



# 2024

Heidi Y Campini  
Cancer Center  
Annual Report



# **2024 Cancer Center Annual Report**

## **2024 Cancer Registry Statistical Review**

*Published November 2025 by the NorthBay Cancer Committee  
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## Introduction



The NorthBay Health Cancer Center is thriving. We have a comprehensive cancer program of prevention, detection, treatment, support, and survivorship services. The Cancer Center is staffed by oncology experts – physicians, a nurse practitioner, nurses, pharmacists, a social worker, a dietitian, and expert technicians. We have an on-site pharmacy to meet the infusion and prescription needs of our patients. We provide a compassionate approach to cancer treatment supported by state-of-the-art technology and access to cutting-edge clinical research protocols. We are treating a record number of patients in radiation/medical oncology and the infusion center.

Since 1987, high quality cancer programs have been available at the NorthBay Health Cancer Center. In 1996, the American College of Surgeon's Commission on Cancer initially approved our Community Hospital Cancer Program, making NorthBay Health Cancer Center the first community-based cancer program in Solano County.

The purpose of the cancer program 2024 Annual Report is to communicate the accomplishments and successes of NorthBay Health's Cancer Program to the medical staff, administration, and partners. This report is also available to the public by accessing it on the NorthBay Health website, at [www.NorthBay.org](http://www.NorthBay.org). The NorthBay Health cancer program activities and accomplishments are described in this annual report, along with statistical data from the NorthBay Health Cancer Registry.

**Cancer Committee Chair: Jessica F. Powers, M.D.  
Commission on Cancer Liaison Physician: Jason Marengo, M.D.  
2024 Annual Report**

NorthBay Health Cancer Center continued to provide outreach activities throughout the community and countywide. Cancer screening and other presentations were given at service organizations, churches and community centers, NorthBay Health Medical Center, NorthBay Health VacaValley Hospital and the NorthBay Health Primary Care in Vacaville.

## 2024 Cancer Committee Members

### NorthBay Health Medical Center Comprehensive Community Hospital Cancer Program (CCP)

Role	Name
Cancer Committee Chair	Dr. Jessica F. Powers
Cancer Liaison Physician	Dr. Jason Marengo
Diagnostic Radiologist	Dr. James Bronk/Dr. Cynthia Tan
Pathologist	Dr. Amin Hojat
Surgeon	Dr. Jason Marengo
Medical Oncologists	Drs. James Long, Brian Vikstrom, J.D. Lopez
Radiation Oncologist	Dr. Stephen Banks/Dr. Loan Tran
Palliative Care	Dr. Terrell B. Van Aken
Cancer Program Administrator	Lori Muir
Registered Dietitian	Devin Baker
Oncology Nurse	Kareen Ferrer, R.N., O.C.N.
Oncology Social Services	Magi Philpot, LCSW, OSW-C
Certified Tumor Registrar (CTR)	Charlene K. Thompson, LVN, CTR
Cancer Conference Coordinator	Charlene K. Thompson, LVN, CTR
Quality Improvement Coordinator	Ashley Chadbourne, R.N./Lori Muir
Clinical Trials Coordinator	Natasha Perkins, R.N., O.C.N.
Pharmacist	Christopher Smith, RPh
Rehabilitation	Mark Rivera
Nurse Navigators	Keni Horiuchi, R.N., A.O.C.N Maricel Roblez, N.P.
Radiation Oncology	Cassie Marquez, RT

## **Tumor Board/Cancer Conference Coordinator Report – 2024**

The Tumor Board Conferences (also called Breast Care Conference, Lung Care Conference and the addition of G.I. Conference) are an integral part of the hospital's cancer treatment program. The Tumor Board Conferences provide physicians with access to multidisciplinary cancer consultative services for their patients, as well as continuing cancer education. This specialized team consists of board-certified medical oncologists, radiation oncologists, surgeons, diagnostic radiologists, pathologists, a clinical trial nurse, nurse navigators, pharmacists and the cancer registrar. Any staff physician is welcome to present a cancer-related case to the board. During the conference each patient's medical history, physical findings, clinical course, diagnostic work-up, and pathological specimens are reviewed. Discussions regarding the disease process, AJCC Staging, medical literature review and personal experience in the management of disease follow. Recommendations regarding further treatment plans are made based upon available information (NCCN Guidelines) as well as consideration of available clinical trials.

Conferences are held weekly and are divided into three formats: Breast Care Conference, Lung Care Conference and with general Tumor Board cases discussed at the end of each Site-specific conference.

One hundred and sixty-one NorthBay cancer patients were presented and reviewed in 2024 Cancer Conferences.

### **The Tumor Board Conferences Also Provide a Forum to Discuss Issues Related to Cancer Care –**

- Articles presented at Cancer Conferences:
  1. Management of Adenoid Cystic Carcinoma of the Breast: A Single-Institution Study, Frontiers in Oncology; Case Report: Secretory Carcinoma of the Breast, J Breast Health 2016
  2. Germline Testing in Patients with Breast Cancer: ASCO-Society of Surgical Oncology Guideline

Cancer Conference cases can be scheduled by physicians through the Cancer Registry Office: 707-624-8103 or [cthompson@northbay.org](mailto:cthompson@northbay.org).

## 2024 Cancer Program Elements

### Bioethics Committee

NorthBay Health provides bioethics consultations through the Bioethics Committee. The committee consists of physicians, nurses, a chaplain, a social worker, a community lawyer and an administrative representative. This committee is available to any physician, staff person, patient or family needing consultation with an interdisciplinary focus. The Bioethics Committee meets quarterly to conduct business/education and meets whenever called to provide consultations. Decisions or actions to be taken are not decided during a consultation. The committee only provides recommendations regarding the issues brought before it.

### Cancer Committee

The NorthBay Health Cancer Committee is a multidisciplinary team that directs and oversees all cancer program activities. Four meetings were held in 2024. Members of the Cancer Committee represent administration, quality improvement, rehabilitation, nursing, social services, the cancer registry, radiation oncology, clinical trials, medical oncology and physicians from several disciplines. The members are named elsewhere in this report.

### Cancer Registry

The NorthBay Health Cancer Registry is a data system that has been monitoring the incidence, staging, treatment and survival of cancer patients seen by NorthBay Health since our original reference date, Jan. 1, 1987. The Cancer Registry is an integral part of the NorthBay cancer program and a basic requirement for approval by the Commission on Cancer of the American College of Surgeons. The major objective of the Cancer Registry is to make basic knowledge about the cancer experience at NorthBay available to all members of the medical staff in order to evaluate the results of patient care and compare the results with regional and statewide data. The registry is comprised of 17,651 cases admitted to NorthBay Health Medical Center and 7575 cases admitted to NorthBay Health VacaValley Hospital from 1987-2024. Through the Cancer Registry's lifetime follow-up service, physicians and patients are contacted annually to record and update each patient's progress. The follow-up process helps to ensure patients receive regular medical care and provides the basis for survival statistics. In 1987, the registry began reporting cancer data to the state Department of Health Services California Cancer Registry as part of the mandatory cancer reporting law.

Under the direction of the Cancer Committee, registry staff performs data analyses and participates in internal and national data studies. During 2024, registry data was submitted error-free to the National Cancer Database (NCDB) for cases diagnosed in 2009 through 2023.

### Clinical Trials Program – 2024

In 2024, NorthBay Health Cancer Center maintained affiliate membership with Stanford Medical Center that allows continued access to national clinical trials through the Clinical Trials Support Unit (CTSU) and ECOG-ACRIN Cancer Research Group. During 2024, 5 trials for various tumor types were open for accrual. Dr. Brian Vikstrom continued to provide oversight of the program as the principal investigator along with colleagues Drs. James Long, Jonathan Lopez, and Jessica Powers in medical oncology. Affiliations with academic tertiary cancer programs allowed additional access to cancer treatment trials. NorthBay remains committed to supporting community-based access to national oncology clinical trials.

## **Diagnostic Imaging Services**

Technologically advanced tools for cancer diagnosis, evaluation, treatment, planning and monitoring are available through NorthBay Health's Diagnostic Imaging Services. These include 256 slice spiral CT Scanning, Magnetic Resonance Imaging, Mammography, Ultrasonography, Angiography, Nuclear Medicine, PET Imaging, and PACS. Diagnostic Imaging also offers Interventional Radiology, which includes percutaneous and stereotactic biopsy procedures, both minimally invasive methods for obtaining cells or tissue for diagnosis. The radiologists are available for consultation and are active participants in cancer conferences and the Cancer Committee.

## **Infusion Center**

The infusion center provides a comfortable outpatient setting for patients to receive a variety of treatments, including chemotherapy, bio-immunotherapy, blood transfusions, antibiotics and other parenteral therapies. Patients receive treatments while comfortably resting in recliners and space is provided to allow attendance by a support person if they desire. As a safety measure, visitors under 18 years of age or who are pregnant are encouraged to wait in the lounge area that is directly adjacent to the infusion center.

All infusion nurses received advanced training in central line maintenance and care. In addition, infusion nurses have training in the administration of infusion therapies, including educational meetings focused on infusion therapies and cancer focused specialized training through the Oncology Nursing Society (ONS). Nurses who administer chemotherapy are required to have an active ONS chemo-biotherapy provider card and to maintain credentialing by NorthBay Health to administer chemotherapy/biotherapy. Some of the infusion nurses had additional oncology credentialing including OCN, AOCNS, and CBCN. While the primary focus of care for infusion nurses is cancer treatment and symptom management patients receiving other treatments also receive the specific treatment related to education support.

Cancer Center nurses promote nursing excellence at NorthBay by being a resource and by providing education to hospital-based nurses and the community. The Cancer Center nurses actively participate in various cancer-related community activities.

## **Hospice & Bereavement**

NorthBay Health Hospice & Bereavement provides comprehensive hospice services to Solano County residents. Hospice is an interdisciplinary program of care that provides palliative care and sophisticated methods of pain and symptom control to help the patient live as fully and comfortably as possible. It also provides emotional and spiritual support to terminally ill patients, their families and friends. The hospice team enables our patients to spend the last months of their lives with dignity and the highest quality of life possible. Hospice care emphasizes quality of life enhancement while preserving the patient's dignity. NorthBay Health bereavement services are free to residents of Solano County, and include written material and support groups. Support groups are available for adults and veterans.

Despite the challenges of COVID, NorthBay Health expanded its services, adding a Drop-in Group held and facilitated on Zoom, in addition to continuing the Journey through Grief program, likewise held on Zoom, and with the cooperation of talented NorthBay colleagues, the Annual Tree of Memories Memorial Service was produced and held remotely.

## **Nursing Department**

NorthBay Health VacaValley Hospital's Medical-Surgical Unit provides 24-hour comprehensive acute care for hospitalized cancer patients. It is a multidisciplinary team composed of physicians, registered nurses, social workers, dietitians, rehabilitation specialists, respiratory therapists, and Continuity of Care Coordinators. The registered nurses are skilled in assessment, planning, interventions and evaluation of patient-care needs. Thirty-three percent of the full- and part-time registered nurses participate in chemotherapy credential or certification classes, updates and oncology educational programs to enhance nursing care for the patient receiving chemotherapy.

## **Nurse Navigation – 2024**

The NorthBay Cancer Center nurse navigators continue to provide support to patients, families and caregivers in regards to cancer related treatment and services in the NorthBay system. The three dedicated nurse navigators work closely with health care providers to enhance the coordination of cancer care within the NorthBay system and for outgoing referrals for cancer services. The navigators also provide additional services such as lung cancer screening, breast navigation, clinical trials referral and management as well as Mayo eConsultation. The oncology nurse navigators work with the oncologists to compile survivorship care plans for eligible patients who have completed their cancer treatment. Altogether, these nurse navigators continue to be a central point of contact for cancer patient care in the NorthBay Health System and work together with the health care team to fulfill the Commission on Cancer accreditation requirements for the NorthBay Health Cancer Center.

## **Nutrition Services**

NorthBay Health clinical dietitians are available to provide comprehensive assessments for the special needs of cancer patients. Currently the dietitians are involved with one-on-one patient counseling, nutrition education and the Cancer Committee. The dietitian's goal is to improve or maintain the nutritional status of cancer patients, which can be helpful in improving patients' response to cancer treatment and minimizing the chance of cancer recurrence.

## **Oncology Social Services**

Oncology Social Services provides direct clinical social work service, counseling and case management services to Cancer Center patients and their families, including psychosocial assessment, development of a plan of care, as well as implementation and documentation of emotional, social, financial, environmental or follow-up referral needs. The oncology social worker works collaboratively with members of the Cancer Center interdisciplinary team and other members of the NorthBay Health team. The social worker monitors progress toward goals of plan of care, collaborates with community partners, and facilitates integration with community-based resources to optimize patient health. Activities are consistent with the system's mission, values and in compliance with applicable regulations and systems policies and procedures.

### **Palliative Care Program**

The objective of the NorthBay Bridges palliative care program is to help patients facing a life-limiting, chronic or progressive illness to manage their symptoms and realize the best quality of life. NorthBay Palliative Care Services assists the primary care or attending physician in providing active care that reaches beyond physical pain and symptom relief to address emotional, social, cultural and spiritual needs of seriously ill patients and their families. Guided by a philosophy of care within an organized and structured system, treatment is determined and delivered in the context of the patient's unique life goals. Palliative care can be delivered concurrently with life-prolonging treatment or as the main focus of care.

### **Pharmacy**

To ensure patient safety, NorthBay Health uses standardized treatment plans that have been referenced and reviewed with evidence-based chemotherapy guidelines by the clinical nurse specialist, board-certified oncology clinical pharmacist and the hematologist/oncologist. For non-standardized chemotherapy regimens, pharmacists verify dosing and scheduling based on textbook references, abstracts, journal articles or protocols from other major research institutions. Pharmacists verify calculations for all dosages of chemotherapy (based on unit of dosing i.e., mg/M<sup>2</sup> or dose per kg etc.) and assess the appropriateness of the dose based upon patient-specific parameters (i.e., renal function; liver function; cardiac function). Any discrepancies or additional patient safety recommendations are discussed with the physician and amended as necessary. The NorthBay Health pharmacy uses a documented double-check system for dosage calculations, drug, drug volume and intravenous solution prior to admixture. NorthBay Health pharmacists oversee the preparation of all chemotherapeutic agents and non-chemotherapeutic agents used in the clinic and in the hospital at NorthBay. NorthBay Health uses a closed system to prepare chemotherapy. This system is an added safety measure to protect health care employees, patients and family members who may be present in the clinic from possible exposure to aerosolized chemotherapy. Pharmacy continues to ensure environmental safety in chemotherapy preparation. We are continually instituting new recommendations from ASHP, NIOSH, USP 797 and USP 800 in regard to employee and patient safety. Pharmacists interact with patients and members of the health care team with drug information, side effect and pain management information and are an important resource at Cancer Committee, Tumor Board and Oncology Team meetings. NorthBay is committed to education and advancing the profession of oncology pharmacy by precepting students at Touro University; University of Pacific, Stockton; and University of California, San Francisco. Our oncology clinical pharmacist is certified by the Board of Pharmaceutical Specialists in Oncology Pharmacy to further offer quality patient care.

### **Pathology**

Pathologists at NorthBay Health provide a full range of oncological-related services, including anatomic pathology, clinical pathology, and immunopathology. Their multi-disciplinary management of cancer care includes an active role in the monthly Cancer Conferences and Cancer Committee, as well as being available to physicians and registry staff for consultation. In 2024, the department of pathology processed 4,697 specimens.

## **Radiation Oncology Department**

Radiation therapy continues to be a vital part of cancer treatment for many of our patients. Because every cancer diagnosis is unique, our expert team of radiation oncologists create personalized treatment plans tailored to each individual's needs and goals. Using the latest in advanced imaging and radiation technologies, we are able to precisely target tumors while minimizing exposure to surrounding healthy tissue.

Our department features the state-of-the-art Varian TrueBeam™ linear accelerator, an advanced image-guided radiation therapy (IGRT) system that delivers radiation with high speed and accuracy. This system is specifically designed to handle complex cancers of the lung, breast, brain, stomach, liver, prostate and more. With integrated features like respiratory gating, real-time tracking, and imaging, we offer cutting-edge treatment options, including:

- Stereotactic Radiosurgery (SRS)
- Stereotactic Body Radiation Therapy (SBRT)
- Image-Guided Radiotherapy (IGRT)
- Intensity-Modulated Radiotherapy (IMRT)
- Brachytherapy
- RapidArc®
- Radiopharmaceuticals

Our dedicated team includes oncology nurses and support staff who provide integrative services to help manage side effects, monitor well-being, and maintain each patient's quality of life throughout treatment.

We are proud to be one of the only local providers of radiation therapy for residents of Solano County, helping ensure that patients can access world-class care close to home. Our commitment to continued staff education and ongoing innovation ensures that patients receive high-quality, compassionate care in a healing environment where they remain the center of every decision.

## **Rehabilitation Services**

Through NorthBay Health Rehabilitation Services, and outpatient rehabilitation, cancer patients are helped to achieve a greater degree of functional independence and an improved quality of life. Available services include speech therapy, occupational therapy and physical therapy, all provided by highly trained, licensed personnel. Lymphedema and post-mastectomy programs are also available.



## 2024 Cancer Program Accomplishments

### Professional and Community education lectures/presentations:

- ◆ “Colon Cancer Education and NCCN Colorectal Screening Education” given to the Paradise Valley Estates Retired Military Resident, Fairfield, CA by Jessica Powers, M.D., NorthBay Medical Oncologist, Cancer Committee Chairman, November 14, 2024.
- ◆ Published the 2023 Annual Report and posted the report to the Cancer Center website.
- ◆ Submitted all 2023 cases seen at NorthBay Health Medical Center and NorthBay Health Vaca Valley Hospital to California Cancer Registry in Sacramento with 99 percent of the cases submitted within six months of first being seen at facility and a 99 percent accuracy rate. (State goal is 97 percent)
- ◆ Held monthly Cancer Conferences (Breast, Lung and Tumor Board).
- ◆ Provided an environment that facilitated the delivery of optimal patient care in all phases of evaluation, planning, treatment and follow up.

## **Quality Studies/Barrier to Care (Quality Improvement) - 2024**

The NorthBay Health Medical Center Cancer Committee reviewed and discussed two quality study measures and one barrier to care (Quality Improvement) in 2024.

### **1. Improve Time from BIRADS 5 Breast Imaging to Savi Scout Placement**

A significant delay from BIRADS 5 mammogram biopsy to the placement of Savi Scout markers was identified. The numerical baseline average was 39 days. This was identified in Breast Cancer Conference by the team of physicians when reviewing cases. The breast surgeon noticed delay in surgeries and recognized the longest delay was from abnormal mammogram to Savi Scout placement. Breast Conference recommended that all biopsies of BIRADS 5 lesions be marked with Savi Scout instead of other type of markers all in one procedure instead of staged procedures. Results of intervention implemented June 2024 through December 2024 (15 cases met criteria for review) was a decrease in average time from 39 days to 3 days.

### **2. Participated in the American College of Surgeons Lung Nodes National Quality Improvement Project. A Two-Year Project.**

Project seeks to aid and assist programs in identifying areas for improvement in compliance for Standard 5.8 Lung Nodal, Operative, Dissection, Evaluation and Staging (NODES). Ten lung resections were submitted between January and November 2024 with 70% (7 of 10) of cases being compliant to the standard assessment of hilar and mediastinal lymph nodes being resected.

### **3. Barrier to Care: Need for Inpatient Chemotherapy Nurses Available for Complicated Chemotherapy Regimens Which Delay Care**

**Assessment:** Communication between the nurse managers, lead RN's and Clinical IV RNs mutually agreed upon barrier.

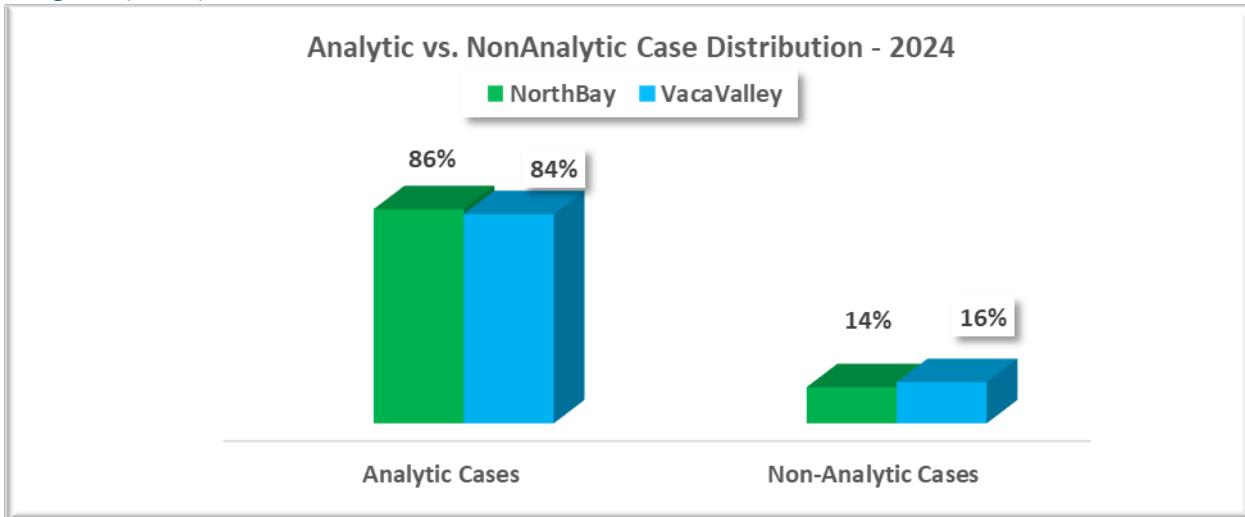
**Addressing Barriers:** A process to give early advanced notification of patient admissions along with involvement by pharmacy to provide protocols and assist nursing with orders as well as continued nursing education.

**Resources/Process Utilized to Address Barrier:** Successfully engaged nursing staff to continue education on inpatient chemotherapy regimens and review of NRC Data using inpatient question regarding informed of care and education.

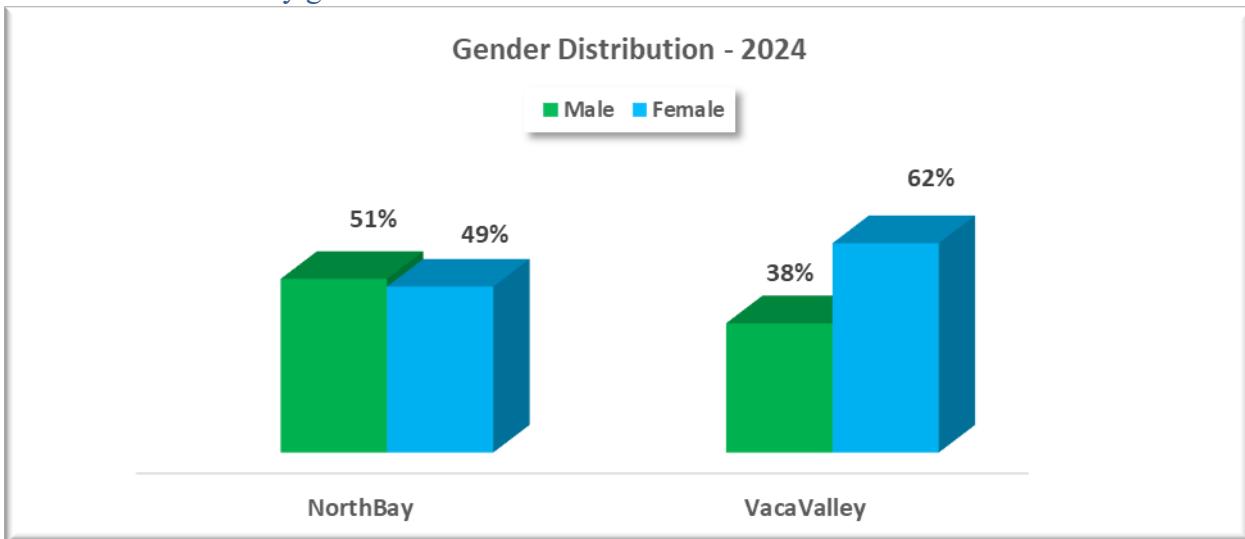
**Analysis:** Increase in 1 West ONS certification, initial sign off and annual competency – 54 nurses 80% ONS, increase pharmacy involvement to provide protocols to nurse and a future goal of establishing a dedicated in-patient chemotherapy ward.

## 2024 Cancer Registry Data Overview

In 2024, the NorthBay Health Cancer Center accessioned 394 cancer cases from NorthBay Health Medical Center (NBMC) and 516 cancer cases from NorthBay Health VacaValley Hospital (VVH).



Eighty-six percent of cases seen at NBMC in 2024 were analytic cases (cases diagnosed and/or received some part of their first course treatment at this facility), while the analytic cases reported at VVH were 84 percent of the caseload. The graph below demonstrates the distribution of new cancer cases by gender.



The tables and graphs on the following pages contain 2024 cancer case data compiled and analyzed by the NorthBay Health Cancer Registry. The Primary Site tables contain a breakdown of our cancer caseload by organ of cancer origin and show cancer case distribution by class of case, gender and AJCC Stage. The graphs entitled "Primary Site Distribution" demonstrate our most common cancer diagnoses at NBMC vs. VVH, as a percentage of each institution's total caseload.

**2024 Primary Site Table NorthBay Health Medical Center**

Site	Total	Class		Sex		Stage					Unknown	
		Cases	Analytic	NonAn	M	F	Stage 0	Stage I	Stage II	Stage III	Stage IV	
ALL SITES	<b>394</b>	<b>337</b>	<b>57</b>		<b>202</b>	<b>191</b>	<b>14</b>	<b>92</b>	<b>55</b>	<b>43</b>	<b>83</b>	<b>5</b>
ORAL CAVITY/PHARYNX	<b>2</b>	<b>2</b>	<b>0</b>		<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>
TONGUE	1	1	0		1	0	0	0	1	0	0	0
OPHOPHARYNX	1	1	0		1	0	0	0	1	0	0	0
<b>DIGESTIVE SYSTEM</b>	<b>85</b>	<b>73</b>	<b>12</b>		<b>48</b>	<b>37</b>	<b>2</b>	<b>18</b>	<b>11</b>	<b>13</b>	<b>23</b>	<b>3</b>
ESOPHAGUS	5	3	2		5	0	0	0	1	1	0	1
STOMACH	12	11	1		9	3	0	4	0	0	7	0
SMALL INTESTINE	1	1	0		1	0	0	0	0	1	0	0
COLON	24	23	1		13	11	1	6	6	4	5	1
RECTUM & RECTOSIGMOID	8	8	0		0	7	0	1	2	0	5	0
ANUS, ANAL CANAL	1	0	1		0	1	0	0	0	0	0	0
LIVER	10	8	2		9	1	0	2	1	3	1	0
GALLBLADDER	2	2	0		1	1	1	1	0	0	0	0
PANCREAS	20	15	5		8	12	0	4	1	4	5	1
BILE DUCTS	2	2	0		2	0	0	0	0	0	0	0
<b>RESPIRATORY SYSTEM</b>	<b>64</b>	<b>56</b>	<b>8</b>		<b>26</b>	<b>38</b>	<b>0</b>	<b>18</b>	<b>7</b>	<b>6</b>	<b>22</b>	<b>0</b>
LUNG/BRONCHUS-SMALL CELL	8	8	0		1	7	0	1	1	2	4	0
LUNG/BRONCHUS-NON-SM CELL	52	45	7		22	30	0	17	5	4	16	0
PLEURA	1	1	0		1	0	0	0	0	0	1	0
LARYNX	3	2	1		2	1	0	0	1	0	1	0
<b>BLOOD &amp; BONE MARROW</b>	<b>15</b>	<b>12</b>	<b>3</b>		<b>10</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>
HEMERETIC	9	7	2		6	3	0	0	0	0	1	0
MYELOMA	6	<b>5</b>	1		4	2	0	1	1	0	0	2
<b>MELANOMA OF SKIN</b>	<b>2</b>	<b>2</b>	<b>0</b>		<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>
SOFT TISSUE	2	2	0		2	0	0	0	0	0	0	0
KAPOSIS SARCOMA	2	2	0		2	0	0	0	0	0	0	0
OTHER SKIN	1	1	0		1	0	0	0	0	0	0	0
RETROPERITONEUM	1	1	0		1	0	0	0	0	1	0	0

**2024 Primary Site Table NorthBay Health Medical Center**

Site	Total	Class		Sex		Stage					Unknown
		Analytic	NonAn	M	F	Stage 0	Stage I	Stage II	Stage III	Stage IV	
ALL SITES	394	337	57	292	191	14	92	55	43	83	5
BREAST	44	38	6	0	44	7	19	1	5	6	0
FEMALE GENITAL	24	21	3	0	24	0	6	2	6	5	0
CERVIX UTERI	3	3	0	0	3	0	2	1	0	0	0
CORPUS UTERI	10	9	1	0	10	0	4	0	4	1	0
UTERUS NOS	2	2	0	0	2	0	0	1	0	1	0
OVARY	4	3	1	0	4	0	0	0	0	3	0
VULVA	2	1	1	0	2	0	0	0	0	0	0
VAGINA	1	1	0	0	1	0	0	0	1	0	0
OTHER FEMALE GENITAL	2	2	0	0	2	0	0	0	1	0	0
MALE GENITAL	71	58	13	71	9	9	11	25	8	1	0
PROSTATE	69	56	13	69	0	0	9	25	8	14	0
TESTIS	2	2	0	2	0	0	2	0	0	0	0
URINARY SYSTEM	25	20	5	15	10	4	9	3	0	4	0
BLADDER	11	8	3	10	1	4	2	2	0	0	0
KIDNEY AND RENAL PELVIS	13	11	2	5	8	0	7	1	0	3	0
URETER	1	1	0	0	1	0	0	0	0	1	0
BRAIN	8	7	1	5	3	0	0	0	0	0	0
OTHER NERVOUS SYSTEM	13	11	2	6	7	0	0	0	0	0	0
ENDOCRINE SYSTEM	13	13	0	4	9	0	9	2	0	0	0
THYROID	9	9	0	3	6	0	7	2	0	0	0
OTHER ENDOCRINE	4	4	0	1	3	0	2	0	0	0	0
LYMPHATIC SYSTEM	15	13	2	7	8	0	1	1	2	7	0
NON-HODGKIN'S LYMPHOMA	14	12	2	6	8	0	1	1	2	6	0
HODGKIN'S LYMPHOMA	1	1	0	1	0	0	0	0	0	1	0
UNKNOWN OR ILL-DEFINED	7	5	2	2	5	0	0	0	0	0	0

## 2024 Primary Site Table NorthBay Health VacaValley Hospital

Site	Total Cases	Class		Sex		Stage					
		Analytic	NonAn	M	F	Stage 0	Stage I	Stage II	Stage III	Stage IV	Unknown
<b>ALL SITES</b>	<b>516</b>	<b>431</b>	<b>85</b>	<b>197</b>	<b>319</b>	<b>35</b>	<b>154</b>	<b>72</b>	<b>57</b>	<b>74</b>	<b>10</b>
<b>ORAL CAVITY</b>	<b>28</b>	<b>26</b>	<b>2</b>	<b>22</b>	<b>6</b>	<b>0</b>	<b>5</b>	<b>8</b>	<b>3</b>	<b>8</b>	<b>0</b>
TONGUE	10	9	1	10	0	0	1	5	0	2	0
SALIVARY-GLANDS, MAJOR	3	3	0	1	2	0	0	0	1	2	0
TONSIL	5	5	0	5	0	0	2	3	0	0	0
OROPHARYNX	3	2	1	3	0	0	2	0	0	0	0
HYPOPHARYNX	1	1	0	0	1	0	0	0	0	0	0
NASOPHARYNX	5	5	0	2	3	0	0	0	2	3	0
MOUTH, OTHER & NOS	1	1	0	1	0	0	0	0	0	1	0
<b>DIGESTIVE SYSTEM</b>	<b>52</b>	<b>50</b>	<b>2</b>	<b>30</b>	<b>22</b>	<b>1</b>	<b>4</b>	<b>8</b>	<b>14</b>	<b>18</b>	<b>2</b>
ESOPHAGUS	5	5	0	5	0	1	0	1	3	0	
STOMACH	7	7	0	5	2	0	1	1	0	4	0
SMALL INTESTINE	2	1	1	0	2	0	0	0	0	0	0
COLON	5	5	0	5	0	0	0	0	1	4	0
RECTUM & RECTOSIGMOID	15	15	0	8	7	0	1	2	5	6	1
ANUS, ANAL CANAL	5	5	0	0	5	0	0	2	2	0	1
PANCREAS	5	5	0	2	3	0	1	1	2	1	0
BILE DUCTS	2	2	0	1	1	0	0	1	1	0	0
LIVER	6	5	1	4	2	0	1	0	0	3	0
<b>RESPIRATORY SYSTEM</b>	<b>51</b>	<b>40</b>	<b>11</b>	<b>29</b>	<b>12</b>	<b>0</b>	<b>6</b>	<b>2</b>	<b>13</b>	<b>18</b>	<b>0</b>
LARYNX	3	3	0	3	0	0	1	0	2	0	0
LUNG/BRONCHUS-SMALL CELL	5	4	1	2	3	0	0	0	1	3	0
LUNG/BRONCHUS-NON-SM CELL	41	32	9	22	19	0	4	2	10	15	0
NASAL CAVITY, SINUS, EAR	2	1	1	2	0	0	1	0	0	0	0
<b>BLOOD &amp; BONE MARROW</b>	<b>19</b>	<b>13</b>	<b>6</b>	<b>11</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
HEMERETIC	7	6	1	3	4	0	0	0	0	0	0
MYELOMA	12	7	5	8	4	0	0	0	0	0	0
KAPOYSIS SARCOMA	2	0	2	2	0	0	0	0	0	0	0
SOFT TISSUE	2	1	1	1	1	0	0	0	1	0	0
BONE	1	1	0	0	1	0	0	0	0	0	0
OTHER SKIN	2	1	1	2	0	0	0	1	0	0	0
<b>BREAST</b>	<b>216</b>	<b>208</b>	<b>8</b>	<b>9</b>	<b>216</b>	<b>35</b>	<b>125</b>	<b>28</b>	<b>11</b>	<b>4</b>	<b>1</b>

## 2024 Primary Site Table NorthBay Health VacaValley Hospital

Site	Total Cases	Class		Sex		Stage					Unknown
		Analytic	NonAn	M	F	Stage 0	Stage I	Stage II	Stage III	Stage IV	
ALL SITES	516	431	85	197	319	35	154	72	57	73	
<b>FEMALE GENITAL</b>	<b>25</b>	<b>21</b>	<b>4</b>	<b>0</b>	<b>25</b>	<b>0</b>	<b>7</b>	<b>3</b>	<b>6</b>	<b>5</b>	<b>0</b>
CERVIX UTERI	2	2	0	0	2	0	0	1	1	0	0
CORPUS UTERI	14	12	2	0	14	0	5	2	4	1	0
VAGINA	2	2	0	0	2	0	1	0	0	1	0
OVARY	3	1	2	0	3	0	1	0	0	0	0
UTERUS NOS	2	2	0	0	2	0	0	0	0	2	0
VULVA	2	2	0	0	2	0	0	0	1	1	0
<b>MALE GENITAL</b>	<b>78</b>	<b>43</b>	<b>35</b>	<b>78</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>20</b>	<b>11</b>	<b>11</b>	<b>0</b>
PROSTATE	77	42	35	77	0	0	0	20	11	11	0
TESTIS	1	1	0	1	0	0	1	0	0	0	0
<b>URINARY SYSTEM</b>	<b>7</b>	<b>7</b>	<b>0</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>1</b>
BLADDER	4	4	0	4	0	0	0	3	0	0	1
KIDNEY AND RENAL PELVIS	3	3	0	0	3	0	2	0	0	1	0
<b>BRAIN</b>	<b>8</b>	<b>5</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>OTHER NERVOUS SYSTEM</b>	<b>5</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>ENDOCRINE SYSTEM</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
OTHER ENDOCRINE	1	0	1	1	0	0	0	0	0	0	0
<b>LYMPHATIC SYSTEM</b>	<b>18</b>	<b>10</b>	<b>8</b>	<b>10</b>	<b>8</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>
NON-HODKIN'S LYMPHOMA	18	10	8	10	8	0	3	0	0	5	0
<b>UNKNOWN OR ILL- DEFINED</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Top Five Primary Sites Comparative Analysis of Newly Diagnosed Cases Seen at NBHMC 2024

### PRIMARY SITES

Prostate	25%
Lung	19%
Breast	16%
Colon	9%
Pancreas	7%
All Other Sites	25%

The top five Primary Site Distribution of cancer diagnosed and treated at NBHMC and NorthBay Health VVH in 2024 are displayed in the comparative analysis tables. These tables do not reflect the incidence of cancer in the areas surrounding the hospital.

## Top Five Primary Sites Comparative Analysis of Newly Diagnosed Cases Seen at NorthBay Health VVH 2024

### PRIMARY SITES

Breast	52%
Prostate	18%
Lung Non-Small Cell	10%
Non-Hodgkin's Lymphoma	4%
Rectum	4%
All Other Sites	16 %

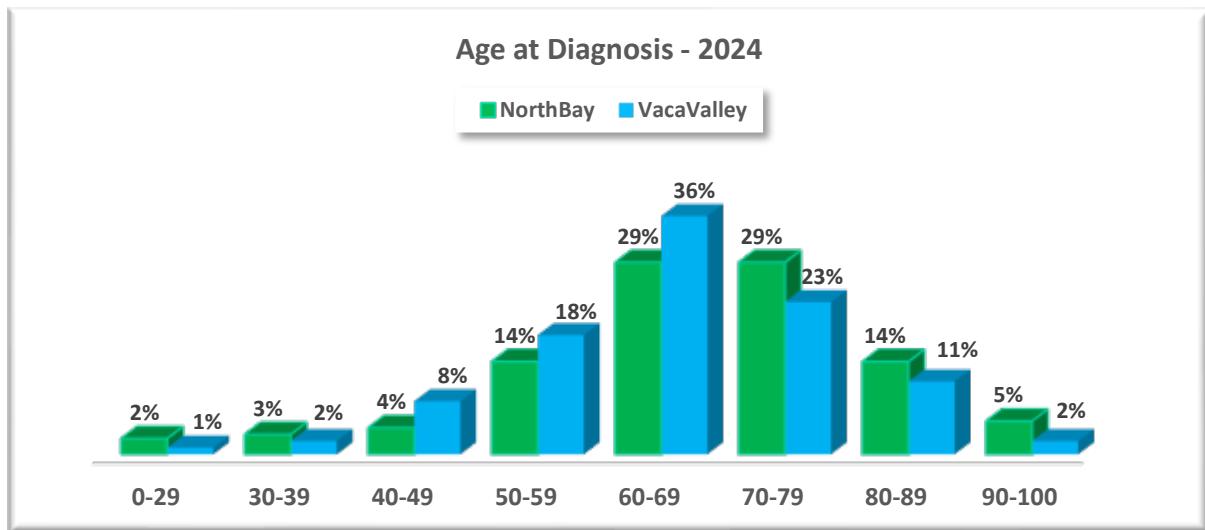
**Top Five Body Systems  
Comparative Analysis  
of Newly Diagnosed Cases Seen at NBHMC 2022-2024**

<b>BODY SYSTEM</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
Digestive System	79	69	73
Respiratory System	46	55	56
Breast	52	35	38
Male Genital System	73	83	58
Urinary System	43	26	20

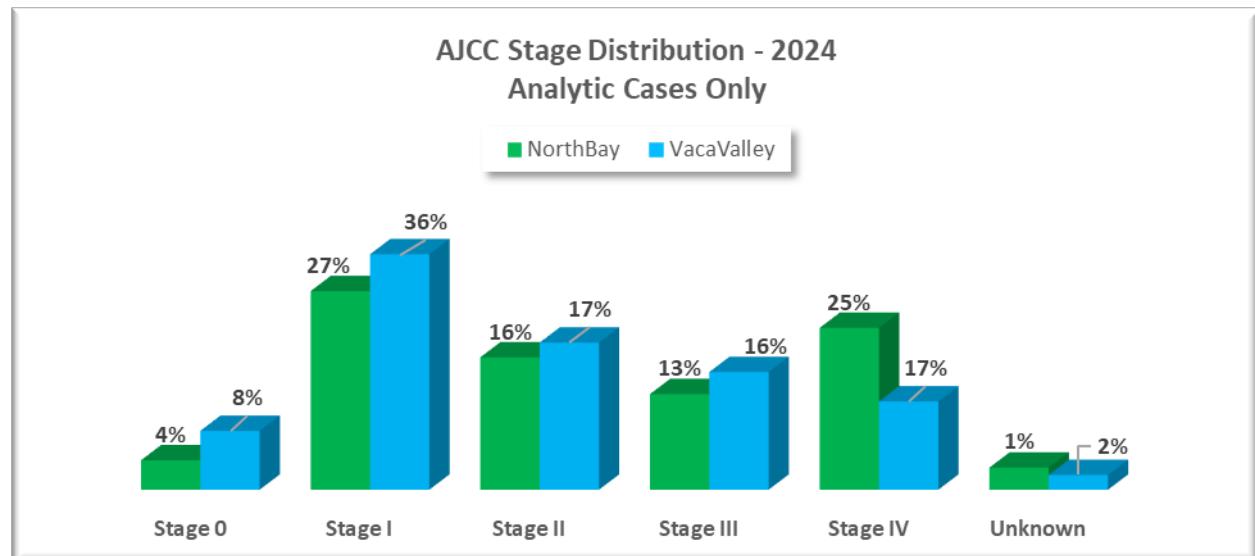
The comparative analysis tables show the top five body systems distribution of cancer diagnosed and treated at NBHMC and NBHVVH in 2022-2024. These tables do not reflect the incidence of cancer in the areas surrounding the hospital.

**Top Five Body Systems  
Comparative Analysis  
of Newly Diagnosed Cases Seen at VVH 2022-2024**

<b>BODY SYSTEM</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
Digestive System	44	42	50
Respiratory System	32	36	40
Breast	207	180	208
Male Genital System	33	43	43
Urinary System	5	5	7



The largest group of patients diagnosed and/or treated at NorthBay presented between the ages of 60-79 at the time of diagnosis. The mean age of 67 and median age of 69 at diagnosis for patients seen at NorthBay. At VacaValley the largest age group of patients presented between the ages of 60-79, with the mean age of 65 and the median age of 66.



Forty-eight percent of the patients at NorthBay and 60 percent of patients at VacaValley newly diagnosed and/or treated at NorthBay/VacaValley were considered early-stage (Stages 0-2), meaning that their cancer was localized to the area of origin. A patient's prognosis is based on the stage of disease at the time of diagnosis.

## Quality and Outcomes

The following section of the annual report represents NorthBay Health Medical Center's ongoing efforts to collect data and measure results to improve quality, safety and patient outcomes. We hope over time this data helps showcase our strengths in patient-centered care as well as clinical excellence.

### **Cancer Program Practice Profile Reports (CP3R) 2023-2024**

NorthBay Health Medical Center has been accredited by the American College of Surgeons Commission on Cancer (CoC) as a Community Hospital Cancer Program since 1997. CoC accreditation challenges cancer programs to enhance the care they provide by addressing patient-centered needs and measuring the quality of the care they deliver against national standards.

As an accredited cancer program, we participate in the Cancer Program Practice Profile Reports (CP3R). CoC provides the performance rates shown in the following reports as an estimate of the proportion of patients concordant with measure criteria by diagnosis year. If appropriate, the CoC Standard and benchmark compliance rate is provided.

The CP3R reports for breast and colorectal cancer are directed toward assuring the completeness of data for breast and colorectal cancer patients recorded in each cancer program's registry as a central means to facilitate accurate comparisons of clinical performance among CoC accredited cancer programs. The CP3R provides a case-by-case review of breast and colorectal cancer cases reported to the National Cancer Database (NCDB) and identifies cases that lend themselves to the evaluation of concordance for each of the measures.

Each year, our cancer committee reviews the CP3R data to evaluate care and how processes can be improved to promote evidenced-based practice. Overall, we are pleased to share that NorthBay Health Medical Center meets or has exceeded the compliance rate in nearly all the measures. In areas that did not meet the standard, our cancer committee has researched the reasons why performance rates were not achieved and actions plans were developed to improve our processes.

Cancer Program Practice Profile Reports (CP3R) 2023-2024 – NorthBay

## Breast Measure:

Patients with AJCC Clinical Stage I-III breast cancer, the first therapeutic surgery in a non-neoadjuvant setting is performed within and including 60 days of diagnosis.

Estimated Performance Rate (%):

CoC Std. %: 95% 2023: 70%

2023: 70%

2024: 70%

## Colon Measure:

At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer.

### Estimated Performance Rate (%)

CoC Std.95%

2023: 88%

2024: 87%

## Hepatocellular Carcinoma Measure:

For hepatocellular carcinoma of any stage, AFP (alpha fetoprotein) is obtained at diagnosis.

### Estimated Performance Rate (%)

Coc Std. %: 95%

2023: 86%

2023: 88%

## Rectum Measure:

Patients with surgically treated clinical T4NanyM0 or TanyN2M0 rectal cancer, neoadjuvant radiation therapy is initiated within 9 months prior to resection or recommended.

### Estimated Performance Rate (%)

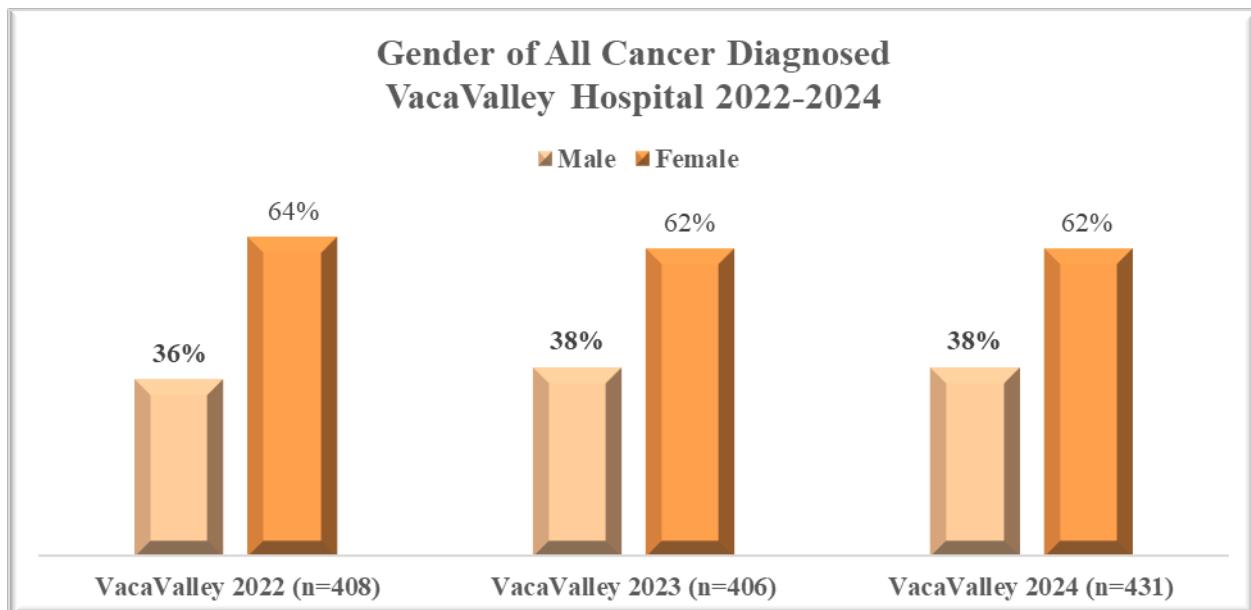
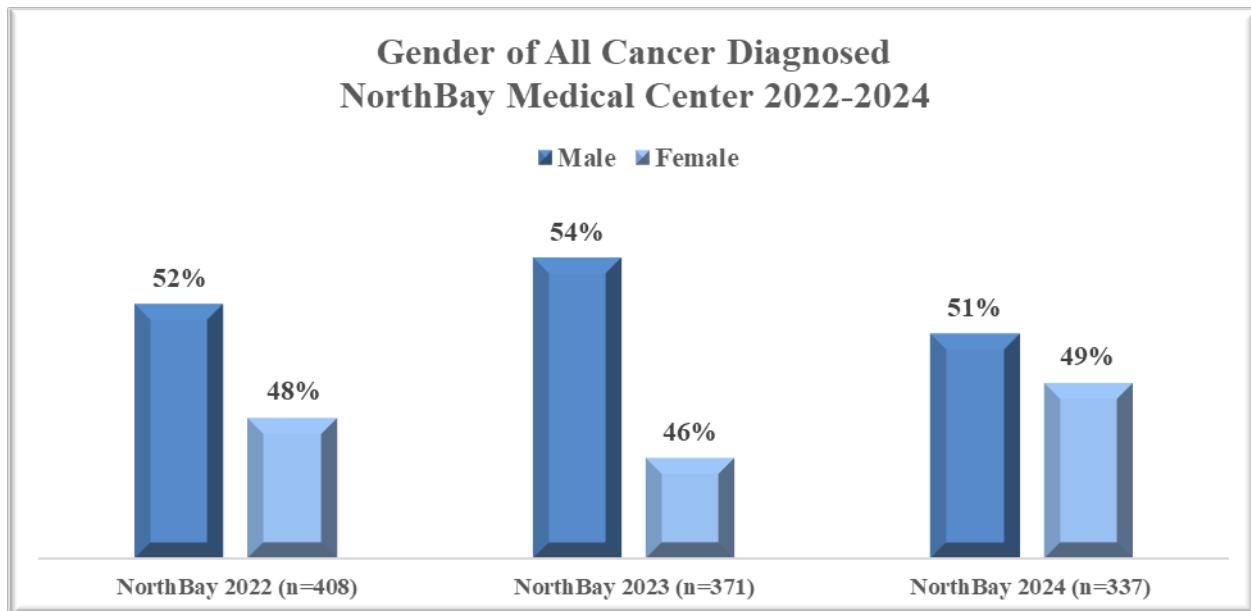
CoC Std. %: 95%

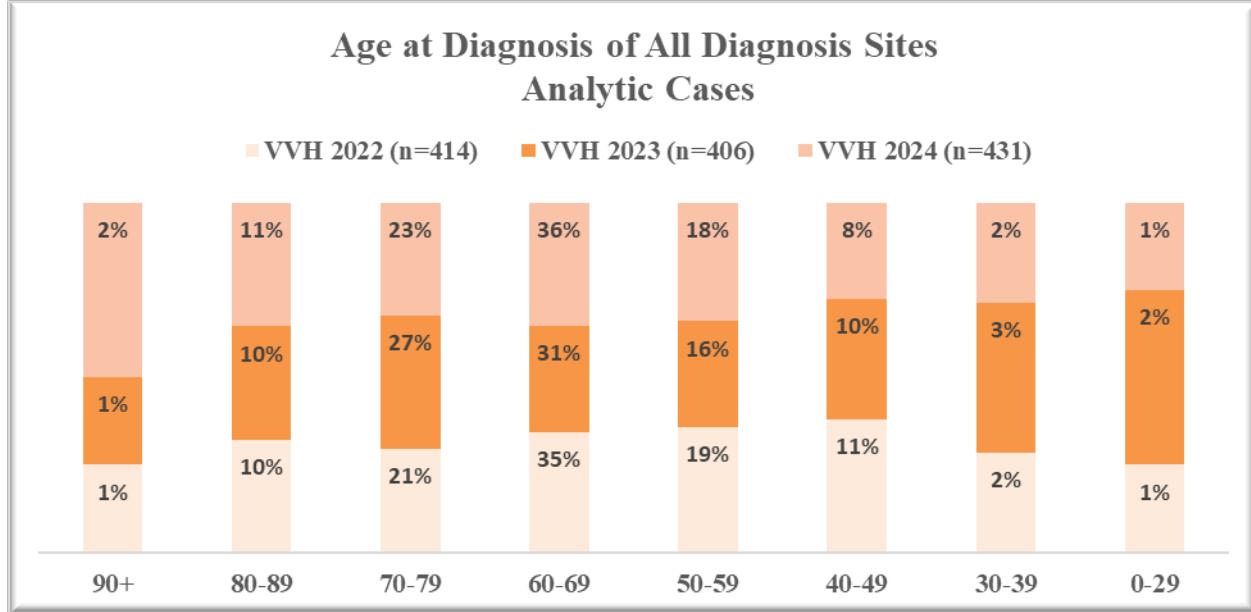
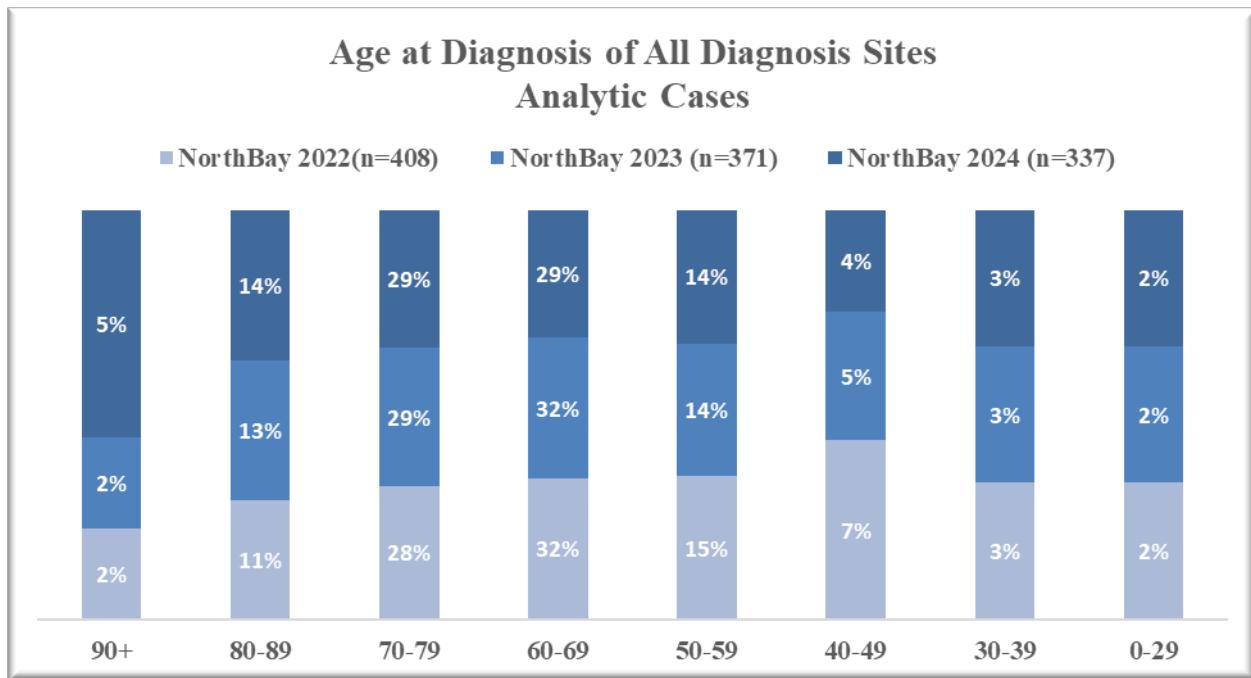
2023: 100%

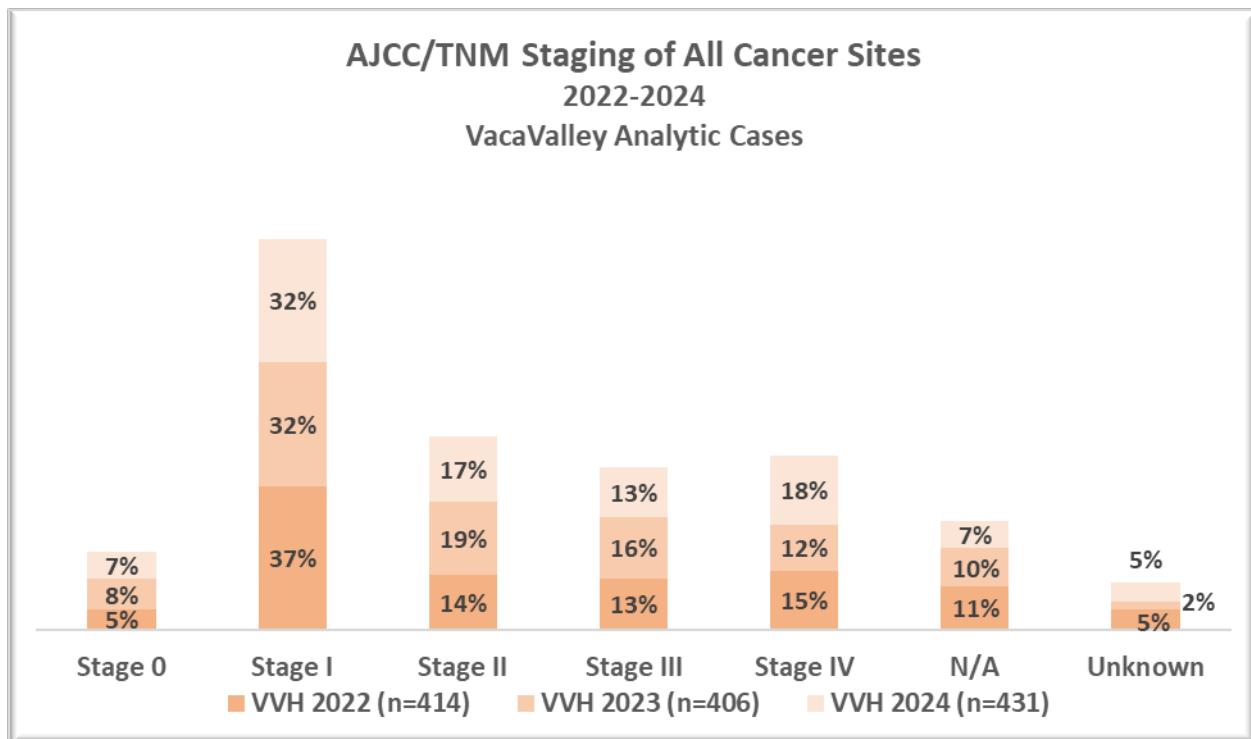
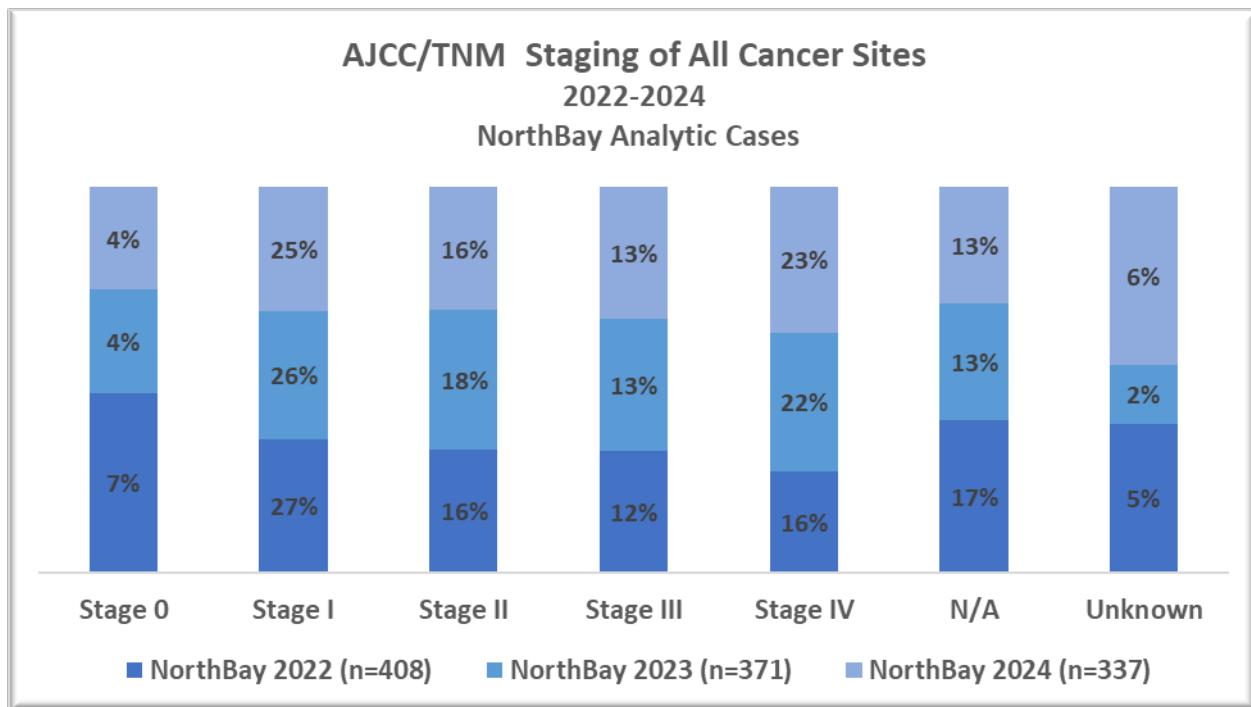
2024: 100%

\*For more information about CP3R, see: <http://www.facs.org/cancer/qualitymeasures.html>

**Hospital Comparison Report for All Sites**  
**NorthBay Medical Center and VacaValley Hospital**  
**2022-2024**







## First Course Top 10 Treatments for All Sites Cancer Diagnosed

### First Course Treatment for All Sites Cancer Diagnosed at NorthBay Medical Center 2022-2024 - Analytic Cases Only

	NBMC 2022 (n=408)	NBMC 2023 (n=3719)	NBMC 2024 (n=337)
<b>First Course Treatment</b>			
Surgery Only	23%	19%	20%
<b>Radiation Only</b>	4%	5%	6%
Surgery & Radiation	2%	2%	4%
<b>Surgery &amp; Chemotherapy</b>	7%	7%	5%
Radiation & Chemotherapy	4%	2%	4%
<b>Chemotherapy Only</b>	7%	8%	7%
Surgery, Radiation & Chemotherapy	2%	2%	1%
<b>Surgery, Radiation &amp; Hormone Therapy</b>	4%	4%	2%
<b>Other Specified Therapy</b>	21%	25%	26%
<b>No 1st Course Treatment</b>	26%	26%	25%

### First Course Treatment for All Sites Cancer Diagnosed At VacaValley 2022-2024 - Analytic Cases Only

	VVH 2022 (n=414)	VVH 2023 (n=406)	VVH 2024 (n=431)
<b>First Course Treatment</b>			
Surgery Only	9%	2%	1%
<b>Radiation Only</b>	4%	7%	8%
Surgery & Radiation	7%	9%	9%
<b>Surgery &amp; Chemotherapy</b>	3%	2%	2%
Radiation & Chemotherapy	6%	9%	10%
<b>Chemotherapy Only</b>	4%	3%	2%
Surgery, Radiation & Chemotherapy	5%	8%	5%
<b>Surgery, Radiation &amp; Hormone Therapy</b>	20%	26%	29%
<b>Other Specified Therapy</b>	32%	27%	30%
<b>No 1st Course Treatment</b>	10%	7%	4%

## Glossary & Abbreviations

**ACS:** American Cancer Society

**AJCC:** The American Joint Commission on Cancer, co-creators of the TNM (Tumor, Node, and Metastasis) scheme for staging cancer (See Stage of Disease).

**Analytic Case:** A situation in which the patient was diagnosed with cancer and/or given at least part of his/her first course of cancer treatment by NorthBay Healthcare. (Class of Case 00-40, see below).

**Cancer-Directed Treatment:** Therapy intended to affect, control, remove, destroy or cure cancer. Examples are chemotherapy and radiation therapy.

**Class of Case:** The category of cancer case according to services rendered by the reporting hospital.

The classes recognized by the American College of Surgeons and NorthBay Healthcare are:

- ❖ Class 00: Diagnosis only by the reporting hospital; cancer-directed treatment elsewhere.
- ❖ Class 10-14: Diagnosis and at least part of the first course of cancer-directed First Course of Treatment at the reporting facility.
- ❖ Class 20-22: At least part of the first course of cancer-directed First Course of Treatment at the reporting facility; cancer diagnosed elsewhere.
- ❖ Class 30-33: Diagnosis and all of first course of cancer-directed First Course of Treatment elsewhere. Additional treatment, as for a recurrence or progression, administered at the reporting facility.
- ❖ Class 37: Diagnosis and all of first course cancer-directed First Course of Treatment at the reporting facility before the reference date of the Cancer Registry. Additional treatment, as for a recurrence or progression, administered at the reporting facility after the reference date of the Cancer Registry.
- ❖ Class 38: Diagnosis with cancer at autopsy.
- ❖ Class 40-41: Diagnosis and all of first course of cancer-directed First Course of Treatment in the office of a staff physician (not a member of NorthBay Healthcare in our case). The NorthBay Cancer Registry does not currently collect this class of case.

**Median:** The middle value in a range of numbers arranged in ascending order.

**NCDB:** National Cancer Data Base: “A nationwide oncology outcomes database for 1,600 hospitals in 50 states...The NCDB was founded as a joint project of the Commission on Cancer of the American College of Surgeons (ACoS) and the American Cancer Society.” (Quoted from the NCDB link on the ACoS website, <http://www.facs.org>)

**NOS:** Not otherwise specified

**Non-cancer Directed Treatment:** Procedures intended to diagnose, stage, or palliate (relieve pain) rather than to control or cure cancer.

**Stage of Disease:** A category describing the extent of cancer present at diagnosis and its distribution through the body, which has implications for treatment and prognosis. NorthBay Healthcare’s preferred staging system is the TNM (Tumor, Node, and Metastasis) scheme from the American Joint Commission on Cancer (AJCC).

## References

National Cancer Database – 2002-2024, Commission on Cancer, Benchmark Summary of Cancer Care and Survival, United States. Chicago, IL; Commission on Cancer, 2002-2024.

## Acknowledgements

Special thanks to:

Jessica F. Powers, M.D., Cancer Committee Chair.

Jason Marengo, M.D., Cancer Liaison Physician to the American College of Surgeons' Commission on Cancer.

Members of the Cancer Committee for their continued support of, and commitment to, the Cancer Program.

Sierra Valley Cancer Registry Services, Inc., especially Jean M. Jones, CTR, for her continued excellence in cancer data abstracting.

NorthBay Health Marketing/Communications for editorial and publication assistance.

The NorthBay Cancer Registry, for coordinating the publication of this report. Please direct your comments and questions to Charlene Thompson, LVN, ODS-C, at (707) 624-8103.

## Professional Affiliations

- ❖ American Cancer Society (ACS)
- ❖ American College of Surgeons (ACOS)
- ❖ American Society of Clinical Oncology (ASCO)
- ❖ American Society of Hematology (ASH)
- ❖ Association of Community Cancer Centers (ACCC)
- ❖ Association of Oncology Social Workers
- ❖ California Cancer Registrars Association (CCRA)
- ❖ City of Hope National Medical Center
- ❖ National Association of Social Work
- ❖ National Cancer Data Base (NCDB)
- ❖ National Cancer Registrars Association (NCRA)
- ❖ Oncology Nursing Society (ONS)
- ❖ Southwest Oncology Group (SWOG)

Administration.....	646-5001
Cancer Registry.....	624-8103
Cancer Support Group Information.....	646-3595
Clinical Trials Coordinator.....	624-8007
Community Health Education.....	646-4277
Diagnostic Imaging Services	
NorthBay Health Medical Center.....	646-5100
NBH VacaValley Hospital.....	624-7100
Health at Home.....	646-3575
Hospice & Bereavement Services.....	646-3595
Laboratory Services	
NorthBay Health Medical Center.....	646-5000
NBH VacaValley Hospital.....	624-7000
Managed Care Services .....	646-3290
Medical Director, Cancer Center.....	624-8000
Medical Oncology.....	624-8000
Nursing Services.....	646-5011
Nutritional Counseling.....	646-5055
Oncology Social Services.....	646-4045
Pathology Department.....	646-5143
Pharmacy Services.....	646-5150
Marketing/Communications.....	646-3304
Radiation Oncology.....	624-8100
Rehabilitation Services	
NorthBay Health Medical Center.....	646-4150
NBH VacaValley Hospital.....	642-7000