



# 2015

## CANCER PROGRAM ANNUAL REPORT







# 2015 Cancer Program Medical Director Overview of Cancer Committee Activities and Accomplishments

## The PIH Health Hospital - Whittier Cancer Program

Cancer Program services at PIH Health Hospital - Whittier are multifaceted, from screening and prevention programs to treatment, recovery and support. Through a commitment to acquiring the latest treatments and technology as well as to the development of a dedicated oncology unit, the Comprehensive Community Cancer Program (CCCP) at PIH Health Hospital - Whittier continues to be a leader in helping patients and their caregivers meet the challenges of cancer, just as it has for more than 30 years. These efforts have earned the PIH Health Cancer Program the highest accreditation possible for a nonacademic medical center: designation as an American College of Surgeons Commission on Cancer (CoC) Comprehensive Community Cancer Program. As further testament to the excellence of the Cancer Program, the CoC honored PIH Health Hospital - Whittier with the Outstanding Achievement Award (OAA), a 3-year Certification of Accreditation with Gold-Level Commendation through 2016. The Cancer Program has been OAA certified continuously since its inception in 2004.

The Cancer Committee is responsible for establishing, monitoring and evaluating specific cancer-related patient-care criteria and initiating a variety of studies to identify opportunities for improvement. The committee has worked with other departments, community organizations and the PIH Health Foundation to provide quality cancer care.



**Nathan Honda MD CLP**  
Medical Director  
PIH Health Cancer Program

# 1 | This year, many cancer services were enhanced to provide the best patient experience possible:

- The PIH Health Hospital - Whittier Infusion Center was relocated to 2-North and expanded to accommodate 24 infusion chairs. The infusion center was designed with our patients in mind, offering social work, chaplain, reflexology and reiki therapy services. Our supportive services address the patient's physical, emotional, psychological and spiritual needs.
- An Oncology Resource Center was organized by staff and volunteers to ensure that patients receive educational material that can help them on their journey through treatment and surveillance after treatment.
- The PIH Health Hospital - Whittier Cancer Program offers a 4-week Spiritual Workshop Series. The workshops help connect patients with their spirituality so they can move through life's challenges with greater peace and awareness.
- Quarterly Cancer Survivorship Workshops were held throughout the year, presenting a variety of topics and speakers. Emphasis was placed on diet, screening, stress relief, exercise and support services.
- The National Comprehensive Cancer Network (NCCN) distress tool was provided to all appropriate patients at PIH Health Hospital - Whittier who are undergoing cancer treatment in the in-patient and out-patient setting, Infusion Center and Radiation Oncology.
- In October, a fundraiser was hosted by board member, Annette Atwood, for the purchase of wigs and head coverings for cancer patients. The American Cancer Society Wig Bank at PIH Health Hospital - Whittier is located in the Oncology Resource Center at 2-North.
- PIH Health Hospital - Whittier continues to provide numerous clinical trials as treatment options.
- The PIH Health Breast Health Center was surveyed by the National Accreditation Program for Breast Centers (American College of Surgeons) in December 2014 and received a full 3-year accreditation.
- The Cancer Program offered several screening and prevention programs for breast, lung and colon cancer, as well as lectures.
- In 2015, Survivorship Care plans were distributed to eligible breast, colon and lung patients.
- Lisa Wang MD, Daniel Saket MD, Dustin Stevenson DO and Neal Shindel MD have been featured on the medical series *American Health Journal*, which airs on PBS-affiliates nationwide, discussing cancer prevention and treatment.



## Performance Improvement Initiatives Established in 2015:

- The **Clinical Goal** chosen for 2015 was to evaluate patients who will undergo breast surgery pre-operatively for lymphedema measurements. Fifty-nine percent of patients received pre-operative lymphedema measurements from May through September 2015.
- The **Programmatic Goal** was to increase the response rate of treatment letters that are sent to physicians. Having all pertinent treatment information ensures that the data collected by the cancer registry accurately reflects the treatment the patient received. In 2014, 25% of treatment letters were returned to the Registry. In 2015, there was a 60% response rate with treatment information.
- **Three studies of quality** were completed to determine the appropriateness of molecular cancer tests ordered in 2014 for colon, breast and lung cancer:

1

**Colon:** NCCN Guidelines - Testing for KRAS mutation for patients with advanced or metastatic disease who are being considered for cetuximab or panitumumab therapy. Patients with the mutated oncogene do not respond to anti-EGFR therapy. Patients who are not candidates for systemic chemotherapy would not benefit from KRAS testing. Conclusion: Approximately 75% of colon cancer patients tested for KRAS mutation were candidates for systemic chemotherapy including anti-EGFR therapy.

2

**Lung Cancer:** NCCN Guidelines - EGFR and ALK mutation testing should be obtained for patients presenting with adenocarcinoma or adenocarcinoma of the lung with advanced (Stage IV) disease or un-resectable tumor and who are candidates for target therapy. The test should not be ordered on early stage resectable cancer and patients who are not candidates for target therapy. Conclusion: All 19 patients with lung cancer tested for EGFR and ALK mutations had advanced stage IV or unresectable tumors. No patients were tested inappropriately.

3

**Breast Cancer:** 21-gene RT-PCR Assay (Oncotype Dx Testing) estimates the likelihood of recurrence and likely benefit from chemotherapy. Candidates for testing are early stage invasive breast cancer stage I or II, >0.5 cm ER+HER2/neu(-). Conclusion: Oncotype Dx testing was found appropriate in approximately 75% of cases. The results of this study became the basis of a performance improvement, which resulted in 100% appropriate testing.

As required each year by the American College of Surgeons Commission on Cancer, a physician member of the cancer committee performs a study to assess whether patients within the program are evaluated and treated according to evidence-based national treatment guidelines. The 2015 study assessed evaluation and treatment planning in rectal cancer.

**Method:** Rectal cancer patients who received their first course of treatment at PIH Health Hospital - Whittier in 2012 and 2013 were identified in the Cnext database and sorted by age, tumor histology, clinical stage, diagnostic studies performed (abdominal pelvic CT, chest CT, EUS, pelvic MRI), chemotherapy, radiation, type of surgery and pathologic staging.

The following clinical categories are assessed:

- A. Clinical T1-2, N0, MO
- B. Clinical Stage M1, T Any, N Any
- C. Clinical Stage T4 unresectable
- D. Clinical Stage T3, N0 or T Any, N

The data was analyzed along with information in the electronic medical record and follow-up records to determine if the clinical management of rectal cancer was concordant with current NCCN Practice Guidelines in oncology version 4.2013 rectal cancer.

**Summary:** The results of this study indicate conformance with NCCN guidelines in the evaluation and treatment of patients with rectal adenocarcinoma at PIH Health Hospital - Whittier. Multiple clinical factors including patient performance status, age, co-morbidities and patient's desires were taken into consideration in treatment and management. Different surgical approaches were employed depending on the location and extent of disease to treat rectal cancer. Sequenced multimodality therapy, including neoadjuvant chemoradiation and surgery, was implemented based upon clinical stage and patient performance status. Pathologic down-staging of rectal adenocarcinoma was achieved in 9 of 13 patients (70%) and three of those patients had a complete pathologic response (23%). Post treatment outcomes for patients who received neoadjuvant chemotherapy followed by surgery were comparable to published studies.

Presented to the Cancer Committee on October 12, 2015.  
Nathan S. Honda MD, Medical Director, Cancer Program.

## Improvements Implemented by the Cancer Committee:

**1** The Cancer Committee approved a performance improvement based upon a completed study of quality for breast cancer on the utilization of 21 gene RT PCR Assay (Oncotype). Dr. Honda reviews all tests prior to sending them out to insure that criteria are met prior to testing.

**2** The Breast Health Center's performance improvement focused on timeliness of ultrasound breast biopsies. Procedure time was 87 minutes Pre-LEAN and 66 minutes Post-LEAN, indicating a 20% reduction in procedure time Post-LEAN and 12% reduction in process variation. There was a 467% improvement in procedures that start on time. BX procedure on-time start is 15% Pre-LEAN and 85% Post-LEAN.

## Community Outreach and Education:

The Cancer Committee collaborated with other departments and organizations to provide quality cancer care at PIH Health Hospital - Whittier and throughout the community. The hospital participated in numerous community outreach and educational activities during 2015, including:

- Education on Breast Self-Examinations
- Low-Cost Mammography
- Colorectal Cancer Lecture Series
- Lung Cancer Screening
- American Cancer Society Partnered Events, Relay for Life, and Making Strides
- Cancer Survivorship Workshops
- Cancer Caregivers Workshops
- Participation in Health Fairs



## PIH Health Hospital - Whittier and ACS Offer Numerous Support Groups, including:

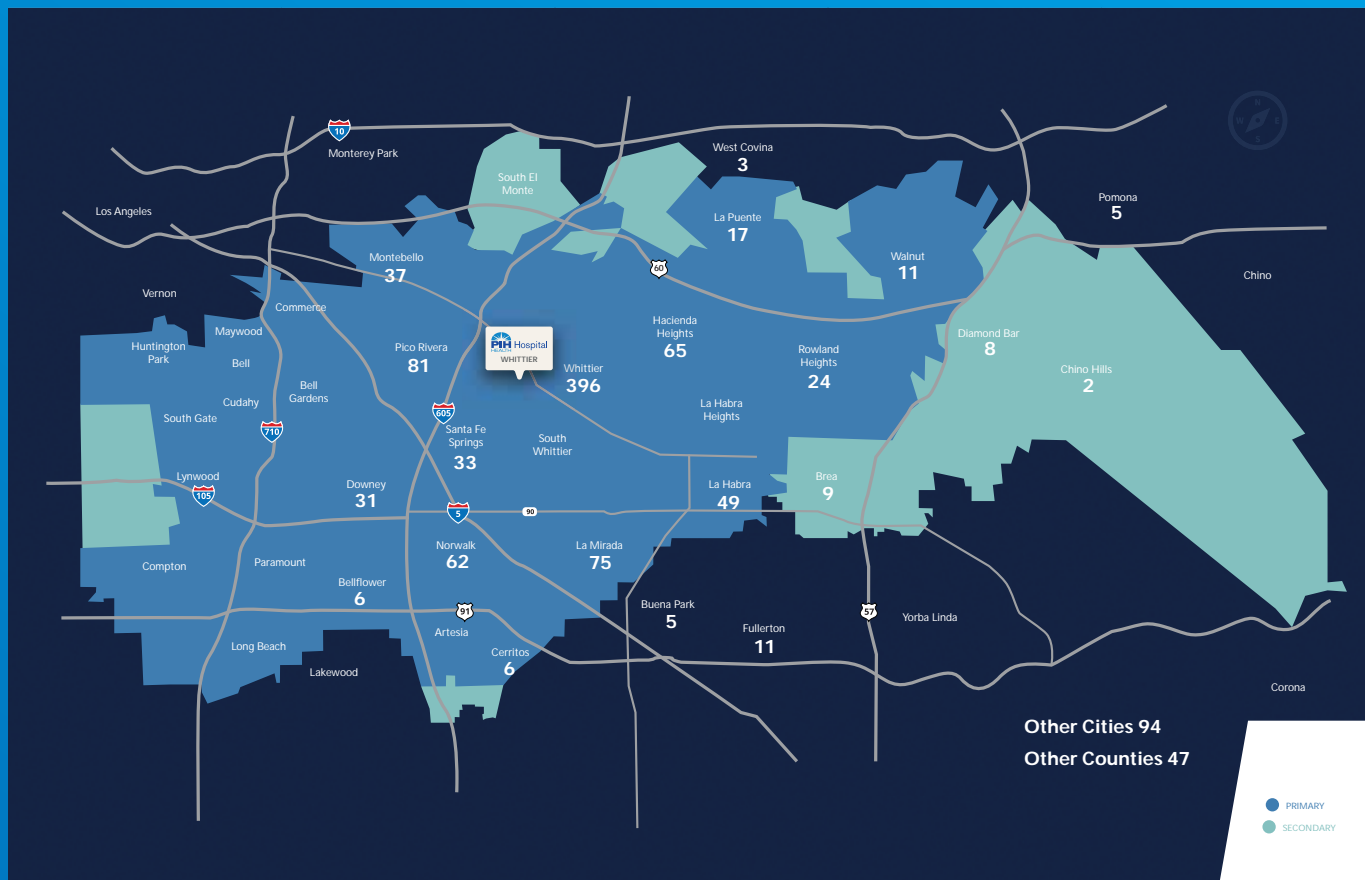
- Breast Cancer Support Group
- 24-hour Cancer Information Hotline
- Journey Through Cancer Support Group
- Life After Cancer
- Grief Recovery
- Look Good, Feel Better
- Healing After Loss
- I Count Too
- I Can Cope



(Please see PIH Health's service area map for cancer diagnosis in the community for the year 2015.)

# 2014 Geographic Distribution of Caseload

1077 Cancer Patients seen at PIH Health Hospital - Whittier



## 2 | Cancer Registry

Established in 1987, the Cancer Registry is an essential component of the PIH Health Hospital - Whittier Comprehensive Community Cancer Program. Our cancer database management system is designed to monitor all types of cancers diagnosed and/or treated at PIH Health Hospital - Whittier, and is a critical element in the evaluation of cancer care. The registry staff is specially trained in the field of oncology data management. Demographic information, cancer type, treatment and follow-up data are collected on each cancer patient. In 2014, the Oncology Registry database included information on 25,975 cases.

### Cancer Statistics

In 2014, 1344 patients were diagnosed or received cancer care at PIH Health Hospital - Whittier. The Primary Site Distribution (Table 2 on next page) details the hospital's 2014 cancer experiences by site, age, gender and stage of disease at diagnosis.

The most common cancers diagnosed and treated at PIH Health Hospital - Whittier were compared to California cancer incidence and ranked according to frequency. Cancer incidence by gender at PIH Health Hospital - Whittier were 440 males and 637 females. The incidence of breast cancer is higher at PIH Health Hospital - Whittier compared to California rates (Table 1).

Figure 1 depicts the number of newly diagnosed cancer cases accessioned into the cancer registry since 1987. These cases are categorized into three groups: new cancer cases for the year 2014; cases diagnosed and treatment given; and those diagnosed elsewhere, but receiving their initial treatment at PIH Health Hospital - Whittier.

Figure 2 illustrates the five most common sites of the total cancer at PIH Health Hospital - Whittier in 2014 were breast (21%), colorectal (10%), lung (10%), prostate (6%) and kidney (4%).

The stage of disease at the time of diagnosis plays a vital role in the prognosis and treatment of a cancer patient. In 2014, 35% of all newly diagnosed patients had early stage disease at diagnosis (in-situ or Stage I), 17% were Stage II, 10% were Stage III, 17% were Stage IV, 17% were not applicable for staging (NA) and 4% were classified as unknown stage at time of diagnosis (Figure 3).

Seventy-four percent (74%) of patients were between the ages of 60 and 90 at diagnosis. The median age was 70 years. (Figure 4).

{Table 1}

### 2014 Cancer Incidence by Gender at PIH Health Hospital - Whittier



440 males



637 females

Male	PIH Health Hospital - Whittier	Calif.
Prostate	16%	28%
Colon & Rectum	14%	9%
Leukemia & Lymphoma	7%	14%
Lung	11%	11%
Urinary Bladder	5%	6%

Female	PIH Health Hospital - Whittier	Calif
Breast	35%	33%
Uterus & Cervix	8%	9%
Colon & Rectum	7%	9%
Lung	9%	10%
Leukemia & Lymphoma	8%	11%



{Table 2}

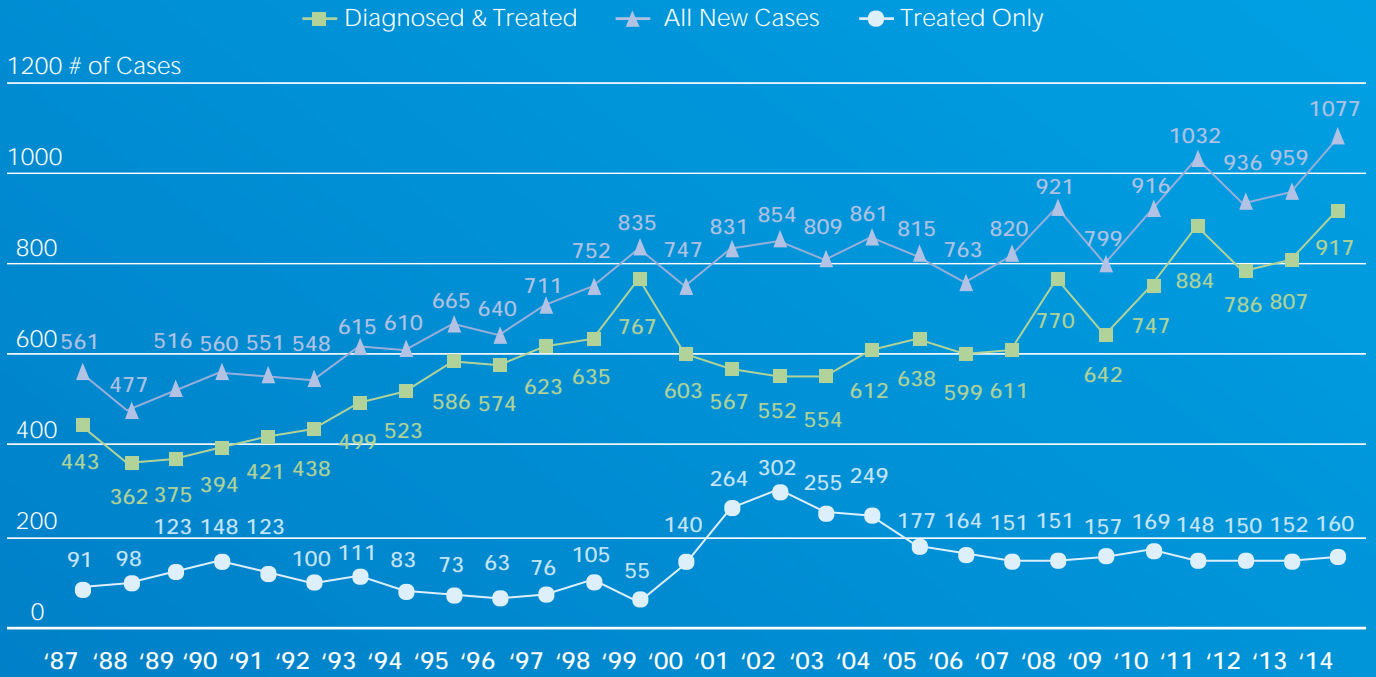
## Primary Site Distribution - 2014

PRIMARY SITE	Class of Case			Sex*		Stage at Diagnosis*						
	Cases	A	N/A	M	F	0	I	II	III	IV	NA	UNK
<b>ALL SITES</b>	<b>1344</b>	<b>1077</b>	<b>267</b>	<b>575</b>	<b>769</b>	<b>73</b>	<b>298</b>	<b>186</b>	<b>111</b>	<b>186</b>	<b>180</b>	<b>43</b>
<b>ORAL CAVITY/PHARYNX</b>	<b>15</b>	<b>12</b>	<b>3</b>	<b>11</b>	<b>4</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>0</b>
Tongue	4	3	1	3	1	0	2	0	0	2	1	0
Salivary Glands, Major	3	3	0	3	0	0	0	0	1	1	2	0
Mouth Other	6	5	1	3	3	0	3	1	0	1	1	0
Tonsil	1	1	0	1	0	0	0	0	1	0	0	0
Oropharynx	1	0	1	1	0	0	0	0	0	0	0	0
<b>DIGESTIVE SYSTEM</b>	<b>274</b>	<b>214</b>	<b>60</b>	<b>158</b>	<b>116</b>	<b>7</b>	<b>46</b>	<b>38</b>	<b>30</b>	<b>66</b>	<b>26</b>	<b>3</b>
Esophagus	16	14	2	13	3	1	2	1	1	7	2	0
Stomach	25	19	6	11	14	0	4	1	3	6	5	0
Small Intestine	3	3	0	1	2	0	0	2	1	0	0	0
Colon/Rectum/Rectosigmoid	134	104	30	78	56	6	27	24	18	23	6	0
Anus/Anal Canal/Anorectum	2	2	0	1	1	0	1	0	0	0	0	1
Liver	44	32	12	31	13	0	8	3	5	6	10	0
Gallbladder/Extrahepatic Bile Ducts	13	11	2	5	8	0	2	1	2	5	1	0
Other Digestive	2	2	0	0	2	0	0	0	0	2	0	2
Pancreas	35	27	8	18	17	0	2	6	0	17	2	0
<b>RESPIRATORY/INTRATHORACIC</b>	<b>406</b>	<b>119</b>	<b>25</b>	<b>74</b>	<b>70</b>	<b>1</b>	<b>34</b>	<b>12</b>	<b>15</b>	<b>47</b>	<b>8</b>	<b>0</b>
Larynx	10	8	2	9	1	0	4	1	0	7	1	0
Lung/Bronchus/Pleura	134	111	23	65	69	1	30	11	15	40	7	0
<b>BLOOD &amp; BONE MARROW**</b>	<b>105</b>	<b>59</b>	<b>46</b>	<b>51</b>	<b>54</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>59</b>
Leukemia	48	31	17	21	27	0	0	0	0	0	0	31
Multiple Myeloma	22	10	12	11	11	0	0	0	0	0	0	10
Other Bone Marrow Disorders	35	18	17	19	16	0	0	0	0	0	0	18
<b>SOFT TISSUE/BONE</b>	<b>19</b>	<b>14</b>	<b>5</b>	<b>10</b>	<b>9</b>	<b>0</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>1</b>
<b>SKIN</b>	<b>19</b>	<b>11</b>	<b>8</b>	<b>15</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>
Melanoma of Skin	14	9	5	12	2	0	4	4	1	0	0	0
Other Skin/Kaposi Sarcoma	5	2	3	3	2	0	0	0	0	0	0	2
<b>BREAST</b>	<b>251</b>	<b>222</b>	<b>29</b>	<b>1</b>	<b>250</b>	<b>53</b>	<b>87</b>	<b>59</b>	<b>12</b>	<b>9</b>	<b>2</b>	<b>0</b>
<b>FEMALE GENITAL</b>	<b>109</b>	<b>91</b>	<b>18</b>	<b>0</b>	<b>109</b>	<b>0</b>	<b>43</b>	<b>12</b>	<b>17</b>	<b>13</b>	<b>2</b>	<b>4</b>
Cervix Uteri/Cervix Insitu	16	11	5	0	16	0	3	4	3	1	0	0
Corpus Uteri/Uterus NOS	44	39	5	0	44	0	29	2	2	6	0	0
Ovary	35	27	8	0	35	0	8	4	10	5	0	0
Vulva/Vagina/Other	14	14	0	0	14	0	3	2	2	1	2	4
<b>MALE GENITAL</b>	<b>113</b>	<b>75</b>	<b>38</b>	<b>113</b>	<b>0</b>	<b>1</b>	<b>18</b>	<b>38</b>	<b>10</b>	<b>7</b>	<b>1</b>	<b>0</b>
Prostate	107	70	37	107	0	0	14	38	10	7	1	0
Testis/Penis	6	5	1	6	0	1	4	0	0	0	0	0
<b>URINARY</b>	<b>88</b>	<b>75</b>	<b>13</b>	<b>70</b>	<b>18</b>	<b>11</b>	<b>32</b>	<b>10</b>	<b>9</b>	<b>13</b>	<b>0</b>	<b>0</b>
Bladder	28	26	2	25	3	10	6	8	0	2	0	0
Kidney and Renal Pelvis	59	48	11	45	14	1	26	2	9	10	0	0
Ureter/Other Urinary	1	1	0	0	1	0	0	0	0	1	0	0
<b>BRAIN/EYE/CNS**</b>	<b>79</b>	<b>75</b>	<b>4</b>	<b>22</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>75</b>
<b>ENDOCRINE/THYROID</b>	<b>40</b>	<b>36</b>	<b>4</b>	<b>16</b>	<b>24</b>	<b>0</b>	<b>14</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>14</b>
<b>LYMPHATIC SYSTEM</b>	<b>62</b>	<b>52</b>	<b>10</b>	<b>21</b>	<b>41</b>	<b>0</b>	<b>11</b>	<b>8</b>	<b>9</b>	<b>21</b>	<b>2</b>	<b>1</b>
Hodgkin's Disease	11	9	2	4	7	0	1	5	0	2	1	0
Non-Hodgkin's Lymphoma	51	43	8	17	34	0	10	3	9	19	1	1
<b>UNKNOWN**</b>	<b>26</b>	<b>22</b>	<b>4</b>	<b>13</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>22</b>

\*Stage reflects analytic cases \*\*AJCC Stage not applicable NA = Non-applicable UNK = Unknown Stage

{Figure 1}

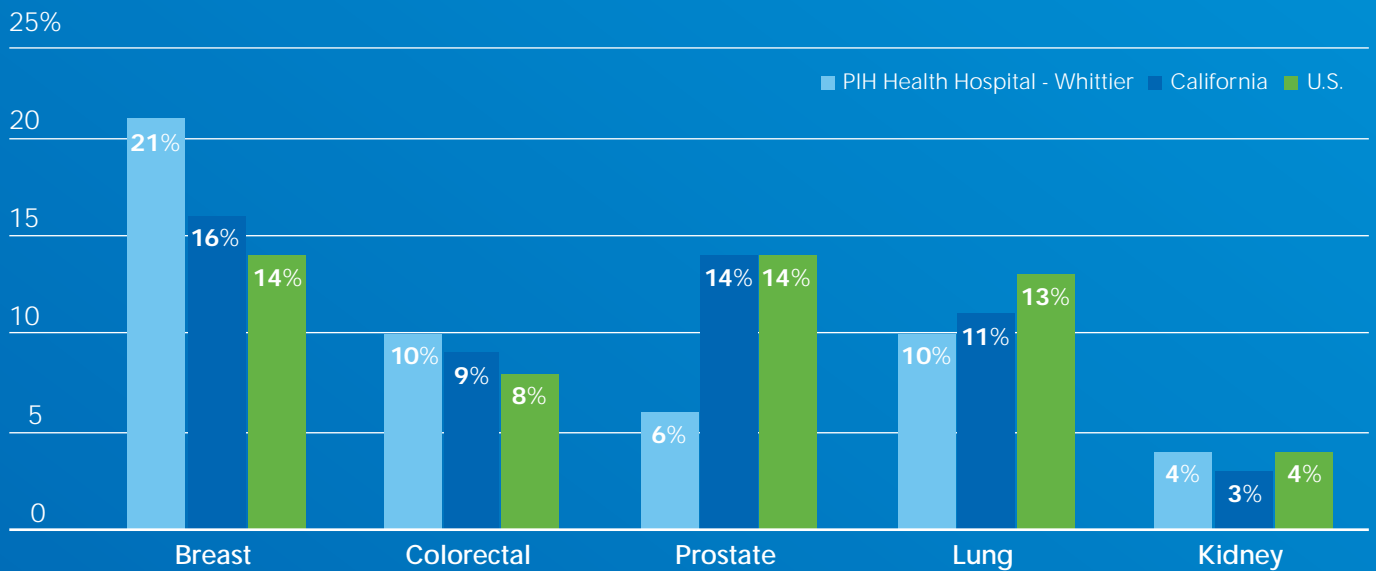
## New Cancer Cases 1987-2014



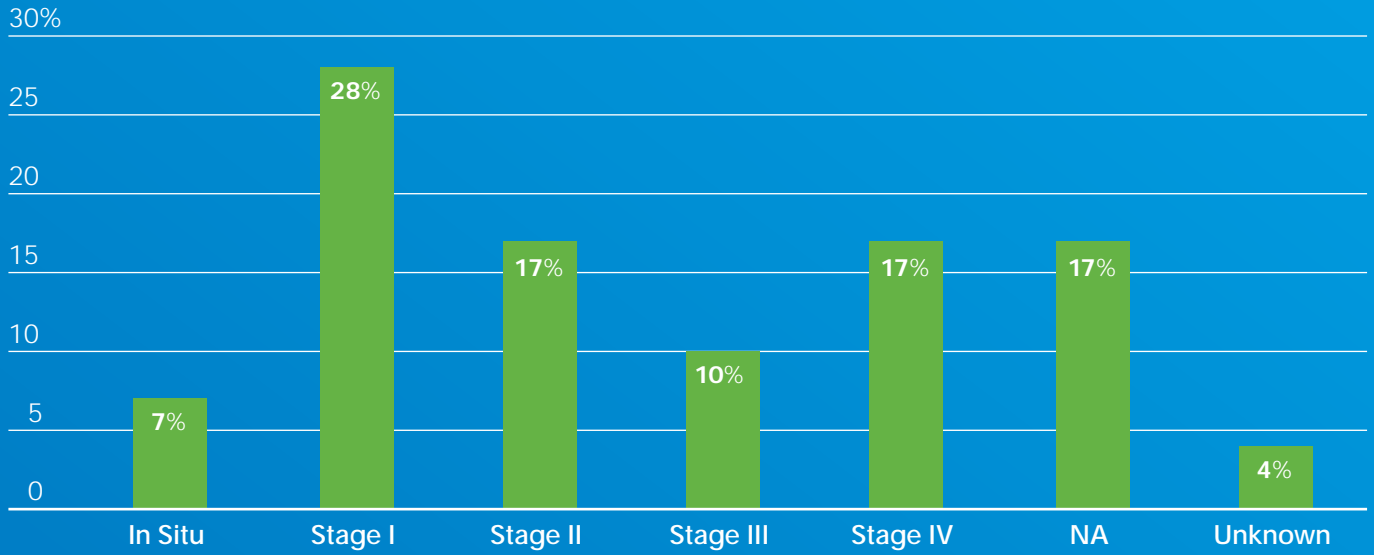
{Figure 2}

## 2014 Major Site Comparison

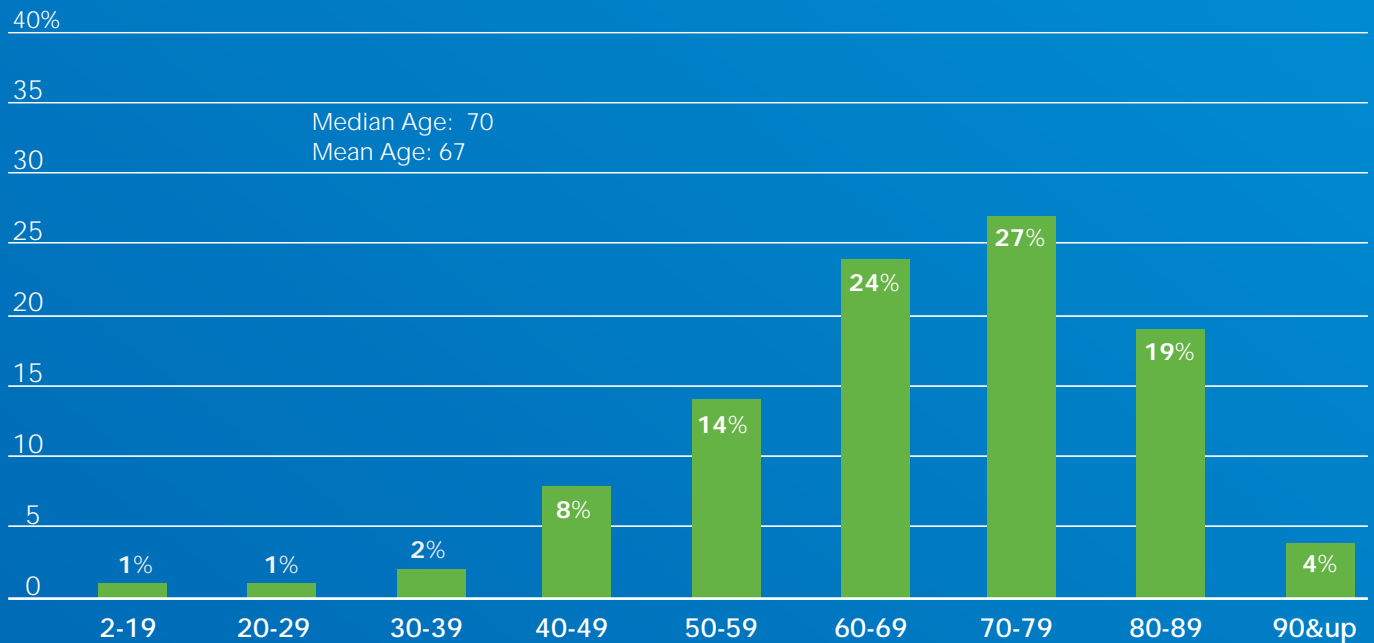
1077 Analytic Cases



{Figure 3}  
**Stage at Diagnosis**  
1077 Analytic Cases



{Figure 4}  
**Age Distribution**  
1077 Analytic Cases





# 3 | Non-Hodgkin's Lymphoma

By Dustin Stevenson DO, Hematology/Oncology

## INTRODUCTION

Non-Hodgkin's Lymphoma (NHL) is a term used to describe a variety of cancers that begin in the lymph system. The lymph system includes lymph nodes, spleen, tonsils, bone marrow, thymus gland and lymphocytes (immune cells in the blood). NHL can be classified based on the type of cell involved (B-cell, T-cell or NK cell). The majority of NHLs originate in B-cells. NHL can also be classified based on aggressiveness. Indolent lymphomas are slow growing, not immediately life threatening and treatment is usually indicated when symptoms are present. In contrast, aggressive lymphomas are fast growing and life threatening and require treatment with chemotherapy and immune-based therapies such as Rituximab.

	B-Cell NHL	T/NK Cell NHL
Indolent Lymphomas	CLL/SLL Follicular Marginal Zone Lymphoplasmacytic	T-cell Lymphoma/Leukemia Mycosis Fungoides Anaplastic Large Cell of Skin
Aggressive Lymphomas	Diffuse Large Burkitt's Mantle cell Primary CNS Lymphoma	Peripheral T-cell Lymphoblastic Extranodal NK/T-cell

### Statistics

Non-Hodgkin's Lymphoma accounts for 4% of all cancers. Although they may occur at any age, the average age at diagnosis is 60. At PIH Health Hospital - Whittier, the distribution of ages is similar to those reported in the medical literature (see **Figure 6**). NHL occurs slightly more in men. It is more prevalent in Caucasians compared to African-Americans and Asian-Americans. In the United States, approximately 70,000 individuals are diagnosed each year with NHL. Just under 20,000 die annually from the disease. At PIH Health Hospital - Whittier, we have seen a steady increase in the diagnoses of NHL (see **Figure 7**). Advances in the treatment of NHL to include the use of the anti-CD20 antibody Rituximab have led to significant improvements in survival since the 1990's.

### Risk factors

Although the exact cause of lymphomas is unknown, several risk factors have been identified. Exposure to certain chemicals that include agricultural pesticides, hair dyes and dioxins (Agent Orange) have been linked to the development of NHL. Various infections such as HIV, Human T Lymphocyte Virus Type 1 (HTLV-1), Epstein Barr virus and Hepatitis C virus predispose individuals to various types of lymphoma. Use of immunosuppressive medications after organ transplantation and autoimmune diseases also predispose to the development of lymphoma. A healthy diet rich in fruits and vegetables as well as regular exercise decreases the risk of NHL.

### Symptoms

Symptoms of NHL can include swollen glands especially in the neck, under the arms and/or in the groin. Fevers, sweating heavily at night and weight loss are called "B-symptoms" and are associated with aggressive lymphomas. Lymphomas involving the central nervous system may lead to headaches, seizures, weakness and paralysis. Lymphomas involving the bone marrow can result in fatigue from anemia, infections from low white blood cell counts and bleeding from low platelet counts. Lymphomas involving the GI tract can lead to blockage and intestinal bleeding as well as malabsorption. Other symptoms include unexplained rashes, severe reactions to insect bites and gout.

### Diagnosis

When lymphoma is suspected based on symptoms and findings during a physical exam, the next step is to biopsy a suspected site. Biopsy of a lymph node can be done either by an excisional biopsy (where a surgeon removes a whole lymph node via an incision) or by a needle biopsy. Once a biopsy sample is obtained, a pathologist examines the specimen under a microscope to determine the type of disease. Additional studies are often performed on the specimen, which include the use of special stains (called immunohistochemistry) and flow cytometry. These tests further characterize the type of lymphoma and may help with prognosis and treatment options.

## Staging

Once lymphoma is confirmed, it is staged to determine the extent of disease. Common tests include CT scans, PET scans and bone marrow biopsies. Staging is useful for prognosis and may determine the best treatment options. Stage I disease means that only one lymph node is involved. Stage II means that there are more than 2 sites of lymphoma on the same side of the diaphragm whereas stage III means that lymphoma is present above and below the diaphragm. Stage IV is when the lymphoma involves other organs such as the bone marrow or the liver. **Figure 3** shows 2014 data at PIH Health Hospital - Whittier regarding the stage of all patients diagnosed in 2014.

## Survival Rates

The overall 5-year survival rate for NHL in the United States is 69% and lymphoma specific survival at 10 years is 59%. Surviving lymphoma is dependent upon the type of lymphoma, the patient's age, how healthy the person is going into treatment, the stage at diagnosis, the molecular profile of the lymphoma (genetic changes in the lymphoma cells) and how well the lymphoma responds to treatment. **Table 3** shows the 5-year survival rates for NHL diagnosed at PIH Health Hospital - Whittier for the period of 2008-2012. Stage for stage, the survival rates compare favorably to national statistics.

## Indolent Lymphoma

Patients with indolent lymphomas typically cannot be cured with therapy but generally live more than 10 years. For follicular lymphomas, a prognostic index has been created called "FLIPI". Points are assigned based on the following:

1. Age greater than 60
2. Stage III/IV disease
3. Hemoglobin less than 12
4. More than 4 sites of involved lymph nodes
5. Elevated LDH

The 10-year survival rates for low risk (0-1 points) is 71%, 51% for intermediate risk (2 points) and 36% for high risk (3 or more points). For patients with Stage I/II follicular lymphoma who are not experiencing symptoms, immediate treatment has not been shown to improve outcomes. Patients with symptomatic disease and patients with Stage III and IV disease merit treatment. In 2015, the most common treatment was a combination of Bendamustine (a well-tolerated chemotherapy medication) with Rituximab. Rituximab is an engineered antibody against a protein on cell surfaces called CD20. The majority of B-cell lymphomas have CD20 on the surface of their cells. Rituximab binds to CD20, which ultimately leads to cell death via numerous immune system mechanisms.

## Aggressive Lymphoma

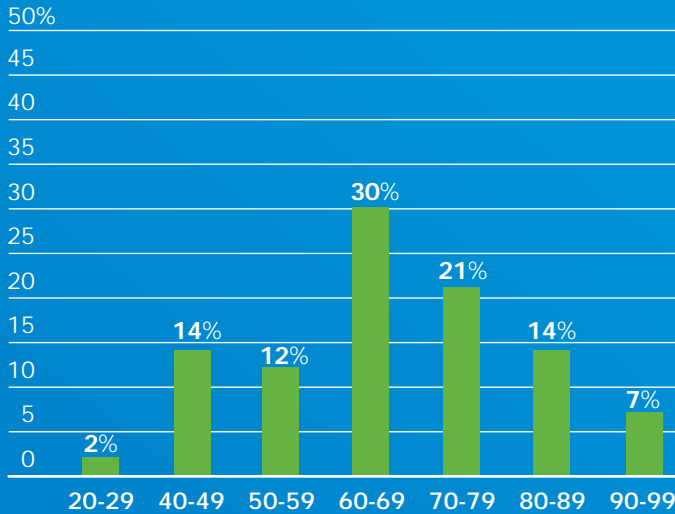
Aggressive lymphomas require immediate treatment. Although life threatening, they are potentially curable with intensive treatment. For the most common lymphoma, Diffuse Large B-Cell Lymphoma (DLBCL), the standard treatment is a combination cyclophosphamide, adriamycin, vincristine and prednisone (CHOP) in addition to Rituximab. All four drugs are administered every 3 weeks for 6-8 treatments. A number of factors determine the likelihood of cure with this treatment. The revised international prognostic index (IPI) looks at 5 poor risk factors and assigns points. The poor risk factors are:

1. Age greater than 60
2. Stage III/IV disease
3. Lymphoma involving one or more organs
4. Elevated LDH
5. Poor performance status (unable to perform routine tasks due to disease symptoms)

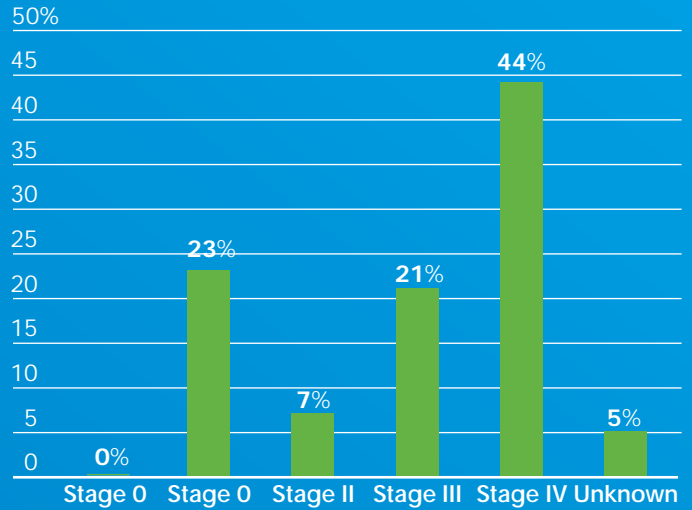
Patients with 0 to 1 point are classified as low risk and on average 91% of patients in this category are alive and lymphoma free at 30 months. Low intermediate risk is defined as 2 points and 81% of patients are alive at 30 months whereas high intermediate risk (3 points) has a 65% survival and high risk (4-5 points) has a 59% survival at 30 months. For patients who are not cured of their lymphomas with CHOP + Rituxan, options include stem cell transplantation and clinical trials of experimental medications.



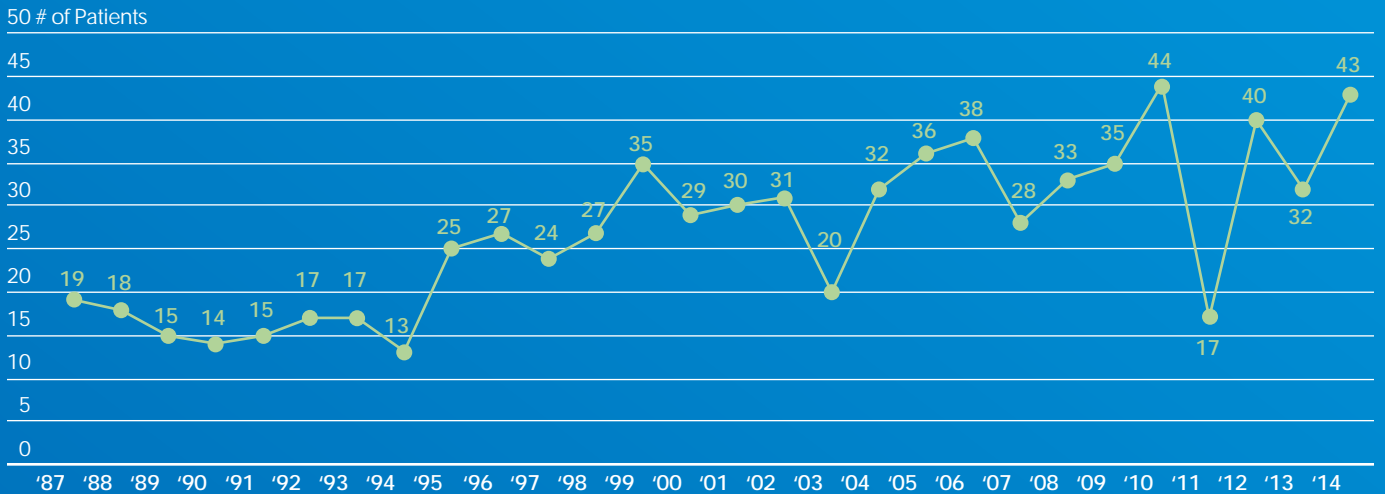
{Figure 5}  
**Non-Hodgkin's Lymphoma  
 Age Distribution (Diagnosed 2014)**  
 43 Analytic Cases



{Figure 7}  
**2014 Non-Hodgkin's Lymphoma  
 Stage at Diagnosis**  
 43 Analytic Cases



{Figure 6}  
**1987-2014 Incidence of Non-Hodgkin's Lymphoma**  
 784 Analytic Cases



{Table 3}  
**Five-Year Observed Survival Rate (Actuarial Method) - by Stage at Diagnosis**  
 Non-Hodgkin's Lymphoma - Diagnosed 2008 - 2012

	All	I	II	III	IV
PIH Health Hospital - Whittier # Patients	148	34	29	26	59
5 year survival rate %	64%	94%	87%	69%	32%



## 4 | 2014 Breast, Lung & Multidisciplinary Cancer Conferences and Lectures

Cancer conferences provide a multidisciplinary, patient specific, treatment-planning, consultative service for patients and their managing physicians. The conferences offer a forum for discussing the most appropriate patient management plan. At PIH Health Hospital - Whittier in 2014, a total of 46 multidisciplinary cancer conferences were held and 148 cases were presented, representing 28 sites. Forty-six breast cancer conferences were held, with 165 breast cancer cases presented. In addition, 12 lung cancer conferences were held and 69 lung cancer cases were presented.

### Doctors Who Presented and Participated in Case Presentations at Cancer Conferences in 2014

Akhavan Daniel MD  
 David Berz MD  
 John Britto MD  
 Alfred Castellanos MD  
 Nadeem Chishti MD  
 Armen Gregorian MD  
 Jack Freimann MD  
 Nathan Honda MD  
 Hussein Nassr MD  
 Samuel Im MD  
 Neil Klein MD  
 William Kurohara MD  
 Jason Lai MD  
 Edwin Lin MD  
 William MacDonald MD  
 Mukesh Shah MD  
 Mark Odou MD  
 Wayne Ray MD  
 Peter Roca MD  
 Kiumars Saketkhoo MD  
 Dennis Sargent MD  
 Merrill Shum MD  
 Dustin Stevenson DO  
 Kenneth Thompson MD  
 Eduardo Tovar MD  
 Miguel Velez MD  
 Lisa Wang MD  
 Gerald Yoon MD  
 Jeffrey Yuen MD  
 Scott Yun MD

Cancer Conferences			
Appendix	1	Ovary/Fallopian Tube	4
Bladder	2	Pancreas/Bile Duct	3
Brain	2	Peritoneum	1
Breast	165	Prostate	8
Colorectal/Anus	40	Skin/Melanoma	9
Corpus Uteri/Vulva/ Endocervical/Vagina	8	Soft Tissue	3
Esophagus	2	Spine	1
Gall Bladder	3	Spleen	3
Head & Neck	1	Stomach	10
Kidney	5	Testis	2
Leukemia/Myeloma	5	Thymus	2
Liver	10	Thyroid	3
Lung/Pleura	69	Tonsil	1
Lymphoma	14	Unknown Primary	5

**Total # cases presented 382**

### In addition, 5 Lectures were offered:

1. "Multidisciplinary Approach in Management of Hepatocellular Carcinoma  
**Yuri Stepanovich Genyk MD**"
2. "Hereditary Cancer: The Importance & Significance of Identifying High Risk Patients in a Breast Cancer Setting  
**Richard Frieder MD, Medical Director, Intelegene**"
3. "Histologic and Molecular Diversity and Corresponding Therapeutic Implications  
**Michael Pins MD & David Berz MD PhD MPH**"
4. "Gene Signatures and Prediction of Treatment Benefit in Breast Cancer and Risk-Adapted Therapy for DCIS  
**Michael Alvarado MD**"
5. "Surgical Management of Primary and Secondary Liver Malignancies  
**Vatche G. Agopian MD**"

## 5 | 2015 Cancer Committee

The PIH Health Hospital - Whittier Cancer Committee is a multidisciplinary team composed of medical staff members representing diagnostic and therapeutic specialties, administrative staff and allied health professionals involved in the care of cancer patients. The committee members work together to provide the highest quality of care to cancer patients and play a key role in the success of the PIH Health Hospital - Whittier Comprehensive Community Cancer Program.

### Physician Members

**Kimberly Bickell MD**

Co-Director Breast Health Center  
Radiologist

**Anthony Britto MD**

Plastic Surgeon

**Nadeem Chishti MD**

Pulmonologist

**Nelson DallaTor MD**

Family Practice, Pain Specialist/  
Palliative Care

**Jack Freimann MD**

Chair, Cancer Committee  
Hematologist/Medical Oncologist

**Brent Gray MD**

Assistant VPMA/OB/Gyn

**Armen Gregorian MD**

Colorectal Surgeon

**Nathan Honda MD**

Cancer Program Medical Director/  
Cancer Liaison Physician/Activity  
Coordinator, Performance  
Improvement/Pathologist

**Maureen Jensen MD**

Co-Medical Director Breast Health  
Center, Radiologist

**Robert Kleinman MD**

Radiologist

**William Kurohara MD**

Quality Control Coordinator of Registry  
Data/Radiation Oncologist

**Edwin Lin MD**

Hematologist/Medical Oncologist

**Merrill Shum MD**

Hematologist/Medical Oncologist

**Dustin E. Stevenson DO**

Hematologist/Medical Oncologist

**Kennith Thompson MD**

Co-Medical Director Breast Health  
Center/Cancer Liaison Physician/  
General Surgeon

**Lisa S. Wang MD**

Hematologist/Medical Oncologist

### Non-Physician Members

**Suzanne Barone RMT MA**

Reiki Master, Coordinator  
Complementary Medicine

**Maria Cortinas Davila RN MSN**

Clinical Director, Plaza Tower

**Lorraine DeGiacomo RN BSN OCN**

Manager, Radiation Oncology

**Rosie Drulias RN BSN PHN CCRP**

Clinical Research Coordinator/Clinical  
Research Activity Coordinator

**Kelsey Frimodt CTR**

Cancer Data Specialist/Co-Conference  
Activity Coordinator - Cancer Program

**Carla Guess RN CBCN CBPN-IC**

Oncology Nurse Navigator, Breast  
Health Center

**Danielle Halewijn RD CDE MHA**

Clinical Nutrition Manager and  
Director of Diabetes Education

**Kristine Hillary RN MSN NP**

Clinical Director, Hospice

**Shelley Hart PTA-CLT**

Lymphedema Program

**April Hopper CTR**

Cancer Data Specialist/Conference  
Activity Coordinator - Cancer Program

**Jarvis Jimenez MSW**

Social Work/Psychosocial Activity  
Coordinator

**Sue Jervik RN BSN**

Pain Education

**Ellen Knell PhD**

Certified Genetic Counselor

**Ricardo Lopez MPH CHES**

Community Outreach/Community  
Outreach Activity Coordinator

**Debbie McKnight RN MSN OCN**

Administrative Director, Med-Surg/  
Oncology Unit/Outpatient Infusion  
Center/Cancer Program

**Sarah Merkle RN BSN MSN**

Clinical Nurse Specialist, 4-T, Oncology  
Unit/Infusion Center

**Ashley Millhouse**

System Manager, ACS

**Ivonne Munoz RN BSN**

Director, Breast Health Center

**Lucinda Place RN MSN**

Administrator, Quality Management &  
Performance Excellence

**Jessica Peckham RN MSN OCN NP-C**

Lung Screening Program

**Lynze Ruvalcaba RN BSN**

Clinical Director, 4-T, Oncology Unit/  
Infusion Center

**Kathy Seymour RN BSN OCN**

Oncology Nurse Navigator, Cancer  
Program

**Cynthia Swystun**

Administrative Director, Medicine  
Specialties/Group Operations

**Reanna Thompson RN MSN CNO COO**

Chief Nurse Officer, Chief Operating  
Officer/Cancer Program Senior  
Executive

**Raquel Varella PT DPT CLT**

Lymphedema Program

**Ellie Winterfeld BA CTR CCRP**

Director, Cancer Program/Clinical Trials

**Kathy Wright RN**

Practice Manager, PIH Health Oncology  
Group

## 6 | Acknowledgments

The 2014 - 2015 Cancer Program Annual Report was prepared by Ellie Winterfeld BA CTR CCRP Director, Cancer Program/Clinical Trials and the Cancer Data Specialists under the purview of the Cancer Committee.

### Special Thank You to **Dustin Stevenson DO** **Hematology/Oncology** for his research and narrative on Non-Hodgkin's Lymphoma

#### References

Cancer Program Manual, 2012; American College of Surgeons Commission on Cancer; Chicago  
Manual for Staging of Cancer, 7th Edition; American Joint Committee on Cancer, Springer; New York, NY 2010  
Cancer Facts & Figures, 2014; American Cancer Society, Inc.; New York, New York  
California Facts & Figures, 2014; American Cancer Society; California Division, Inc.; Oakland, California  
PIH Health Cancer Registry Statistical Database  
For more information about the PIH Health Comprehensive Community Cancer Program please,  
call **562.698.0811 Ext. 12456** or visit **PIHHealth.org**

#### Directory of Services

**Main Hospital Number**

562.698.0811

**American Cancer Society at PIH Health**

562.698.0811 Ext. 12820

**American Cancer Society**

800.ACS.2345

**Breast Oncology Nurse Navigator**

562.907.0667 Ext. 15326

**Cancer Program Education/Support Groups**

562.698.0811 Ext. 12570

**Cancer Information Hotline**

562.945.8326

**Cancer Registry**

562.698.0811 Ext. 12896

**Clinical Trials Department**

526.698.0811 Ext. 12930

**Colon Cancer Prevention Program**

562.945.4754

**Colorectal Oncology Nurse Navigator**

562.698.0811 Ext. 12580

**Complementary Medicine Program**

562.698.0811 Ext. 12777

**Home Health**

562.902.7763

**Infusion Services**

562.698.0811 Ext. 12641

**Inpatient Medical Oncology Unit**

562.698.0811 Ext. 13400

**Lung Cancer Screening Program**

562.967.2892

**Lung Nurse Navigator**

562.698.0811 Ext. 11271

**Lymphedema Program**

562.698.0811 Ext. 12594

**Nutrition Services**

562.698.0811 Ext. 12590

**Patricia L. Scheifly Breast Health Center**

562.907.0667

**PIH Health Hematology/Oncology Clinic**

562.789.5480

**Ruby L. Golleher Oncology Center**

562.696.5964

**Website Address**

**PIHHealth.org**



## 7 | Glossary of Terms

### A = Analytic:

Cases which are first diagnosed and/or received all or part of their first course of treatment at PIH Health Hospital - Whittier.

### N/A = Non-Analytic:

Cases which were first diagnosed and treated elsewhere, later admitted to PIH Health Hospital - Whittier with disease.

### Stage at Diagnosis:

The extent of disease based on all diagnostic and therapeutic evidence available by the end of the first course of therapy or within four months after beginning treatment.

### NA:

Not Applicable. Some types of cancer do not have staging schemes.

### TNM Staging System:

The TNM system is an expression of the anatomic extent of disease and is based on the assessment of three components:

- T** The extent of the primary tumor
- N** The absence or presence and extent of regional lymph node metastasis
- M** The absence or presence of distant metastasis

### TNM Stage Groupings:

After the T, N and M has been assigned, they are grouped into stages.

The grouping ensures, as far as possible, that each stage group is relatively homogeneous with respect to survival and that the survival rates of these stage groupings for each cancer site are distinct. Carcinoma in situ is categorized Stage 0; for most sites, a case with distant metastasis is categorized Stage IV. Stages I, II and III indicate relatively greater anatomic extent of cancer within the range from Stage 0 to Stage IV.

### Survival Rate:

A statistical index that summarizes the probable frequency of specific outcomes for a group of patients at a particular point in time.

### Life Table Method:

The life table method involves dividing the total period over which a group is observed into fixed intervals, usually months or years.

### Relative Survival:

The ratio of the observed survival rate to the expected rate for a group of people in the general population similar to the patient group with respect to race, sex and age. The relative survival rate represents the likelihood that a patient will not die from causes associated specifically with their cancer at some specified time after diagnosis.







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