Cancer Program
Annual Report
2016
Table of Contents

WELCOME FROM THE CANCER COMMITTEE CHAIRMAN
CANCER COMMITTEE
CANCER PROGRAM HIGHLIGHTS
PERFORMANCE IMPROVEMENT INITIATIVES
ONCOLOGY REGISTRY
FOCUS REPORT ON COLORECTAL CANCER
DIRECTORY OF SERVICES
GLOSSARY OF TERMS
2016 PIH Health Hospital - Whittier
Cancer Committee Chairman Welcome
and Overview of the Cancer Program

It is with great admiration and appreciation that I acknowledge the remarkable accomplishments of the PIH Health Hospital – Whittier Cancer Program and the multiple departments within the organization working together to provide exemplary cancer care for our community. In 2016 our cancer program treated more than 1,000 patients with newly diagnosed cancers in addition to those individuals with ongoing needs for oncologic care and monitoring.

At the time a breast, colorectal or lung cancer is identified, patients are paired with a diagnosis specific nurse navigator who guides them through the process of physician consultation and additional assessment, treatment and survivorship. Cases are discussed in a weekly multidisciplinary tumor board composed of pathologists, radiologists, medical oncologists, radiation oncologists, surgeons, oncology certified nurses and support service professionals, to ensure comprehensive assessment and care. Additionally, site specific cancer conferences in breast and lung malignancies provide focused recommendations for these diseases.

As an organization, PIH Health Hospital – Whittier maintains its certification by the American College of Surgeons as a Comprehensive Community Cancer Program. This designation is the highest accreditation possible for a non–academic medical center, and reflects the commitment by hospital administration, nursing, medical staff, and support services to serve our community with excellence and compassion. The National Accreditation Program for Breast Centers has surveyed the PIH Health Hospital – Whittier Breast Cancer Program and awarded our program a three-year certification as a Center of Excellence. PIH Heath Hospital – Whittier continues to partner with community and national organizations in events and studies that focus on cancer screenings, preventative measures and research.

In this report, we summarize our quality improvement initiatives and community outreach activities as well as our Cancer Registry Data which profiles the cancer demographics of our service area. In the focus study of this report, our Cancer Program Medical Director, Nathan Honda MD, took the lead role in reviewing the PIH Health experience of colorectal cancer diagnosis in 2015. As Cancer Committee Chairman, I reaffirm the commitment of the PIH Health Cancer Program to serve the community with exceptional care and express my humble gratitude to all of those who have contributed to our successes.

Kennith O. Thompson MD FACS CLP
Cancer Committee Chairman
Co–Medical Director
PIH Health Hospital – Whittier Breast Cancer Program
The PIH Health Cancer Committee is a multidisciplinary team composed of medical staff members from 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 PIH Health.

**Physician Members**

Anthony Britto MD  
PLASTIC SURGEON

Armen Gregorian MD  
COLORECTAL SURGEON

Brent Gray MD  
ASSISTANT VPMA/OB/GYN

Dustin E. Stevenson DO  
HEMATOLOGIST/MEDICAL ONCOLOGIST

Edwin Lin MD  
HEMATOLOGIST/MEDICAL ONCOLOGIST

Jack Freimann MD  
HEMATOLOGIST/MEDICAL ONCOLOGIST

Jeffrey Yuen MD  
RADIATION ONCOLOGIST

Kennith Thompson MD  
CO-MEDICAL DIRECTOR BREAST HEALTH CENTER/CANCER LIAISON PHYSICIAN/GENERAL SURGEON/CHAIR, CANCER COMMITTEE

Kimberly Bickell MD  
CO-MEDICAL DIRECTOR BREAST HEALTH CENTER, RADIOLOGIST

Lisa S. Wang MD  
HEMATOLOGIST/MEDICAL ONCOLOGIST

Mark Odou MD  
SURGEON

Maureen Jensen MD  
DIAGNOSTIC RADIOLOGIST

Merrill Shum MD  
HEMATOLOGIST/MEDICAL ONCOLOGIST

Nadeem Chishti MD  
PULMONOLOGIST

Nelson DallaTor MD  
FAMILY PRACTICE, PAIN SPECIALIST/PALLIATIVE CARE

Nathan Honda MD  
CANCER PROGRAM MEDICAL DIRECTOR/CANCER LIAISON PHYSICIAN/ACTIVITY COORDINATOR PERFORMANCE IMPROVEMENT/PATHOLOGIST

Robert Kleinman MD  
DIAGNOSTIC RADIOLOGIST

Virag Shah MD  
FAMILY PRACTICE/PALLIATIVE CARE

William Kurohara MD  
QUALITY CONTROL COORDINATOR OF REGISTRY DATA/RADIATION ONCOLOGIST

William MacDonald MD  
PATHOLOGIST
Non-Physician Members

April Hopper CTR
CANCER DATA SPECIALIST/CONFERENCE ACTIVITY COORDINATOR

Ashley Millhouse
SYSTEM MANAGER AMERICAN CANCER SOCIETY

Carla Guess RN CBCN CBPN-IC
ONCOLOGY NURSE NAVIGATOR, BREAST HEALTH CENTER

Cynthia Swystun
ADMINISTRATIVE DIRECTOR, MEDICINE SPECIALTIES/GROUP OPERATIONS

Danielle Halewijn RD CDE
PIH HEALTH CLINICAL NUTRITION MANAGER AND DIRECTOR OF DIABETES EDUCATION

Debbie McKnight RN MSN OCN
ADMINISTRATIVE DIRECTOR, MED-SURGICAL SERVICES/CANCER PROGRAM
ADMINISTRATOR/QI COORDINATOR

Ellie Winterfeld BA CTR CCRP
DIRECTOR, CANCER PROGRAM/CLINICAL TRIALS

Ivonne Munoz RN BSN
DIRECTOR, BREAST HEALTH CENTER

Jarvis Jimenez MSW
SOCIAL WORKER/PSYCHOSOCIAL ACTIVITY COORDINATOR

Jessica Peckham RN MSOCN NP-C
LUNG SCREENING PROGRAM

Kathy Seymour RN BSN OCN
ONCOLOGY NURSE NAVIGATOR CANCER PROGRAM

Kathy Wright RN
PRACTICE MANAGER, PIH HEALTH ONCOLOGY GROUP

Ellen Knell PHD
CERTIFIED GENETIC COUNSELOR

Kelsey Frimodt CTR
CANCER DATA SPECIALIST/CO-CONFERENCE ACTIVITY COORDINATOR - CANCER PROGRAM

Kristine Hillary RN MSN NP
CLINICAL DIRECTOR, HOSPICE

Lorraine DeGiaco RN BSN OCN
MANAGER, RADIATION ONCOLOGY

Lucinda Place RN MSN
ADMINISTRATOR, QUALITY MANAGEMENT & PERFORMANCE EXCELLENCE

Lynze Ruvalcaba RN BSN
CLINICAL DIRECTOR, ONCOLOGY UNIT/INFUSION CENTER

Maria Cortinas Davila RN MSN
CLINICAL DIRECTOR, POST OPERATIVE UNIT

Nicole M. Terrazas RN MSN CNS
CLINICAL NURSE SPECIALIST, PERFORMANCE IMPROVEMENT REPRESENTATIVE

Raquel Varella PT/CLT
PHYSICAL THERAPIST, LYMPEDEMA PROGRAM

Reanna Thompson RN MSN CNO COO
CHIEF NURSE OFFICER, CHIEF OPERATING OFFICER/CANCER PROGRAM ADMINISTRATOR

Ricardo Lopez MPH CHES
MANAGER, COMMUNITY HEALTH EDUCATION

Rosie Drulias RN BSN PHN CCRP
CLINICAL RESEARCH COORDINATOR/CLINICAL RESEARCH ACTIVITY COORDINATOR

Sarah Merkle RN MSN AOCNS
CLINICAL NURSE SPECIALIST, 4-T ONCOLOGY UNIT/INFUSION CENTER

Shelly Hart PTA-CLT
PHYSICAL THERAPIST, LYMPEDEMA PROGRAM

Sue Jervik RN BSN
PAIN MANAGEMENT EDUCATOR

Suzanne Barone RMT MA
REIKI MASTER, COORDINATOR, COMPLEMENTARY MEDICINE
2016 Cancer Program Highlights

This year many of the cancer services were enhanced to provide the best patient experience possible:

- The PIH Health Cancer Program was surveyed by the Commission on Cancer (American College of Surgeons) in May 2016 and received a full 3-year accreditation.

- PIH Health Infusion Center continues to grow and is now able to accommodate 24 infusion chairs. The infusion center was designed with our patients in mind offering social work, chaplain services, reflexology and reiki therapy services. Our supportive services address the patient’s physical, emotional, psychological and spiritual needs.

- In November a fundraiser was hosted by Annette Atwood for the purchase of wigs and head coverings for cancer patients. The PIH Health Wig Bank is located in the infusion center at PIH Health Hospital – Whittier.

- The PIH Health Cancer Program held a 4-week Spiritual Workshop Series. The workshop helps connect patients with their spirituality so they can move through life’s challenges with greater peace and awareness. Kathy Seymour presented the work of the oncology nurse navigators at the Spirituality Workshop during the 2016 National Oncology Nursing Society Conference.

- Quarterly Cancer Survivorship Workshops were held throughout the year, which offered a variety of topics and speakers. Emphasis was placed on diet, screenings, stress relief, exercise and support services.

- The National Comprehensive Cancer Network (NCCN) distress tool was given to all appropriate patients at PIH Health who are undergoing cancer treatment in the infusion center and radiation oncology.

- The Cancer Program offered several screening and prevention programs which included colorectal lectures, as well as screening for breast cancer.

- Survivorship Care plans continue to be distributed to eligible lung cancer patients. In 2016, Maribel Ordorica was appointed Survivorship Nurse Navigator.

- In August, oncology nurses Carla Guess, Jeneane Stevenson, Sarah Merkle, Jessica Peckham and Kathy Seymour were honored by the American Cancer Society at the 2016 California Spirit Event.
Clinical Trials

PIH Health’s participation in clinical trials allows us to provide new approaches to treating and managing cancer. We are an affiliate of the Radiation Oncology Therapy Group (RTOG) and the Southwest Oncology Group (SWOG). Through these affiliations, PIH Health regularly participated in numerous clinical trials for treatment options. In 2016, 88 patients took part in clinical trials and studies.

Breast Center of Excellence

PIH Health is committed to providing quality, evidence-based cancer care. Our Breast Health Center has been designated as a Breast Imaging Center of Excellence by the American College of Radiology and has received accreditation by the National Accreditation Program for Breast Centers (NAPBC), a program administered by the American College of Surgeons.

Community Outreach and Education

The Cancer Committee worked with multiple PIH Health Hospital – Whittier departments and outside organizations to provide quality cancer care within our organization and throughout the community. The hospital participated in numerous community outreach and educational activities during 2016 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
- Smoking cessation

PIH Heath and American Cancer Society (ACS) offered numerous support groups including:

- Woman’s 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
Oncology Resource Center

The Oncology Resource Center is available for patients and their family members to access educational material and resources that can help them with their journey through treatment and surveillance after cancer. Resources include information about transportation services, support groups and exercise classes to name a few. The Oncology Resource Center is affiliated with the PIH Health Wig Bank, which provides wigs, scarves, and hats to patients.

Performance Improvement Initiatives established in 2016

Improving Cancer Care Management Through Early Detection and Treatment of Hypersensitivity Reactions Related to Chemotherapy and Biotherapy

Cancer therapies such as chemotherapy and biotherapy have the potential to cause hypersensitivity reactions (HSRs). The purpose of this project was to improve patient care by providing immediate intervention for patients who experience HSR through nursing education and implementation of a standardized procedure. Through the implementation of a nurse-driven standardized procedure, there was a 32 percent decrease in the mismanagement of HSR.

Patient Blood Management: Improving Patient Safety and Cost Containment through Blood Utilization Review

Blood management involves proactive strategies that ensure the right patient is receiving the correct amount of blood in the appropriate circumstance. The purpose of this project is to reduce the number of allogeneic blood transfusions by providing multidisciplinary education based on indication guidelines.

Program Goals

Formulary Advisory Committee

With the rapid evolution of cancer science, the effectiveness and options for cancer treatment continue to expand. In an effort to promote the best possible evidence-based care, a Formulary Advisory Committee was formed to establish an efficient process for adding new medications to the hospital formulary. Seven new oncolytic, or cancer fighting, medications were added to the out-patient formulary in fiscal year 2015–2016. In most cases, a patient can receive a new medication in 24–48 hours.
Global Questionnaire

The purpose of this project was to improve multidisciplinary communication for cancer patients through the development of a “Global Oncology Health Questionnaire”. The Global Oncology Health Questionnaire facilitates communication between PIH Health care providers while limiting the amount of paper work required to be completed by patients and is live in PHP oncology, all general surgery offices, and radiation oncology.

Clinical Goal

Early Detection of Lymphedema in Breast Cancer

The purpose of this project was to diagnose lymphedema at an early stage in breast cancer patients who are at risk. This was achieved through the implementation of pre- and post-surgical upper extremity measurements. By the end of FY 15-16, 66 percent of patients received at least one arm measurement.

Oncology Registry

Established in 1987, the Oncology 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 and is a critical element in the evaluation of cancer care. The demographic information, cancer type, treatment and follow-up data are collected on each cancer patient by the registry staff, who is specially trained in the field of oncology data management. In 2016 the Oncology Registry database included data on 35,071 cases.

2015 Geographic Distribution of Caseload

(FIGURE 1)
2015 Cancer Incidence by Gender at PIH Health

(TABLE 1)

<table>
<thead>
<tr>
<th>Cancer Site</th>
<th>Male #pts</th>
<th>Male PIH Health</th>
<th>Male #pts US</th>
<th>Female #pts</th>
<th>Female PIH Health</th>
<th>Female #pts US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prostate</td>
<td>71</td>
<td>12%</td>
<td>220,800</td>
<td>230</td>
<td>30%</td>
<td>231,840</td>
</tr>
<tr>
<td>Lung/Bronchus</td>
<td>69</td>
<td>12%</td>
<td>115,610</td>
<td>68</td>
<td>8%</td>
<td>67,770</td>
</tr>
<tr>
<td>Leukemia &amp; Lymphoma</td>
<td>62</td>
<td>10%</td>
<td>70,750</td>
<td>62</td>
<td>8%</td>
<td>105,590</td>
</tr>
<tr>
<td>Colon &amp; Rectum</td>
<td>57</td>
<td>10%</td>
<td>69,090</td>
<td>56</td>
<td>7%</td>
<td>55,290</td>
</tr>
<tr>
<td>Urinary Bladder</td>
<td>36</td>
<td>6%</td>
<td>56,320</td>
<td>50</td>
<td>6%</td>
<td>63,610</td>
</tr>
</tbody>
</table>

Cancer Statistics

In 2015, 1,325 patients were diagnosed or received cancer care at PIH Health. The Primary Site Distribution Table details the Hospital’s 2015 cancer experiences by site, age, gender, and stage of disease at diagnosis.
2015 Primary Site Distribution

(TABLE 2)

<table>
<thead>
<tr>
<th>Primary Site</th>
<th>Class of Case</th>
<th>Sex*</th>
<th>Stage at Diagnosis*</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Sites</td>
<td>1325</td>
<td>1060</td>
<td>265</td>
</tr>
<tr>
<td>Oral Cavity/Pharynx</td>
<td>18</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Lip</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Tongue</td>
<td>7</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Salivary Glands, Major</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Tonsil</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Oropharynx</td>
<td>5</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Digestive System</td>
<td>271</td>
<td>225</td>
<td>46</td>
</tr>
<tr>
<td>Eosophagus</td>
<td>15</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Stomach</td>
<td>28</td>
<td>21</td>
<td>7</td>
</tr>
<tr>
<td>Small Intestine</td>
<td>10</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Colon/Rectum/Rectosigmoid</td>
<td>107</td>
<td>96</td>
<td>11</td>
</tr>
<tr>
<td>Anus/Anal Canal/Anorectum</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Liver</td>
<td>46</td>
<td>37</td>
<td>9</td>
</tr>
<tr>
<td>Gallibladder/Extrahepatic Bile Ducts</td>
<td>11</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Other Digestive</td>
<td>6</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Pancreas</td>
<td>44</td>
<td>31</td>
<td>15</td>
</tr>
<tr>
<td>Respiratory/ Infrathoracic</td>
<td>141</td>
<td>124</td>
<td>17</td>
</tr>
<tr>
<td>Nasal Cavity/Sinus/Larynx</td>
<td>10</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Lung/Bronchus/Pleura</td>
<td>131</td>
<td>115</td>
<td>16</td>
</tr>
<tr>
<td>Blood &amp; Bone Marrow**</td>
<td>98</td>
<td>45</td>
<td>53</td>
</tr>
<tr>
<td>Leukemia</td>
<td>50</td>
<td>29</td>
<td>21</td>
</tr>
<tr>
<td>Multiple Myeloma</td>
<td>21</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Other Bone Marrow Disorders</td>
<td>27</td>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td>Soft Tissue/Bone</td>
<td>15</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Skin</td>
<td>23</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>Melanoma Of Skin</td>
<td>18</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Other Skin/Kaposi Sarcoma</td>
<td>5</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Breast</td>
<td>230</td>
<td>200</td>
<td>30</td>
</tr>
<tr>
<td>Female Genital</td>
<td>112</td>
<td>87</td>
<td>25</td>
</tr>
<tr>
<td>Cervix Uteri/Cervix Insitu</td>
<td>16</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Corpus Uterus/Uterus Nos</td>
<td>52</td>
<td>47</td>
<td>5</td>
</tr>
<tr>
<td>Ovary</td>
<td>39</td>
<td>27</td>
<td>12</td>
</tr>
<tr>
<td>Vulva/Vagina/Other</td>
<td>5</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Male Genital</td>
<td>80</td>
<td>46</td>
<td>34</td>
</tr>
<tr>
<td>Prostate</td>
<td>71</td>
<td>37</td>
<td>34</td>
</tr>
<tr>
<td>Testis/Penis</td>
<td>9</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Urinary</td>
<td>125</td>
<td>111</td>
<td>14</td>
</tr>
<tr>
<td>Bladder</td>
<td>44</td>
<td>38</td>
<td>6</td>
</tr>
<tr>
<td>Kidney And Renal Pelvis</td>
<td>79</td>
<td>71</td>
<td>8</td>
</tr>
<tr>
<td>Ureter/Other Urinary</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Brain/Eye/Cns**</td>
<td>59</td>
<td>48</td>
<td>11</td>
</tr>
<tr>
<td>Endocrine/Thyroid</td>
<td>53</td>
<td>47</td>
<td>6</td>
</tr>
<tr>
<td>Lymphatic System</td>
<td>68</td>
<td>53</td>
<td>15</td>
</tr>
<tr>
<td>Hodgkin's Disease</td>
<td>5</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Non-Hodgkin's Lymphoma</td>
<td>63</td>
<td>48</td>
<td>15</td>
</tr>
<tr>
<td>Unknown**</td>
<td>32</td>
<td>27</td>
<td>5</td>
</tr>
</tbody>
</table>

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

The most commonly diagnosed cancers detected and treated at PIH Health were compared to California cancer incidence and ranked according to frequency. Cancer incidence by gender at PIH Health was 565 males and 760 females. The incidence of breast cancer is higher at PIH Health compared to California rates. (Table 2).
Number of New Cancer Cases 1987-2015

(FIGURE 2)

Figure 2 depicts the number of newly diagnosed cancer cases added to the Oncology Registry since 1987. These cases are categorized into three groups: new cancer cases for the year 2015; cases diagnosed and treatment given; and those diagnosed elsewhere, but received their initial treatment at PIH Health.

2015 Major Site Comparison

(FIGURE 3)
The five most common sites diagnosed at PIH Health for total cancer in 2015 were breast (18 percent), lung (10 percent), kidney (6 percent), colorectal (9 percent) and prostate (4 percent). By comparison, the incidence of breast cancer was higher at PIH Health than in California and the United States (figure 3).

**Stage at Diagnosis (Figure 4)**

The stage of disease at the time of diagnosis plays a vital role in the prognosis and treatment of a cancer patient. In 2015, 38 percent of all newly diagnosed patients were in early stage at diagnosis (in-situ or Stage I), 15 percent were Stage II, 12 percent were Stage III, 17 percent were Stage IV, 14 percent were not applicable for staging (NA) and 4 percent were classified as unknown stage at time of diagnosis (figure 4).

**Age Distribution at Diagnosis (Figure 5)**

Sixty-six percent (66 percent) of patients were between the ages of 60 and 90 at diagnosis. The median age was 69 years. (Figure 5).
Physicians who presented and participated in case presentations at cancer conferences in 2016

<table>
<thead>
<tr>
<th>Alfred Castellanos MD</th>
<th>Jason Lai MD</th>
<th>Nadeem Chishti MD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armen Gregorian MD</td>
<td>Jeffrey Yuen MD</td>
<td>Nathan Honda MD</td>
</tr>
<tr>
<td>Christie Pang MD</td>
<td>John Britto MD</td>
<td>Nassr Hussein MD</td>
</tr>
<tr>
<td>Daniel Akhavan MD</td>
<td>Kenneth Thompson MD</td>
<td>Neil Klein MD</td>
</tr>
<tr>
<td>Dennis Sargent MD</td>
<td>Kimberly Bickell MD</td>
<td>Samuel Im MD</td>
</tr>
<tr>
<td>Dustin Stevenson DO</td>
<td>Kiumars Saketkhoo MD</td>
<td>Scott Yun MD</td>
</tr>
<tr>
<td>Eddy Thara MD</td>
<td>Lily Wang MD</td>
<td>Shah Mukesh MD</td>
</tr>
<tr>
<td>Eduardo Tovar MD</td>
<td>Lisa Wang MD</td>
<td>Wayne Ray MD</td>
</tr>
<tr>
<td>Edwin Lin MD</td>
<td>Mark Odou MD</td>
<td>William Kurohara MD</td>
</tr>
<tr>
<td>G. Yoon MD</td>
<td>Maureen Jensen MD</td>
<td>William MacDonald MD</td>
</tr>
<tr>
<td>Jack Freimann MD</td>
<td>Merrill Shum MD</td>
<td></td>
</tr>
<tr>
<td>James Kuo MD</td>
<td>Miguel Velez MD</td>
<td></td>
</tr>
</tbody>
</table>
2016 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 various treatment options and assist in determining the most appropriate patient management plan. In 2016, PIH Health held a total of 47 Multidisciplinary Cancer Conferences and 161 cases were presented, representing 28 sites. Additionally, 47 Breast Conferences were held with 166 breast cancer cases presented and 48 Lung Cancer Conferences were held with 195 lung cases presented.

In addition, 2 lectures were offered:

- “New Agents and Clinical Strategies in the Systemic Treatment of Non-Small Cell Lung Cancer – Ground rounds – Heather Wakelee MD”
- “Advances in the Treatment of Metastatic Breast Cancer – Rena Callahan MD”

<table>
<thead>
<tr>
<th>Location</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spine</td>
<td>1</td>
</tr>
<tr>
<td>Adrenal Gland</td>
<td>1</td>
</tr>
<tr>
<td>Esophagus</td>
<td>1</td>
</tr>
<tr>
<td>Stomach</td>
<td>11</td>
</tr>
<tr>
<td>Colorectal/Anus</td>
<td>54</td>
</tr>
<tr>
<td>Liver</td>
<td>3</td>
</tr>
<tr>
<td>Gall Bladder</td>
<td>1</td>
</tr>
<tr>
<td>Pancreas/Bile Duct</td>
<td>12</td>
</tr>
<tr>
<td>Vocal Cord</td>
<td>1</td>
</tr>
<tr>
<td>Lung/Pleura</td>
<td>195</td>
</tr>
<tr>
<td>Soft Tissue</td>
<td>1</td>
</tr>
<tr>
<td>Breast</td>
<td>166</td>
</tr>
<tr>
<td>Ovary/Fallopian Tube</td>
<td>8</td>
</tr>
<tr>
<td>Corpus Uteri/Vulva/Endocervical/Vagina</td>
<td>7</td>
</tr>
<tr>
<td>Prostate</td>
<td>5</td>
</tr>
<tr>
<td>Testis</td>
<td>3</td>
</tr>
<tr>
<td>Bladder</td>
<td>2</td>
</tr>
<tr>
<td>Kidney</td>
<td>7</td>
</tr>
<tr>
<td>Thyroid</td>
<td>8</td>
</tr>
<tr>
<td>Lymphoma</td>
<td>14</td>
</tr>
<tr>
<td>Leukemia/Myeloma</td>
<td>2</td>
</tr>
<tr>
<td>Appendix</td>
<td>4</td>
</tr>
<tr>
<td>Skin/Melanoma</td>
<td>5</td>
</tr>
<tr>
<td>Brain</td>
<td>4</td>
</tr>
<tr>
<td>Head &amp; Neck</td>
<td>1</td>
</tr>
<tr>
<td>Unknown Primary</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total # cases presented</strong></td>
<td><strong>382</strong></td>
</tr>
</tbody>
</table>
Introduction

The mission of the PIH Health Cancer Program is to provide the highest standard of clinical care for our colorectal cancer (CRC) patients through the collaborative efforts of physician specialists, nurses, and ancillary care staff; and through meeting and surpassing standards required for accreditation by the American College Surgeons Commission on Cancer (COC). Approximately 134,490 new cases of CRC are diagnosed annually in the United States including approximately 95,270 colon and 39,220 rectal cancers. An estimated 49,190 Americans are expected to die of large bowel cancer each year. Although CRC mortality has been progressively declining since 2001 due to improvements in treatment, awareness and screening, it still remains the third most common cause of cancer death in the United States.

Incidence

At PIH Health Hospital – Whittier, CRC is the second most common cancer in men and third most common in women with 93 CRC patients diagnosed and/or having received the first course of treatment at PIH Health in 2015, an incidence which has remained relatively constant over the past 10 years (Figure 1 Incidence of Colorectal Cancer). The risk of developing CRC increases with age. Nationally, 90 percent of new cases of colon cancer occur in people 50 years of age or older. At PIH Health Hospital – Whittier, 87 percent of the CRCs diagnosed in 2015 were in people 50 years of age or older and nearly 50 per cent were diagnosed in their 70s and older (Figure 2 Colorectal Cancer Age Distribution).
Risk Factors

Individuals who have a family member (parent, brother, sister or child) with colorectal cancer or polyps are at increased risk for developing the disease themselves and may need to undergo screenings at a younger age. Individuals with inflammatory bowel disease or who have more than one family member with colorectal cancer or with other types of cancers may be at even higher risk. Genetic susceptibility to CRC includes well defined inherited syndromes such as Lynch Syndrome (also known as hereditary nonpolyposis colorectal cancer) and familial adenomatous polyposis which may account for 2 to 4 percent of CRCs. Therefore it is recommended that all patients with CRC be questioned regarding their family history and considered for risk assessment by a qualified cancer genetics specialist.
Screening Program

It is estimated that as many as 90 percent of CRCs can be prevented if every individual over the age of 50 with moderate risk were screened in accordance with national guidelines. The American Cancer Society recommends men and women at average risk for developing CRC start screening at age 50 by one of the following: colonoscopy every 10 years, flexible sigmoidoscopy every 5 years or double contrast barium enema every 5 years. Other screening options include high sensitivity fecal occult blood test (FOBT) or fecal immunohistochemical test (FIT) every year. The PIH Health Colon Cancer Prevention Program (CCPP) strongly advocates screening colonoscopy as the gold standard for screening in our community through partnerships with gastroenterologists and primary care physicians. Colonoscopy allows physicians to prevent the development of colon cancer through the removal of polyps as well as early detection. In compliance with COC Standard 4.2, 1,868 screening and diagnostic colonoscopies were performed by the CCPP in 2015 with 15 CRC findings as well as a large number of precancerous or adenomatous polyps. Patients identified with adenomatous polyps are at increased risk and are recommended for continued surveillance by colonoscopy.

Staging

The most important indicator of survival is the stage of the disease at the time of diagnosis which refers to the depth of tumor invasion into the bowel, presence or absence of lymph node involvement and presence or absence of distal metastasis (spread). The five-year survival rate for people with CRC discovered early is greater than 90 percent. But nationally, only 39 percent of CRCs are found at early stage. Five-year survival rapidly declines when the cancer has spread to nearby organs or lymph nodes. At PIH Health, approximately 40 percent of patients were diagnosed at an early stage (stage 0 and stage I), 18 percent at stage II, 24 percent at stage III (lymph node involvement), and 14 percent at stage IV (Figure 4 Colorectal Cancer Stage Distribution in 2015). The data suggest a relatively high proportion of patients are diagnosed at stage I at PIH Health.

(FIGURE 4)
As with all cancer treatment at PIH Health, a multidisciplinary approach is the foundation of optimal clinical decision making. Medical oncologists collaborate closely with colorectal cancer surgeons, gastroenterologists, radiologists, radiation oncologists, pathologists and other experts. A multidisciplinary Tumor Board reviews CRC cases to determine the best course of treatment. A dedicated colorectal nurse navigator facilitates the patient’s appointments with the specialists, coordinates diagnostic tests and provides psychosocial support to improve overall patient experience. In addition, the PIH Health Survivorship Program provides patients with survivorship care plans that include a record of the cancer history, treatments provided, need for future checkups and tests, possible long-term effects of treatment, and recommendations for maintaining general good health.

Surgery is the mainstay of treatment for colorectal cancer which can be done alone or with radiation, chemotherapy or a combination of all three. This multimodality approach at PIH Health is summarized for the first course of treatment in 2015 (Figure 5, Colorectal Cancer First Course of Treatment). The recommended surgical procedure for respectable colon cancer is an en–bloc resection (colectomy) and removal of at least 12 regional lymph nodes. The extent of colon resection is dependent upon the location of the tumor and patient status. In addition to the state–of–the–art open procedures, PIH Health surgeons also perform laparoscopic–assisted colorectal cancer surgery which is associated with a faster recovery and shorter hospital stay. Transanal endoscopic microsurgery (TEMS) and transrectal ultrasound is performed by a dedicated colorectal surgeon for diagnosis, staging and treatment of rectal cancer.

Medical oncology options for treating colorectal cancer include chemotherapy, targeted therapy as well as clinical trials with treatment tailored to each patient’s situation, including factors such as tumor size and location, disease spread, patient age, health, and preferences. Chemotherapy is recommended in patients under 80 whose cancer has spread to the lymph nodes (stage III) to decrease the risk of future recurrence. Treatment for rectal cancer may include chemotherapy and radiation therapy before surgery is performed (neoadjuvant therapy).

Each year PIH Health compares our performance in treating CRC against other hospitals who are accredited by the COC. The performance measures for colorectal cancer in the Clinical Practice Profile Reports for surgical removal of lymph nodes, adjuvant chemotherapy, and preoperative chemo and radiation for rectal cancer are within the COC expected performance rates and are summarized below:

(FIGURE 5)

<table>
<thead>
<tr>
<th>First Course of Treatment</th>
<th># of Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospice</td>
<td>9</td>
</tr>
<tr>
<td>Refused Treatment</td>
<td>1</td>
</tr>
<tr>
<td>Surgery Only</td>
<td>56</td>
</tr>
<tr>
<td>Surgery and Radiation</td>
<td>3</td>
</tr>
<tr>
<td>Surgery and Chemo</td>
<td>10</td>
</tr>
<tr>
<td>Chemo and Biologic</td>
<td>3</td>
</tr>
<tr>
<td>Surgery. Radiation and Chemo</td>
<td>11</td>
</tr>
<tr>
<td>TOTAL</td>
<td>93</td>
</tr>
</tbody>
</table>
COC Standard 4.4 Accountability Measure ACT

Adjuvant chemotherapy is recommended or administered within 4 months of diagnosis for patients under age 80 with lymph node positive colon cancer.

PIH HEALTH ESTIMATED PERFORMANCE RATES

| Year | 2011: 100% | 2012: 81.80% | 2013: 75% | 2014: 100% |

COC Standard 4.5 Quality Improvement Measure 12 RLN

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

PIH HEALTH ESTIMATED PERFORMANCE RATES

| Year | 2011: 86.10% | 2012: 90.3% | 2013: 73.2% | 2014: 75.5% |

COC Standard 4.5 Quality Improvement Measure RECRTCT

Preoperative or postoperative chemo and radiation are administered or recommended to patients with locally advanced rectal cancer under the age of 80.

PIH HEALTH ESTIMATED PERFORMANCE RATES

| Year | 2011: 75% | 2012: 50% | 2013: 62.5% | 2014: 100% |

Prevention And Survivorship

Making healthier food choices, eating a balanced diet and being physically active are key components in preventing colon cancer as well as improving outcomes in CRC patients. Modifiable risk factors include obesity, physical inactivity, smoking, consumption of red meats, alcohol, and inadequate consumption of fresh fruits and vegetables. There is some evidence that higher intake of milk and calcium may be associated with a lower risk of death in patients with CRC. PIH Health provides quarterly workshops for the community to provide information on diet, exercise, stress relief and support services. In addition, the PIH Health Survivorship Program provides patients with survivorship care plans that include a record
of the cancer history, treatments given, need for future checkups and tests, possible long-term effects of treatment and recommendations for maintaining general health. The recommended diet and lifestyle changes are important for the prevention of all cancers and can also help prevent diabetes and heart disease. For more information on cancer prevention, visit cancer.org and search for the American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention.

Acknowledgments

The 2015–2016 PIH Health Comprehensive Community Cancer Program Annual Report was prepared by Sarah Merkle RN MSN AOCNS and April Hooper CTR under the purview of the Cancer Committee.

References

CANCER PROGRAM MANUAL, 2016, 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, 2016, AMERICAN CANCER SOCIETY INC.
NEW YORK, NEW YORK

CALIFORNIA FACTS & FIGURES, 2015
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, call 562.698.0811 Ext. 12456, or visit PIHHealth.org
Directory of Services

Main Hospital Number 562.698.0811
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
Colorectal Oncology Nurse Navigator 562.698.0811 Ext. 12580
Hospice 562.947.3668
Home Health 562.902.7763
Infusion Services 562.698.0811 Ext. 12641
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
Oncology Resource Center 562.698.0811 Ext. 12820
Patricia L. Scheifly Breast Health Center 562.907.0667
PIH Health Hematology/Oncology Clinic 562.789.5480
Radiation Oncology 562.696.5964
Website Address PIHHealth.org
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 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.