The 2012 Cancer Center Annual Report is dedicated to the memory of Dr. Steven D. Lilly who served as the chaplain at Princeton Community Hospital since 2003.

Dr. Lilly took a great interest in the Cancer Center and was an integral part of the Cancer Committee since 2004. He is deeply appreciated and will be greatly missed.
Team PCH Participated in the 2012 Relay for Life

Once again, Princeton Community Hospital employees enthusiastically supported Relay for Life, the main volunteer-driven fundraising effort of the American Cancer Society, on June 15, 2012.

One hundred eighty employees signed up for Team PCH and most participated in the walk.

Princeton Community Hospital collected $16,087 for the American Cancer Society. The total amount raised by all of Mercer County, West Virginia, was $103,671.

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2011 was a busier year for the Princeton Community Hospital Cancer Program. There was an increase in analytic cases from 300 the previous year, to 387 in 2011. The increase was accommodated seamlessly. The collaborative efforts of the various departments, including Surgery, Pathology, Radiology, Outpatient and Inpatient Oncology units, Education and Hospice made this possible.

The two most common malignancies were breast and lung cancers, having 71 cases each. Ninety percent of the breast cancer cases were diagnosed in an early stage. Our efforts in early detection and education are bearing fruit. In contrast, 63% of the lung cancers were diagnosed in a late stage, which is at par with WV and national statistics.

A feasibility study for the establishment of a community hospital breast program at PCH has been presented, and was approved by the PCH Executive Team and the Board of Directors. We look forward to making this a reality.

We continue to participate in clinical trials. 2.6% of our patients were enrolled in clinical trials in 2011.

Socioeconomic and educational disparities play a big role in effective care. Our staff is sensitive to these issues and they, together with the Cancer Care Navigator, address psychosocial, economic, end-of-life and survivorship issues.

We thank our patients and their families for entrusting us with their care. We will continue to provide collaborative, compassionate care and cutting-edge technology.

Quality care—close to home!

David A. Mullins, M.D., MBA, FACS
Cancer Liaison Physician Commission on Cancer, American College of Surgeons

In my first year as the Cancer Liaison physician, I have had the privilege of being involved in the numerous activities dedicated to improving the quality of care delivered to the patients at Princeton Community Hospital’s cancer program. The Commission on Cancer (CoC) established the Cancer Liaison Program in 1963 and Princeton Community Hospital has a long relationship with the CoC. The Liaison Physicians support the cancer program efforts in complying with the CoC standards. Princeton Community Hospital continues to excel in the measurable standards of care released by the American College of Surgeons National Cancer Data Base in their Cancer Program Practice Profile Report. PCH remains at 100% in almost all measures which places Princeton Community Hospital’s compliance above most state and national levels of compliance.

The information that is presented in this report tells only part of the story. The statistics and graphs highlight the breadth and depth of our Cancer Program but it is the exceptional care provided by the physicians and staff that is the success to be seized upon. Our highly experienced and talented professional and ancillary staff has been fortunate to experience first-hand the impact cancer has on the patient as well as their family. From the moment of diagnosis and through every treatment step, each patient is a person and not a statistic and it remains a privilege to serve those who choose Princeton Community Hospital for their cancer care.
PRINCETON COMMUNITY HOSPITAL TO PURSUE BREAST CENTER ACCREDITATION

The National Accreditation Program for Breast Centers (NAPBC) is a consortium of national, professional organizations dedicated to the improvement of the quality of care and the monitoring of outcomes for patients with diseases of the breast. The NAPBC strategically built its leadership by inviting leaders from the major disciplines that routinely work together to diagnose and treat breast disease to become part of the consortium. Working toward one goal, this multidisciplinary group formed the NAPBC Board that mutually defined 28 program standards and 17 program components of care that collectively provide the most efficient and contemporary care available for patients diagnosed with diseases of the breast.

I am pleased to announce that the PCH Executive Team and Board members enthusiastically support the pursuit of National Breast Center Accreditation for our hospital. The Breast Center Accreditation work group is confident that a good deal of the work has already been completed toward successful accreditation.

My sincere thanks to the subcommittee for the time and effort you contributed to the successful kickoff and approval of this endeavor.

FROM THE TUMOR REGISTRAR

The Cancer Program at Princeton Community Hospital witnessed a great deal of activity in 2012! The Cancer Committee enthusiastically embraced the new requirements put in place by the American College of Surgeons’ Commission on Cancer; each new standard has been met, and the requirements of some have been exceeded! We are well on our way to concordance with yet more new standards that will take effect in 2015, and thanks to the dedication and efforts of individual committee members, we actually already meet many of those future requirements.

As PCH continues to offer the best and newest technologies for diagnosis and treatment of our patients, our numbers of reportable malignancies continues to increase each year. Breast cancer cases in particular have continued to show an annual increase in number, so we sincerely appreciate the endorsement just given to us by the PCH Executive Team and the PCH Board of Directors to pursue accreditation by the National Accreditation Program for Breast Centers (NAPBC.) So, as we end a busy and productive 2012, we look forward to the challenges that 2013 will bring, as we launch our Breast Center accreditation application and open a new chapter in the PCH Cancer Program.

Rose Morgan, RN, BSN, MS, Vice President of Patient Care Services

Melinda Perdue, CTR, Tumor Registrar
QUALITY OF CARE AT PRINCETON COMMUNITY HOSPITAL

The performance rates shown below are provided by the American College of Surgeons’ Commission on Cancer, and are an indication of the proportion of breast and colorectal patients treated according to recognized standards of care for cases diagnosed in 2010. The Cancer Center at PCH achieved 100% performance in four of five categories, and ranks higher than state and national averages in all five categories.

- **Radiation therapy** is administered within 1 year (365 days) of diagnosis for women under age 70 receiving breast conserving surgery for breast cancer.
- **Combination chemotherapy** is considered or administered within 4 months (120 days) of diagnosis for women under 70 with AJCC T1cN0M0, or Stage II or III hormone receptor negative breast cancer.
- **Tamoxifen or third generation aromatase inhibitor** is considered or administered within 1 year (365 days) of diagnosis for women with AJCC T1cN0M0, or Stage II or III hormone receptor positive breast cancer.
- **Adjuvant chemotherapy** is considered or administered within 4 months (120 days) of diagnosis for patients under the age of 80 with AJCC Stage III (lymph node positive) colon cancer.
- At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer.

Data provided by ACoS CoC (American College of Surgeons’ Commission on Cancer, National Cancer DataBase).
### Top Ten Sites at PCH • 2011

<table>
<thead>
<tr>
<th>Types of Cancer</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung</td>
<td>70</td>
</tr>
<tr>
<td>Breast</td>
<td>70</td>
</tr>
<tr>
<td>Prostate</td>
<td>53</td>
</tr>
<tr>
<td>Colorectal</td>
<td>40</td>
</tr>
<tr>
<td>Urinary Bladder</td>
<td>32</td>
</tr>
<tr>
<td>Non-Hodgkin Lymphoma</td>
<td>26</td>
</tr>
<tr>
<td>Uterus</td>
<td>24</td>
</tr>
<tr>
<td>Leukemia</td>
<td>19</td>
</tr>
<tr>
<td>Melanoma (Skin)</td>
<td>13</td>
</tr>
<tr>
<td>Head &amp; Neck</td>
<td>5</td>
</tr>
</tbody>
</table>

Data provided by the PCH Tumor Registry.

### Summary by Body System and Sex

#### Males (Total: 196)

<table>
<thead>
<tr>
<th>Primary Site</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Cavity &amp; Pharynx</td>
<td>6</td>
</tr>
<tr>
<td>Lung &amp; Bronchus</td>
<td>39</td>
</tr>
<tr>
<td>Pancreas</td>
<td>2</td>
</tr>
<tr>
<td>Kidney &amp; Renal Pelvis</td>
<td>3</td>
</tr>
<tr>
<td>Urinary Bladder</td>
<td>19</td>
</tr>
<tr>
<td>Colon &amp; Rectum</td>
<td>24</td>
</tr>
<tr>
<td>Prostate</td>
<td>53</td>
</tr>
<tr>
<td>Non-Hodgkin Lymphoma</td>
<td>10</td>
</tr>
<tr>
<td>Melanoma of the Skin</td>
<td>5</td>
</tr>
<tr>
<td>Leukemia</td>
<td>8</td>
</tr>
<tr>
<td>All Other Sites</td>
<td>27</td>
</tr>
</tbody>
</table>

#### Females (Total: 191)

<table>
<thead>
<tr>
<th>Primary Site</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thyroid</td>
<td>.3</td>
</tr>
<tr>
<td>Lung &amp; Bronchus</td>
<td>.32</td>
</tr>
<tr>
<td>Breast</td>
<td>.69</td>
</tr>
<tr>
<td>Kidney &amp; Renal Pelvis</td>
<td>.2</td>
</tr>
<tr>
<td>Ovary</td>
<td>.1</td>
</tr>
<tr>
<td>Uterine Corpus</td>
<td>.11</td>
</tr>
<tr>
<td>Colon &amp; Rectum</td>
<td>.26</td>
</tr>
<tr>
<td>Non-Hodgkin Lymphoma</td>
<td>.13</td>
</tr>
<tr>
<td>Melanoma of the Skin</td>
<td>.5</td>
</tr>
<tr>
<td>Leukemia</td>
<td>.2</td>
</tr>
<tr>
<td>All Other Sites</td>
<td>.27</td>
</tr>
</tbody>
</table>

Data provided by the PCH Tumor Registry.
PRINCETON COMMUNITY HOSPITAL
BREAST CARCINOMA SITE-SPECIFIC STUDY

Breast carcinoma is the most commonly diagnosed malignancy among women, both nationally and at Princeton Community Hospital. Our facility has seen a continuing increase in the number of cases.

Breast • Figure 1

Breast Cancer • (All Cases at PCH) • 2002–2011

Meticulous staging and tracking of all diagnosed breast cancer is a priority at Princeton Community Hospital. Thus, there is virtually no unknown stage (compared to 41% in WV and 19.5% nationally.) This is then reflected in the higher incidence of Stage I, III and IV cases at PCH, compared to state and national figures.

In 2011, 90% of breast cancer cases at PCH were diagnosed in an early stage (Stage 0 to Stage II,) again reflecting the success of education and screening efforts.

Breast • Figure 2

Breast Cancer • Stage at Diagnosis Comparison • 2011

Along with our caring nursing staff, the oncology navigator/cancer care coordinator is able to assist patients and families to obtain better access to resources, and overcome any obstacles they may have to receiving the highest quality treatment possible. It is vital that patients receive timely diagnoses, work-up, and treatment planning/implementation.

There are many obstacles that patients face, requiring assistance from outside sources. It is the oncology navigator’s role to identify and assist in overcoming any barriers that may impede the treatment process. Patients may require assistance with obtaining insurance, applying for additional funds, or simply finding a reliable source of transportation.

With our caring staff, and outside resources, patients and families are better able to cope with the reality of cancer diagnosis and treatment. With knowledge, guidance, and assistance, our patients are empowered, making the fight against cancer an attainable and achievable reality, with many patients reaching the survivorship goal.

Julie Lilly, RN, BSN, Oncology Navigator/Cancer Care Coordinator
Multimodality treatment is documented on the CP3R studies, where 100% of our breast cancer patients received adjuvant hormonal and chemotherapy within the standards of care timeline parameters. (Please see page 4).

Based on 2011 data, the age at diagnosis of PCH patients is comparable to that of other hospitals across the state and the nation, with the exception of the 60 to 69 years of age category, where our numbers are higher. This may reflect the demographics of our retirement community.

Our breast, cervical and colon screening efforts continue to reach more women yearly. In 2012, we had 229 participants on our Women’s Health Screening day. We continue to partner with the WV Breast and Cervical Cancer Screening Program in these efforts.
The five-year survival data for breast cancer at Princeton Community Hospital for Stages I, II and III are at par with national data and slightly lower at Stage IV, reflecting our aging population with multiple co-morbidities.

In summary, our program had a progressive increase in breast cancer cases, mostly due to urgent intervention by our surgeons. The majority of the cases are diagnosed in the early stage, indicating that our screening efforts are effective. The timeline of multi-modality treatment is better than state and national statistics. Five-year survival for Stage I to Stage II cases is at par with national data. The survival of Stage IV disease patients is poorer than national statistics.

Preliminary efforts to attain accreditation as a community-based Breast Center are in progress. This will improve the quality of care and monitoring of patients with diseases of the breast in our community.
PCH Medical Imaging continues to offer the only ACR accredited Breast MRI in our area. It is often, although not always, part of the breast cancer work-up. A major role for MRI is in patients already diagnosed with breast cancer to evaluate for possible additional sites in the same breast or for possible involvement in the opposite breast. As an example, in the 69 female breast cancers treated at PCH in 2011, four of these involved both breasts. Three were unsuspected and two of the unsuspected cancers were diagnosed only with MRI. One case was diagnosed in the opposite breast with a combination of MRI and PET.

Breast MRI guided biopsies have been done where indicated. Breast MRI has been used to evaluate findings on mammography and sonography, and has helped to avoid biopsies. Breast MRI also continues to play a prominent role in high risk patients without known cancer.

The MRI techniques that are used for breast cancer have a close parallel with prostate cancer methods, and these are under development at PCH. Prostate MRI cases so far have been primarily related to radiation therapy. MR images appear to accurately demonstrate the location of cancer within the prostate and have been used in radiation planning. Dr. Joseph M. Baisden and Dr. Dana O. Olson presented prostate cancer cases to the PCH Tumor Board on July 17, 2012. Prostate MR imaging has also been used as a biopsy planning guide for TRUS (Transrectal Ultrasound). New techniques for Prostate MR imaging are being evaluated, along with the possibility of MRI guided prostate biopsies.
PRINCETON COMMUNITY HOSPITAL
NODAL NON-HODGKIN LYMPHOMA

We have 17 cases of nodal NHL in 2011. Most were B-cell lymphomas, except for two cases of T-cell lymphoma. Fifty-nine percent were indolent and 24% had aggressive histology.

Nodal NHL • Figure 1

Nodal NHL (All Cases at PCH) • 2002–2011

0 5 10 15 20 25 30

Year

PCH Nodal NHL Cases

Data provided by the PCH Tumor Registry.

All of the cases were diagnosed in patients between the ages of 50 and 89 years of age, reflecting our retirement demographics.

Cami Maxwell, RN, BSN, OCN
Clinical Trials Nurse

Cancer clinical trials are research studies that involve people who volunteer to help answer specific questions related to the prevention, diagnosis or treatment of cancer. They are the final step in a long process that begins with research in a lab. Treatments we use today for cancer are the results of past clinical trials. Trials are available for most types and stages of cancer. Participation in a clinical trial is strictly voluntary. It is another treatment option patients can consider.

Clinical trials follow strict guidelines that state who are eligible to join the study. Cancer diagnoses at PCH are reviewed to identify which patients meet the criteria to participate in a clinical trial. When potential patients are discovered, we discuss the clinical trial with the patient so they can make an informed decision whether or not to participate.

Many of the trials offered at PCH are the very same studies offered at the nation’s major cancer centers and patients in turn do not have to travel to have access to this service. Currently, PCH is conducting clinical trials for breast cancer, colon cancer, liver cancer, lung cancer and MDS. We are pleased to provide this service to our patients and community. We are honored to contribute to the research that will lead to improvements in the prevention, diagnosis and treatment of cancer. If you have any questions or would like additional information regarding cancer clinical trials, please contact the cancer clinical trials office at 304-487-7515.

Nodal NHL • Figure 2

Nodal NHL Age at Diagnosis Comparison • 2011

Data provided by the PCH Tumor Registry.
PCH stages at diagnosis are at par with state and national statistics, but with slightly higher number of Stage II disease, likely reflecting a thorough staging process.

The survival of Stage I and Stage II patients are at par with the national average. We have slightly higher Stage III and Stage IV survival than national averages, perhaps reflecting aggressive medical support of patients as they undergo therapy.
In 2012, Princeton Community Hospital purchased a new nuclear imaging system, the Discovery NM630, for the Radiology Department. It is the latest model of the GE Healthcare nuclear scanner and offers greater speed and significantly higher image quality.

The system enables confident diagnoses by providing the necessary information in a single image with a single exam that is quick and comfortable for patients. It delivers quality images with a lower dose of radiation (as low as half that of standard Nuclear Medicine protocols) in as little as 10 minutes.

PCH Radiologist Afzal U. Ahmed, M.D., said, “The 4-slice SPECT/CT scanner provides short scan time and optimal image quality. This is the latest advancement in hybrid scanners, which combine nuclear imaging with computed tomography (CT). It provides sharp, high-quality images that help us make confident diagnoses. It’s a big step forward in diagnostic confidence and patient comfort. It improves quality of patient care. CT Breast Lymphoscintigraphy is performed for breast cancer patients. This helps to accurately localize the lymph nodes where disease could spread beyond the breast. The combination of CT and Nuclear Medicine studies is utilized to accurately localize the disease process to this specific area of the body.”

“We always strive to bring new technology and services to the forefront for our community,” explained Director of Diagnostic Imaging Services Sherri Snead, BART, RDMS, RVT. “The acquisition of the two new cameras shows our continued commitment to provide the most advanced and innovative imaging services to our patients and our physicians.”
Walk for Women • August 25, 2012 • Princeton City Park • Princeton, West Virginia

The West Virginia Breast and Cervical Cancer Screening Program offers free and low-cost Pap tests, pelvic exams, clinical breast exams, mammograms, and other diagnostic services to women who qualify. The money raised during the Walk for Women goes to the screening program and directly benefits uninsured or underinsured women in West Virginia. The hospital raised over $2,000 during this year’s walk and we saw an increase in employee and community participation.

Free Women’s Health Screening • October 27, 2012 • Princeton Community Hospital

Two hundred twenty-nine area women participated in PCH’s annual Free Women’s Health Screening. Three hundred thirty women registered for the event.

Each October, PCH partners with the West Virginia Breast & Cervical Cancer Screening Program to provide free mammograms, Pap tests, and other exams to women who qualify. In addition to the health exams, the participants are provided with information on nutrition, breast self-exams, and other women’s health issues.
CANCER PROGRAM SPECIALTY PHYSICIANS

**Gastroenterology:**
Dr. Kamalesh Patel
Dr. Shahid Rana
Dr. Shahnaz Rana
Dr. Todd Remines

**Gynecology:**
Dr. Robert Edwards
Dr. Joe Ellington
Dr. Jamette Huffman
Dr. Lori Tucker
Dr. Robert Edwards
Dr. Joe Ellington
Dr. Jamette Huffman
Dr. Lori Tucker

**Hematology/Oncology:**
Dr. Rowena Chambers
Dr. Muhammed Khokar
Dr. Joel Schor
Dr. Rowena Chambers
Dr. Muhammed Khokar
Dr. Joel Schor

**Hospitalists:**
Dr. Mohsin Arshad
Dr. Kristin Bowman
Dr. Christopher Daniel
Dr. Hamza Rana
Dr. Yoginder Yadav
Dr. Mohsin Arshad
Dr. Kristin Bowman
Dr. Christopher Daniel
Dr. Hamza Rana
Dr. Yoginder Yadav

**Internists/Family Practice:**
Dr. Amanda Bailey
Dr. Nabeel Ghabra
Dr. Nancy Lohuis
Dr. Marshall Long
Dr. Christopher Parrish
Dr. Abdul Piracha
Dr. Gordon Prescott
Dr. Amanda Bailey
Dr. Nabeel Ghabra
Dr. Nancy Lohuis
Dr. Marshall Long
Dr. Christopher Parrish
Dr. Abdul Piracha
Dr. Gordon Prescott

**Pathology:**
Dr. Gopal Pardasani
Dr. Monika Roychowdhury

**Radiology:**
Dr. Afzal Ahmed
Dr. Edward Aycoth
Dr. Stephen Belcher
Dr. David Groten
Dr. Dana Olson
Dr. Dilip Patel
Dr. Kishor Pathak
Dr. Michael Shahan

**Neurology:**
Dr. William Merva
Dr. Tahir Rana

**Neurosurgery:**
Dr. Jeffrey Greenberg
Dr. John Orphanos

**Neurology:**
Dr. William Merva
Dr. Tahir Rana

**Neurosurgery:**
Dr. Jeffrey Greenberg
Dr. John Orphanos

**Otolaryngology:**
Dr. Brian Collie
Dr. Robert Jones
Dr. Lee Smith

**Ophthalmology:**
Dr. Theodore Werblin

**Orthopedics:**
Dr. Walid Azzo
Dr. Darrell Belcher
Dr. Philip Branson
Dr. Robert Pennington
Dr. Frederick Morgan
Dr. Steven O’Saile

**Pathology:**
Dr. Gopal Pardasani
Dr. Monika Roychowdhury

**Radiology:**
Dr. Afzal Ahmed
Dr. Edward Aycoth
Dr. Stephen Belcher
Dr. David Groten
Dr. Dana Olson
Dr. Dilip Patel
Dr. Kishor Pathak
Dr. Michael Shahan

**Radiation Oncology:**
Dr. Joseph Baisden

**General Surgery:**
Dr. Gene B. Duremdes
Dr. Generoso Duremdes
Dr. Eric Hopkins
Dr. David Mullins
Dr. Izhar Rana

**Urology:**
Dr. Naeem Pervaiz

**Pulmonology:**
Dr. Oscar Figueroa
Dr. Vishnu Patel

**CANCER COMMITTEE MEMBERS**

Dr. Rowena Chambers, Hematology/Oncology, Committee Chair
Dr. Afzal Ahmed, Medical Imaging
Mary Lou Baker, Community Representative
Richard Hypes, Marketing & Public Relations
Gail Davidson, R.N., Hospice Compassus
Rose Morgan, R.N., B.S.N., M.S., Vice President Patient Care Services
Susan Drady, Pharmacy
Dr. David A. Mullins, General Surgery, ACoS Liaison Physician
Tisha James, Nutrition Services
Dr. Muhammed Khokar, Hematology/Oncology
Dr. Steven Lilly, Pastoral Care
Cami Maxwell, R.N., O.C.N., Clinical Trials Nurse
Julie Lilly, R.N., B.S.N., Oncology Navigator/Cancer Care Coordinator
Rosa Moody, Compliance Officer
Dr. Gopal Pardasani, Pathology
Melinda Perdue, C.T.R., Tumor Registrar/Cancer Program Coordinator
Richard Puckett, R.N., B.S.N., Vice President of Quality and Safety
Melanie Meachum, American Cancer Society
Khristy Shrewsbury, R.N., B.S.N., Oncology Nurse Manager
Gaynelle Steuber, Community Representative
Sherry Traylor, R.N., O.C.N., Outpatient Oncology
Cindy Weber, Medical Staff Services
Thelma Workman, WV Breast & Cervical Cancer Screening Program