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### Lehigh Valley Hospital: Statistical Report 2018

Lehigh Valley Health Network

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### LEHIGH VALLEY HOSPITAL-POCONO STATISTICAL REPORT 2018





# WELCOME

We are pleased to present Lehigh Valley Cancer Institute's 2018 annual report for Lehigh Valley Hospital–Pocono, featuring 2017 data as well as information about our oncology services. Our cancer program is focused on prevention, detection, diagnosis and treatment. We offer the latest in cancer treatment including surgical oncology, radiation oncology and chemotherapy, along with access to leading-edge clinical trials. We offer patient navigation and additional services including genetic testing and counseling, nutritional services, social and psychological support, rehabilitation, as well as guidance for survivorship, palliative care and, if needed, hospice care.

#### LEHIGH VALLEY CANCER INSTITUTE

In September 2017, we introduced Lehigh Valley Cancer Institute. The word "institute" in successful health care organizations describes a location where clinicians of the highest caliber collaboratively conduct patient care, research and provider education at the highest level to better predict, prevent and combat disease. Lehigh Valley Health Network (LVHN) has adopted the institute model because it has the necessary infrastructure, programs and partnerships in place to help people stay healthy and provide the most advanced treatment when needed. People in the communities we serve can be confident in knowing they have access to hundreds of lifesaving and breakthrough clinical trials through LVHN's partnership with Memorial Sloan Kettering (MSK) Cancer Institute and other clinical relationships.



#### **OUR CANCER INSTITUTE MISSION**

We ease our community's cancer burden by preventing cancer, by finding cancer early, by providing comprehensive diagnostic, consultative, treatment, support and survivorship services, and by educating health care professionals and residents of the communities we serve about advances in cancer care.



#### MEMORIAL SLOAN KETTERING CANCER ALLIANCE PARTNERSHIP COMES TO LVH-POCONO

Lehigh Valley Hospital (LVH)–Pocono, Monroe County's cancer care leader, has advanced the level of cancer care available to patients right in their community by extending the Memorial Sloan Kettering (MSK) Cancer Alliance membership at Dale and Frances Hughes Cancer Center at LVH–Pocono. Lehigh Valley Cancer Institute became the second member of the MSK Alliance in 2016 and also provides the alliance's advanced oncology care at LVH–Cedar Crest and LVH–Muhlenberg. In 2018 the alliance was expanded to include LVH-Pocono.

#### Specialized oncology care

Recognizing that the majority of oncology patients receive care in community health care settings, Lehigh Valley Cancer Institute's membership in the MSK Alliance emphasizes innovation and collaboration. Patients at Lehigh Valley Cancer Institute have access to MSK clinical trials as well as the genetic sequencing tool MSK–IMPACT. Teams of oncology specialists from both health care organizations reviewed processes and clinical standards from across six disease specialties and disciplines within Lehigh Valley Cancer Institute – melanoma, breast, colon, endometrial, lung and prostate – to ensure alignment with MSK Standards of Care.

Lehigh Valley Cancer Institute also aligned with MSK to initiate site-specific disease management teams (DMTs). DMTs meet weekly to review and discuss new findings within their areas of expertise and interpret the data, helping to determine necessary changes within standardof-care practice. Cases that pose unique challenges are discussed by experts at MSK and Lehigh Valley Cancer Institute to offer patients a collective treatment plan.



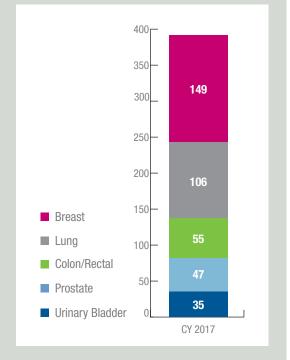


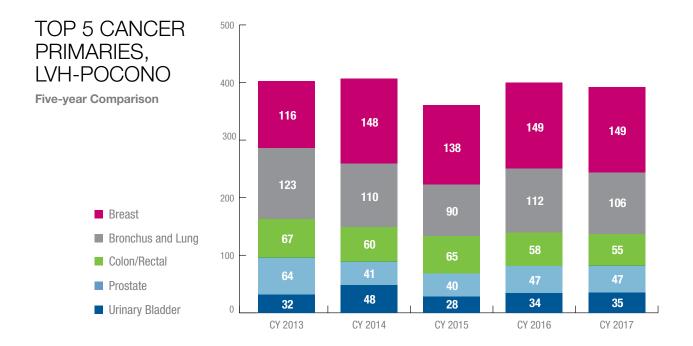


The faculty of the cancer program is composed of physicians who are cancer care specialists and board-certified in their fields. In calendar year 2017, the cancer program saw more than 621 new cancer patients. In fiscal year 2017, outpatient infusion volumes comprised 10,706 visits, and radiation oncology comprised 455 new treatments.



### 2017 LVH-POCONO TOP 5 ANALYTIC CANCER SITES





### CANCER STAGING AND INCIDENCE TERMINOLOGY

Cancer diagnosis, staging, incidence and treatment have a language of their own. Here are some commonly used terms and resources for more information:

#### American Joint Committee on Cancer (AJCC) staging

A classification system used for describing the extent of disease progression based on the evaluation of the tumor size/invasion (T), nodal status (N) and metastasis (M) at the time of diagnosis. AJCC staging is important in determining treatment plans.

#### **Analytic Cancer Case**

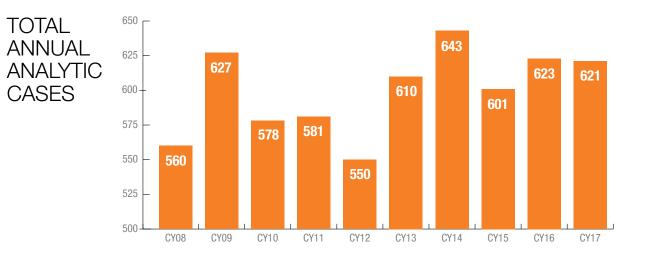
Cases for which the facility provided the initial diagnosis of cancer and/or for which the facility contributed to all or part of the first course of treatment.

#### **National Cancer Database (NCDB)**

The NCDB, a joint project of the American Cancer Society and the Commission on Cancer, collects information on cancer cases diagnosed and/or treated at hospitals throughout the country. This non-patient-identified information is used to present scientifically reviewed descriptions of patient diagnosis, treatment and outcomes. The most recent data from NCDB for comparison is on cases newly diagnosed in 2015.

#### **Rapid Quality Reporting System (RQRS)**

The RQRS is a web-based data collection and reporting system that uses information gathered through the National Cancer Database (NCDB), a nationwide oncology case repository specifically focused on breast and colon-rectal cancer patients and their quality of care. Lehigh Valley Cancer Institute participates in the NCDB data collection and reporting program. The resulting data contributes to a body of evidenced-based cancer care knowledge. Based on the evidence, the RQRS alerts users each month to "anticipated care" for breast and colon-rectal cancer patients. The value in these alerts is to avoid having patients miss out on adjuvant, evidence-based care or therapy that they could receive in addition to their main treatment.





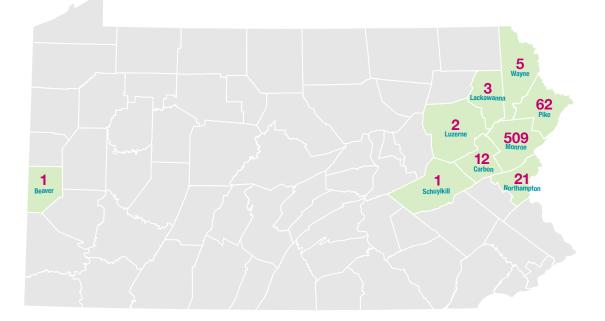
In 2017, Lehigh Valley Hospital (LVH)–Pocono provided diagnostic care, second opinion recommendations and treatment to 621 patients from nine Pennsylvania counties. In addition, five patients came to our cancer program from communities across the United States.

| BEAVER<br>CARBON<br>LACKAWANNA<br>LUZERNE<br>MONROE<br>NORTHAMPTON<br>PIKE<br>SCHUYLKILL<br>WAYNE |     |
|---|-----|
| LACKAWANNA<br>LUZERNE<br>MONROE<br>NORTHAMPTON<br>PIKE<br>SCHUYLKILL                              | 1   |
| LUZERNE<br>MONROE<br>NORTHAMPTON<br>PIKE<br>SCHUYLKILL  | 12  |
| MONROE<br>NORTHAMPTON<br>PIKE<br>SCHUYLKILL   | 3   |
| NORTHAMPTON<br>PIKE<br>SCHUYLKILL   | 2   |
| PIKE<br>SCHUYLKILL  | 509 |
| SCHUYLKILL  | 21  |
|   | 62  |
| WAYNE   | 1   |
|   | 5   |
| OUT OF STATE  | 5   |
| TOTAL   | 621 |

### CASE CLASSIFICATION BASED ON PATIENT MIGRATION PATTERNS

LVH-Pocono 2017





### 2017 ANALYTIC CASES BY PRIMARY BODY SITE

#### LVH-POCONO PREVALENCE BY DISEASE SITES

| PRIMARY SITE                      | TOTAL |
|-----------------------------------|-------|
| HEAD AND NECK                     | 27    |
| DIGESTIVE ORGANS                  | 97    |
| ESOPHAGUS                         | 9     |
| STOMACH                           | 5     |
| SMALL INTESTINE                   | 3     |
| COLON                             | 39    |
| RECTOSIGMOID JUNCTION             | 2     |
| RECTUM                            | 14    |
| ANUS AND ANAL CANAL               | 5     |
| LIVER AND BILE DUCTS              | 4     |
| GALLBLADDER                       | 1     |
| OTHER BILIARY TRACT               | 3     |
| PANCREAS                          | 12    |
| OTHER DIGESTIVE ORGANS            | 0     |
| THORAX                            | 109   |
| BRONCHUS AND LUNG                 | 106   |
| THYMUS                            | 0     |
| HEART MEDIASTINUM PLEURA          | 3     |
| MUSCULOSKELETAL/SOFT TISSUE SITES | 4     |
| BLOOD AND BONE MARROW             | 34    |
| SKIN                              | 10    |
| BREAST                            | 149   |
| FEMALE GENITAL ORGANS             | 42    |
| VULVA                             | 1     |
| VAGINA                            | 1     |
| CERVIX UTERI                      | 6     |
| CORPUS UTERI                      | 20    |
| UTERUS NOS                        | 2     |
| OVARY                             | 10    |
| OTHER FEMALE GENITAL ORGANS       | 2     |
| PLACENTA                          | 0     |

| PRIMARY SITE                            | TOTAL |
|---|-------|
| MALE GENITAL ORGANS                     | 49    |
| PENIS                                   | 1     |
| PROSTATE GLAND                          | 47    |
| TESTIS                                  | 0     |
| OTHER & UNSPECIFIED MALE GENITAL ORGANS | 1     |
| URINARY TRACT ORGANS                    | 46    |
| KIDNEY                                  | 8     |
| KIDNEY, RENAL PELVIS                    | 1     |
| URETER                                  | 1     |
| URINARY BLADDER                         | 35    |
| OTHER AND UNSPECIFIED URINARY ORGANS    | 1     |
| CENTRAL NERVOUS SYSTEM                  | 8     |
| MENINGES                                | 2     |
| BRAIN                                   | 5     |
| OTHER NERVOUS SYSTEM                    | 1     |
| ENDOCRINE GLANDS                        | 7     |
| THYROID GLAND                           | 7     |
| ADRENAL GLAND                           | 0     |
| OTHER ENDOCRINE GLANDS                  | 0     |
| OTHER                                   | 1     |
| ORBIT, OCULAR                           | 0     |
| OTHER ILL DEFINED SITES                 | 0     |
| RETROPERITONEUM & PERITONEUM            | 1     |
| LYMPH NODES                             | 21    |
| UNKNOWN PRIMARY                         | 17    |
| TOTAL ANALYTIC CASES                    | 621   |



(Data source: LVHN Tumor Registry) 10/22/2018

### PRIMARY BODY SITES: FIVE MOST FREQUENTLY TREATED AT LVHN

### **1** BREAST CANCER

#### INCIDENCE OF BREAST CANCER BY AGE AT DIAGNOSIS LVH-POCONO 2017

| AGE AT DIAGNOSIS | 0-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | 90-100 | TOTAL |
|------------------|------|-------|-------|-------|-------|-------|-------|--------|-------|
| (N)              | 0    | 3     | 17    | 34    | 39    | 39    | 15    | 2      | 149   |

### COMPARISON OF INITIAL TREATMENT BY AJCC STAGE FOR BREAST CANCER: LVH-POCONO 2017 DATA TO NCDB 2015 DATA

| TREATMENT                                       | Stage<br>0 | Stage<br>I | Stage<br>II | Stage<br>III | Stage<br>IV | Stage<br>UNK | LVH-P<br>Total | LVH-P<br>% | NCDB<br>Total | NCDB<br>% |
|---|------------|------------|-------------|--------------|-------------|--------------|----------------|------------|---------------|-----------|
| SURGERY ONLY                                    | 1          | 2          | 1           | 0            | 2           | 1            | 7              | 4.7%       | 33,926        | 14.7%     |
| SURGERY AND RADIATION                           | 6          | 12         | 2           | 0            | 0           | 0            | 20             | 13.4%      | 14,666        | 6.4%      |
| SURGERY AND CHEMOTHERAPY                        | 0          | 2          | 2           | 1            | 0           | 0            | 5              | 3.4%       | 9,495         | 4.1%      |
| SURGERY, RADIATION AND<br>CHEMOTHERAPY          | 0          | 8          | 6           | 0            | 0           | 0            | 14             | 9.4%       | 11,082        | 4.8%      |
| SURGERY, RADIATION AND<br>HORMONE THERAPY       | 12         | 35         | 7           | 1            | 0           | 0            | 55             | 36.9%      | 55,523        | 24.1%     |
| SURGERY AND HORMONE<br>THERAPY                  | 2          | 4          | 4           | 0            | 0           | 0            | 10             | 6.7%       | 34,607        | 15.0%     |
| SURGERY, RADIATION,<br>CHEMOTHERAPY AND HORMONE | 0          | 3          | 7           | 4            | 0           | 0            | 14             | 9.4%       | 20,323        | 8.8%      |
| SURGERY, CHEMOTHERAPY<br>AND HORMONE            | 0          | 0          | 0           | 0            | 0           | 0            | 0              | 0.0%       | 7,519         | 3.3%      |
| RADIATION                                       | 0          | 0          | 0           | 1            | 0           | 0            | 1              | 0.7%       | 322           | 0.1%      |
| ACTIVE SURVEILLANCE                             | 0          | 0          | 0           | 0            | 0           | 0            | 0              | 0.0%       | 154           | 0.1%      |
| OTHER SPECIFIED THERAPY                         | 1          | 4          | 3           | 2            | 3           | 0            | 13             | 8.7%       | 35,679        | 15.5%     |
| NO 1ST COURSE RX                                | 2          | 3          | 4           | 0            | 0           | 1            | 10             | 6.7%       | 7,115         | 3.1%      |
| TOTAL   | 24         | 73         | 36          | 9            | 5           | 2            | 149            | 100.0%     | 230,411       | 100.0%    |

NCDB data represents analytic cases in all states from 1,316 hospitals

### 2 LUNG CANCER

#### INCIDENCE OF LUNG CANCER BY AGE AT DIAGNOSIS LVH-POCONO 2017

| AGE AT DIAGNOSIS | 0-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | 90-100 | TOTAL |
|------------------|------|-------|-------|-------|-------|-------|-------|--------|-------|
| (N)              | 0    | 0     | 3     | 16    | 40    | 29    | 16    | 2      | 106   |

### COMPARISON OF INITIAL TREATMENT BY AJCC STAGE FOR NON-SMALL CELL LUNG CANCER: LVH-POCONO 2017 DATA TO NCDB 2015 DATA

| TREATMENT                              | Stage<br>0 | Stage<br>I | Stage<br>II | Stage<br>III | Stage<br>IV | Stage<br>UNK | LVH-P<br>Total | LVH-P<br>% | NCDB<br>Total | NCDB<br>% |
|--|------------|------------|-------------|--------------|-------------|--------------|----------------|------------|---------------|-----------|
| RADIATION ONLY                         | 1          | 14         | 2           | 1            | 4           | 22           | 23.2%          | 21,283     | 16.5%         | 14.7%     |
| SURGERY AND CHEMOTHERAPY               | 0          | 1          | 1           | 0            | 0           | 2            | <b>2.1%</b>    | 6087       | 4.7%          | 6.4%      |
| RADIATION AND CHEMOTHERAPY             | 0          | 3          | 1           | 13           | 0           | 17           | 17.9%          | 25,410     | 19.8%         | 4.1%      |
| CHEMOTHERAPY ONLY                      | 0          | 0          | 0           | 1            | 5           | 6            | 6.3%           | 14,300     | 11.1%         | 4.8%      |
| SURGERY, RADIATION AND<br>CHEMOTHERAPY | 0          | 0          | 1           | 0            | 0           | 1            | 1.1%           | 3,135      | 2.4%          | 24.1%     |
| OTHER RX                               | 0          | 0          | 0           | 3            | 3           | 6            | <b>6.3%</b>    | 7,859      | <b>6.1%</b>   | 15.0%     |
| ACTIVE SURVEILLANCE                    | 0          | 0          | 0           | 0            | 0           | 0            | 0.0%           | 491        | 0.4%          | 8.8%      |
| NO 1ST COURSE OF RX                    | 0          | 3          | 0           | 6            | 13          | 22           | 23.2%          | 23,931     | 18.6%         | 3.3%      |
| TOTAL                                  | 1          | 37         | 8           | 24           | 25          | 95           | 100.0%         | 128,599    | 100.0%        | 100.0%    |

NCDB data represents analytic cases in all states from 1,315 hospitals

# 2 LUNG CANCER

### COMPARISON OF INITIAL TREATMENT BY AJCC STAGE FOR SMALL CELL LUNG CANCER: LVH-POCONO 2017 DATA TO NCDB 2017 DATA

| TREATMENT                  | Stage<br>0 | Stage<br>I | Stage<br>II | Stage<br>III | Stage<br>IV | Stage<br>UNK | LVH-P<br>Total | LVH-P<br>% | NCDB<br>Total | NCDB<br>%    |
|----------------------------|------------|------------|-------------|--------------|-------------|--------------|----------------|------------|---------------|--------------|
| RADIATION AND CHEMOTHERAPY | 0          | 0          | 2           | 2            | 0           | 4            | <b>36.4%</b>   | 8731       | 41.6%         | <b>24.1%</b> |
| CHEMOTHERAPY ONLY          | 0          | 0          | 0           | 1            | 0           | 1            | <b>9.1%</b>    | 5937       | 28.3%         | 15.0%        |
| OTHER SPECIFIED THERAPY    | 1          | 2          | 0           | 0            | 0           | 3            | 27.3%          | 2037       | 9.7%          | 8.8%         |
| NO 1ST COURSE OF RX        | 0          | 0          | 0           | 2            | 1           | 3            | 27.3%          | 4266       | 20.3%         | 3.3%         |
| TOTAL                      | 1          | 2          | 2           | 5            | 1           | 11           | 100.0%         | 20971      | 100.0%        | 100.0%       |

NCDB data represents analytic cases in all states from 1,295 hospitals

### **3** PROSTATE CANCER

#### INCIDENCE OF PROSTATE CANCER BY AGE AT DIAGNOSIS LVH-POCONO 2017

| AGE AT DIAGNOSIS | 0-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | 90-100 | TOTAL |
|------------------|------|-------|-------|-------|-------|-------|-------|--------|-------|
| (N)              | 0    | 0     | 0     | 9     | 19    | 12    | 6     | 1      | 47    |

#### COMPARISON OF INITIAL TREATMENT BY AJCC STAGE FOR PROSTATE CANCER: LVH-POCONO 2017 DATA TO NDCB 2015

| TREATMENT                      | Stage<br>I | Stage<br>II | Stage<br>III | Stage<br>IV | Stage<br>Unkn | LVH-P<br>Total | LVH-P<br>%   | NCDB<br>Total | NCDB<br>%    |
|--------------------------------|------------|-------------|--------------|-------------|---------------|----------------|--------------|---------------|--------------|
| SURGERY ONLY                   | 2          | 6           | 0            | 1           | 0             | 9              | 17.6%        | 48,846        | <b>44.9%</b> |
| RADIATION ONLY                 | 6          | 6           | 0            | 0           | 0             | 12             | 23.5%        | 14,399        | 13.2%        |
| SURGERY AND RADIATION          | 1          | 1           | 1            | 0           | 0             | 3              | 5.9%         | 1,740         | 1.6%         |
| RADIATION AND HORMONE          | 2          | 12          | 0            | 0           | 0             | 14             | 27.5%        | 13,874        | 12.8%        |
| SURGERY, RADIATION AND HORMONE | 0          | 2           | 0            | 0           | 0             | 2              | <b>3.9</b> % | 1,760         | 1.6%         |
| HORMONE ONLY                   | 0          | 0           | 0            | 3           | 1             | 4              | 7.8%         | 5,355         | 4.9%         |
| OTHER RX                       | 0          | 0           | 0            | 2           | 0             | 2              | 11.8%        | 7,118         | 6.5%         |
| ACTIVE SURVEILLANCE            | 0          | 0           | 0            | 0           | 0             | 0              | 0.0%         | 8,233         | 7.6%         |
| NO 1ST COURSE RX               | 1          | 0           | 0            | 0           | 0             | 1              | 2.0%         | 7,355         | 6.8%         |
| TOTAL                          | 12         | 27          | 1            | 6           | 1             | 47             | 100.0%       | 108,680       | 100.0%       |

NCDB data represents analytic cases in all states from 1,295 hospitals

### PRIMARY BODY SITES: FIVE MOST FREQUENTLY TREATED AT LVHN

## 4 COLON AND RECTAL CANCER

#### INCIDENCE OF COLON CANCER BY AGE AT DIAGNOSIS LVH-POCONO 2017

| AGE AT DIAGNOSIS | 0-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | 90-100 | TOTAL |
|------------------|------|-------|-------|-------|-------|-------|-------|--------|-------|
| (N)              | 0    | 1     | 5     | 6     | 13    | 10    | 6     | 0      | 41    |

### COMPARISON OF INITIAL TREATMENT BY AJCC STAGE FOR COLON CANCER: LVHN-POCONO 2017 DATA TO NCDB 2015 DATA

| TREATMENT                              | Stage<br>I | Stage<br>II | Stage<br>III | Stage<br>IV | Stage<br>Unkn | LVH-P<br>Total | LVH-P<br>%   | NCDB<br>Total | NCDB<br>% |
|--|------------|-------------|--------------|-------------|---------------|----------------|--------------|---------------|-----------|
| SURGERY ONLY                           | 7          | 3           | 2            | 1           | 5             | 18             | <b>43.9%</b> | 42,646        | 54.3%     |
| SURGERY AND CHEMOTHERAPY               | 1          | 1           | 9            | 3           | 0             | 14             | <b>34.1%</b> | 18,629        | 23.7%     |
| CHEMOTHERAPY ONLY                      | 0          | 0           | 0            | 2           | 0             | 2              | <b>4.9%</b>  | 3,112         | 4.0%      |
| SURGERY, CHEMOTHERAPY AND BRM          | 0          | 0           | 1            | 1           | 0             | 2              | <b>4.9%</b>  | 2,395         | 3.0%      |
| SURGERY, RADIATION AND<br>CHEMOTHERAPY | 0          | 0           | 0            | 0           | 0             | 0              | 0.0%         | 1,681         | 2.1%      |
| OTHER SPECIFIED THERAPY                | 1          | 0           | 0            | 0           | 0             | 1              | 2.4%         | 3,986         | 5.1%      |
| NO 1ST COURSE OF RX                    | 1          | 0           | 1            | 0           | 2             | 4              | <b>9.8%</b>  | 6,082         | 7.7%      |
| TOTAL                                  | 10         | 4           | 13           | 7           | 7             | 41             | 100.0%       | 78,531        | 100.0%    |

NCDB data represents analytic cases in all states from 1,326 hospitals

#### INCIDENCE OF RECTAL CANCER BY AGE AT DIAGNOSIS LVH-POCONO 2017

| AGE AT DIAGNOSIS | 0-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | 90-100 | TOTAL |
|------------------|------|-------|-------|-------|-------|-------|-------|--------|-------|
| (N)              | 0    | 0     | 1     | 4     | 4     | 0     | 5     | 0      | 14    |

### COMPARISON OF INITIAL TREATMENT BY AJCC STAGE FOR RECTUM CANCER: LVH-POCONO 2017 DATA TO NCDB 2015 DATA

| TREATMENT                              | Stage<br>I | Stage<br>II | Stage<br>III | Stage<br>IV | Stage<br>Unkn | LVH-P<br>Total | LVH-P<br>% | NCDB<br>Total | NCDB<br>% |
|--|------------|-------------|--------------|-------------|---------------|----------------|------------|---------------|-----------|
| SURGERY, CHEMOTHERAPY AND<br>RADIATION | 1          | 1           | 1            | 0           | 0             | 3              | 21.4%      | 8378          | 40.2%     |
| SURGERY ONLY                           | 0          | 0           | 0            | 0           | 0             | 0              | 0.0%       | 6943          | 33.3%     |
| RADIATION AND CHEMOTHERAPY             | 0          | 0           | 1            | 1           | 0             | 2              | 14.3%      | 2530          | 12.1%     |
| CHEMOTHERAPY                           | 0          | 0           | 0            | 0           | 1             | 1              | 7.1%       | 1057          | 5.1%      |
| NO 1ST COURSE OF RX                    | 2          | 0           | 0            | 2           | 4             | 8              | 57.1%      | 1958          | 9.4%      |
| TOTAL                                  | 3          | 1           | 2            | 3           | 5             | 14             | 100.0%     | 20,866        | 100.0%    |

NCDB data represents analytic cases in all states from 1,302 hospitals

# 5 BLOOD AND BONE MARROW CANCER

#### INCIDENCE OF URINARY BLADDER CANCER BY AGE AT DIAGNOSIS LVH-POCONO 2017

| AGE AT DIAGNOSIS | 0-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | 90-100 | TOTAL |
|------------------|------|-------|-------|-------|-------|-------|-------|--------|-------|
| (N)              | 0    | 0     | 1     | 4     | 11    | 10    | 8     | 1      | 35    |

### COMPARISON OF INITIAL TREATMENT BY AJCC STAGE FOR BREAST CANCER: LVH-POCONO 2017 DATA TO NCDB 2015 DATA

| TREATMENT                              | Stage<br>0 | Stage<br>I | Stage<br>II | Stage<br>III | Stage<br>IV | Stage<br>N/A | Stage<br>UNK | LVH-P<br>Total | LVH-P<br>% | NCDB<br>Total | NCDB<br>%    |
|--|------------|------------|-------------|--------------|-------------|--------------|--------------|----------------|------------|---------------|--------------|
| SURGERY ONLY                           | 14         | 6          | 0           | 1            | 0           | 1            | 3            | 25             | 71.4%      | 27,277        | <b>54.1%</b> |
| SURGERY AND<br>CHEMOTHERAPY            | 0          | 0          | 1           | 0            | 0           | 0            | 0            | 1              | 2.9%       | 11,039        | 21.9%        |
| SURGERY AND BRM                        | 0          | 0          | 0           | 0            | 0           | 0            | 0            | 0              | 0.0%       | 5,292         | 10.5%        |
| SURGERY, CHEMOTHERAPY<br>AND BRM       | 0          | 0          | 0           | 0            | 0           | 0            | 0            | 0              | 0.0%       | 1,539         | 3.1%         |
| SURGERY, RADIATION AND<br>CHEMOTHERAPY | 0          | 0          | 0           | 0            | 1           | 0            | 0            | 1              | 2.9%       | 1,492         | 3.0%         |
| SURGERY AND RADIATION                  | 0          | 0          | 1           | 0            | 0           | 0            | 0            | 1              | 2.9%       | 680           | 1.3%         |
| CHEMOTHERAPY ONLY                      | 0          | 0          | 0           | 0            | 1           | 0            | 0            | 1              | 2.9%       | 372           | 0.7%         |
| RADIATION AND<br>CHEMOTHERAPY          | 0          | 0          | 0           | 0            | 0           | 0            | 0            | 0              | 0.0%       | 126           | 0.2%         |
| ACTIVE SURVEILLANCE                    | 0          | 0          | 0           | 0            | 0           | 0            | 0            | 0              | 0.0%       | 90            | 0.2%         |
| OTHER SPECIFIED THERAPY                | 0          | 0          | 0           | 0            | 0           | 0            | 0            | 0              | 0.0%       | 956           | 1.9%         |
| NO 1ST COURSE OF RX                    | 1          | 0          | 1           | 0            | 2           | 0            | 2            | 6              | 17.1%      | 1,548         | 3.1%         |
| TOTAL                                  | 15         | 6          | 3           | 1            | 4           | 1            | 5            | 35             | 100.0%     | 50,411        | 100.0%       |

NCDB data represents analytic cases in all states from 1,300 hospitals





#### PREVENTION: Shine a Light on Lung Cancer

45 participants were educated about lung cancer awareness for screening, prevention and radon testing. Initial outcomes:



radon kits distributed



participants referred to primary care provider (PCP) for screening appointments



of participants noted increased knowledge after the presentation

### CANCER PROGRAM ANNUAL GOALS

#### CLINICAL GOAL: To make endobronchial ultrasound (EBUS) available at LVH–Pocono.

EBUS was not an available on-site service at LVH–Pocono, so patients needed to travel out of their primary service area. The EBUS procedure is performed by the hospital-based pulmonologist with a referral from Lehigh Valley Cancer Institute unless the patient is a current pulmonary patient who has a pulmonologist.

#### PROGRAMMATIC GOAL: Develop a program for incidental lung nodule finding follow-up.

The purpose is to identify those patients who have either an incidental finding or a nodule 8 millimeters or greater on a scan for navigation and followup. In addition, the program will expedite care for lung patients to be diagnosed at an earlier stage. The review committee for the lung program consists of a medical oncologist, radiation oncologist, pulmonologist and nurse navigator. There were 188 cases reviewed with 23 lung cancer findings.



#### SCREENING: Lung Cancer Screening Event

This event allowed participants to sign up and complete lung screenings on the same day. Initial outcomes:

- ▶ Two lung screenings were completed
- > 32 radon kits were distributed
- -12 radon kits received; five indicated high radon levels
- ▶ 32 surveys collected
- 100 percent increase in knowledge about lung screenings, radon testing and smoke cessation

The Melanie Humphrey Breath of Life Fund Welcomes You

Changing the world a little at a time. The Melanie Humphrey Breath of Life Fund provides financial assistance to Lung Cancer patients and their families struggling with the cost of treatments and much more.



In 2008, 41-year-old Melanie Humphrey was a clinical trials nurse at Dale and Frances Hughes Cancer Center, devoted to stopping cancer. Little did she know that by fall 2008, she would be diagnosed with an advanced stage lung cancer. Never a smoker, Melanie battled through four years of treatment, but ultimately passed in December 2012, leaving behind a loving husband, Craig, and their two sons, Tanner, age 12, and Logan, age 10. In July 2016, after much thought and preparation, Tanner presented an idea to establish a charitable fund to be administered by Pocono Health Foundation in his mother's memory.

Purpose of this fund is to minimize the financial and emotional impact of a lung cancer diagnosis and treatment for both patients and their families. The Melanie Humphrey Breath of Life Fund provides up to \$500 to both male and female patients of Dale and Frances Hughes Cancer Center for basic living expenses, including rent, food/groceries, gas, child care, utilities, medication and other expenses. In addition to direct patient support, the Melanie Humphrey Breath of Life Fund also will assist with funding support awareness and education of lung cancer screening, symptoms and prevention. An important aspect of the Melanie Humphrey Breath of Life Fund is lung cancer awareness. Lung cancer is underfunded and heavily stigmatized, making it more important than ever to get the truth out there. Dedicated to the cause, Tanner Humphrey uses his family's story to raise awareness for lung cancer everywhere he can. In November 2017, the Melanie Humphrey Breath of Life Fund was honored to sponsor the Shine a Light on Lung Cancer awareness event at Dale and Frances Hughes Cancer Center.

Melanie's Miles is an annual 5K held in early November each year to benefit the Melanie Humphrey Breath of Life Fund. In its first two years it has attracted nearly 400 runners to the beautiful and challenging Blair Academy cross-country course. The race is an amazing opportunity to stand united against the monster that is lung cancer.

# PUBLIC REPORTING OF OUTCOMES

PENNSYLVANIA HEALTH CARE QUALITY ALLIANCE DATA (PHCQA) Hospital Quality Cancer Care Report: LVH-Pocono 2015 Data

| PROCESS MEASURES  | LVH-<br>Pocono | PA RATE<br>BENCHMARK | US<br>RATE | CoC<br>STANDARD |
|---|----------------|----------------------|------------|-----------------|
| Radiation therapy is administered within one year for women receiving breast conserving surgery for breast cancer                                   | 91.9%          | 94.7%                | 92.4%      | 90.0%           |
| Combination chemotherapy is considered or administered<br>within four months of diagnosis for women with hormone-receptor<br>negative breast cancer | 100.0%         | 94.6%                | 93.3%      | 90.0%           |
| Tamoxifen (or equivalent drug therapy) is considered or<br>administered within one year for women with hormone-receptor<br>positive breast cancer   | 96.8%          | 96.3%                | 93.2%      | 90.0%           |
| At least 12 regional lymph nodes are removed and examined for colon cancer patients who have had colon surgery                                      | 73.9%          | 92.6%                | 92.2%      | 80.0%           |
| Chemotherapy is considered or administered within four months of diagnosis for patients with (lymph node positive) colon cancer                     | 50.0%          | 91.1%                | 89.3%      | 90.0%           |



# EVIDENCE-BASED STUDY

### Lehigh Valley Hospital-Pocono

#### INTRODUCTION

Pancreatic cancer is the fourth leading cause of cancer-related death in the United States. According to National Cancer Institute SEER Database, about 55,440 people will be diagnosed with pancreatic cancer in 2018. This accounts for about 3.2 percent of all new cancer cases. Unfortunately, it has a difficult prognosis with only 8.5 percent five-year survival.

#### METHODS

The electronic medical records of all patients diagnosed with pancreatic adenocarcinoma in 2017 were reviewed. Nine new cases were identified, all of whom were treated at LVH–Pocono in an outpatient setting by a multidisciplinary team of medical oncologists, surgical oncologists and radiation oncologists. Each case was discussed in a multispecialty tumor board. The following variables were assessed among the cohort of nine patients: age, sex, race, stage and management following NCCN guidelines.

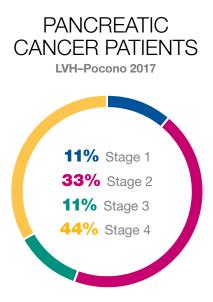
#### RESULTS

- > Analysis of the data showed median age of 65 years; 66 percent females.
- Although risk is small, pancreatic cancer is linked to cigarette smoking, and 77 percent of patients had either a history of tobacco use or were active smokers.
- African Americans have a higher incidence of pancreatic cancer, but 88 percent of patients were white.
- 11 percent were stage 1, 33 percent were stage 2, 11 percent were stage 3, and 44 percent were stage 4.

#### CONCLUSIONS

The American Joint Committee on Cancer (AJCC) guidelines were used for staging criteria for pancreatic adenocarcinoma that follow the tumor/node/ metastasis (TNM) system. All patients were discussed in a multidisciplinary tumor board meeting. With one exception, eight of nine patients in the review were assigned treatment plans in accordance with NCCN guidelines. One patient was offered adjuvant chemotherapy regimen suited for metastatic setting rather than offering one of the Category 1 regimens. Standard 4.6: Monitoring Compliance with Evidence-Based Guidelines

- Primary endpoint: To assess whether patients at Lehigh Valley Hospital (LVH)–Pocono are evaluated and treated according to evidence-based National Comprehensive Cancer Network (NCCN) guidelines.
- Criteria: Patient diagnosed and treated from Jan. 1, 2017, through Dec. 31, 2017, at Lehigh Valley Hospital–Pocono.
- Evidence-Based National Guidelines: National Cancer Comprehensive Network, Pancreatic Adenocarcinoma, Version 2.2018.
- Date of study: November 2018



# QUALITY STUDIES

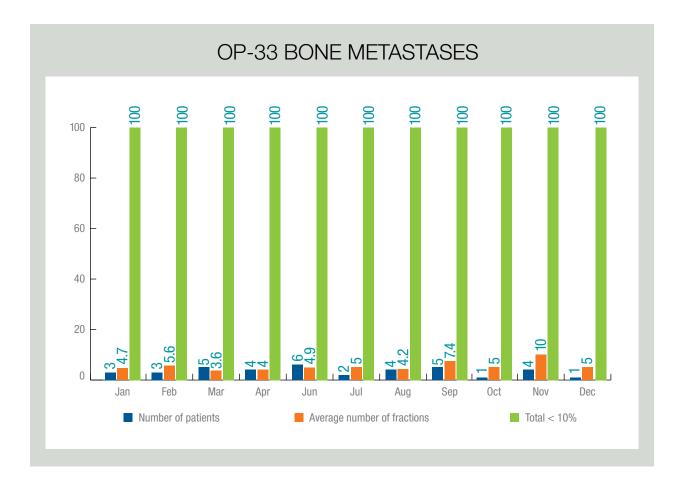
### 2017 Study: Determine adherence to CMS quality measure OP-33 external beam radiotherapy for bone metastasis

Hypofractionation, higher doses of radiation in fewer fractions (Fx) of treatment, has been identified as equally effective treatment in some disease sites, allowing for lower costs. Adopting these treatment schemas allow delivery of high quality of care at a lower cost thereby improving value to our community. Both ASTRO and CMS have initiatives to promote this new treatment schedule.

- ► ASTRO's Choose Wisely focuses on reducing bone metastasis treatment fractions.
- CMS OP-33 Quality Measure Percentage of patients, regardless of age, with a diagnosis of painful bone metastases and no history of previous radiation who receive external beam radiation therapy (EBRT) with an acceptable fractionation scheme (30Gy/10fxns, 24Gy/6fx, 20Gy/5fx and 8Gy/1fx).

Our goal has been to move treatment for bone metastasis from 15 to 10 fraction schema, but there was a question about successful achievement. The study determined that the radiation oncologists are meeting the quality standard with an average of 5.1 days. No further interventions were required as treatment schedules are concordant with the quality measure.





#### **Quality Improvement**

When treating inpatients, medical oncologists work out of a different oncology-specific EMR than the inpatient system. The inpatient system is a predominantly paper process. This will be resolved with the EPIC implementation in the future, however a study was conducted in 2016 that demonstrated errors in the following: physician signatures, date and time missing, illegible handwriting and multiple phone calls to clarify handwriting. The goal was to transition chemotherapy orders immediately to preprinted/template paper order and ultimately electronic within the McKesson system. As a result of this initiative, all chemotherapy orders have been converted to electronic forms. The top six high-volume regimens were identified and converted to electronic order sets within the McKesson system.



### KIDNEY CANCER MEETS ITS MATCH

#### Multidisciplinary approach halts Ken Kolakowski's aggressive kidney cancer

Renal cancer cost Ken Kolakowski a kidney in 2012. In 2016, a tumor appeared on the remaining kidney. Six months after surgery to remove the cancer, a scan showed it had spread to Kolakowski's adrenal gland and lymph nodes. At this point, his primary care physician, Ian Foster, MD, thought that Kolakowski should meet his friend and colleague, hematologist oncologist Suresh Nair, MD, physician in chief at Lehigh Valley Cancer Institute and an expert in kidney cancer.

One of the first things Nair did was order a magnetic resonance imaging (MRI) study of Kolakowski's brain. It's unusual for kidney cancer to spread to the brain, but Kolakowski had begun having headaches. The scan revealed eight brain tumors, one so large it demanded emergency surgery. "I unfortunately had to give Ken the news on the phone," Nair says. Rather than go home that night, Kolakowski was admitted to Lehigh Valley Hospital (LVH)–Cedar Crest and scheduled for surgery.

With the crisis averted, Nair turned to formulating a treatment plan. It would be an aggressive one. Life expectancy for a patient with cancer like Kolakowski's is generally three to six months, but he was determined to fight. Sean Quinlan-Davidson, MD, radiation oncologist at LVH–Pocono Hughes Cancer Center, provided whole-brain radiation. Nair then started Kolakowski on a new medication designed for advanced kidney cancer. The collaboration involved multiple physicians, disciplines and facilities, "a great example of teamwork," Nair says.

That was all more than a year ago. Kolakowski's brain is back to normal. "There are just a few scars where the tumors had been," Nair says. Scans still show an adrenal tumor, but it's shrinking. Quinlan-Davidson will take care of it with an innovative radiosurgery called Varian Edge<sup>™</sup>. "This minimally invasive approach is incredibly accurate. It allows us to use a higher dose of radiation in fewer sessions with less risk to healthy tissues that are nearby – in this case, healthy tissue adjacent to Ken's adrenal gland," Quinlan-Davidson says.

Kolakowski continues on the drug Nair prescribed, with a goal to celebrate his 25th wedding anniversary – six years away. "And then we'll start working toward another 25 years," Kolakowski says.

# CANCER DATA MANAGEMENT

#### TUMOR REGISTRY

The cancer data management department of Lehigh Valley Cancer Institute captures a complete summary of patient demographics, history, diagnosis and treatment for every cancer patient seen at Lehigh Valley Cancer Institute. These important data are abstracted and stored in a secure cancer registry, an information software system designed for collection, management and analysis of data on persons with a diagnosis of malignant neoplastic disease. In turn, these data are used by medical providers, as well as local, state and national agencies, for example, Pennsylvania Cancer Registry (PCR) and National Cancer Database (NCDB), to make important decisions including:

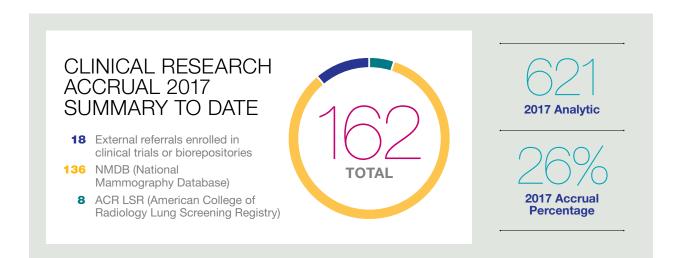
- Evaluate patient outcome, quality of life and implement procedures for improvement
- Provide follow-up information for cancer surveillance

- Provide information for cancer program activities
- Allocate resources at the health care facility, community, region or state level
- Develop educational programs for health care providers, patients and the public
- Report cancer incidence
- Evaluate efficacy of treatment modalities

Aside from case abstracting, the department performs a variety of additional functions: case finding of cancer cases at Lehigh Valley Cancer Institute, lifetime patient follow-up, organizes cancer conferences, multidisciplinary tumor boards wherein treatment and management of cancer cases are discussed, Cancer Committee, and required reporting to local, state and national agencies.

### CLINICAL TRIALS

Offering patients excellence in cancer care and access to the latest and most promising therapies is the mission of Lehigh Valley Health Network's (LVHN) clinical trials program. Our dedicated clinical trials staff helps ensure we follow the strictest of clinical trial protocols and deliver clear results, while providing compassionate care for our patients. LVHN was invited to join the Memorial Sloan Kettering (MSK) Cancer Alliance. LVHN cancer patients work with their LVHN provider to determine if an early-phase MSK cancer clinical trial is right for them. In addition to potentially improving lifespan or quality of life, the LVHN/MSK clinical trials collaboration will help advance cancer treatment knowledge to benefit all patients.



# RADIATION ONCOLOGY

#### SpaceOAR® (Spacing Organs at Risk)

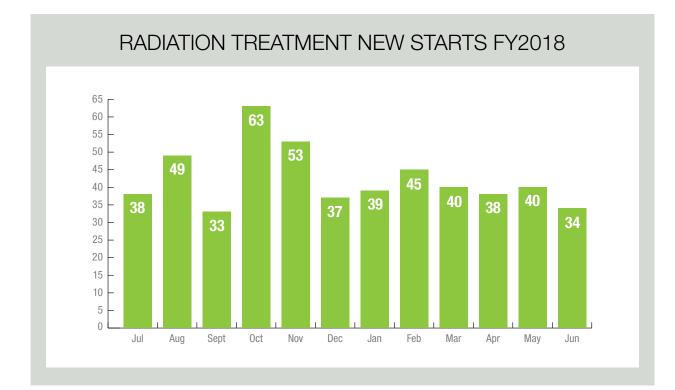
SpaceOAR is a temporary hydrogel spacer is implanted between prostate and rectum prior to receiving radiation therapy to protect the rectum. Goal is to maximize radiation to prostate and avoid irradiating surrounding normal tissue. This allows us to treat appropriate patients with hypofractionated treatments. With prostate stereotactic body radiotherapy (SBRT), patients receive five fractions of high-dose radiation versus several weeks of treatment.

A prospective, randomized clinical trial involving 222 patients at 20 sites across the U.S. found that SpaceOAR was safe and well-tolerated in patients, with no device-related adverse events. Gel placement was highly successful (99 percent success rate) and created an average of 0.5 inches or 1.3 centimeters of space between the prostate and rectum, producing a 74 percent reduction in rectal V70 radiation exposure, resulting in:

less rectal pain during radiation treatment

less rectal toxicity (complications) 15 months after treatment

reduction in patients experiencing a negative impact on bowel





#### **INFUSION VISITS**

#### **Edge® Linear Accelerator**

Using technology designed for radiosurgical ablation, Edge radiosurgery system represents an evolution in the way advanced radiosurgery is delivered. Edge offers advanced tools designed to deliver highly conformal dose distributions to tumors of the lung, brain, spine and other areas of the body where radiation is indicated.

Edge can precisely target cancer cells while minimizing radiation to surrounding tissue. What makes Edge specifically appealing for lung cancer is its ability to track tumors in real time, because tumors move with the respiratory cycle. Because it can track a patient's breathing pattern, Edge can find when the tumor is in a certain location and treat it at that time. This helps decrease radiation exposure to other parts of the lung and surrounding non-lung tissue.

Lehigh Valley Hospital (LVH)–Pocono was the first hospital in the region to offer this leading-edge stereotactic radiosurgery treatment in early 2017. Lehigh Valley Health Network (LVHN) unveiled a second Edge radiosurgery system in 2018 at LVH–Cedar Crest.



#### **Calypso<sup>®</sup>**

This technology is used on the Varian Edge. A transponder is implanted in or near the treatment target/tumor. The Calypso system is a localization system designed for use during radiation therapy that provides accurate and continuous target localization for patient alignment and target position monitoring during treatment delivery.



Total number of all annual mammograms



Total number of mammogram screenings



Total number of diagnostic mammograms

# BREAST HEALTH SERVICES

#### **BIOZORB®**

The BioZorb tissue marker was developed by Focal Therapeutics. It has six titanium marker clips distributed in a 3D pattern inside a bio-absorbable coil that enables delivery of a more focused radiation therapy with lower amount of radiation reaching healthy tissues. By delimiting the surgical site, this device improves visual confirmation for therapy planning, patient positioning and follow-up. BioZorb is compatible with virtually all forms of radiation therapy and is frequently used in the breast. The coil can be reabsorbed by the body within a year or more, leaving titanium clips for permanent 3D visualization at the surgical site.

BioZorb is placed at time of surgical tissue removal – for example, during breast surgery. Its unique open design allows for tissue in-growth during the healing process.

#### SAVI SCOUT®

SAVI SCOUT is an innovative wire-free radar localization technology that will help reduce stress for women in treatment for breast cancer. SCOUT utilizes a small reflector - smaller than a grain of rice - that is placed at the tumor site at any time during breast cancer diagnosis or treatment. SCOUT is an option instead of the thin wire that is commonly inserted to mark abnormal breast tissue. During surgery, the surgeon uses a hand-held guide with a unique radar signal to detect location of the reflector at the tumor site. By knowing precisely where the reflector is located (within 1 millimeter), the surgeon can be more successful and optimize breast conservation.







There is no restriction on how long the SCOUT reflector remains in the breast, which gives clinicians maximum flexibility to use it throughout the patient's care. This includes the option of placing the reflector at time of biopsy, prior to chemotherapy or prior to surgery. The SCOUT reflector will not interfere with magnetic resonance imaging (MRI) studies, meaning there is no restriction on type of imaging that can be used effectively throughout a patient's treatment. SAVI SCOUT reflector was given FDA clearance in 2017 for use as a long-term implant.

### LEHIGH VALLEY CANCER INSTITUTE MOBILE MAMMOGRAPHY COACH



Designed specifically for Lehigh Valley Cancer Institute, the mobile mammography coach provides a convenient way for you to receive a 3D screening mammogram. This is the same imaging technology we use at our facilities. The mobile mammography coach is designed with you in mind:

- Private changing rooms and mammogram area
- On average, mammogram takes less than 15 minutes
- Fully staffed by Lehigh Valley Cancer Institute medical technologists
- Mammogram reading by Lehigh Valley Cancer Institute doctors
- Timely screening results provided to you and your primary care provider

The mammography coach is available to visit communities served by LVHN, and beyond. The goal of the coach is to increase access to this important screening technology, especially in underserved areas of our community.

#### NQMBC<sup>™</sup> DESIGNATES HUGHES CANCER CENTER AS BREAST CENTER OF EXCELLENCE



Lehigh Valley Hospital (LVH)–Pocono and Breast Health Services at Lehigh Valley Hospital in Allentown have been recognized by the National Consortium of Breast Centers Inc. as certified quality breast centers of excellence in the National Quality Measures for Breast Centers<sup>™</sup> Program (NQMBC). In doing so, these locations are the only comprehensive centers in Pennsylvania to earn Certified Quality Breast Center of Excellence designations.

For Monroe County community members, this means the Dale and Frances Hughes Cancer Center holds a distinguished honor for providing the highest level of quality breast health care to patients in the region. The National Quality Measures for Breast Centers<sup>™</sup> reflect more than 11 years of work, which has culminated in the adoption of more than 33 National Quality Indicators<sup>™</sup>. The National Consortium of Breast Centers promotes excellence in breast health care for the general public through a network of diverse professionals dedicated to the active exchange of ideas and resources. It facilitates collaborative research opportunities on issues of breast health and developed a set of core measures to define, improve and sustain quality standards in breast health care programs and for quality performance in all types of breast health care facilities.

## SURGERY

#### LVH-POCONO WELCOMES ONCOLOGY SURGEONS

As an extension of Lehigh Valley Physician Group (LVPG) and to provide a greater breadth and depth of services to Lehigh Valley Hospital (LVH)–Pocono, oncology surgeons have begun seeing patients at Dale and Frances Hughes Cancer Center.

Gynecological oncologists Martin Martino, MD, and M. Bijoy Thomas, MD, both board-certified in obstetrics and gynecology and gynecologic oncology, offer complex and radical gynecologic surgery, reconstructive pelvic and advanced laparoscopic or minimally invasive surgeries, as well as robotic surgery.

The team also performs gynecologic surgery for benign conditions such as endometriosis or uterine fibroids, especially when there are technical challenges or a patient has medical problems that can complicate the situation.

Patients in the Pocono area with malignant and benign gynecologic tumors don't have to travel far for comprehensive, leading-edge treatment.

Aaron Blackham, MD, dual-certified in general surgery and complex general surgical oncology, and the only board-certified complex general surgical oncologist, will see patients at LVH–Pocono. Blackham and his partner, Jeffrey Brodsky, MD, specialize in pancreatic and liver surgeries. Brodsky also specializes in hepatic, biliary and GI surgical oncology surgeries.

These specialized services will help improve outcomes for oncology patients in Monroe County through the Dale and Frances Hughes Cancer Center.

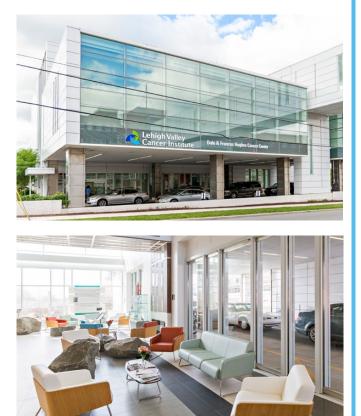


M. Bijoy Thomas, MD





Jeffrey Brodsky, MD





# COUNSELING SERVICES

A cancer diagnosis can create strong feelings of grief, sadness, anger or fear. Our licensed counselors with expertise in cancer care are available to help patients, their families and caregivers cope with the diagnosis to help feel less distressed. Counselors can make visits to doctor offices or treatment areas.

#### JANUARY TO DECEMBER 2017:

#### **Psychosocial**

Emotional needs assessment distress screening is entered into the electronic medical record (EMR) for all new chemotherapy and radiation treatment patients, with follow-up by a social worker, as requested/needed.



patients were provided

with transportation resources/services

#### US Too prostate support group

- Meets once per month for patients and family members/caregivers of prostate cancer
- Co-facilitated by Aalih Hussein, LSW, and Richard Kerr, prostate cancer survivor
- ▶ 58 attendees

#### Support/Survivor programs:

Leukemia and lymphoma support group

- ▶ Meets quarterly for patients and family members/caregivers of blood-related cancers
- Co-facilitated by Lynn Steele, LSW, OSW-C, and Cindy Wildrick, RN, BSN
- ▶ 25 attendees

#### **Transportation**

115 patients were provided with transportation resources/services.

#### Free mammogram voucher

Program services include: screening and diagnostic mammograms and breast ultrasounds, clinical breast exams and office visits, genetic counseling, transportation assistance and lymphedema sleeves.

#### Komen voucher program

Dale and Frances Hughes Cancer Center was awarded a Susan G. Komen of Northeastern Pennsylvania grant for 2017-2018 to provide preventive, diagnostic, transportation, educational, lymphedema sleeves, genetic counseling and survivorship services.



22 received transportation assistance | 21 received genetic counseling

28 received assistance for lymphedema sleeves



#### ARTIST IN RESIDENCE

Ellen Jamiolkowski, a professional artist who works in cooperation with the Allentown Art Museum, held support groups once a week from January through May. She interacted with patients individually to provide emotional support using clay as a medium and instructed individuals through the process of sculpting these birds.

She also completed the "Birds of Hope" group project with patients and families. This Art Residency was made possible through the Partnership of the Allentown Art Museum and the Pennsylvania Council on the Arts. The Pennsylvania Council on the Arts is supported by the National Endowment for the Arts.



### SURVIVORSHIP

#### CAREGIVER WORKSHOPS

The workshop examined roles of caregivers, reviewed positive coping strategies and provided emotional support. The workshop was open to caregivers and patients and was provided by LVHN, and the Cancer Support Community. Participants were asked to rate their level of distress before and after the workshop (0= no stress and 10= high stress). At the program conclusion, results showed a 67 percent decrease in stress level.

#### BREAST SURVIVORSHIP WORKSHOPS Pink and Pampered

This breast cancer patient workshop, designed to focus on stress reduction, was funded through a Susan G. Komen grant and hosted at Kalahari Resort and Spa. Survivors received mini spa treatments and participated in movement activities. Guest speaker, Anita Bondi, provided positive coping strategies for survivorship. Participants were asked to rate their level of distress before and after the workshop (0= no stress and 10= high stress). At the program conclusion, results showed a 71.85 percent decrease in stress level.

#### COME JOIN THE CIRCLE

Come Join the Circle was a breast cancer patient only survivorship workshop funded through the Susan G. Komen grant and was held at Shawnee Inn and Golf Resort. Krista Bott, MD, breast surgeon, spoke during the dinner, and provided information and education about breast cancer survivorship. Cheryl Mozdian, music therapist, worked with participants in a drum circle music therapy activity. In conclusion, Miranda Zinn, social work intern, led the group in an activity to enhance positive coping strategies for survivorship. Survey results from the workshop demonstrated a 67.3 percent reduction in stress and 100 percent of participants indicated it was educational and helpful.

#### YOU ARE A GIFT

You Are a Gift was funded through the Susan G. Komen 2017-2018 grant. There guest speakers included Anita Bondi, holistic therapist, and Rebecca Reed, LVH–Pocono dietitian. The survivors were educated on different techniques to deal with stress by Bondi, and Reed presented on healthy eating choices and offered recipes.

#### LOOK GOOD/FEEL GOOD

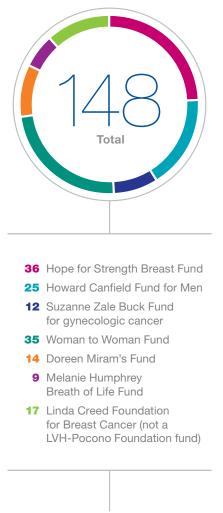
Dale and Frances Hughes Cancer Center continued collaboration with the American Cancer Society (ACS) to provide wig fittings and Look Good/Feel Better programs for women at the cancer center.

# FINANCIAL ASSISTANCE

#### FINANCIAL ASSISTANCE APPLICATIONS PROCESSED

Lehigh Valley Hospital–Pocono provides financial coordinators to assist patients in reducing financial barriers to care. They answer questions related to precertification requirements, health insurance and medical bills, and generally help to navigate the complex waters of insurance and community resources.

Financial coordinators also connect patients with support agencies to assist them in receiving free or reduced-cost services and medical supplies if they qualify.





#### FINANCIAL COUNSELING



Patients assisted with primary or secondary insurance information needs

#### ADDITIONAL SUPPORT SERVICES PARTICIPANTS



#### Creative Expressions Workshop, every Wednesday



Beading



Reiki

58

**Moving Meditation** 

Cancer Center volunteers continue to provide direct patient services weekly.

FISCAL YEAR 2018

## NUTRITION COUNSELING

Five board-certified specialists in oncology nutrition are available to meet with patients and families before, during and after treatments to assess nutritional needs and determine appropriate goals and strategies to reach those goals. Dietitians also offer their expertise to the community through community outreach programs including presentations, cooking demonstrations and participation in health fairs.





# CANCER REHABILITATION

Cancer rehabilitation services helps patients manage functional activities of daily living that are affected by the cancer experience. Individualized treatment programs are designed to enable the patient to resume normal activities. If patients are suffering from fatigue, weakness, balance problems, lymphedema, or other symptoms related to their condition and treatment, specially educated rehabilitation therapists can help provide relief or recommend steps to take to improve symptoms.

# CANCER GENETIC SCREENING PROGRAM

We continue to see substantial growth in our program. Given new advances in treatment for cancer, patients who carry certain genetic alterations can be treated with targeted therapies. Therefore, we are now seeing more patients who will use genetic test results to determine treatment strategies.

> NEW GENETIC COUNSELOR REFERRALS 29 Total counseled | 22 Total tested

MUTATIONS FOUND P53 mutation ATM genetic mutation

> PALB2 genetic mutation

# LUNG CANCER MULTIDISCIPLINARY TEAM

The Lung Cancer Multidisciplinary Clinic at Dale and Frances Hughes Cancer Center offers access to a team of lung cancer experts who can review the diagnosis and create a comprehensive care plan recommendation at the conclusion of the visit. Typically, the process of diagnosing and developing a treatment plan can take weeks, maybe months, as the patient meets with each doctor separately, and doctors confer about treatment.

In the multidisciplinary clinic, patients meet with a nurse, social worker and team of lung cancer specialists, leaving with a treatment plan and peace of mind that comes from having and understanding their diagnosis and a plan of action. The day of the clinic includes:

- Lung cancer education session
- Opportunity to meet with navigator to learn about resources for lung cancer
- Opportunity to meet with social worker
- Individual consultations with lung cancer experts, including a medical oncologist, radiation oncologist and thoracic surgeon, depending on specifics of patient's health status and status of lung cancer
- Treatment plan meeting with patient and family to receive treatment recommendation.

Prior to the clinic, patients receive all tests they need to ensure a comprehensive recommendation.



# OUR AWARDS, CERTIFICATIONS AND ACCREDITATIONS

#### American College of Radiology (ACR) Seal of Accreditation



Lehigh Valley Hospital–Cedar Crest and Lehigh Valley Hospital-Muhlenberg have been awarded the ACR and the American Society for Radiation Oncology (ASTRO) seal of accreditation.

#### American College of Radiology (ACR) for Breast Mammography



Lehigh Valley Health Network has earned accreditation from the American College of Radiology (ACR) for breast mammography.

#### American College of Radiology ACR) Breast Imaging Center of **Excellence (BICOE)**



LVHN Breast Health Services is also designated as a Breast Imaging Center of Excellence by the ACR.

#### American College of Radiology (ACR) Lung Cancer **Screening Center**



ACR Lung Cancer Screening Center program, recognizes facilities committed to providing quality screening care to patients at the highest risk for lung cancer.

#### **COEMIG<sup>™</sup>** designation



A number of our physicians also have earned COEMIG™ designation from the AAGL (American Association of Gynecologic Laparoscopists), whose mission is advancing minimally invasive gynecology worldwide.

#### **Commission on Cancer**



Lehigh Valley Health Network has been an accredited cancer program through the American College of Surgeons Commission on

Cancer® (CoC), a designation only granted when a facility voluntarily commits to provide the best in cancer diagnosis and treatment, while also complying with standards established by the CoC.

#### **Accreditation Program for Breast Centers (NAPBC)**



LVHN Breast Health Services is accredited by the National Accreditation Program for Breast Centers (NAPBC).

#### The Joint Commission (TJC)



The Joint Commission accreditation and certification is recognized nationwide as a symbol of quality that reflects an organization's commitment to meeting safe and effective care of the highest quality and value.

#### Lehigh Valley Cancer Institute and Memorial Sloan Kettering (MSK) Cancer Alliance



Lehigh Valley Cancer Institute is a formal member of the Memorial Sloan Kettering (MSK) Cancer Alliance, a

transformative initiative to improve the quality of care and outcomes for people with cancer in community health care settings, including access to key clinical trials.

#### Michigan Cancer Research Consortium (MCRC) WCI Community Oncology Research Program (NCORP)



NCORP is a national network of investigators, cancer care providers, academic institutions and other organizations with a mission to conduct multi-site cancer clinical trials and studies in

diverse populations in community-based health care systems across the United States. For patients, this means Lehigh Valley Cancer Institute's commitment to leading-edge oncology clinical trial access and advances in evidence-based practices remains as strong as before.

#### **National Quality Measures for Breast Centers**



LVHN Breast Health Services is a certified quality breast center with the National Quality Measures for Breast Centers<sup>™</sup> Program (NQMBC<sup>™</sup>) administered by the

National Consortium of Breast Centers Inc. NQMBC is a voluntary participation program focused on the tracking and sharing of quality measures, such as patient satisfaction, timeliness of care for imaging, biopsies and surgery, as well as complication rates. The primary focus is on providing each patient with the highest quality of care through shared learning.

#### **U.S. News & World Report**



Each year, U.S. News & World Report ranks hospitals according to patient satisfaction, patient outcome and access to leading-edge care across many specialties. U.S. News & World Report guide to America's Best Hospitals ranks LVH–Cedar Crest among Top 5 in Pa. for five straight years.