

2012

Annual Report (2012): The Cancer Center Statistical Report

Lehigh Valley Health Network

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2012

THE CANCER CENTER
STATISTICAL REPORT



WELCOME

Welcome to Lehigh Valley Health Network Cancer Program's 2012 Statistical Report, featuring data on cancer cases we treated in 2011.

In September 2011, Lehigh Valley Health Network Cancer Program earned three-year accreditation, with commendation, from the American College of Surgeons Commission on Cancer (ACoS/CoC).

Our Cancer Program's Breast Health Services received reaccreditation by the National Accreditation Program for Breast Centers (NAPBC) in April 2012 and is designated by the American College of Radiology (ACR/ASTRO) as Breast Center of Excellence.

In February 2012, our Department of Radiation Oncology received three-year full accreditation from the American College of Radiology/American Society for Therapeutic Radiation Oncology (ACR).

Our Cancer Program is a proud participant in the National Cancer Institute's (NCI) Community Cancer Centers Program (NCCCP). Only 21 cancer institutions nationwide hold this distinction as of July 2012.



Lehigh Valley Health Network is an affiliate of Moffitt Cancer Center, Tampa Fla., and The Wistar Institute of Anatomy and Biology, Philadelphia Pa.

American College of Surgeons Commission on Cancer: facts.org/cancer

National Cancer Institute's National Community Cancer Centers Program: ncccp.cancer.gov

National Accreditation Program for Breast Centers: napbc-breast.org

OUR MISSION:

TO REDUCE THE BURDEN THAT CANCER PLACES ON PATIENTS AND THEIR FAMILIES

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Hematology Oncology
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Physician Director, NCCCP

2011 LEHIGH VALLEY HEALTH NETWORK CANCER CASE INFORMATION

Lehigh Valley Hospital–Cedar Crest and Lehigh Valley Hospital–Muhlenberg, collectively Lehigh Valley Health Network (LVHN), were involved in the diagnosis and/or treatment of more than 3,100 cancer patients in 2011. Ninety-three percent (2,918) of those cases were considered analytic cases directly diagnosed and/or treated at the health network. Of these, about 30 percent (853) were diagnosed at another medical facility and referred to LVHN for part or all of their cancer treatment.

The top five most prevalent cancers treated at the health network remain consistent across the past 10 years.

YEAR	MOST TREATED	2	3	4	5
2011	Breast	Lung	Prostate	Colon/Rectum	Bladder
2010	Lung	Breast	Colon/Rectum	Prostate	Corpus Uteri
2009	Breast	Lung	Prostate	Colon/Rectum	Skin
2008	Breast	Lung	Colon/Rectum	Prostate	Urinary Bladder
2007	Breast	Lung	Colon/Rectum	Prostate	Skin
2006	Breast	Lung	Prostate	Colon/Rectum	Urinary Bladder
2005	Breast	Lung	Colon/Rectum	Prostate	Thyroid
2004	Breast	Lung	Prostate	Colon/Rectum	Skin
2003	Breast	Lung	Colon/Rectum	Prostate	Urinary Bladder
2002	Breast	Prostate	Lung	Colon/Rectum	Urinary Bladder

SOME COMMONLY USED TERMINOLOGY

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/invasiveness (T), nodal status (N) and metastasis (M) at the time of diagnosis. AJCC stage is important in considering treatment plans.

Analytic Cancer Case: Analytic cases are 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.

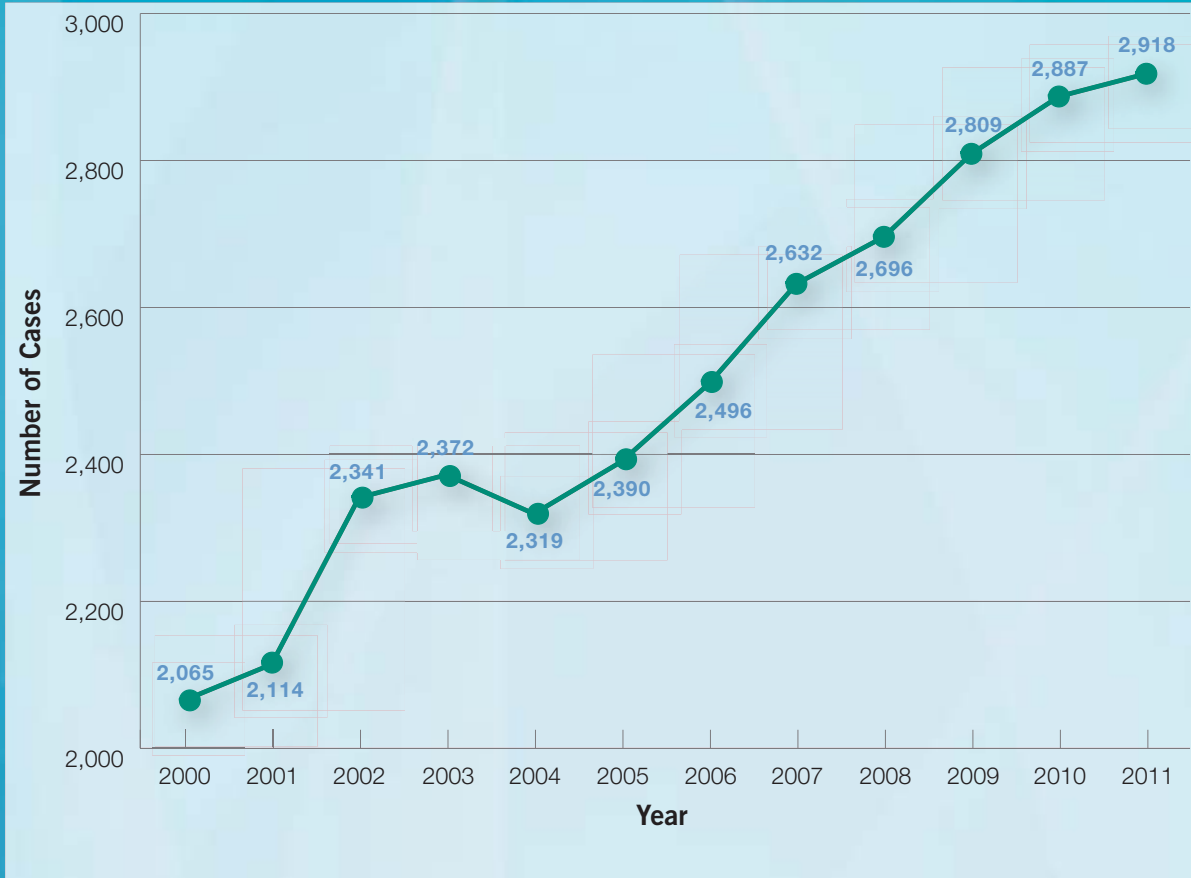
Collaborative Staging: Cancer stage historically has been collected using three different staging systems:

- AJCC (TNM)
- Surveillance, Epidemiology and End Results (SEER) Extent of Disease (EOD)
- Summary Stage (SS)

Collaborative Stage is a unified data collection system designed to provide a common data set to meet the needs of all three staging systems and provide a comprehensive system to improve data quality by standardizing rules for timing, clinical and pathological assessments, and compatibility across all of the systems for all cancer sites.

National Cancer Database: The National Cancer Database (NCDB) is a joint project of the American Cancer Society and the Commission on Cancer. This database 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 is on cases newly diagnosed in 2010.

TOTAL ANNUAL ANALYTIC CASES YEARS 2000-2011



INCIDENCE BY COUNTY

COUNTY OF RESIDENCE	2007	2008	2009	2010	2011
Adams	0	1	0	0	0
Beaver	0	0	0	0	2
Berks	185	153	170	171	166
Bradford	2	1	1	0	0
Bucks	49	30	52	59	41
Cambria	0	0	0	0	0
Carbon	141	129	169	183	168
Centre	0	3	2	1	0
Chester	7	2	3	3	3
Clinton	0	11	0	0	0
Clearfield	1	0	0	1	0
Columbia	5	4	4	3	6
Cumberland	1	0	0	0	1
Dauphin	2	3	1	0	0
Delaware	0	5	0	3	0
Elk	1	0	0	0	0
Fayette	0	0	1	0	0
Franklin	0	0	0	2	0
Lackawanna	34	36	36	39	47
Lancaster	2	1	0	1	1
Lebanon	0	1	1	2	2
Lehigh	1,316	1,357	1,301	1,328	1,393
Luzerne	66	80	83	80	73
Lycoming	2	1	1	3	2
Monroe	86	90	107	93	127
Montgomery	53	62	67	81	62
Northampton	533	578	599	643	619
Northumberland	2	1	0	1	1
Perry	1	0	0	0	0
Philadelphia	1	1	0	3	0
Pike	8	4	12	22	9
Potter	1	1	0	0	1
Schuylkill	77	76	117	98	120
Sullivan	0	0	1	0	0
Susquehanna	2	3	3	3	1
Tioga	0	0	0	0	1
Warren	0	0	0	0	1
Wayne	5	8	5	6	6
Wyoming	2	9	3	3	1
York	1	0	1	2	3
Out of State	46	55	69	53	61
TOTALS	2,632	2,706	2,809	2,887	2,918

During the past five years, 67-71 percent of cancer patients diagnosed and/or treated by Lehigh Valley Health Network resided in either Lehigh or Northampton counties. Other counties making up an average 20 percent of the health network's cancer patients included, in decreasing order: Carbon, Berks, Monroe and Schuylkill.

NON-ANALYTIC CASES*

YEAR	NUMBER
2007	208
2008	156
2009	165
2010	227
2011	234

* Diagnosed and all first course of treatment received elsewhere prior to coming to Lehigh Valley Health Network.

Data Source: LVHN Tumor Registry. All cases diagnosed and/or treated through Lehigh Valley Health Network's Cancer Program.

2011 ANALYTIC* CASES BY PRIMARY BODY SITE

PRIMARY SITE	MALE (N)	FEMALE (N)	TOTAL	Percent
Head and Neck				
LIP	1	0	1	1.3%
BASE OF TONGUE	3	4	7	9.3%
OTHER PARTS OF TONGUE	6	3	9	12.0%
GUM	0	1	1	1.3%
FLOOR OF MOUTH	2	2	4	5.3%
OTHER/UNSPECIFIED PARTS OF MOUTH	2	1	3	4.0%
PAROTID GLAND	2	3	5	6.7%
OTHER SALIVARY GLANDS	2	1	3	4.0%
TONSIL	12	2	14	18.7%
NASOPHARYNX	1	0	1	1.3%
PYRIFORM SINUS	1	0	1	1.3%
HYPOPHARYNX	1	0	1	1.3%
NASAL CAVITY and MIDDLE EAR	0	3	3	4.0%
ACCESSORY SINUSES	2	0	2	2.7%
LARYNX	15	5	20	26.7%
Subtotal	50	25	75	100.0%
Digestive Organs				
ESOPHAGUS	21	7	28	5.8%
STOMACH	38	8	46	9.5%
SMALL INTESTINE	6	1	7	1.4%
COLON and RECTUM	137	135	272	56.0%
ANUS and ANAL CANAL	2	9	11	2.3%
LIVER and BILE DUCTS	25	11	36	7.4%
GALLBLADDER	1	2	3	0.6%
OTHER BILIARY TRACT	8	4	12	2.5%
PANCREAS	39	30	69	14.2%
OTHER DIGESTIVE ORGANS	2	0	2	0.4%
Subtotal	279	207	486	100.0%
Respiratory Organs				
TRACHEA	0	1	1	0.3%
BRONCHUS and LUNG	200	164	364	97.8%
THYMUS	0	2	2	0.5%
HEART MEDIASTINUM PLEURA	3	2	5	1.3%
Subtotal	203	169	372	100.0%
Breast				
BREAST	0	427	427	100.0%
Subtotal	0	427	427	100.0%
Female Genital Organs				
VULVA	0	27	27	10.0%
VAGINA	0	3	3	1.1%
CERVIX UTERI	0	27	27	10.0%
CORPUS UTERI	0	147	147	54.6%
UTERUS NOS	0	2	2	0.7%
OVARY	0	60	60	22.3%
OTHER FEMALE GENITAL ORGANS	0	3	3	1.1%
Subtotal	0	269	269	100.0%

PRIMARY SITE	MALE (N)	FEMALE (N)	TOTAL	Percent
Male Genital Organs				
PENIS	5	0	5	1.7%
PROSTATE GLAND	275	0	275	94.5%
TESTIS	10	0	10	3.4%
OTHER and UNSPECIFIED MALE GENITAL ORGANS	1	0	1	0.3%
Subtotal	291	0	291	100.0%
Urinary Tract Organs				
KIDNEY	76	35	111	37.8%
KIDNEY, RENAL PELVIS	7	3	10	3.4%
URETER	3	2	5	1.7%
URINARY BLADDER	128	36	164	55.8%
OTHER and UNSPECIFIED URINARY ORGANS	3	1	4	1.4%
Subtotal	217	77	294	100.0%
Ophthalmic Sites				
ORBIT, NOS and OVERLAPPING LESION	0	1	1	100.0%
Subtotal	0	1	1	100.0%
Central Nervous System				
MENINGES	23	51	74	51.4%
BRAIN	36	22	58	40.3%
OTHER NERVOUS SYSTEM	8	4	12	8.3%
Subtotal	67	77	144	100.0%
Endocrine Glands				
THYROID GLAND	16	50	66	66.0%
ADRENAL GLAND	1	4	5	5.0%
OTHER ENDOCRINE GLANDS	14	15	29	29.0%
Subtotal	31	69	100	100.0%
Skin				
SKIN	69	53	122	100.0%
Subtotal	69	53	122	100.0%
Musculoskeletal Sites				
BONES, JOINTS and ARTICULAR CARTILAGE	1	1	2	7.7%
BONES, JOINTS and OTHER UNSPECIFIED SITES	4	2	6	23.1%
CONNECTIVE SUBCUTANEOUS OTHER SOFT TISSUE	11	7	18	69.2%
Subtotal	16	10	26	100.0%
Other Sites				
HEMATOPOIETIC and RETICULOENDOTHELIAL SYSTEMS	71	72	143	46.0%
OTHER ILL DEFINED SITES (includes RETROPERITONEUM and PERITONEUM)	4	7	11	3.5%
LYMPH NODES	65	48	113	36.3%
UNK PRIMARY	19	25	44	14.1%
Subtotal	159	152	311	100.0%
TOTAL	1,382	1,536	2,918	100.0%

**Analytic cases are cases diagnosed and/or treated through Lehigh Valley Health Network Cancer Program.*

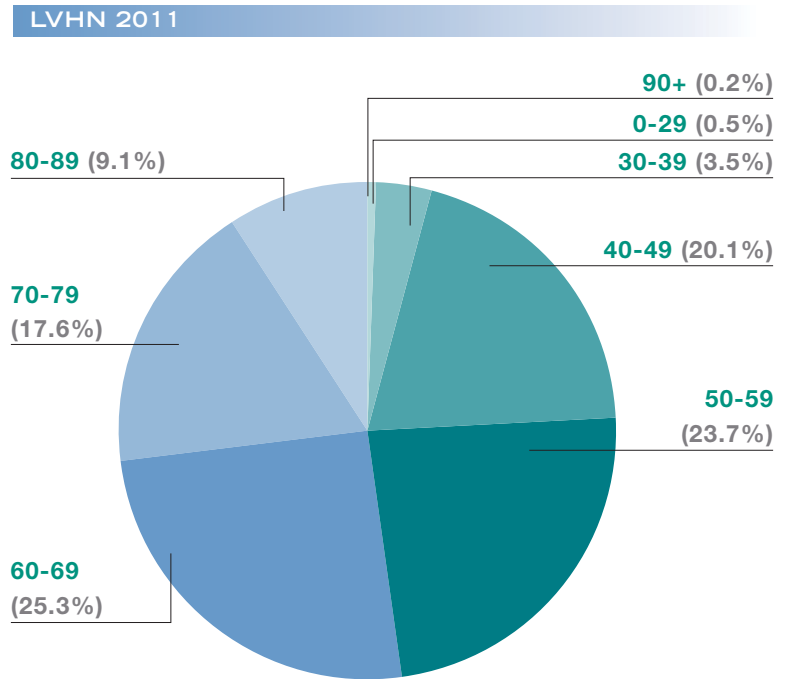
2011 BREAST CANCER CASES

Breast cancer has been the most frequently treated cancer at Lehigh Valley Health Network for the past 10 years, accounting for 14.6 percent of 2011 newly diagnosed cases. In 2011, at the health network, 49 percent of new breast cancer cases occurred in women between ages 50–69, and 24 percent of cases occurred in women under the age of 50. These findings are in line with nationally reported age at diagnosis. Treatment options at Lehigh Valley Health Network are in keeping with the National Comprehensive Cancer Network (NCCN) guidelines and also reflect those reported by the NCDB. More cancers were identified at an early stage than nationally reported through the 2010 National Cancer Database. Twenty-five percent of the health network’s breast cancer cases were diagnosed at stage 0 compared with only 20.6 percent of nationally reported cases according to the NCDB. Through our Breast Health Services (BHS) mammography screening, our health network has continuously set the pace for detecting breast cancer at an early stage.

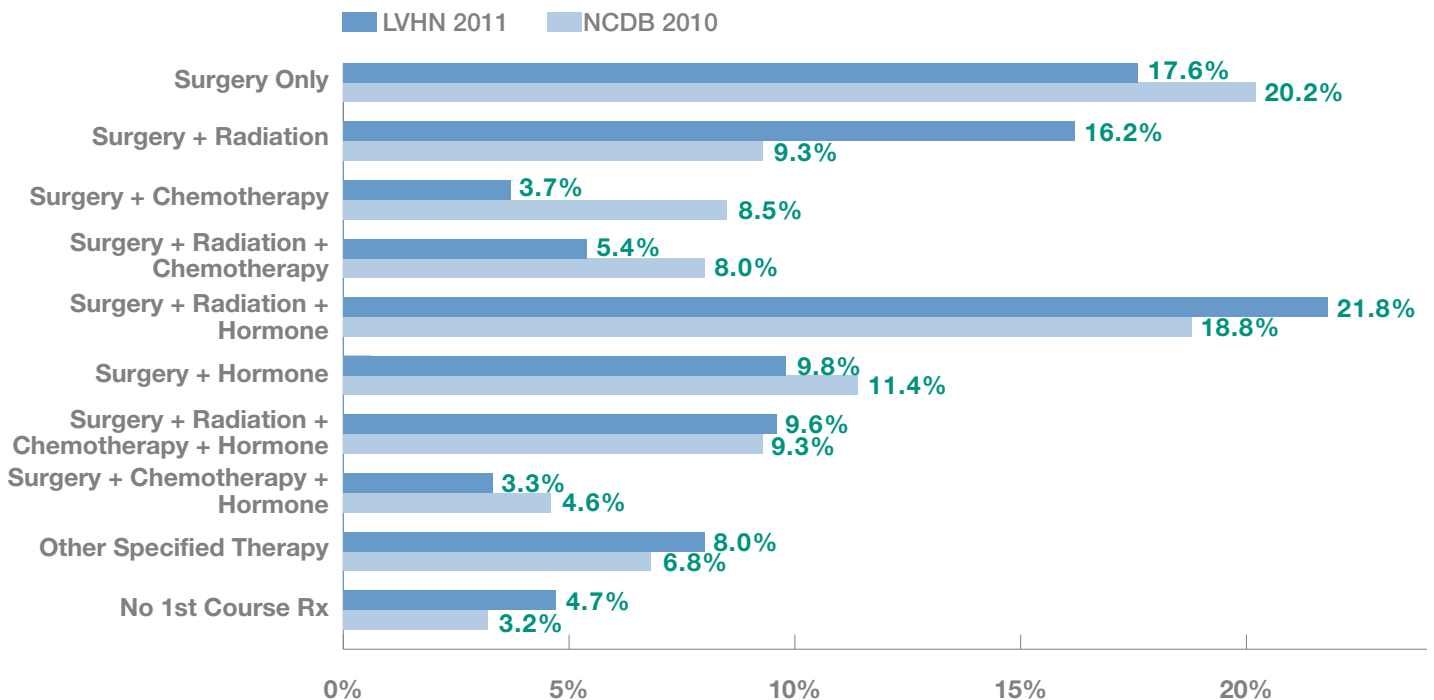
INCIDENCE OF BREAST CANCER BY AGE AT DIAGNOSIS LVHN 2011

Age Range	0 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80 - 89	90 +	TOTAL
(N)	2	15	86	101	108	75	39	1	427

BREAST CANCER BY AGE AT DIAGNOSIS



COMPARISON OF AJCC COLLABORATIVE STAGE FIRST COURSE OF TREATMENT

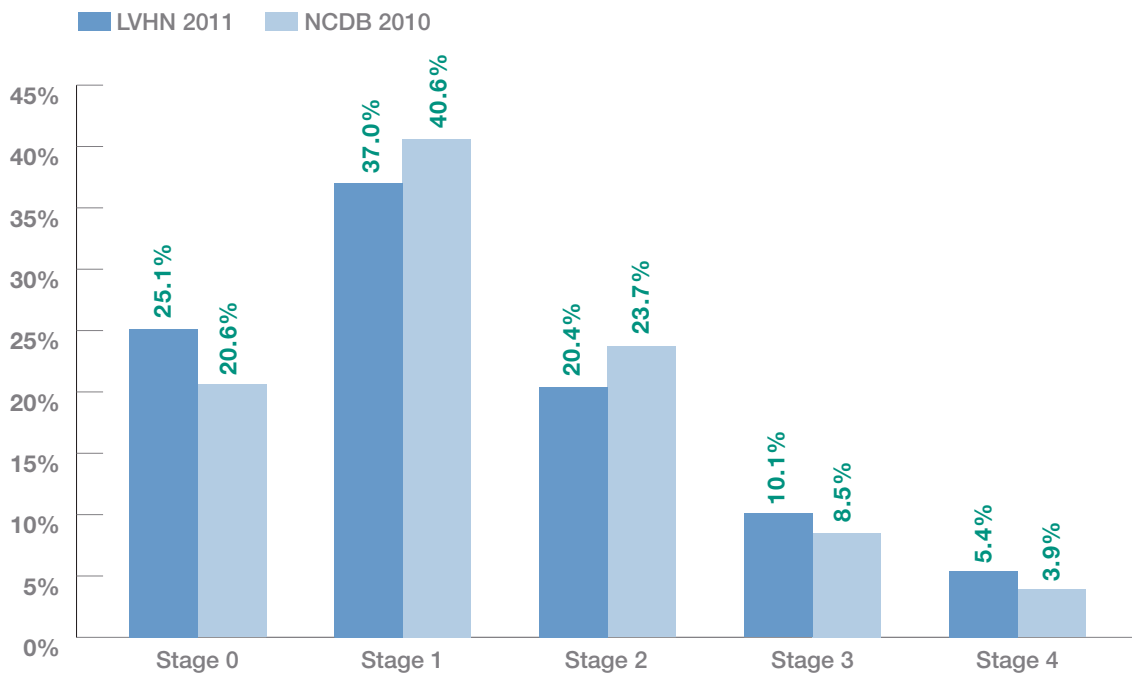


2011 LEHIGH VALLEY HEALTH NETWORK CANCER CENTER

BREAST CANCER TREATMENT BY STAGE AT DIAGNOSIS (N=427)

FIRST COURSE TREATMENT	STAGE 0	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE UNK	%
Surgery Only	36%	13%	10%	7%	4%	22%	17.6%
Surgery + Radiation Therapy	32%	19%	5%	0%	0%	11%	16.2%
Surgery + Chemotherapy	0%	5%	3%	7%	4%	11%	3.7%
Surgery + Radiation Therapy + Chemotherapy	0%	5%	14%	7%	0%	0%	5.4%
Surgery + Radiation Therapy + Hormone Therapy	16%	33%	22%	9%	0%	11%	21.8%
Surgery + Hormone Therapy	9%	13%	8%	9%	0%	11%	9.8%
Surgery + Radiation Therapy + Chemotherapy + Hormone Therapy	0%	3%	20%	42%	4%	0%	9.6%
Surgery + Chemotherapy + Hormone Therapy	1%	1%	7%	7%	9%	0%	3.3%
Other Specified Therapy	0%	3%	10%	9%	65%	11%	8.0%
No 1st Course Rx	6%	4%	1%	2%	13%	22%	4.7%
Total Number of Cases	107	158	87	43	23	9	427

COMPARISON OF AJCC COLLABORATIVE STAGE AT DIAGNOSIS



FOR MORE INFORMATION GO TO LVHN.org/cancer

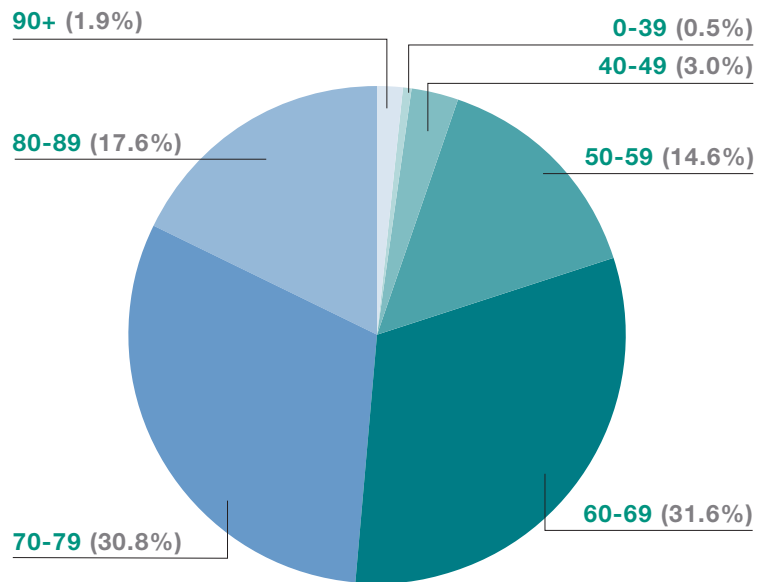
LUNG CANCER

Lung cancer has been the second most frequently treated cancer at Lehigh Valley Health Network for the past nine years. In 2011, lung cancer accounted for 12.5 percent of our health network's analytic cases. More than half (55 percent) of these cases were male. About 82 percent of newly diagnosed patients were at or above 60 years of age, compared to 79 percent reported by the NCDB. Twenty-five percent of lung cancers at the health network were stage 1, and 6 percent stage 2, all of which were candidates for primary surgical resection. In stage 3 disease, 34 percent of patients underwent combined modality chemotherapy/radiation as the initial course of treatment. In stage 4 disease, 46 percent of patients received either palliative chemotherapy (23 percent) or combined chemotherapy/radiation therapy (23 percent). Lehigh Valley Health Network reported fewer stage 4 cases (38 percent) than reported by NCDB (44 percent). Treatment patterns are in keeping with the National Comprehensive Cancer Network (NCCN) guidelines and reflect those reported in the 2010 NCDB.

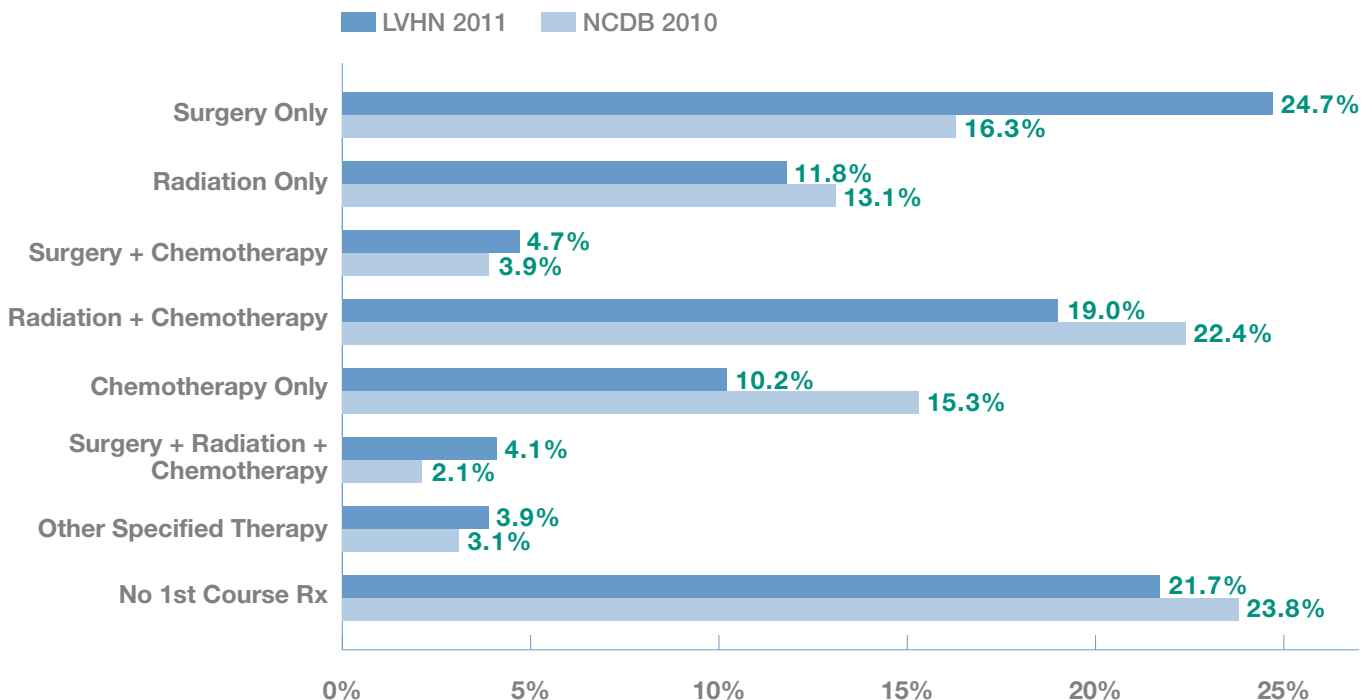
INCIDENCE OF LUNG CANCER BY AGE AT DIAGNOSIS LVHN 2011

Age Range	0 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80 - 89	90 +	TOTAL
(N)	2	11	53	115	112	64	7	364

INCIDENCE OF LUNG CANCER BY AGE AT DIAGNOSIS LVHN 2011



COMPARISON OF FIRST COURSE OF TREATMENT

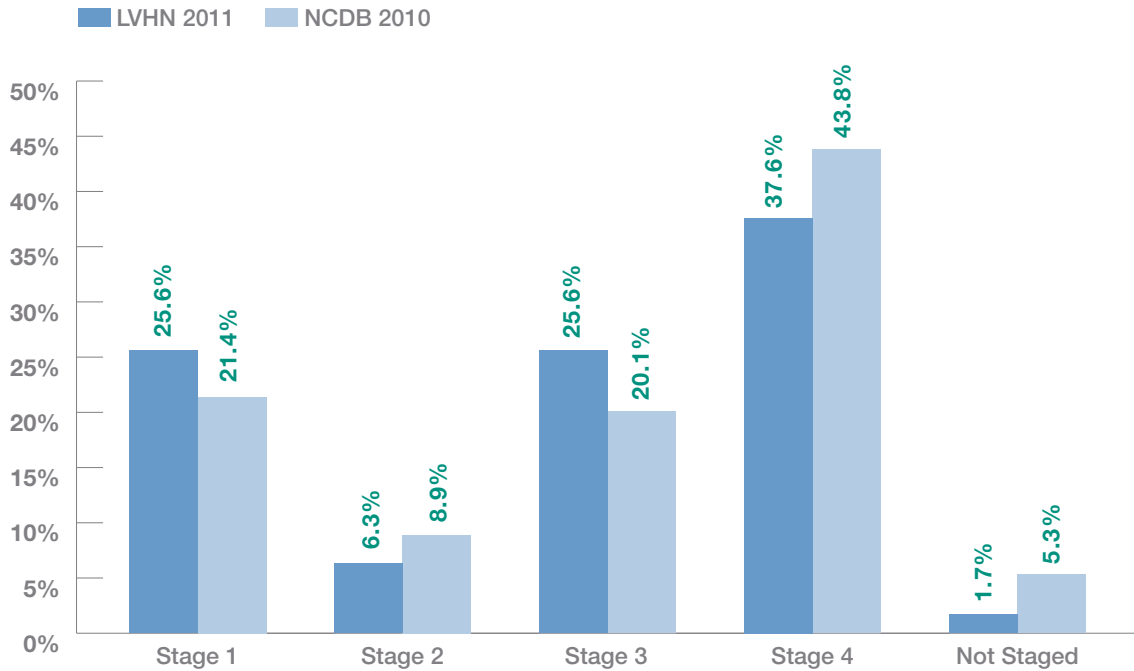


2011 LEHIGH VALLEY HEALTH NETWORK CANCER CENTER

LUNG CANCER TREATMENT BY STAGE AT DIAGNOSIS (N=364)

FIRST COURSE TREATMENT	STAGE 0	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE OC	STAGE NA	STAGE UNK	%
Surgery Only	100%	68%	35%	8%	2%	0%	78%	17%	24.7%
Radiation Only	0%	13%	0%	8%	17%	0%	0%	17%	11.8%
Surgery and Chemotherapy	0%	5%	17%	6%	1%	0%	0%	0%	4.7%
Radiation and Chemotherapy	0%	3%	13%	34%	23%	0%	0%	0%	19.0%
Chemotherapy Only	0%	1%	4%	3%	23%	0%	0%	17%	10.2%
Surgery, Radiation and Chemotherapy	0%	1%	9%	12%	1%	0%	0%	0%	4.1%
Other Specified Therapy	0%	1%	0%	4%	7%	0%	0%	0%	3.8%
No 1st Course Rx	0%	8%	22%	25%	27%	100%	22%	50%	21.7%
Total Number of Cases	1	93	23	93	137	2	9	6	364

COMPARISON OF AJCC COLLABORATIVE STAGE AT DIAGNOSIS



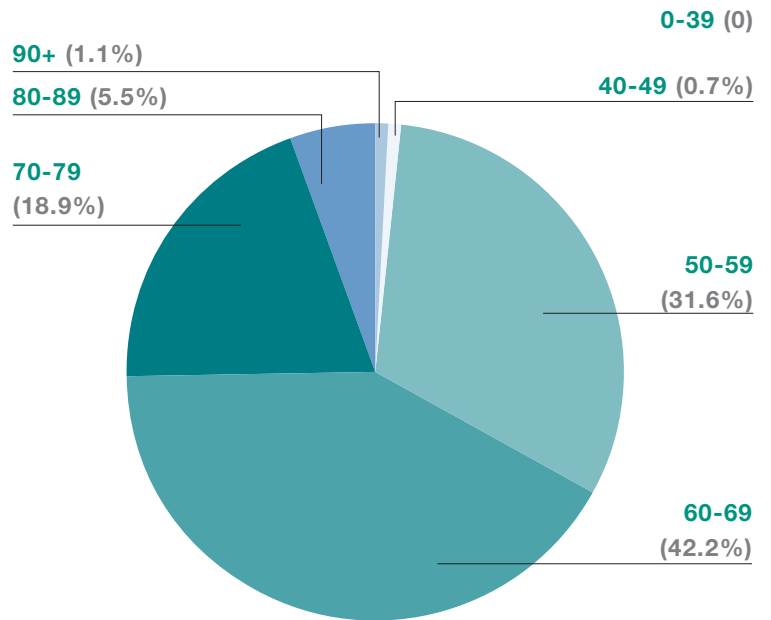
PROSTATE CANCER

Prostate cancer was the third most frequently treated cancer at Lehigh Valley Health Network in 2011. The 275 analytic cases diagnosed in 2011 accounted for 9.4 percent of all analytic cancer cases at the health network. Seventy-four percent (74 percent) of newly diagnosed patients at the health network were between the ages of 50 to 69 in comparison to the 2010 National Cancer Database (NCDB) reported rate of 68 percent. Percent of cases newly diagnosed at stage 2 (76 percent) were similar for the health network as NCDB cases diagnosed at stages 1 and 2 (80 percent) combined. To increase community awareness, the health network implemented a series of prostate cancer screenings and education events offered free to the public in 2012. Treatment options at LVHN are in keeping with National Comprehensive Cancer Network (NCCN) guidelines and reflect those reported in the most recent 2010 NCDB. Most men continue to choose surgical definitive treatment at both the health network (60 percent) and nationwide (54 percent).

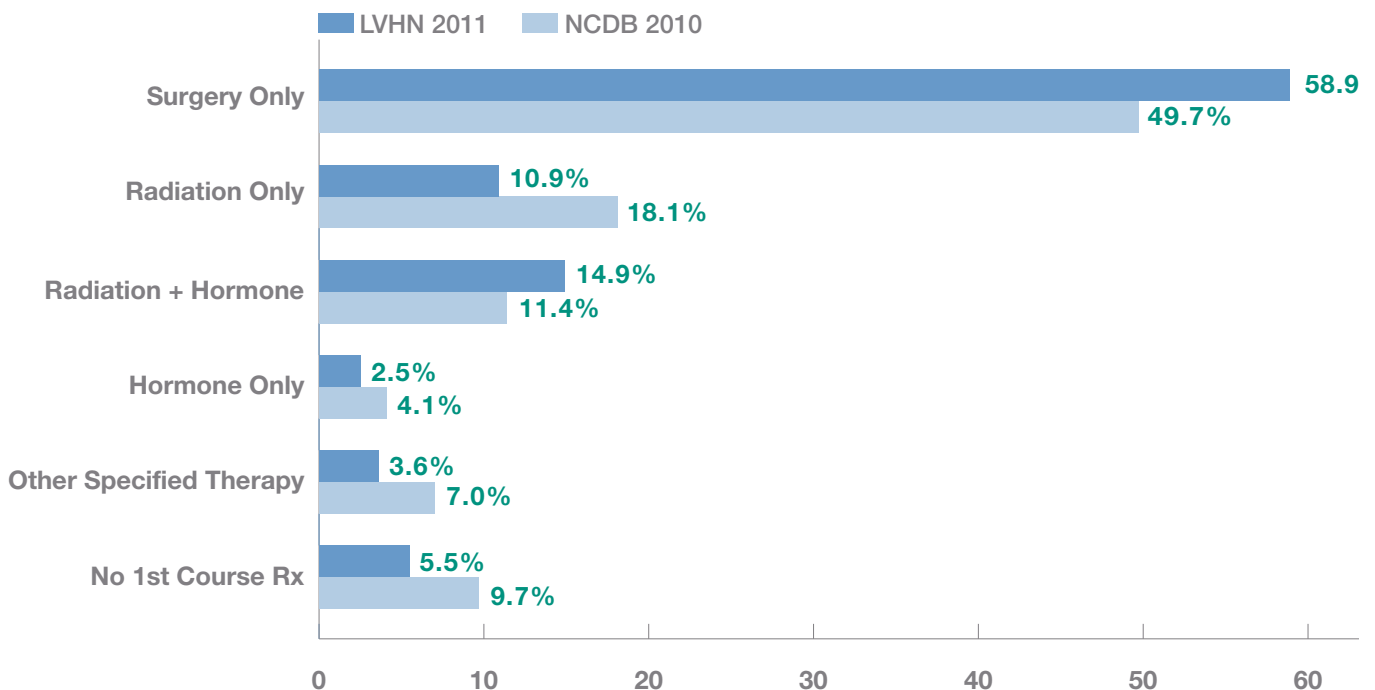
INCIDENCE OF PROSTATE CANCER BY AGE AT DIAGNOSIS LVHN 2011

Age Range	0 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80 - 89	90 +	TOTAL
(N)	0	2	87	116	52	15	3	275

PROSTATE CANCER BY AGE AT DIAGNOSIS LVHN 2011



COMPARISON OF FIRST COURSE OF TREATMENT

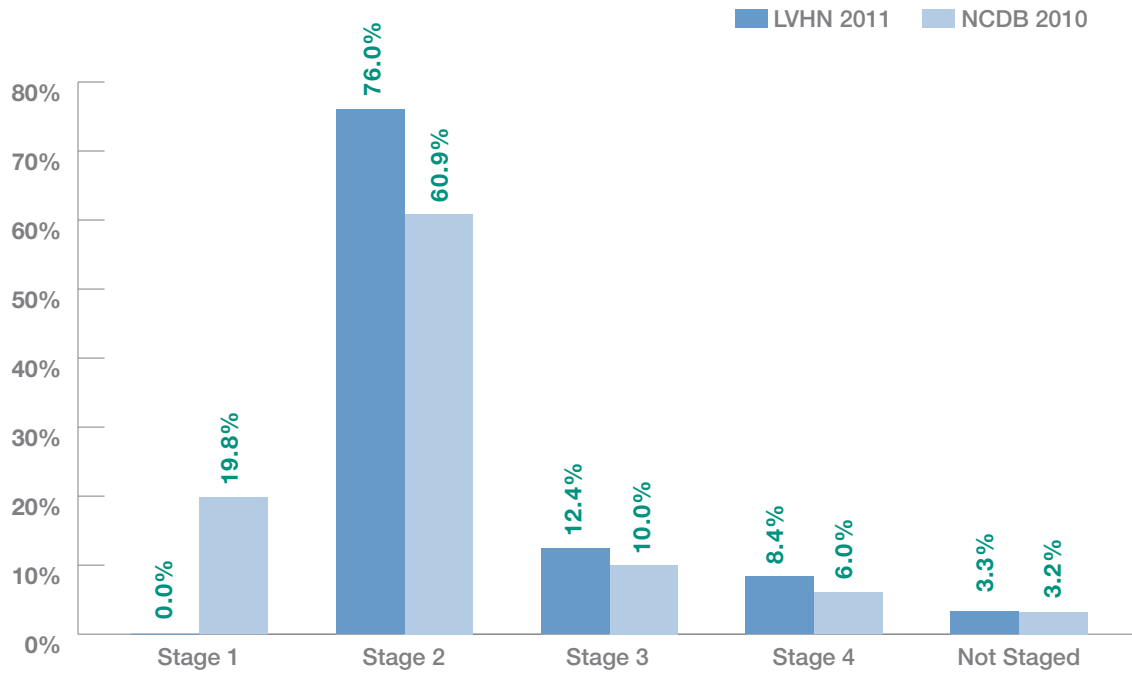


2011 LEHIGH VALLEY HEALTH NETWORK CANCER CENTER

PROSTATE CANCER TREATMENT BY STAGE AT DIAGNOSIS (N=275)

TREATMENT	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE NA	STAGE UNK	%
Surgery Only	0%	60%	76%	9%	0%	89%	58.9%
Radiation Only	0%	14%	0%	0%	0%	0%	10.9%
Radiation + Hormone Therapy	0%	17%	0%	26%	0%	0%	14.9%
Hormone Therapy Only	0%	0%	3%	26%	0%	0%	2.5%
Other Specified Therapy	0%	3%	21%	30%	0%	0%	3.6%
No 1st Course Rx	0%	6%	0%	9%	0%	11%	5.5%
Total Number of Cases	0	209	34	23	0	9	275

PROSTATE CANCER COMPARISON OF AJCC COLLABORATIVE STAGE AT DIAGNOSIS



COLON AND RECTUM CANCER

Colorectal cancer was the fourth most frequently treated cancer (N=272) at Lehigh Valley Health Network in 2011 accounting for 9.3 percent of all newly diagnosed cases. From 2004 through 2008 (most recent Centers for Disease Control and Prevention Cancer Statistics available), colorectal cancer has consistently ranked fourth across the United States. The incidence of colorectal cancer is evenly distributed between men (50.4 percent) and women (49.6 percent). More than 60 percent of all newly diagnosed patients, both at the health network and nationwide, are diagnosed at stage 2 or greater. To increase community awareness, the health network implemented a series of colorectal screening and education sessions in 2012.

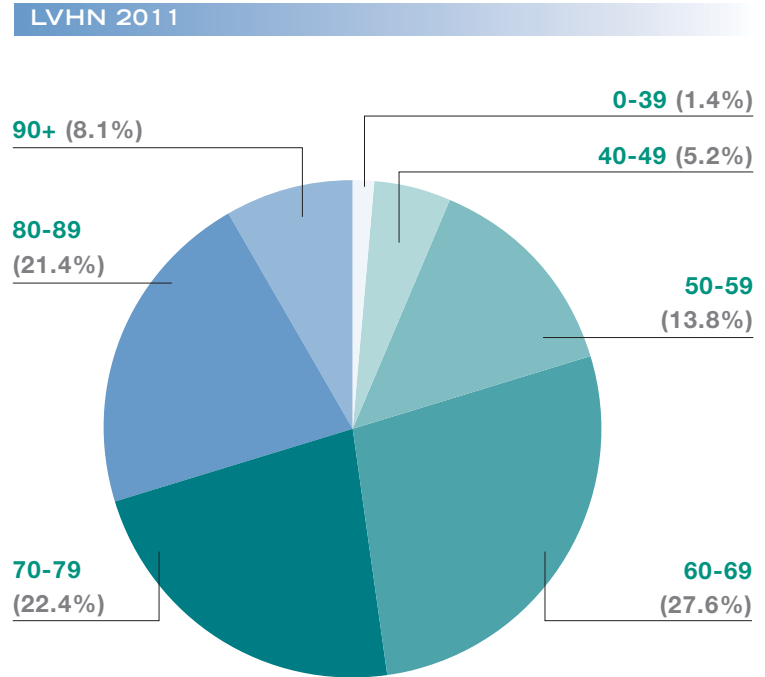
COLON CANCER

Nearly 80 percent of colon cancers diagnosed at the health network were 60 years of age and older compared to 73 percent by the National Cancer Database (NCDB). In 2011, the health network was more likely to see cases diagnosed at a later stage, 49 percent, than those reported by NCDB, 43 percent. Surgical resection in combination with or without chemotherapy is the most common treatment approach for all stages of colon cancer at the health network (83.3 percent) comparable to 2010 NCDB reported cases (82.7 percent).

INCIDENCE OF COLON CANCER BY AGE AT DIAGNOSIS LVHN 2011

Age Range	0 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80 - 89	90 +	TOTAL
(N)	3	11	29	58	47	45	17	210

COLON CANCER BY AGE AT DIAGNOSIS

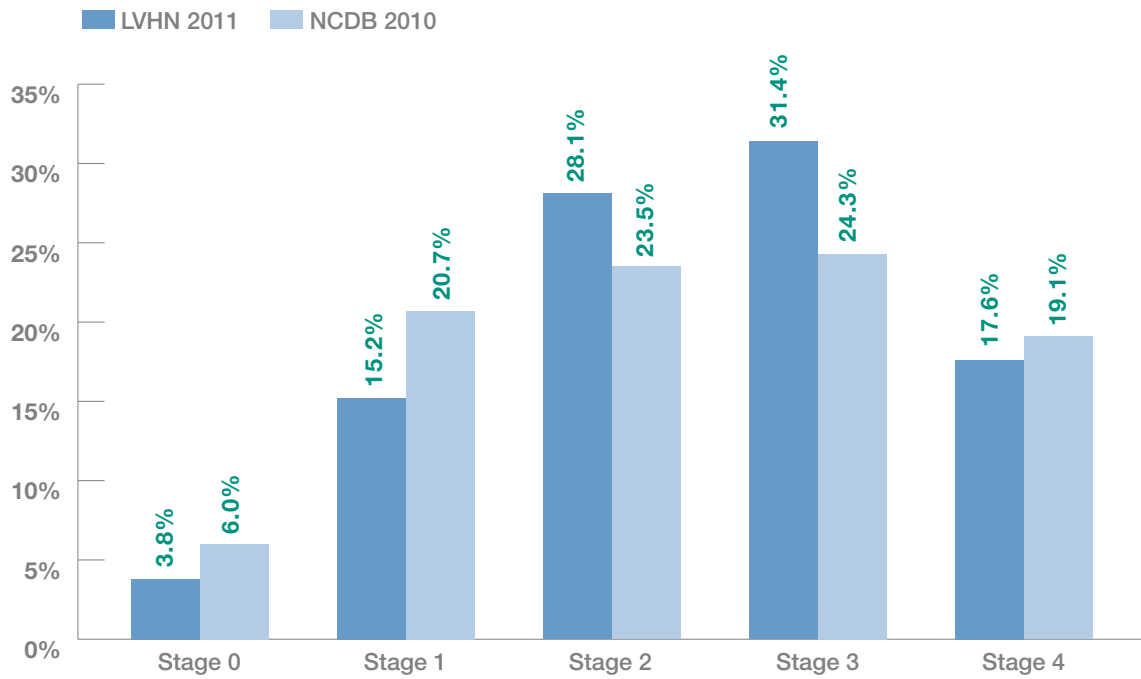


2011 LEHIGH VALLEY HEALTH NETWORK CANCER CENTER

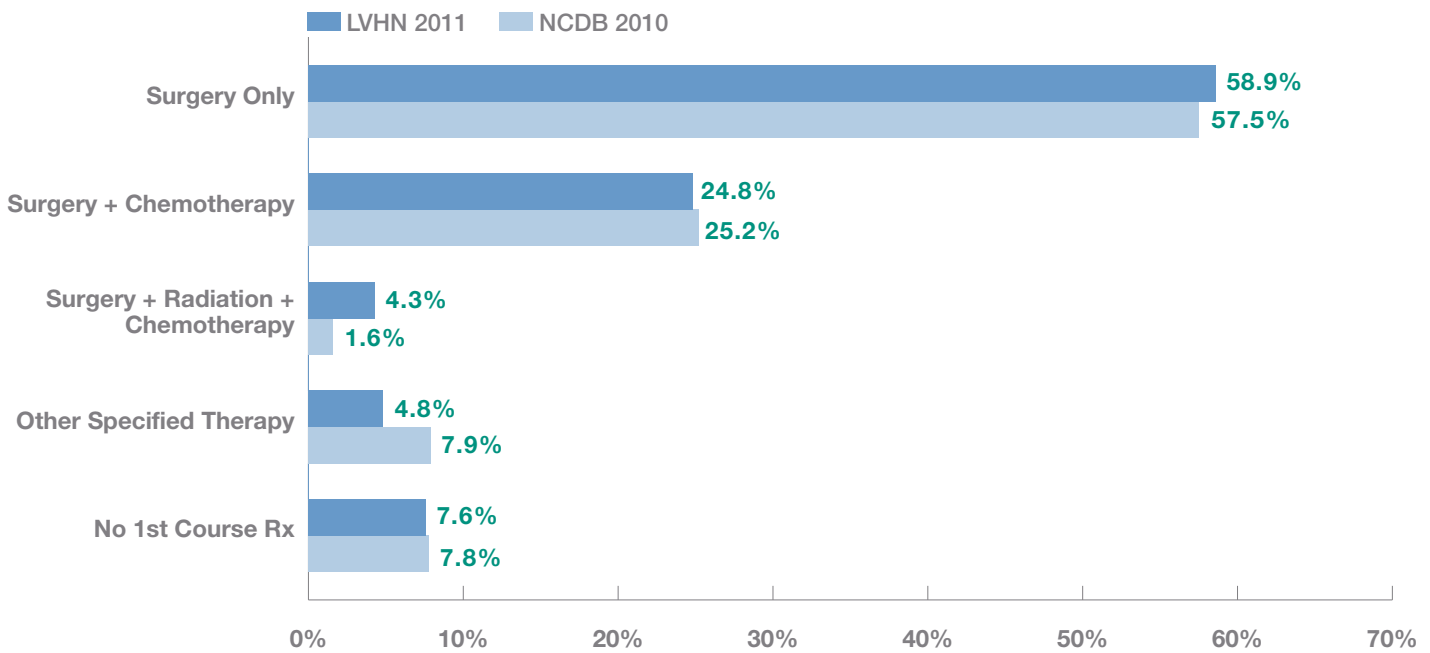
COLON CANCER TREATMENT BY STAGE AT DIAGNOSIS (N=210)

TREATMENT	STAGE 0	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE NA	STAGE UNK	%
Surgery Only	100%	100%	76%	47%	19%	0%	0%	58.6%
Surgery + Chemotherapy	0%	0%	17%	44%	30%	100%	0%	24.8%
Surgery + Radiation + Chemotherapy	0%	0%	5%	9%	0%	0%	0%	4.3%
Other Specified Therapy	0%	0%	0%	0%	24%	0%	17%	4.8%
No 1st Course Rx	0%	0%	2%	0%	27%	0%	83%	7.6%
Total Number of Cases	8	32	59	66	37	2	6	210

COLON CANCER COMPARISON OF AJCC COLLABORATIVE STAGE AT DIAGNOSIS



COMPARISON OF FIRST COURSE OF TREATMENT



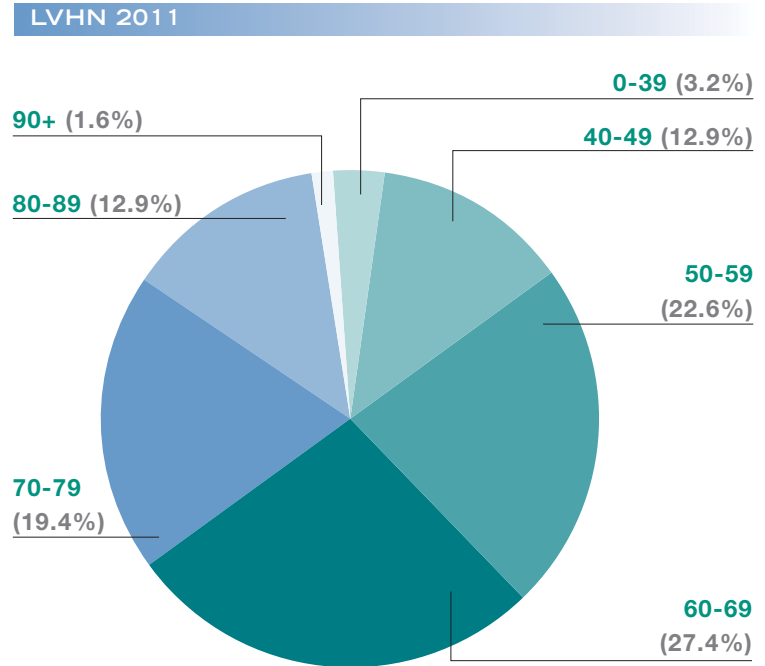
RECTAL CANCER

Rectal cancer patients were more likely to be diagnosed at an earlier stage than colon cancer patients. Eighty-three percent (83 percent) of the health network patients were diagnosed at age 50 and older compared with 85 percent of reported NCDB patients in this age range. Treatment options for rectal cancer were more variable than those selected for colon cancer. Definitive surgery alone was more often recommended for stage 0 and stage 1 rectal cancer at the health network (77 percent) compared with 62 percent of NCDB reported cases. However, surgery and radiation plus systemic therapies were recommended at the health network (32.3 percent) compared to NCDB (36.3 percent) for stage 1 through stage 3 cases.

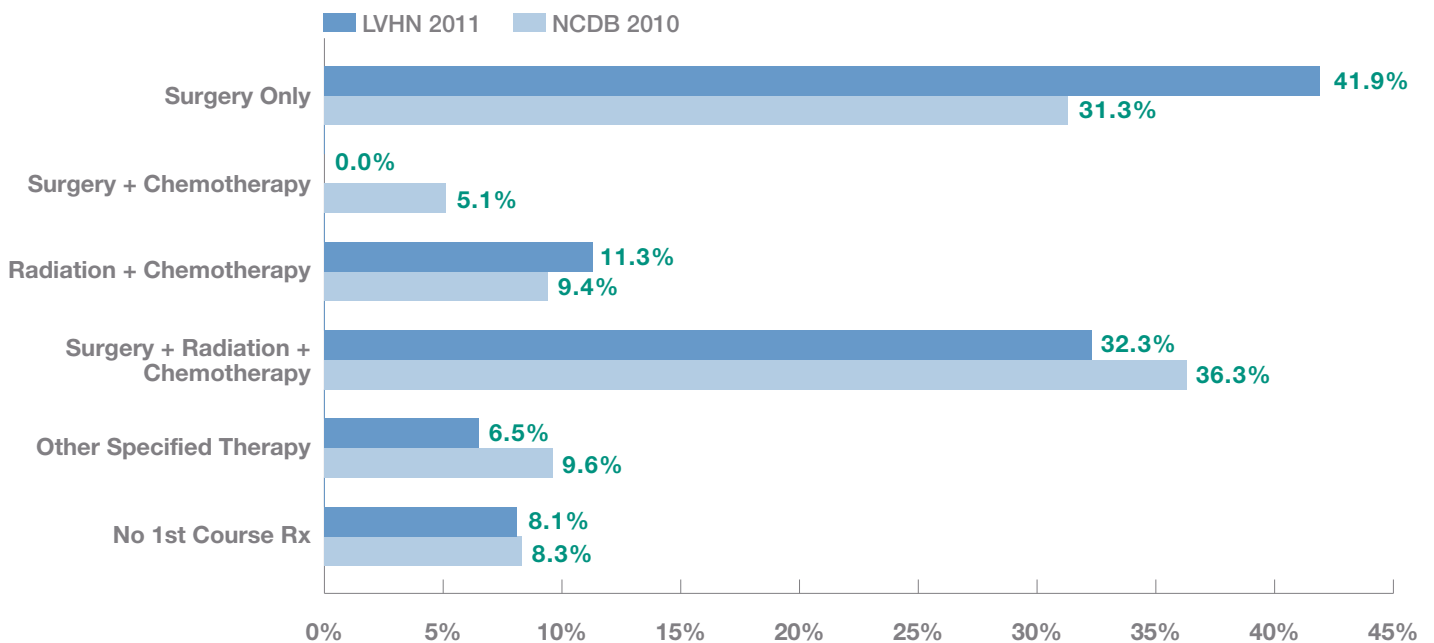
INCIDENCE OF RECTUM CANCER BY AGE AT DIAGNOSIS LVHN 2011

Age Range	0 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80 - 89	90 +	TOTAL
(N)	2	8	14	17	12	8	1	62

RECTUM CANCER BY AGE AT DIAGNOSIS



COMPARISON OF FIRST COURSE OF TREATMENT

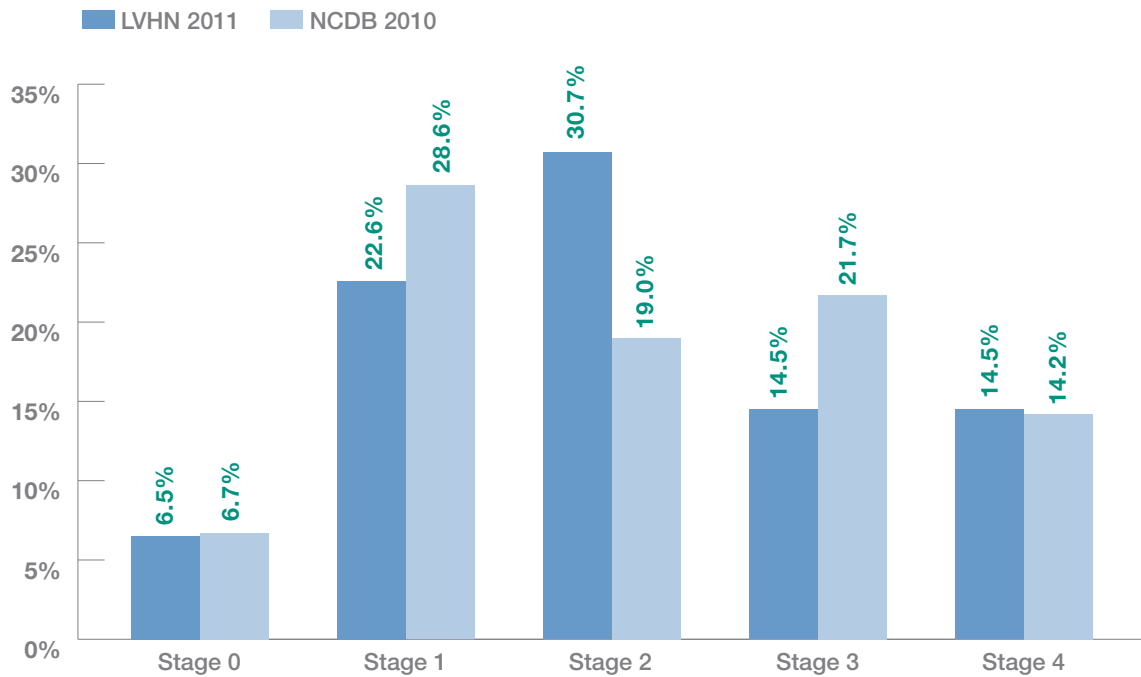


2011 LEHIGH VALLEY HEALTH NETWORK CANCER CENTER

RECTUM CANCER TREATMENT BY STAGE AT DIAGNOSIS (N=62)

TREATMENT	STAGE 0	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE NA	STAGE UNK	%
Surgery Only	100%	71%	21%	22%	11%	100%	33%	42%
Surgery + Chemotherapy	0%	0%	0%	0%	0%	0%	0%	0%
Radiation + Chemotherapy	0%	0%	26%	0%	22%	0%	0%	11.3%
Surgery + Radiation + Chemotherapy	0%	29%	42%	67%	22%	0%	0%	32.3%
Other Specified Therapy	0%	0%	5%	11%	22%	0%	0%	6.5%
No 1st Course Rx	0%	0%	5%	0%	22%	0%	67%	8.1%
Total Number of Cases	4	14	19	9	9	4	3	62

RECTUM CANCER COMPARISON OF AJCC COLLABORATIVE STAGE AT DIAGNOSIS



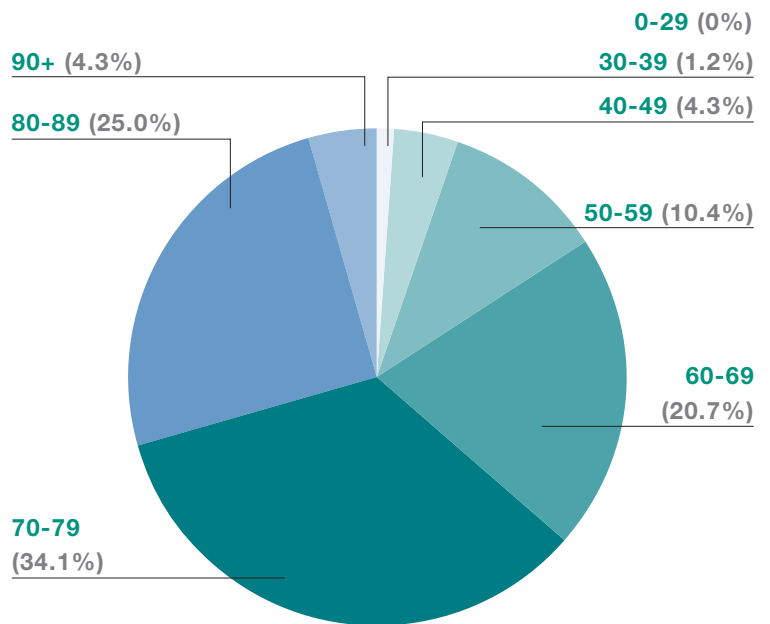
URINARY BLADDER CANCER

Bladder cancer emerged as the fifth most frequently treated cancer at Lehigh Valley Hospital Network in 2011, accounting for 5.6 percent of all newly diagnosed analytic cases. The majority of bladder cancer cases (84 percent) were diagnosed in patients age 60 or older. There were no cases diagnosed in patients younger than 30 years at the health network compared to 0.2 percent of NCDB 2010 reported cases. The health network was more likely to diagnose cases at an early stage (63 percent diagnosed at stage 0) than cases reported to the NCDB (49 percent diagnosed at stage 0). Surgery alone was the most common treatment offered for all stages of urinary bladder cancer at the health network (63.43 percent) comparable to 2010 NCDB (62.2 percent) reported cases. NCDB reported 16.5 percent of cases treated with surgery and chemotherapy as compared to the health network (22.6 percent) of cases. Treatment options are in keeping with the National Comprehensive Cancer Network (NCCN) guidelines and reflect those reported to the NCDB.

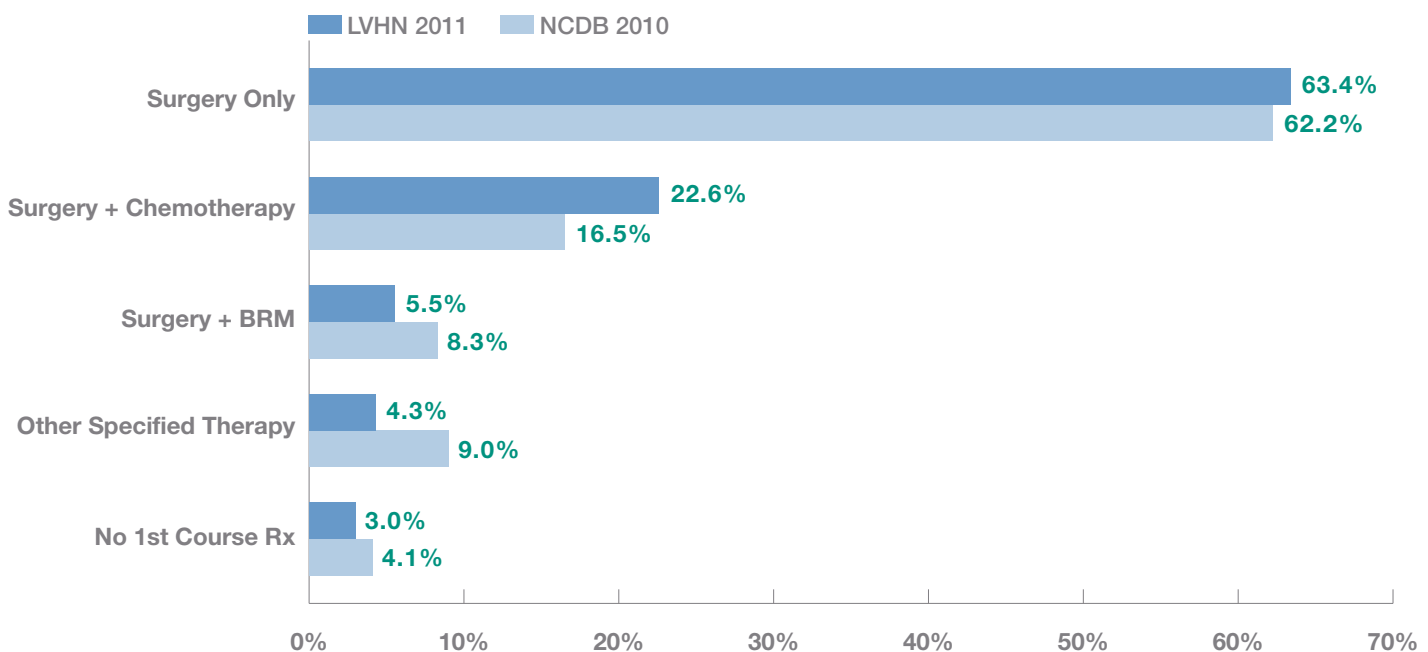
INCIDENCE OF URINARY BLADDER CANCER BY AGE AT DIAGNOSIS LVHN 2011

Age Range	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90+	TOTAL
(N)	0	2	7	17	34	56	41	7	164

URINARY BLADDER CANCER BY AGE AT DIAGNOSIS LVHN 2011



COMPARISON OF FIRST COURSE OF TREATMENT

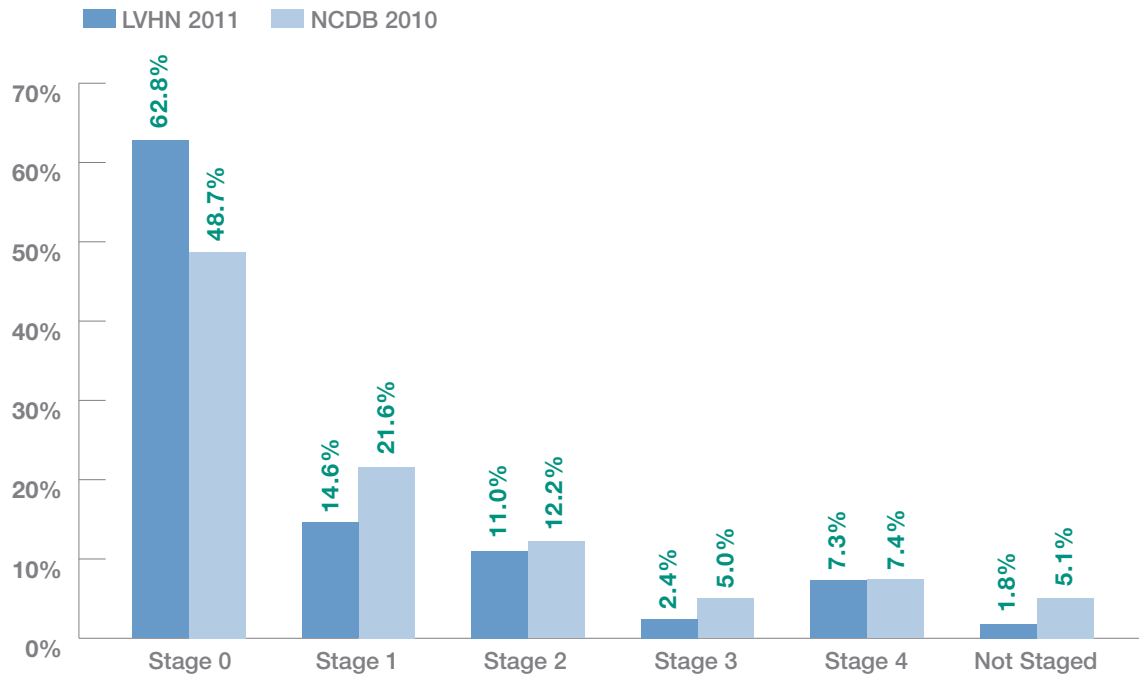


2011 LEHIGH VALLEY HEALTH NETWORK CANCER CENTER

URINARY BLADDER CANCER TREATMENT BY STAGE AT DIAGNOSIS (N=164)

TREATMENT	STAGE 0	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE NA	STAGE UNK	%
Surgery Only	67%	71%	50%	50%	42%	0%	67%	63.4%
Surgery + Chemotherapy	21%	21%	28%	25%	25%	0%	33%	22.6%
Surgery + BRM	8%	4%	0%	0%	0%	0%	0%	5.5%
Other Specified Therapy	1%	4%	17%	25%	25%	0%	0%	4.3%
No 1st Course Rx	3%	0%	6%	0%	8%	0%	0%	3%
Total Number of Cases	103	24	18	4	12	0	3	164

URINARY BLADDER CANCER COMPARISON OF AJCC COLLABORATIVE STAGE AT DIAGNOSIS



The background of the page is a solid blue color with a subtle, abstract geometric pattern of overlapping, semi-transparent shapes in various shades of blue, creating a sense of depth and movement.

SERVICES AT LEHIGH VALLEY HEALTH NETWORK

THE TUMOR REGISTRY DEPARTMENT

The Tumor Registry Department is an integral part of Lehigh Valley Health Network's Cancer Center. Through systematic collection, management, analysis and follow-up of data on all patients with a diagnosis of malignancy or reportable benign disease, the tumor registry plays an important part in efforts to improve cancer care.

SERVICES AT LEHIGH VALLEY HEALTH NETWORK

The Cancer Center at Lehigh Valley Health Network provides a variety of support and educational programs for patients, family members and the general public. Most of these services and programs are offered free of charge.

CANCER SURVIVOR EVENTS

Two breast cancer survivor events were held in fiscal year 2012. These workshops are designed specifically for breast cancer survivors who have completed their treatment. These full-day events include presentations by one of our physicians, a nurse practitioner, sex therapist and dietitian. This year, 34 women attended the events. In June 2012, we held our 10th Annual Cancer Survivor Celebration. More than 130 people attended. This event included dinner, a musical presentation by Richard Boulay, MD, and an inspirational and humorous presentation by comedienne Brenda Elsagher, a 20-year colon cancer survivor

COUNSELING SERVICES

Counseling services are provided by a team of licensed clinical social workers, a psychologist and a psychiatrist. Phone consultations are provided on an individual basis to newly diagnosed patients seeking information. Short-term individual and family therapy, as well as individual counseling is available. The health network's Cancer Center also offers a certified sex therapist to address changes cancer may cause in the patient's relationship with his or her significant other.

FINANCIAL COORDINATION

The Cancer Center provides financial coordinators to assist patients in financial matters such as precertification requirements, health insurance and medical bills. Financial coordinators also connect patients with support agencies to assist them in receiving free or reduced-cost services and medical supplies.

GENETIC COUNSELING

Three board-certified genetic counselors and a medical oncologist are available to meet with patients and families to discuss benefits of genetic testing and perform a personalized risk assessment. The genetic counselors provide in-depth reviews of results, counsel patients and family members on implications, and provide comprehensive surveillance and treatment recommendations.

INTERPRETER SERVICES

The health network offers language and sign language interpreter services, as well as assistance for people who are hearing-impaired. Trained medical interpreters for non-English speaking patients and people who communicate through sign language are available 24 hours a day, seven days a week via live interpreters or a telephonic language interpretation service.

MARY ROSE MUHR SLEMMER

SURVIVORPLACE: PROGRAMS FOR LIVING AFTER THE CANCER EXPERIENCE

SurvivorPLACE is designed to help people who have undergone treatment for cancer to live a healthy life. This includes preventing, detecting and treating complications from cancer treatment. The care team includes a nurse practitioner, registered nurse, social worker, registered dietitian and rehabilitation therapist, all of whom are specially educated and/or certified in oncology. All patients receive a personalized cancer survivor summary, which includes information on their cancer treatment as well as their survivor care plan.

NURSE NAVIGATORS

Cancer Support Services nurse navigators offer patients emotional support, help them communicate with their physicians and provide guidance for decision-making about choices in their care. Navigators direct patients to support services and community resources to assist them with treatment-related supplies, financial concerns and transportation. They coordinate all members of the patient's health care team and guide the patients to survivorship services when their treatment is complete.

NUTRITION COUNSELING

Three registered dietitians are available to meet with patients and families to assess nutritional needs and determine appropriate nutritional goals and strategies during cancer treatment. In fiscal year 2012, our dietitians consulted with 2,158 patients.

PATIENT EDUCATION LIBRARY

The Cancer Center houses the virtual Patient Education Library, providing patients with access to current cancer-related literature at no charge. Access to the library and education can occur on a self-referral basis. The health network's Cancer Center also offers one-to-one education with an oncology clinical nurse specialist. Additional educational materials are also available via the 402-CARE phone line.

PREOPERATIVE CLASSES

A preoperative breast class is offered weekly to all newly diagnosed breast cancer patients to prepare them for surgery and to review post-surgical care, including rehabilitation needs. The class is also available in Spanish.

SUPPORT GROUPS

Support groups offered by the Cancer Center include a monthly Men Facing Cancer Discussion Group, Metastatic Breast Cancer Support Group, and our Breast Cancer Support of Survivor group. In addition to providing space for the monthly meetings, Cancer Center staff has served to provide educational support for the groups as well. Members of the Cancer Support team facilitate the support groups.

The Breast Cancer Support of Survivors (SOS) Program offers a 24-hour helpline for newly diagnosed patients. Helpline volunteers receive more than 40 hours of training, which is conducted by our Cancer Center professional staff. Monthly meetings are facilitated by the health network's Cancer Support Services staff and provide the volunteers with ongoing education and opportunity to seek guidance on dealing with particularly challenging calls. A greeter program provides support to both patient and family on the day of breast cancer surgery.

Circulo de Apoyo (Circle of Caring) is held monthly at Lehigh Valley Hospital–17th Street. This is designed, specifically, for our Hispanic cancer patients and their significant others.

OTHER ON-SITE SUPPORT SERVICES

The Cancer Center coordinates closely with other health network services. These services include Center for Pain Management, Home Care, Hospice, Oncology Rehabilitation, palliative care through the OACIS (Optimizing Advanced Complex Illness Supports) Team, Pastoral Care, Pharmacy Services and valet parking.

COMMUNITY EDUCATION AND SCREENING PROGRAMS

BETTER MEDICINE SATURDAYS

In fiscal year 2012, Lehigh Valley Health Network launched an advertising campaign designed to support the National Community Cancer Centers Program (NCCCCP). The goals were to increase opportunities for interaction between the Hispanic community and staff of the NCCCCP at Lehigh Valley Hospital–17th Street, and increase access to cancer research protocols. The strategy was to create foundational materials to support the NCCCCP program, starting with a message focused on overall healthy living, including diet, activity, regular screenings and checkups, and tie these messages to cancer prevention. A total of seven events were held in fiscal year 2012; 320 people attended. Screenings for cancer totaled 153.

CANCER RESOURCE FOR SCHOOLS

The Cancer Center clinical nurse specialists provide lectures on cancer-related topics to health classes in area school districts and also to various colleges. The topics for fiscal year 2012 included: overview of chemotherapy, care of the oncology patient, general oncology overview, biotherapy overview and health career programs. They conducted a total of six lectures.

COMMUNITY CANCER RESOURCES

The Cancer Center also provides lectures on cancer-related topics as requested by both the lay and professional communities. The topics for fiscal year 2012 included nutrition education, breast cancer survivor event, prostate cancer prevention and early detection, breast health awareness, lung health, prevention and early detection of colon cancer, and training for support of survivors volunteers and lectures on various breast health topics.

COMMUNITY HEALTH FAIRS

Community outreach is provided in the form of education at community health fairs and community lectures. The health network's Cancer Center colleagues participated in a total of 22 health fairs in fiscal year 2011, reaching more than 12,000 people.

FLU IMMUNIZATION

A total of 168 flu immunizations were provided to patients under treatment in the infusion areas at Lehigh Valley Hospital–Cedar Crest and Lehigh Valley Hospital–Muhlenberg.

PROSTATE CANCER SCREENING

Free prostate cancer examinations were provided during the annual prostate cancer-screening program for men. This program is held in collaboration with Lehigh Valley Urology Specialty Care, Allentown Health Bureau and our Lehigh Valley Hospital–17th Street's Community Health and Wellness Center. Three staff urologists as well as five nursing/clerical staff volunteered for the screening session. A total of 32 men were screened.

SKIN CANCER SCREENING

Free examinations are provided during the annual skin screening. Seven dermatologists and 25 nursing/clerical staff volunteered for the skin screening held in fiscal year 2012. A total of 138 community members were screened. This program is conducted in conjunction with the American Academy of Dermatology and the health network's division of dermatology.

BREAST CANCER SCREENING AND CERVICAL CANCER SCREENING

Working in collaboration with the Allentown Health Bureau, the health network's Breast Health Services

provided free clinical breast exams and screening mammograms for 800 women. In addition, 623 women received a free Pap test through our Center for Women's Medicine and the Community Health and Wellness Center.

LEHIGH VALLEY HEALTH NETWORK CANCER CENTER: A LINK AMONG COMMUNITY RESOURCES

The Lehigh Valley Health Network Cancer Center collaborates with many community groups and resources. These links are very valuable to our community and our patients. Here are five primary partnerships.

AMERICAN CANCER SOCIETY

Lehigh Valley Health Network frequently connects patients with the American Cancer Society. Fifty to 75 patients a month are referred for information, day-to-day help and emotional support. The Society provides transportation and linkage to other area resources. The health network frequently hosts the Society's Look Good, Feel Better workshops where women undergoing treatment learn how to understand and care for changes in skin and hair that may occur during treatment. Call the Society at 1-800-227-2345 or visit cancer.org.

CANCER SUPPORT COMMUNITY OF THE GREATER LEHIGH VALLEY

Multiple patient and family lectures were provided at the Cancer Support Community of the Greater Lehigh Valley by our physicians and nurses as well as at other community-based programs on topics including: lymphoma, lung cancer, breast cancer, colon cancer, clinical trials and cancer fatigue. Some of these programs also were offered on-site at Lehigh Valley Hospital and conducted by members of our professional staff. For more information on the Cancer Support Community of the Greater Lehigh Valley education programs, call 610-861-7555 or visit cancersupportglv.org.

COMMUNITY EXCHANGE TIMEBANKING

The health network's Cancer Center collaborates with the Lehigh Valley Health Network Community Exchange TimeBank. Frequently referred to as Community Exchange, this program provides assistance to patients in need and creates a vibrant community working together. Community Exchange is a network of people who both volunteer and earn time through a model for community action and connectivity.

LEHIGH COALITION FOR CANCER CONTROL

Since 1987, the health network's Cancer Center has worked along with the Allentown Health Bureau, St. Luke's University Hospital and Sacred Heart Hospital as the Lehigh Coalition for Cancer Control.

The goal of the Coalition is to remove barriers that may prevent women from getting a mammogram and/or Pap test. These barriers include cost, lack of insurance coverage and lack of a medical provider. Together, we help uninsured and underinsured women follow the breast and cervical cancer screening recommendations. For more information, call 610-437-7513.

LEUKEMIA AND LYMPHOMA SOCIETY

We partner with the Leukemia and Lymphoma Society (LLS) to offer patient education programs as well as the Cirulo de Apoyo support group for our Latino patients and their families. We collaborated in April 2012 to offer activities for Minority Cancer Awareness Week at our Community Health and Wellness Center. The LLS provides us with education materials for all patients with blood cancers. They also offer a wide range of webinars for both professionals and patients. For more information, call 610-266-8513 or visit them at www.lls.org.

RESEARCH AT LEHIGH VALLEY HEALTH NETWORK'S CANCER CENTER

Clinical research in oncology has been conducted at Lehigh Valley Health Network for more than 35 years, initially with the National Surgical Adjuvant Breast and Bowel Project (NSABP) and the Eastern Cooperative Oncology Group (ECOG). During the last 15 years, the health network has remained members with NSABP, ECOG and expanded to include cancer prevention trials in breast and prostate cancer, treatment trials in surgical oncology (ACOSOG), Gynecologic Oncology (GOG), the North Central Cancer Treatment Group (NCCTG), and we are a member of the Clinical Trials Support Unit (CTSUS). The health network's cancer program enjoys a collaborative relationship with Moffitt Cancer Center and recently The Wistar Institute of Anatomy and Biology, both of which are NCI-designated Cancer Centers. The health network's Cancer Center also participates in local, national and pharmaceutical studies designed to prevent and treat cancers.

The Cancer Program's Protocol Priority Review Committee (PPR) meets monthly to review its clinical trial portfolio. The committee's goal is to keep the oncology clinical trial portfolio scientifically sound and appropriate for the resources of the Cancer Program and the Oncology Clinical Trials Office. Research at the health network is supported by a central research office, the Network Office of Research and Innovation (NORI), comprised of the Office of Clinical Operations, the Office of Integrity and Education, the Office of Research and Finance and the Human Subject Protection Office.

CANCER COMMITTEE MEMBERSHIP

At Lehigh Valley Health Network, we excel in care for our cancer patients. Lehigh Valley Health Network's Cancer Committee oversees activities of the cancer program and is responsible for ensuring quality care and facilitating advancements. The multidisciplinary cancer committee is composed of medical and administrative personnel with a full range of specialty skill sets. We also work closely with the American Cancer Society and Leukemia and Lymphoma Society.

2011 CANCER COMMITTEE MEMBERSHIP

MEMBER NAME	DISCIPLINE
Andrews, Charles MD	Chair, Radiation Oncologist
Baccala, Angelo Jr. MD	Surgeon Urology
Barnaby, Janine RPh, BS, BCOP	Oncology-certified Pharmacist
Barraco, Debra BS	Tumor Registry Research Associate
Boulay, Richard MD	Chair, Cancer Committee; Chair, Gynecology Oncology
Boyle, Linda PT, DPT, OCS, CLT-LANA	Rehabilitative Services
Brennan, Jennifer RD, CSO, LDN	Registered Dietitian
Brong, Diane LCSW	Social Worker and Psychosocial Services Coordinator
Chung, Heiwon MD	General Surgeon
Dellers, Elizabeth MD	Anatomic and Clinical Pathology
Dwinal, Brenda CTR	Supervisor, Tumor Registry
Earley, Nancy MS, RT(R)(T)	Cancer Program Administrator
Fillebrown, Ruth RN, CHPN	Palliative Care Team Member, Hospice RN Education Coordinator
Friedman, Eliot MD	Chief, Division of Hematology-Medical Oncology
Gheller, April BSN, MS, OCN	Quality Coordinator/Nurse, Infusion Area
Harper, Gregory MD, PhD	Hematology-Medical Oncology, NCCCP Medical Director
Kimmel, Sharon PhD, MHA, CCRP	Director, Oncology Clinical Trials and Data Management
Mack, Nadesda RN, BSN, MBA, OCN	Cancer Program Administrator
McGonigle, Lenore MEd	Facility-Based Education/Community Outreach
Monteleone, Philip MD	Pediatric Oncologist
Namey, Tara MS, CGC	Genetic Counselor, Cancer Risk and Assessment Program
O'Connell, Mary Ellen MSN, MBA	Performance Improvement and Quality Management (Network)
Park, John MD	Surgeon, Colon and Rectal
Ray, Daniel MD	Director, OACIS Palliative Care
Reimer, Nicole BSN, OCN	Director, Oncology Medical Surgery Inpatient Unit
Rienzo, Robert MD	Chief, Section of Nuclear Medicine
Rivera, Ada BA	Director, NCCCP Quality and Data Management
Schiavone, Karen (non-voting)	American Cancer Society Representative
Sevedge, Kathleen RN, MA, AOCN	Director, Cancer Support Services
Skandan, Savitri MD	Hematology-Medical Oncology, CoC Cancer Liaison Physician
Steigerwalt, Susan RT (R) (M)	Director, Breast Health Services
Weinhold, Keith MHA, FACHE	Senior Vice President, Operations
Whitney, Samiyah RN, BSN	Supervisor, Oncology Clinical Research, Network Office of Research

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