Carle Cancer Center Public Reporting of Outcomes

2017 ANNUAL REPORT
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Our Mission
We serve people through high quality care, medical research and education.

Our Vision
Improve the health of the people we serve by providing world-class, accessible care through and integrated delivery system.

Our Values
ICARE–Integrity, Collaboration, Accountability, Respect, Excellence.

NOTABLE HEALTHGRADES AWARDS IN 2017:
• America’s 50 Best Hospitals Award™ (2 yrs. in a row)
• America’s 100 Best Hospitals for Critical Care™ (6 yrs. in a row)
• Top 1% in the nation for consistent clinical quality
• Distinguished Hospital Award for Clinical Excellence™
• Most Wired health system by Hospitals & Health Networks
  (6 yrs. in a row for Carle; 5 yrs. in a row for Hoopeston Regional Health Center)
• Top 34 Hospitals for Hip Replacement by Consumer Reports (reported by Becker’s Orthopedic Review)
• 100 Great Healthcare Leaders to Know, CEO/President Dr. Leonard by Becker’s Hospital Review
Carle Cancer Center continues its mission of providing high quality cancer care through education, continuous quality improvement, research and technology.

Our cancer program is accredited by the Commission on Cancer /American College of Surgeons on Cancer as an Academic Comprehensive Cancer Program. The Mills Breast Cancer Institute is also accredited by the National Accreditation Program for Breast Centers (NAPBC). Both of these re-accreditation surveys were completed this year; both are good for a three (3) year period, with our next survey to be scheduled in 2020. In addition to CoC and NAPBC accreditations, we also have various specialty accreditations including the American College of Radiology (ACR) for our Radiation Oncology services and the American Society of Clinical Oncology’s Quality Oncology Practice Initiative (QOPI) for Medical Oncology services.

Our newest relationship is with the University of Illinois Carle College of Medicine. This formalizes and strengthens our commitment to education and research.

Cancer Research is an integral part of our cancer care system. We have been involved in national clinical research since 1976. Carle Cancer Center was first recognized as a Comprehensive Community Oncology Center by The National Cancer Institute (NCI) in 1983. In 2014, Carle Cancer center was designated as a National Community Oncology Research Program. As one of only 34 such NCORP sites in the nation, Carle Cancer Center participates in cancer treatment, prevention, and control studies, as well as academic-based and investigator-initiated studies.

Any Carle physician may ask for data (with IRB approval) or sponsor research using our database. Interested individuals, including medical and nursing students, resident physicians, nurses, U of I facility may obtain sponsorship.

The Cancer Registry is the information backbone of our cancer clinical research efforts. It provides feasibility data to allow U of I basic science. Starting in 1934, the data collected by our Cancer Registry department was originally kept to determine patterns of disease with outcomes and to adjust strategies to detect cancer. It is now used not only to identify patterns and outcomes, but to support research activities at Carle and across the nation. Data is also used to assess the need for space, used for patient care, capital equipment and the need for services with a geographic area. National co-operative studies with the American Cancer Society and the American College of Surgeons have used our data as well.

Carle is a small part of the total picture, which is reflected by the State of Illinois Department of Public Health Cancer Registry website.

The Carle Cancer Center engages multidisciplinary cancer clinics, patient navigators, support groups, and clinical trial opportunities to deliver integrated cancer care.

Our accreditations through Commission on Cancer (CoC), National Accreditation Program for Breast Centers (NAPBC), Quality Oncology Practice Initiative (QOPI) and American College of Radiology (ACR) continue to validate our commitment to the highest quality of care.

Sincerely,

James R. Egner, MD
Chairman, Carle Cancer Committee
Carle Research and Cancer Conferences

All conferences serve as a multidisciplinary consulting board for presenting cancer cases and making recommendations for the patient’s course of diagnosis, treatment and survivorship.

The conferences are attended by physicians from all cancer specialties, staff, interns, medical students, residents, nurses, social workers, dieticians, genetic counselors, researchers, cancer registry staff and approved guests. All the conferences are held with the utmost of confidentiality and the underlying goal is to ensure high quality of seamless care provided to all patients and their families.

Carle Foundation is accredited by the Illinois State Medical Society to provide continuing medical education for physicians and staff. The Care Foundation designates each educational activity for a maximum of 1 AMA PRA Category of 1 Credit.

The Houseworth Conference Room is designed with high tech equipment and capabilities of skyping out to the outside facilities, physicians and staff who cannot attend the conference in person. The Carle satellite in Danville, IL. are invited to join in on the conferences. Outside physicians can participate, observe and present cases, in which the multidisciplinary team at Carle can provide their opinions on the outside cases.

THE FOLLOWING IS A LIST OF OUR CONFERENCES:

**Research conference**
*Frequency:* Every week on Fridays in the Houseworth Conference Room  
*Chair:* Dr. Kendrith Rowland

University of Illinois teaching researchers and Carle clinical researchers inform the physicians and staff of the different protocols and clinical trials.

In the research conferences, the researchers and physicians present and discuss new clinical trials coming up for the future and the clinical trials that have opened, closed and would be best for Carle. On occasion, outside speakers present studies and interesting research topics.

**General cancer conference**
*Frequency:* Every week on Friday in the Houseworth Conference Room  
*Chair:* Dr. James Egner

**GI cancer conference**
*Frequency:* Every week on Fridays in Digestive Health.  
*Chair:* Dr. Robert Dodson

This conference used to be held in conjunction with General Cancer Conference. With the opening of the GI Multidisciplinary Clinic in July, this conference is now held weekly before the start of the clinic day. This will ensure that those enduring GI cancer will have access to a multidisciplinary approach with less barriers.

**Breast cancer conference**
*Frequency:* Every Wednesday in the Houseworth Conference Room  
*Chair:* Dr. Maria Grosse-Perdekamp

**Head and neck conference**
*Frequency:* First and third Monday of every month in the Houseworth Conference Room  
*Chair:* Dr. Kelly Cunningham

**Genitourinary (GU) and Gynecology (GYN) cancer conference**
*Frequency:* Second and fourth Tuesdays of every month in the Houseworth Conference Room.  
*Chair:* GU- Dr. Glen Yang GYN- Dr. Ronald Kimball

The GYN Cancer Conference has applied to become a CME Credited Conference.

**Thoracic surgery/pulmonary case conference**
*Frequency:* Second and fourth Thursday of every month in the Houseworth Conference Room  
*Chair:* Dr. Yujie Zhao
The Cancer Committee selected the following members to represent each of the following cancer committee coordinator specialties:

- Kimberly Harden, MSW, LCSW - Psychosocial Services Quality Coordinator
- Betsy Barnick, BS, CCRP - Clinical Research Coordinator
- Mary VanCleave, BSN, RN, OCN - Community Outreach Coordinator
- Sarah Glenn, MSN, RN, OCN - Quality Improvement Coordinator
- Sharon Jacobson, CTR - Cancer Registry Quality Coordinator
- Sharon Jacobson, CTR - Cancer Conference Coordinator

Carle’s cancer committee has four required quarterly business meetings. They consist by discussing the Commission on Cancer Program Standards, Eligibility Requirements, registry activities, and new business. The administrative cancer committee determines the goals, quality studies, improvements, community outreach activities, screening and prevention programs and what will benefit our patients and community.

The Administrative Cancer Committee Meetings were held on second floor in the Houseworth Conference Room on February 6th, May 8th, August 7th and November 6th in 2017.
Carle Cancer Center Public Reporting of Outcomes

Clinical Trial Accruals

For nearly 35 years, the Carle Cancer Center has offered patients access to cutting edge clinical research. As one of the first cancer facilities in the United States to be designated a Community Clinical Oncology Program (CCOP), now renamed National Community Oncology Research Program (NCORP), Carle is one of only 34 health care groups in the nation to have this designation by the National Cancer Institute (NCI). These research initiatives offer new insight into how to prevent cancer, demonstrate new ways to treat cancer and its side effects, and explore novel screening and imaging modalities. In addition, these trials focus on supportive care, symptom management, surveillance, quality of life and genetics.

More recent to the cancer research program are increased collaborations with the University of Illinois. Through initiatives like C*STAR, also known as the Cancer Scholars for Translational and Applied Research, several trials are underway examining topics like individualized treatment regimens, cognitive health, nutrition and survivorship, and tumor imaging. This jointly funded graduate program, initiated in the fall of 2015, matches students with an Illinois faculty mentor and a Carle physician mentor. The program fosters translational research and was developed to encourage near-term benefits to patients served by Carle and the greater Champaign-Urbana community. C*STAR projects complement other U of I projects that are ongoing in the areas of activity and cognition, imaging and nutrition.
Lung Cancer in Our Community

A Report by Dr. Suparna Mantha

The Cancer Committee identified lung cancer as an area of focus for 2017. The incidence of lung cancer is higher in Vermilion and Coles counties, both major service areas for the cancer center.

Lung cancer is the second most common cancer in both men and women. It is the leading cause of death from cancer. According to the NCI SEER database, the estimated new cases of lung cancer in 2017 is 222,500 accounting for 13.2% of new cancer cases. Estimated deaths from lung cancer in 2017 is 155,870, which is 25.9% of all cancer deaths.

The most common risk factors for lung cancer include smoking, exposure to second hand smoke, radiation exposure – from radiation therapy, imaging tests, Radon exposure, exposure to air pollution etc. The median age at diagnosis is 70 years.

There are two main types of lung cancer - Non-small cell lung cancer and small cell lung cancer. Non-small cell lung cancer is more common of the two types.

A review of NCDB report for Carle Foundation Hospital Cancer Center was performed for the years 2011 to 2015 and compared to data from other Comprehensive Community Cancer Programs. Consistent with the SEER data, the most common age group at diagnosis for Non-small cell lung cancer was 70-79 years. As lung cancer is usually diagnosed at advanced stage, the most common stage at diagnosis was Stage IV. With improved screening, the second most common stage was Stage I. The distribution of new cancers diagnosed across different stages was similar to the data from other comprehensive community cancer center programs.

Carle has offered low dose CT screening for lung cancer since 2013, to people who are at high risk to develop lung cancer. This year, Carle conducted four education events in the month of October, focusing on education regarding Radon exposure and risk of cancer, symptoms and signs of lung cancer and information regarding Radon detection kits.

The most common mode of treatment for early stage Non-small cell lung cancer is surgery. The more advanced stages are treated with a combination of surgery, chemotherapy and/or radiation. The rate of surgery and radiation therapy to treat lung cancer at Carle are similar to other comprehensive community cancer programs.

To ensure timely, expedited care and access to various specialists involved in care of lung cancer patients, Carle is now planning Lung multidisciplinary clinic. Such a clinic will add to our goal to attack lung cancer right from prevention, education, screening and multidisciplinary care.

### Non-Small Cell Lung Cancer Benchmarks

<table>
<thead>
<tr>
<th>Year</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>120</td>
</tr>
<tr>
<td>2012</td>
<td>134</td>
</tr>
<tr>
<td>2013</td>
<td>110</td>
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<td>125</td>
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![Lung Cancer Cases Chart]

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<td>2015</td>
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</tbody>
</table>

![Lung Cancer Cases Chart]
THE DISTRIBUTION OF NEW NON-SMALL CELL LUNG CANCER BY STAGE:

THE FIRST COURSE OF TREATMENT FOR NON-SMALL CELL LUNG CANCER AT CARLE COMPARED TO OTHER COMPREHENSIVE COMMUNITY CANCER PROGRAMS:

<table>
<thead>
<tr>
<th>Metric</th>
<th>Carle Performance Rate</th>
<th>Required Performance Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systemic chemotherapy is administered within 4 months to day preoperatively or day of surgery to 6 months postoperatively, or it is recommended for surgically resected cases with pathologic lymph node-positive (pN1) and (pN2) NSCLC (Quality Improvement)</td>
<td>100%</td>
<td>85%</td>
</tr>
<tr>
<td>Surgery is not the first course of treatment for cN2, MO lung cases (Quality Improvement)</td>
<td>100%</td>
<td>85%</td>
</tr>
<tr>
<td>At least 10 regional lymph nodes are removed and pathologically examined for AJCC stage IA, IB, IIA and IIB resected NSCLC (Surveillance)</td>
<td>41.7%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

(NCDB CP3R Measures 2015)
Outreach Activities

Radon and Lung Cancer: An Education event aimed at the prevention of Radon related Lung Cancer.

Carle Cancer Center held four (4) education and prevention sessions at different locations in our service area on the following dates:

- 10/1/2017
- 10/7/2017
- 10/20/2017
- 10/29/2017

Radon education materials were given out along with a stock card with lung cancer signs and symptoms. This was in accordance with the Community Needs Assessment and the Illinois Emergency Management Agency (IEMA). Information is in accordance with the NCCN guideline LCS-1, and is obtained from the Environmental Protection Agency (EPA). Also given was information regarding several different types of Radon detection kits available and the cost associated with each kit, obtained from the IEMA.

A small survey was given to each participant to determine if the participant felt the information was helpful and if they would utilize the information given.

A total of 69 people accepted the information:

- 59 participants (85%) felt the information was of use to them and would follow up with Radon detection.
- 10 people felt it was not helpful:
  - 4 were already scheduled for service to remit the gas in their homes.
  - 2 were undergoing testing
  - 2 were in the business of Radon mitigation
  - 2 would not respond
Cancer Registry

Mission: Carle Cancer Registry is dedicated to accurately abstracting cancer information from medical records and maintaining a Certified Cancer Registry. Patients diagnosed and/or treated with cancer are followed annually with the utmost compliance of confidentiality for their lifetime.

Cancer Registry abstracts, collects and maintains all cancer patient information at Carle. The Cancer Registry staff follows the cancer patient for their lifetime if they are diagnosed and/or treated at Carle. The abstracted information provides the registry with measurement of outcomes and cancer patient survival. Our annual analytic caseload is over 1500 cases.

Table 1: Follow up Rates as required by Commission on Cancer/American College of Surgeons:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Actual Rate</th>
</tr>
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<tbody>
<tr>
<td>Reference Year (2000)</td>
<td>80%</td>
</tr>
<tr>
<td>5 year</td>
<td>90%</td>
</tr>
</tbody>
</table>

2017 CANCER REGISTRY STAFF
Sharon Jacobson, CTR, Cancer Program Coordinator
Sarah Glenn, MSN, RN, OCN, Quality Coordinator
Julie McClain, Cancer Registry Intern
Stephanie Grote, Cancer Registry Specialist

OUTSOURCED REGISTRY STAFF
Dawn Grabowski, CTR
Heather Benson, CTR
Brandy Lewis, CTR
Talisha Ballard, CTR
Tiffany Ervin, CTR
Quality Studies

The Commission on Cancer “is dedicated to improving survival and quality of life for cancer patients through standard-setting, prevention, research, education and the monitoring of comprehensive quality of care.”

The Carle Cancer Center 2017 study of quality is looking at the quality of care for endometrial cancer. At the present time measures are being monitored and evaluated endometrial surgery. The study was chosen by the cancer team to ensure that those patients having surgery for endometrial cancer are getting the least invasive surgery according to the guidelines of the Society of Gynecologic Oncology. Specifically we are assessing the percentage of women with endometrial cancer treated surgically who undergo minimally invasive surgery with laparoscopic Da Vinci robot (total hysterectomy and bilateral salpingo-oophorectomy with or without pelvic sentinel lymph node mapping). The target goal is > 65%. The study data continues to be evaluated but we are meeting our target goal. Timely changes will be considered based on data received. Over a six month time frame, we had 23 patients who had surgery for their endometrial cancer. Of those 23 patients, 19 had surgery with robotic assistance. Those that didn’t, had conditions that did not lend themselves for a laparoscopic surgery.

% Robotically assisted surgery for endometrial cancer

QUALITY IMPROVEMENTS

The Carle Cancer Center Cancer Committee decided on a quality improvement to ensure that 100% of all eligible women diagnosed with epithelial ovarian cancer are being offered genetic testing. Any cause for a patient not offered genetic testing will be investigated, documented and tracked. The practice statement by the Society of Gynecologic Oncology states that women diagnosed with epithelial ovarian, tubal, and peritoneal cancers should receive genetic counseling and be offered genetic testing, even in the absence of a family history. Nine months of data show that 100% of eligible patients are being offered an appointment with our genetics counselor. Evaluation and feedback from the Cancer Committee has been performed on a quarterly basis and will continue to complete the year.
Who We Serve

County at Diagnosis

* Metriq (Elekta) through Carle

* Metriq (Elekta) through Carle
**Summary of Body System and Sex Report, 11/14/17**

<table>
<thead>
<tr>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Cavity &amp; Pharynx - 40 (6%)</td>
<td>Thyroid - 46 (6%)</td>
</tr>
<tr>
<td>Lung &amp; Bronchis - 97 (15%)</td>
<td>Lung &amp; Bronchis - 75 (10%)</td>
</tr>
<tr>
<td>Pancreas - 30 (5%)</td>
<td>Breast - 226 (30%)</td>
</tr>
<tr>
<td>Kidney &amp; Renal Pelvis - 36 (6%)</td>
<td>Kidney &amp; Renal Pelvis - 13 (2%)</td>
</tr>
<tr>
<td>Urinary Bladder - 38 (6%)</td>
<td>Ovary - 23 (3%)</td>
</tr>
<tr>
<td>Colon % Rectum - 65 (10%)</td>
<td>Uterine Corpus - 69 (9%)</td>
</tr>
<tr>
<td>Prostate - 129 (20%)</td>
<td>Colon % Rectum - 62 (8%)</td>
</tr>
<tr>
<td>Non-Hodgkin Lymphoma - 29 (4%)</td>
<td>Non-Hodgkin Lymphoma - 22 (3%)</td>
</tr>
<tr>
<td>Melanoma of the Skim - 55 (8%)</td>
<td>Melanoma of the Skim - 49 (7%)</td>
</tr>
<tr>
<td>Leukemia - 19 (3%)</td>
<td>Leukemia - 10 (1%)</td>
</tr>
</tbody>
</table>

| All other sites - 119 (18%)    | All other sites - 154 (21%) |

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