

Public Reporting Of Outcomes

2019 Annual Report

CARLE CANCER CENTER

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Carle Foundation Hospital

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 an integrated delivery system.

Our Values

ICARE—Integrity, Collaboration, Accountability, Respect, Excellence.

NOTABLE AWARDS AND ACCOMPLISHMENTS: 2019

- Notable Healthgrades awards in 2019:
 - America's 50 Best Hospitals Award™ (four years in a row)
 - America's 100 Best Hospitals for Critical Care™
 - America's 100 Best Hospitals™ (nine years in a row)
- Great Place to Work® in Healthcare
- Magnet Status for excellence in nursing care for Carle Foundation Hospital and Carle Physicians Group.

Additionally, In 2018, Carle provided \$195 million in services, donations and support to our community, including \$34.8 million in free or discounted care to more than 35,000 patients.

Chair's Message



WELCOME TO THE CARLE CANCER CENTER'S 2019 REPORT.

2019 was a successful year of providing the highest quality care to our patients.

Our team continues to grow with the additions of new physicians and staff in radiation oncology, plastic surgery, surgical oncology and social work. Our multiple tumor boards (breast, head and neck, lung, gastrointestinal, gynecology- oncology, genitourinary and general) and patient navigators help provide multidisciplinary care in an efficient manner. This year, we have successfully established the Upper Gastrointestinal Multidisciplinary Clinic. The multidisciplinary clinics in breast and lower gastrointestinal cancers continue to flourish.

We remain accredited through the Commission on Cancer/American College of Surgeons, National Accreditation Program for Breast Cancer. We are also accredited through American College of Radiology for Radiation Oncology and Quality Oncology Practice Initiative (QOPI) through the American Society for Clinical Oncology.

Research has always been a focus at Carle Cancer Center. To support these efforts, Carle Cancer Center was awarded six more years and more than \$9 million of clinical trial funding through a National Community Oncology Research Program (NCORP) grant with the National Cancer Institute (NCI). Carle enrolled more than 1,000 patients in 2019 to various clinical trials, with a wide variety of focus. A majority of these patients were enrolled to the cancer screening study, TMIST. Carle ranked first among all community TMIST trial sites in the US with 933 patients as of October 1, 2019. The research program received several awards this year including outstanding performance from ECOG-ACRIN, a platinum certificate of excellence from the NCI and highest accruing NCORP affiliate from the Wake Forest School of Medicine.

Our association with University of Illinois remains strong through many research projects including C*STAR projects. We also take active part in training future physicians and physician researcher through the Carle Illinois College of Medicine.

We successfully conducted the 2019 Illinois Cancer Symposium at Carle on September 27, 2019. The target audience included physicians, advance practice providers, researchers, registered nurses, social workers, occupational therapists, physical therapists, pharmacists and health professional students. Topics discussed included cancer immunotherapy, SBRT, cancer genetics and lung cancer screening. The Oncology Nursing Symposium was conducted on May 11, 2019 and discussed ITP, multiple myeloma, cancer advocacy and cancer pharmacology.

We continue to work toward Carle's vision to improve the health of the people we serve by providing world-class, accessible care through an integrated delivery system as we look forward to new challenges and accomplishments in 2020.

Sincerely,

Suparna Mantha, MD

Chairperson, Carle Cancer Committee

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, dietitians, genetic counselors, researchers, cancer registry staff and approved guests. All the conferences are held with the utmost of confidentiality and the underlying goal of ensuring high-quality, seamless care is provided to all patients and their families.

The 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 one *AMA PRA Category of 1 Credit*.

The Houseworth Conference Room is designed with high tech equipment and capabilities of Skyping within Carle and to outside facilities, physicians and staff who cannot attend the conference in person. All Carle satellite nurses 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 Friday 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

Chairperson: Dr. Suparna Mantha

Upper GI Cancer Conference

Frequency: Every Tuesday at 7 a.m. in the Digestive Health Conference Room.

Chairperson: Dr. Kevin Lowe

Lower GI Cancer Conference

Frequency: Every Friday at 7 a.m. in the Digestive Health Conference Room.

Chairperson: Dr. Paul Tender

Breast Cancer Conference

Frequency: Every Wednesday in the Houseworth Conference Room

Chairperson: Dr. Maria Grosse-Perdekamp

Head and Neck Conference

Frequency: First and third Monday of every month in the Houseworth Conference Room

Chairperson: Dr. Kelly Cunningham

Genitourinary (GU) Cancer Conference

Frequency: Second and fourth Tuesday of every month in the Houseworth Conference Room.

Chairperson: GU - Dr. Glen Yang

Gynecology (GYN) Cancer Conference

Frequency: First, third and possible fifth Tuesday of every month in the Houseworth Conference Room.

Chairperson: Dr. Georgina Cheng

Thoracic Surgery/Pulmonary Case Conference

Frequency: Every Thursday in the Houseworth Conference Room

Chairperson: Dr. Sinisa Stanic

2019 Cancer Committee Members and their Alternates

Academic Comprehensive Cancer Program Approved 2/4/2019

CANCER PROGRAM STANDARD 1.3

2019 CANCER COMMITTEE MEMBERS

Role	Member	Alternate
Cancer Committee Chair	Dr. Suparna Mantha	Dr. Maria Grosse-Perdekamp
Cancer Liaison Physician	Dr. Pratima Chalasani	Dr. Vamsi Vasireddy
Diagnostic Radiologist	Dr. Martin Kuntz	Dr. James Hlubocky
Pathologist	Dr. Frank Bellafiore	Dr. Ike Uzoaru
Surgeon	Dr Kevin Lowe	Dr. Paul Tender
Medical Oncologist	Dr. Suparna Mantha	Dr. Maria Grosse- Perdekamp
Radiation Oncologist	Dr. Kalika Sarma	Dr. Sinisa Stanic
GI Center for Excellence	Dr. Paul Tender	Dr. Michelle Olson
Specialist	Dr. Kendrith Rowland	
Palliative Care	Dr. Michael Aref	Dr. April Yasunaga

Role	Member	Alternate
Cancer Program Adm.	Jason Hirschi	Luke Sullivan
Registered Dietitian	Tammie Heiser	
Oncology Nurse Courtney	Courtney Cox, RN	Melissa Tull, RN
Social Worker	Kimberly Harden, LCSW	Kelly Harris, LCSW
Cert. Tumor Registrar	Julie McClain, CTR	Cassie Phillips, CTR
Cancer Conference Coordinator	Stephanie Grote	
Quality Improvement Coordinator	Sarah Glenn, RN	Sherry Rose, RN
Ca. Registry Quality Coordinator	Julie McCain, CTR	Cassie Phillips, CTR
Comm. Outreach Coordinator	Mary VanCleave, RN	Cheryl Murdock, RN
Clinical Research Coordinator	Betsy Barnick, MS	Joshua Ward, BS
Pharmacist	Todd Thompson, RPH	Lauren Trisler, PharmD
Rehabilitation	Renee Daniels	Elizabeth Camp
Radiation Oncology	David Pool, BS	Amy Gerdes, RTT
Pastoral Care	Jeffrey McPike	
American Cancer Society Rep.	Linda Schulz	



The Cancer Committee selected the following members to represent each of the following cancer committee coordinator specialties:

- Kimberly Harden, MSW, LCSW - Community Outreach Coordinator
- Betsy Barnick, MS, CCRP - Clinical Research Coordinator
- Mary VanCleave, BSN, RN, OCN - Nurse Navigator Cancer Center
- Sarah Glenn, MSN, RN, OCN - Quality Improvement Coordinator
- Julie McClain, CTR - Cancer Registry Quality Coordinator
- Stephanie Grote - Cancer Conference Coordinator

Carle's Cancer Committee has four required quarterly business meetings. They consist of discussing the Commission on Cancer Program Standards, Eligibility Requirements, registry activities, CQIP, CP3R, RQRS 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 4, May 6, August 5 and November 4 in 2019.

Clinical Services

CLINICAL TRIALS

For more than 35 years, Carle Cancer Center has offered patients access to leading-edge clinical research. Designated by the National Cancer Institute as a National Community Oncology Research Program (NCORP), Carle is one of only 32 healthcare organizations in the nation to have this designation. In partnership with the NCI and academic medical centers like Mayo Clinic, these research initiatives offer new insight into how to prevent cancer, treat cancer, and explore novel screening and imaging modalities. In addition, these trials focus on supportive care, symptom management, surveillance, quality of life and genetics. More recently, Carle's research program has added CCDR, or cancer care delivery research. This type of research, focuses on how organizational structures and processes, care delivery models, financing and reimbursement, health technologies, and healthcare provider and patient knowledge, attitudes, and behaviors can influence quality, cost, and access and ultimately the health outcomes and well-being of patients and survivors. Examples of CCDR currently underway at Carle include a stepped-care telehealth approach to address anxiety in rural cancer survivors and increasing socioeconomically disadvantaged patients' engagement in breast cancer surgery decision-making through a shared decision-making intervention.

The Carle Cancer Research Program also continues to build 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 diet and nutrition's impact on quality of life in head and neck cancer survivors, the impact of cholesterol on the ovarian tumor microenvironment and cancer progression, the development of a blood-based microRNA panel to facilitate colon cancer screening, and ultrafast tissue histopathology during breast cancer surgeries. C*STAR, a jointly funded graduate program initiated in the fall of 2015, matches students with a University of Illinois faculty mentor and a Carle physician

mentor. The program fosters translational research and was developed to generate near-term benefits to patients served by Carle and the greater Champaign-Urbana community. C*STAR projects complement other University of Illinois projects ongoing in the areas of food insecurity, survivorship, imaging, biomarkers and the microbiome.

NURSE NAVIGATOR

In accordance with the Community Needs Assessment, in which access to care was identified, the navigation program at Carle Cancer Center follows the patient throughout the continuum of care. Carle employs four nurse navigators whose focus is on the care of the cancer patient. Mills Breast Cancer Institute utilizes two of those navigators for the care of the breast cancer patient. One navigator assists the patient in during the tests needed in the radiology department and the other during the treatment aspect of patient care. Each navigator follows specific touchpoints throughout the patient's journey. For the Breast Imaging Navigator, these times are at the abnormal mammography finding through the biopsy period. For the Cancer Center Navigator, the touchpoints are preparation for the multidisciplinary consults, presentation and/or documentation at cancer conference, at the beginning of both chemotherapy and radiation therapy, and at survivorship.

The Breast Imaging Navigator is also responsible for assisting with scheduling and educating patients as they move through the process initiated when a patient has an abnormal mammogram. Once a biopsy and cancer diagnosis has been obtained the Cancer Center Navigator assists with patients gaining access to timely care throughout the cancer care continuum. This begins with diagnosis and access for patients to oncologic care. The follow-up includes tracking patients to be sure they have been offered all the care standard per NCCN guidelines; which is inclusive of timely surgery, chemotherapy, radiation therapy, and pathological molecular analyses.

PSYCHOSOCIAL SUPPORT

The psychosocial aspects of cancer are recognized as an important part of a patient's cancer experience. Carle Cancer Center has two licensed clinical social workers who provide assessment, emotional support, and knowledge of psychosocial resources throughout the continuum of the individual's cancer care from initial diagnosis, throughout treatment, to post-treatment and survivorship. The Cancer Center social workers identify areas of need in patient care by creating programs and facilitating events that provide information, networking and support. The social workers facilitate a total of three support groups for patients and their family members, and host a Survivor's retreat each year.

REHABILITATION

Carle's Rehabilitation Department is a team of approximately 90 physical, occupational and speech therapists from both the inpatient and outpatient settings. They cover acute care patients on the inpatient oncology unit and admit patients into our 20-bed CARF-accredited Inpatient Rehabilitation Unit. After discharge the team manages the rehabilitation needs of patients with ongoing deficits through programs such as Carle Community Re-Entry Program, Lymphedema Clinic, Head and Neck Cancer Speech program, and general outpatient therapy. They work with each of these teams on providing evidence-based practice and keeping up with emerging trends in Oncology Rehabilitation. The Cancer Center doctors, nurses and rehabilitation specialists partner to develop protocols and practice standards, and work to assess patient satisfaction and overall outcomes related to care.

SURVIVORSHIP

Nationally recognized cancer care at Carle includes a collaborative effort, combining the dedication and skill of staff with the determination and courage of our patients, throughout and after treatment. Survivorship care plans (SCP) are created at the onset of a cancer diagnosis, maintained throughout the process of treatment, and delivered to patients at the end of their treatment process. These SCPs document the care delivery team, treatment path, and a plan for follow-up care, and serve as not only a testament to the patient's personal journey, but also as a clear statement of past, present and future goals for the overall well-being of each individual.

FINANCIAL COUNSELING

Financial Counseling is available to patients and families to help understand the costs of treatment, insurance coverage and financial responsibility. For more information patients can visit Carle's Patient Accounts Office to speak with one a Customer Service Representatives or call (217) 902-5690. Patient Accounts is located on the first floor of the South Clinic Building (by the lab) and is open 8 a.m. to 5 p.m. Patients can find a second location in the Main Hospital by the Lobby. This location is open 7 a.m. to 5 p.m.

SPIRITUAL CARE

Pastoral and spiritual care services at Carle are available for patients and families in their time of need during cancer treatment. Clinically trained chaplains help patients and families use their unique spiritual resources and provide a supportive presence anytime during the course of treatment or after treatment is complete.

NUTRITIONAL COUNSELING

A full-time registered dietitian is available Monday through Thursday at Carle Cancer Center for dietary consultation free of charge. The dietitian works as an integral part of the healthcare team to provide assessment, education and support, aiming to optimize patients' nutritional statuses and quality of life. Appointments can be scheduled with any patient service representative at check-in or check-out. The oncology dietitian is specialized in dealing with cancer-related issues and side effects from cancer treatments. Nutrition counseling and surveillance is available before, during and after cancer treatment or surgery.

Management of Melanoma at Carle Cancer Center

By Priyank Patel, MD, Hematology/Oncology

For the year 2019, the focus of the cancer committee was to look in to the details of malignant melanoma at Carle Cancer Center.

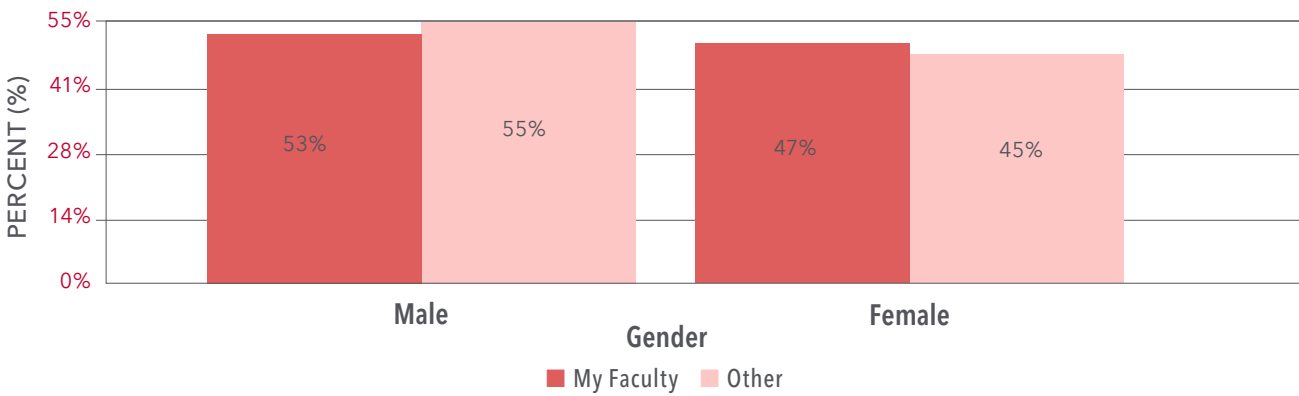
EPIDEMIOLOGY

Melanoma also known as malignant melanoma is a very aggressive skin cancer and the fifth most common cancer in men and women in the United States. According to American Cancer Society estimates for 2019, about 96,480 new melanomas will

be diagnosed (about 57,220 in men and 39,260 in women). About 7,230 people are expected to die of melanoma (about 4,740 men and 2,490 women). The incidence of melanoma has been increasing over the past several decades in the United States. Melanoma is more than 20 times more common in whites than in African Americans. Overall, the lifetime risk of getting melanoma is about 2.6% (1 in 38) for whites, 0.1% (1 in 1,000) for blacks, and 0.6% (1 in 167) for Hispanics.

Gender of Melanoma of the Skin Cancer Diagnosed in 2011, 2012, 2013, 2014, 2015, 2016

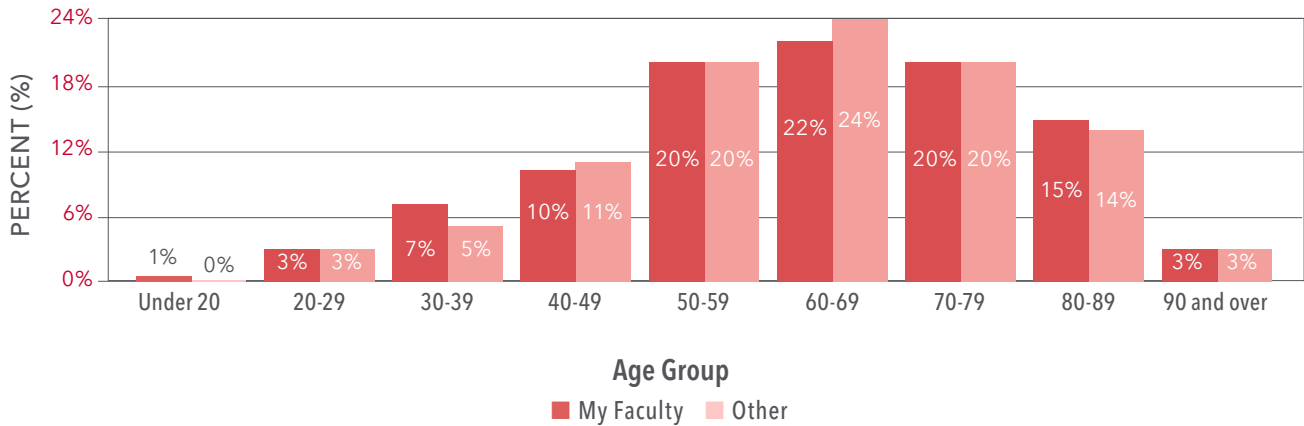
Carle Foundation Hospital, Urbana IL vs. Comprehensive Community Cancer Program Hospitals in State of Illinois
Combination Class of Case 00 and Class of Case 10-14 -Data from 37 Hospitals



	Male	Female
My Faculty	53%	47%
Other	55%	45%

Age Group of Melanoma of the Skin Cancer Diagnosed in 2011, 2012, 2013, 2014, 2015, 2016

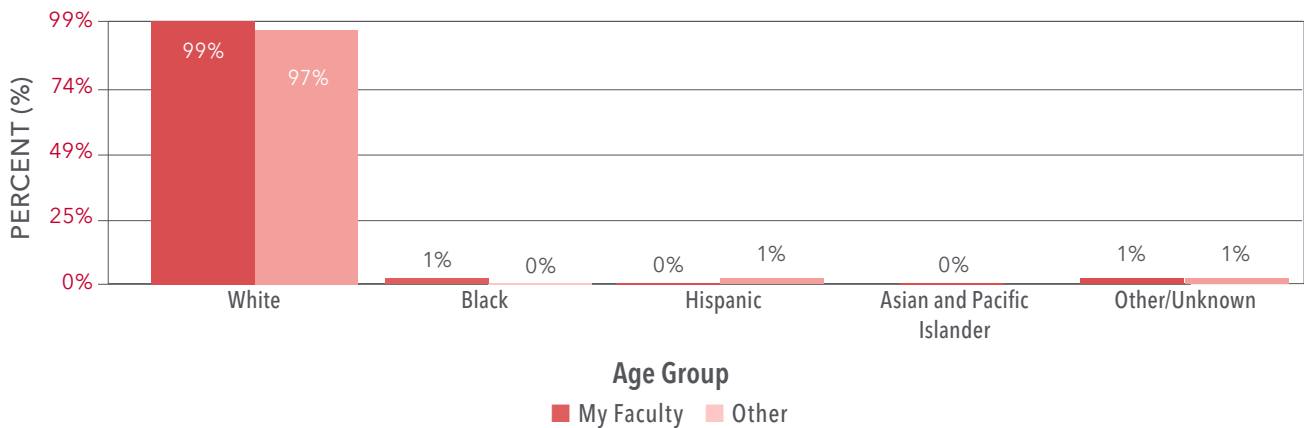
Carle Foundation Hospital, Urbana IL vs. Comprehensive Community Cancer Program Hospitals in State of Illinois
Combination Class of Case 00 and Class of Case 10-14 -Data from 37 Hospitals



	Under 20	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90 and over
My Facility	1%	3%	7%	10%	20%	22%	20%	15%	3%
Other	0%	3%	5%	11%	20%	24%	20%	14%	3%

Race/Ethnicity of Melanoma of the Skin Cancer Diagnosed in 2011, 2012, 2013, 2014, 2015, 2016

Carle Foundation Hospital, Urbana IL vs. Comprehensive Community Cancer Program Hospitals in State of Illinois
Combination Class of Case 00 and Class of Case 10-14 -Data from 37 Hospitals

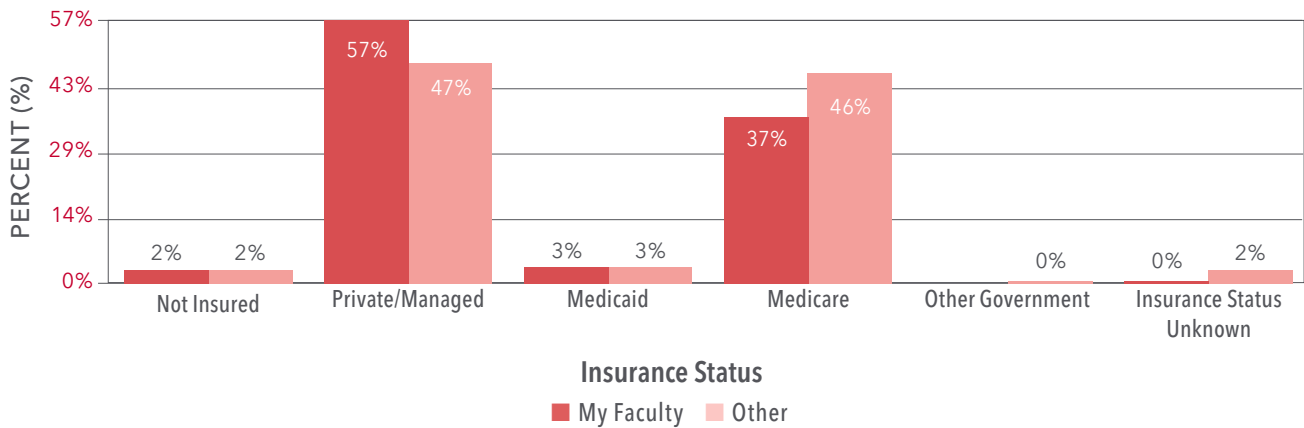


	White	Black	Hispanic	Asian and Pacific Islander	Other/Unknown
My Facility	99%	0%	0%	0%	1%
Other	97%	0%	1%	0%	1%

OVERWHELMING MAJORITY OF PATIENTS DIAGNOSED AT CARLE ARE OF WHITE ETHNICITY. THIS COMPARES WITH OUTSIDE INSTITUTIONS AND WITH NATIONAL STATISTICAL DATA.

Insurance Status of Melanoma of the Skin Cancer Diagnosed in 2011, 2012, 2013, 2014, 2015, 2016

Carle Foundation Hospital, Urbana IL vs. Comprehensive Community Cancer Program Hospitals in State of Illinois
 Combination Class of Case 00 and Class of Case 10-14 -Data from 37 Hospitals



	Not Insured	Private/Managed	Medicaid	Medicare	Other Government	Insurance Status Unknown
My Facility	2%	57%	3%	37%	0%	0%
Other	2%	47%	3%	46%	0%	2%

MAJORITY OF PATIENTS HAD SOME OR THE OTHER FORM OF INSURANCE. COMPARED TO OUTSIDE INSTITUTIONS, CARLE HAS SLIGHTLY LESS MEDICARE PATIENTS, BALANCED BY SLIGHTLY MORE MANAGED CARE AND PRIVATE INSURANCE PATIENTS.

RISK FACTORS

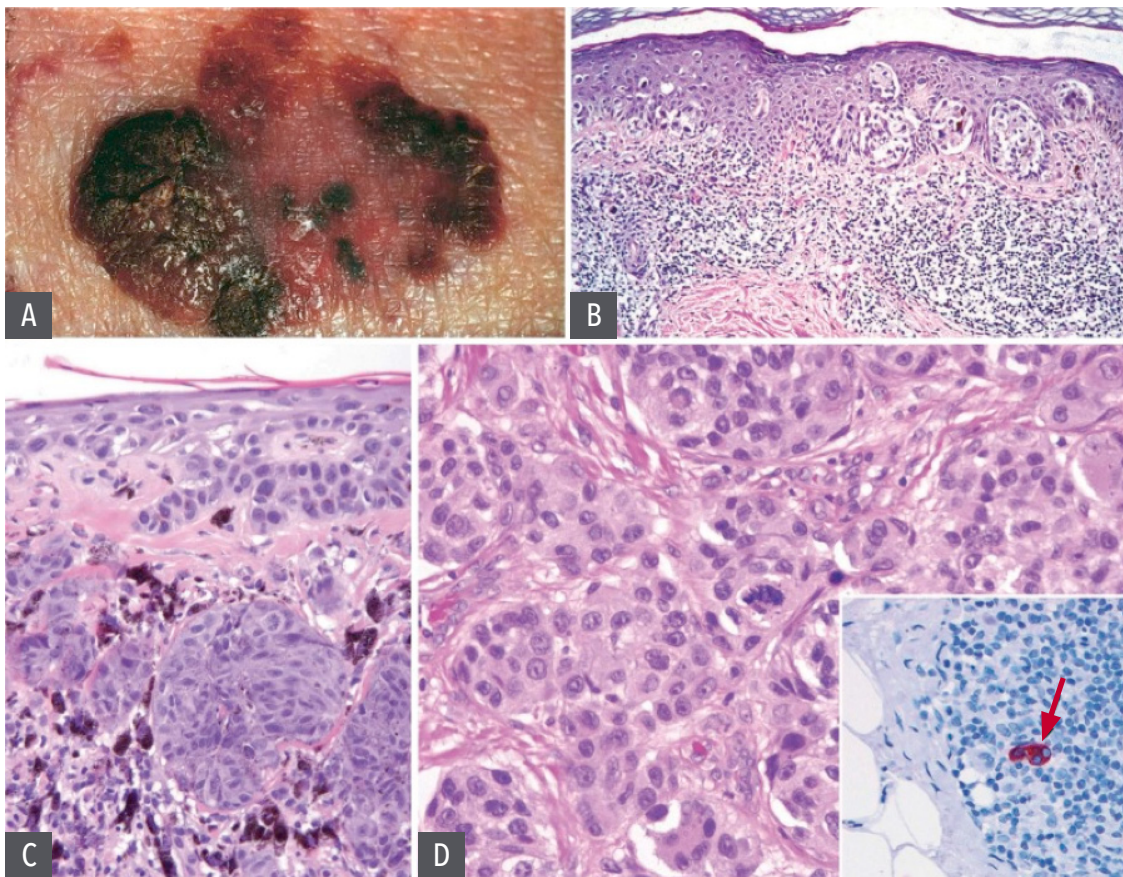
The most common risk factor for development of melanoma is exposure to the sun. The ultraviolet radiation from the sun causes genetic damage to the melanocytes thereby leading to development of melanoma. People with fair skin, blonde hair and tendency to have sunburn, very high number of common nevi (greater than 50) are at higher risks. Uncommonly, melanomas can occur as a part of familial cancer syndromes and can be inherited.

CLINICAL PRESENTATION AND PATHOLOGY

Melanoma arises when the melanocytes mutate. Initially, the growth of these cancers is superficial, also known as

radial phase. The moles commonly change color. After a long duration of time, typically years, these cancers tend to grow deeper in the skin, known as the vertical phase. It is this characteristic of melanoma that portends to its aggressive nature. Deeper the melanoma grows, the higher the risk of metastasis to the lymph nodes and distant organs.

Usually, a mole or a nevus changes its character when it becomes cancerous. It becomes asymmetric, borders become irregular, color can change (color variegation) and the size or the diameter of the mole increases. It is commonly known as ABCD of melanoma.



A: Typical lesions are irregular in contour and pigmentation. Macular areas correlate with the radial growth phase, while raised areas correspond to nodular aggregates of malignant cells in vertical growth phase.

B: Radial growth phase, showing irregular nested and single-cell growth of melanoma cells within the epidermis and an underlying inflammatory response within the dermis.

C: Vertical growth phase, demonstrating nodular aggregates of infiltrating cells.

D: High-power view of melanoma cells. The inset shows a sentinel lymph node with a tiny cluster of melanoma cells (arrow) staining for the melanocytic marker HMB-45. Even small numbers of malignant cells in a draining lymph node may confer a worse prognosis.

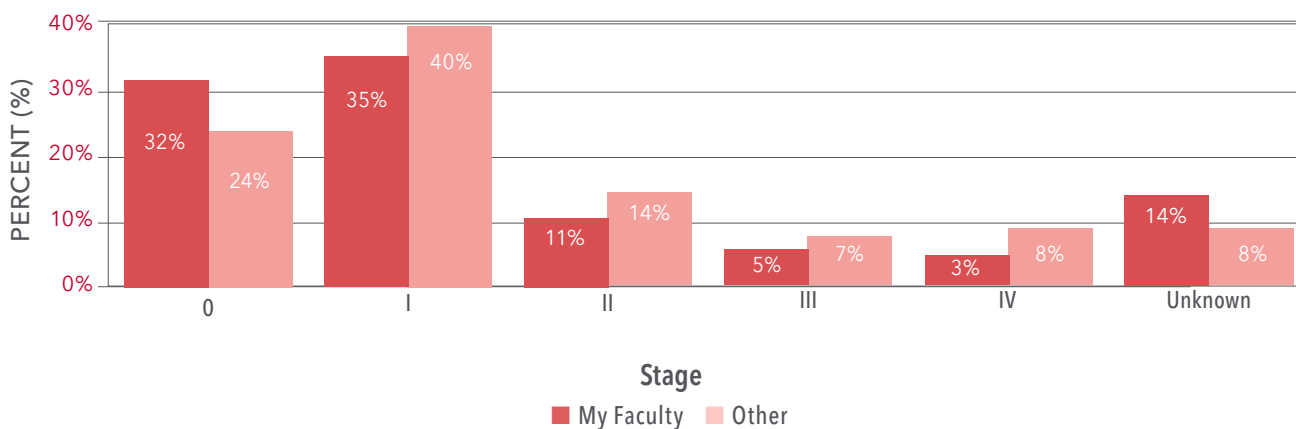
There are four main types of melanoma: superficial spreading, lentigo maligna, nodular and acral lentiginous. More than 70 percent of melanomas are superficial spreading type and about 60 percent harbor mutation in BRAF gene. Ocular melanomas also known as uveal melanomas and mucosal melanomas are distinct entities and are not the part of this report.

STAGING

The staging of melanoma is per the TNM criteria published by American Joint Committee on Cancer (AJCC). Generally, stage I and II melanomas generally involve only the skin and are differentiated by the depth of invasion. Stage III typically involving the lymph nodes and stage IV is when they metastasize to distant organs. Melanoma in situ is also known as stage 0 melanoma and is defined when the melanoma is very superficial and has not developed any vertical growth.

Stage of Melanoma of the Skin Cancer Diagnosed in 2011, 2012, 2013, 2014, 2015, 2016

Carle Foundation Hospital, Urbana IL vs. Comprehensive Community Cancer Program Hospitals in State of Illinois
Combination Class of Case 00 and Class of Case 10-14 -Data from 37 Hospitals



	0	I	II	III	IV	Unknown
My Facility	32%	35%	11%	5%	3%	14%
Other	24%	40%	14%	7%	8%	8%

AT OUR HOSPITAL MAJORITY OF THE MELANOMAS THAT WERE DIAGNOSED WERE EITHER STAGE 0 (MELANOMA IN SITU) OR STAGE I AS SHOWN IN THE DIAGRAM ABOVE. ABOUT 14 PERCENT PATIENTS DID NOT HAVE STAGING CAPTURED IN THE MEDICAL RECORDS.

TREATMENT

The mainstay of treatment of stage I-III melanoma is surgical excision. Wide local excision (WLE) is generally required which involves removing up to 2 cm of healthy tissue around the melanoma. Stage 0 melanoma or melanoma in situ is managed by complete surgical excision of primary site. Stage III involves removal of the primary tumor with WLE and removing the involved lymph nodes. Adjuvant treatment with immunotherapy or anti-BRAF therapy usually follows. For stage IV melanoma, immunotherapy with anti-PDL1 or anti-PD1 agents (such as nivolumab, pembrolizumab)

and anti-CTLA4 antibody (ipilimumab) are used. If BRAF mutation is present, a combination of BRAF/MEK inhibitors are utilized. The goals of treatment for stage IV melanoma are palliation of symptoms and to control the growth of cancer. Total eradication of cancer is possible but unlikely. With the advent of immunotherapy in melanoma, the survival of patients with stage IV melanoma has increased to about 45 percent to 55 percent at five years. Radiation therapy does not usually play a role in treatment for melanoma except for palliative intent in patients with metastatic disease especially to the brain.

First Course Surgery of Melanoma of the Skin Cancer Diagnosed in 2011, 2012, 2013, 2014, 2015, 2016

Carle Foundation Hospital, Urbana IL vs. Comprehensive Community Cancer Program Hospitals in State of Illinois
Combination Class of Case 00 and Class of Case 10-14 -Data from 37 Hospitals

	None; no surgery of primary site	Local tumor excision, NOS	Biopsy of primary tumor followed by a gross excision of the lesion	Wide excision or reexcision of lesion or minor (local) amputation with margins more than 1cm, NOS	Major amputation	Surgery, NOS	Unknown if surgery performed
My Facility	3%	7%	37%	52%	0%		0%
Other	9%	13%	25%	53%	1%	0%	0%

AT CARLE, THE MAINSTAY OF TREATMENT IS SURGERY FOR MELANOMA. SINCE MOST OF THE MELANOMA ARE SUPERFICIAL IN NATURE ON DIAGNOSIS, THE SURGERY IS THE PRIMARY MODALITY OF TREATMENT OFFERED. RADIATION AND CHEMOTHERAPY ARE NOT USUALLY DONE FOR SUPERFICIAL MELANOMA (DATA NOT SHOWN).

CONCLUSION

Melanoma is a very aggressive type of skin cancer that arises from melanocytes and is the fifth most common cancer in males and females. Ultraviolet rays exposure from sun is the most common risk factor. Most patients with melanoma present at an early stage, usually noted as an abnormal mole that changes size, shape and color. The standard treatment for superficial melanoma is surgical excision with wide margins which is generally curative for most of the patients. About 14 percent of patients were unstaged at our institution which is

slightly more than benchmark average. This difference may be due to inadequate data capturing and lack of manual entry of staging information in the medical records likely in stage III and stage IV melanoma. This likely does not translate in to substandard patient care. At Carle, the management of melanoma is standard and very comparable with the benchmark standards.



Cancer Registry

MISSION STATEMENT

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 1,400 cases.

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

	Requirement	Actual Rate
Reference Year (2008)	80%	91.04%
5 year (2013)	90%	93.30%

2019 Cancer Registry Staff	2019 Outsourced Registry Staff
Stephanie Grote, Cancer Conference Coordinator	Julie McClain, CTR
Sarah Glenn, MSN, RN, OCN, Quality Improvement Coordinator	Cassie Phillips, CTR
	Diane Fawley, CTR
	Tracy Potter, CTR
	Brandy Lewis, CTR

Commission on Cancer (CoC) Standards 4.7 & 4.8

COMMISSION ON CANCER STANDARD 4.7 QUALITY STUDY

Initiation of a plan of care quickly can help reduce fear and anxiety for patients, and increase patient satisfaction. The Carle Cancer Center and the Cancer Committee had some concerns about access to Medical Oncology and wanted to ensure that patients were seen for consult in a timely manner. Our Quality study for 2019 looked at access to care for patients needing a consultation with a medical oncologist. The Cancer Center’s target is to have those patients seen by the medical oncologist 10 working days or less after the referral is placed.

We wanted to measure each step of the process to determine if there were any opportunities for improvement. This included:

- The date the referral was placed by the initial provider
- The date the referring provider’s scheduler forwarded the referral
- The date the cancer center scheduler scheduled the appointment
- The date of the actual consultation

A review of every new internal consult was conducted, measuring the working days between each of the above mentioned steps, between January and September of 2019.

We found that the average time the referral order is placed to the time the referring provider’s scheduler forwards the referral was less than one day. The longest delay was 2.4 days, in January.

In addition, the average time from the referring physician office scheduler to our scheduler .7 days. The longest delay was also in January, at 1.8 days.

We saw the same issue for the time from the cancer center scheduler receiving the request to how long to get an appointment. The average was 6.8 days, but we saw significant delays in January and into February. For the most part, our target of 10 days or less was met; but you can see in January, when we have more physicians scheduled off, we were above our 10-day goal (Table 1). It is possible that we may see this issue again at the end of the year, as we have physicians scheduled off during the holidays.

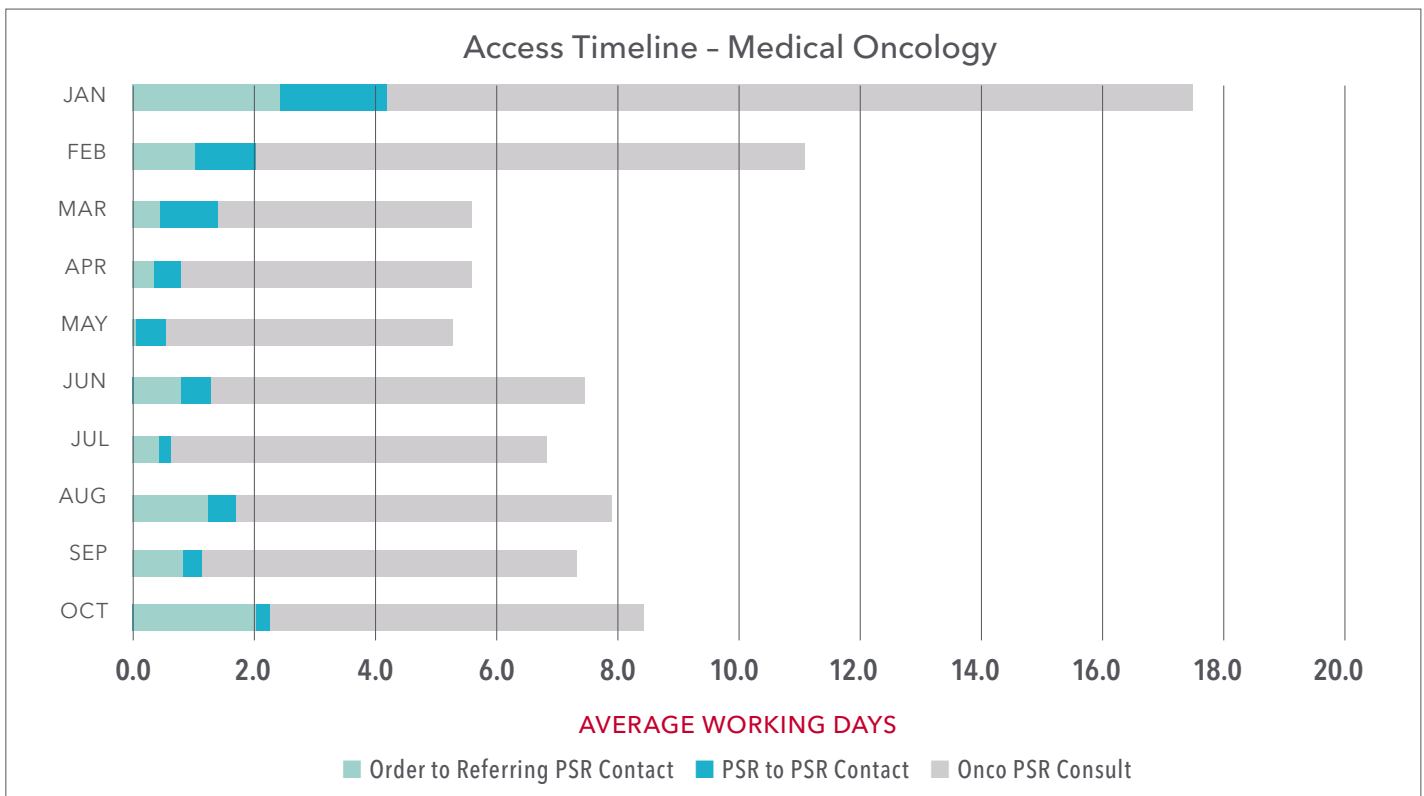


Table 1: Medical Oncology Access Timeline

Overall, the study showed that although we met our goal of 10 days or less from referral to consult, we clearly have some room for improvement. Our average time from initial referral to consult appointment is 8.4 days; however, there are many patients who are

not falling within the 10-day goal (see Table 2). No systemic or process issues were identified; the delays we experienced are directly related to physician staffing levels. We will continue to monitor access on a periodic basis.

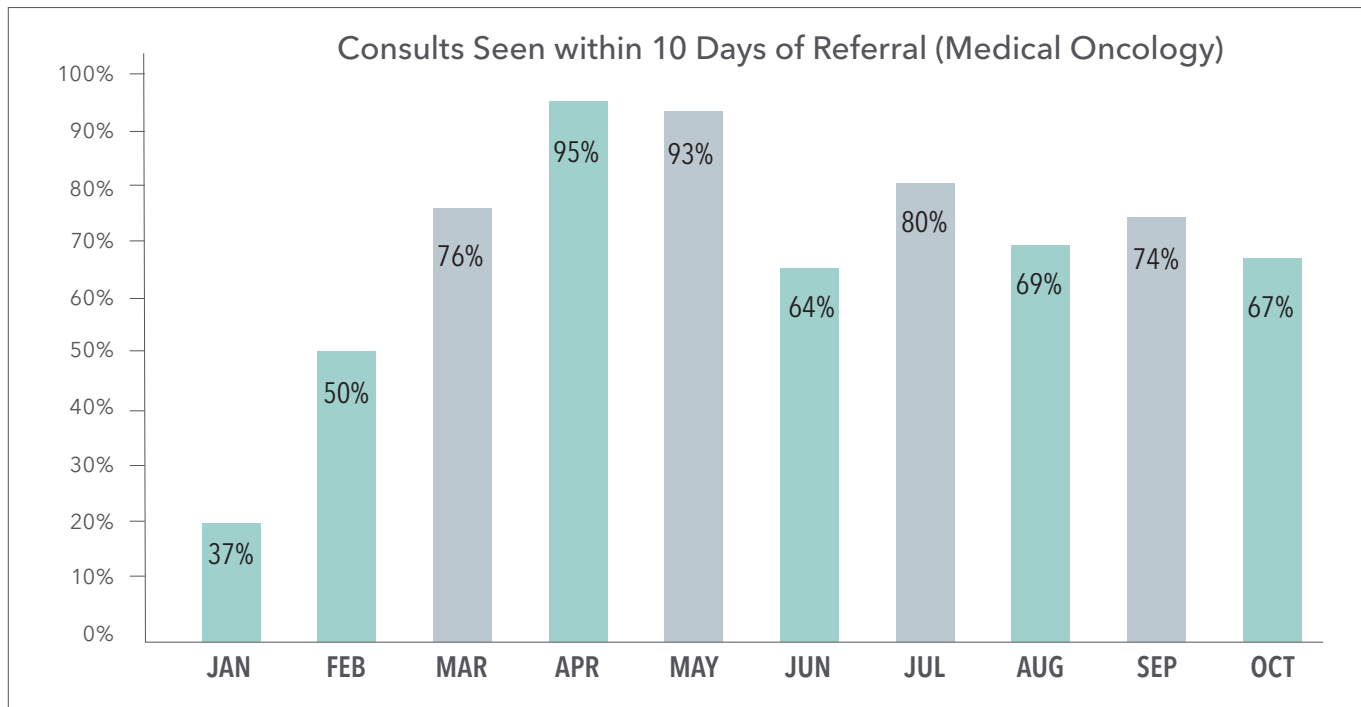


Table 2: Percent of Patients Seen for Consult 10 Days or Less from the Date of Referral

COMMISSION ON CANCER STANDARD 4.8 QUALITY IMPROVEMENT

The quality improvement for 2019 is a result of data we received from our quality study performed in 2018, measuring delays in treatment for patients receiving concurrent chemo/radiation. From the comprehensive study performed in 2018, we learned that the processes and tools used to coordinate appointments for patients with head and neck cancer needed improvement to maximize care in order to receive concurrent treatment with both chemotherapy and radiation therapy. In order for head and neck cancer patients to get the best results from treatment, it's imperative that when concurrent chemotherapy and radiation is ordered, both treatments start at the same time.

The 2018 study did not show many patients not starting treatments on the same day; however, that is mainly due to one or the other modality being held until the other was ready. That study identified three areas that could be improved:

- Consult appointments for Medical Oncology and Radiation Oncology were not coordinated.
- There was no good way to identify patients designated as needing concurrent treatment for medical oncology (using EPIC) and radiation oncology (using ARIA).
- There was no shared tracking tool or communication between medical and radiation oncology to ensure start times were aligned.

To address these issues, multiple improvement tools were put into place. These included:

- A new combined order set was created for referring physicians to order both medical and radiation oncology consults together. Instead of going to two different departments, this order is routed to Radiation Oncology, who in turn, ensures both the medical oncology and radiation oncology consults are scheduled within one week of each other.

- The CT simulation order was changed to include a mandatory check box to state whether the patient is planned for concurrent treatment.
- There was already an EPIC order in place to distinguish between a treatment regimen with radiation from one without radiation. The physicians were re-educated on the differences of these orders.
- A shared worklist was created identifying patients needing concurrent treatment that is used and monitored by the nursing staff.

The use of the improvement tools began in January 2019 with the hope of decreasing delayed consultations to either department. Just past the midway mark of this quality improvement, a barrier was discovered showing that providers were not using the newly created combined order set. The reset button was pushed and communication was sent to all involved providers regarding the availability of the combined order set and the importance of its use. In spite of that, 13 of 18 referrals to both medical oncology and radiation oncology were placed the same day.

The improvements put in place show that even without the use of the combined order set, patients are starting chemotherapy and radiation on the same day. Each improvement tool helps with the coordination of patient treatments at different points in their schedule which ensures the best coordination possible. Nine months of data shows that 17 out of 18 patients started their radiation and chemotherapy treatments the same day, with no manual intervention or delaying of one modality or the other (see Table 1). The one day delay in September was due to an unexpected change in physician orders at the last minute and it was in the best interest of the patient to start radiation one day sooner than chemotherapy.

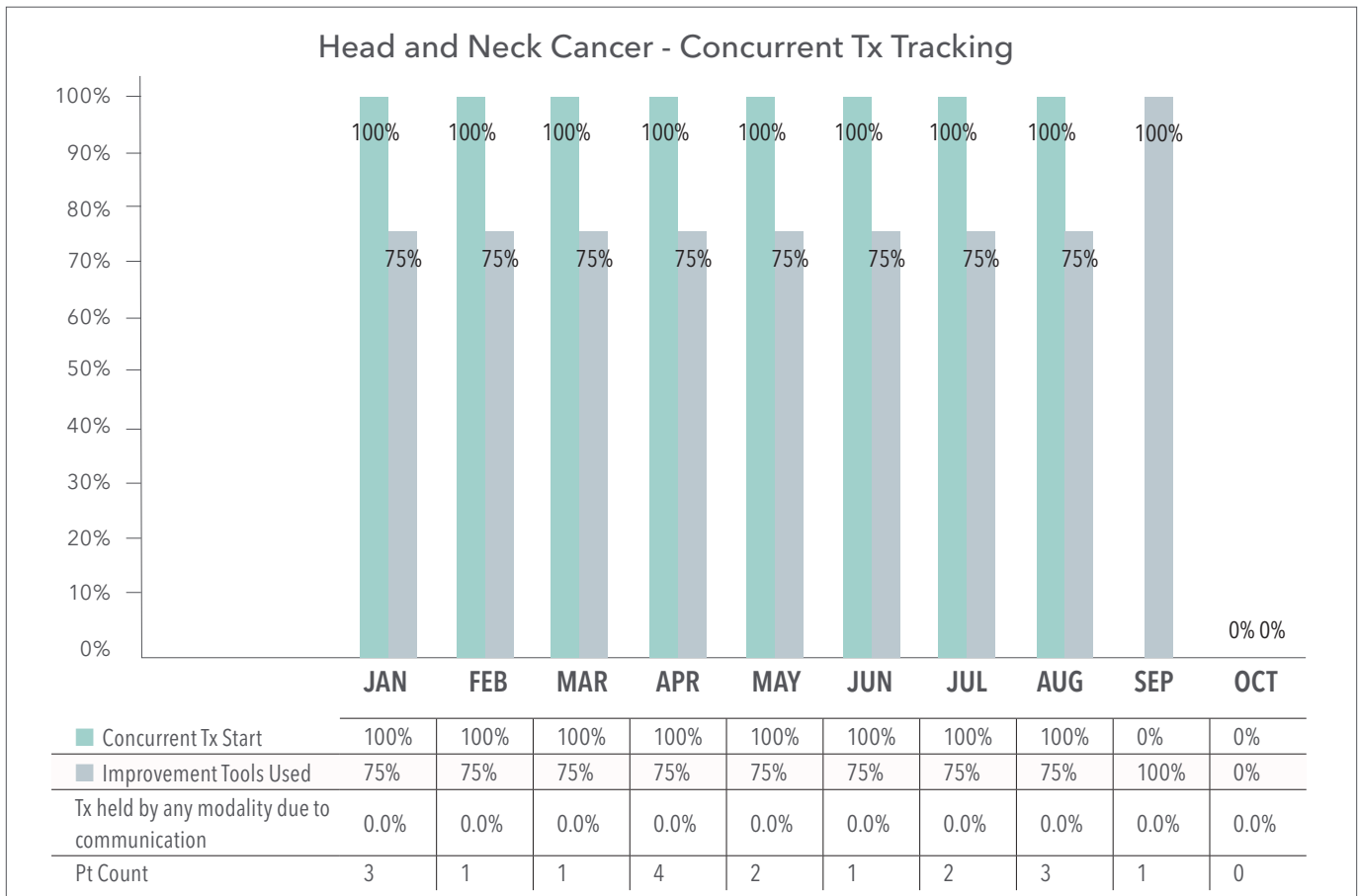
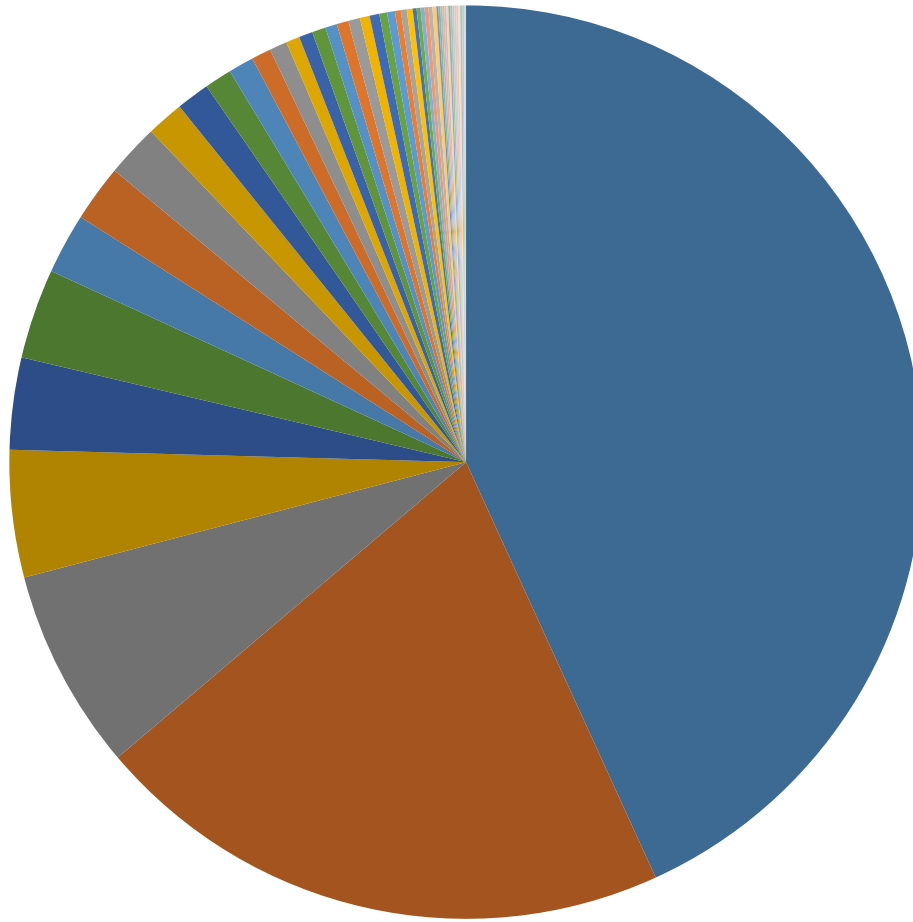


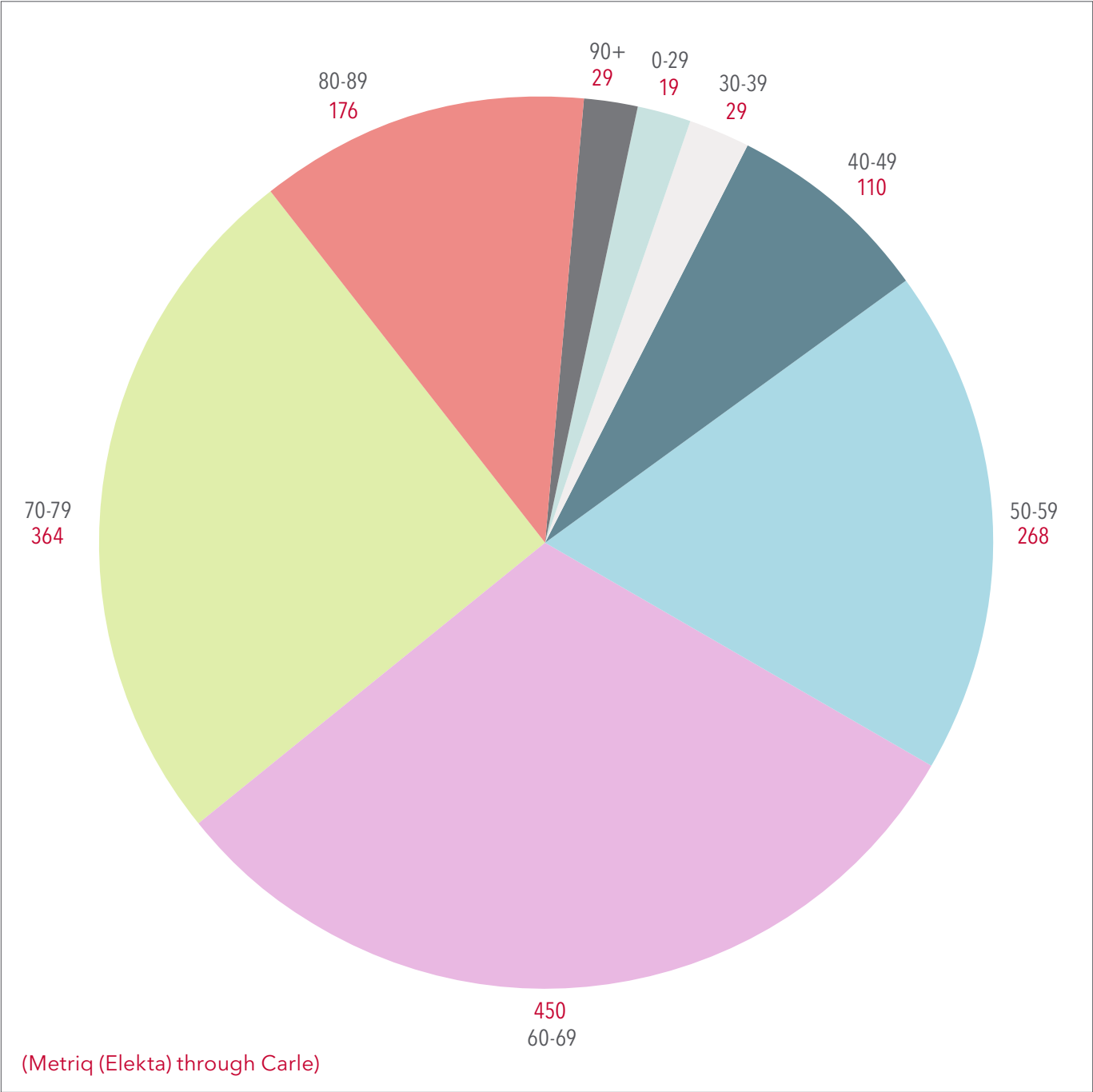
Table 1: Medical Oncology Access Timeline

Counties with new cases treated and/or diagnosed at Carle Facilities for 2018 (cont.)



- IL-Champaign
- IL-Vermilion
- IL-Coles
- IL-Douglas
- IL-Edgar
- IL-Iroquois
- IL-Piatt
- IL-Ford
- IL-McLean
- IL-Effingham
- IL-Crawford
- IL-De Witt
- IL-Cumberland
- IL-Jasper
- IN-Outside state/county code unknown
- IL-Clark
- IL-Peoria
- IL-Shelby
- IL-Kankakee
- IL-Lawrence
- IL-Richland
- IL-Macon
- IL-Moultrie
- IL-Sangamon
- IL-Tazewell
- IL-Christian
- IL-Clay
- IL-Knox
- FL-Outside state/county code unknown
- IL-Cook
- IL-Fayette
- IL-La Salle
- IL-Woodford
- IN-Fountain
- IL-Adams
- IL-Bureau
- IL-Edwards
- IL-Fulton
- IL-Madison
- IL-Montgomery
- IL-Outside state/county code unknown
- IL-Schuyler
- IN-Clark
- IN-Vermillion
- IN-Warren
- KY-Outside state/county code unknown
- OH-Outside state/county code unknown
- PA-Crawford
- TX-Outside state/county code unknown

Age at Diagnosis (In Years)



Summary of Body System and Sex Report

Males

Oral Cavity & Pharynx - 37 (6%)
 Lung & Bronchis - 88 (13%)
 Pancreas - 22 (3%)
 Kidney & Renal Pelvis - 46 (7%)
 Urinary Bladder - 49 (7%)
 Colon & Rectum - 62 (9%)
 Prostate - 148 (22%)
 Non-Hodgkin Lymphoma - 19 (3%)
 Melanoma of the Skin - 53 (8%)
 Leukemia - 36 (2%)

 All other sites - 126 (19%)



Females

Thyroid - 35 (4%)
 Lung & Bronchis - 91 (12%)
 Breast - 254 (33%)
 Kidney & Renal Pelvis - 21 (3%)
 Ovary - 19 (2%)
 Uterine Corpus - 76 (10%)
 Colon & Rectum - 64 (8%)
 Non-Hodgkin Lymphoma - 17 (2%)
 Melanoma of the Skin - 48 (6%)
 Leukemia - 6 (1%)

 All other sites - 150 (19%)

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(Metriq (Elekta) through Carle)

