2014 Cancer Program Annual Report
With 2013 Cancer Registry Data
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This report features data and information regarding cancers diagnosed and treated at the Orange Coast Memorial Medical Center, with a special focus on colorectal cancer. Designed for physicians and interested patients, this information demonstrates the patient-centered, high-quality approach to care that Orange Coast Memorial patients receive.
The quest for discovery of effective treatment options and/or cures to various cancers may have appeared unimaginable to the public - or elusive to say the least - in years past, but dedicated oncology specialists have witnessed as many advances in cancer treatment in the past five years as we have seen in the past 50 years of research and exploration. While there are an inordinate number of cells types in various cancer sites, there are equally a vast network of creative solutions to addressing the needs of cancer patients through innovative programs and services. This annual report will highlight Orange Coast MemorialCare Cancer Institute’s response to the call for providing compassionate cancer care that addresses the needs of our patients in surrounding communities.

Even though each cancer program in the United States has a customized response to serving patients facing this insidious disease, there are common threads in trends that emerge for all cancer programs across the nation. A recent (January 17, 2013) Becker’s Hospital Review report noted the following trends in hospitals’ cancer programs:

- More outpatient based care
- Focus on patient-centered care
- Personalized medicine and individualized care
- Greater awareness and focus on reducing costs, while maintaining quality
- More focus on outcomes
- Care coordination through the use of technology such as electronic health records
- Greater emphasis on supportive services and complementary care—psychosocial, spiritual, and nutritional services to name a few
- Coordinated cancer services, with support through navigation programs
- Enhanced survivorship programs
- Palliative care services/end-of-life care
- Educational opportunities for patients

With emerging ethno-demographics on a national basis, various national agencies and accreditation programs (The Joint Commission, the National Cancer Institute, American Cancer Society, etc.) have noted the need for more culturally relevant/competent programs and services to meet the changing fabric of diversity within the US. This trend has been particularly palpable in the Orange Coast Memorial service area—especially among our featured primary site review for colorectal cancer. In addition, our care delivery experience has been aligned with national trends demonstrated in the membership survey findings for community cancer centers through the Association of Community Cancer Centers (ACCC). The majority of respondents also highlighted the following features - not all inclusive - among its most recent 2014 findings:

- Cancer programs proactively developing their own guidelines to help measure and track quality of care
- The demand for patient-centered care - palliative care, clinical trials, patient navigation, survivorship programs, genetic counseling, etc. - remains strong
- Financial advocacy and financial assistance services within cancer centers is thriving

The following table illustrates the MemorialCare Cancer Institute at Orange Coast Memorial Medical Center’s performance over 2014 in key trending areas:
<table>
<thead>
<tr>
<th>TREND</th>
<th>IMPACT</th>
<th>GROWTH OPPORTUNITY</th>
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<tbody>
<tr>
<td><strong>Outpatient Care</strong></td>
<td>Growing volume/revenue in most outpatient diagnostics and procedures</td>
<td></td>
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<tr>
<td><strong>Personalized Medicine</strong></td>
<td>Well-established genetic counseling</td>
<td>Opportunities for targeted therapies through clinical trials</td>
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<tr>
<td><strong>Care Coordination – Technology</strong></td>
<td>Baseline pilot survivorship care plan to interface with CNExT for breast cancer patients</td>
<td>Explore use of EPIC system in implementing distress thermometer on inpatient unit and infusion center</td>
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<tr>
<td><strong>Coordinated Cancer Services</strong></td>
<td>Well-established care coordination and navigation services in breast and thoracic programs</td>
<td>Build upon baseline performance of thoracic patient navigation to consider other sites</td>
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<td><strong>Supportive &amp; Complementary Services</strong></td>
<td>Great reach through oncology social worker; integration of chaplaincy support; outpatient nutritional services; ACS Information Center classes</td>
<td>Development of Community Resources Guide with readily available contacts/phone numbers to support patients with financial assistance, transportation, and other needs</td>
</tr>
<tr>
<td><strong>Greater Awareness of Cost</strong></td>
<td>Ongoing financial analysis by Oncology Business Development Team of tumor sites/patient care settings</td>
<td>Development of business plans for each priority tumor site/cancer program</td>
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<td><strong>Patient-Centered Care</strong></td>
<td>Exponential growth in palliative care consults/notary services; dedicated clinical coordinator on research team for medical center; patient navigator for thoracic program; integrated genetic counseling within health system; outpatient nutritional counseling program; specialty physical therapy programs - lymphedema, cancer rehabilitation, “pre-hab” services for patients prior to chemotherapy; ACS Information Center - wig, hat, prosthetic banks</td>
<td>Develop survivorship care program; more culturally relevant outreach for select tumor sites - Latino, African American, Vietnamese and other Asian populations</td>
</tr>
<tr>
<td><strong>Enhanced Survivorship Programs</strong></td>
<td>Well-established support groups for various cancer sites - breast, prostate, etc.</td>
<td>Growing need/opportunity to work with community partners in developing survivorship clinics/educational events on topics such as: fatigue, sleep disorders, cognitive function, endocrine issues, sexual health after cancer, bone health, neuropathy, anxiety and depressive symptoms, etc.</td>
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<tr>
<td><strong>Palliative Care/End-of-Life Care</strong></td>
<td>High growth experience at OCMMC</td>
<td>Consider additional support to team - Nurse Practitioner</td>
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<tr>
<td><strong>Educational Opportunities</strong></td>
<td>Extensive community outreach - high impact in the Vietnamese community</td>
<td>Targeted education to special populations - Vietnamese, Latino, and African American on topics in breast and colorectal health through collaborative community efforts with partners</td>
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<tr>
<td><strong>Increased Focus on Outcomes</strong></td>
<td>NAPBC 3-year Full Accreditation</td>
<td>Opportunities for comparative effectiveness studies - which</td>
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The reach and impact of the MemorialCare Cancer Institute team extends well beyond the walls of the medical center and is evidenced at an international level, through voluntary professional society involvement of team members, published works, presentations at conferences, advisory committees, boards, political and media arenas, etc., all the way to the bedside with the evolving embrace of the Palliative Care program by physicians, allied health providers, patients, and families. As we express our commitment to cancer care in unique and diverse ways, our common thread is alignment with trends in care, commitment to an integrated health system network—particularly in research development, engagement of a growing network of community partners, steadfast adherence to fulfilling/exceeding regulatory and accreditation standards and requirements, and stellar multidisciplinary care and planning through consistent participation by all subspecialists, allied health professionals, and sometimes community partners in tumor boards, committees, and special meetings to advance the cancer programs and services at Orange Coast Memorial Medical Center.

The philanthropic support that has been shown to us through key community-based organizations such as the American Cancer Society, the Community Cancer Advisory Council, the Jodi Ferragamo Foundation, the Vietnamese American Cancer Foundation, and employee contributions to the OCMMC Foundation have been a major lifeline to our continued growth and expansion at the Cancer Institute.

Signature events such as Fall Festival for Life, March for Hope, and Fight with Grace have brought tremendous value and support to patients needing help with the alleviation of barriers to accessing our compassionate care. The next major milestones on our journey will, undoubtedly, be funded with the support of interested partners from a vast network of medical and allied health professionals, community, and patient partners. We welcome you forming these critical footprints with the MemorialCare Cancer Institute on its evolving quest for “Excellence in Health Care - Exceptional People. Extraordinary Care. Every Time.”

In partnership,

Julio A. Ibarra
## Orange Coast Memorial Cancer Institute
### 2014 Cancer Committee Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Role</th>
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<tbody>
<tr>
<td>Thomas Asciuto, MD</td>
<td>Pulmonary Medicine, Medical Director, Critical Care and Pulmonary Services</td>
</tr>
<tr>
<td>Cindy Callaghan</td>
<td>Director, Imaging Services and Breast Center</td>
</tr>
<tr>
<td>Lynne Daniels, LCSW</td>
<td>Oncology Psychosocial Coordinator</td>
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<tr>
<td>John Fenger</td>
<td>Manager, Rehabilitation Services</td>
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<tr>
<td>Deborah Fridman, RN, MS</td>
<td>Research Program Director, Todd Cancer Institute</td>
</tr>
<tr>
<td>Asif Harsolia, MD</td>
<td>Radiation Oncology</td>
</tr>
<tr>
<td>Stan Hill, PharmD</td>
<td>Director, Pharmacy</td>
</tr>
<tr>
<td>Erin Hotra-Shinn</td>
<td>Vice President, Strategy &amp; Business Development</td>
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<tr>
<td>Julio Ibarra, MD</td>
<td>Chair, Cancer Committee</td>
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<tr>
<td>Jack Jacoub, MD</td>
<td>Cancer Liaison Physician, Medical Director, Thoracic Oncology Program</td>
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<tr>
<td>Jamie Jernigan, CTR</td>
<td>Cancer Registrar</td>
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<tr>
<td>Jane Kakkis, MD</td>
<td>Medical Director, Surgery OCMBC, General Surgery</td>
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<tr>
<td>Barbara Kingsbury, RN</td>
<td>Oncology Nurse Educator</td>
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<tr>
<td>Marie M. La Fargue, MPH</td>
<td>Director, Oncology Programs</td>
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<tr>
<td>Tam Le, MD</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Thunga Le</td>
<td>Vietnamese Relations Coordinator</td>
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<tr>
<td>Jeanne McCullough, RN, BSN</td>
<td>American Cancer Society, Health Systems Manager, Hospitals</td>
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<tr>
<td>Jenny Mendola, MSN, RN, OCN</td>
<td>Director, Oncology Services</td>
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<tr>
<td>Bichlien Nguyen, MD</td>
<td>Medical Director, Research, OCMBC, Medical Oncology</td>
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<tr>
<td>Joanne O’Heany</td>
<td>Director, American Cancer Society Information Center</td>
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<tr>
<td>Robin Phillips, RN, MS, BSN</td>
<td>Nurse Navigator</td>
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<tr>
<td>Ajmel Puthawala, MD</td>
<td>Radiation Oncology</td>
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<tr>
<td>Emily Randle</td>
<td>Chief Operating Officer</td>
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<tr>
<td>Jessica Rayhanabad, MD</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Richard Reitherman, MD</td>
<td>Medical Director, Imaging, OCMBC, Radiology</td>
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<tr>
<td>Julie Rothermich</td>
<td>Clinical Research Coordinator</td>
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<tr>
<td>Homayoon Sanati, MD</td>
<td>Medical Director, Breast Center, Medical Director, Palliative Care Program</td>
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<tr>
<td>Chris Shinar, PharmD</td>
<td>Executive Director, Performance Improvement/Patient Safety</td>
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<tr>
<td>Suellen Skow</td>
<td>Administrative Assistant, Oncology</td>
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<tr>
<td>Trish Stines, CTR</td>
<td>Cancer Registry Coordinator</td>
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<tr>
<td>Dale Vital, RN, BSN, MBA</td>
<td>Vice President Nursing, Chief Nursing Officer</td>
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<tr>
<td>Collin Vu, MD</td>
<td>Medical Oncologist</td>
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<tr>
<td>Richard Wasley, MD</td>
<td>Director Radiology, Chair, QA/QI Committee</td>
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<tr>
<td>William Wells</td>
<td>Chaplain</td>
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<tr>
<td>Diane Woods, RN</td>
<td>Breast Center Nurse Coordinator</td>
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A Message from the Director of Oncology Programs
Marie M. La Fargue, MPH

Vision painted well outside the lines of what is standard and customary, partnership, resourcefulness, and benevolence will be important tools to shaping the next building blocks of growth at MemorialCare Cancer Institute. With the demand for patient-centered, culturally competent, personalized medicine - in an accountable and transparent manner and delivered with focus on mind-body-spirit healing - the cancer patient journey requires well-coordinated and navigated services from prevention of disease and death to end-of-life care. This new paradigm in care delivery promotes nurturing a relationship with patients and empowering them to make decisions about their care based on evidence-based research and outcomes through clinical trials and other effective treatment options. The overarching theme and goal is ushering patients to a solid place of survivorship and optimal quality of life.

According to the American Cancer Society in its 2014-2015 Cancer Treatment & Survivorship Facts & Figures report, by January 1, 2024 it is estimated that the population of cancer survivors will increase to almost 19 million - 9.3 million males and 9.6 million females. It is through passion, dedication, adherence to quality standards, and alignment with cancer center trends that we witness cancer programs such as MemorialCare Cancer Institute at Orange Coast Memorial fuel the blaze of survivors that is spreading with a “thriving spirit” of hope across this nation. How have we helped to spark this passionate fire for many of our patients? It starts with realizing that there are names and faces behind the numbers that we see in the cancer registry case accessions per year. While we have analyzed stellar growth, improved staging, and increased survival in some tumor sites, we must remain diligent in solving puzzles as to why certain tumor staging/survival performance escapes our reach and ability to achieve more successful outcomes. In addition, we must sometimes step outside of our comfort zone and be willing to forge new trends and pathways as opposed to watching and waiting for the next wave of change.

In reviewing our 2013 analytic cases, we chose to focus our impact over the coming years on colorectal cancer. According to the National Cancer Institute, colorectal cancer is the third most common non-skin cancer in both men and women. It is the second leading cause of cancer-related mortality in the United States. In a 2005 report titled “Cancer Services: Capturing the Outpatient Opportunity,” Sg2 Healthcare Intelligence noted that colon cancer is strongly correlated with an aging population in the United States. In fact, breast, prostate and colorectal cancer will increase cancer prevalence. When you see the trend of rising incidence and decreasing mortality, this leads us to the emerging state of increased prevalence.

Many national organizations and health promotion projects - Healthy People 2020, the National Cancer Institute and the American Cancer Society - have promoted the implementation of guidelines for evidence-based screening for cervical, colorectal and breast cancer through the use of screening tests. Monitoring the incidence of invasive cancer (cervical and colorectal) and late-stage breast cancer - which are intermediate markers of cancer screening success - is highly effective with the following tools:

- Breast Cancer (using mammography)
- Cervical Cancer (using Pap tests)
- Colorectal Cancer (using fecal occult blood testing, sigmoidoscopy, or colonoscopy)

What is most alarming, according to the American Cancer Society, is that while the use of recommended colorectal cancer screening tests can both detect cancer earlier and prevent colorectal cancer through the detection and removal of precancerous polyps, only 59% of men and women 50 years of age and older actually receive colorectal cancer screening according to the established guidelines. This pattern of underutilization rests in barriers to access such as psychological, financial, cultural, and others. Our role as a cancer program is to not perceive these populations as “difficult to reach,” but rather exercise more creativity and collaboration in embracing them. Over the next year, the MemorialCare Cancer Institute will partner with the Vietnamese American Cancer Foundation and other grassroots organizations to reach special populations (including
A Message from the Director of Oncology Programs
Marie M. La Fargue, MPH

African-American and Latino) in a culturally relevant manner with targeted awareness, education and screening events. This “stretch” goal is essential because, even though we have witnessed a drop in colorectal cancer incidence and mortality rates over past decades - largely due to increased use of screening tests - there remains a challenge in higher incidence and mortality rates among American Indians/Alaska Natives (highest incidence and mortality rates) and African Americans. It is also one of the top five cancers for Vietnamese Americans by mortality in both men and women.

And just as we have faced challenges in better understanding the nuances and special needs of some cultures, we have also experienced changes in the culture of medicine and a paradigm shift in the practice of treating colorectal cancer. As survival rates for metastatic colon cancer have gone up, surgery rates for primary tumor resection (PTR) for advanced stages of this disease have substantially fallen over the past two decades. Patients with advanced colorectal cancer underwent surgery less often than they did 20 years ago, while relative survival rates grew during the same period.

This shift is due to the availability of more treatment options - chemotherapy and biological therapy, as well as emerging technologies in radiation therapy. The FDA has approved several systemic and biological chemotherapeutic agents since 2000, but, despite adding these more effective chemotherapeutic options to the colorectal cancer armamentarium, physicians at major academic medical centers such as MD Anderson and others have noted that there are still far too many patients undergoing PTR. This might suggest that current treatment practices lag behind evidence-based treatment guidelines. At MemorialCare Cancer Institute we hope to conduct our own comparative effectiveness analyses to determine if we still have more work to be done in translating evidence supporting new treatment options with health care decisions in clinical practice for colorectal and other cancers. Our integration with the Memorial Health System Research team is the critical linchpin in ensuring progress in this area and improving clinical and patient experience outcomes over time.

The horizon paints a clear and vivid picture for MemorialCare Cancer Institute. Through collaboration and relationship building with payers, physicians, patients, and our most precious resource - the multidisciplinary team of people who make the Cancer Institute thrive on a daily basis - we will lift up from aligning with trends to raising the bar as trailblazers.

In search of the perfect cancer care experience,

Marie M. La Fargue, MPH
Cancer Liaison Physician Report  
Jack Jacoub, MD

The role of the Cancer Liaison Physician is to spearhead CoC initiatives within Orange Coast Memorial’s cancer program; collaborate with local agencies, such as the American Cancer Society; and to facilitate quality improvement initiatives utilizing data submitted to the Commission on Cancer’s National Cancer Database. These functions are aligned with the goals of all the physician and ancillary members of our cancer program who collaborate to eliminate cancer and to reduce the burden it places on our patients, their loved ones and our communities.

Early Detection and Prevention through Education and Screening:
We are committed to providing education on cancer prevention and early detection. Our focus is to increase awareness about the warning signs of cancer and to provide access to regular, free cancer screenings. Through our involvement in community wellness programs, individual counseling and support, and offering information to make lifestyle changes which may help to reduce the risk of a cancer diagnosis, we make clear our dedication to lessening the effects of cancer on our community.

2014 Prevention, Screening & Education Events
- Vietnamese Prostate Cancer Screening held in February where 82 men received PSA and digital rectal screening examinations. 13 men had suspicious findings.
- Orange Coast co-hosted two Hepatitis Screening events with the Vietnamese American Cancer Foundation in October & November with over 600 community members screened.
- Vietnamese Clinical Breast Examination Workshop including consultations with Dr. Bichlien Nguyen held in February, July and November with a total of approximately 150 women screened.
- Mix, Mingle & Mammography, an education event including a tour of Orange Coast Memorial Breast Center, was held in October in honor of Breast Cancer Awareness month.
- Skin Cancer Screening was held in June and November with 187 community members screened.
- Prostate Cancer Screening was held in September and 32 men received PSA and digital rectal screening examinations. Six men had suspicious findings.
- Smoking Cessation classes were held in January-February, March-May, and May-June.
- Vietnamese Community Health Fair at Garden Grove Community Center with approximately 300 attendees.
- Education on early detection and screening offered via our community lectures including the Senior Lecture Series and the Vietnamese Lecture Series.

Survivorship & Community Outreach:
We are proud of the quality, comprehensive services that we offer to our patients and families during the diagnosis and treatment of cancer and the continued surveillance and support offered after the completion of definitive treatment. In 2014, approximately 3,000 members of our community participated in monthly support group meetings and community outreach activities at Orange Coast Memorial Medical Center.

2014 Community Outreach and Survivorship Events
- Orange Coast Memorial Medical Center enjoys a strong relationship with the American Cancer Society. Joanne O’Heany, Director of the ACS Information Center, and Jeanne McCullough, R.N., B.S.N., Health Systems Manager, Hospitals, are both active member of our Cancer Committee.
- On-site American Cancer Society Information Center at the Orange Coast Patient Care Pavilion, which serves as a resource library that includes brochures, newsletters and videotapes on a variety of cancer related topics, including clinical trials, and also houses a wig and prosthetics bank. Volunteers facilitate the “Look Good Feel Better” program.
- We continue to actively sponsor and participate in the American Cancer Society’s “Relay for Life”. This year’s event was held at Fountain Valley High School on May 17th and 18th, 2014. Orange Coast efforts were led by Lynne Daniels, L.C.S.W.
A team of approximately 150 members represented Orange Coast Memorial Medical Center at this year’s Susan G. Komen “Race for the Cure” on September 28, 2014.

The Community Cancer Advisory Council for the Cancer Institute planned and coordinated the third annual “Fall Festival for Life”, a survivors’ celebration/health fair to provide education to the community on cancer services available at OCMMC. The “Fall Festival for Life” was held on November 8, 2014, over 120 volunteers and physicians were on hand to greet and educate approximately 500 community members.

Our third annual “March for Hope” was held on March 16, 2014 at the Center Club. This event is a collaborative effort of the Community Cancer Advisory Council and Orange Coast Memorial physicians, nursing and ancillary staff. Monies are raised to meet the unfunded needs of our patients during their journey with cancer.

Support Groups: “The Journey” is a support group for women at any stage of the breast cancer experience, female family members and friends. “Women in Treatment” (WIT) is a special group for women currently undergoing treatment for cancer. The prostate cancer support group provides supportive discussion and educational information for prostate cancer patients, family members and friends. “Support Connection” is a general cancer support group. “Bereavement/Transitions” group provides support to adults who have recently lost a loved one to cancer. The Yoga and Cancer group utilizes yoga in the healing process. Yoga instruction provided free of charge.

Commission on Cancer (CoC) Accredited Cancer Program & National Cancer Data Base

Cancer programs that are accredited by the Commission on Cancer submit their institution’s cancer data to a national cancer data base known as the NCDB. This allows a facility to look at its treatment of cancers by stage and site and compare themselves to the national and state treatment averages. The NCDB has developed Cancer Program Practice Profile Reports (CP3R) that look at specific quality of care indicators for the major cancer sites.

The following primary site report on colon cancer includes outcomes for the two colon cancer measures of the National Quality Forum (NQF) adopted by the Commission on Cancer.

This year the cancer program at OCMMC has also begun participating in the Commission on Cancer’s Rapid Quality Reporting System (RQRS). RQRS is a reporting and quality improvement tool which provides real clinical time assessment of hospital level adherence to National Quality Forum (NQF)-endorsed quality of cancer care measures for breast and colorectal cancers.

RQRS was developed to assist Commission on Cancer-accredited cancer programs in promoting evidenced-based cancer care at the local level. It is a web-based, systematic data collection and reporting system that advances evidenced-base treatment through a prospective alert system for anticipated care which supports care coordination required for breast and colorectal cancer patients at participating cancer programs.
Colorectal cancer is the third most frequently diagnosed cancer in the United States. It is estimated that 136,830 new cases of colon cancer will be diagnosed in 2014. The graph below shows the new colon and rectal cancer cases diagnosed at the Orange Coast Memorial Medical Center over the past five years.

According to the American Cancer Society, the number of new colon and rectum cancer cases has declined over the past two decades, largely due to colorectal cancer screening efforts which help to detect cancer and remove precancerous polyps.

Early stage colorectal cancer is usually asymptomatic; therefore, screening is necessary to detect these cancers at an early stage. Orange Coast Memorial Medical Center promotes community education, screening via colonoscopy, and prevention of colorectal cancer for the members of our community. The risk of colorectal cancer increases with age; 91% of cases are diagnosed in persons age 50 or older. The graph below shows our patients’ age at diagnosis in 2013. When comparing our age distribution with other accredited hospitals in California and the United States, per data from the National Cancer Data Base (NCDB), we had less patients diagnosed at ages 50-69 and more over the age of 70. See graph below.
Colon Cancer Risk Factors

- Age - colon cancer is more common in people over 50 years old
- Family history of colorectal cancer or polyps
- Inherited disorders such as hereditary nonpolyposis colorectal cancer (HNPCC or Lynch) syndrome or familial adenomatous polyposis (FAP)
- Race or ethnic background: American Indians/Alaska Natives, African Americans and Jews of Eastern European descent (Ashkenazi Jews) are at higher risk
- Inflammatory bowel disease (Crohn’s disease or chronic ulcerative colitis)
- Colorectal cancer or polyps
- Obesity
- Lack of exercise
- Eating a lot of red meat, processed meats or meats cooked at very high heat
- Type 2 Diabetes
- Cigarette smoking
- Drinking too much alcohol

For patients who are concerned about inherited family syndromes that cause colon cancer, we offer risk assessment and genetic testing/counseling at Orange Coast Memorial Medical Center.

Colon Cancer Prevention

Certain lifestyle choices may decrease your chances of getting colon cancer:

- Have regular screening tests
- Stay at a healthy weight
- Exercise regularly
- Eat a healthy diet with lots of fruits and vegetables
- Avoid cigarettes
- Drink alcohol only in moderation
Primary Site Report: Colorectal Cancer at Orange Coast Memorial Cancer Institute

90% 5-YEAR SURVIVAL RATE IF FOUND AT THE LOCAL STAGE

40% DIAGNOSED AT AN EARLY STAGE PARTLY DUE TO LOW TESTING RATES

STAGES OF COLORECTAL CANCER

POLYP
Most colorectal cancers develop from these noncancerous growths.

IN SITU
Cancer has formed, but is not yet growing into the colon or rectum walls.

LOCAL
Cancer is growing in the colon or rectum walls; nearby tissue is unaffected.

REGIONAL
Growth is into tissue or lymph nodes, beyond the colon or rectum walls.

DISTANT
Cancer has spread to other parts of the body, such as the liver or lungs.

IF YOU'RE 50 OR OLDER, TALK TO YOUR DOCTOR ABOUT GETTING TESTED

TYPE OF SCREENING TEST	PROS	CONS
Flexible Sigmoidoscopy
Blind tube inserted through the rectum into the colon. Provides visual exam of rectum and lower part of colon.
- Fairly quick
- Sedation usually not used
- Does not require a specialist
- Doesn't view upper part of colon
- Can't see or remove all polyps
- Colonoscopy needed if abnormal

Colonoscopy
Direct exam of colon and rectum. Polyps removed if present. Required for abnormal results from other tests.
- Can usually view entire colon
- Can biopsy and remove polyps
- Done every 10 years
- Costs more than other tests
- Higher risk than other tests
- Full bowel preparation needed

Double-Contrast Barium Enema
X-ray exam of colon. Barium sulfate is put in through the rectum and spreads throughout the colon.
- Can usually view entire colon
- Relatively safe
- No sedation needed
- Can miss small polyps
- Can't remove polyps during test
- Full bowel preparation needed

CT Colonography
Detected, cross-sectional, 2-D or 3-D views of the colon and rectum with an x-ray machine linked to a computer.
- Fairly quick and easy
- Can usually view entire colon
- No sedation needed
- Still fairly new test
- Can't remove polyps during test
- Full bowel preparation needed

Fecal Occult Blood Test / Fecal Immunochromatographic Test
Can detect blood in stool caused by tumor or polyp. Health care provider gives patient a home kit.
- No direct risk to the colon
- No bowel preparation
- Sample done at home
- Colonoscopy needed if abnormal
- May miss some polyps/cancers
- Should be done every year

Stool DNA Test
Looks for certain DNA changes from cancer or polyp cells. Health care provider has kit sent to patient.
- No direct risk to the colon
- No bowel preparation
- Sample done at home
- Colonoscopy needed if abnormal
- May miss some polyps/cancers
- Should be done every 3 years

* For average-risk individuals with no symptoms, testing should begin at age 50. If you are at increased risk or are experiencing symptoms, speak to your doctor right away.

Symptoms include: Rectal bleeding, blood in the stool, dark- or black-colored stools, change in shape of stool, lower stomach cramping, unexplained weight loss.
Stage I tumors have spread beyond the inner lining of the colon to the second and third layers and involve the inside wall of the colon. The cancer has not spread to the outer wall of the colon or outside the colon. Standard treatment involves surgery to remove the cancer and a small amount of tissue around the tumor. Additional treatments are not usually needed. Aggressive surgery to remove all of the cancer offers a great potential for cure. The five-year survival rate for stage I colorectal cancer is 93% according to the American Cancer Society.

Stage II colorectal cancers are larger and extend through the muscular wall of the colon, but there is no cancer in the lymph nodes. Standard treatment is surgical removal of the cancer and an area surrounding the cancer. Chemotherapy, as a precaution against cancer recurrence, is usually restricted to persons with high-risk disease, as the advantages of chemotherapy in this stage of colon cancer are minimal. An oncologist should help in making the decision as to whether chemotherapy is necessary for stage II colon cancers. The five-year survival rate for stage II colon cancer is 78%.

Stage III colorectal cancers have spread outside the colon to one or more lymph nodes. Treatment involves surgery to remove the tumor and all involved lymph nodes if possible. After surgery, the patient will receive chemotherapy, usually with 5-FU, leucovorin and oxaliplatin, capecitabine with oxaliplatin or capecitabine alone. Radiation may be needed if the tumor is large and invading the tissue surrounding the colon. The five-year survival rate for stage III colon cancer is about 64%. Patients with one to four positive lymph nodes have a higher survival rate than people with more than five positive lymph nodes.

Stage IV colorectal cancers have spread outside the colon to other parts of the body, such as the liver or the lungs. The tumor can be any size and may or may not include affected lymph nodes. Treatment may include: Removal of the cancer surgically or another surgical procedure to bypass the colon cancer and resect healthy colon (an anastomosis); surgery to remove parts of other organs such as the liver, lungs, and ovaries, where the cancer may have spread; chemotherapy to relieve symptoms and improve survival; Erbitux, Avastin, or Vectibix in combination with standard chemotherapy, depending upon tumor characteristics; clinical trials of new chemotherapy regimens, or immunological therapy; radiation to relieve symptoms. The five-year survival rate for stage IV colon cancer is nearly 8%.
Primary Site Report: Colorectal Cancer at Orange Coast Memorial Cancer Institute

As a Commission on Cancer-Approved cancer program, Orange Coast Memorial Medical Center submits data to the National Cancer Data Base. The Commission on Cancer has adopted two colon cancer measures of the National Quality Forum (NQF).

**NQF National Standard: Adjuvant Chemotherapy for Node Positive Patients.** Adjuvant chemotherapy is considered or administered within 4 months (120 days) of diagnosis for patients under the age of 80 with AJCC Stage III (lymph node positive) colon cancer. The graph below shows Orange Coast Memorial Medical Center’s Cancer Registry has documented administration of adjuvant chemotherapy in 92% of stage III colon cancer patients. This percentage is above the California and national averages for 2012. See above graph.

![NQF Standard: Chemotherapy Considered or Administered Stage III (Lymph Node Positive) Colon Cancer](chart1)

**NQF National Standard: Regional Lymph Nodes in Surgically Resected Patients.** At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer. Orange Coast Memorial Medical Center compliance with this measure is above the California and national average for 2012. See above graph.

![NQF Standard: Resection & Pathologic Examination of Regional Lymph Nodes in Colon Cancer](chart2)
Orange Coast Memorial Medical Center is a 224-bed, full-service hospital and the only not-for-profit hospital in the Fountain Valley and Huntington Beach area.

As a member of MemorialCare Health System, we are committed to health care excellence through best practice, evidence-based medicine. Our physicians study the best practices in health care from around the country and implement them here, resulting in innovative and effective treatments for our patients.

**MemorialCare Breast Center**

The MemorialCare Breast Center is among the most highly regarded centers for breast care in the area. Our multidisciplinary team of highly acclaimed experts is completely dedicated to the prevention, early diagnosis and treatment of breast cancer.

Services offered at the Breast Center include:

- Digital screening and diagnostic mammogram
- Ultrasound and biopsy procedures
- Breast MRI and MRI-guided biopsy
- Automated whole breast ultrasound
- Dexa bone density testing
- Second-opinion evaluations
- Psychosocial services
- Breast cancer supports groups
- Multidisciplinary pre-treatment planning

Whether visiting our Breast Center for a routine mammogram or for more urgent needs, our patients find comfort in knowing they are supported by radiologists, pathologists, oncologists, surgeons, and allied health professionals who work side-by-side to provide comprehensive, coordinated care.

Our expert physician team remains current on research studies, treatment advances and quality of life enhancements for our patients. From digital mammograms and other diagnostic breast services like ultrasound, MRI and biopsy procedures to genetics, nutrition and psychosocial services, their primary focus is optimal individualized care for those with breast disease.

The MemorialCare Breast Center at Orange Coast also offers automated whole breast ultrasound. Women with dense breast tissue may have masses that cannot be detected by mammography. Automated whole breast ultrasound can assist in diagnosing early breast cancer in these women and in women at elevated risk of developing breast cancer. Automated whole breast ultrasound images the entire breast volume unlike traditional handheld ultrasound, which targets specific areas in a woman’s breast. Automated whole breast ultrasound uses no radiation and there is no compression. Automated whole breast ultrasound is complementary to mammography; it does not replace mammography.

**Orange County CyberKnife and Radiation Oncology Center**

Radiation therapy has long been established as a highly-effective method for limiting the growth of, or completely eliminating, cancer. Our experienced radiation oncologists use advanced robotic radiation therapy technologies designed to deliver precise treatment to tumors while conserving the healthy tissue surrounding them. Available services include:

- **Accuray® CyberKnife**, a noninvasive, state-of-the-art, robotic, radiosurgery system that involves no cutting. It targets cancerous and non-cancerous tumors anywhere in the body. This technology provides a pain-free, non-surgical option for patients who have inoperable or surgically complex tumors, or those who refuse surgery, as well as shorter treatment cycle than traditional radiation therapy.
- **RapidArc® Linear Accelerator**, an innovative, fast and precise form of radiation therapy. Image-guidance improves tumor targeting and RapidArc provides a complete treatment in a single rotation of the machine around the patient, which takes less than two minutes. Using the system’s advanced mapping and planning technology, clinicians can deliver a precise radiation dose that conforms to the shape of the tumor, thus reducing potential side effects.
- **High-Dose Rate (HDR) Brachytherapy**, an advanced form of internal radiotherapy. It places radiation inside a tumor, tightly focused within the site of the cancer. This technique ensures the maximum radiation dose is given where it is needed most. Brachytherapy often reduces the total treatment time. Side effects may also be reduced because HDR does not cause skin irritation or burning.
Orange Coast Memorial Medical Center has a dedicated, 22-bed oncology unit staffed with highly trained and compassionate registered nurses - the majority of whom have been certified in oncology nursing by the Oncology Nursing Society (ONS). An integral part of our multidisciplinary treatment team at every stage of the disease process, these highly experienced oncology nurses provide care for symptom management and chemotherapy delivery. The unit has a dedicated clinical educator who provides specific educational programs, such as a chemotherapy course twice a year, to help develop our staff on an on-going basis. The unit also has a dedicated care coordinator who works closely with patients and their families with discharge planning, helping to ensure all of their needs are met. Additionally, a licensed clinical social worker is available to address all patients’ psychosocial needs. The patient satisfaction scores for the oncology unit have steadfastly remained among the highest in our medical center. A nursing journal club meets monthly to help nurses stay current with advances in medical research and to bring the latest nursing results to patients' bedsides as quickly as possible.

Our outpatient Infusion Center, located within the Patient Care Pavilion, provides one-to-one nursing care with our highly skilled and compassionate nursing staff. The Infusion Center provides patients with the utmost comfort and convenience from on-site registration to administration of chemotherapy and other transfusion services - all provided in our center by our caring staff. Our team includes highly-skilled infusion nurses certified in oncology nursing and chemotherapy administration. The Infusion Center team works collaboratively with the nurse navigator and social worker.

With quality of life being a major focus of our Cancer Program, there is "zero tolerance" for pain. Under the direction of pain management specialist, Medhat Mikhail, M.D., several methods, including medication and nerve blocks, are available to control pain and other side effects resulting from cancer treatment. Our oncology nursing staff is specially trained in managing our patients’ pain and works closely with our physicians on pain management, including alternative management methods. Enhancing the quality of each patient’s life is an important part of the care we provide.

Our full-service outpatient rehabilitation department occupies 3,500 square feet in the Patient Care Pavilion and has been equipped with the newest state-of-the-art equipment available.

Women and men diagnosed with cancer often undergo treatment including surgery, radiation therapy, and chemotherapy. In some cases, side effects from these treatments may include pain, limited mobility, decreased strength, swelling, and fatigue. Physical therapy interventions beneficial in counteracting these side effects may include:

- **Postural awareness** for retraining affected muscles and joints
- **Therapeutic exercises** to improve flexibility and strength in the involved area
- **Aerobic conditioning** to combat cancer related fatigue
- **Education** on skincare, scar management and safety during daily activities.

Lymphedema is an accumulation of lymphatic fluid that causes swelling, and can develop when the channels and ducts that transport lymph are missing, impaired, or damaged. Secondary lymphedema (acquired lymphedema) commonly occurs following surgeries that require the removal of lymph nodes. Lymphedema can develop immediately following surgery or months to years following cancer treatment. In addition to swelling, symptoms of lymphedema may include a feeling of heaviness and tightness, skin changes, infection in the affected area, and cosmetic deformity.

Although lymphedema is a chronic condition, specially trained physical therapists can provide invaluable rehabilitative care. Early intervention and learning lifelong management techniques are essential to allow patients to lead full, normal lives. Orange Coast Memorial Medical Center employs a
comprehensive care approach that emphasizes the importance of the patient’s understanding of the condition and treatment. In addition to learning about precautionary measures that reduce the risk of developing lymphedema, patients benefit from a rehabilitation program that increases range of motion, flexibility, strength, and endurance.

**Lymphedema treatment** may include:

- **Manual lymphatic drainage** to mobilize fluid and protein from an affected area by a non-invasive manual therapy technique.
- **Multi-layer bandaging** to reduce swelling and assist in softening of skin and tissue in a swollen limb.
- **Therapeutic exercises** to improve lymph drainage through a program of flexibility, strength training and aerobic activities.
- **Patient education** to allow patients to take control of their own lives. In addition to learning how to manage lymphedema at home, patients may receive guidance on specific questions from nutritionists, social workers, support groups, or other health professionals.
- **Compression garments** to help minimize swelling during daytime activities.
- **Compression pumping** (in select cases) to assist with circulation through state-of-the-art pneumatic pumps.

### Imaging & Radiology

Orange Coast Memorial offers a wide array of diagnostic services. These services are performed using a variety of state-of-the-art imaging methods and therapeutic treatments—all in one convenient location by an expert team of radiologists and technologists who have specialized training and licensure in numerous radiological procedures.

Our 64 multi-slice CT scanner is a multi-channel spiral CT scanner, which is must faster than conventional single channel scanners, allowing imaging of the body within a single breath hold. This technology allows efficient appointment scheduling and helps us to ensure that our patients are treated in as timely a manner as possible. In addition, the 64 Multi-slice CT Scanner is specifically designed to minimize patient radiation exposure.

Imaging Services at Orange Coast Memorial Medical Center offers a variety of diagnostic and therapeutic services using many different imaging modalities.

**Imaging services include:**

- PET/CT Fusion Scan
- Computed Tomography (CT Scan)
- Diagnostic Radiology
- Interventional Radiology Procedures
- MRI (Magnetic Resonance Imaging)
- Nuclear Medicine
- Ultrasound

**Treatments offered:**

- Interventional Radiology
- Interventional Oncology
- Laser Vein Ablation (LVA)
- Uterine Fibroid Embolization

### Pathology

The pathology group that serves OCMMC and LBMMC is composed of 11 highly qualified professionals who have pursued subspecialties in areas such as breast, GYN, genitourinary, hematopathology, dermatopathology, thoracic oncology, gastrointestinal pathology, blood blanking, chemistry and microbiology. Many of these professionals have reached academic levels recognized by their peers and have published scientific papers in peer reviewed journals as well as participated in national and international symposia in their own sub-specialties. Despite the fact that we have two pathologists on site at OCMMC, our patient population has access to pathology expertise throughout the Health System.

### Research

We believe clinical trials are the front line in the battle against cancer. Our physicians offer among the best and most innovative treatment options to our patients and are involved in more than 40 of the world’s most promising research protocols. Our approach to research centers on clinical trials that offer the hope and promise of more effective patient care and outcomes, rehabilitation, quality of life, and healing. Through this collaboration, patients in our community have access to many of Orange County’s top cancer specialists with more than 30 years of clinical research experience and completion of more than 500 clinical trials.
Most cancers manifest without a known cause, but some are hereditary. Genetic counseling helps patients determine their risk for diseases that can be inherited, including colon, uterine, breast and ovarian cancer. Any family with a higher than expected number of cancer cases, regardless of the type, would benefit from having a formal “Hereditary Cancer Risk Assessment” consultation. To help you decide if genetic testing is appropriate, a genetic counselor analyzes family cancer patterns and environmental influences. Hereditary Cancer Risk Assessments are highly individualized. Patients receive an accurate assessment of personal genetic risk and an individualized plan for cancer screening, prevention, and surveillance.

Our physician team conducts weekly roundtable discussions designed to review cases and recommend individual treatment options for each patient. Committed to multidisciplinary pre-treatment planning, medical and radiation oncologists, surgeons, pathologists and radiologists are required attendees of these conferences. National Comprehensive Cancer Network (NCCN) practice guidelines, information on open clinical trials, and review and discussion of AJCC staging are included in case presentations. In addition, physical therapy, pain management, home health, nutritional counseling, palliative care, and psychosocial needs are addressed to offer the optimal treatment plans for patients.

At Orange Coast Memorial Medical Center, we understand how a cancer diagnosis impacts every area of a patient's life. Under the direction of a professional licensed clinical social worker, we assist patients and their families with the emotional effects of cancer diagnosis and treatment. Individual and family counseling, group support, and referrals to appropriate community resources that are provided according to each patient's particular needs.

Support Groups include:
- **The Journey** support group for women at any stage of the breast cancer experience, female family members and friends.
- **Women in Treatment (WIT)** is a special group for women currently undergoing treatment for cancer.
- **Prostate Cancer Support Group** provides supportive discussion and educational information for prostate cancer patients, family members and friends.
- **Smoking Cessation Classes** provide patients with techniques and support in their effort to quit smoking.
- **Bereavement/Transitions** provides support to adults who have recently lost a loved one to cancer.
- **Yoga**: Yoga instruction is provided free of charge.

MemorialCare Cancer Institute enjoys a collaborative partnership with the American Cancer Society. The American Cancer Society Information Center has been on the campus of Orange Coast Memorial Medical Center since April 2006. The Information Center is located on the fourth floor of the new Patient Care Pavilion on the Orange Coast Memorial Medical Center campus. Staffed with highly trained volunteers, the Center provides extensive information and education about cancer prevention, early detection, treatment alternatives and advances in research. A tremendous resource for patients, family members and healthcare professionals, the Center is open to the general public. During 2014, information, resources and support were accessed by approximately 3,000 individuals. The Wig Bank,
located within the Information Center, is available to anyone who has experienced hair loss as a result of cancer treatment. During 2014, 270 free wigs were provided to patients. Additionally, the Center provided free breast prostheses to 17 women. Several American Cancer Society programs are held regularly at Orange Coast Memorial Medical Center. During 2014, 87 women attended "Look Good, Feel Better," a hands-on course for patients who have experienced appearance-related changes as a side effect of cancer treatment. The Warm Wishes Program, provides hospitalized cancer patients with cancer information and donated knitted or crotched lap blankets.