

# 2014 | Cancer Services Annual Report



Medical Center Health System  
Your One Source for Health



# Cancer Services Annual Report

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This past year Medical Center Health System's cancer program has continued to work together to provide the highest quality cancer care close to home for all of the residents of the Permian Basin. Once diagnosed with cancer, it can be a confusing and at times an almost overwhelming experience for the patient. In order to address this issue, improve the patient's experience, and to shorten the time from initial diagnosis to the start of treatment, MCHS implemented a Patient Navigator program. The Patient Navigator program has already been able to significantly expedite the process for patients newly diagnosed with breast cancer. We have continued to expand this important program to offer this service to patients diagnosed with colorectal and lung cancer as well. The cancer program continued to work together to achieve a comprehensive approach to cancer care. We have continued to support the full array of services needed to reduce the toll that cancer exacts on the community.

Throughout this past year various health fairs and wellness conferences were held in order to educate the public on the importance of a healthy diet and lifestyle to reduce one's risk of developing cancer. Tobacco cessation education programs continued to be emphasized and are recognized as an essential means of promoting wellness as well as cancer prevention. The importance of screening and early detection programs continued to be promoted by the cancer program as vital ways of improving patient outcomes. Medical Center Health System's oncology program also continued to work to improve access and accrual to clinical research trials that attempt to improve the treatment of cancer patients. Support groups

designed to address the cancer patient's and their families important emotional and spiritual needs continued to be well received. These important meetings included evening seminars, women's luncheons, meditation, and grief classes.

The Look-Good-Feel-Good shop continued to provide an ever increasing number of complimentary services including free haircuts, facials, massages, manicures, wigs, hats, and scarves. Thanks to our many wonderful volunteers, free lunchtime snacks were provided to our patients undergoing treatment. All of these extra services continued to be well received and are recognized by the oncology program as being essential services to meet the entire spectrum of needs for our patients. We wish to express our sincere appreciation to all of the extraordinary volunteers, ancillary staff, nurses, and physicians whose efforts through the year have made the opening of the West Texas Cancer Center at Medical Center Hospital a center of excellence that ensures state-of-the-art quality patient care, with outstanding comprehensive services to serve our community.

**Joseph Kaczor, MD**  
Chairman Cancer Committee  
Radiation Oncology

## Mission Statement

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Medical Center Health System is committed to providing the highest quality comprehensive cancer care in a compassionate manner to the residents of the Permian Basin.

## Vision Statement

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By providing the highest quality comprehensive cancer care close to home we will continue to help cancer patients achieve the best cure rates and the best quality of life.



# MCH Cancer Services

At Medical Center Hospital, patient care is not only innovative, but compassionate as well. We assist our cancer patients and their loved ones with treatment, support, education and expert care. In partnership with West Texas Cancer Center, we

## Patient Navigation

Medical Center Hospital is proud to offer the MCH Patient Navigation Program to individuals receiving treatment in our facility. The two MCH Oncology Navigators are specially trained to help patients diagnosed with breast, lung and colorectal cancer to navigate the healthcare system. All patient navigation services are offered free of charge through Medical Center Hospital.

## Lung Cancer

Medical Center Health System is proud to introduce the MCH Lung Screening Program; a new service that uses a series of low-dose CT (computed tomography) scans to screen high risk individuals for lung cancer, the only one of its kind in the area.

Screening for lung cancer using low-dose CT scans is safe and effective. It has been proven by a recent study to be essential to achieving early detection. It can help diagnose the disease before symptoms appear and reduce death from some cancers among high-risk smokers.

According to the National Comprehensive Cancer Network® (NCCN®), high-risk individuals include:

- People 55 to 74 years of age who have a 30 or more pack-year history of cigarette smoking (30 pack-year is equivalent to one pack per day for 30 years, two packs per day for 15 years, etc.)
  - People 50 years or older who have a 20 or more pack-year history of cigarette smoking and an additional risk factor for lung cancer, such as:
    - o Exposure to radon or occupational carcinogens, such as silica, cadmium, asbestos, arsenic, beryllium, chromium, diesel fumes, nickel, coal smoke, and soot
    - o A previous cancer such as lung, lymphoma, head & neck, or smoking related cancer
    - o A family history of lung cancer
    - o Lung disease such as COPD or pulmonary fibrosis
- Individuals who fall into either group should consider participating in the program, although the NCCN® states that there is more evidence and consensus for screening in the first group.

reach out to cancer patients throughout 17 counties in West Texas. Services include in-patient chemotherapy, supportive cancer care, pain management and education, plus outpatient services as needed. It's advanced cancer care close to home.

## MCH Oncology Navigators

- Guide patients through the medical experience
- Provide emotional support during a stressful time
- Support patients through their diagnosis and treatment
- Help connect patients with community resources
- Offer support and education
- Assist in getting answers to patient's questions

MCH lung screening program includes:

- A series of three low-dose CT scans
- Provided once per year over a two-year period
- At a cost of \$300 per scan
- The program also includes the assistance of a Nurse Navigator who provides education, finds community programs, and follows-up. Free smoking cessation resources are also available at MCH.

## Getting Started

A physician's order is required to participate. Once you and your physician have determined that this program is right for you, contact our nurse navigator at (432) 640-2689 to make your appointment.

Medical Center Hospital has been designated as a Screening Center of Excellence by the Lung Cancer Alliance. MCH has received 31 lung screening referrals since the inception of the program.

The Shine a Light on Lung Cancer Vigil was held on November 19, 2014 in the Healing Garden with 45 participants. Two cancer survivors gave their testimony, and Dr. Kaczor was a guest speaker.

Visit these websites for more in-depth information on lung cancer and lung cancer screenings.

[www.lungcanceralliance.org/](http://www.lungcanceralliance.org/)

[www.lung.org/](http://www.lung.org/)

[www.screenforlungcancer.org/](http://www.screenforlungcancer.org/)

[www.cancer.gov](http://www.cancer.gov)

# MCH Cancer Services

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## Infusion Services

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The Medical Center Hospital Infusion Services Clinic is spacious and comfortable with a staff of specially trained oncology nurses who have earned certifications in PICC insertion, chemotherapy and biotherapy. Our nurses also play an integral role in coordinating care with clinical pharmacists and physicians, and work diligently to ensure the best possible outcomes for our patients.

MCH Infusion Services is equipped to accommodate a number of patients at any given time and is capable of providing a wide range of treatments – fully encompassing the care available in our region. Infusion services include:

- Inpatient Chemotherapy
- Blood & Blood Product Transfusions
- Phlebotomy
- Intravenous Antibiotics
- Immunoglobulin Therapy
- Colony Stimulation Factors
- High-Dose Steroids Chemotherapy
- Remicade
- Anti-Infective Therapy (Antifungal, Antiviral)
- Hydration
- Peripherally Inserted Central Venous Catheters (PICCs)
- PICC Line & Port Management
- Lovenox Bridging

## Breast Cancer

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### Every Woman Deserves Excellence

Medical Center Hospital offers a full range of women's imaging services provided at three convenient locations. Whichever location you choose, you can expect nothing less than excellence... it's in everything we do. The Women's Imaging Center, located in the MCH Cone Building on the MCH main campus, offers a full line of digital breast imaging and interventional services, including: advanced digital mammography, computer-aided detection, nonsurgical stereotactic breast biopsy and advanced diagnostic breast ultrasound.

### The Center for Health & Wellness

The Women's Imaging Center located at the Center for Health & Wellness, 8050 East Highway 191 at Faudree Road, is an outpatient center offering privacy, convenience and the newest digital screening mammography available in the region. The center also provides Bone Densitometry for the detection and treatment of osteoporosis.

### Medical Center Hospital

MCH is proud to offer the advanced technology of Breast MRI (magnetic resonance imaging) for the detection of breast cancer. Breast MRI is a non-invasive imaging study that uses powerful magnetic fields and advanced computers to create detailed images of the soft tissue of the breast.

While MCH offers a full range of women's imaging services, Breast MRI is only offered at our main campus location.

In addition to the advanced imaging technology in use at our centers, we also incorporate Computer Aided Detection. CAD provides a computerized "second read" of mammography results providing an added measure that can alert our radiologist to any areas of potential concern.



### Our Credentials

MCH's imaging centers are accredited by the Texas Department of State Health Services and the American College of Radiology (ACR), and our Women's Imaging Center is the only mammography center in Odessa certified as a Breast Imaging Center of Excellence – the highest mammography accreditation awarded by the ACR. The Center has accreditation in mammography, breast ultrasound, breast ultrasound biopsy and stereotactic biopsy procedures.

# MCH Cancer Services

## Palliative Care

If you or a loved one has a serious illness, Medical Center Hospital offers Palliative Care designed to improve quality of life for both the seriously ill and their family. To relieve suffering, our Palliative Care specialists assist with symptom management for pain, anxiety, weakness, and other discomforts. They are skilled in helping patients and families deal with the side effects of other therapies.

Medical Center Hospital's Palliative Care program focuses on relieving pain, suffering and symptoms. However, unlike hospice care, Palliative Care does not require patients to give up curative or life prolonging treatments. Nationwide, 90 million Americans who suffer from conditions such as cancer, heart disease, Parkinson's

disease, AIDS, and Alzheimer's disease can benefit from a Palliative Care program. Yet, only about one million patients and their families are served by these programs each year. That's why we have a dedicated Palliative Care program at Medical Center, to make sure you have this option nearby when you need it.

Medical Center offers a dedicated Palliative Care unit within the hospital. Experienced, professional staff are dedicated to providing excellent, compassionate care and work as a multidisciplinary team to best care for the patient and caregiver. Our Palliative Care unit features more spacious rooms to accommodate frequent visits by family members.

Referrals from January 2014-October 2014: 50  
 Transfers to the Service October 2013-October 2014: 1

	Number of referrals	Number of transfers to service
January 2014	5	
February 2014	4	
March 2014	4	1
<b>FY Q2 total</b>	<b>13</b>	
April 2014	3	
May 2014	4	
June 2014	0	
<b>FY Q2 total</b>	<b>7</b>	<b>0</b>
July 2014	7	
August 2014	5	
September 2014	18	
<b>FY Q2 total</b>	<b>30</b>	<b>0</b>

Data Specifics for fiscal year 2014:

- Top principal diagnoses: colon cancer (12%), stroke (12%), and sepsis (12%)
- Cancer diagnoses comprised 24% of the total referrals

# Ector County Health Statistics

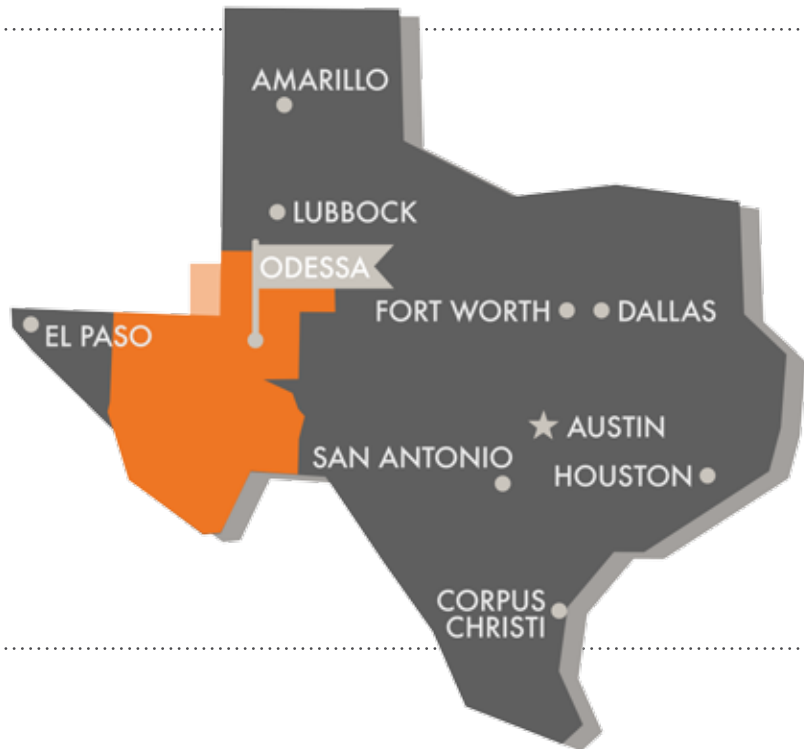
## Referrals

Breast Cancer Navigation	88
Colorectal Navigation	26
Lung Navigation	14
Non-Specified Navigation	25 (Prostate, Liver, Kidney, Head and Neck, Cervical, Anal, Leukemia, Lymphoma, Multiple Myeloma, Ovarian, Pancreatic)
<u>Lung Screening</u>	<u>18</u>

171 Patients referred for navigation services.

## Referrals by Counties

Andrews	3
Brewster	1
Crane	3
Ector	126
Howard	1
Lea	1
Lubbock	1
Midland	6
Pecos	5
Presidio	2
Reeves	9
Upton	1
Ward	7
Winkler	4



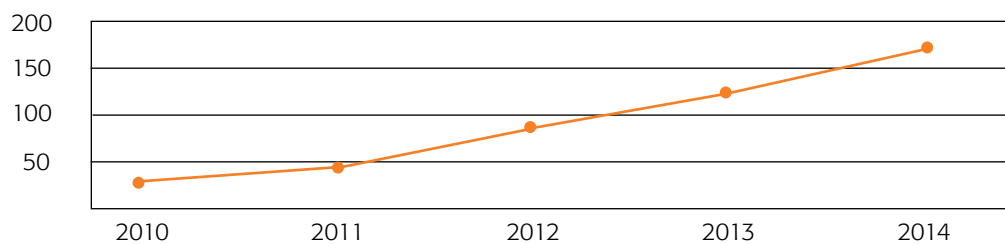
## Ethnicity of Referrals

African American	3
Asian	3
Hispanic	71
White	94

## Growth of Cancer Navigation Referrals by Year

- 2010 - 38 referrals
- 2011 - 46 referrals
- 2012 - 89 referrals
- 2013 - 122 referrals
- 2014 - 171 referrals

Referrals



# Partnerships and Programs

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## Reach to Recovery Referrals

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- There were 19 Reach to Recovery visits prior to June 2014.
- The two current Oncology Navigators are not breast cancer survivors so they are unable to provide this service. We are currently working with ACS on having a volunteer provide this service.

## Cancer Survivorship Through Art

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The Cancer Survivorship through Art program held its first class on November, 1 2013. This class offers an opportunity for cancer survivors to meet and experience artistic expression and meets twice a month at Crescent park Baptist Church. Currently, there are 24 members in this group with three volunteer instructors. Art supplies have been donated by Medical Center Health System Foundation and the class is free of charge for all cancer survivors.

## On with Life! Cancer Support Group

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This program was discontinued in April, 2014.

## Surviving Life's Journey Cancer Support Group

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Surviving Life's Journey is a cancer support group for both survivors and caregivers. The group is sponsored by MCHS and meets once a month, led by Jackie Freeman, RN, CN-BN. In addition to these community outreach programs, the Oncology Navigators attended seven health fairs in Odessa and the surrounding communities and passed out educational information and information on services provided. The navigators also spoke at five different events in Odessa to promote early detection and cancer education.

## West Texas Cancer Center

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Medical Center Hospital and Texas Oncology joined forces to form a partnership in the war on cancer. The Grand Opening Celebration was held on January 11, 2007 to mark the official opening of the highly-anticipated Cancer Center.

The Cancer Center is located adjacent to Medical Center Hospital (on Washington Street, between 3rd and 4th Streets), which will provide better, quality care and convenience for the patient. The partnership between Medical Center Hospital and Texas Oncology/ West Texas Cancer Center has proven to be a good team effort in the war on cancer, allowing cancer care close to home for West Texans.

## West Texas Gifts of Hope

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Hope House Odessa is the "dream come true" for nonprofit West Texas Gifts of Hope, Inc., whose vision was to create a safe lodging environment for patients who seek help while taking cancer treatment. Medical Center Health System is a community partner with West Texas Gifts of Hope and frequently refers patients to stay at the Hope House. This is very convenient for patients and their families, as it is located across the street from the hospital on 2nd and Golder.

## The STAR Program®

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The STAR Program®, certified by Oncology Rehab Partners, provides comprehensive rehab therapy to cancer survivors who live with the side effects of oncology treatment. The program focuses on the unique, individual needs of cancer survivors and offers customized rehab plans developed by a team of specialists ranging from physicians and physical, speech and occupational therapists to dieticians and mental health professionals. This interdisciplinary approach is intended to help cancer survivors heal physically and emotionally.

STAR Program® cancer survivors learn how to increase strength and energy, alleviate pain, improve daily function and enhance quality of life. Services provided under this program are reimbursable and covered by most health insurance plans.

For more information, call the MCH STAR Program® at (432) 640-6000.

# 2014 Breast Site Study

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Breast cancer is the most common malignancy in women, accounting for 29% of all cancers in females. Breast cancer is responsible for 15% of cancer deaths in women, making it the number two cause of cancer deaths. An estimated 232,670 new breast cancer cases will be diagnosed in the United States this year, and 40,000 women will die of this cancer. In Texas alone, 15,500 estimated new breast cancer cases will be diagnosed with an estimated almost 2,700 women dying from breast cancer in 2014.

Breast cancer is an uncommon disease in men; the female-to-male ratio is approximately 100:1.

## Etiology and Risk Factors

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The risk of developing breast cancer increases with age. The disease is uncommon in women younger than the age of 40 years.

Caucasian women have a higher overall rate of breast cancer than African-American women; however this difference is not apparent until age 50 and is marked only after menopause. The incidence of breast cancer in American-Asian and Hispanic women is approximately half that of Caucasian women.

Numerous other risk factors have been associated with the development of breast cancer. Hereditary forms of breast cancer constitute only 5%-7% of breast cancer overall. Women with a strong family history of breast cancer should be evaluated according to published Genetic/Family screening guidelines. Early menarche, late menopause, older age at first live childbirth, prolonged hormone replacement therapy, previous exposure to chest wall irradiation, certain benign proliferative breast diseases, and moderate alcohol intake as well as a high, fatty diet and obesity have been associated with increased breast cancer risk. Despite all of the available data on breast cancer risk factors, 75% of women diagnosed with breast cancer have no identifiable risk factors.

## Screening and Diagnosis

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The American Cancer Society recommends that women begin monthly breast self-examination at the age of 20. They and others recommend annual mammography screening beginning at age 40. An abnormality on physical exam of the breast and/or mammography is often followed by a breast biopsy to obtain tissue or pathologic diagnosis of breast cancer.

## Staging and Prognosis

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The most widely used systems to stage breast cancer is the American Joint Committee on Cancer classification (Table 1) which is based on breast tumor size, the status of regional lymph nodes, and the presence of distant metastasis. Numerous prognostic factors for breast cancer have been identified. Axillary lymph node metastasis is the most important single prognostic factor. Overall, patients who are lymph node negative have a 10 year survival rate of 70% and a five year recurrence rate of 19%.

As the number of positive lymph nodes increases so does the likelihood of relapse and death. Patients with greater than 10 positive lymph nodes have a recurrence rate of about 75%.

The majority of patients who develop recurrence after initial curative treatment for early stage breast cancer will also have distant metastatic disease.

Tumor size and hormonal receptor status also correlate with outcome. More recently molecular prognostic factors, including the growth factor receptor C-erbB-2/neu and multigene signature score, have been used in determining treatments and predicting outcomes.

## Treatment

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In general, the treatment of breast cancer includes the treatment of the local disease in the breast with surgery or surgery followed by radiation therapy and the treatment of the systemic or whole body with cytotoxic chemotherapy and/or hormonal therapy. The need for and selection of various local breast or systemic therapies are based on a number of prognostic and predictive factors.

Breast cancer does occur in men, and men with breast cancer should be treated similarly to postmenopausal women. Patient preference is also a major part of the decision making process, especially in situations in which survival rates are equivalent among the treatment options available.

In terms of treatment, breast cancer may be divided into:

1. The pure non-invasive cancers (Stage 0) including lobular carcinoma in-situ (LCIS) and ductal carcinoma in-situ (DCIS).



# 2014 Breast Site Study

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2. Operable invasive breast cancer (Stage I, Stage II, and some Stage IIIA tumors).
3. Inoperable locally advanced invasive breast cancer (clinical Stage IIIB, Stage IIIC).
4. Treatment of metastatic or recurrent breast cancers (Stage IV).

## Stage 0, Pure Noninvasive Carcinomas Lobular Carcinoma In-situ

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Observation alone is the preferred option for women diagnosed with LCIS. Recent data from the (NSABP) Breast Cancer Prevention Trial show that tamoxifen given for five years is associated with an approximately 56% reduction the risk of developing invasive breast cancer. In the STAR trial raloxifene was found to be as effective in reducing the risk of invasive breast cancer. For post-menopausal women, some aromatase inhibitors have also been shown to reduce the risk of developing breast cancer. Therefore, the use of Tamoxifen should be considered as a risk reduction strategy in women with LCIS.

## Ductal Carcinoma In-Situ

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For the vast majority of patients with limited disease and in whom negative margins are achieved with surgery, breast preserving treatment using radiation therapy to the breast is an appropriate treatment option for patients diagnosed with DCIS. Another treatment option would be a complete simple mastectomy. Axillary lymph node dissection is generally not recommended for patients with pure DCIS. Tamoxifen treatment may be considered in women with DCIS treated with breast preserving therapy, especially in those with estrogen receptor positive tumors. Tamoxifen decreases the risk of ipsilateral recurrences and also decreases the development of contralateral breast cancers.

## Stage I, IIA, IIB or T3, N1, M0, Invasive Breast Cancer - Local Regional Treatment

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In the majority of women with Stage I and Stage II breast cancers, breast preserving therapy with surgical lumpectomy, axillary lymph node sampling followed by breast radiation (breast conserving therapy) is a treatment option. Modified radical mastectomy is a medically equivalent primary treatment option. Radiation therapy after breast preserving treatment involves carefully planned x-rays to the breast in order to achieve optimal cosmetic

results while avoiding underlying normal tissues. A typical course of breast preserving radiation requires treatment Monday through Friday over approximately six weeks duration. More recently, accelerated partial breast radiation therapy (APBRT) using a radiation holder implanted into the involved breast tumor bed has become a treatment option for women diagnosed with early stage breast cancer. APBRT treatment requires patients to be treated twice a day for five treatment days thus completing their breast preserving radiation therapy in a much shorter period of time than traditional breast preserving radiation treatments. Breast cancer patients that may be candidates for APBRT therapy include women older than 50 years with a tumor size less than two to three centimeters in size with a lumpectomy specimen that shows negative or clean margins and who have no spread to the axillary lymph nodes.

In certain cases, radiation therapy may still be a recommendation for patients who chose mastectomy instead of breast preserving treatment. After mastectomy, patients whose breast tumors were larger than five centimeters in greatest diameter or who have positive margins of resection or who are found to have four or more positive axillary lymph nodes are all at increased risks for recurrence and post mastectomy radiation therapy is indicated. Patients treated with mastectomy may be candidates for breast reconstructive surgery.

## Systemic Therapy

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Preoperative chemotherapy should be considered for women with large clinical Stage IIA, Stage IIB, and T3, N1, M0 tumors who meet the criteria for breast preserving therapy except for tumor size.

## Postoperative Systemic Therapy

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For those women under age 70 years the current guidelines recommend adjuvant therapy without regard to the patient's age. The decision to use systemic adjuvant therapy requires considering and balancing risk for disease recurrence with local therapy alone, the magnitude of benefit from applying adjuvant therapy, the toxicity of the therapy, and patient comorbidities. The decision making process requires a collaboration involving the patient and the health care provider, usually a medical oncologist. Guidelines call for determining the estrogen, progesterone receptor, HER2/neu oncogene, and in some case the multigene signature score in invasive breast cancers.

The most firmly established adjuvant endocrine therapy for premeno-

## 2014 Breast Site Study

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pausal women is Tamoxifen for both premenopausal. In women with hormone estrogen receptor positive or unknown breast cancers, adjuvant Tamoxifen decreases the annual odds of recurrence by 47% and the annual odds of death by 26%. The benefit of Tamoxifen is observed regardless of age, menopausal status, lymph node status, or whether or not chemotherapy is used. Several studies have been reported using aromatase inhibitors in the treatment of postmenopausal women with early breast cancer. Some aromatase inhibitors tested has been found to be superior to Tamoxifen in recent trials. The aromatase inhibitors, however, are not active in the treatment of a woman with functioning ovaries or premenopausal women.

Patients with tumors greater than one centimeter in diameter or with lymph node involvement are appropriate candidates for adjuvant systemic therapy. For women with lymph node negative, hormone receptor negative tumors greater than one centimeter in diameter, chemotherapy is recommended. For those women with lymph node negative, hormone receptor positive tumors greater than one centimeter in diameter, a tumor multigene signature score is often used to decide if endocrine therapy alone or with chemotherapy is recommended. The use of endocrine therapy and chemotherapy must be based on balancing the expected absolute risk reduction from treatments and the individual patient's willingness to experience toxicity to achieve that incremental risk reduction. Patients with tumors that over express HER2/neu have been shown to derive benefit from target therapy against this with Trastuzumab (Herceptin) as well. Patients with lymph node positive disease are candidates for chemotherapy and, if the tumor is hormone receptor positive, for the addition of endocrine therapy to follow.

### Inoperable Locally Advanced Breast Cancer, Clinical Stage IIIA (except T3, N1, M0), Clinical Stage IIIB or Clinical Stage IIIC

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The use of anthracycline-based preoperative chemotherapy is standard in patients with locally advanced, inoperable breast cancer. After preoperative chemotherapy, local therapy usually consists of modified radical mastectomy followed by locoregional radiation therapy.

### Stage IV Metastatic Disease or Systemic Recurrence of Disease

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Treatment of patients with metastatic disease is designed to prolong survival and enhance quality of life but is not curative. Therefore treatments that are associated with minimal toxicity are preferred.

The use of chemotherapy, hormonal therapy and targeted therapy are available. The decision making process for these palliative treatment options requires collaboration between the patient and the medical oncologist with an in depth discussion regarding the expected benefits and risks of treatment.

## Clinical Outcomes

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Stage 0 breast cancer has an observed five year survival of 92.7%. Stage I breast cancer has five year survival of 87.8%. Stage IIA breast cancer has a five year survival of 81.4%. Stage IIB breast cancer has a five year survival of 74%. Stage IIIA 66.7%, and Stage IIIB 41%. Patients with Stage IV breast cancer have a five year observed survival of 14.8%. Overall, the five year observed survival of breast cancer is about 78%.

Early detection with screening mammography allows for the diagnosis of breast cancer at an early stage when breast cancer is more curable and the survival is better.



**Nancy Rangel,**  
*Breast Cancer Survivor*

“When I was diagnosed with breast cancer, I was so confused I just didn’t know what to do. Thank goodness for my patient navigator. She took me by the hand and helped me get through this critical time in my life.”

# 2014 Breast Site Study

## Summary of Medical Center Hospital Experience 2013

A diagnosis of breast cancer was established in 91 patients, 96.7% were female patients and 3.3% were male patients. This ratio is consistent with the national data of 1 out of 100 male to female breast cancer cases.

Breast cancer was diagnosed most frequently in patients between the ages of 60 to 69 years. Patients between the ages of 50-79 years accounted for 68% of all cases and this is similar to the national data.

The most frequently diagnosed stage of breast cancer was Stage I which accounted for 36.3% of cases presenting to MCH. This was also the case nationally where breast cancer was diagnosed at Stage I disease (40%). Overall, earlier stage disease, Stage 0-II, was diagnosed in 46.2% of cases at MCH. Nationally, Stage 0-II was diagnosed in 60% of cases. A greater percentage of patients presenting to MCH had more advanced stage III and Stage IV disease 25.3% compared to 12% nationally.

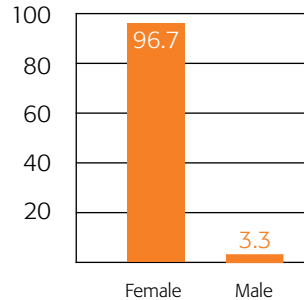
The household income for patients presenting to MCH was lower than that seen nationally.

36.99% of MCH patient's household income was less than \$28,000, whereas nationally 35.17% of patient's household income was greater than \$49,000. The higher incidence of more advanced stage breast cancer seen at MCH is correlated with the lower average household income of our patients.

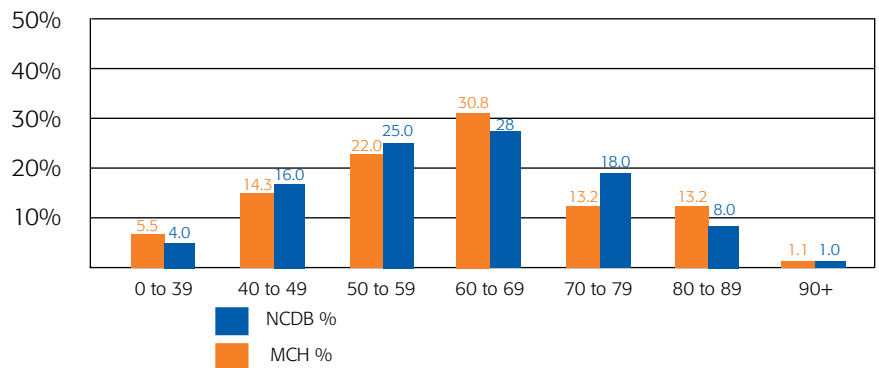
Patients diagnosed at MCH received the full spectrum of breast cancer treatments, including surgery, or surgery with some combination of hormonal therapy, chemotherapy, and/or radiation therapy. The first course of treatment of patients diagnosed with breast cancer at MCH are shown below and compared to the national data. Some of the differences noted, for example in the use of chemotherapy, may be related to the lower percentage of patients presenting with Stage 0 disease, and the higher percentage of patients presenting with more advanced Stage III disease at MCH.

### Incidence by Gender

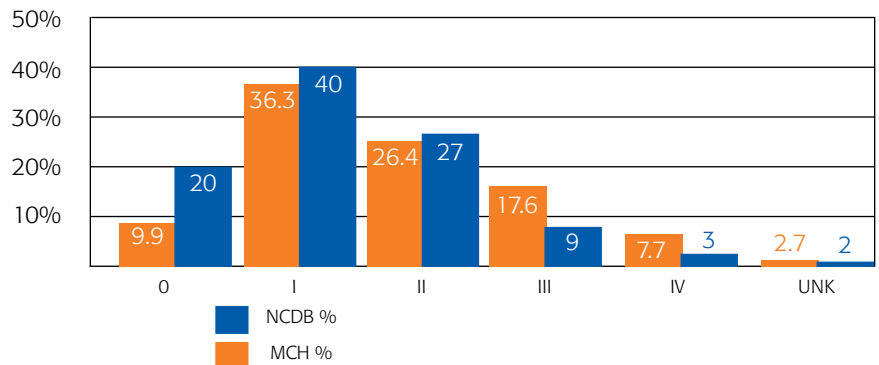
MCH Patients



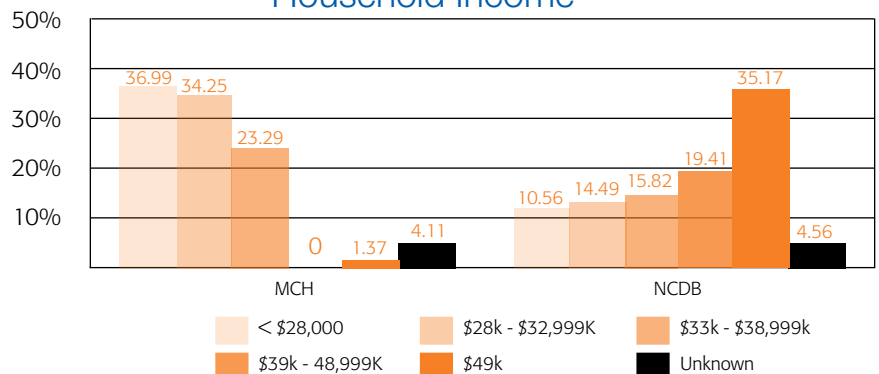
### Incidence by Age



### Incidence by Stage



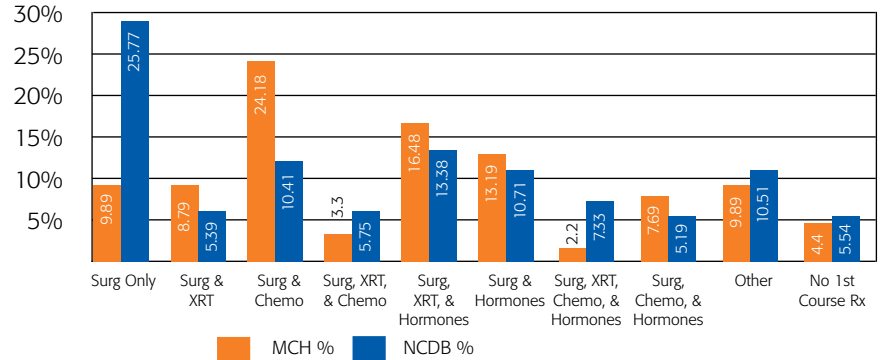
### Household Income



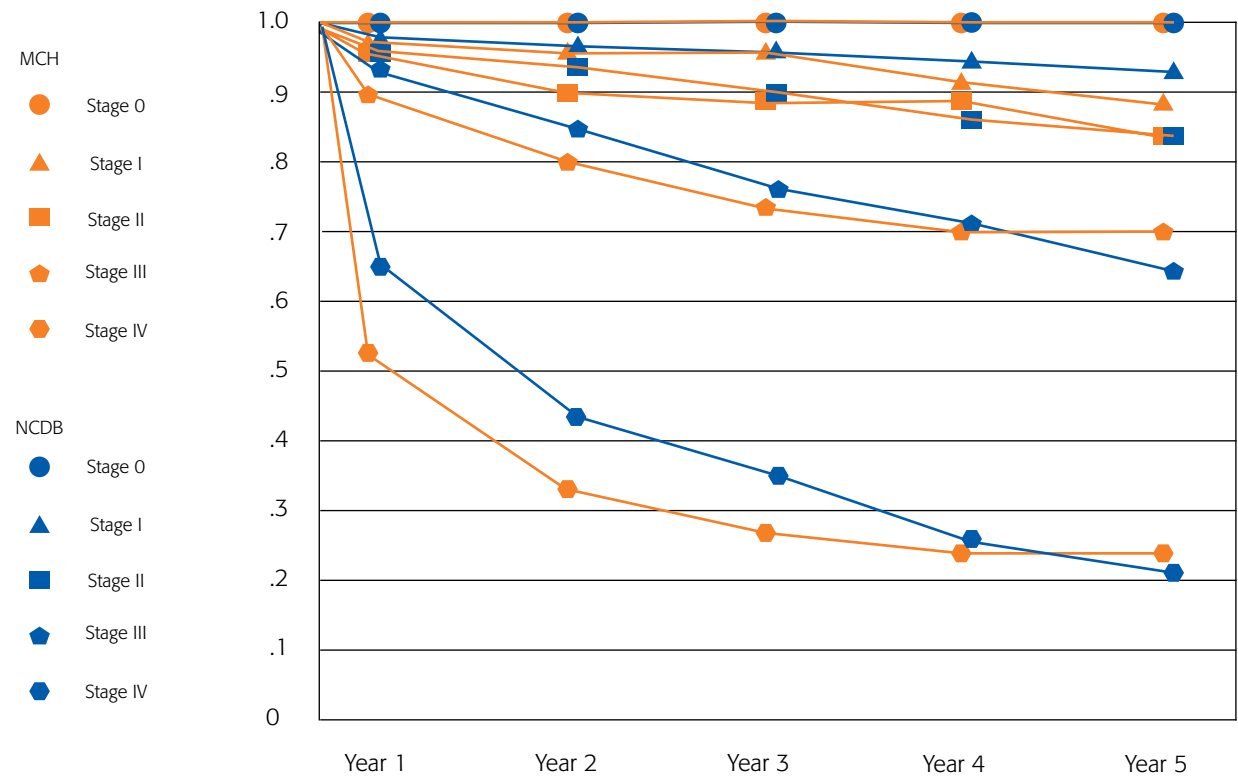
# 2014 Breast Site Study

The observed five year survival, by stage, for breast cancer patients at MCH is shown and can be compared to the national data in the following two graphs. Overall the observed survival of breast cancer patients by stage of disease at MCH is very similar to that seen nationally.

### First Course of Treatment



### Observed Five Year Survival For Breast Cancer



## Conclusion

Until we are able to completely prevent breast cancer from occurring, the best chance of cure and often with the least intense or invasive treatment is obtained when the breast cancer is diagnosed in its earliest stage. The best way to detect breast cancer at its earliest and most curable stage is for women to undergo annual screening mammograms, according to national guidelines.



**Joseph Kaczor, MD**  
Chairman Cancer Committee  
Radiation Oncology

