LEWIS AND FAYE MANDERSON CANCER CENTER

2017 ANNUAL REPORT
For 2016 data

The Lewis and Faye Manderson Cancer Center at DCH Regional Medical Center

MDAnderson Cancer Network Certified Member
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2017 Annual Report
The Lewis and Faye Manderson Cancer Center is recognized by MD Anderson Cancer Center as one of the best practices in oral chemotherapy for outstanding work in creating a patient education book and follow-up call sheet for tracking oral chemotherapy toxicities. Manderson Cancer Center is invited by MD Anderson to be a speaker at their Annual Symposium that will be held on October 21-22, 2017 in Houston, Texas to share our best practice.

Oral chemotherapy is emerging as a new option for cancer patients. Oral chemotherapy drugs have been available for decades. However, in the past six years, there has been an accelerating expansion in the development of oral chemotherapy. Experts anticipate that more than one-quarter of the 400 antineoplastic agents now in the pipeline are planned as oral drugs. Additionally, patient preference for oral chemotherapy agents has been one of the main drivers for its current popularity. If a patient has a choice between oral chemotherapy or IV chemotherapy, the patient usually opts for oral chemotherapy, as it gives them more control over their cancer therapy because of the greater convenience and flexibility in the location and scheduling of medication administration.

Based on the data collected at Manderson Cancer Center from October 1, 2014 - July 30, 2016, of all patients receiving chemotherapy, 21.2% of the patients received oral chemotherapy, 5.6% received both oral and IV chemotherapy and 73.2% received IV only. There are some concerns associated with the administration of oral chemotherapy such as the increase of medication error, drug-drug interaction, patient non-adherence, toxicity profiles of new agents, safe handling of these oral agents and cost. These concerns led the American Society of Clinical Oncology (ASCO) and Oncology Nursing Society (ONS) to update their guidelines and develop a new set of standards addressing prescribing, preparation, administration, assessment for adherence and toxicity of oral chemotherapy.

Patients’ adherence to oral chemotherapy is critical to improving therapy outcomes in cancer patients. Research finds that adherence is the most complex and multifaceted issue that can alter the outcomes of therapy and the most challenging commitment for most patients. Thus, monitoring adherence is an important step in determining treatment effectiveness. Non-adherence or over-adherence can be dangerous and can lead the Oncologist to modify dose or change therapeutic regimens because of apparent non-responsiveness or unexpected adverse effects. These efforts can ultimately lead to increased costs to healthcare systems such as an increase in physician visits, increased hospitalization rates, longer hospital stays, decreased patient satisfaction and compromised disease outcomes such as decreased time to relapse and decreased survival.

Non-adherence to oral chemotherapy could be a contribution for many factors such as the presence of cognitive impairment, presence of psychological problems, treatment of asymptomatic diseases, inadequate follow up or discharge planning, adverse effects of medication, patient’s lack of belief in the benefits of treatment, complexity of treatment, etc.

To improve our patient adherence, Manderson Cancer Center organized a multidisciplinary team consisting of Physicians, Pharmacists and Nurses to discuss the impact of the use of oral chemotherapy and the developments needed to maximize efficacy of oral chemotherapy agents.

All oral chemotherapy prescriptions are now coordinated by a Pharmacy Oncology Services Coordinator who coordinates the fill of prescriptions and assists the patients with the cost of their medications through assistance programs. Additionally, all patients are counseled by a Pharmacist before starting their medications. The Pharmacist evaluates the order for appropriate indication, dose and frequency then screens the patient’s medication profile for drug interactions. The counseling addresses the dose, frequency, timing of dosing, what to do if dose is omitted, side effects that are specific to the agent and what to do if an adverse effect is encountered. Furthermore, the patient is provided an education book as well as written documentation on the diagnosis and the adverse effects of the medication. Finally, a follow-up call to assess patient adherence and toxicity is performed by a nurse using specific toxicity tools as a reference to assess patient adherence and to track patient toxicity.
Standard 4.4 Accountability Measures and Standard 4.5 Quality Improvement Measures

The Commission on Cancer (CoC) is actively involved in the development of the Cancer Programs Practice Profile reports (CP3R). According to the American College of Surgeons, the CP3R is updated annually and gives local providers comparative information to assess adherence to and consideration of standard of care therapies for major cancers. This reporting tool also provides a platform from which to promote continuous practice improvement to improve quality of patient care at the local level. It also permits hospitals to compare their care for these patients relative to that of other providers within their state, region and all CoC-approved programs. The chart below shows performance measures for 2014 breast and colorectal cases, which are the most recent data released.

<table>
<thead>
<tr>
<th>Cancer Program Measure</th>
<th>CoC Standard</th>
<th>DCH Regional Medical Center</th>
<th>Alabama Programs</th>
<th>South Census Region</th>
<th>All CoC Approved Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast and Colorectal Measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radiation therapy is administered within 1 year (365 days) of diagnosis for women under 70 receiving breast conserving surgery for breast cancer.</td>
<td>90%</td>
<td>93.2%</td>
<td>93.3%</td>
<td>92.8%</td>
<td>93.1%</td>
</tr>
<tr>
<td>Radiation therapy is recommended or administered following any mastectomy within 1 year (365 days) of diagnosis of breast cancer for women with ≥ 4 positive regional lymph nodes.</td>
<td>90%</td>
<td>100%</td>
<td>88%</td>
<td>91.6%</td>
<td>91%</td>
</tr>
<tr>
<td>Tamoxifen or third generation aromatase inhibitor is considered or administered within 1 year (365 days) of diagnosis for women with AJCC T1c N0 M0 or Stage 2 or 3 ER and/or PR positive breast cancer.</td>
<td>90%</td>
<td>95%</td>
<td>93.1%</td>
<td>93.4%</td>
<td>93.7%</td>
</tr>
<tr>
<td>Image or palpation-guided needle biopsy to the primary site is performed to establish diagnosis of breast cancer.</td>
<td>80%</td>
<td>80.4%</td>
<td>87.5%</td>
<td>91.2%</td>
<td>92.6%</td>
</tr>
<tr>
<td>At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer.</td>
<td>85%</td>
<td>92.6%</td>
<td>88.8%</td>
<td>87.7%</td>
<td>91.4%</td>
</tr>
<tr>
<td>Adjuvant chemotherapy is recommended, or administered within 4 months (120 days) of diagnosis for patients under the age of 80 with AJCC stage 3 (lymph node positive) colon cancers.</td>
<td>N/A</td>
<td>84.6%</td>
<td>91.8%</td>
<td>91.4%</td>
<td>90.1%</td>
</tr>
<tr>
<td>Preoperative chemo and radiation are administered for clinical AJCC T3 N0, T4 N0, or Stage 3; or Postoperative chemo and radiation are administered within 180 days of diagnosis for clinical AJCC T1-2 N0 with pathologic AJCC T3 N0, T4 N0, or Stage 3; or treatment is recommended; for patients under the age of 80 receiving resection for rectal cancer.</td>
<td>85%</td>
<td>100%</td>
<td>79.7%</td>
<td>86.6%</td>
<td>89.2%</td>
</tr>
</tbody>
</table>
PATIENT APPRECIATION DAY

The Lewis and Faye Manderson Cancer Center’s Chemotherapy and Radiation Therapy Nurses and staff members hosted the third annual Patient Appreciation Day on October 28, 2016. As patients arrived for treatment, they found the Manderson Cancer Center transformed into an 80’s theme of "Don’t Stop Believing" utilizing costumes, props, decorations and treats.

Patients undergoing chemotherapy and radiation therapy struggle with many physical and emotional stressors. Using items of positive distraction has been shown to help with positive physiological and psychological outcomes (Ziqi et al., 2013). Studies show that patients appreciate and use humor as a way to help with stressful situations (Christie & Moore, 2005). Patients and families enjoyed the event, as evidenced by the smiles and laughter heard throughout the center.

LYMPHEDEMA SERVICES

In May 2016, Jennifer Adams, PT provided a new component to our lymphedema services to better serve our patients. Jennifer is a Physical Therapist and a Lymphedema Specialist. She typically works with patients at DCH Physical Rehabilitation, but she wanted to help more patients while they are in treatment without adding the stress of going to another appointment.

Jennifer is able to see patients while they are at Manderson Cancer Center receiving treatments. Patients are referred to Jennifer if they have recently had breast surgery and are currently receiving radiation treatments for breast cancer. This allows patients to be evaluated for lymphedema and receive important information about safe exercises and activities to avoid before lymphedema begins.

During 2016, Jennifer was able to meet with 43 patients while they received radiation treatments. Patients have expressed their gratitude for being given the opportunity to have a consult with Jennifer without having to go to a different office for the visit.
STUDIES OF QUALITY

Each year the Lewis and Faye Manderson Cancer Center is required to conduct two Studies of Quality that measure the quality of care and outcomes for cancer patients (Standard 4.7). In 2016 the Manderson Cancer Center performed two studies of quality.

Documentation of BRAF mutation is provided for all metastatic melanoma cancer patients. The charts of all new patients with a diagnosis of melanoma were reviewed for 12 months. The results were:

- During the months of January – December 2016 a total of 5/5 (100%) patients had documentation of BRAF mutation.

Age at diagnosis is documented for each blood relative noted with all new breast and ovarian cancer patients. The charts of all new breast/ovarian cancer patients with blood relatives who met the criteria were reviewed for 12 months. The results were:

- During the months of January – December 2016 a total of 112/126 (89%) had age at diagnosis for each blood relative noted to have “history of cancer” documented.

SURVIVORSHIP

The American College of Surgeon Commission on Cancer (CoC) made cancer survivorship a major priority beginning in 2014. The goal of the Lewis and Faye Manderson Cancer Center’s Survivorship Program is to enhance the quality of life of cancer survivors by improving the surveillance and screening practices that might detect the return of cancer and by promoting healthy behaviors to reduce late and long-term effects of cancer and its treatment.

In 2014, the Manderson Cancer Center developed a cancer survivorship program to provide comprehensive care for adult-onset cancer survivors that include survivorship care plans, treatment summary and follow-up plan, patients eligibility criteria, and/or completing cancer treatment.

Brandy Junkin, Certified Registered Nurse Practitioner, is spearheading our cancer survivorship program by working collaboratively with the Medical and Radiation Oncologists to help ensure patients’ quality of life continues to improve after their treatment. Referrals are made by the Oncologists and Nurse Practitioners when a patient has been determined to meet survivorship criteria.
Standard 4.1 Cancer Prevention Programs and Standard 4.2 Screening Programs

October 10, 2016 Manderson Cancer Center General Breast Screening
There were 102 women screened with clinical breast exam and education on breast health and early detection. Of those, 82 had screening mammograms, two had diagnostic mammograms, one had an MRI, one surgical referral, three were no-show to appointment and one was a no-show for surgical referral appointment. There are 12 still in follow-up.

Summary of effectiveness: One hundred and two ladies received a clinical breast exam, education on early detection and prevention, as well as any recommended follow-up. A pre-survey and post survey were given regarding knowledge of breast health and self-breast exams.

- 97 completed the pre-survey.
- 87 completed the post survey.
- The age range was 38-80.
- There was a 14% increase in knowledge of breast health and self-breast exams.
- 82% stated they learned something new.

October 27, 2016 Manderson Cancer Center Hispanic Breast Screening
There were 60 women screened with clinical breast exam and education on breast health and early detection. Out of those, 48 received screening mammograms, three received diagnostic mammograms, one was a no-show to appointment, one too young for mammogram and seven still in follow-up.

Summary of effectiveness: Sixty ladies received a clinical breast exam, education on early detection and prevention, as well as any recommended follow-up. A pre-survey and post survey were given regarding knowledge of breast health and self-breast exams.

- 77 completed the pre-survey.
- 46 completed the post survey.
- The age range was 20-74.
- There was a 7% increase in knowledge of breast health and self-breast exams.
- 100% stated they learned something new.

Smoking Cessation/Lung Cancer Education Event Was Held June 10, 2016
There were a total of 30 participants. Select organizations were invited to provide handouts on lung cancer, information about aid in quitting smoking and lung cancer screening. This event was held to create awareness of cancer risks related to smoking and to provide resources to stop smoking to patients, staff and the surrounding community. News stations attended to broadcast information as well.
The Lewis and Faye Manderson Cancer Center offers outpatient oncology nutrition services to provide medical nutrition therapy, including nutritional support and symptom management and to encourage an improved quality of life for our patients. Regina Jackson, RD, LDN has been providing these services for our cancer center for the past nine years. Starting in 2016, our nutrition services grew from a few days a week to full-time coverage. We welcomed Julie Gambril, RD, LDN, to our staff this year to assist our growing patient population with their nutritional needs. Our Registered Dietitians meet with new patients to provide prevention, treatment, survivorship and palliative care nutrition counseling. They follow and encourage our highest risk patients weekly, including concurrent chemotherapy and radiation patients and any patients with increased needs. A nutrition screening protocol was developed and implemented specifically for our nursing staff. Nurses now review nutritional parameters for patients at each treatment visit, and patients are referred to our Dietitians for further assistance with any new nutritional concerns.

RESEARCH AND CLINICAL TRIALS

Lewis and Faye Manderson Cancer Center is a National Cancer Institute (NCI) Central Institutional Review Board Signatory Institution. We are also an affiliate member of NRG Oncology, which brings together the research areas of the National Surgical Adjuvant Breast and Bowel Project (NSABP), the Radiation Therapy Oncology Group (RTOG) and the Gynecologic Oncology Group (GOG). NRG Oncology has been awarded a grant by the National Cancer Institute (NCI) as a member of the NCI National Clinical Trials Network (NCTN).

Through our clinical trials program, patients who qualify can access other health care alternatives and investigational new drugs long before they are available on the open market. The Manderson Cancer Center jointly conducts research with MD Anderson Cancer Center.

ClinicalTrials.gov is a searchable database that provides patients, family members and the public with information about ongoing clinical research studies. Below is a list of clinical trials that are currently offered at Manderson Cancer Center. We have attached the link for each study for ease in finding detailed information regarding these studies.

For any questions or to learn if you qualify for a trial, please contact our Clinical Research Coordinator, Danielle Daniel, at (205) 759-6237 or by email at cancer.research@dchsystem.com.

During the months of January – December 2016 a total of 80 patients were accrued to trials.

- Treatment/interventional trials - 2 onsite, 3 referred
- Quality of life or supportive care trials - 40 onsite, 1 referred
- Patient registries/data bank with an underlying cancer research focus - 26 onsite, 4 referred
- Biospecimen repository trials - 4
Below is a list of all trials available at the Manderson Cancer Center:

**NRG Oncology Studies**

<table>
<thead>
<tr>
<th>Trial Code</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRG-CC001</td>
<td><em>A Randomized Phase III Trial of Memantine and Whole Brain Radiotherapy with or without Hippocampal Avoidance in Patients with Brain Metastases</em></td>
<td>This study compares memantine hydrochloride and whole-brain radiotherapy with or without hippocampal avoidance in reducing neurocognitive decline in patients with cancer that has spread from the primary site (place where it started) to the brain.</td>
</tr>
<tr>
<td>NRG-CC003</td>
<td><em>A Randomized Phase II/III Trial of Prophylactic Cranial Irradiation with or without Hippocampal Avoidance for Small Cell Lung Cancer</em></td>
<td>This trial studies how well whole-brain radiation therapy works and compares it with or without hippocampal avoidance in treating patients with small cell lung cancer.</td>
</tr>
</tbody>
</table>

**MD Anderson Studies:**

<table>
<thead>
<tr>
<th>Study Code</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-0609</td>
<td><em>Biospecimen Banking and Biomarker Validation for Lung Cancer Early Detection in Cohort Receiving Low Dose Helical Computed Tomography Screening</em></td>
<td>This is a multicenter study led by MD Anderson to establish a Biospecimen repository from a cohort of current and former smokers who meet the criteria for low dose helical tomography (LDCT) screening.</td>
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</tbody>
</table>

**Lung Cancer Studies:**

<table>
<thead>
<tr>
<th>Study Code</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSIGHT</td>
<td><em>An Observational Study Assessing the Clinical Effectiveness of Veristrat® and Validating Immunotherapy Tests in Subjects with Non-Small Cell Lung Cancer</em></td>
<td>The primary purpose of this study is to assess the physician’s clinical practice patterns while using Veristrat in subjects with non-small cell lung cancer whose tumors are epidermal growth factor receptor (EGFR) wild-type or EGFR negative.</td>
</tr>
</tbody>
</table>

**Breast Cancer Studies:**

<table>
<thead>
<tr>
<th>Study Code</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Breast Cancer and Lymphedema Registry</td>
<td><em><a href="https://clinicaltrials.gov/show/NCT01580800">https://clinicaltrials.gov/show/NCT01580800</a></em></td>
<td>This registry will provide documented support for the potential importance of pre-emptive strategies for breast cancer-associated lymphedema.</td>
</tr>
</tbody>
</table>

**Myelodysplastic Syndromes (MDS) and Acute Myeloid Leukemia (AML)**

<table>
<thead>
<tr>
<th>Study Code</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connect MDS and AML</td>
<td><em>The Myelodysplastic Syndromes (MDS) and Acute Myeloid Leukemia (AML) Disease Registry</em></td>
<td>The purpose of this study is to observe and collect data for patients with Myelodysplastic Syndromes (MDS) or Acute Myeloid Leukemia (AML).</td>
</tr>
</tbody>
</table>
Discrimination is Against the Law

DCH Health System complies with applicable Federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, or sex. DCH Health System does not exclude people or treat them differently because of race, color, national origin, age, disability, or sex. DCH Health System:

- Provides free aids and services to people with disabilities to communicate effectively with us, such as:
  - Qualified sign language interpreters
  - Written information in other formats (large print, audio, accessible electronic formats, other formats)

- Provides free language services to people whose primary language is not English, such as:
  - Qualified interpreters
  - Information written in other languages

If you need these services, contact our Corporate Director of Compliance at (205)759-7111.

If you believe that DCH Health System has failed to provide these services or discriminated in another way on the basis of race, color, national origin, age, disability, or sex, you can file a grievance with:

Corporate Director of Compliance
DCH Health System
809 University Blvd. E.
Tuscaloosa, AL 35401
205-759-7111
TTY 1-866-237-0173
info@dchsystem.com

You can file a grievance in person or by mail or email.

You can also file a civil rights complaint with the U.S. Department of Health and Human Services, Office for Civil Rights, electronically through the Office for Civil Rights Complaint Portal, available at https://ocrportal.hhs.gov/ocr/portal/lobby.jsf, or by mail or phone at:

U.S. Department of Health and Human Services
200 Independence Avenue, SW
Room 509F, HHH Building
Washington, D.C. 20201
1-800-368-1019, 800-537-7697 (TDD)

Complaint forms are available here.
Italian

Japanese
注意事項：日本語を話される場合、無料の言語支援をご利用いただけます。1-205-759-7111（TTY: 1-866-237-0173）まで、お電話にてご連絡ください。

Korean

Portuguese

Russian

Spanish

Tagalog

Vietnamese
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