2012 Director's Report

2012 was our second year in the Cecil B. Highland, Jr. and Barbara B. Highland Cancer Center. We are proud to continue to provide excellent cancer care to the residents of north central West Virginia. Using state-of-the-art technology, we are better able to coordinate oncology care in one convenient setting. Our comprehensive approach translates into improved patient care.

We have seen major changes this year in the Highland Cancer Center. We said goodbye to Craig Coonley, M.D. who retired after 22 years of excellent and dedicated service. We also welcomed two new oncologists, Salman Osman, M.D. and Yaser Homsi, M.D. Both of these physicians are superbly trained and are experts in their fields.

The Cancer Center has produced a new video for patients that orient them to our comprehensive services and details the process involved in receiving cancer treatments, this is available for viewing at www.thenewuhc.com/oncology/dvd. In addition, our Breast Health navigator Peggy Johnson has been instrumental in assisting patients to access the care they need.

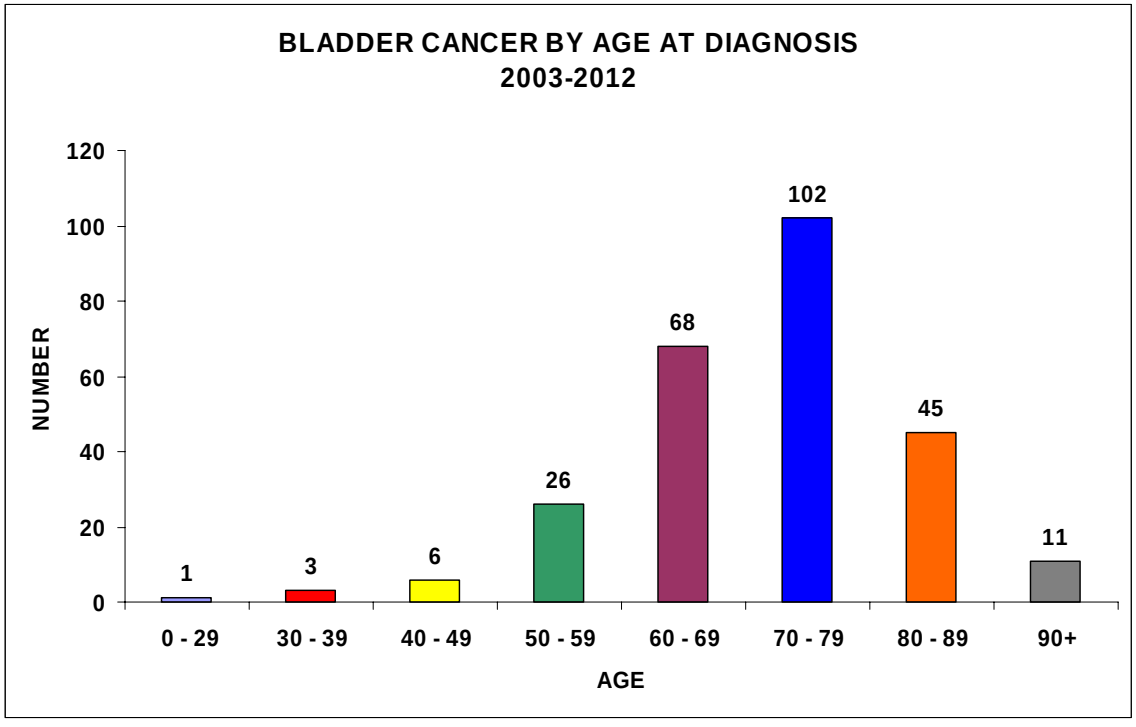
Our commitment to research and education remains strong with well attended weekly cancer conferences and periodic lectures from national oncology experts. We remain active with clinical protocol studies coordinated with the National Surgical Breast and Bowel Project and West Virginia University to increase our patient's care options.

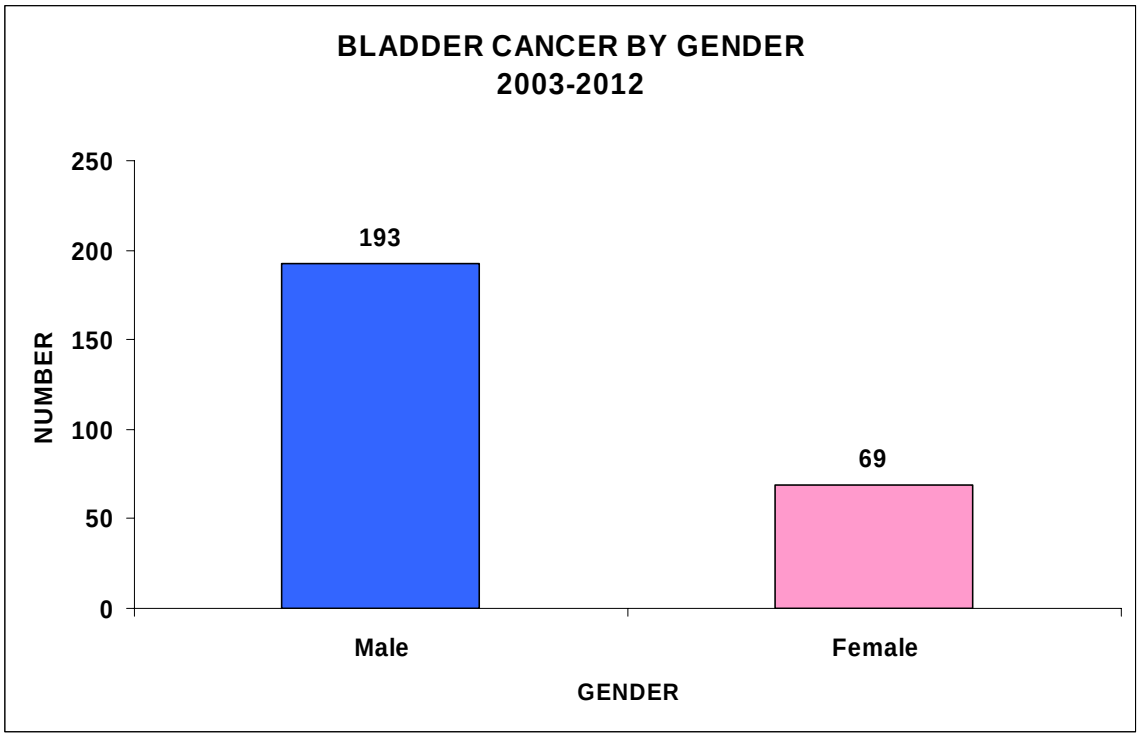
Overall, with our new hospital facility and our hard working and dedicated oncologists, we continue to strengthen cancer care within our community. Through coordination and collaboration with medical, surgical, and radiation oncology, we are able to provide the best cancer care available to the residents of north central West Virginia.

Paul M. Brager, M.D., Director

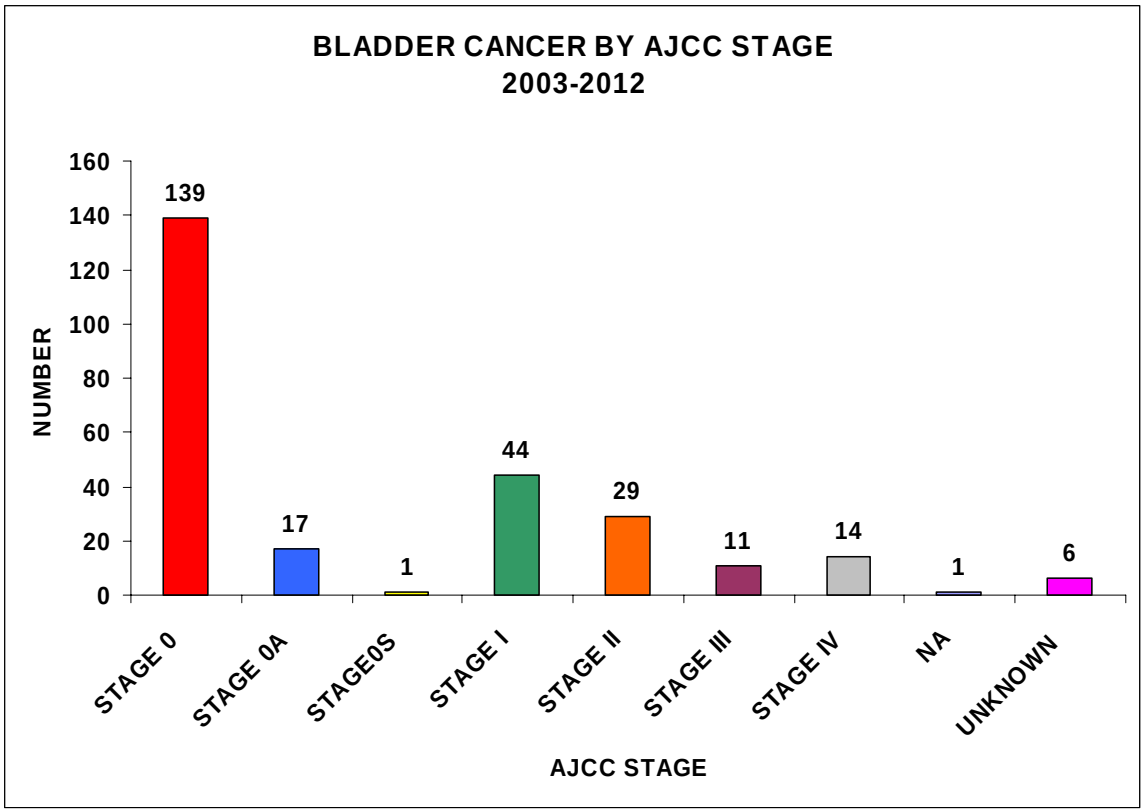
2012 Long Term Study: Bladder Cancer

More than 72,000 new cases of bladder cancer were diagnosed in the United States in 2012. At the Cecil B. Highland, Jr and Barbara B. Highland Cancer Center, 289 cases of bladder cancer were diagnosed and treated between 2003 and 2012. The median age of our patients was 70 years (Graph 1) which is similar to the American College of Surgeons (ACoS) statistics. The male to female ratio (Graph 2) was 2.8 to 1, which is also similar to the ACoS data.

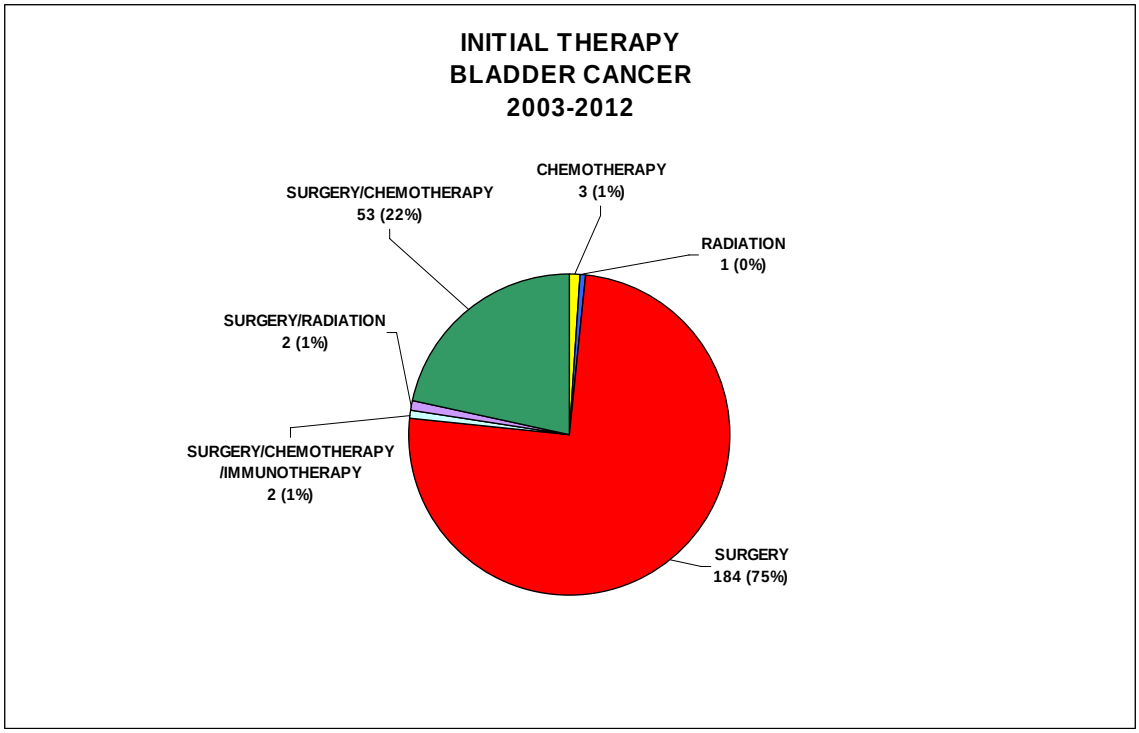




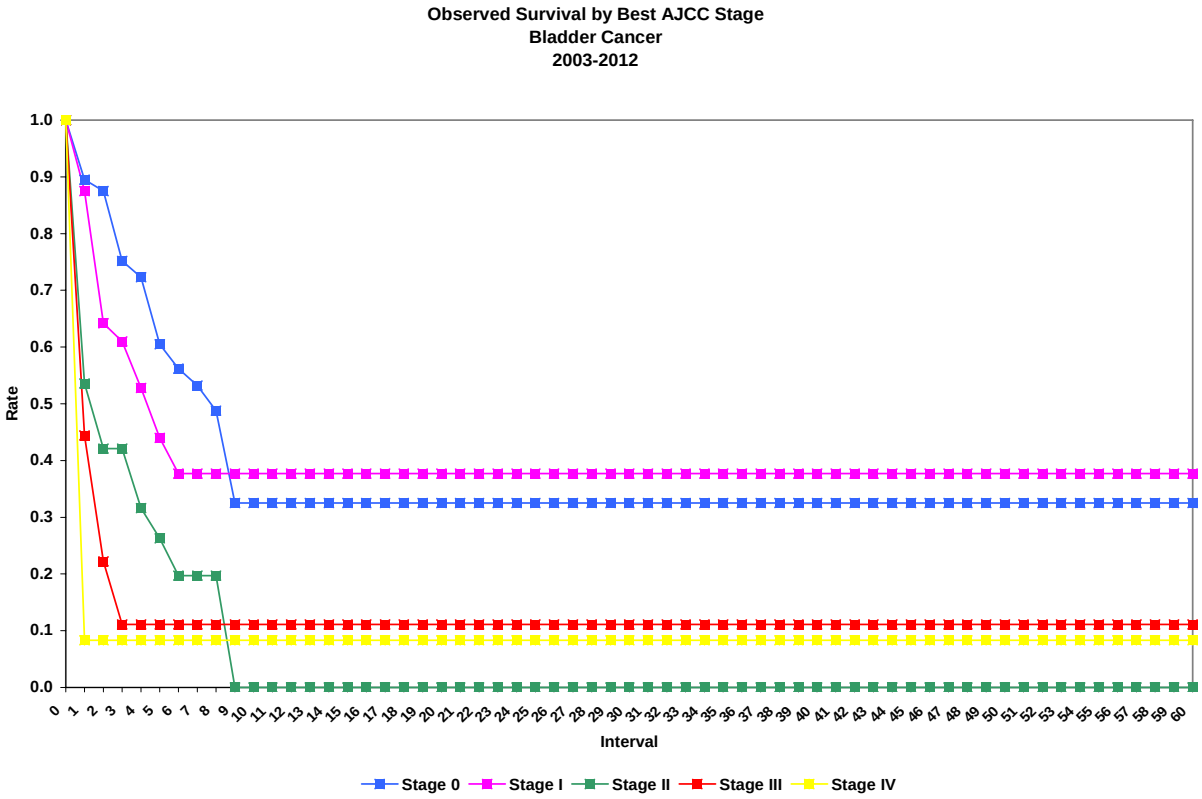
The stage of bladder cancer at diagnosis is important in determining treatment options. Fifty percent of bladder cancers are superficial (Stage 0) and can be treated with surgical removal through a cystoscope (TURBT). Bladder instillation of BCG or chemotherapy is employed after TURBT if the cancer is flat (Tis or stage OA) or recurrent. In our study (Graph 3), 52% were stage 0, similar to the 50% reported by the ACoS. Twenty-two percent of patients in our study were Stage I, representing cancer that invades the subepithelial lining of the bladder but without invading bladder muscle, similar to the ACoS statistics of 20%. Stage III cancer invades through muscle and into the outside wall of bladder and comprised 5.5% of our cases, similar to ACoS statistics of 4.5%. Stage IV disease includes invasion outside of the bladder involving pelvic organs, lymph nodes, or spread to distant organs. In our study, this involved 4% of cases (ACoS was 5.6%).



Treatment and prognosis of bladder cancer depends on stage at presentation. Most of the patients in our study underwent surgery (either TURBT, cystectomy, or both, Pie graph 4). This included the 75% of patients with stage 0 & I disease receiving TURBT alone. Only 1% of patients are recorded to have received immunotherapy with BCG. Stage II patients most often were treated with radical cystectomy (removal of bladder) unless they could not tolerate this surgery, then RT +/- chemotherapy was then often used. Stage III patients also were treated with radical cystectomy if they could tolerate this surgery. Stage IV patients usually received palliative chemotherapy.



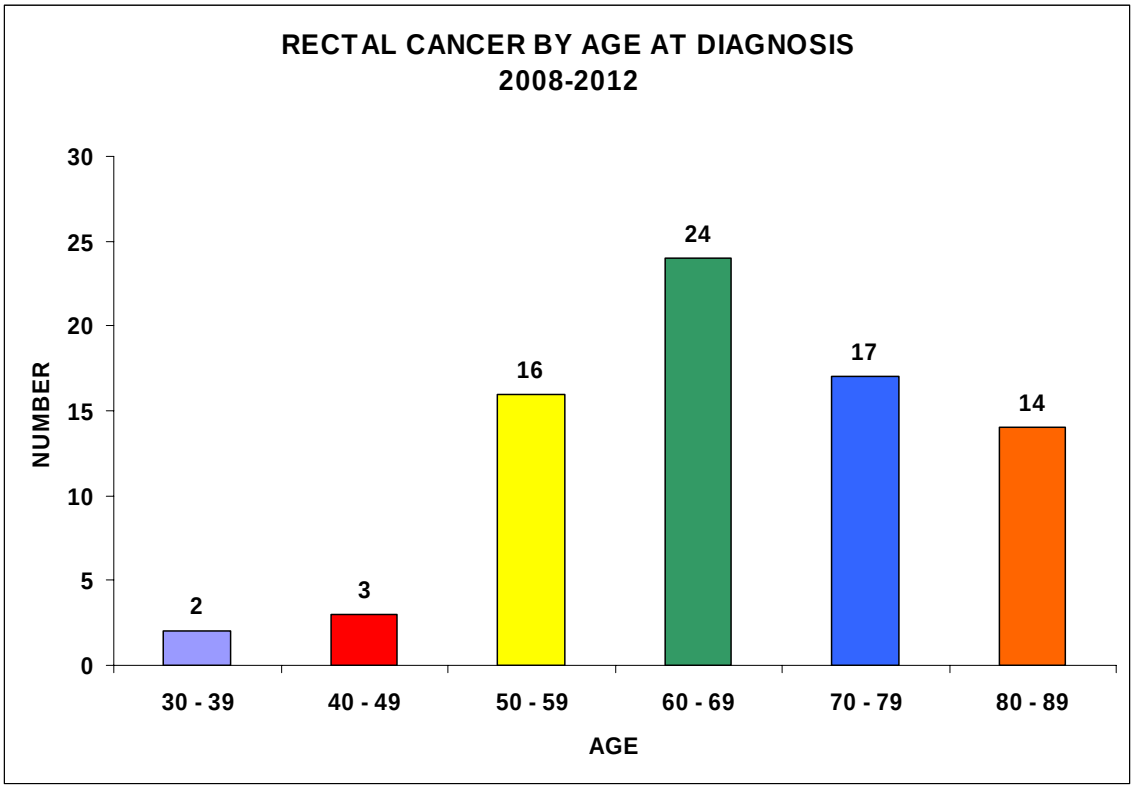
Patient survival in our study is shown in Graph 5. Stage 0 and I, five year survival was 35% and 40%, respectively. ACoS national statistics showed Stage 0, five year survival of 77% and Stage I of 64%. In our study, all stage II patients had died by nine months with median survival of three months, compared with the national statistics of 35% five year survival. Our study illustrates Stage III and IV five year survival being 11% and 9% respectively, as compared to the national statistics of 27% and 11%. Although our study indicates that our patients did significantly worse than would be expected when compared to other hospital data, further analysis reveals that of the 262 patient in this study, only 29 of the 112 patient who died had active bladder cancer at the time of their death. Most of the patients (83) who died did so from non-cancer related causes.

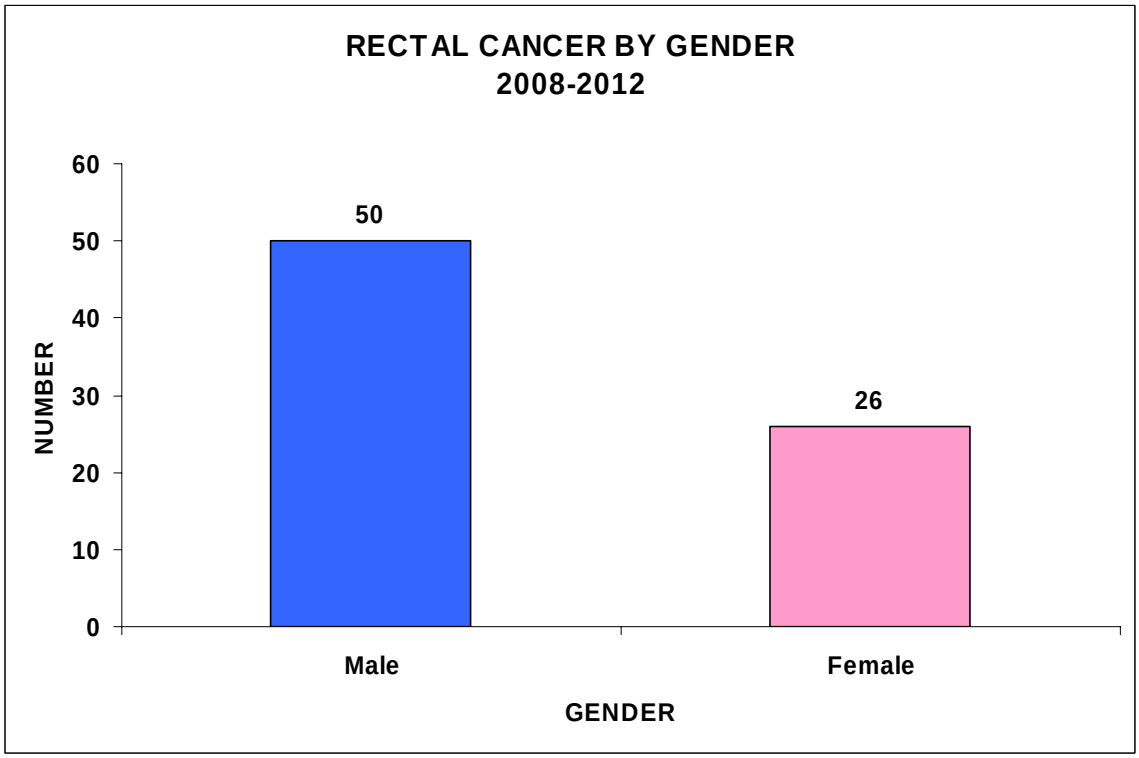


2012 Short Term Study: Rectal Cancer

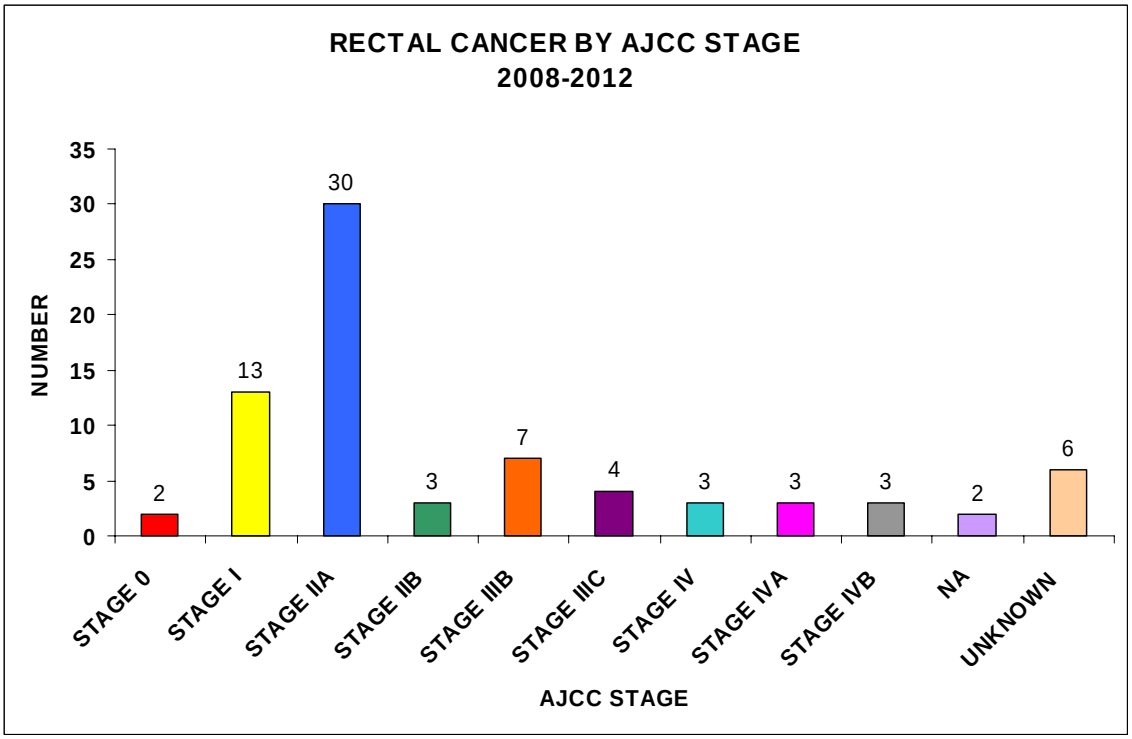
More than 40,000 new cases of rectal cancer were diagnosed in the United States in 2012. Anatomically, the rectum includes the final 15 cm of the colon extending from the sigmoid colon (peritoneal reflection) to the anus. The most common cell type is adenocarcinoma. Stage for stage, rectal cancers have a slightly worse prognosis than cancer originating in other areas of the colon.

Between 2008 and 2012, 76 cases of rectal cancer were diagnosed at United Hospital Center. The age distribution is shown on Graph 6 with the median age in the late 60's, similar to the national statistics. Male to female ratio was 2 to 1 (Graph 7), with a greater male predominance than the national averages of 1.3 to 1.


RECTAL CANCER BY AGE AT DIAGNOSIS
2008-2012
NUMBER
30
25
20
15
10
5
0
2
3
16
24
17
14
30 - 39
40 - 49
50 - 59
60 - 69
70 - 79
80 - 89
AGE

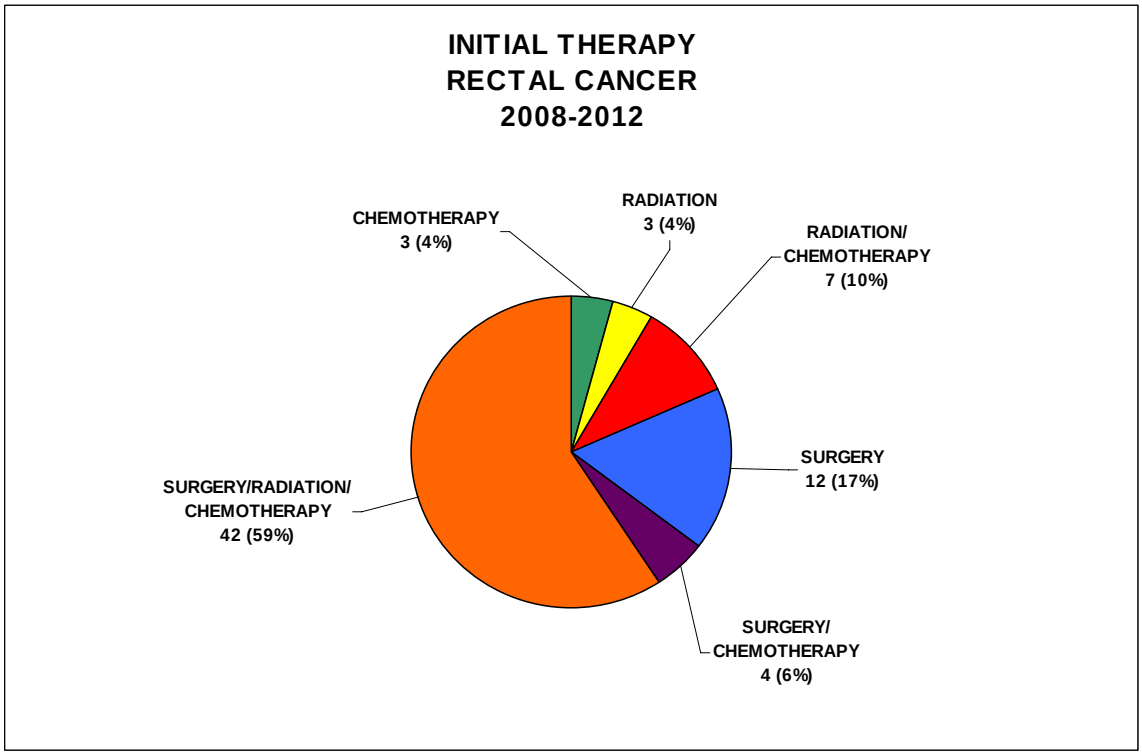

RECTAL CANCER BY GENDER
2008-2012
NUMBER
60
50
40
30
20
10
0
50
26
Male
Female
GENDER

The stage at diagnosis is again very important in planning treatment and estimating prognosis (Graph 8). Stage 0 represents non-invasive cancer and is rare; two patients in our study representing 5% as compared to the national percentage of 7.5%. Stage I represents patients with cancer invading the epithelial lining or part of the colonic muscle. In our study, this consisted of 17% of patients; the national percentage was 20%. Stage IIA cancer penetrates through the muscularis, but not through the outer layer of the colon (serosa). This was the most common presentation at diagnosis in our study involving 39% of patients, and was comparable to national statistics. Stage IIB disease includes cancer completely through the serosa and involved 4% of our patients. Stage III disease includes spread to cancer to regional lymph nodes and included 14% of patients as compared to 20% nationally. Stage IV patients have cancer that has spread to distant sites and included 12% of our patients, also in line with national averages.



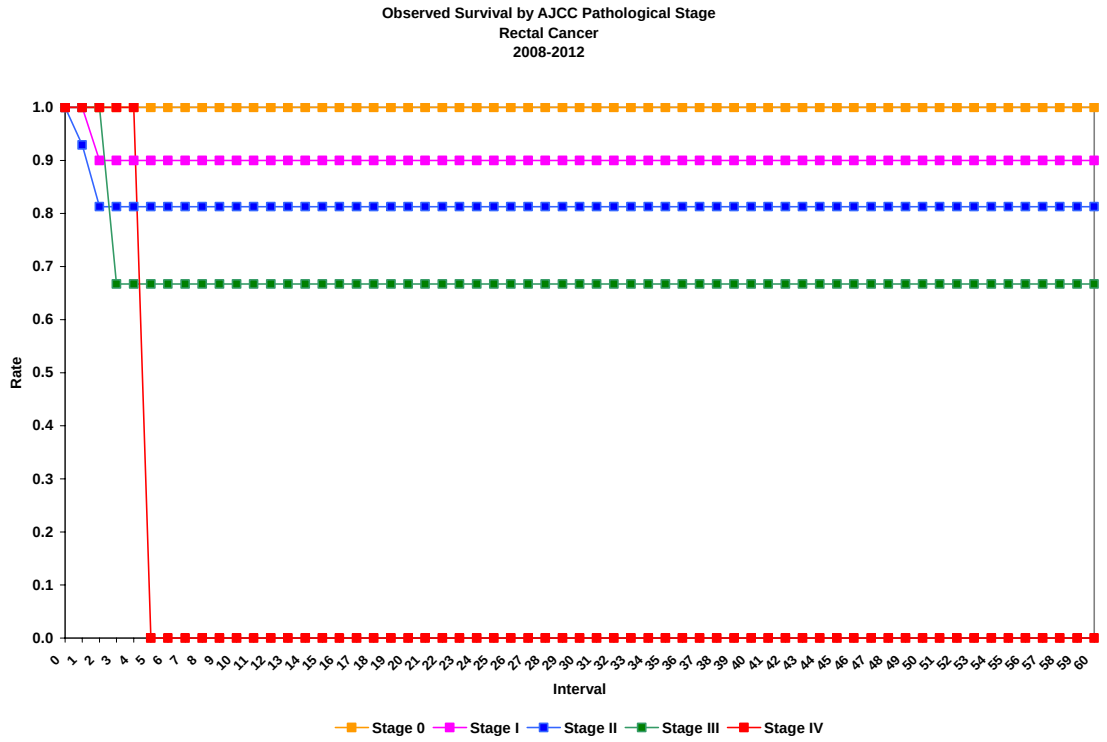
Initial treatment depends on the clinical and pathological stage as seen in Pie graph 9. Most patients with clinical stage II or III disease received preoperative radiation and 5-FU chemotherapy to shrink their

cancer before surgery. This often preserves the rectum and avoids a colostomy. 59% of our patients received this form of treatment representing most of our stage II and III patients. Surgery alone is appropriate for stage I patients and 17% of patients received this treatment. Stage IV patients are often first treated with surgery, then chemotherapy to extend survival. Occasionally, chemotherapy is given without removing the primary cancer. In our study, surgery and chemotherapy was used in 6% of patients and chemotherapy alone in 4% of patients representing our stage IV patient.



Prognosis depends on the cancer stage (Graph 10). All patients in our study with non-invasive rectal cancer survived for more than five years. Ninety percent of stage I patients survived five years which is significantly better than the national statistic of 75%. In our study, stage II five year survival was 80%, also better than national statistics of 64%. Stage III survival was 66%, similar to the national statistics. All patients with stage IV disease died within six months of diagnosis; this is worse than the national

statistics which show median survival of 19 months. This low survival rate may be a result of the small number of patients studied. Overall, our patients represented in this study did quite well, and our results were generally better than the national averages.

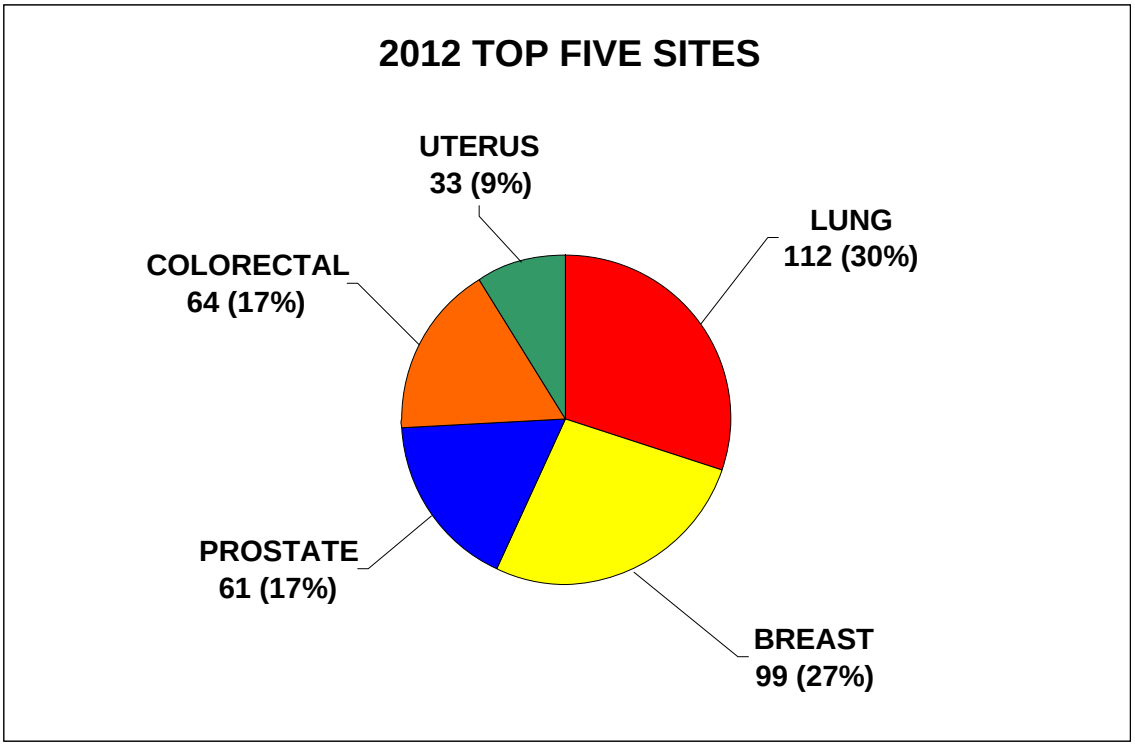


2012 SITE DISTRIBUTION

CODE	SITE	# Accessioned 2012
C00	LIP	**2**
C01	BASE OF TONGUE	**5**
C04	FLOOR OF MOUTH	**2**
C05	PALATE	**2**
C07	PAROTID	**1**

C08	OTHER MAJOR SALIVARY GLANDS	**1**
C09	TONSIL	**4**
C10	NASOPHARYNX	**1**
C15	ESOPHAGUS	**5**
C16	STOMACH	**17**
C17	SMALL INTESTINE	**3**
C18	COLON	**44**
C19	RECTOSIGMOID JUNCTION	**3**
C20	RECTUM	**17**
C21	ANUS AND ANAL CANAL	**4**
C22	LIVER AND INTRHEPATIC BILE DUCT	**1**
C23	GALLBLADDER	**2**
C24	OTHER PARTS OF BILIARY TRACT	**2**
C25	PANCREAS	**8**
C31	ACCESSORY SINUSES	**3**
C32	LARYNX	**7**
C34	BRONCHUS AND LUNG	**112**
C42	HEMATOPOIETIC AND RETICULOENDOTHELIAL SYSTEM	**14**
C44	SKIN	**25**
C48	RETROPERITONEUM AND PERITONEUM	**1**
C49	CONNECTIVE, SUBCUTANEOUS, AND OTHER SOFT TISSUE	**2**
C50	BREAST	**99**
C51	VULVA	**2**
C52	VAGINA	**1**
C53	CERVIX UTERI	**16**
C54	CORPUS UTERI	**33**
C56	OVARY	**5**
C60	PENIS	**1**
C61	PROSTATE GLAND	**61**
C62	TESTIS	**3**
C64	KIDNEY	**11**

C65	RENAL PELVIS	**3**
C66	URETER	**2**
C67	BLADDER	**33**
C70	MENINGES	**2**
C71	BRAIN	**4**
C72	SPINAL CORD AND OTHER CENTRAL NERVOUS SYSTEM	**1**
C73	THYROID	**30**
C77	LYMPH NODES	**23**
C80	UNKNOWN	**19**
	TOTAL	**637**



2012 CANCER COMMITTEE MEMBERS AND INVITED GUEST

Paul M. Brager, MD, Co-Chair
Medical Oncology

Craig J. Coonley, MD, Co-Chair
Medical Oncology - Retired 06/15/12

Chinmay Datta, MD
Pathology

Carl Fischer, III, MD
General Surgery

Thomas Kennedy, MD
Plastic Surgery

Jeffrey Madden, MD, Cancer Liaison
General Surgery

Ahmed Mahmoud, MD
Physical Medicine, Rehabilitation, & Pain

Daniel Merenda, MD
Otolaryngology

Vincent Miele, MD
Neurosurgery

Saad Mossallati, MD
Thoracic Surgery

Lisa Ashcraft-Carr, RD, LD
Dietician

Melissa Bedilion, RN
Nurse Manager, 6S, Oncology

Linda Carte, RN, MSN, AOCN
Director Oncology Services

Melodie Coffman, BSN
Coordinator Out-Patient Infusion

Judy Dye, RN, OCN
Oncology Program Coordinator

Butch Heflin, SW
Social Worker

James Israel
Chief Medical Physicist/Radiation Safety Officer

Peggy Johnson, RN, BSN
Clinical Navigator - Breast Cancer

Cathy Libert, RTT
Supervisor, Radiation Oncology

Ryann Moore
American Cancer Society

Michael A. Stewart, MD
Radiation Oncology

W. Park Thrush, MD
Radiology

Salman Osman, MD
Oncology Fellowship

James Morley
Chaplain/Ethics

Liz Pigg, RN, BSN, CPHN
Manager, Hospice

Mark Povroznik, CQO
VP of Quality Improvement

John Pulice, PT
Manager, Rehabilitation Services

Lorry Richards, RHIT, CTR
Cancer Registrar

Todd Rohrbough, RPH
Pharmacist

Chrissy Swenskie, RN
Radiation Oncology Nurse

Michael Tillman, RN, MSN
VP Patient Services, Chief Operating Officer

Linda Tyson, Behavioral Therapist
Behavioral Health

2012 Performance Improvement Summary

Each year many aspects of cancer care are analyzed for compliance with national standards while focusing on always striving to improve patient care.

During 2012, the following were formally targeted by UHC Cancer Committee for study and possible identification of opportunities for improvement:

1. The use of NCCN guidelines for staging and treatment of lung cancer. A thorough analysis of the care provided for the diagnosis of lung cancer occurred. A 100% review occurred including diagnostic studies, surgical procedures and treatment modalities after diagnosis.

2. Assessment and management of non-flushing Ports or PICC lines. All current policies were reviewed and revised with whole house education occurring on updated policies.

3. Implementation of Survivorship Care Plans with Breast Cancer patients.

4. An analysis of the Chemotherapy/Biotherapy dose verification process wherever the patient is cared for, including policies reviewed with education as needed.

5. A quality study of EGFR/ALK mutation analysis on lung cancer pathology specimens was completed.

6. A quality study of patient satisfaction with the newly implemented navigator role was completed with overwhelming positive patient, physician and ancillary response.

A sub-committee of the Cancer Committee, Oncology care team, is comprised of members of UHC multidisciplinary departments who also contribute to positive cancer care practices throughout the organization. This sub-committee also reports to the Cancer Committee and takes direction on tasks identified by the team. Some accomplishments of the sub-committee include:

1. A quarterly associate meeting within the cancer center including private oncology offices to talk about processes and improve patient coordination and satisfaction.

2. Addition of a patient bulletin board area in shared cancer center waiting room for stronger communication with patients and families on cancer center offerings.

3. Improvement in wait times for pain clinic referrals.

4. Addition of UHC Chaplains to the hospice volunteer team.

5. An education event for UHC chaplains on the unique needs of Veterans in crisis from diagnosis to end of life concerns.

6. Home Health and hospice education enhancement on pain management in cancer care including non medication approaches.

7. Addition of a community head and neck cancer screening.
8. A grant to obtain and implement the Breast Health Navigator position.
9. Enhanced psychosocial distress resources.
10. Information technology enhancements for physicians to capture clinical staging information.
11. Addition of a stationary PET scanner for patient care.
12. A cancer focused blood drive offering to highlight the need of oncology patients and blood products.
13. Reorganization of the Breast Cancer Support group.
14. American Cancer Society added resource of a CHA director bringing education and outreach focusing on colon health and cancer awareness.
15. Addition of Oncology physician order sets.
16. Process of chemotherapy mixing reviewed and revised for improvement of timely availability to patients.

United Hospital Center Community Outreach 2012

Review of Education, Screening and Prevention activities and other Community Programs

1. The American Cancer Society serves our patients through their Cancer Resource Center located in the Cecil B. Highland, Jr. and Barbara B. Highland Cancer Center. The Look Good…Feel Better program creates a support system for cancer patients through sessions with professionals on make-up, skin care, hair and wigs. Sessions were held in January, March, May, July, September and November.
2. The American Cancer Society Cancer Resource Center is open each week and staffed by ACS volunteers every Monday and Tuesday from 10 am till 2pm. The ACS offers many resources: guidelines for screening, early detection and prevention as well as information for those diagnosed with cancer. Information is available to support cancer patients as well as their families and caregivers. The resource center houses a wig bank and provides wigs to cancer patients at no cost. The American Cancer Society is available by phone or online 24 hours a day, 7 days a week at 1-800-ACS-2345 or www.cancer.org.
3. In January, the Fresh Start Program, a four part series for tobacco cessation was offered to the community.
4. Cancer Center staff visited Pratt Whitney in March providing educational materials and offering discussion with their employees about the health risk of using tobacco products and tips on ways to stop using tobacco.
5. Let's Talk to Kids About Cancer is a program for children ages 6-12 who have a significant adult in their lives diagnosed with cancer. This includes a tour of UHC's Infusion Center and the Radiation Oncology Department. A Behavioral Therapist is available if the children express a

desire to discuss their feelings and emotions. This program was offered in the spring and again in the fall.

6. The annual Men's Cancer Awareness and Screening day was held in April. Men were offered testicular screening, manual prostate screening, fecal occult blood testing and PSA lab testing for age appropriate males. Educational materials about early detection and cancer prevention as well as general wellness education including tobacco cessation and good nutrition were available.
7. Also in April during national Oral, Head and Neck Cancer Awareness Week and in cooperation with UHC ENT and Audiology, a screening for Oral, Head and Neck Cancer was held. This included examination of the face, inside and outside of the mouth, tongue, and throat and neck area. Typical symptoms of head and neck cancer were reviewed. Educational materials about early detection and prevention were given to patients. Wellness included tobacco cessation and good nutrition.
8. Mountain State Medical Specialties Dermatology physicians joined the Cancer Center in offering a Skin Cancer Screening in May. Participants were offered a body screening for skin cancer, instructions on how to perform self examinations and educational materials on prevention and early detection.
9. Beginning in May 2012, UHC's Clinical Navigator for Breast Health began the Butterfly Kiss Support Group for those with breast cancer and their families and friends. The group meets monthly and each meeting includes group discussion and an educational offering.
10. Cancer Center staff shared early detection, prevention and general wellness information at area health fairs visiting the FBI and the Infocision Call Center.
11. In October, during national breast cancer awareness month, the annual Cancer Screening and Awareness day for Women was held. The screening included pap smears, fecal occult blood testing, breast exams and mammograms to the appropriate participants. Educational materials about prevention and early detection were provided.
12. The Celebration of Life event was held in November in collaboration with the Louis A. Johnson VA Healthcare System and included the ribbon cutting and open house for the new PET/CT scanner. Celebration of Life is an annual gathering to honor and celebrate cancer survivors. The celebration also included brunch and presentation of the Guardian Angel award.
13. Also in November, UHC's Cancer Center joined with the American Cancer Society and supported the Great American Smokeout. Displays were set up sharing information on tips to stop smoking and all tobacco use as well as information on the health benefits of tobacco cessation. Smoking cessation classes through the ACS are available as requested.
14. The It's All About You Survivorship Series was held in the Cecil B. Highland Jr. and Barbara B. Highland Cancer Center waiting area as a five part series. Topics covered included:
    - Managing Stress: Inspiration, Reflexology and Massage
    - Nutrition: Eating with a Purpose
    - Keeping the Lines of Communication Open
    - Staying Active
    - Looking Your Best for the Holidays

    It's All About You was held December 3rd through 7th and included a healthy snack and beverage with recipe cards each day.
15. A quarterly newsletter, We Hear You, is provided to patients. The content follows the seasons and offers health and nutrition tips and keeps our patients and their families up to date on the happenings in the Cancer Center and upcoming education, screening and program opportunities.

16. We acknowledge the need for support as our patients, families, and community face difficult times. A Bereavement Support Group is available and an annual grief program, Getting Through the Holidays, is offered each year in the fall for those who have lost a loved one in the past year.
17. Education and outreach for cancer prevention, treatment, and survivorship issues is provided on an ongoing basis. Cancer Committee members are asked to provide feedback on what offerings are helpful and if others are needed.
18. Patients and families of the Cancer Center are constantly asked for feedback and recommendation along with participants at programs for any needed changes for enhancements.
19. The Cecil B. Highland Jr. and Barbara B. Highland Cancer Center at United Hospital Center wants you to know, *You're Not Alone* and invites you to view the DVD, Understanding The Journey Through Cancer With Us, at www.thenewuhc.com/oncology/dvd.

CECIL B. HIGHLAND JR. & BARBARA B. HIGHLAND CANCER CENTER

UNITED HOSPITAL CENTER

2012 Program Schedule

Community Support Groups*
For more information call Judy Dye 681.342.1804.

Cancer Survivorship Workshop
For all cancer survivors/family and friends. Important topics will be discussed which may include the following: communication, nutrition, spirituality, rehabilitation needs, financial issues, thoughts and feelings, and survivorship panel.

May and October
For more information, contact Judy Dye, Oncology Program Coordinator, 681.342.1804.

Hope Support Group
A group for those with cancer and their families/ friends. For more information, call Judy Dye, Oncology Program Coordinator, 681.342.1804.

Bereavement Support Group
To register or for more information, call Leigh Ann Ritter, 681.342.3259.

FreshStart*
A 4-session program to help individuals stop smoking or using smokeless tobacco. For more information or to register, call American Cancer Society, 1.800.ACS.2345.

Getting Through the Holidays
A program for those who have lost a loved one in the past year – grief workshop.

November - December
For more information or to register, call Leigh Ann Ritter, 681.342.3259.

Learning to Live with Cancer
Your choice of an informational video or DVD. To obtain a copy, call Judy Dye, Oncology Program Coordinator, 681.342.1804.

Skin Cancer Screening
Skin screening available at no cost; pre-registration required.

Spring
For more information or to register, call Judy Dye, Oncology Program Coordinator, 681.342.1804.

Look Good, Feel Better*
A program where women with cancer can receive tips on makeup, hair, wigs and turbans. Call Ryann Moore, 681.342.1818.

Celebration of Life
Annual cancer survivor program; invitations are sent to those patients treated at UHC. For more information, call Linda Carte, 681.342.1830.

Men's Cancer Screening
Manual Prostate/Testicular exam and colorectal screening at no cost. PSA blood tests will be made available for high risk males (prostate family history) and those currently experiencing symptoms of concern.

Spring
For more information Judy Dye, Oncology Program Coordinator, 681.342.1804.

Nutrition Information*
Get answers or suggestions for your questions on nutrition. Call the American Cancer Society dietitian on call at 1.888.227.6333 or call Judy Dye, Oncology Program Coordinator, 681.342.1804.

Women's Cancer Screening
Breast exam, pap test, colorectal screening and mammogram at no cost; pre-registration required.

October
For more information Judy Dye, Oncology Program Coordinator, 681.342.1804.

Let's Talk About Cancer with Kids
For kids who have a close relative who has been diagnosed with cancer. Tour Infusion Center, Radiation Oncology and inpatient unit as well as discuss feelings and emotions with a therapist. For more information or to register, call Judy Dye, Oncology Program Coordinator, 681.342.1804.

Cancer Genetics Testing
Discuss with your physician whether you would benefit from genetic testing. For more information or to register, call Judy Dye, Oncology Program Coordinator, 681.342.1804.

Voyager Newsletter
Informative cancer care newsletter. If you would like to be added to the mailing list or for more information, call Judy Dye, Oncology Program Coordinator, 681.342.1804.

Clinical Trials
For information on the clinical trials currently open and enrolling, call Judy Dye, Oncology Program Coordinator, 681.342.1804.

*Program offered in conjunction with American Cancer Society

If you have a suggestion for a program or service, call Linda Carte, 681.342.1830.

For information on community education programs or to be placed on a mailing list to receive information call 618.342.1804.

Unless otherwise noted all programs are held on the UHC campus.

Note: Program dates and times are subject to change throughout the year. Therefore, it is important to call and register for programs or to call for any information you may need.

For information on any cancer-related topic call the Cancer Information Line.

1-800-924-2083

CANCERLINE UHC

At United Hospital Center

2/12