The Cancer Committee at the Center for Cancer Care & Research (CCCR) is proud to present our annual report for 2010-11, a guide through our activities, offerings, achievements and cancer registry data from 2010.

One of only three freestanding cancer centers in the country to be accredited by the American College of Surgeons Commission on Cancer (CoC) and the only official local affiliate of **H. Lee Moffitt Cancer Center & Research Institute** in Tampa, FL. The CCCR is a collaboration between **Watson Clinic LLP, Clark & Daughtrey**, and the finest independent physicians in the area. Featuring a highly renowned staff of cancer specialists, the latest detection and treatment technologies, an active and thriving community outreach program and one of the most comprehensive clinical trials and research programs in the Southeast, CCCR strives to set the benchmark for exceptional cancer care.

In the past year, we have continued to work both within our walls and outside in the community to elevate the quality of cancer care, prevention and awareness. Here are examples of a few of those efforts:

- We are involved in innovative national clinical trials for a variety of cancers and conduct many on-site cancer research activities in concert with Moffitt's efforts, including their groundbreaking Total Cancer Care genetic research project. To date, we have enlisted approximately 2300 enrollees, making us one of the nation's most productive contributors to the project.
- Through the Watson Clinic Foundation, we continue to operate the *Arts in Medicine* program, which encourages healing by integrating the expressive arts, such as music, painting, beading, journaling and storytelling, into the healthcare setting.
- Our most recent groups – Conquering Chemo and Your Inner Hero: Life After Cancer Treatment – are the latest additions to a diverse range of programs designed to educate and support patients on their road to survivorship and beyond. Additional efforts include our monthly Cancer Caregiver Support Group, Breast Cancer Support Group, Cancer Survivor Education Series, Man to Man Prostate Cancer Support Group, and Young Adults Conquering Cancer. We also maintain a regular series of smoking cessation classes (and are proud supporters of the Tobacco-Free Partnership of Polk County), frequently host community lectures related to cancer-specific topics, and conduct a free annual community skin cancer screening day.
- We proudly debuted the high-dose rate (HDR) brachytherapy suite, a one of a kind treatment room that stands in stark contrast to the typically cold and sterile feel of a clinical setting. Featuring calming pink walls and an ornately tiled breast cancer ribbon on the floor of the entranceway, the new suite is elegantly designed to cater to the female cancer patient and instill a sense of calm during treatment. The majority of procedures performed in the new HDR treatment suite include those conducted with the AccuBoost system, a patient-friendly, non-invasive radiotherapy treatment for women with breast cancer. High-dose radiation treatments for cervical cancer also take place in the new suite.

- We are pleased to offer the services of a compassionate and highly qualified nurse navigator who guides each new patient through every step of their treatment process – from diagnosis to survivorship. This invaluable new service eases the burden on each patient as they undertake the daunting and frequently overwhelming process of living with cancer.
- We continue to work within the community on projects designed to raise awareness and make a difference in the fight against cancer. In addition to the **Leukemia and Lymphoma Society** (who recently awarded us for our ongoing commitment to their annual Light the Night event), we continue to nurture our collaborations through participation and sponsorship for the **American Cancer Society**, **Susan G. Komen Breast Cancer Foundation**, Good Shepherd Hospice, United Way, and Volunteers in Service to the Elderly. Events in which we play a major role include Making Strides Against Breast Cancer, Relay for Life, the Breast Cancer Awareness Luncheon, Bartow Cancer Survivor's Dinner, Cancer Survivor's Day and Komen's 3-Day Walk event.
- Our ongoing process-improvement program continues to eliminate waste and redundancy and makes the care process more streamlined and efficient.
- The American College of Radiology bestowed a three-year accreditation to the radiation oncology department at the Center for Cancer Care & Research for achieving the highest practice standards in quality of patient care, personnel qualifications, facility equipment, quality control procedures, and patient safety.

The contents of this report detail these efforts and more, and provide testimony to our commitment to improving the level of cancer care and awareness in our community.

Mission Statement:

The CCCR Cancer Committee is dedicated to being the leader in establishing and maintaining high quality cancer care in our community through a Center for Excellence for multidisciplinary oncology services.

Vision:

To be a leader in the delivery of patient-centered cancer care:

- By forming a partnership between our patients and staff, ensuring greater choice and involvement in decision making; and
- By providing access to the latest medical advances through the innovative use of emerging technology.

2011 Annual Report of CCCR:

Dr. Fred J. Schreiber

Hematologist/Oncologist
Co-Medical Director of the Center for Cancer Care & Research
Cancer Committee Chairman

What Makes Us Unique
A Message from Fred J. Schreiber, MD

A collaboration between Watson Clinic LLP, Clark & Daughtrey Medical Group, PA, and the finest independent physicians in the area, the Center for Cancer Care & Research (CCCR) first opened its doors in 2003 with one primary goal: to heighten the caliber of cancer care in our community.

To that end, we have established a safe haven like none other for cancer patients, families and survivors in our area where they receive an all-inclusive list of cancer treatment options and services, and the expertise of the largest team of cancer specialists in Polk County.

Talent and Resources. CCCR also distinguishes itself as the only official local affiliate of the world-renowned H. Lee Moffitt Cancer Center & Research Institute - a National Cancer Institute designated comprehensive cancer center and a unique resource which allows our patients unfettered access to the latest technologies, national trials, and comprehensive follow-up care.

Our Moffitt affiliation enhances an already diverse team of CCCR specialists who work in every field of medicine related to cancer treatment and ancillary care, including anesthesiologists, breast surgeons, cardiologists, critical care intensivists, dermatologists/ dermatopathologists, facial plastic surgeons, family practitioners, gastroenterologists, general surgeons, gynecologists, hospitalists, internal medicine physicians, nephrologists, neurologists, obstetricians, oncologists, ophthalmologists, orthopedists, otolaryngologists, pain management physicians, pathologists, plastic surgeons, psychiatrists, pulmonologists, radiation oncologists, radiologists, surgical oncologists, thoracic surgeons, urologists, and many more.

Collaboration. Our patients are offered another unique benefit when they receive their care from us: communication and collaboration. The core CCCR team – including surgeons, radiologists, pathologists, medical oncologists, radiation oncologists, nurses, research staff and additional clinicians and managers – meet two to four times a week as a group to review individual cases. For the patient, it's like having multiple doctors come to their bedside or receiving the advantage of several 'second opinions' in one visit.

During these meetings, our specialists review individual cases, examine patient x-rays and biopsies, and debate various treatment options. An integral component of these discussions is improving and maintaining patients' quality of life. Additional consultive and educational conferences are conducted and dedicated to specific types of cancer, including breast, lung, and cancers of the bone marrow system.

Research. CCCR remains on the forefront of tomorrow's cancer breakthroughs as we participate in multiple ongoing trials organized through Watson Clinic's Center for Research for conditions such as breast, esophageal, gynecologic, multiple myeloma, lymphoma, leukemia, lung, prostate and renal cancers.

In addition, our Moffitt affiliation provides our patients with a plethora of progressive therapies and cutting-edge cancer trials, and we continue to be one of the country's leading contributors to Moffitt's Total Cancer Care research study, an initiative designed to devise personalized treatments through genetic tumor research.

Recognition. CCCR voluntarily participates in national quality control and standard setting programs to ensure that we continue to exceed the expectations of our patients and the industry in general. Our three-year reaccreditation by the American College of Surgeons Commission on Cancer (CoC) illustrates the exemplary standards we maintain for our patients in the areas of treatment, research, education and quality of care. *Our facility remains one of only three freestanding cancer centers in the entire country to receive this honor.*

CCCR also played an integral role in securing the recent accreditation bestowed upon Watson Clinic from the National Accreditation Program for Breast Centers.

The experts and our patients agree. Our palette of diverse cancer services, the expertise of our large team of specialists, and the collaborative spirit we all share in defeating this disease has helped to create a new standard for exceptional cancer in our community.

Fred J. Schreiber, MD
Hematologist/Oncologist

Dr. Luis A. Franco

Hematologist/Oncologist for the Center for Cancer Care & Research
Cancer Liaison Physician

A Message from Luis A. Franco, MD

The rapid evolution of cancer care from its initial primary focus on local disease to its current sophisticated, multidisciplinary approach has resulted in a quality of care we had only imagined just 50 years ago. Further contributing to this improvement has been the explosion of scientific research, which has led to more reliable prognoses, and the availability of more personalized targeted treatments. Integrated treatments have led to improved cancer screening, local therapies and systemic treatments – all culminating in a dramatic reduction in cancer mortality.

All of us at the Center for Cancer Care & Research (CCCR) are committed to remaining on the forefront of tomorrow's innovations in cancer research, treatments and outreach. A crucial element of this commitment lies in our ability to improve upon areas in which we are faltering, define those areas in which we excel, and cultivate our resources to meet the many new and exciting challenges and developments of the future.

Seeking accreditation from the American College of Surgeons Commission on Cancer has allowed us to do just that. Bestowed every three years, this prestigious accreditation measures the success rates of treatment centers following an in-depth evaluation. CCCR received not only a renewal of their accreditation from three years earlier, but achieved an astounding 7 out of 8 possible special commendations for going above and beyond expectations. Most impressively, we are one of only three freestanding cancer centers in the entire country to receive this distinguished honor of recognition.

Yet we cannot be content with resting on these laurels. Since our reaccreditation, we have continued to go the extra mile by implementing cancer and chemotherapy education programs and additional programs related to cancer navigation, social services for patients and families who deal with the disease, and nutrition support. We continue to develop strong community sponsorships for causes such as smoking cessation and collaborate closely with organizations including Susan G. Komen, the American Lung Association, American Cancer Society and the Leukemia & Lymphoma Society. We continue to invest in the most promising research projects through our affiliations with H. Lee Moffitt Cancer Center and Research Institute, the Sarah Cannon Research Group and the Southwest Oncology Group.

These efforts will allow us to continue in our quest to improve the state of cancer care and outcomes for our patients, empower many throughout our community, and remain one step ahead in the fight against cancer.

Luis A. Franco, MD
Hematologist/Oncologist

Center for Cancer Care & Research (CCCR)
2010 & 2011 Community Outreach and Events at a Glance

When citizens in the Polk County community hear the words "Center for Cancer Care & Research" we hope they think of a superior cancer care center but also recognize the organization as one with far reaching and deep roots to the local community. Through the efforts of the Center for Cancer Care & Research's (CCCR) employees and physicians the facility is always striving to find new and exciting ways to support the local economy and non-profit organizations, while also achieving it's number one purpose: providing the highest care possible in the fight against cancer.

For many years now the CCCR has provided hundreds of volunteer hours, thousands of much needed dollars and helped promote many worthwhile events. While keeping the focus to eradicate cancer at the forefront of every decision made by the organization, the CCCR remains true to its spirit of community in the ongoing battle against this disease. A constant awareness of opportunities to support or offer free screenings and education are always key to ensuring that people are empowered with quality information and many community events provide a platform to reach large numbers in big audiences with current and critical information.

At every turn, you will see leadership from the CCCR at the helm or participating in the partnership they have with local organizations engaged in the same effort. Continually bringing much needed resources to local efforts is never out of sight - or out of mind. Examples of this commitment include, but are not limited to, some of the following:

- Being a leading fundraising organization in support of the local Chapters of the American Cancer Society.
- Providing hundreds of local citizens the opportunity to be seen by an area physician who specializes in dermatology during the annual skin screening outreach event held in partnership with the Watson Clinic Foundation.
- Working with local churches, civic and other organizations and businesses to coordinate medical professionals as speakers for numerous community events as part of our ongoing focus on education along with participation in many corporate and community health fair events reaching hundreds of individuals with educational information.
- Continuing to participate and expand our involvement in numerous community events to include: Susan G. Komen's Polk Race for the Cure, a community event where 75% of the proceeds will be used to help women in Polk County have access to mammograms they might not otherwise be able to afford, teams involved in the Komen 3- Day Walk help ensure necessary monies are raised to fund critical cancer research, participation in the American Cancer Society's Cattlebaron's Ball, Relay For Life and Making Strides additional cancer awareness fundraisers, along with events such as the Watson Clinic Foundation's Annual Women's Health Summit and Men's Health Conferences.
- Conducting monthly education programs on Tobacco Control to help our areas youth learn the importance of never starting to smoke and to assist smokers who have a desire to quit to better understand their options.
- Working in partnership with the Watson Clinic Foundation and the Watson Clinic Foundation Auxiliary to raise much needed funds to help continue the necessary research to find cures and implement patient trials.

We must continue to be involved in these worthwhile events to help bring the necessary screenings and education to people of our community. It is a core value of the staff and physicians at the Center for Cancer Care & Research to make a difference and to help you fight this disease.

If there is a community event in which you would like assistance or involvement to help strengthen the awareness in the fight against cancer, please contact our organization and let us help you be part of the answer, too.

Center for Cancer Care & Research (CCCR)
2010-2011 Cancer Committee Members

This Cancer Committee is an advisory body at CCCR, 1730 Lakeland Hills Boulevard, Lakeland, Florida, and is subject to such regulations that proceed from the Watson Clinic LLP Management Committee that reports directly to the Watson Clinic Board of Directors and the Clark & Daughtrey Medical Group, P.A. that reports directly to the Clark & Daughtrey Board of Directors.

Cancer Committee Physician Members:

Dr. Michael Addonizio, Interventional Radiology
Dr. John Barrett, Radiation Oncology
Dr. Richard Cardosi, Gynecologic Oncology
Dr. Jens Carlsen, Urology
Dr. Elisabeth Dupont, Breast Surgery
Dr. Luis Franco, Medical Oncology/Hematology, Cancer Liaison Physician
Dr. Edward Garcia, Pathology
Dr. Howard Gorell, Radiology
Dr. Kamal Haider, Medical Oncology/Hematology
Dr. Randy Heysek, Radiation Oncology
Dr. Scott Kelley, Surgery
Dr. Thomas Moskal, Surgical Oncology
Dr. Shalini Mulaparthi, Medical Oncology/Hematology
Dr. Rakesh Patel, Urology
Dr. Fred Schreiber, Medical Oncology Hematology, Chairman
Dr. Sandra Sha, Radiation Oncology
Dr. Jack Thigpen, Surgery
Dr. Antonio Trindade, Medical Oncology/Hematology
Dr. Galina Vugman, Medical Oncology/Hematology

Non-Physician Members:

Cauney Bamberg, Director, Watson Clinic Foundation
Shannon Barlow, MS, DABR, Radiation Oncology
Cheryl Bell, Director of Registration & Satellites
Mary Ann Blanchard, RN, BS, Director, Clinical Services
Cynthia Bruton, Administrative Assistant
Sheila Cole, RN, OCN, Oncology Nursing
Monique Hakins, MSW, Social Services
Ishiuan Hargrove, MS, DABR, Radiation Oncology
Pam Herbert, RN, OCN, Oncology Practice Coordinator
Debora Hunt, BSW, Social Services
Jerri Huntt, MSW, LCSW, Social Services
Adil Khan, MHA, Chief Administrative Officer
Ann Lehman, BSW, Social Services
Zejian Liu, PhD, MS, DABR, Radiation Oncology
Carol Martin, RN, Women's Center Clinical Services Coordinator
Noreen McGowan, BSN, CCRC, Administrative Research Coordinator
Tracey Mensing, RN, BSN, OCN, Chemotherapy/Oncology Nursing
Nancy Nethery, American Cancer Society Area Patient Representative
Kim Stetson, BHM, Site Manager
Patty Strickland, Community Outreach Manager
Robin Vollmer-Antes, MS, MPT, Radiation Oncology
Dawn Watson, RN, OCN, Chemotherapy/Oncology Nursing
Linda Wolf, RN, Director, Clinical Services

Cancer Registry Members:

Paula Buck, CTR, Abstractor
Helen Lewis, BS, CTR, Cancer Program Coordinator
Blanche Myers, RHIT, CTR, CPC, Lead Abstractor
Aprill Rease, CTR, Abstractor
Angie Simmons, CTR, Abstractor

Center for Cancer Care & Research (CCCR)
2011 Nurse Committee Report

The concept of “Network Weaving” is to connect multiple groups of individuals and have the participants work together to provide more cohesive and "threaded" patient-driven care. This "tapestry of care" will be uniquely that of the Center for Cancer Care & Research and will help distinguish this center's nursing professionals as top in their field.

Here is a snapshot of our accomplishments:

Empowering collaboration:

- Monthly committee meetings.
- Clinical simulation drills for emergency situations.
- Fostering open communications and ensuring that the culture of shared attitudes, values, goals and practices reflect the Center for Cancer Care & Research mission.

Developing quality control initiatives:

- Utilizing the guidelines provided by the Oncology Nursing Society (ONS), have continual review of practices and implement necessary improvements relative to: care plans, orientations, resuscitation, safe handling of chemotherapy, extravasation management, management of immunocompromised patients, radiation, care and isolation, maintenance care, oncology emergencies, and pain control.
- Established a systematic approach to support efficient and effective patient-driven care in all settings and in every program.
- Established ongoing monitoring and improvement of care actions.

Goals:

- To continually improve collaboration with our peers.
- To improve communication and problem solving approaches to enhance the safety and quality care of patients.
- To develop a variety of initiatives to facilitate Quality Assurance issues.
- Remain an advocate for improving patient care and serve as a liaison between patient and physician.
- Promote an environment whereby each patient’s dignity and rights are recognized and respected and always a priority.
- Provide staff development and on-going oncology nursing education programs.
- Promote empowering patients with education and community resources that are designed to enhance positive outcomes and survival.

Center for Cancer Care & Research (CCCR)
2010 - 2011 Cancer Conferences

Cancer Conferences not only serve as a forum for prospective review of cancer cases, involving a multidisciplinary team in the patient care process, but also offer education for the physicians and staff as well. Our multidisciplinary team, which includes physicians in the departments of hematology/medical oncology, radiation oncology, surgical oncology, pathology, diagnostic radiology, and other specialties as well as allied health professionals from research, nursing, social services, cancer registry and administration, attend Cancer Conference three times a week for collaborative discussion of diagnosis, stage, prognostic factors, and national treatment guidelines pertaining to the cases presented and cancer related educational activities.

Year End 2010	
Total # of Cancer Conferences	88
Total # of Cases Presented (70% of Analytic Caseload)	775
Total # of Cases Presented Prospectively (99% of Cases Presented)	766
Total # of Cancer Related Educational Activities	38

YTD September 30, 2011	
Total # of Cancer Conferences	73
Total # of Cases Presented (56% of Analytic Caseload)	617
Total # of Cases Presented Prospectively (99% of Cases Presented)	613
Total # of Cancer Related Educational Activities	26

Center for Cancer Care & Research
Cancer Registry Activity Report on 2010 Data

Florida cancer cases are required by state statute to be reported to Florida Cancer Data Systems (FCDS) the state cancer registry. The Cancer Registry performs this function for three facilities: Watson Clinic, LLP (WC); Center for Cancer Care & Research (CCCR) and Clark & Daughtrey Medical Group, P.A. (C&D). The Cancer Registry also reports de-identified analytic cases to the National Cancer Data Base (NCDB), a joint project of the American College of Surgeon's Commission on Cancer (CoC) and American Cancer Society. Reporting to the NCDB is required for the CCCR's CoC accreditation.

In addition, Cancer Registry activities this past year included the following:

- The NCDB began updating their entire database in 2011 which required us not only to submit CCCR analytic cases from 2009 as would normally be expected, but also to update and re-submit every data year 2004-2008. Prior to this year, NCDB would request accredited facilities to annually submit only the most recent data year and every previous 5th year.
- The Cancer Registry assisted in the Watson Clinic Women's Center effort to achieve accreditation by the National Approvals Program for Breast Centers (NAPBC) by providing data for the application and participating on the steering committee. The Women's Center enjoyed an error-free survey and earned NAPBC accreditation in April 2011.
- The Department of Health mandated a new program this year that requires dermatologists to register and report malignant skin cancers (excluding squamous cell and basal cell types) directly to FCDS. The Cancer Registry and CCCR administration were successful in getting a waiver from the registration requirement for our dermatologists which allows the Cancer Registry to continue reporting full abstracts of their skin malignancies as it always has.
- Extensive changes in data requirements were mandated by the CoC and FCDS this past year. Site-specific factors increased from six data items to 25, although not every cancer site requires all 25 factors to be collected. Class of case, which codes the category of care for each primary cancer, increased from 10 categories to 24. Classes still collapse into two major categories: analytic and non-analytic.

Analytic is defined as newly diagnosed cases diagnosed and/or received first-course therapy at the reporting facility. Non-analytic cases were diagnosed and received all first-course therapy elsewhere. Previously almost all newly diagnosed cancers were reported as analytic. However, the CoC recently narrowed its interpretation of analytic so that many newly diagnosed cases are now omitted and fall into the CoC's newly created non-analytic class 30. See Glossary of Terms this report for more detailed definition of class 30.

To allow comparisons to previous years, the four site-distribution tables in this report list both analytic and total newly diagnosed casses (analytic plus class 30) under the heading of "Analytic Plus." Non-analytic cases in the tables include only those cases diagnosed and receiving all first course treatment elsewhere prior to presenting with recurrent or persistent cancer or a new diagnosis.

The first three tables display cancer site, gender and class of case distributions for each of our facilities for 2010. A fourth table includes only newly diagnosed 2010 cancer cases for CCCR but displays TNM stage at diagnosis. State and national standards require cancer registries to abstract (create a record) for each primary cancer and benign central nervous system tumor and for each facility where the reportable tumor is seen. Consequently, a single patient may be counted more than once if he/she has more than one diagnosis of cancer and/or is seen at more than one of our facilities for the same cancer. As seen by the totals on the first three tables, the Cancer Registry abstracted 3195 cases for 2010: 1361 for CCCR, 1541 for WC and 293 for C&D. These totals represent 1910 unique patients.

Some cancer sites, notably colon, GYN and soft tissue may be first seen, diagnosed and/or treated elsewhere by one of our physicians but not seen at our facility until the cancer is removed. These usually

do not meet criteria for including in the Cancer Registry database. Consequently, our physicians see many more cancer patients than are represented on the following tables.

In addition to the four site-distribution tables mentioned above are several graphical analyses of 2010 CCCR newly diagnosed cancer cases:

- Five most frequent CCCR cancer sites
- Five most frequent female CCCR cancer sites
- Five most frequent male CCCR cancer sites
- Five most frequent CCCR cancer sites compared to Florida and national incidence
- Age at diagnosis
- Stage at diagnosis for all CCCR cancer sites combined

Table 1. Total 2010 Cases for CCCR

PRIMARY SITE	CASES	MALE	FEMALE	ANALYTIC	ANALYTIC PLUS*	NON-ANALYTIC
ALL SITES	**1361**	**607**	**754**	**859**	**1041**	**320**
LIP	0	0	0	0	0	0
TONGUE	11	8	3	8	8	3
OROPHARYNX	5	4	1	5	5	0
HYPOPHARYNX	1	1	0	1	1	0
OTHER ORAL CAVITY	19	15	4	12	17	2
ESOPHAGUS	17	10	7	14	16	1
STOMACH	14	10	4	7	11	3
COLON	76	36	40	39	54	22
RECTUM	35	16	19	21	27	8
ANUS/ANAL CANAL	8	0	8	6	6	2
LIVER	11	9	2	4	10	1
PANCREAS	36	18	18	24	32	4
OTHER DIGESTIVE	7	4	3	4	5	2
NASAL/SINUS	1	0	1	0	0	1
LARYNX	12	10	2	9	10	2
LUNG/BRONCHUS	201	106	95	143	183	18
OTHER RESPIRATORY	6	4	2	4	4	2
LEUKEMIA	48	35	13	29	36	12
MULTIPLE MYELOMA	25	12	13	18	19	6
OTHER BLOOD & BONE MARROW	11	9	2	5	5	6
BONE	1	1	0	0	0	1
CONNECT/SOFT TISSUE	7	4	3	2	6	1
MELANOMA	70	35	35	17	35	35
OTHER CUTANEOUS	1	0	1	1	1	0
BREAST	315	2	313	241	264	51
CERVIX UTERI	12	0	12	7	8	4
CORPUS UTERI	39	0	39	23	26	13
OVARY	27	0	27	25	25	2
VULVA	2	0	2	1	1	1
OTHER FEMALE GENITAL	2	0	2	1	1	1
PROSTATE	158	158	0	77	93	65
TESTIS	9	9	0	7	7	2
OTHER MALE GENITAL	2	2	0	0	0	2
BLADDER	21	19	2	7	7	14
KIDNEY/RENAL PELVIS	21	11	10	8	11	10

OTHER URINARY	0	0	0	0	0	0
BRAIN (MALIGNANT)	8	3	5	8	8	0
OTHER CNS	2	2	0	0	0	2
THYROID	13	2	11	3	9	4
OTHER ENDOCRINE	2	0	2	1	1	1
HODGKIN LYMPHOMA	7	4	3	4	5	2
NON-HODGKIN LYMPHOMA	81	42	39	59	68	13
UNKNOWN PRIMARY	13	5	8	11	12	1
OTHER & ILL-DEFINED SITES	4	1	3	3	4	0

*Total newly diagnosed cases; includes analytic plus class 30 per Commission on Cancer definitions

Table 2. Total 2010 Cases for Watson Clinic LLP

PRIMARY SITE	CASES	MALE	FEMALE	ANALYTIC	ANALYTIC PLUS*	NON-ANALYTIC
ALL SITES	**1541**	**690**	**851**	**830**	**1312**	**229**
LIP	0	0	0	0	0	0
TONGUE	13	9	4	6	11	2
OROPHARYNX	4	4	0	2	4	0
HYPOPHARYNX	0	0	0	0	0	0
OTHER ORAL CAVITY	13	8	5	6	13	0
ESOPHAGUS	18	10	8	1	18	0
STOMACH	8	5	3	0	5	3
COLON	53	24	29	1	37	16
RECTUM	24	8	16	1	21	3
ANUS/ANAL CANAL	5	0	5	0	4	1
LIVER	9	7	2	1	9	0
PANCREAS	25	11	14	7	22	3
OTHER DIGESTIVE	7	2	5	0	4	3
NASAL/SINUS	2	1	1	0	2	0
LARYNX	11	9	2	3	10	1
LUNG/BRONCHUS	139	72	67	41	124	15
OTHER RESPIRATORY	3	2	1	0	3	0
LEUKEMIA	19	13	6	6	10	9
MULTIPLE MYELOMA	15	5	10	2	11	4
OTHER BLOOD & BONE MARROW	2	2	0	0	1	1
BONE	1	1	0	0	0	1
CONNECT/SOFT TISSUE	7	5	2	2	6	1
MELANOMA	423	247	176	381	383	40
OTHER CUTANEOUS	6	3	3	5	5	1
BREAST	267	2	265	169	229	38
CERVIX UTERI	11	0	11	1	9	2
CORPUS UTERI	72	0	72	9	67	5
OVARY	35	0	35	10	32	3
VULVA	9	0	9	6	8	1
OTHER FEMALE GENITAL	4	0	4	1	4	0
PROSTATE	128	128	0	74	91	37
TESTIS	4	4	0	1	4	0
OTHER MALE GENITAL	1	1	0	1	1	0
BLADDER	46	38	8	23	32	14
KIDNEY/RENAL PELVIS	15	8	7	4	12	3

OTHER URINARY	1	1	0	0	1	0
BRAIN (MALIGNANT)	4	4	0	4	4	0
OTHER CNS	18	5	13	13	14	4
THYROID	23	5	18	17	19	4
OTHER ENDOCRINE	17	9	8	12	15	2
HODGKIN LYMPHOMA	4	2	2	1	4	0
NON-HODGKIN LYMPHOMA	58	28	30	15	49	9
UNKNOWN PRIMARY	12	6	6	3	10	2
OTHER & ILL-DEFINED SITES	5	1	4	1	4	1

*Total newly diagnosed cases; includes analytic plus class 30 per Commission on Cancer definitions

Table 3. Total 2010 Cases for Clark & Daughtrey Medical Group, P.A.

PRIMARY SITE	CASES	MALE	FEMALE	ANALYTIC	ANALYTIC PLUS*	NON-ANALYTIC
ALL SITES	**293**	**169**	**124**	**92**	**233**	**60**
LIP	0	0	0	0	0	0
TONGUE	0	0	0	0	0	0
OROPHARYNX	0	0	0	0	0	0
HYPOPHARYNX	0	0	0	0	0	0
OTHER ORAL CAVITY	2	2	0	1	2	0
ESOPHAGUS	0	0	0	0	0	0
STOMACH	3	3	0	1	3	0
COLON	17	13	4	0	8	9
RECTUM	8	4	4	0	7	1
ANUS/ANAL CANAL	2	0	2	0	1	1
LIVER	0	0	0	0	0	0
PANCREAS	5	3	2	0	3	2
OTHER DIGESTIVE	2	1	1	0	2	0
NASAL/SINUS	0	0	0	0	0	0
LARYNX	1	1	0	0	1	0
LUNG/BRONCHUS	59	33	26	10	58	1
OTHER RESPIRATORY	0	0	0	0	0	0
LEUKEMIA	7	5	2	1	5	2
MULTIPLE MYELOMA	5	4	1	0	4	1
OTHER BLOOD & BONE MARROW	3	3	0	1	2	1
BONE	0	0	0	0	0	0
CONNECT/SOFT TISSUE	0	0	0	0	0	0
MELANOMA	9	2	7	0	3	6
OTHER CUTANEOUS	0	0	0	0	0	0
BREAST	49	0	49	8	38	11
CERVIX UTERI	0	0	0	0	0	0
CORPUS UTERI	7	0	7	3	6	1
OVARY	0	0	0	0	0	0
VULVA	0	0	0	0	0	0
OTHER FEMALE GENITAL	0	0	0	0	0	0
PROSTATE	54	54	0	37	41	13
TESTIS	2	2	0	1	2	0
OTHER MALE GENITAL	0	0	0	0	0	0
BLADDER	22	19	3	16	18	4
KIDNEY/RENAL PELVIS	18	12	6	9	14	4
OTHER URINARY	0	0	0	0	0	0

BRAIN (MALIGNANT)	0	0	0	0	0	0
OTHER CNS	3	2	1	2	2	1
THYROID	1	0	1	1	1	0
OTHER ENDOCRINE	2	1	1	0	1	1
HODGKIN LYMPHOMA	1	0	1	0	0	1
NON-HODGKIN LYMPHOMA	8	5	3	1	8	0
UNKNOWN PRIMARY	3	0	3	0	3	0
OTHER & ILL-DEFINED SITES	0	0	0	0	0	0

*Total newly diagnosed cases; includes analytic plus class 30 per Commission on Cancer definitions

Table 4. CCCR 2010 Primary Site Distribution of Newly Diagnosed Cancer Cases

PRIMARY SITE	CLASS		GENDER		AJCC STAGE AT DIAGNOSIS						
	Analytic Plus*	Analytic	Male	Female	0	I	II	III	IV	UNK**	N/A***
ALL SITES	**1041**	**859**	**435**	**606**	**50**	**254**	**214**	**188**	**214**	**27**	**94**
ORAL CAVITY	**30**	**25**	**25**	**5**	**0**	**0**	**4**	**8**	**15**	**2**	**1**
Lip	0	0	0	0	0	0	0	0	0	0	0
Tongue	8	8	8	0	0	1	1	3	3	0	0
Oropharynx	5	5	4	1	0	0	1	0	4	0	0
Hypopharynx	1	1	1	0	0	0	0	0	1	0	0
Other	17	12	13	4	0	0	2	5	7	2	1
DIGESTIVE SYSTEM	**160**	**119**	**83**	**77**	**6**	**21**	**33**	**40**	**48**	**8**	**4**
Esophagus	16	14	9	7	0	0	2	3	4	7	0
Stomach	11	7	9	2	0	3	1	1	4	1	1
Colon	54	39	26	28	3	4	16	18	12	0	1
Rectum	27	21	11	16	2	4	6	9	6	0	0
Anus/Anal Canal	6	6	0	6	0	3	1	1	1	0	0
Liver	10	4	8	2	0	5	1	3	1	0	0
Pancreas	32	24	17	15	1	2	6	5	17	0	1
Other	5	4	3	2	0	0	1	0	3	0	1
RESPIRATORY SYSTEM	**196**	**155**	**103**	**93**	**0**	**40**	**14**	**60**	**77**	**2**	**3**
Nasal/Sinus	0	0	0	0	0	0	0	0	0	0	0
Larynx	10	9	8	2	0	3	1	4	2	0	0
Lung/Bronchus	183	143	94	89	0	38	12	54	74	2	3
Other	4	4	2	2	0	0	1	2	1	0	0
BLOOD & BONE MARROW	**58**	**50**	**36**	**22**	**0**	**1**	**0**	**0**	**0**	**0**	**57**
Leukemia	36	29	24	12	0	1	0	0	0	0	35
Multiple Myeloma	19	18	9	10	0	0	0	0	0	0	19
Other	5	5	4	1	0	0	0	0	0	0	5
BONE	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
CONNECT/SOFT TISSUE	**6**	**2**	**4**	**2**	**0**	**5**	**0**	**1**	**0**	**0**	**0**
SKIN	**35**	**17**	**19**	**16**	**4**	**16**	**2**	**3**	**6**	**3**	**1**
Melanoma	35	17	19	16	4	17	2	2	6	3	1
Other	1	1	0	1	0	0	0	1	0	0	0
BREAST	**264**	**241**	**2**	**262**	**40**	**123**	**67**	**22**	**11**	**1**	**0**
FEMALE GENITAL	**61**	**57**	**0**	**61**	**0**	**15**	**7**	**26**	**11**	**1**	**1**
Cervix Uteri	8	7	0	8	0	2	0	4	1	1	0
Corpus Uteri	26	23	0	26	0	12	3	9	1	0	1
Ovary	25	25	0	25	0	1	3	12	9	0	0
Vulva	1	1	0	1	0	0	0	1	0	0	0
Other	1	1	0	1	0	0	1	0	0	0	0
MALE GENITAL	**94**	**79**	**94**	**0**	**0**	**0**	**73**	**5**	**8**	**8**	**0**
Prostate	93	77	93	0	0	2	76	6	8	1	0
Testis	7	7	7	0	0	0	0	0	0	7	0
Other	0	0	0	0	0	0	0	0	0	0	0

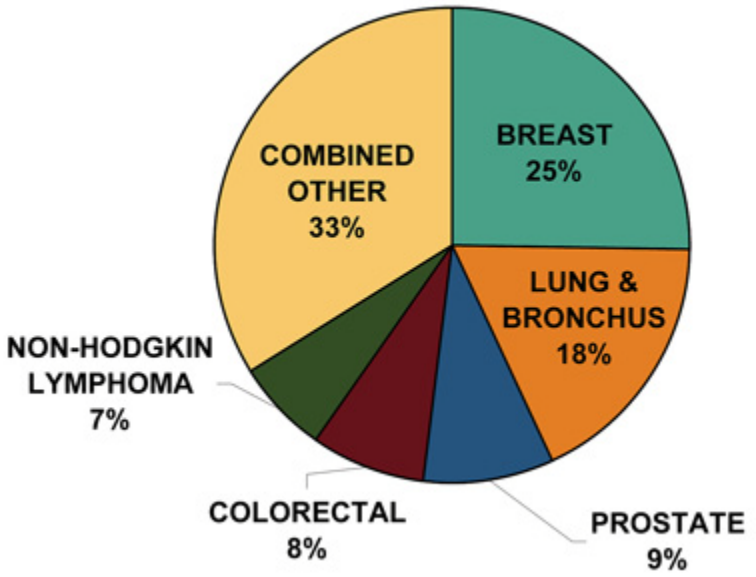
URINARY SYSTEM	**18**	**15**	**13**	**5**	**0**	**2**	**4**	**5**	**6**	**1**	**0**
Bladder	7	7	7	0	0	1	3	0	3	0	0
Kidney/Renal Pelvis	11	8	6	5	0	1	1	5	3	1	0
Other	0	0	0	0	0	0	0	0	0	0	0
BRAIN & CNS	**8**	**8**	**3**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**8**
Brain (Benign)	0	0	0	0	0	0	0	0	0	0	0
Brain (Malignant)	8	8	3	5	0	0	0	0	0	0	8
Other	0	0	0	0	0	0	0	0	0	0	0
ENDOCRINE	**10**	**4**	**2**	**8**	**0**	**6**	**0**	**1**	**2**	**0**	**1**
Thyroid	9	3	2	7	0	6	0	1	2	0	0
Other	1	1	0	1	0	0	0	0	0	0	1
LYMPHATIC SYSTEM	**72**	**62**	**37**	**35**	**0**	**19**	**6**	**16**	**30**	**1**	**0**
Hodgkin Lymphoma	5	4	2	3	0	0	2	2	1	0	0
Non-Hodgkin Lymphoma	68	59	35	33	0	20	4	14	29	1	0
UNKNOWN PRIMARY	**12**	**11**	**4**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**12**
OTHER & ILL-DEFINED SITES	**4**	**3**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**4**

*Total newly diagnosed cases; includes analytic plus class 30 per Commission on Cancer definitions
**UNK - Unknown stage, case unable to be staged
***N/A - Not applicable, no AJCC staging schema exists for this cancer site or histology

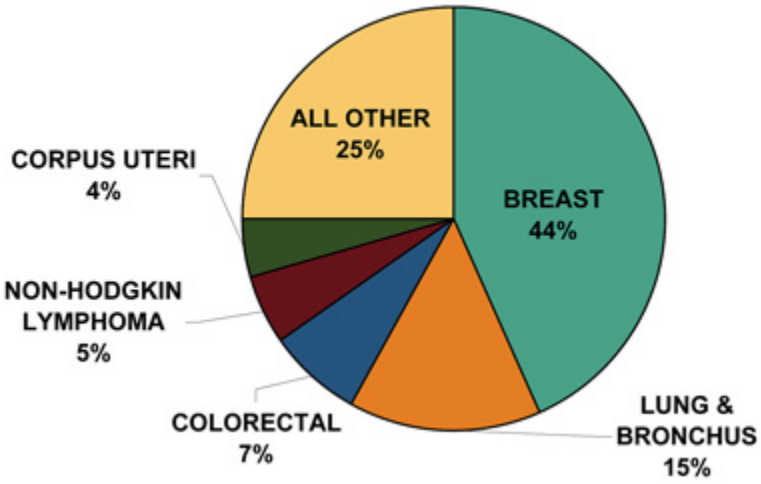
Five Most Frequent Cancer Sites in 2010

The five most frequent cancer sites seen at CCCR in 2010 were breast (25% of newly diagnosed cases), lung (18%), prostate (9%), colorectal (8%) and non-Hodgkin lymphoma (7%). This shows an increase in breast cancer over 22% seen in 2009. Prostate cancer also increased by 1% compared to 2009, which made it the third most frequent cancer seen at CCCR in 2010. In 2009, prostate cancer was fourth most frequent. Colorectal cancer (8%) was third in 2009 at 10% and fourth in 2010. Two-thirds (67%) of CCCR newly diagnosed cases were these five sites. The 1041 newly diagnosed cases represented 76% of total cases seen at CCCR.

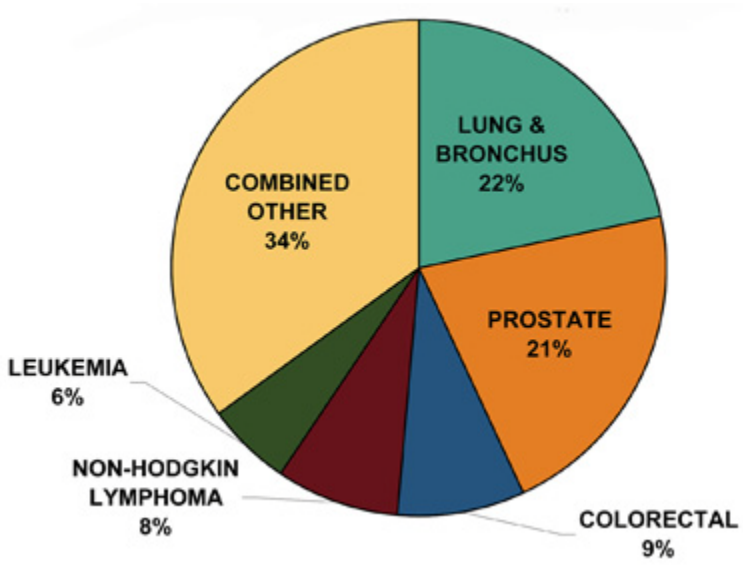
Distribution of 2010 CCCR Cases



Distribution of 2010 CCCR Female Cases

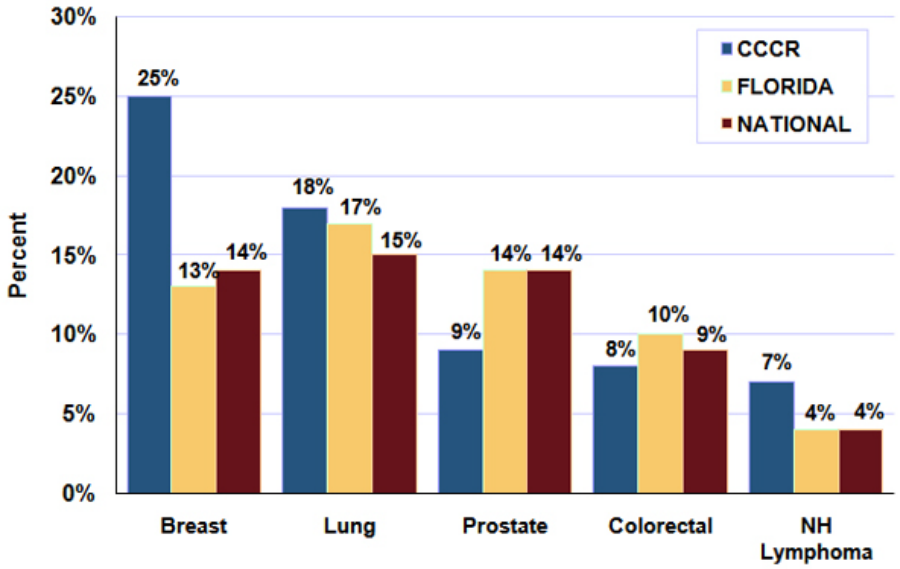


Distribution of 2010 CCCR Male Cases



CCCR 2010 Frequency Compared to Incidence

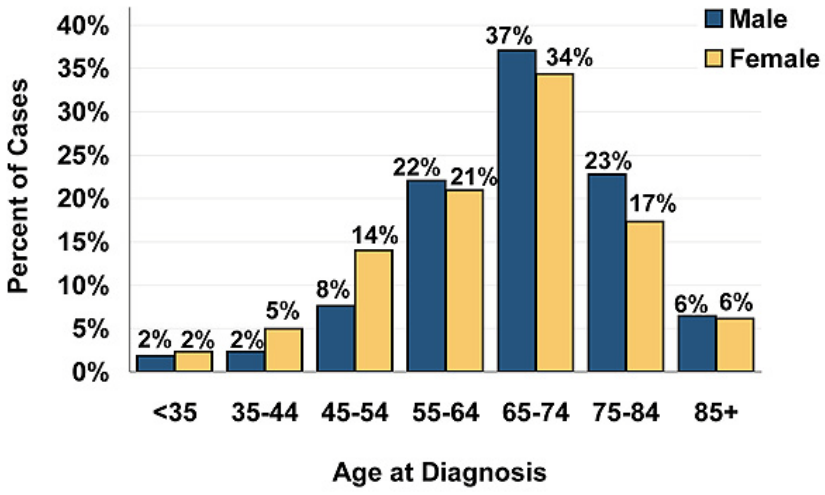
Facilities count frequency, meaning the number of cancer cases that come to the facility from anywhere. Because incidence represents all newly diagnosed cancer cases within a geographic area, the following graph compares incidence to all the CCCR newly diagnosed cancer cases. The comparison of the CCCR top five cancer sites to state and national incidence for these same cancer sites shows we see much more than our "share" of breast cancer and non-Hodgkin lymphoma but less prostate and colorectal cancers.



Source of U.S. & Florida data: Cancer Facts & Figures 2010, American Cancer Society

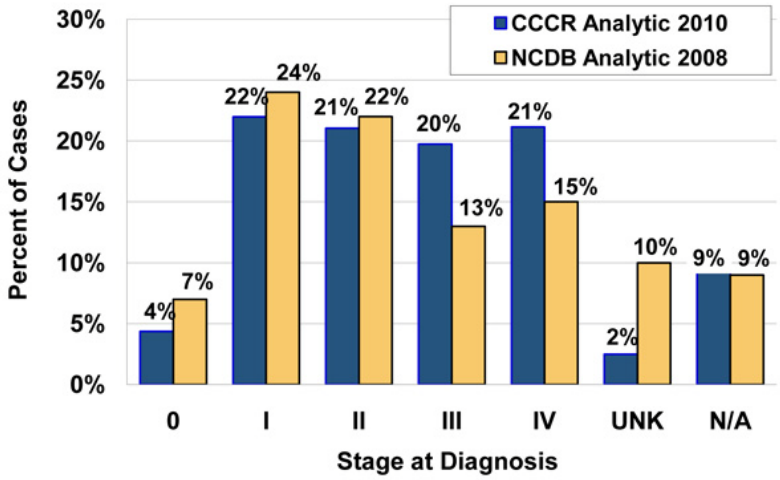
Age at Diagnosis by Gender of CCCR 2010 Analytic Cases

Of the 1041 newly diagnosed 2010 CCCR cases, 42% were male and 58% were female. Over half (61%) were age 65 or older. This is slightly less that last year's 63%. Of the 435 male patients, 288 (66%) were age 65 or older. Of the 606 female patients, 350 (58%) were 65 or older. Average age of male patients was 68. Average age of female patients was 65. Average age for both combined was 66.



CCCR 2010 Stage at Diagnosis Compared to NCDB Other Facilities

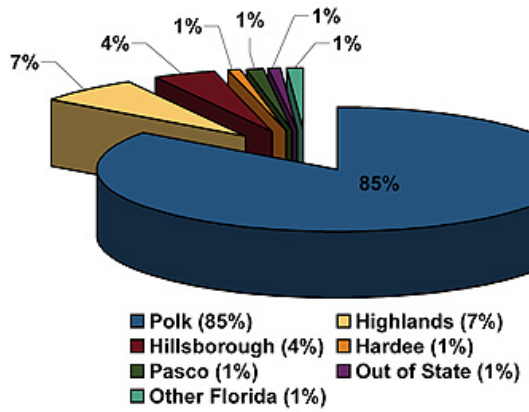
The NCDB database includes only analytic cancer cases as defined by the CoC. Consequently only CCCR analytic cases—using the same CoC definition—were used for this comparison of stage at diagnosis. The most recent data year available from NCDB was 2008, which was compared to CCCR 2010 cases. CCCR cases were excluded from the NCDB data, even though it was unlikely that the 846 CCCR analytic cases would skew the NCDB data based on 1,131,021 cases. Of the 846 CCCR analytic cases, 401 (47%) were early stage (stages 0, I & II), which was the same as the previous two years; NCDB early stage was 53%. Later stages (stages III & IV) accounted for 41% of CCCR cases but only 28% of NCDB cases. However, stage was unknown for 10% of NCDB cases but only 2% of CCCR cases. Cases for which there was no staging were 9% in both populations. The Collaborative Staging System, which may combine AJCC clinical and pathological TNM staging components, was used for all stage designations in this report.



Source of NCDB data: 2011 National Cancer Data Base/CoC

County of Residence at Diagnosis of CCCR 2010 Cases

The majority of CCCR newly diagnosed patients (85%) resided in Polk County at the time of their diagnosis. Approximately another 13% came from surrounding counties and 2% came from outside the region. Fewer than 10 patients came from Hardee County in 2009; 14 (1% of patients) came in 2010. Highlands County showed the largest change. In 2009, 46 (4%) patients came from Highlands County. In 2010, 68 (7%) came. Hillsborough County showed no change (4%).



Retrospective Prostate Treatment Outcome Data Review Study

John Barrett, MD, PhD, Principal Investigator
Martha Yarinich, Co-Investigator

Background: Outcomes of prostate cancer treatment should not always be measured simply by disease-free and lifetime survivals. Quality of life issues are also important treatment outcomes that deserve measuring in order to provide a more complete understanding of how treatment of prostate cancer affects not only the cancer but the person. This retrospective study looks at the experience of the Center for Cancer Care & Research (CCCR) in treating newly diagnosed prostate cancer patients with IMRT or radiation in combination with other treatment modalities. AJCC T1 and T2 patients were selected to provide a fairly homogenous study population of localized prostate cancer. Time until biochemical failure will provide an end point, but quality of life issues, specifically toxicity and sexual function will also be measured. This special subset analysis will be used to measure our quality outcomes goals for 2011.

Objective of the Study: The objective of the study is to evaluate the quality-of-life outcomes of patients diagnosed with AJCC stage T1 and T2 prostate cancer.

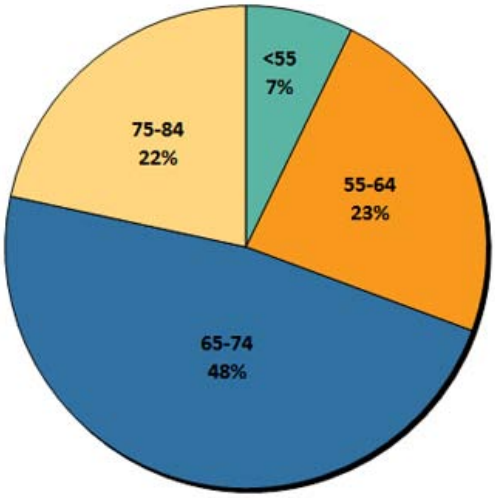
Methodology: The CCCR Cancer Registry provided a list of 450 prostate cancer patients from years 2007-2010. The list was used to identify patients of Watson Clinic, LLP, or Clark & Daughtrey Medical Group, PA. Of these, 222 patients met the study criteria:

- Newly diagnosed with T1 & T2 prostate cancer confined to the prostate
- Was the only cancer diagnosed for each patient
- Received radiation therapy for at least part of their first-course treatment either as a sole modality or in combination with other radiation therapy modalities and/or pre-treatment hormone therapy.
- Had at least one full year of follow-up after diagnosis

Patients' data were reviewed in the electronic and paper medical records for demographic distributions, including age at diagnosis and race, and for clinical distributions including stage, histology, Gleason score, pre-treatment and post-treatment PSA levels, treatment modalities, and reported toxicities related to urinary complications, rectal problems and erectile dysfunction. A review of the histology of the study cases revealed that all the prostate cancers in the study were adenocarcinoma. Disease-free survival was evaluated. A four-year prostate cancer survival was provided from the Cancer Registry database.

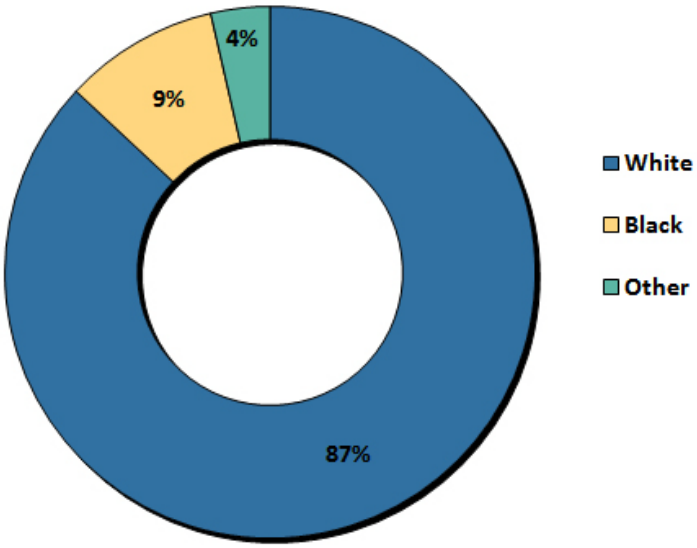
Demographic Distributions: The first demographic distribution reviewed for the study population was age at diagnosis. Almost half of the men fell between the ages of 65-74 at the time of their diagnosis. The average age was 68; 70% were Medicare age (65 or older).

Age at Diagnosis Distribution



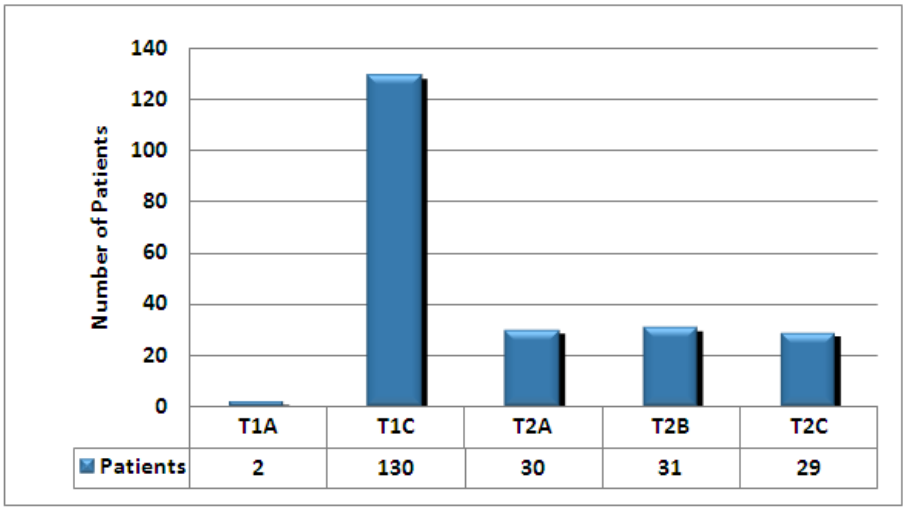
A review of the 222 males in the study population showed that 193 were white, 21 were black, and 8 patients either did not provide race or identified themselves as “other race”. Consequently our study contained a disproportionate race distribution.

Race Distribution



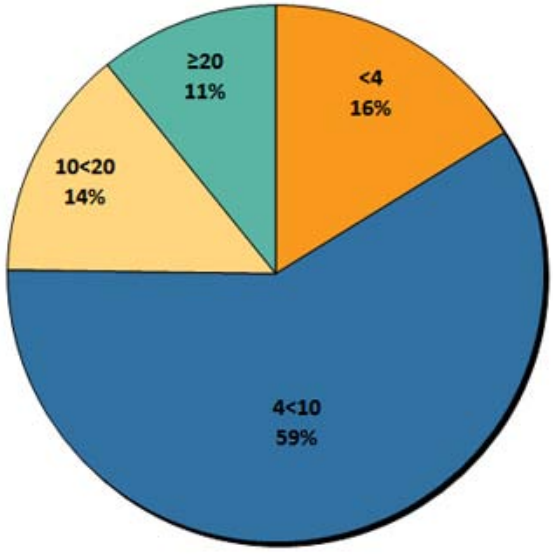
Clinical Distributions: One of our criteria was for patients to be diagnosed with T1 or T2 stage cancer, which means the cancer was confined within the prostate capsule. This graph shows the number of patients that fell into each stage T category. All patients were AJCC stage II. For the purpose of this study, all cases were staged using *AJCC Cancer Staging Manual, sixth edition,* prostate cancer schema.

Distribution of AJCC "T" Staging Component



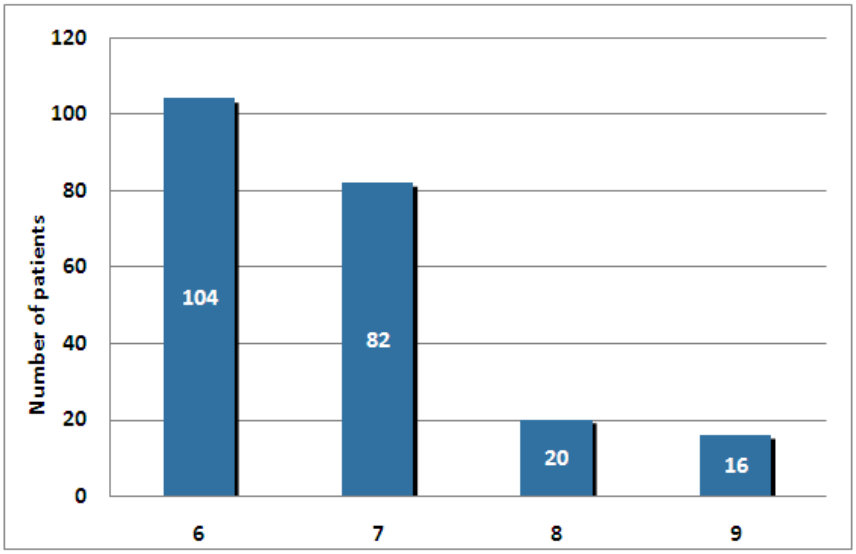
This next graph shows the pre-treatment PSA level distribution. The largest group, 131 patients, fell in the 4 <10 PSA range.

Patients' Pre-Treatment PSA (ng/mL) Distribution



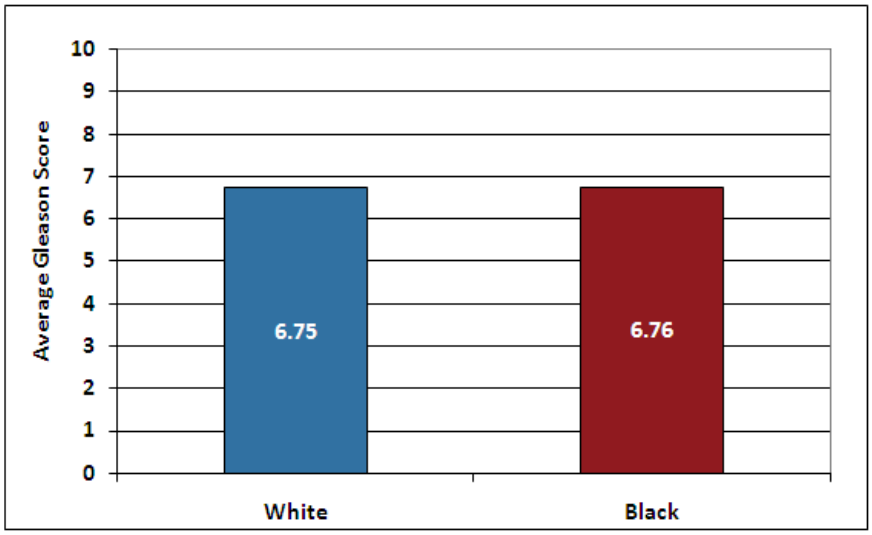
As seen by the Gleason score distribution graph below, the most common Gleason score was 6 for the patients in our study. The higher the Gleason score the more aggressive the tumor is likely to act and the worse a patient's prognosis. Gleason scores are based upon microscopic appearance of prostate tissue. No patients in the study had a prostatectomy. All Gleason scores were derived from the biopsy specimens. The sample size for each Gleason score category varied greatly.

Distribution of Gleason Scores



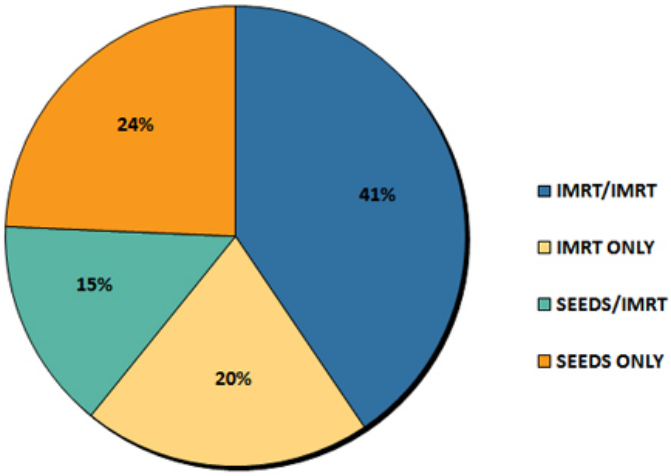
According to national studies, Gleason scores vary in regards to race, with black males being diagnosed on average with higher scores than white males. In our study, the Gleason score average for white males was the same as for black males. This may have been due to our small sample size. The 4% other/unknown racial group was not included in the graph because of the very small number and the inability to provide comparative information.

Gleason Score Distribution by Race



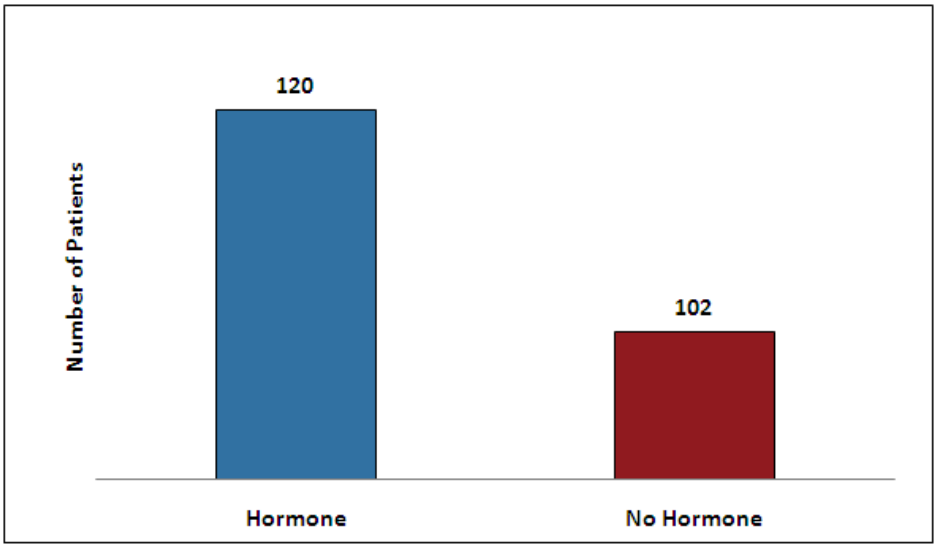
Patients' radiation treatment modalities included external beam IMRT, brachytherapy (radioactive seeds) or a combination of modalities including pre-radiation HT. As seen in the following graph, radiation therapy combinations most frequently consisted of IMRT to an area a little larger than the prostate and a more focused treatment (boost) directly to the prostate either by IMRT or brachytherapy. A boost can occur before or after the wider area IMRT. The type of treatment patients received varied according to PSA levels, Gleason scores, and other factors.

Radiation Modalities for Prostate Cancer



Hormone therapy (HT) is frequently used in prostate cancer treatment to shrink the size of the prostate before administering any type of radiation treatment. Older men often have a condition called benign prostatic hypertrophy (BPH) where the prostate is abnormally enlarged. Radiation therapy is more effective when the prostate is a smaller, more normal size. In our study, 120 patients received HT before their initial radiation treatment and 102 did not.

Frequency of Pre-Treatment Hormone Therapy



Observations: The International Prostate Symptom Score (I-PSS) is calculated by the patient from a questionnaire score sheet. This score measures a patient's urinary toxicities such as urgency, frequency and other complications. Each patient is given an I-PSS form to complete at each appointment.

The example below is used by Watson Clinic Radiation Oncology at CCCR. Clark & Daughtrey Radiation Oncology uses a similar form. The scoring system is standard.

International Prostate Symptom Score (I-PSS)

THIS IS AN INFORMATIONAL FORM AND IS NOT A PERMANENT PART OF THE MEDICAL RECORD

WATSON CLINIC LLP
Quality Healthcare for Every Generation

International Prostate Symptom Score (I-PSS)

Center for Cancer Care & Research

Patient Name: _____ Age: _____

Race: ☐ White ☐ Hispanic ☐ Black/African American ☐ Native American ☐ Asian/Pacific Islander
☐ Other _____

For Questions 1 thru 6, please utilize the following scale:

Not at all	Less than 1 time in 5	Less than half the time	About half the time	More than half the time	Almost always
0	1	2	3	4	5

	DATE				
1. Over the past month, how often have you had a sensation of not emptying your bladder completely after you have finished urinating?					
2. Over the past month, how often have you had to urinate again less than two hours?					
3. Over the past month, how often have you found you stopped and started again several times when you urinated?					
4. Over the past month, how often have you found it difficult to postpone urination?					
5. Over the past month, how often have you had a weak urinary stream?					
6. Over the past month, how often have you had to push or strain to begin urination?					
7. Over the past month, how many times did you most typically get up to urinate from the time you went to bed at night until the time you got up in the morning? (0-5)					
Total I-PSS Score (total of questions 1-7)					

	Delighted	Pleased	Mostly Satisfied	Mixed	Mostly Dissatisfied	Unhappy	Terrible
If you were to spend the rest of your life with your urinary condition just the way it is now, how would you feel about it?	0	1	2	3	4	5	6

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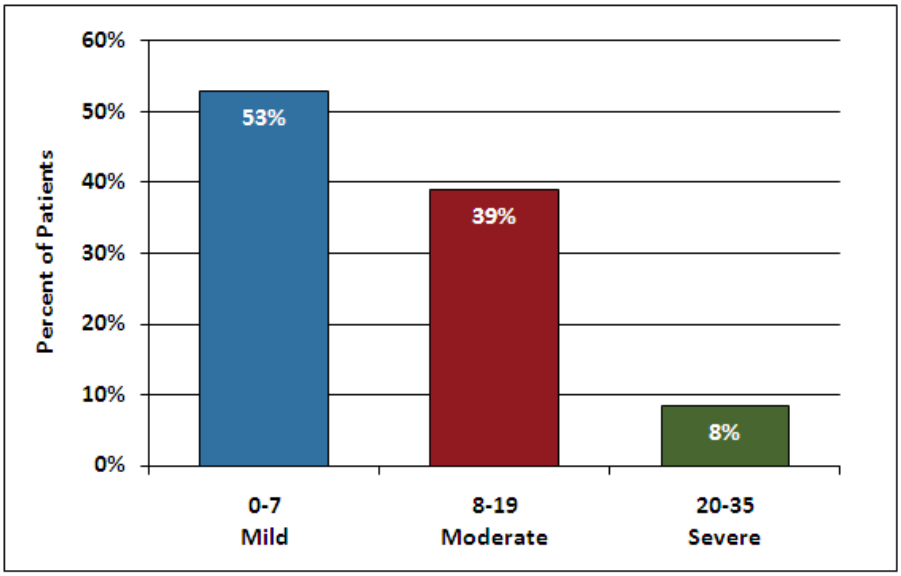
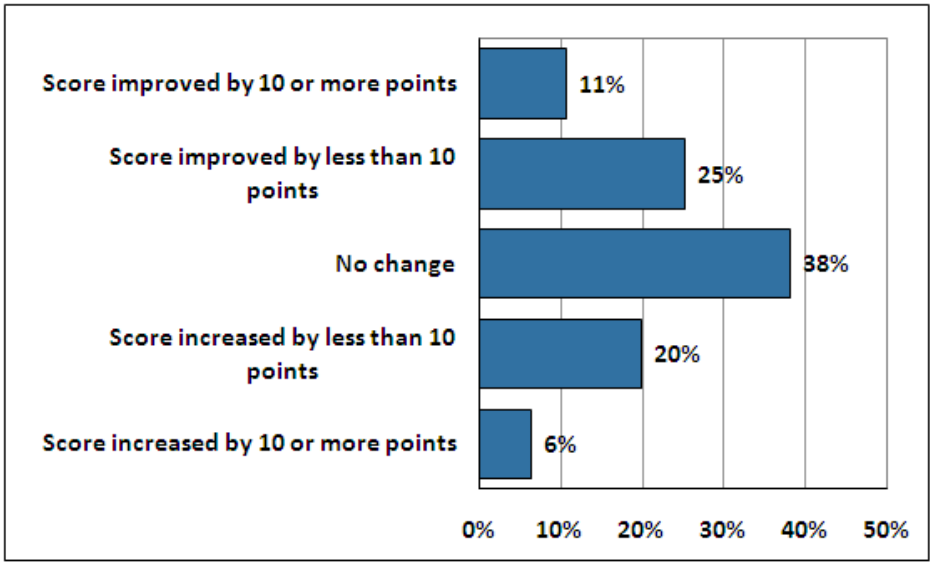
The following graph shows the distribution of I-PSS scores one year after treatment for the 216 patients who completed I-PSS forms. The higher the score the more problems the patient has with urinary toxicity.

Post-treatment International Prostate Symptom Score (I-PSS)



To provide additional perspective on post-treatment I-PSS, the following graph compares I-PSS scored by patients prior to radiation treatment to I-PSS scored by patients approximately a year after treatment was completed. The majority of men (94%) saw little or no change in urinary toxicity. A slightly smaller majority (74%) saw an improvement (lower scores) or no change in symptoms after treatment.

Change in I-PSS From Pre-Treatment to 1 Year Post-Treatment



The Sexual Health Inventory for Men (SHIM) is another questionnaire used to evaluate quality of life of prostate cancer patients, specifically problems with erectile dysfunction (ED) and sexual satisfaction. Patients are asked to complete a SHIM prior to treatment and again a year after completion of treatment. Clark & Daughtrey Radiation Oncology uses a similar form to the example below.

Sexual Health Inventory for Men (SHIM)

WATSON CLINIC LLP
Quality Healthcare for Every Generation

SEXUAL HEALTH INVENTORY FOR MEN

Patient Name:_____

Date:_____

Sexual health is an important part of an individual's overall physical and emotional well-being. Erectile dysfunction, also known as impotence, is one type of very common medical condition affecting sexual health. Fortunately, there are many different treatment options for erectile dysfunction. This questionnaire is designed to help you and your doctor identify if you may be experiencing erectile dysfunction. If you are experiencing erectile dysfunction, you may choose to discuss treatment options with your doctor.

Each question has several possible responses. Circle the number to the response that best describes your own situation. Please be sure that you select one and only one response for each question.

OVER THE PAST 6 MONTHS:

1	How do you rate your confidence that you could get and keep an erection?	Very Low **0**	Low **1**	Moderate **2**	High **3**	Very High **4**	
2	When you had errections with sexual stimulation, how often were your erections hard enough for penetration (entering your partner)?	No Sexual activity **0**	Almost Never or Never **1**	A Few Times (much less than half the time) **2**	Sometimes (about half the time) **3**	Most Times (much more than half the time) **4**	Almost Always or Always **5**
3	During sexual intercourse, how often were you able to maintain your erection after you had penetrated (entered) your partner?	Did Not Attempt Intercourse **0**	Almost Never or Never **1**	A Few Times (much less than half the time) **2**	Sometimes (about half the time) **3**	Most Times (much more than half the time) **4**	Almost Always or Always **5**
4	During sexual intercourse, how difficult was it to maintain your erection to completion of intercourse?	Did Not Attempt Intercourse **0**	Extremely Difficult **1**	Very Difficult **2**	Difficult **3**	Slight Difficult **4**	Not Difficult **5**
5	When you attempted sexual intercourse, how often was it satisfactory for you?	Did Not Attempt Intercourse **0**	Almost Never or Never **1**	A Few Times (much less than half the time) **2**	Sometimes (about half the time) **3**	Most Times (much more than half the time) **4**	Almost Always or Always **5**

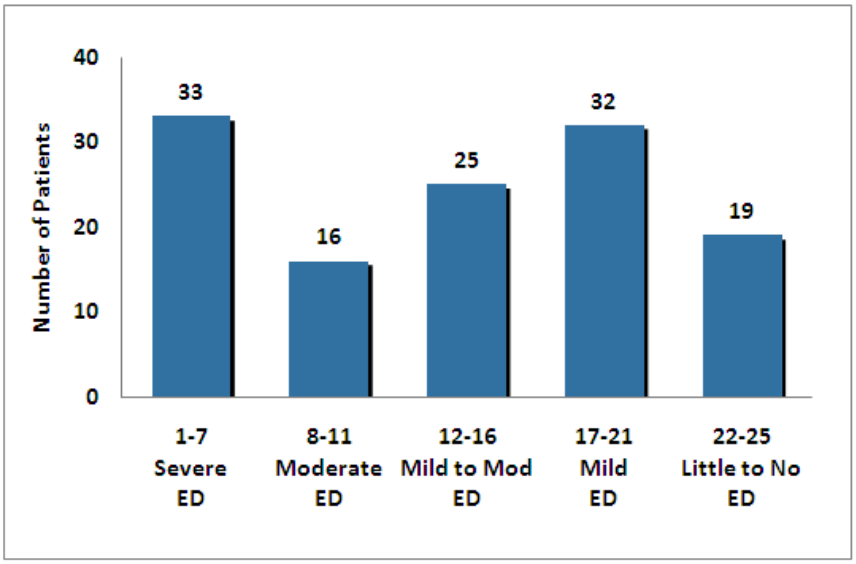
11 RADTH mr 018 *(5 hole punch, top)*

Total_____

Of the 222 charts reviewed, we found a total of 205 completed (SHIM) questionnaires precisely one year after treatment. The higher the score, the fewer the problems experienced by patients. Of the completed SHIM forms, 80 patients scored 0, which means there was no sexual activity, and 19 scored higher than 21, indicating little or no dysfunction. Based on our review, patients' sexual health scores varied greatly. No pattern related to treatment was identified.

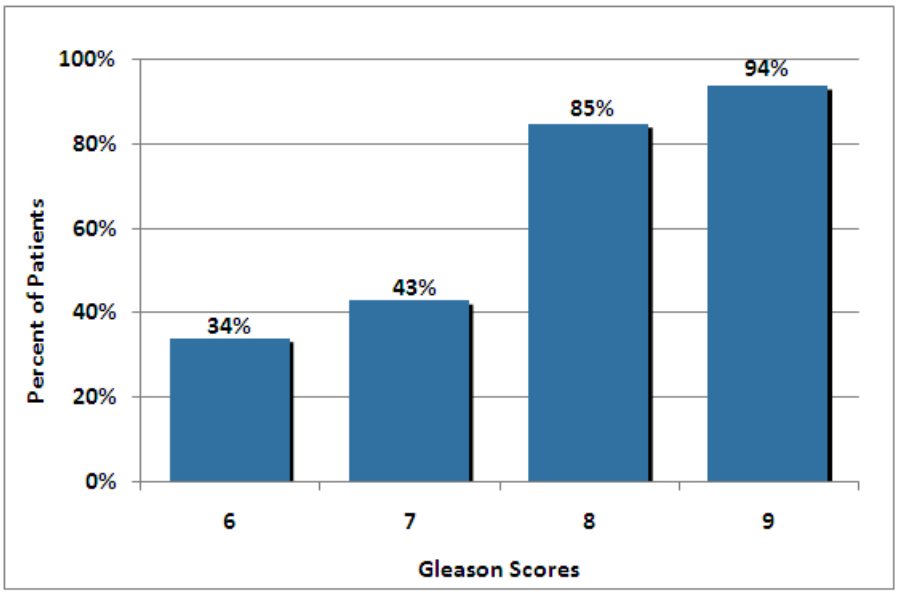
The following graph shows each category according to how the 125 patients who indicated some sexual activity scored themselves. The majority of patients (74%) reported only mild to moderate sexual dysfunction a year after treatment. Because the average age of the study population was 68, it is difficult to identify whether the cause of sexual dysfunction resulted primarily from age, cancer treatment or other factors.

Post-Treatment Sexual Health Inventory (SHIM) for Men



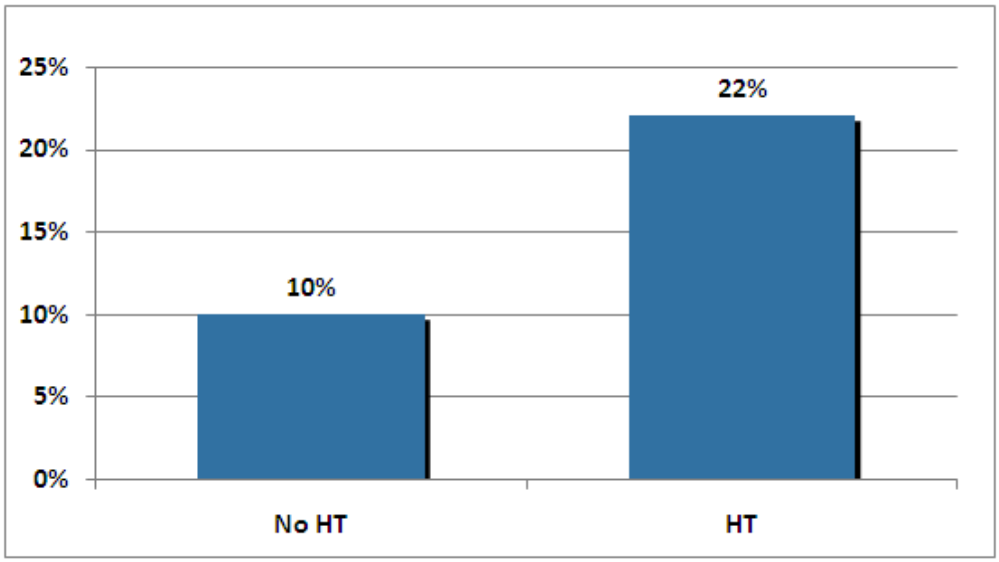
This next graph shows the distribution of Gleason scores for patients who received HT. Whether or not a patient should receive HT depends sometimes on their Gleason score as well as the size of his prostate. When scores were high, like 8 or 9, a greater percentage of patients received HT. For example, 94% of patients with Gleason 9 received HT. In our review, significant numbers of patients with Gleason scores of 6 and 7 also received HT.

Pre-Treatment Hormone Therapy per Gleason Score



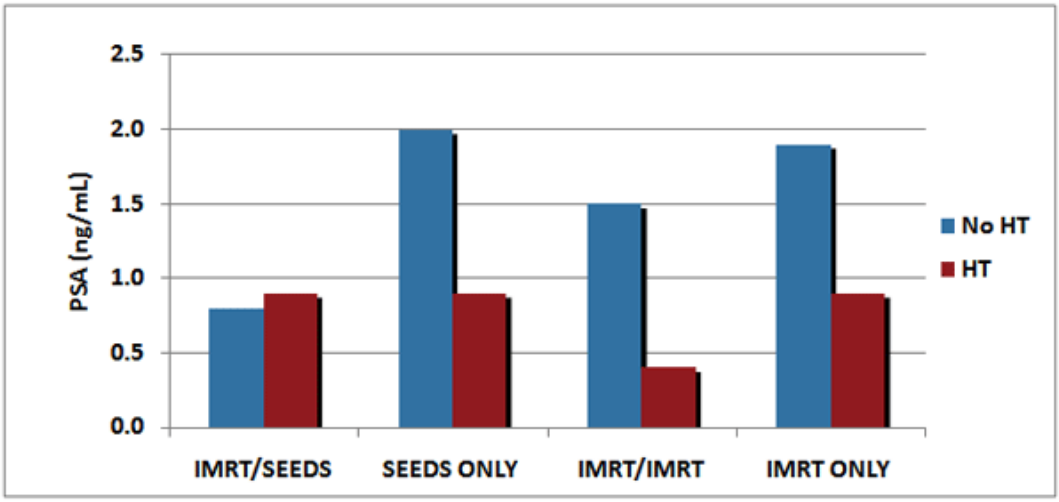
This graph shows that 22% of patients that received HT had rectal problems while only 10% of the patients that did not receive HT had rectal problems.

Occurrence of Rectal Toxicity



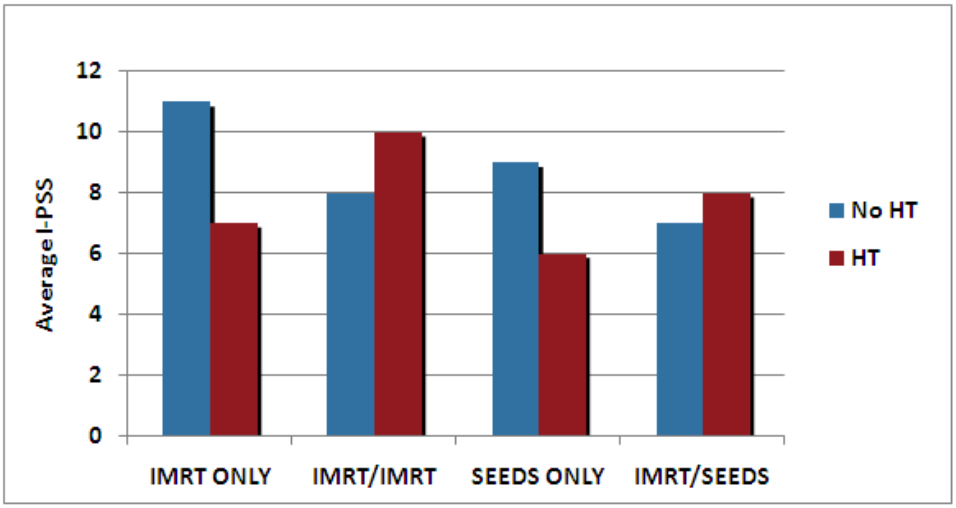
This next graph shows patients' post-treatment PSA averages according to treatment type. The PSA's in the graph were all taken one year after treatment. The addition of HT seems to suppress PSA levels slightly more than radiation alone; however all the PSA averages are well within the normal range.

Post-Treatment PSA Averages by Radiation Treatment Modality



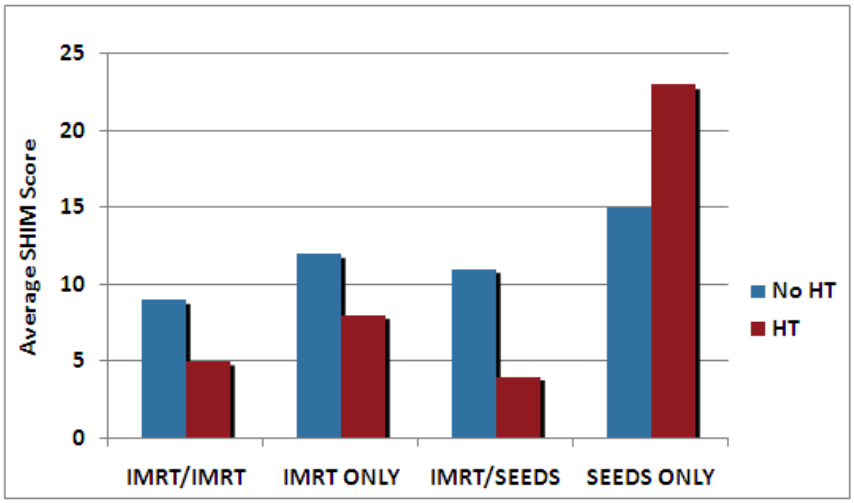
The following graph shows the average post-treatment I-PSS score recorded for each treatment modality. Lower scores indicate less urinary toxicity. Overall the average scores are very good for every radiation modality. All are fewer than 12 points out of a possible 35, which means all averages are either in the mild range or at the low end of the moderate range.

Post-Treatment I-PSS Distribution by Radiation Treatment Modality



SHIM scores were also collected approximately one year after treatment. This graph shows the distribution by treatment modalities. Higher scores indicate fewer problems.

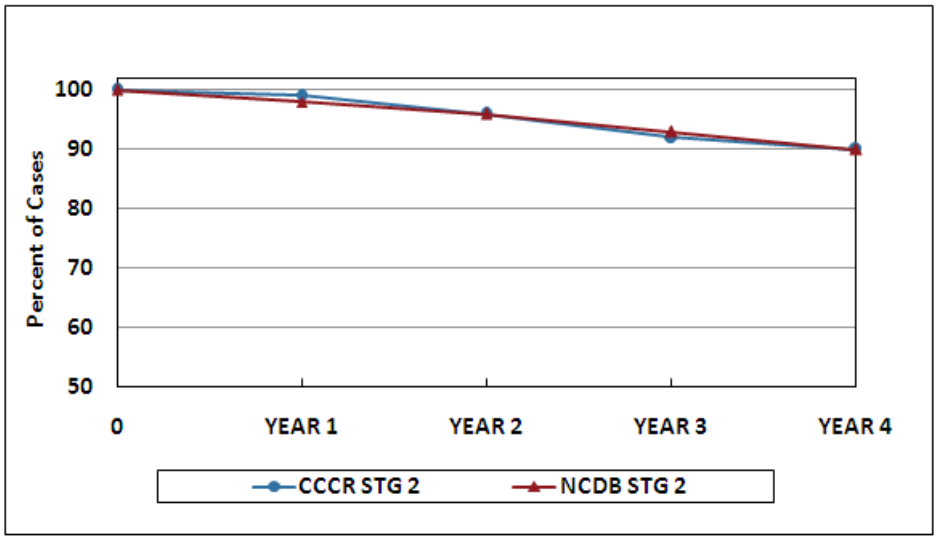
Post-Treatment SHIM Distribution by Radiation Treatment Modality



Disease - Free Survival: Of the 222 patients in the study, only one experienced a biochemical recurrence for a disease-free survival rate of 99.55%. A biochemical recurrence occurs when PSA begins increasing after treatment even though no overt recurrence can be seen on scans. These type recurrences are usually successfully treated by additional radiation therapy or hormone therapy.

Comparative Four - Year Survivals: The following graph compares four-year actuarial observed survivals of CCCR stage II prostate cancer from 2004-2010 and NCDB stage II prostate cancer from 2003 (the most recent year available for NCDB survival benchmark reports). Both survivals are still at 90% four years after diagnosis. Observed survivals include deaths from any cause. Actuarial survivals require only one year of follow-up. The average age at diagnosis for the CCCR population included in this survival was 70 years, one year older than the NCDB population and two years older than the prostate study population. The study population, from years 2007-2010, is represented mainly in the first half of the survival curve for CCCR. Notice that the CCCR and NCDB survival curves are almost identical.

Stage II Prostate Cancer 4-Year Observed* Survivals Comparison CCCR 2004-2010 & NCDB 2003



***Observed survivals include deaths from any cause**
Source NCDB Data: 2011 National cancer Data Base, Commission on Cancer, Survival Reports

Conclusions: Our goal for this study was to understand some of the quality of life issues impacted by radiation treatments. First, we looked at our patients' demographic and clinical distributions. We found that the Gleason average for white males was unexpectedly similar to the Gleason score average for black males in our study population. According to national studies, Gleason scores are normally higher in black men diagnosed with prostate cancer, which indicates their cancers are usually more aggressive at time of diagnosis.

The majority of the men in the study fell within mild to moderate ranges for their SHIM scores. It would have been helpful for assessing the impact of radiation therapy if SHIM scores had been available for this age group from men who did not have prostate cancer.

I-PSS seemed lower (better) for patients who had single-modality brachytherapy or IMRT only. Higher scores indicate increased urinary toxicity which may or may not result from treatment but which could have a major impact on quality of life. Scores seemed higher for patients who had a combination of treatment modalities, although on average all the scores were in the mild to moderate range. Patients that received HT also showed slightly higher I-PSS on average. However, patients who had hormone therapy and choose just a single treatment modality had lower I-PSS scores. There was no clear pattern related to treatment modality. It's difficult to draw definite conclusions because other factors besides treatment also impact I-PSS.

Patients were consistent with completing I-PSS forms, but the scores were not always easy to find in patients' records. The majority of men in the study saw little or no change in their I-PSS when post-treatment scores were compared to pre-treatment scores. A large number saw improvement after treatment.

Recommendations:

- Encourage patients to complete SHIM score sheets prior to treatment as well as after treatment.
- If additional work is done on the study, review available SHIM scores prior totreatment as well as after.
- Document I-PSS scores in a standard and very visible location in patients' records.
- Use an objective treatment scoring system to document rectal toxicity.

Center for Cancer Care & Research (CCCR)
Total Cancer Care™

According to the American Cancer Society, approximately **113,400** Florida residents will be diagnosed with cancer in **2011** and 41,000 will die from the disease, ranking our state second in cancer mortality and incidence nationwide.

To serve the needs of this growing population, The Center for Cancer Care & Research and Moffitt Cancer Care & Research Institute have joined forces on an exciting new research project that could affect future generations of cancer patients here in Florida and all over the world.

A new frontier in cancer research has arrived.

Discover:

We all know that cancer is generally classified by its site of origin (lung, breast, prostate), but did you know that there are many different types of each of these cancers? In fact, with a total of over 200 different types of cancer, standard protocols and drugs seldom work in a similar manner for everyone. Physicians are struggling to find appropriate treatments that can be of benefit to every patient. For many years, the technology has been lacking to sufficiently determine why some patients respond to a certain cancer-fighting drug while others do not.

The answers could potentially lie in genetic research.

Recent advancements have made it possible to detect and test over 30,000 genes from any cancer tumor tissue. In a broad, sweeping initiative called Total Cancer Care™, top researchers, physicians and clinicians from across the country will determine and study each tumor's molecular "fingerprint". These fingerprints are unique to every tumor just as your fingerprints are unique in identifying you. Through the collection of hundreds of thousands of genetic profiles, researchers hope to develop drug therapies that are more personalized to work for each individual.

None of this will be possible, of course, without the assistance of our area residents who have cancer.

Translate:

Participants in the study are making an invaluable contribution to the future of cancer care, but their involvement will be minimal and will require no additional testing or cost. In accordance with HIPAA regulations, the patient's medical information will remain private. Here's how Total Cancer Care™ works:

- During a regular visit with the doctor, if a patient is interested in voluntarily participating in the TCC study and provides written consent, the patient is asked questions regarding their medical history.
- If a biopsy is recommended as a part of the patient's regular treatment, an extra biopsy specimen is collected at that time, based on the physician discretion.
- If surgery is required for the patient, he or she is asked for their permission to study any excess cancer tissues that are removed. These cancer tissues would normally be discarded.

As the study expands and evolves, new clinical trials will be made available to participants of the program. The information compiled from these trials, as well as the genetic research, will be interpreted to create simpler and more effective treatments.

Deliver:

The Moffitt Cancer Center in Tampa serves as the study's epicenter and has enlisted 17 consortium sites throughout the country to assist in this endeavor. These consortium sites ensure that patients will be able to reap the benefits of Moffitt's world-renowned expertise and resources without leaving their own communities.

The Center for Cancer Care & Research, which has been an affiliate of Moffitt since its inception, is the only cancer clinic in the area involved in this groundbreaking project. During **2010**, CCCR enrolled **484** participants in the program. There are currently more than **2,300** patients enrolled at the Center for Cancer Care & Research.

Through expert care, advanced technologies, clinical trials and the progressive research made possible through studies like Total Cancer Care™, CCCR remains committed to improving the odds in the fight against cancer.

Sources for Information on Cancer:

American Cancer Society (ACS)
800-227-2345 • www.cancer.org

American College of Surgeons (ACoS)
800-621-4111 • www.facs.org

American Institute for Cancer Research (AICR)
800-843-8114 • www.aicr.org

American Lung Association
www.lungassociation.org

Centers for Disease Control and Prevention (CDC)
www.cdc.gov

Commission on Cancer (CoC))
312-202-5009 • http://facs.org/cancer

Florida Cancer Data System (FCDS)
305-243-4600 • http://fcds.med.miami.edu/

Florida Department of Health (FDH)
www.doh.state.fl.us

Leukemia Lymphoma Society
800-955-4572 • www.leukemia-lymphoma.org

National Cancer Institute (NCI)
800-4CANCER • www.cancer.gov

Susan G. Komen
800-468-9273 • www.komen.org

Glossary of Terms:

Cancer Case – a single primary cancer; a patient diagnosed with more than one primary cancer will represent more than one case in a cancer registry database.

Chemotherapy – drugs that work directly on cancer cells to kill them or slow their growth.

Class of Case – categories of cases based on their relationship to the reporting facility; classes relevant to the CCCR are as follows:

- **Analytic (classes 00-22)** – diagnosed and/or received first-course, cancer-directed treatment at the reporting facility.
- **Class 30** – newly diagnosed cases but first diagnosis and all first-course treatment elsewhere, includes cases where further diagnostic workup, staging workup or treatment planning is performed at the reporting facility or any care provided while patient has newly diagnosed active disease; new category for 2010 cases. Several types of cases once considered analytic by the CoC were moved into class 30 and are no longer reported to NCDB. Class 30 cases are required to be reported to FCDS.
- **Non-analytic (classes 30-37)** – diagnosed and all first-course treatment provided elsewhere before patient presented with persistent or recurrent disease.

Collaborative Staging (CS) System – staging system developed by the Surveillance, Epidemiology and End Results (SEER) program of the National Cancer Institute (NCI). CS is based on extent of disease and AJCC cancer staging guidelines. CS differs from AJCC staging in that CS stages may mix clinical and pathological T, N, and M to arrive at a complete "best" stage. While AJCC staging applies strict guidelines for identifying homogeneous populations for research, CS staging is more similar to how clinicians stage when developing a treatment plan.

- **T** – defines extent, and sometimes the size, of the primary tumor.
- **N** – defines involvement of regional lymph nodes.
- **M** – defines contiguous or noncontiguous spread to distant site.
- **Stage grouping** – based on the combination of T, N, M and sometimes other prognostic factors; represented by a concise group-stage code that indicates overall cancer extent and expected prognosis.

Hormone Therapy – drugs that work indirectly on hormone-sensitive cancer cells by modifying specific hormones in the body's hormone system.

Initial Therapy – first planned course of treatment designed to eliminate, control or palliate a patient's cancer. Initial therapy may also be active surveillance or a decision for comfort and support measures only.

Metastasis – cancer cells that have spread from the initial primary site to site(s) elsewhere in the body, usually by way of the lymphatic or circulatory system; may be regional or distant:

- **Regional Metastases** – cancer that has spread to tissues, lymph nodes or organs that are close to the primary site and are listed as regional in a standard staging system.
- **Distant Metastases** – cancer that has spread to tissues, lymph nodes or organs that are usually not in proximity to the primary site and are listed as distant in a standard staging system.

Reportable Tumor – tumor that meets criteria for reporting to the CoC and/or FCDS; most reportable tumors are malignant but benign central nervous system tumors were added to the list of reportable tumors beginning January 1, 2004. Chronic myeloproliferative disorders and myelodysplastic syndromes were added beginning January 1, 2001.

Acronyms:

ACS	American Cancer Society
ACOS	American College of Surgeons
AJCC	American Joint Committee on Cancer
CCCR	Center for Cancer Care & Research
CoC	ACOS Commission on Cancer
DOH	Department of Health
FCDS	Florida Cancer Data System (State Cancer Registry), Program of the DOH
NCCN	National Comprehensive Cancer Network
NCDB	National Cancer Data Base
NCI	National Cancer Institute
SEER	Surveillance, Epidemiology and End Results program of the NCI