

THE CANCER HOSPITAL OF NEW  
JERSEY

at

ROBERT WOOD JOHNSON  
UNIVERSITY HOSPITAL

Cancer Program Annual  
Report 2005



*A multidisciplinary program of the  
American College of Surgeons*

THE CANCER HOSPITAL OF NEW JERSEY AT  
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CANCER PROGRAM ANNUAL REPORT 2005

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## I. RWJUH MISSION, VISION, VALUES

### RWJUH MISSION

Our CORE Mission is to provide the highest quality patient care, education, research, and community outreach in a supportive environment that enhances the well being of everyone we touch.

**Care:** to keep the patient at the center of our Mission and to continually strive to provide patients with the most appropriate and highest-level of health care possible in a safe and supportive environment.

**Outreach and Service to the Community:** to develop a wide range of public health education and service activities tailored to the needs of its constituents.

**Research:** to serve as the center for clinical research and the advancement of medical knowledge.

**Education:** to maintain viable medical and health education programs.

### RWJUH VISION

- ❖ Be nationally recognized as a premier academic medical center committed to patient care, community outreach, research, and education.
- ❖ Provide leading edge technology and health care professionals demonstrating excellence in the delivery of patient care.
- ❖ Provide high-quality, patient-centered care in a safe and supportive environment, demonstrated by superior outcomes and integrated, efficient use of clinical and financial resources.
- ❖ Maintain and continue to develop distinctive programs using the unique resources of an academic medical center and through the development of strategic partnerships that will allow the Hospital to fulfill its Mission and maintain its presence in the marketplace.

### RWJUH VALUES

- ❖ Respect for human dignity and the worth of each individual
- ❖ Continuous pursuit of excellence
- ❖ Collaborative and safe approach to patient care delivery
- ❖ Providing an environment for the advancement of education of health care professionals
- ❖ Commitment to the effective stewardship of entrusted resources, including human and financial capital
- ❖ Service to the community

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## II. OVERVIEW OF RWJUH CANCER PROGRAM



The Cancer Hospital of New Jersey at RWJUH brings together the latest technologies, cutting edge cancer research, and the very best in compassionate, supportive, evidence-based care for oncology patients.

The Cancer Hospital of New Jersey at RWJUH, the state's only ACOS-CoC NCI-designated Cancer Program is a 123-bed "hospital within a hospital" and is comprised of several specialized units. These include: an outpatient chemotherapy treatment area, a bone marrow transplant unit, a hematology-oncology unit, a medical oncology unit and a surgical oncology unit. In addition, there is a four bed urgent-care center located on the medical oncology unit which enables patients to be treated immediately by oncology specialists, bypassing the Emergency Department.

For children and young adults with cancer, the Bristol-Myers Squibb Children's Hospital at RWJUH houses a pediatric hematology-oncology unit offering age-appropriate care in a family-oriented environment. Patients, who range in age from birth to twenty-one, are supported with age-appropriate medical, psychological, and spiritual care. On-site tutoring along with recreation and activity centers staffed with Child Life Specialists enable children to normalize activities while hospitalized. Established Thanatologic counseling, as well as pediatric palliative care and parent advocacy programs complete the full spectrum of cancer care modalities offered to our pediatric population.

RWJUH's Cancer Program hospital provides wide-ranging oncology-focused services including diagnostic, laboratory, psychosocial services, pain management, and radiation therapy.

Radiology services are offered around the clock in all venues of diagnostic imaging including CT Scan, MRI, Interventional Radiology, Ultrasound, and Nuclear Medicine including PET scanning. Services are offered for all populations, with increased specialization for Pediatrics.

The diagnostic services offered include the latest in breast cancer detection and treatment. The Women's Imaging Center at Robert Wood Johnson University Hospital offers the latest technology in mammography, breast, and gynecological ultrasound. The Center also offers stereotactic breast biopsy, ultrasound-guided core breast biopsy and ultrasound-guided fine-needle biopsy as well as needle-localization for breast biopsy and lumpectomy.

The Radiation Oncology department offers Intensity Modulated Radiation Therapy [IMRT], stereotactic radiosurgery, precise high-dose radiation treatment therapy, brachytherapy, and CT simulation, a body scanning technology providing high resolution images to map tumor location, for both inpatients and outpatients. Providing on-site radiation therapy services enables hospital inpatients to receive radiation therapy that is coordinated with their other care modalities; providing for both

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continuity of care while avoiding the expense and inconvenience of off-site transport to receive cutting-edge cancer treatment.

The Cancer Hospital of New Jersey focuses on the total care of the patient and families, ensuring all needs are met including education, psychological and spiritual support. Supportive services available for this Magnet Award-winning hospital include the care of a dedicated oncology social worker, an oncology nutritionist, two oncology-specific outcomes managers, a chaplain, and a wide variety of complementary therapies provided through our Integrative Healing Program. Therapies include: Reiki, acupuncture, massage therapy, pet therapy, therapeutic touch, music therapy, meditation, and guided imagery.

In addition, there are numerous support and education opportunities for patients and their family. The oncology chaplain holds weekly support sessions for patients and caregivers. Educational sessions regarding various aspects of cancer care are regularly held, and patient and family education areas, including Internet access, are available throughout the Cancer Hospital of New Jersey. Patients and families also have access to the support and educational programs offered at CINJ.

There are various Oncology-focused Community Outreach activities that are also offered. Screening programs for the citizens of Middlesex County include monthly breast cancer screenings including mammography for low- income citizens, biannual prostate cancer screenings and colorectal cancer screenings. In addition, periodic skin and oral cancer screenings for residents are coordinated through the University of Medicine and Dentistry/Robert Wood Johnson Medical School.

As the flagship hospital of the Cancer Institute of New Jersey (CINJ) New Jersey's only National Cancer Institute Designated Comprehensive Cancer Center, patients at both The Cancer Hospital of New Jersey at RWJUH and The Bristol-Myers Squibb Children's Hospital at RWJUH have access to the latest technologies, cutting edge treatment, innovative therapies, world renowned clinicians and clinical trials.

The Cancer Hospital of New Jersey at RWJUH maintains an on-site Tumor Registry. The Registry reports to the State of New Jersey Department of Health and Senior Services Cancer Epidemiology Services. Registry services are highlighted in section V of this report.

The services offered at the Cancer Hospital of New Jersey at RWJUH are truly full spectrum, ranging from cancer screening, diagnostic and laboratory services for diagnosis, to in- and outpatient treatment areas, and supportive and complementary therapies.

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**III. MESSAGE FROM THE CHAIRMAN OF THE CANCER COMMITTEE AT RWJUH**  
**IV.**



On behalf of the Cancer Program at Robert Wood Johnson University Hospital (RWJUH) the Cancer Committee is pleased to present the 2005 Cancer Program Annual Report. This report reflects RWJUH's dedication to providing outstanding cancer care for each of our patients through comprehensive multi-disciplinary care.

The Cancer Program at RWJUH continues to grow, fostered through our partnership with The Cancer Institute of New Jersey (CINJ), The University of Medicine and Dentistry (UMDNJ)-Robert Wood Johnson Medical School (RWJMS) and with the Cancer Committee's dedicated membership of physicians, allied health professionals, administrators and others. During this past year, the cancer committee members chose to pursue aggressive goals in ensuring that all of our patients received evidence-based care that is timely, safe, comprehensive, and delivered in a caring, supportive environment.

Some highlights of our work for this year include:

- Patient care studies assuring evidence-based care in the areas of surgical technique for nephrectomy and adjuvant treatment for Stage III Rectal Cancer.
- Patient safety studies assuring documentation of chemotherapy consent prior to treatment and elimination and minimization of readmission within 24 hours of discharge.
- Assurance of easily accessible information regarding open clinical trials through the web-based New Jersey Cancer Trial Connect site and through staff educational programs.
- Increased outreach and education to our Hispanic population through translation of medical information supportive care documents into Spanish.
- The development of a Palliative Care Task Force to evaluate
  - Patient study on the quality and the cost of care at end of life
  - Development of a Business Plan for a Palliative Care Team at RWJUH
  - Assessment of Optimal Use of Hospice at RWJUH

The Cancer Committee and all members of the healthcare team at Robert Wood Johnson University Hospital merit high praise for their dedication and effort to eliminate the pain and suffering caused by cancer.

Molly Gabel, MD  
Chair, RWJUH Cancer Committee

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#### IV. CANCER COMMITTEE AND PROGRAM

##### A. PURPOSE

The Cancer Committee at RWJUH is a multidisciplinary committee that provides vision, leadership and direction for RWJUH's Cancer Program. The Cancer Committee convenes regularly and is responsible for goal setting, planning, initiating, implementing, evaluating, and improving all cancer related activities. Dr. Molly Gabel, Associate Professor of Radiation Oncology and Deputy Director of Extramural Affairs, chairs the Committee. Dr. Michael J. Nissenblatt, Medical Director of Medical Oncology at RWJUH and Professor of Medicine at UMDNJ-RWJMS, is the Cancer Liaison Physician.

##### B. MEMBERSHIP

The Cancer Committee membership is multidisciplinary, representing physicians from the diagnostic and treatment specialties and non-physicians from administrative and supportive services. The following list of Committee members in 2004 reflects the multidisciplinary nature of the Cancer Committee:

<u>Member</u>	<u>Specialty</u>
Joseph Aisner, MD	Medical Oncology
Ali Ameri, MD	Oncology Fellow
David A. August, MD	Surgical Oncology
Nicola Barnard, MD	Pathology
Rachel Behrendt, RN, C, BA, OCN	Oncology Nursing Education
Regina Cunningham, Ph.D., MA, RN	Chief Nurse, CINJ
Reverend John DeVelder	Pastoral Care
Richard Drachtman, MD	Pediatric Hematology/Oncology
Henry Durivage, PhD	Clinical Research Data
Maureen Eng, MA, RN	Hospice and Home Care Administrator
Richard S. Feinstein, MD	Diagnostic Radiology
Molly Gabel, MD	Cancer Committee Chair, Radiation Oncology
Kathy Gelchion, MSN, RN, AOCNS	CINJ Oncology Nursing
Debra Good, MSW, LCSW, CMAC	Case Management
James Goydos, MD	Surgical Oncology
Bruce Haffty, MD	Radiation Oncology
Brandi Handel, MSN, RN, APN	Oncology Nursing
Renia Harris-Hellams	AVP, Operations
Linda Hassett	CINJ Network
Stephen Jones	SVP, Operations
Mary Jo Kelleher RN, BSN, OCN	Oncology Nursing
Mary Kelly, RN, MA, AOCN, BC-PCM	Oncology Nursing
Ellen Levine	CINJ Social Work
Tracey Malast, RN, MSN	Surgical Oncology Nursing
Aracelis M. Maisonet, CTR	Cancer Registry
Rosemary McAndrew	Tumor Study Group Coordinator
Miriam Merced	Community Outreach
Ron Morton, MD	Genito-Urology
Michael J. Nissenblatt, MD	Cancer Liaison Physician, Medical Oncology
John Patella	Community & Public Affairs
Elizabeth Poplin, MD	Palliative Care
Marilyn Omabegho, BSN, RN, OCN	Oncology Nursing

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Richard Ragovin	Radiology/Radiation Oncology
Sabeen Rana	CINJ Outreach
Lorna Rodriguez, MD	Gynecological Oncology
Manisha Shende, MD	Thoracic Surgery
Steve Shiff MD	GI
Stan Trooskin, MD	Surgical Oncology
Teresa Veneziano, MSN, CCRN	Cancer Program Administrator
Abual Huda Wasfi	CINJ Team Supervisor

### **C. ACHIEVEMENTS AND GOALS**

The Cancer Committee develops and evaluates the annual goals and objectives for the clinical, community outreach, quality improvement, and programmatic endeavors related to cancer care.

#### **Achievements of the RWJUH Cancer Program for the year 2005 are reported below:**

- A Matched Unrelated Donor Hematopoietic Progenitor Cell Transplant program was implemented.
- A pediatric oncology specific performance improvement team was established.
- A standardized form and location for documenting TNM staging was developed
- Members of the nursing staff presented at the Oncology Nursing Society annual conference in Florida.
- The PleurX® catheter was implemented for use as a treatment modality for malignant ascites.
- A palliative care taskforce was created To address identified end of life care issues
- Relative toxicities of open versus laparoscopic nephrectomy were reviewed
- Adjuvant treatment for stage III colorectal cancer was reviewed
- Work began on implementing a consent form for chemotherapy
- Increased outreach/treatment/education was provided to underserved populations through Spanish translations
- A pediatric palliative care program (PAACT) at home was piloted and implemented
- A complementary therapy program, including acupuncture, was implemented

#### **2006 is expected to be another productive year. Goals for 2006 include:**

- Development of a Palliative Care business proposal to present to senior hospital administration for approval
- Achievement of ACOS-CoC re-designation as a National Cancer Institute-Designated Comprehensive Cancer Program.
- Re-accreditation as a Foundation for the accreditation of Cellular Therapies (FACT) of the Bone Marrow Transplant Program.
- Presentation by the oncology nursing staff at the Oncology Nursing Society annual conference in Boston.
- Reorganizing the Oncology Performance Improvement committee into service specific groups (medical, Bone Marrow Transplant, GYN, radiation, surgical)
- Ensuring timely, accessible summaries of clinical trials to both health care providers and patients.
- Assuring that the required numbers of cases are discussed at the cancer conferences on an annual basis and that at least 75% of the cases discussed are presented prospectively.
- Trial use of urgent care area as a discharge lounge for patients meeting specific criteria.

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- Implementing a pre-chemotherapy administration checklist developed for use by the nurse to ensure consistency in safety measures.
- Developing an instruction sheet to guide education of patients receiving chemotherapy by any route in the home setting.
- Increasing the number of surgical oncology cluster beds from 6 to 9

#### **D. ACTIVITIES**



A continuum of care exists between RWJUH and the CINJ. Since its inception, RWJUH's Cancer Program has been committed to providing resources to address the physical, psychosocial, emotional, and spiritual needs of our patients, families, and significant others. The Cancer Program offers some of the most innovative and advanced therapies in the state for oncology patients. Because the Cancer Program clinicians and research scientists work closely together, new drugs and treatments developed in the laboratory are rapidly translated into clinical practice offering patients innovative therapeutic options. A coordinated effort among individuals from nursing and patient services, pastoral care, social services/case management, volunteer services, and many other departments exists to meet and exceed the expectations of adult and pediatric patients who need guidance, assistance, and support. The following is a brief summary of some of these services (listed below in alphabetical order).

#### **Case Management**

The Department of Case Management, comprised of Social Workers, Case Managers, and a Placement Coordinator, work collaboratively with other members of the health care team to promote positive outcomes for the oncology patient population. Comprehensive services are provided to insure continuity of care. Discharge planning services aid in patients and their families making arrangements for the next step after hospitalization, whether it is to home or to a facility. Referrals to community programs help patients' transition back to home living. Interventions with insurance companies maximize reimbursement and services for the highest level of care. Counseling for patients and families in all stages of the disease helps in adjustment to the illness and changes in lifestyle. The specific needs of the bone marrow transplant population are anticipated and addressed. Assistance is provided for end of life issues and hospice referrals.

#### **Clinical Programs**

Active clinical programs at RWJUH/CINJ include:

- ❖ Bone Marrow/Stem Cell Transplant- autologous, allogeneic: matched related donor, matched unrelated donor and umbilical cord
- ❖ Breast Oncology
- ❖ Cancer Risk Assessment and Genetic Counseling/Familial Cancers
- ❖ Clinical Research
- ❖ Gastroenterology Oncology

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- ❖ Genitourinary Oncology
- ❖ Gynecological Oncology
- ❖ Home Care
- ❖ Leukemia/Lymphoma
- ❖ Melanoma and Soft Tissue Oncology
- ❖ Pathology
- ❖ Pediatric Oncology
- ❖ Phase I/Developmental Therapeutics
- ❖ Radiation Oncology
- ❖ Symptom Management Supportive Care
- ❖ Thoracic Oncology

### Community Outreach

Outreach to the community is a cornerstone of the RWJUH mission. As such, education of the public is an incumbent responsibility of every healthcare provider within the institution. The RWJUH Cancer Program provides community education regarding early detection and prevention of cancer as well as information about treatment resources. Education is a collaborative and interdisciplinary activity. Each discipline assesses the learning needs relating to their particular specialty. In total, the biological, psychological, physiological, spiritual and cultural needs of the patient are assessed through our public education and outreach. Various programs that are offered include, but are not limited to: cancer screenings, cancer prevention programs, public education programs about specific cancer topics, Cancer Education and Early Detection Services (CEEDS) in collaboration with the State of New Jersey, annual American Cancer Society events, health fairs, and publications.

2005 Cancer Awareness, Screenings, and Education Initiatives Included:

**Breast Cancer and Prostate Cancer Theater Projects-** This year's initiatives included:

1. The "Sharing Stories/Compartiendo Historias" Breast Cancer Theater Project which reached-out to over 351 community residents in 2005. The presentations included a play, an educational seminar, an evaluation and referrals to local free mammogram clinics available in the community. The NJ Susan G. Komen Race for the Cure Foundation funds this program.
2. The "I am a Man/Soy un Hombre" Prostate Cancer Theater which reached-out to over 319 community residents in 2005. The presentation included a prostate cancer awareness bilingual play, an educational bilingual seminar, an evaluation and referrals to local community prostate cancer screenings. This program is made possible through the CINJ Novartis Outreach Grant. This year's grant included the training of 10 bilingual community health promoters to assist with outreach efforts in hard to reach community sectors.

**Free Mammogram Screening-** This year RWJUH became a CEED site for the Middlesex County Public Health Department (MCPHD). As a result our free mammogram screening for New Brunswick's medically underserved residents was able to restart during the month of July 2005. A total of 61 women were screened for breast cancer, and 80 new referrals for mammograms were sent to the MCPHD prior to the starting of our program.

**Annual Free Prostate Cancer Screening-** This year, the CHPP partnered with the CINJ Outreach Department, the Dean and Betty Gallo Prostate Cancer Center, RWJUH Urology Department, the New Brunswick Faith Based Collaborative to expand our annual prostate cancer screening to three days. As a result, a total of 242 men participated in these years screening, and 18 men were referred for follow-up services.

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**Annual PAP Day-** A total of 16 women participated at this year's screening. In addition, 3 women were referred for further follow-up services. As in the past, the CHPP, the Cancer Institute of NJ, and the Middlesex County Public Health Department sponsored this screening.

### Consultation and Liaison Psychiatry Services

The Consultation and Liaison Psychiatry Department provides comprehensive services to patients. Faculty includes psychiatry attending physicians with extensive clinical experience in oncology. We additionally provide education for medical students from UMDNJ-RWJMS, and trainees from Family Practice, General Internal Medicine, and Psychology Internship Programs. Assistance in evaluating and managing anxiety, depression, confusion, and adjustment issues, while decreasing distress and optimizing comfort are available 24 hours a day, 7 days a week. Practitioners have a high level of expertise in managing organic brain syndromes, complex psychiatric manifestations, related to the disease process and/or its treatment and chemotherapy-induced changes in mentation.

### Home Care Services

Home Care Services include professional nursing, physical therapy, occupational therapy, speech therapy, social services, and home health aides that are coordinated to meet the individual needs of oncology patients in their homes. In addition, home care for oncology patients often includes home intravenous infusion for medication delivery and TPN. Particular emphasis is placed on the continuum of care so that the patient and family experience as seamless a transition as possible from in-patient care to home care. The home care interdisciplinary team uses a collaborative approach to teaching self care management and independence. Patients may be referred for either inpatient hospice services or at hospice care in their home.

A major initiative of the RWJUH Home Care Department has been to address and assist patients to manage their pain. Quality indicator results for 2004 have continued to show the Home Care Department to be consistently about the national norm for positive outcomes.

### Nursing Services

Comprehensive nursing services are provided to adult and pediatric patients with oncology conditions of medical, hematologic and/or surgical etiology. An interdisciplinary approach to nursing care is provided for both inpatients and outpatients. Nursing staff collaborate with case managers, dietitians, pastoral care workers, pharmacists, physicians, respiratory therapists, social workers, among others in the delivery of care to patients. Nursing staff achieve and maintain competency in providing care to patients requiring chemotherapy, biotherapy, radiation therapy, pain management, cancer symptom management, blood and blood product administration, telemetry monitoring, implementation of research protocols, and end of life care. Oncology nurses utilize standards of care and practice that are based on current research as well as national organization guidelines such as the Oncology Nurses Society (ONS) when developing and implementing individualized plans of care. Hospital-wide policies and procedures, oncology specific policies and procedures, and requirements from regulatory agencies also govern nursing practice.

Nurses achieve and maintain competency through participation in a variety of internal and external educational programs. In 2005, all new graduates as well as experienced nurses new to oncology nursing attended our 3-day Oncology Nursing Fundamentals course. This course, based on the

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Oncology Nursing Society's Core Curriculum, provides the background and evidence related to oncology nursing concepts and practices. In addition, to encourage nurses to take their oncology nurse certification exam, an internal OCN review course was held. The Continuity of Care Committee comprised of nurse leaders from Robert Wood Johnson University Hospital and CINJ continued to meet monthly in 2005 to further enhance patient care services between the inpatient and outpatient settings. The oncology areas in the hospital are actively involved in the hospital's patient satisfaction initiative and consistently score among the highest percentile within the institution.



### Pastoral Care

The Pastoral Care Department promotes holistic healing through the practice of competent and compassionate ministry, consultation, spiritual counseling, and religious services to patients, families, and staff of the Hospital. Clinically trained chaplains are available 24 hours each day for patients of all faiths. Chaplains make spiritual assessments, develop pastoral care plans, and contribute to the interdisciplinary patient care rounds, support groups, and bereavement groups. In addition, Chaplains work collaboratively with local clergy and congregations to strengthen the linkage between care given by the chaplain and care given by the patients' congregations.

### Pathology and Laboratory Services

The Pathology Service and the Department of Pathology and Laboratory Medicine play a major supportive role in the diagnosis and care of cancer patients and the research efforts of the Cancer Program through the divisions of Anatomic and Clinical Pathology. Anatomic Pathology is integrally involved in the care of oncology patients through its surgical pathology, cytopathology, neuropathology, and other sections. Clinical pathology remains active in transfusion medicine, clinical chemistry, molecular diagnostics, hematology, and microbiology areas. The labs continue to successfully handle a significant increase in volume and complexity of care for oncology patients. The cytogenetics lab has helped to improve efficiency in cytogenetic lab findings and results. The allogeneic unrelated hematopoietic peripheral blood stem cell processing needs were integrated into the laboratory activities. Since inception, autologous peripheral blood stem cells were harvested and processed from 382 patients and transplanted into 305 patients. For the same period, matched related allogeneic transplants were harvested, processed and transplanted to 43 patients and Cord blood

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was transplanted into 6 patients successfully. The NBAH Blood Center for January through September 2005, produced 6908 products for transfusion which includes red cells, platelets, plasma, and special products for neonates and provided therapy by collection of 358 products as stem cells or therapeutic services.

**Pediatric Hematology-Oncology**

This state-of-the-art 10-bed unit accepts and treats patients with blood disorders and cancer. The pediatric Hematology/Oncology team participates in clinical research trials, administers chemotherapy, biologic modifiers and blood products, assesses and controls for infections secondary to neutropenia. There is an in-house school-tutoring program that helps pediatric patients maintain age-specific growth and development activities while hospitalized. Each single room provides a range of amenities including television sets, VCRs, Nintendo games and in-room sleeping accommodations for parents. Specialists in every aspect of pediatric care are available and participate, as needed, in the multidisciplinary team caring for each patient. Pediatric specialty care is enhanced with a separate same-day services suite, a pediatric emergency room, a radiology suite and a rehabilitation room, designed to meet the needs of children and their families.



**The Bristol Myers Squibb Children's Hospital at RWJUH**

**Performance Improvement (PI)**



The Oncology Program at RWJUH is fully integrated into the hospital's Performance Improvement (PI) Program. The PI program is a comprehensive, collaborative, interdisciplinary, and organization-wide approach to performance measurement, assessment, and improvement. It is linked to the Hospital's Vision, Mission, Values, and Strategic Plan. The PI program incorporates the Joint

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Commission for the Accreditation of Healthcare Organizations (JCAHO), ACoS CoC quality requirements, Foundation on the Accreditation of Cellular Therapy (FACT) and other relevant standards and regulatory requirements. PI projects designed to improve outcomes and process of care for cancer patients are determined based on analysis of data collected, as well as input from various disciplines. .

Using an evidence-based model the Oncology PI team has taken on many initiatives to improve the quality of healthcare delivery to our oncology patients. In 2005 the team continued its focus on further refining our chemotherapy ordering, administration and documentation practices. The chemotherapy policy was revised to incorporate new safety initiatives and changes in ordering process, verification process and documentation. A joint RWJUH and CINJ sub-committee, the Chemotherapy Standardization Taskforce, continued its work on aligning chemotherapy nursing practice across institutions.

In addition, the team looked at the adequacy of pain management in the oncology population. Based on data collected, staff education continued to be a focus for the PI team. Data collection and care delivery were enhanced by the implementation of the new electronic medical record, Sunrise Clinical Manager.

### Radiation Oncology

The Radiation Oncology Department at Robert Wood Johnson University Hospital is the flagship Radiation Oncology facility for the Cancer Institute of New Jersey. Since inception, the program has demonstrated its commitment to high quality care, combining the latest in technology with personalized and supportive care throughout and after treatment.

The Cancer Hospital of New Jersey's Radiation Oncology Department provides the latest diagnostic and treatment technology including intensity modulated radiation therapy or IMRT, the most precise form of radiation therapy. Computer generated images direct higher and more precise radiation to tumors while protecting healthy tissue; stereotactic radiosurgery, a precision high-dose radiation treatment therapy; CT simulation, and an advanced body scanning technology that gives doctors the ability to better view the patient's anatomy with high-resolution, three-dimensional images, used to determine the shape and location of tumors.

Located in the G2 level of The Cancer Hospital at RWJUH in New Brunswick, the department offers:

- 3D Conformal external beam radiotherapy
- Intensity Modulated Radiotherapy (IMRT)
- Stereotactic Radiosurgery
- Stereotactic Radiotherapy
- Extracranial Radiosurgery
- Gynecologic Brachytherapy
- Timely consultations
- Automatic communication and return referral to referring physician(s)
- Free Parking
- Extensive patient education
- Patient support programs

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### Radiology Services

The Radiology Service and Department are integrally involved in social aspects of cancer care ranging from diagnosis with the latest technology to vascular access and treatment with interventional radiology techniques. Radiology and mammography services, in particular, are accredited by the American College of Radiology. The department is actively involved in research studies involving cancer patients. On-site services offered include:

- ❖ Angiography
- ❖ Computerized Axial Tomography Scan (CT)
- ❖ Digital Radiography
- ❖ Mammography
- ❖ Magnetic resonance Imaging (MRI)
- ❖ Nuclear Medicine
- ❖ Positron Emission Tomography Scan (PET)
- ❖ Stereotactic Guided Biopsy
- ❖ Ultrasound

### Research

The Institute for Health Care Research (IHCR) at Robert Wood Johnson University Hospital provides an organizational framework that supports interdisciplinary research and facilitates scientific inquiry to improve patient, provider and organizational outcomes. Funded by external funding sources, the ICHR is New Jersey's first research institute to be housed in an academic health care setting. The IHCR supports the Hospital's four-fold mission of Care, Outreach, Research and Education. The research agenda of the IHCR includes clinical interdisciplinary research studies of the care of patients with cancer. Funded within the IHCR is the position of the Yvette Stolzer, Oncology Nurse Research Scholar, which is currently held by Nancy Gardner, a doctoral-prepared research scientist. Her role is multi-faceted and includes collaboration with clinicians to identify research questions, assist in the conduct of studies, and to improve oncology patient outcomes by identifying evidence-based nursing practice.



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CINJ, located across the street from Robert Wood Johnson University Hospital, serves as the nucleus of the most innovative cancer treatment and research centers in the state. At CINJ, laboratory research is supported by more than \$80 million annually in cancer-related research grants. Research is being conducted in areas including oncogenes, epidemiology, chemical carcinogenesis, tumor virology and immunology, drug development and resistance, the relationship between cellular and genetic mechanisms and tumor development, and cancer genomics. Patients have unprecedented access to clinical trials that may provide the latest treatment options.

New Jersey Cancer Trial Connect, a web-based resource for healthcare providers and cancer patients, enables people to identify active clinical trials that may be appropriate treatment options. Operated by the CINJ with support from the state of New Jersey, the service contains trial information provided by hospitals, academic institutions, oncology offices, and pharmaceutical companies. New Jersey Cancer Trial Connect enables people with cancer, their families and caregivers to enter specific information about their cancer diagnosis and treatment history. The system will then search its database to find a clinical trial “match.” Patients are notified electronically when new clinical trials become available.

### Support Groups



RWJUH staff, physicians, and volunteers facilitate a variety of support groups for patients, families, significant others, and the community. They are either provided on-site or are coordinated with local agencies and facilities, such as The American Cancer Society and include the following:

- ❖ Living With Cancer
- ❖ Living with Cancer – Patient & Family Support Group
- ❖ New Horizons
- ❖ Prostate Cancer
- ❖ Breast Cancer
- ❖ Brain Tumor
- ❖ Leukemia, lymphoma & myeloma support group
- ❖ Lesbians With Cancer
- ❖ Adult Inpatient Support
- ❖ Pediatric Inpatient Support
- ❖ Families of Children with Cancer
- ❖ Bereavement Groups
- ❖ Days of Beauty
- ❖ Look Good Feel Better
- ❖ Strength For Caring

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- ❖ Man To Man
- ❖ Reach For Recovery
- ❖ Road To Recovery
- ❖ Cancer Survivors Network
- ❖ STEPS for Learning – Skills to Empower People

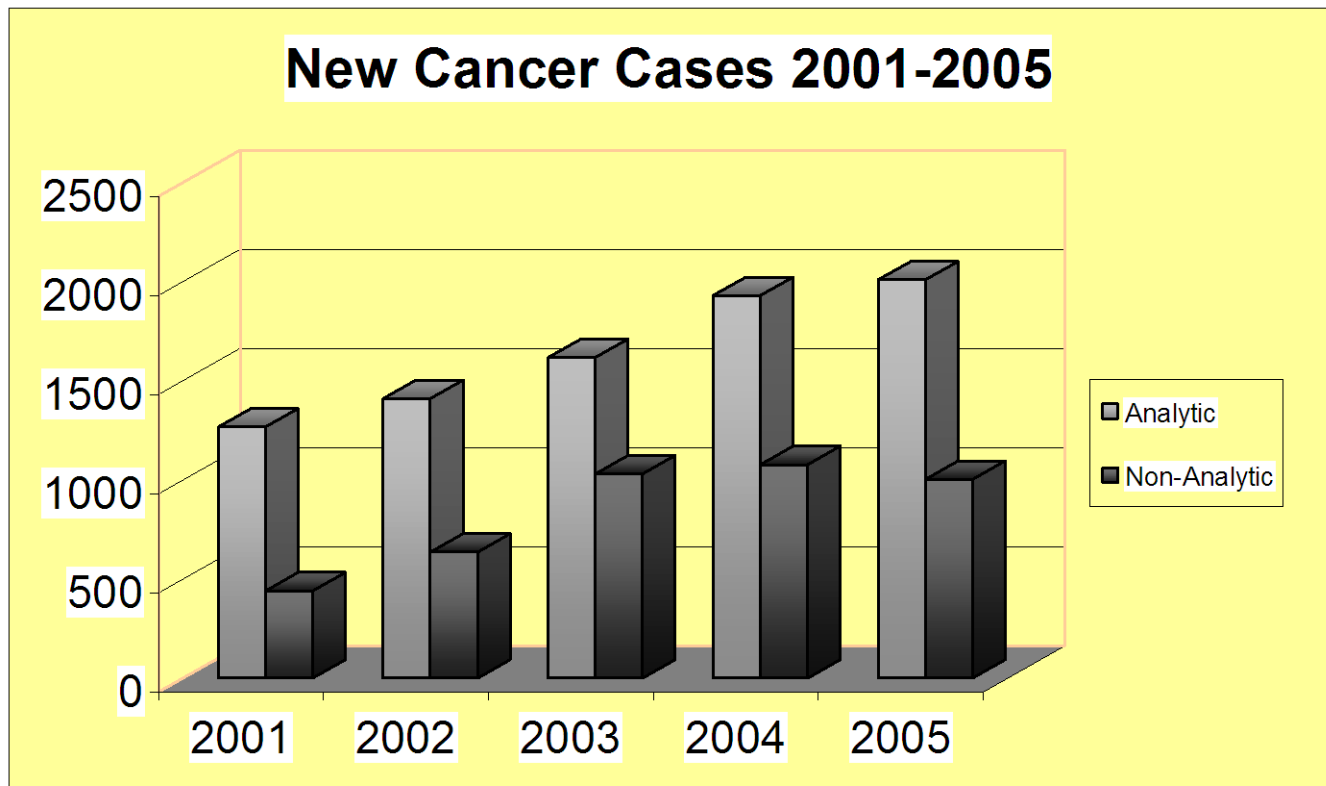
In addition to supportive services, there are also numerous prevention and early detection programs provided on-site or coordinated with other facilities including the following:

- ❖ I Can Cope
- ❖ Chemoprevention programs
- ❖ Skin cancer prevention, screening surveys
- ❖ Smoking cessation
- ❖ Smoking prevention in adolescents
- ❖ Breast Care early detection, education, mammography and clinical exams
- ❖ Colonoscopy
- ❖ PAP testing
- ❖ Prostate exams with or without PSA
- ❖ High risk group surveillance

## V. CANCER REGISTRY ACTIVITY

The Cancer Registry is a vital component of the hospital's Cancer Program and is under the direction of the Cancer Committee. The Cancer Registry ensures that the hospital is in compliance with the standards and guidelines set forth by the American College of Surgeons (ACOS) for an NCI Designated Program. The Registry maintains a computerized database of all cancer patients diagnosed and/or treated at Robert Wood Johnson University Hospital and the Cancer Institute of New Jersey. The Cancer Registrar collects extensive data on each cancer patient, including age, race, primary site, stage, treatment, and current cancer status. The information obtained by the Registry provides critical information used by physicians for the purpose of education, research, and outcomes management. As required by law, all reportable cases are electronically sent to the New Jersey State Cancer Registry. In addition, every year the registry participates in the Commission on Cancer's National Cancer Data Base Call for Data (NCDB).

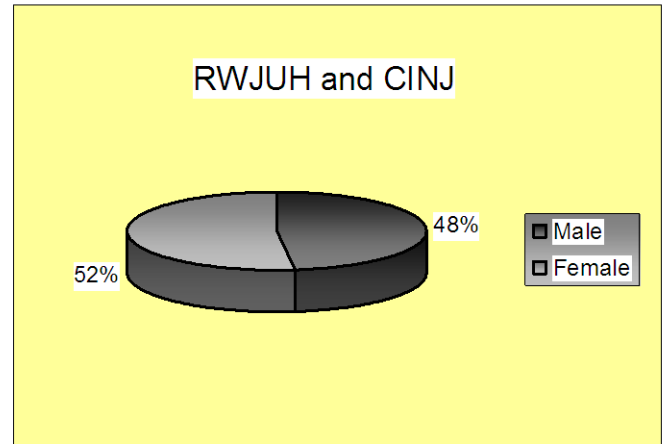
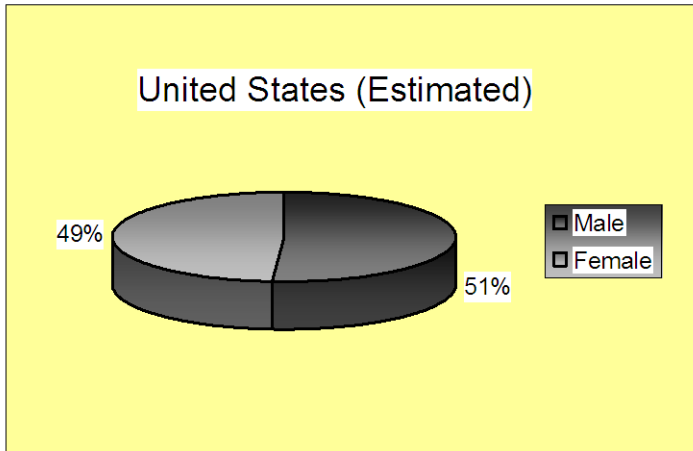
The Cancer Registry has certified professionals who capture a complete summary of the patient's disease from diagnosis through their lifetime. Confidentiality of patient identifying information and related medical data is strictly maintained. The Cancer Registry staff currently includes an Oncology Data Manager, two Cancer Registrars, and a Cancer Registry Assistant. The Registry maintains an extensive database of 31,426 cases. In 2005, the Registry staff abstracted a total of 3,012 cases; 2,010 were analytic and 1,002 were non-analytic. The graph below shows the total



number of analytic and non-analytic cases accessioned in the Registry from 2001 through 2005.

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Of the 2,010 patients seen at RWJUH and CINJ in 2005, 966 patients were male and 1,044 were female. This is comparable to the estimated incidence for the United States in 2005.



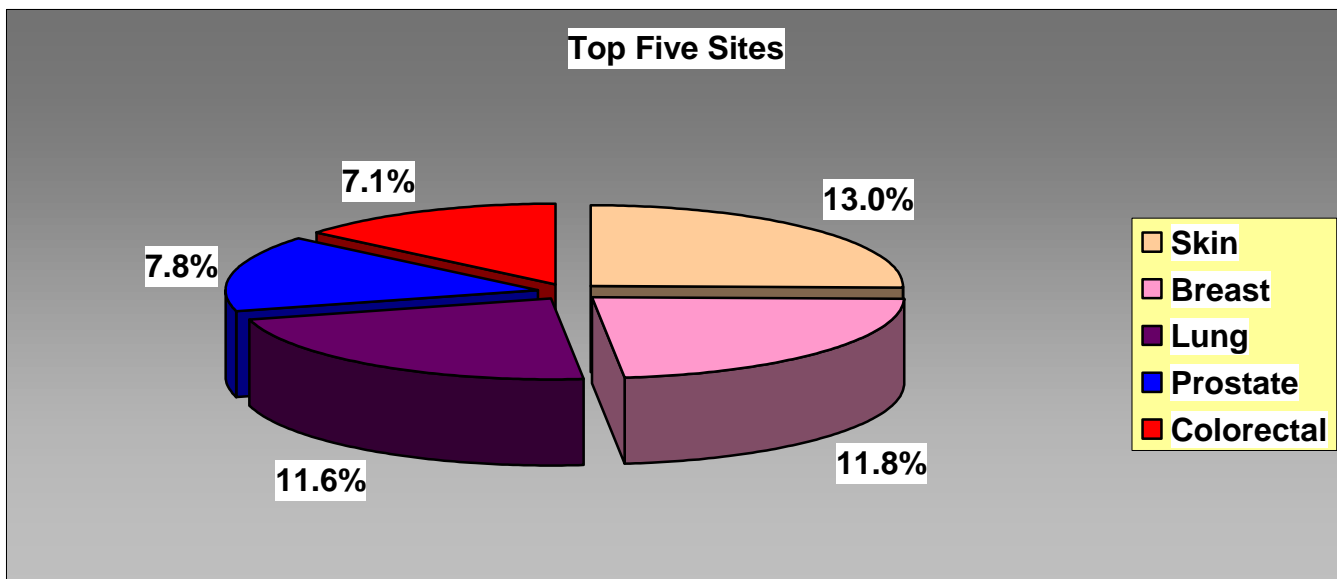
The Cancer Registry staff performs lifetime follow-up on all analytic cases in the database. Continued follow-up provides accurate survival information. It also serves as a reminder to the attending physician and patient, the importance of routine follow-up examinations. Currently the Registry follows 12,336 patients.

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**SITE STATISTICS**

A review of our 2005 data shows the top five cancer sites at Robert Wood Johnson University and the Cancer Institute of NJ were as follows:

1. Skin with an incidence rate of 13.0%.
2. Breast with an incidence rate of 11.8%.
3. Lung with an incidence rate of 11.6%.
4. Prostate with an incidence rate of 7.8%.
5. Colorectal with an incidence rate of 7.1%.



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**SITE DISTRIBUTION REPORT FOR 2005**

**Robert Wood Johnson University Hospital & The Cancer Institute of NJ**

PRIMARY SITE	TOTAL	SEX		DOMINANT AJCC STAGE GROUP						
		MALE	FEMALE	0	I	II	III	IV	None	Unknown
Oral	3	1	2	0	0	0	0	1	1	1
Esophagus	26	22	4	1	2	1	12	2	0	8
Stomach	37	30	7	0	4	2	12	13	0	6
<b>Colorectal*</b>	143	77	66	6	37	28	25	18	0	29
Liver/Biliary	20	11	9	0	3	1	3	8	0	5
Pancreas	88	47	41	0	4	30	9	27	0	18
Larynx	4	2	2	0	1	1	2	0	0	0
<b>Lung*</b>	234	100	134	0	71	14	50	79	0	20
Connective	21	15	6	0	5	4	3	4	1	4
<b>Skin/Melanoma*</b>	261	126	135	52	139	30	15	4	0	21
<b>Breast*</b>	238	1	237	52	61	51	24	11	0	39
Cervix Uteri	22	0	22	0	7	8	4	3	0	0
Corpus Uteri	30	0	30	0	17	2	5	2	0	4
Ovary	27	0	27	0	8	3	10	4	0	2
<b>Prostate*</b>	157	157	0	0	0	127	11	6	0	13
Testis	15	15	0	0	4	5	4	0	0	2
Bladder	56	47	9	13	14	10	6	9	0	4
Kidney/Other	121	78	43	5	68	10	17	21	0	0
Brain/CNS	86	47	39	0	0	0	0	0	86	0
Thyroid	56	14	42	0	42	3	2	3	0	6
Leukemia	70	39	31	0	0	0	0	0	70	0
Lymphoma	90	55	35	0	15	17	10	36	0	12
Other	205	82	123	16	12	7	12	14	130	14
<b>Total</b>	<b>2,010</b>	<b>966</b>	<b>1,044</b>	<b>145</b>	<b>514</b>	<b>354</b>	<b>236</b>	<b>265</b>	<b>288</b>	<b>208</b>

**\*Top 5 Sites**

## Comparison of the Top Cancer Sites, By Gender and Site

MALES			FEMALES		
	RWJUH vs. ESTIMATED			RWJUH vs. ESTIMATED	
Prostate	16%	33%	Breast	22%	32%
Skin	13%	5%	Skin	13%	4%
Lung	10%	13%	Lung	13%	12%
Colorectal	8%	10%	Colorectal	6%	11%
Kidney	8%	3%	Kidney	4%	2%

\*National Data was taken from the American Cancer Society – Cancer Facts and Figures 2005

\*\*Excludes localized basal and squamous cell carcinoma of the skin and in-situ. Estimates based on NCI SEER (Surveillance Epidemiology and End Results) format