

VA NEW YORK HARBOR HEALTHCARE SYSTEM

**CANCER PROGRAM
2012 ANNUAL REPORT**



CANCER PROGRAM 2012 ANNUAL REPORT

MESSAGE OF THE CANCER COMMITTEE

The Cancer Committee at VA-New York Harbor Healthcare System (VA-NYHHS) is composed of specialists who are involved in all aspects of care for patients with malignant diseases. The committee meets quarterly and reviews all cancer-related activities. The Cancer Committee consists of physician representatives from Medical Oncology, Surgery, Radiation Oncology, Urology, Gastroenterology, Pulmonary, Pathology, Palliative Care, Diagnostic Radiology and the Cancer Liaison Physician. Non-physician representation includes Cancer Registry, Patient Services, Quality Management and Health Administration. A member of the American Cancer Society is invited to participate in our meetings and provides the Committee with valuable updates.

At the most recent survey by the American College of Surgeons (ACOS) Commission on Cancer (CoC) in 2010, the NYHHS Cancer Program met all 36 CoC standards, received all eight possible commendations, and earned the prestigious *Outstanding Achievement Award* from the Commission on Cancer. This is a distinction few VA facilities have achieved.

The 2012 CoC Cancer Program Standards: *Ensuring Patient Centered Care* outline new standards that focus on patient-centered needs and bring an additional focus on quality of care and outcomes. The VA-NYHHS 2012 Annual Report contains many examples of advances in patient-centered care and several innovative new programs: Genetics Counseling Program in collaboration with Salt Lake City VA, designed to provide counseling, testing and risk assessment for individuals at high risk of developing certain cancers, VISN-wide Hepatocellular Cancer Program, a Cancer Survivorship program and No Veteran Alone Program to provide volunteer companions to hospitalized patients who are seriously ill.

HEMATOLOGY/ ONCOLOGY	4
RADIATION ONCOLOGY	5
SURGICAL ONCOLOGY	6
THORACIC ONCOLOGY	8
HEPATOCELLULAR CANCER TEAM	9
PALLIATIVE CARE	10
PATIENT SERVICES	11
DIAGNOSTIC RADIOLOGY AND NUCLEAR MEDICINE	14
PSYCHOLOGY	15
ANATOMIC PATHOLOGY	16
QUALITY MANAGEMENT	16
PHYSICAL MEDICINE & REHABILITATION	17
AUDIOLOGY AND SPEECH PATHOLOGY	17
CANCER REGISTRY	18
SUMMARY OF CANCER REGISTRY DATA	19
2012 STUDY OF QUALITY- PROSTATE	21
CANCER RESEARCH	24
COMMUNITY OUTREACH	25

Radiation Oncology Service initiated stereotactic lung radiotherapy for patients with lung lesions which were not resectable by surgery. The availability of this treatment technique expands the department's constantly improving radiation treatment options. Social Work and Psychology Services have joined forces to ensure psychosocial distress monitoring at an appropriate moment early in the cancer treatment journey. Efforts are ongoing by both departments to welcome, inform and reassure patients at this challenging time in their lives. The Palliative Care service is active at all three campuses and offers symptom management to all patients and medical, nursing and psychosocial support to patients approaching the end of life.

Cancer Conferences (Tumor Boards) are an integral part of the VA-NYHHS Cancer Program, providing a interdisciplinary forum to discuss the care and appropriate treatment options for patients with cancer. Cancer conference participants include board-certified medical oncologists, radiation oncologists, surgeons, diagnostic radiologists, pathologists, nurses, cancer registrars, quality management and the research coordinator. At each conference, discussion includes a review of the patient's medical history, radiology studies, pathology, AJCC staging, current methods of treatment and available clinical trials. Treatment recommendations based on multidisciplinary consensus and national treatment guidelines, such as National Comprehensive Cancer Network (NCCN), are formulated and documented in the electronic medical record.

In 2012, the Cancer Committee has continued its practice of reviewing CoC Standards at its quarterly meetings, presenting updates, examining the intent of the standards, and evaluating adherence to them. In addition, newly developed reporting tools from the CoC are being used to provide feedback on quality indicators for care of patients with colorectal and breast cancer: Cancer Program Practice Profile Reports (CP3R) and Rapid Quality Reporting System (RQRS).

The CoC hosts the web-based CP3R site to offer cancer programs comparative information to assess their adherence to the standard of care for major cancers. This reporting tool provides a platform to promote continuous practice improvement to improve quality of patient care and permits hospitals to compare their care relative to that of other hospitals. The aim is to empower clinicians, administrators and other staff to work collaboratively to identify problems in practice and delivery and to implement best practices that will improve cancer care in all CoC-accredited cancer programs.

The NYHHS Cancer program has also joined the CoC Rapid Quality Reporting System (RQRS) which promotes evidence-based care for patients by actively monitoring compliance with National Quality Forum-endorsed measures and surveillance measures for patients on treatment

for breast, colon and rectal cancers. RQRS monitors these measures in real-time and improves patient care by providing alerts to the registrars that prevent delays in cancer treatment and assist hospitals in developing interventions to improve the quality of care.

The NYHHS Cancer Program also participates in the CoC-sponsored Facility Information Profile System (FIPS), a data-sharing system to connect cancer patients with CoC-accredited facilities. Through this program, patients have access to information about the resources and services provided by the VA-NYHHS Cancer Program. The information shared on FIPS includes cancer-related and board certified specialists, diagnostic and therapeutic services provided by surgical, medical and radiation oncology and programs for rehabilitation, support, research, prevention, screening and early detection. Through participation in FIPS, the NYHHS cancer program strives to increase its visibility to the public and promote quality cancer care.

In accordance with 2012 CoC standards, the Cancer Committee conducted a review of breast cancer cases diagnosed in 2010 and 2011 at NYHHS to assess concordance with National Comprehensive Cancer Network (NCCN) guidelines for the first course of treatment. This audit demonstrated a 100% adherence rate to NCCN guidelines for all breast cancer cases.

The newly renovated Hospice and Palliative Care Unit at the St. Albans campus celebrated its opening on April 11, 2012. This state of the art, 15 bed unit provides a comfortable, home-like environment for terminally ill patients and their families and skilled, compassionate care provided by an interdisciplinary team.

In all of its activities, the Cancer program seeks to make the cancer patient and his family the focal point for the organization and delivery of services, ensuring compassionate, technologically advanced and holistic patient care.

HEMATOLOGY/ONCOLOGY

In recent years increased understanding of the molecular basis of many tumors allows for individualized medical treatment for an increasing number of cancer patients. This trend synchronizes with the practitioner's heightened awareness of the need to attend to the whole patient, including his psychological and social needs.

Outpatient Oncology

Outpatient clinic appointments are held throughout the week for Hematology and Oncology patients and are staffed by physicians, nurse practitioners, and nurses. Each patient is screened by the clinic nurse and evaluated for referral to the dietitian, social worker or psychologist who is available to see urgent referrals immediately. The chemotherapy infusion center is supervised by Oncology trained nurses at each campus, and is in session Monday through Friday. Both campuses have modern and attractive chemotherapy suites, designed with the patient's safety and well-being in mind.

Inpatient Oncology

Cancer patients followed in Brooklyn by the physicians in the Hematology, Medical Oncology and Radiation Oncology clinics who require hospitalization for management of cancer are admitted to the Oncology unit at Brooklyn. At the New York campus, Hematology/Oncology inpatients are admitted to the medical wards and are followed by the Hematology-Oncology fellow and the attending physician. Inpatients at the New York campus that require hospitalization for radiation or combined chemo-radiation treatments are transferred to the inpatient Oncology Unit at Brooklyn.

The Oncology Unit team, consisting of an attending oncologist and house officers, manages cancer patients with acute medical problems. The Palliative Care Team, consisting of a nurse practitioner and the physician Director of Palliative Care, work closely with the Oncology Unit team to manage symptoms, participate in family meetings and provide emotional and spiritual support to patients and families. The clinical pharmacist is available to

review and discuss medication management. Interdisciplinary rounds, conducted twice weekly, include the participation of the attending physicians in Oncology and Palliative Care, the house officers, nurses, social workers, the pharmacist, dietitian, psychologist, chaplain, and the QM specialist.

At the time of discharge, all patients receive counseling regarding medications, clinic follow-up with an oncologist and instructions on how to contact their physician, pharmacist, dietitian, social worker, and psychologist.

On the Brooklyn Oncology Unit, two Palliative Care suites are available to provide a comfortable environment for family to visit and stay with patients who have terminal illness. The close collaboration between the Oncology and Palliative Care Teams at both campuses provides high quality care by assuring physical comfort, emotional support and spiritual support for the patient and his family.

RADIATION ONCOLOGY

VA NYHHS Department of Radiation Oncology, on-site at the Brooklyn campus, is accredited by the American College of Radiology and continues to upgrade its technology to offer the most advanced treatment strategies for the management of malignant diseases. The enormous impact of the Radiation Therapy Service on the quality of cancer care is indicated by the high percentage of NYHHS cancer patients whose treatment includes Radiation Therapy.

In 2011, the service initiated stereotactic lung radiotherapy for patients with unresectable lung cancer. . This technique joins the range of therapy offered, which includes brachytherapy seed implants, high dose rate brachytherapy (where radiation is administered internally for a period of time) and conventional Radiation Therapy. Other forms of radiation therapy include Intensity Modulated Radiation Therapy (IMRT) and Image Guided Radiation Therapy, (IGRT). IGRT is being used in the majority of patients,

permitting more precise delivery of radiation to the tumor and reduced side effects. The service also continues to update its treatment planning software to improve the quality and timeliness of treatment planning.

All treatments are available to both inpatients and outpatients, as clinically appropriate. Two nurses and one nursing assistant are dedicated full-time to the nursing and educational needs of the Radiation Oncology patient.

The Radiation Oncology Service collaborates closely with the medical and surgical oncology staff in the diagnosis and treatment of cancer patients, participates very actively in cancer conferences, engages in research and provides educational programs for residents and medical students.

Innovations

The Department of Radiation Oncology is pleased to announce the installation of the Varian True Beam STX linear accelerator early this coming year.

This machine allows for extremely precise stereotactic radiosurgery of brain, lung, spine and body malignancies and is the latest and best available linear accelerator anywhere.

SURGICAL ONCOLOGY

Surgical Oncology at VA-NYHHS continues to grow in caseload and sophistication. Surgical Services at the New York and Brooklyn campuses confer with one another to ensure patients benefit from the expertise of the entire surgical staff through participation in Cancer Conferences and as members of the Hepatocellular Cancer Team. Each campus has its particular areas of interest and experience.

VA NYHHS participates in the National Surgical Quality Improvement Program which compiles comparative institutional data for research and education. Although surgery is often the definitive treatment for cancer, multidisciplinary partnerships are imperative not only for cure, but also to improve the quality of life for all cancer patients.

Brooklyn Campus

NYHHS Surgical Service in Brooklyn continues to expand oncology-related services through advances and innovations in surgical approaches, resident and student oncology education and research.

In 2012, the redesign of the Surgery Department, including five new operating rooms with high definition monitors and state-of-the-art laparoscopic towers was completed.

The Surgical service provides advanced laparoscopic surgery for colorectal cancer as well as state-of-the-art surgical care for oncology-related nephrectomy, prostatectomy, endocrine tumors and radiofrequency ablation of liver tumors. The Service also provides high quality surgical care for patients with primary and secondary liver tumors including, but not limited to, routine and complex liver resections, laparoscopic resections of liver tumors, and radiofrequency ablation with laparoscopic and open techniques. The Service provides treatment for a broad range of complex gastro-intestinal malignancies, such as esophageal, gastric, duodenal, biliary, pancreatic and colorectal cancers. The service uses minimally-invasive approaches when appropriate for all GI malignancies and performs complete cytoreductions and peritoneal perfusions (HIPEC) for patients with peritoneal carcinomatosis. All cases treated by the Surgical Service are discussed at the multidisciplinary Tumor Board meetings and the combined Surgery/GI conferences.

Breast Health Center

The center continues to expand, offering consultations in the Women's

clinic every other week. A surgical attending and a cytopathologist meet with women who have suspicious breast masses and provide expert evaluation and counseling. Enhanced, on-site breast imaging services have also been added. This clinic was developed to improve access for women to timely services for the evaluation of breast neoplasms.

New York Harbor Colorectal Cancer Genomics Project

In 2012, the Surgical service spear-headed an innovative program to provide genetic counseling and risk assessment for cancer via telemedicine consults with the Genomic Medicine Service at the VA Salt Lake City Health Care System.

The Brooklyn Service Chief serves as the Chair of the National Colorectal Cancer Round Table, co-Chair of the New York City Health Department Colorectal Cancer Control Coalition and served as the chairman of the Scientific Program Committee of the Society of Surgical Oncology in 2010. He is also on the Scientific Committee of the Human Variome Project, a global effort to study the contribution of genetic variation to human disease.

SURGICAL ONCOLOGY

New York campus

The New York campus is the referral center for plastic reconstructive, microvascular reconstructive, neurological and thoracic surgery in addition to full service general, urology and head and neck surgery services.

General surgery

Surgeons are skilled in new minimally invasive surgical procedures for treating tumors of the esophagus, pancreas, liver, colon and rectum. In addition, Hyperthermic Intra-peritoneal Chemotherapy (HIPEC) is offered for selected cases of colorectal cancer and mesothelioma. Increased numbers of patients are being referred from other VAs to have their surgery at VA-NYHHS.

Special expertise in hepatobiliary, gastroesophageal and colorectal surgery is supplied by surgical oncologists. Cases are managed by the surgical service in cooperation with medical gastroenterology. Oncology cases are discussed weekly for evidence-based treatment planning during both the

interdisciplinary Tumor Board (surgical, radiation and medical oncology, diagnostic and interventional radiology, pathology and gastroenterology) and the VA-NYU Interdisciplinary Gastrointestinal Conference. Gross and histopathology of all cancer cases are discussed with the surgical pathologists in a weekly case review and staging conference.

Neurological Surgery

Brain and spinal cord tumors are staged with neuroradiology and neurology at the weekly combined VA-NYU Neurosurgery Conference. In addition to staff neurosurgeons, experts in all phases of neurosurgical oncology are available to discuss patients. Skull base tumors, including pituitary and acoustic, are operated jointly with the ENT skull base/neuro-otology group.

Cancer of the Head and Neck

The management of malignancies of the head and neck has become an increasingly multidisciplinary effort focused on radiation and chemotherapy. The role of the surgical service is to

provide appropriate diagnosis and surgical treatment of epidermoid and endocrine malignancies. The New York head and neck service is also the referral center for salvage surgery and for combined reconstruction by plastic and microvascular surgery. A VA-NYU combined Oncology Conference reviews and stages all cases and plans treatment. Close collaboration with thoracic and gastrointestinal surgery allows management of the most complex cases referred from NYHHS and nearby VA facilities.

Urology

At the multidisciplinary urologic oncology conference, all options for care, including minimally invasive and open techniques including nerve sparing prostatectomy are discussed. With a management agreement, patients with prostate cancer are evaluated and followed longitudinally. An IRB-approved database and a translational research program are part of the service efforts.

THORACIC ONCOLOGY

Pulmonary Service continues its interdisciplinary work in conjunction with the other key specialties to develop Thoracic Oncology at the Brooklyn campus.

In its seventh year, the Interventional Pulmonary program continues to develop innovations to improve the treatment and quality of life for patients with unresectable, relapsed and refractory lung cancer, as well as those with certain non-malignant conditions. These innovations include new techniques and new equipment to achieve:

- earlier diagnosis
- more precise staging
- better quality of life

These techniques include the use of Endobronchial Ultrasound (EBUS) which was initiated in 2008. EBUS is a relatively new and sensitive modality for staging lung cancer. This approach increases the accuracy of cancer staging and is also used to investigate lung nodules which are difficult to assess by more traditional methods. EBUS also offers a reliable way to evaluate invasion of bronchial and vascular structures in a less invasive manner than surgery.

The Thoracic Oncology program also addresses

problems such as central airway obstruction and the related complications of bleeding and post obstructive pneumonia. Rigid bronchoscopy is routinely employed for placement and retrieval of airway stents used to establish and maintain airway patency. These advanced stents include the aero covered Self Expanding Metallic Stents (SEMS) and silicone stents. Medical authorities consider aero stents to be the state-of-the-art.

Other treatments such as balloon bronchoplasty and tumor ablation are also used to treat airway obstruction to improve shortness of breath, decrease the risk of pneumonia, and improve quality of life. These methods have the advantage of providing immediate relief of obstruction even in patients receiving other treatments such as chemotherapy and radiation therapy.

Pulmonary Service is in the fifth year of offering Pulmonary Interventional Consultations to other facilities in VISN 3 for the management of thoracic oncology patients and non-malignant airway disease. It is expected that the need for consultative services will grow as both primary therapy for lung cancer and

palliative techniques improve and expand. Life-threatening complications of malignant diseases such as tracheoesophageal fistula are now referred to Pulmonary Interventional Service rather than proceeding to surgery.

A combined thoracic surgery video-conference is held weekly for multidisciplinary case management. Thoracic oncology cases, including pulmonary, esophageal and mediastinal cancers, are discussed at this conference.

New Innovations

The program is in the early stages of a new technology called bronchoscopic navigation, including radial EBUS technology, for a more accurate diagnostic approach to peripheral lung nodules. This approach will offer a significant improvement in the ability to make a diagnosis of peripheral lung nodules with an improved risk-benefit ratio over current standard modalities. In addition, the program is working towards incorporating techniques such as placement of markers to offer precise delivery of radiation therapy and endobronchial brachytherapy.

HEPATOCELLULAR CANCER TEAM

Hepatocellular cancer is the most common type of liver cancer globally, the fastest growing cancer in the United States and the eighth leading cause of death. This trend is expected to continue until the peak of the hepatitis C epidemic in 2020.

In 2012, the VA-NYHHS Hepatocellular Cancer (HCC) Team received funding from the VA Public Health Strategic Care Group to standardize care for HCC patients and create the first VISN-wide HCC Tumor Board in the Veterans Health Administration.

With this funding, an interdisciplinary team was created from disciplines across the VISN, including members of medical oncology, nursing,

gastroenterology, hepatology, surgery, radiology, palliative care, social work, telehealth, information technology and cancer registry. This team of 112 members comes from six VA facilities with 5 different University affiliations.

An innovative weekly VISN-wide Tumor Board was established on July 15, 2012 and is conducted using video technology to discuss cases, view radiology and pathology and make recommendations for therapeutic intervention. The HCC Team has developed a standardized Tumor Board Note template which includes all necessary items for decision making, including the degree of underlying liver disease, ECOG performance status and TNM staging.

Accomplishments of the Hepatocellular Cancer Team

Standardization

- Staging
- Documentation
- Radiographic Imaging

Clinical Reminders for screening patients at risk

Telehealth Clinics at all 6 sites

VISN-wide Tumor Board weekly

VISN HCC Summit with national and international distinguished speakers, attended by 150 providers

Hepatocellular Cancer Summit

The HCC Summit, held in September, 2012, provided training to close the educational gap between current and best practices in the treatment of HCC and a forum for engaged dialogue among national VA and non-VA leaders. The discussions included alternative treatment options, standardizing treatment staging and planning, improving access, and creating multidisciplinary teams and HCC tumor boards



PALLIATIVE CARE

As a member of the Veterans Integrated Service Network (VISN) 3 Palliative Care program, the New York Harbor Palliative Care Service shared in the recognition by the American Hospital Association's 2010 Circle of Life Award. This prestigious award recognizes programs that provide excellent end of life care and that serve as innovative models of delivery of palliative care for the nation.

The Palliative Care service continues to be active on all three campuses, Brooklyn, New York and St. Albans, with the goal of providing expert care to all patients in need of symptom management and to patients who are approaching the end of life. We participate in the VISN 2/3 Hospice Veterans Partnership, working closely with our partners in the local hospice organizations.

Papillon de Vie—Butterflies of Life is the name of the newly renovated state of the art 15 bed dedicated Hospice and Palliative Care (HPC) Unit had its opening celebration in April, 2012.

The mission of the HPC Unit is to provide personalized care to each Veteran. The Veteran's and family's preferences for care are clarified and honored to maintain the comfort and dignity of each Veteran while caring for his or her emotional, spiritual, physical and psychological needs in a beautiful, home-like environment. Veteran's families are welcomed and accommodated on the unit.

An interdisciplinary team of highly trained staff provide patients with holistic, compassionate, and integrative care, including Reiki and aromatherapy.

No Veteran Dies Alone Program guarantees that no Veteran dies alone. With collaboration of the nursing team and trained volunteers, every Veteran is provided with reassurance, care and companionship during his or her final hours. At the New York campus, the Palliative Care Team is available on a consultation basis and meets weekly to review the cases in an interdisciplinary meeting.

Semiannual Memorial Service is held in January and July for staff and the family of patients who died within the past year. During these services, patients are remembered and honored for their military service.



Papillon de Vie
Butterflies of Life
Hospice and Palliative
Care Unit at St. Albans
campus

PATIENT SERVICES

Patient Services includes nursing, social work, clerical support, pharmacy, nutrition and pastoral care.

Operations are organized on a patient-centered care model which aligns services around patients rather than in individual departments. Programs for care are decentralized from the departmental level and re-grouped along diagnostic categories, such as Oncology.

The Oncology Patient Care Team Coordinators at each campus are registered nurses who are responsible for the direct supervision of in-patient and out-patient oncology nursing, including Radiation Therapy and chemotherapy, and coordination with the allied health and other support staff in all assigned areas.

Oncology Nursing

The nursing staff continues its commitment to excellent care with a focus on the relief of the symptoms of cancer as well as the comfort of patients and their families.

The staff provides a compassionate environment for the patients' physical and emotional comfort.

Assignment to both inpatient and outpatient settings has established cross-coverage, increased sharing of knowledge and more consistent care.

All nursing practices are based on Oncology Nursing Society (ONS) standards of practice with specific nursing competencies for chemotherapy and radiation therapy. Oncology Nurses are responsible for the safe delivery of all chemotherapeutic agents in the hospital, including the outpatient and inpatient settings. Nursing ensures that prior to receiving chemotherapy, patients are educated about specific regimens, anticipated side effects and suggested coping measures for side effects.

Both campuses have modern and renovated chemotherapy suites, designed for the comfort and safety of inpatients and outpatients.

Oncology Nurses work closely with Radiation Oncology, Medical Oncology, Pharmacy, Pastoral Care, Nutrition and Quality Management, Social Work and Psychology. Nursing Team Leaders participate in the weekly meetings with representatives from each service

Ongoing educational opportunities for nurses in oncology and palliative care are met with enthusiasm. The ELNEC (End of Life Nursing Education Consortium) course which addresses critical aspects of

end-of-life care has been attended by nursing and nurse aides from all three campuses. Oncology Nursing Society membership remains strong. All nursing service oncology policy and procedures are followed, updated annually and are based on ONS standards.

Social Work Service

Oncology Social Workers collaborate with the interdisciplinary treatment team to provide comprehensive psychosocial oncology services in all clinical areas that treat patients with cancer, including the Palliative Care Service.

Oncology Social Workers provide assistance to patients under the policies and procedures of the Community and Social Services division of Patient Services. The Oncology Program Social Workers are master's level practitioners, holding state licenses appropriate to their position and are dedicated to advancing their practice by attending continuing education programs that enhance clinical practice skills and knowledge of community resources. They adhere to the Codes of Ethics of the National Association of Social Workers (NASW) and the Association of Oncology Social Work (AOSW) and demonstrate competencies in accordance with the

PATIENT SERVICES

standards for healthcare social workers of NASW.

Oncology Social Workers provide assessment, counseling, case management, continuity of care/discharge planning, psycho-education, community liaison and end-of-life care for patients and their families who are affected by cancer. Oncology Social Workers strive to establish and maintain therapeutic relationships with patients and their caregivers to decrease the anxiety associated with the initial news of a cancer diagnosis. By offering individualized plans of care including assessment, supportive counseling and referrals for tangible services such as transportation, homecare and specialized support groups, oncology social workers intervene in practical ways to improve patient and family coping at a particularly stressful time in their lives. Oncology Social Workers assure appropriate representation of patient and caregiver perspectives in interdisciplinary team meetings, in program planning venues and in staff education activities.

In 2012, psychosocial distress screening for new cancer patients was a joint pilot project with Psychology

Service at the Brooklyn campus.

In 2012, Oncology Social Workers increased their engagement with the care teams and the patients by taking the lead in assessing Vietnam Era patients for Agent Orange exposure. Awareness of the relationship between cancer and environmental exposure is a developing area of practice. Social workers knowledgeable in this area are helping Veterans receive treatment for illnesses resulting from exposures during their service. Oncology Social Workers also contribute to patient participation in cancer clinical trials by handling the insurance documentation required for enrollment in off-site clinical trials. At the New York campus, the hiring of two new oncology nurses fostered improved communication between disciplines and increased teamwork.

As the Veteran population ages, there is a need for consultation with geriatricians and palliative care specialists to develop an understanding of the bio-psychosocial needs of older patient with cancer. It is important as well to help these individuals define their

quality of life, and help them achieve it. For the younger patients, social workers may need to assess the repercussions of combat experience at this time in their lives, as well as evaluate the effects of their disease on their family life and work life.

Pillars 4 Life

VA-NYHHS is a 2012 recipient of the Pillars4Life grant of the Livestrong Foundation. Pillars4Life is dedicated to improving the quality-of-life of cancer patients and of their families by making critically necessary, highly effective, evidence-based psychosocial care, affordable and accessible to everyone.

PATIENT SERVICES (CONTINUED)*Navigator Program*

Since 2007, Oncology Social Workers have partnered with the Brooklyn Branch of the Eastern Division of the American Cancer Society to develop and manage a Navigators Program at the Brooklyn campus. Our navigators are Veterans of the armed forces who have experienced cancer either as a patient or as caregiver. They provide peer support to other Veterans with cancer with the goal of lessening the anxiety of receiving cancer care and providing a friendly presence in clinics and chemotherapy areas and through their presence, assist patients as they move through the cancer treatment continuum.

Nutrition and Food Service

Nutrition and Food Service is an important member of the NYHHS Cancer Program. Brooklyn campus has a nutritionist dedicated to the oncology patients. All oncology inpatients are evaluated by a nutritionist within 72 hours of admission and initial consultations receive follow up consultations based on the patient's nutritional risk. Outpatients are referred to nutrition by consultation. The dietitian works with nursing to ensure nutritious snacks are made available to outpatient chemotherapy

patients.

Nutrition plays an important role in patient education and in the management of a patient's side effects. The oncology dietitians collaborate with other specialists to optimize and personalize nutritional care to oncology patients throughout NY Harbor. Patient satisfaction surveys indicate greater patient meal satisfaction for oncology patients relative to others in the hospital.

Pharmacy Service

Pharmacy service has dedicated full-time pharmacists at each campus for the preparation of chemotherapy. Each is assisted by a full-time pharmacy technician. The pharmacists screen patient charts for height, weight, allergies, concurrent therapy and pertinent laboratory values and all physician orders for appropriateness of dose, indication and duration of therapy. The pharmacist is a resource for drug information for both medical and nursing staff and acts as a liaison between the medical staff and the pharmaceutical companies, consulting with them regarding new therapies, administration of medications and new indications for an approved

drug. A recent trend has been a greater use of oral chemotherapy as maintenance therapy for select disease states. By close contact and communication with the medical and nursing staff, the pharmacists contribute significantly toward the safe, efficient and cost-effective administration of chemotherapeutic agents to our patients. sterility, and a new non-chemotherapy hood was installed.

The clinical pharmacist performs many functions for cancer inpatients. The pharmacist not only provides medication counseling to all inpatients at the time of discharge but also improves medication distribution by facilitating drug approvals and one-time drug requests, monitoring missed doses, reviewing and overseeing physician orders and monitoring the use of opioids. The pharmacist is also a resource for information about medications, drug interactions, adverse effects and dosage and participates in interdisciplinary rounds, assists in the preparation of pharmacologic guidelines for oncology patients and provides lectures to the nursing staff on topics related to the care of cancer patients.

PATIENT SERVICES

Pastoral Care

The primary role of the Chaplain is to provide for the spiritual welfare of patients within the holistic approach of the care team. The Chaplain visits, counsels and prays with patients, especially before and after surgery, and on a regular basis during a patient's stay in our Oncology-Palliative Care Unit.

The Chaplain is witness to the range of feelings experienced by the cancer patient, from the initial diagnosis through the course of his illness and assists the patient in coping with the lifestyle limitations and difficult choices that lie before him. The Chaplain is available when the patient becomes discouraged or when an event occurs that affects the patient's hope for recovery. The Chaplain encourages positive health choices as the patient faces the future.

Staff and team members make good use of the Chaplains' expertise as pastoral and spiritual needs arise. The Chaplain speaks with and prays with the patient, family members and staff. Pastoral counseling also includes helping the patient and the family to comprehend the significance of the Advance Directive as they attempt to deal with the patient's illness.

A VA training program for clinical pastoral education was initiated at New York Harbor in 2001. This program has improved staff awareness and skills for providing patients spiritual support and the pastoral students have directly provided spiritual counseling to both inpatients and outpatients in the Cancer Program.

DIAGNOSTIC RADIOLOGY AND NUCLEAR MEDICINE

The Radiology and Nuclear Medicine Services are essential in detecting, evaluating and monitoring patients with cancer. Services provided by these departments include the performance and interpretation of conventional radiographic examinations, fluoroscopic studies of gastrointestinal and genitourinary tracts, CAT scans, ultrasound examinations, magnetic resonance imaging (MRI), angiography and radionuclide studies. Positron Emission Tomography (PET) scans are available by contract with local providers and are reviewed by our radiologists. Diagnostic evaluation by PET scan is becoming a standard of care for many different types of cancer.

Interventional Radiology offers biopsies, aspiration and drainage of pleural, biliary and genitourinary tracts, long-term peripherally inserted central catheter (PICC) placement, percutaneous feeding tube placement, tumor embolization and intra-arterial chemotherapy access for hepatocellular cancers.

The Radiology service also includes on-site digital Mammography services. The digital unit is faster and more flexible than the previous unit, results in fewer repeats for patients, and is more helpful diagnostically.

All Radiology exams are captured digitally since the implementation of Picture Archive Communications System (PACS) in 2005. This technology allows the quick transmission of Radiology images and radiologists' reports to all clinicians on their own workstations. PACS has accelerated communication, diagnosis, decision-making and treatment. With this new technology, VA New York Harbor can interpret greater than 90% of all exams within 24 hours of the exam time.

PSYCHOLOGY

The psychologist participates on the interdisciplinary treatment team. Through health and behavior interventions, psychology fellows, under the supervision of the psychologist, work with the oncology physicians to monitor at-risk patients and support their compliance with medical treatment. The psychology fellows perform clinical assessments and provide interventions with the goals of supporting medical decision-making, assisting with patient compliance, providing psycho-education, and support groups. The psychology service also assists in the management of potential crisis situations as they arise in the context of medical therapy.

Each new patient admitted to inpatient and outpatient oncology service receives a screen for psychosocial distress. For those who show a need for further psychological services, there is an initial health and behavior assessment for hospital depression and anxiety, cognition and quality of life. Psychologists routinely screen and assess patients for suicide risk, depression, alcohol and substance use and PTSD. These disorders may be directly related to their medical conditions or indicative of pre-existing mental health issues.

Psychotherapy, including cognitive-behavioral and supportive interventions, as well as VA evidence-based psychotherapy intervention using Acceptance and Commitment Therapy (ACT) is also made available. Pain management is offered using cognitive techniques such as relaxation training and guided imagery. In addition, outpatients can participate in a weekly cancer support group where psychoeducation is provided on a variety of topics related to cancer treatment, adjustment and coping skills.

Pet Therapy

A popular feature of the oncology services is pet therapy. On a regular basis, a

service dog and his owner, accompanied by the psychologist, visit with oncology patients and their loved ones. The goal of the program is simply to "talk dog." These interventions have shown a good result with reducing stress by providing a break from the hospital routine.

Another important aspect of the psychology service involves assisting family members with the emotional impact of the veteran's medical illness. Interventions include brief family therapy and individual supportive sessions for caregivers. In addition, oral history taking and dignity therapy with the goal of assisting patients to leave a legacy for their loved ones is provided.



Denali, Pet Therapy Dog

ANATOMIC PATHOLOGY

The Anatomic Pathology section of Laboratory Service offers the latest technology and evaluation in surgical pathology, immunopathology, dermatopathology, cytopathology and electron microscopy.

By providing detailed analysis and discussion of selected tumors, Pathology makes an essential and unique contribution to the weekly Tumor Board conferences. The pathologist's presentation of the histology and cytology of the tumors, with reference to staging and prognostic indicators, add an important contribution to treatment planning.

The immunopathology section provides immunohistochemistry, immunofluorescence, and flow cytometry. The immunohistochemistry laboratory offers over 100 antibodies to aid in phenotypic identification of tumors, leading to improved classification of unknown primary cancers.

The electron microscopy laboratory provides pathologists with the opportunity to study cancers on an ultra-structural basis and has been very useful in the evaluation of poorly differentiated malignancies. Cytopathology services include fine needle aspirations of

lymph nodes and subcutaneous nodules performed by a board certified cytopathologist. In 2010, the Pathology Service introduced the Sure-Path methodology for PAP smears which is more sensitive in detecting abnormal PAP and facilitates diagnosis in a number of ways.

QUALITY MANAGEMENT

The Quality Management (QM) Specialist is an active member of the interdisciplinary cancer treatment team, the Cancer Committee and attends the Pulmonary, General and Cardiothoracic Tumor Boards.

QM Specialists review the medical records of patients with lung, breast colorectal and high risk locally advanced prostate cancers for compliance with the nationally recognized guidelines of The National Comprehensive Cancer Network. The results of these reviews are presented quarterly to the Cancer Committee. Opportunities for improvement are discussed and recommendations for corrective action are

reviewed and implemented.

A significant role of the QM specialist is to ensure program compliance with accrediting agencies such as the Commission on Cancer of the American College of Surgeons and the Joint Commission on Accreditation of Healthcare Organizations. This is done by serving as the facility expert of accrediting agencies standards and methods required for full compliance with the standards. Policies and procedures are reviewed to ensure standards compliance. Medical records are reviewed on an ongoing basis to ensure appropriate documentation. Patient care rounds are performed on a routine basis to educate the staff on standard compliance.

The QM Specialist also monitors quality of care, utilization of patient care resources, patient safety and continuity of care. Admissions are reviewed utilizing Interqual criteria, to determine the appropriateness of admissions and length of stay on the inpatient Oncology Unit. The QM specialist is also actively involved in the timely coordination of patient care between the Brooklyn and New York campuses.

PHYSICAL MEDICINE AND REHABILITATION

The Physical Medicine and Rehabilitation (PM&R) Service supports the cancer program by minimizing impairment and reducing activity limitations of cancer patients through a coordinated, interdisciplinary approach to patient care. The PM&R Service is integrated across all campuses of the VA New York Harbor Health Care System and encompasses physiatry, physical therapy, occupational therapy, kinesiotherapy, and vocational therapy staff. This core group of clinicians works closely with recreation therapy, psychology, neuropsychology, speech pathology and audiology, nursing and social service staff to form a dynamic extended rehabilitation team. As more patients become cancer survivors, the role of PM&R in the lives of survivors

continues to expand.

We have introduced and continue to develop our new specialty programs available to cancer patients that address pelvic floor dysfunction, lymphedema, and vestibular issues. An interventional pain management service provides new alternatives in the treatment of malignant and non-malignant pain.

The PM&R Service works also closely with the Prosthetics and Sensory Aids Service to provide veterans in the cancer program and others with the proper adaptive equipment and assistive devices. Through the Housing and Structural Alterations Program, Veterans are provided with financial assistance to obtain

necessary home modifications such as ramps. Through the Major Medical Equipment Committee, Veterans are provided with high-quality equipment as clinically necessary.

Patients receive both inpatient and outpatient therapy services. Patients who require bedside services are seen regularly on the inpatient units. All other patients are seen in the designated therapeutic areas to encourage independence, socialization and psychological well being.

As an integral part of the care of patients in the cancer program, the PM&R team works to improve both the functional status and the quality of life of Veterans with cancer.

AUDIOLOGY AND SPEECH PATHOLOGY

The Audiology and Speech Pathology Service provides diagnostic and rehabilitation services to patients with communication and swallowing disorders. Such disorders include hearing loss, dizziness, aphasia, dysphagia, laryngectomy, glossectomy, confusion and dementia, dysarthria, memory disorders,

and problems with voice production. Patients with neurogenic and mechanical swallowing disorders are also managed. The Service provides comprehensive hearing evaluation services, auditory brainstem response evaluations, and vestibular assessments. Prosthesis (e.g. hearing aids, assistive listening devices and

electrolarynges) are provided to eligible veterans.

Fiberoptic evaluations of swallowing disorders are conducted with Otolaryngology Service and videofluoroscopic studies of swallowing disorders are conducted with Radiology Service.

AUDIOLOGY AND SPEECH PATHOLOGY (CONTINUED)

In addition to individual services, there are several support programs including the Communication/Stroke and Laryngectomy groups. Families of patients with swallowing disorders are provided counseling about how to

maximize the nutritional content of the patient's recommended diet and assure that the rehabilitative swallowing techniques taught to the patient are used in the home setting. Family members are also counseled

about communication disorders, teaching them the best methods to help the patient communicate effectively.

CANCER REGISTRY

The Cancer Registry is a vital part of the Cancer Program and coordinates the collection, management, analysis and dissemination of information on cancer patients who are diagnosed and treated at the VA-NYHHS. Our registry has a reference date of January 1, 1984 and was computerized in 1990.

The Cancer Registry is staffed by two Certified Tumor Registrars and is supervised by the Cancer Committee. In 2011, the registry began to participate in the CoC's Rapid Quality Reporting System (RQRS), which provides the facility rapid case specific feedback for certain treatment milestones in real-time to allow for adjustments in the patient's treatment.

In 2012, 687 new analytical cases were added to the registry with a total number

of 20,616 cases since its reference date. The data is electronically stored and submitted to the National Cancer Data Base (NCDB), allowing comparison with other hospitals and national data. In addition, beginning in 2009, data has also been submitted to the New York State Cancer Registry.

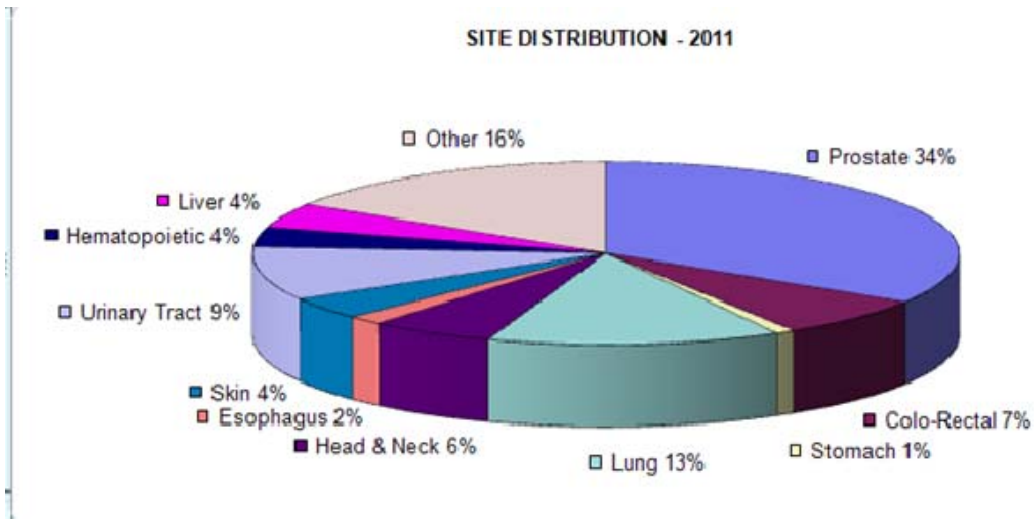
Annual follow-up of patients is an important function of the registry and the procedure for follow-up is based on guidelines recommended by the Commission on Cancer. Tracing and surveillance of registered cancer patients assures continuity of care, early detection of recurrent or new primary tumors, and appropriate patient follow-up. Our follow-up tracking and surveillance rate for all eligible patients in the registry from the reference date is 96%: the CoC standard is 80%. The registry is also required to track follow-up rates for

patients diagnosed within the last 5 years. Our follow-up rate for these patients is 96%, the Commission on Cancer's standard is 90%.

Utilization of the cancer registry data is monitored by the physician supervisor and is another important function to promote clinical research and continuous analysis of the data. Utilization of this data contributes to the effectiveness of patient care and the Cancer Committee encourages frequent use of the Cancer Registry database.

SUMMARY OF THE CANCER REGISTRY DATA FOR 2011

In the pages that follow, selected data of the Cancer Registry of VA-NYHHS for 2011 are presented.



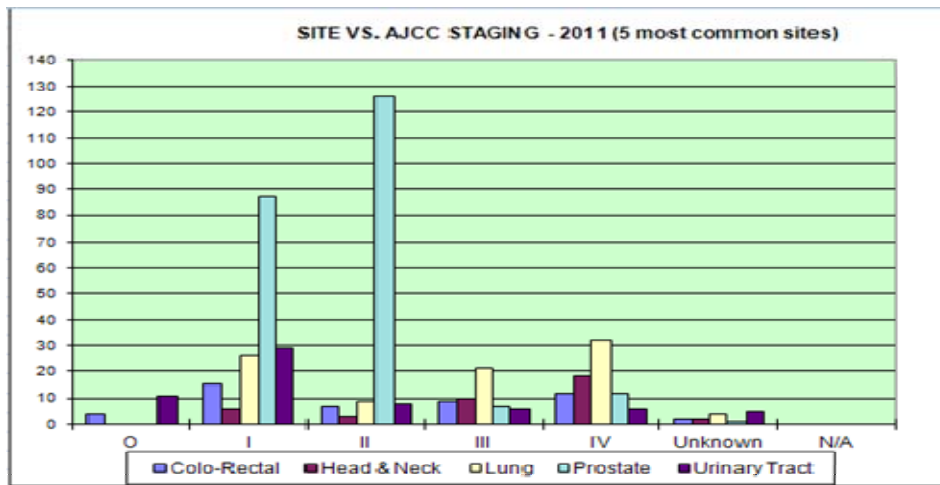
The total number of analytical cases in 2011 is 687 and the figure above illustrates the site distribution for newly diagnosed malignancies. The five major sites are prostate, lung, urinary tract, colorectal cancer and head & neck. Prostate cancer continues to be the leading malignancy with 233 new cases in 2011, representing 34% of analytic cases this year. Lung cancer is the second most common malignancy with 92 new cases. Urinary tract cancer, including kidney, renal pelvis, ureter and bladder is the third most common malignancy.

Analysis of the total 686 cases in the cancer registry shows that 54.6% of patients are Caucasian, 40.5% African American and 4.9% other ethnic groups, representing Hispanic and Asian Americans. Prostate cancer is the most common site in both groups, accounting for 48.9% of cases in African Americans and 32.3% of cases in Caucasians. Lung cancer is the second most common site in both groups. The third most common site is genitourinary cancer for Caucasians (18.9% of cases) and colorectal cancer for African Americans (13% of cases).

The analysis of patients diagnosed at VA-NYHHS with one of the top five malignancies indicates that 79.8% of patients are over the age of 60 at the time of diagnosis, reflecting the older population we serve.

SUMMARY OF THE CANCER REGISTRY DATA FOR 2011 (CONTINUED)

AJCC staging of patients at VA-NYHHS (Figure 5) continues to be exceptionally good with only 4.1% of cases unstaged in 2011. Of note is the high percentage of patients diagnosed with early stage prostate cancer: 85.9% of patients were diagnosed with Stage 0, I, II. This reflects the continued stage migration to earlier stages in patients with prostate cancer, which has been seen in the national data since the introduction of prostate cancer screening programs.



In summary, the analysis of the 2011 cancer registry data from the VA-New York Harbor Healthcare System is similar to the national data. Of note is the very low rate of unstaged cases in our registry and the continued increase in the number of patients diagnosed with prostate cancer at an early stage, thus allowing earlier treatment with the potential for cure.

PROSTATE CANCER QUALITY STUDY 2012

Prostate cancer ranks number one for cancer incidence in the Veterans Health Administration (VHA). In 2011, 233 prostate cancer cases were diagnosed at VA-NYHHS and the current study was conducted to evaluate the quality of care of these patients and identify improvement activities using quality indicators developed nationally by the Office of Quality and Performance of the VHA.

A nationwide evaluation of quality of care provided to Veterans with prostate cancer was conducted for cases accessioned to the VA Central Cancer Registry in 2008. There were 12,590 cases eligible for analysis. Eight of the quality indicators addressing diagnosis, treatment and management during active surveillance are presented below. The quality indicators were based on evidenced-based guidelines from national organizations including the National Comprehensive Cancer Network guidelines (NCCN), American Urological Association guidelines and the Physician Consortium for Performance Improvement of the American Medical Association.

As seen in the Table below, for six of the quality indicators reviewed, adherence was exceptionally high for VA-NYHHS (77 to 100%).

	Quality Indicator	NYHHS 2008
Diagnosis	At least 10 cores samples are taken at prostate needle biopsy ¹	98%
Treatment	The use of three-dimensional conformal radiation therapy or intensity-modulated radiation therapy for localized prostate cancer ²	100%
	Doses of at least 75 Gray are used for radiation therapy as primary treatment for early stage prostate cancer ²	100%
	Neo-adjuvant and adjuvant hormonal therapy is offered for high-risk patients receiving external beam radiation therapy ³	89%
	Pre-treatment documentation in a single medical record note of PSA, clinical tumor stage, and Gleason score for newly-diagnosed cases of non-metastatic prostate cancer ²	77%
Active Surveillance	PSA monitoring following primary therapy or Active Surveillance decision for early stage prostate cancer ²	97%

PROSTATE CANCER QUALITY STUDY 2012

However for two indicators evaluated in 2008, performance at VA-NYHHS demonstrated opportunity for improvement. In this quality study, current performance for these two quality indicators was evaluated by medical record review for prostate cancer cases accessioned in 2011. The results for 2008 and 2011 are seen in the table below.

	Quality Indicator	2008	2011
Diagnosis	No bone scan or PET scan prior to primary therapy for prostate cancer at low risk of recurrence* and treated with surgery or radiation therapy ²	56%	67%
Treatment	Negative margins for radical prostatectomy specimens for patients treated with surgery as primary treatment ⁴	50%	78%

* Low risk prostate cancer is defined as Stage T1c or T2a and PSA 10 ng/mL with Gleason score ≤ 6 .

Review of study results and actions taken by the Cancer Committee

This study indicates that prostate cancer patients generally receive excellent care at VA-NYHHS. However, there is an opportunity for improvement in the staging of patients with prostate cancer at low risk of recurrence. Current literature does not support the use of bone or PET scans for staging of newly diagnosed low grade carcinoma of the prostate (Stage T1c/T2a, prostate-specific antigen (PSA) <10 ng/ml, Gleason score less than or equal to 6) with low risk of distant metastasis. Unnecessary imaging can lead to harm through unnecessary invasive procedures, over-treatment and unnecessary radiation exposure⁵.

The Cancer Committee reviewed these results and recommended the following actions:

1. Bone scans or PET scans should not be performed as routine staging for patients with low risk of recurrence. Chiefs of Urology, Surgery, Nuclear Medicine, Radiology, Medical Oncology and Radiation Oncology agreed with this recommendation.
2. Quality Management will perform medical record reviews of prostate cancer cases and present to the Cancer Committee semi-annually.

PROSTATE CANCER QUALITY STUDY 2012

References

1. Thurs et al: Comparison of 12-core versus 8-core prostate biopsy. *Urology* 77: 541-7, 2011
2. National Comprehensive Cancer Network. Clinical Practice Guidelines in Oncology: Prostate Cancer, 2012. www.nccn.org/professionals/physician_gls
3. American Urological Association. Guidelines for the management of clinically localized prostate cancer: 2006 update.
4. Grossfield et al: Impact of positive surgical margins on prostate cancer recurrence. *J Urol* 2000; 163:1171-1177.
5. Makarov DV, Desai RA, Yu JB, et al: The population level prevalence and correlates of appropriate and inappropriate imaging to stage incident prostate cancer in the Medicare population. *J Urol* 187:97-102, 2012

CLINICAL CANCER RESEARCH

Participation in clinical cancer research is one of the features of a state of the art cancer program and is a requirement for our accreditation status with the Commission on Cancer of the American College of Surgeons. The Commission requires this standard to assure patients and their families the opportunity to participate in recent advances in cancer treatment and to provide opportunities to participate in research trials for a variety of cancers.

Cancer Research at VA-NYHHS is primarily involved in cooperative group treatment and prevention studies sponsored by the National Cancer Institute (NCI), Eastern Cooperative Oncology Group (ECOG), and Radiation Therapy Oncology Group (RTOG). In addition, we have access to other cooperative group trials through the CTSU (Clinical Trials Support Unit). Sponsored by the NCI, the CTSU allows sites access to protocols without the requirement of group membership.

Treatment guidelines developed as a result of clinical trials are made available for clinicians across the country and around the world so they can deliver the best treatment for their patients. Today, there are more than 10 million cancer survivors in the United States, in large part because of the work that has been done in clinical trials.

COMMUNITY OUTREACH

The Cancer Program’s major community outreach event is the annual Cancer Survivors Day Celebration, now in its 16th year. In June of each year, we invite patients and staff from both the New York and Brooklyn campuses and all cancer survivors, to join together for an afternoon of celebration. The event always includes a talk by one of our Cancer Survivors, refreshments, and entertainment generously provided by very talented performers.



Throughout the rest of the year, staff of Cancer Program plays a part in planning for or promoting a variety of community outreach activities. Our goal is to make sure that NYHHS community outreach includes a message about the availability of cancer treatment and prevention as part of the VA NYHHS family of services.

2012

- Mar 21 John Jay Wellness Fair
- April 4 Prostate Cancer VA Radio
- April 11 Health Resource Fair
- June 13 National Cancer Survivors Day
- June 23 Living With Cancer
- Sept 22 Men’s Health Awareness Fair
- Sept 27 Staten Island Health & Wellness Expo
- Oct 19 Wear Pink Day for Breast Cancer
- Oct 21 Making Strides for Breast Cancer



