

Strong Memorial Hospital Cancer Committee Report 2011



WILMOT
CANCER CENTER

 UNIVERSITY of
ROCHESTER
MEDICAL CENTER

MEDICINE *of* THE HIGHEST ORDER

Annual Report 2011: Chairman's Report



I am pleased to share this 2011 annual report of the Cancer Committee at the University of Rochester Medical Center's Strong Memorial Hospital, home of the James P. Wilmot Cancer Center. As has been the pattern of the last decade, 2011 was a year of continued growth and achievement for the Wilmot Cancer Center, both in the areas of research and patient care.

The most visible, and literal, sign of our growth during the past year was the continued construction of an exciting vertical expansion project that will add three additional floors to our cancer center and allow us to expand patient care and research programs. In July 2012, the inpatient Hematology/Oncology unit and the Samuel E. Durand Bone Marrow Transplant unit will be relocated to the Wilmot Cancer Center, transforming it into a comprehensive cancer hospital with more efficient, centralized services for our patients. These new units have been designed to not only to enhance our level of clinical care, but to also provide additional comfort and convenience for patients and their families, a sign of our ongoing commitment to Patient and Family Centered Care. Amenities like sleeper sofas in patient rooms, laundry

facilities, breathtaking views of the Rochester region and gaming have all been incorporated with patients and families in mind.

During the course of 2011, we also strengthened our growing research relationship Roswell Park Cancer Institute (RPCI). Leaders of the two institutions approved a memorandum of understanding for a partnership that will guide our collaborative research activities and funding structure. A collaboration between upstate New York's two largest cancer research facilities could result in a scientific powerhouse, enhancing faculty recruitment, funding, and the development of larger research studies. While the goal would be to create cross-institutional teams that can attract more and larger federal research grants, ultimately the collaborative work would be expected to lead to discoveries that would improve patient care and fuel further research.

The Commission on Cancer, from which we received accreditation in 2009, believes that the best cancer care is multidisciplinary in nature and that approach is central to the mission of the clinicians and researchers at the Wilmot Cancer Center. Surgeons, medical and radiation oncologists, diagnostic radiologists,

pathologists and other cancer specialists collaborate to provide an appropriate, customized approach to treatment for each and every patient.

We are the only cancer program in the region that provides multidisciplinary clinics for all of the major cancer sites, allowing us to evaluate each patient and determine the best possible combination and sequence of therapies tailored to their specific needs. We recorded more than 25,000 outpatient visits alone to our state-of-the-art facility in 2011 and we remain the busiest cancer program in the region. In 2011, there were 160 Cancer Center Clinical trials open, accruing 513 patients. This accounts for an accrual rate of 16.9 percent using the 2010 registry data for total number of cases. More importantly, it reflects our commitment to advance cancer care and provide patients with access to promising, cutting-edge treatments. This commitment is also exemplified by a marked increase in our cancer research funding as our basic and translational research programs continue to expand, enabling us to not only provide the best of the current cancer therapies, but to find better treatments, and ultimately find a cure.

Under the leadership of Richard Fisher, M.D., Wilmot Cancer Center director, Jonathan Friedberg, MD, chief of the division of Hematology/Oncology, Yuhchayau

Chen, M.D., Ph.D., chair of the department of Radiation Oncology, myself, and my colleagues in the various surgical departments, we continued in 2011 to advance cancer care for those whom we serve:

- The Comprehensive Breast Care Center at the James P. Wilmot Cancer Center and the Highland Breast Imaging Center at Red Creek received a full, three-year accreditation from the National Accreditation Program for Breast Centers (NAPBC), a program of the American College of Surgeons.
- University of Rochester Medical Center physicians pioneered a new surgical technique that added Near Infrared Imaging to the daVinci Robotic Surgery System, to used for procedure related to kidney and other urologic cancers.
- As our expertise and national reputation as a leader in cancer care and research continues to grow, so does the support of our generous community which recognizes the importance of having an elite cancer facility in its midst. Two substantial gifts in the form of Endowed Professorships were made during 2011 to support the research of YuhChyau Chen, M.D., Ph.D. in radiation oncology, and Craig Jordan, Ph.D., one of the nation's recognized leaders in leukemia stem cell research.

I am extremely proud and privileged to be part of the world class team at the Wilmot Cancer Center. By providing multidisciplinary, collaborative and specialized care, we are ensuring that those who entrust their cancer care to our talented team are getting the most effective, customized treatment plan for their particular disease. The combination of state-of-the-art treatments, cutting-edge research, and access to a multitude of promising clinical trials, allows our patients to have the best possible outcome while maintaining a high quality of life. While we have achieved much in 2011, we will continue our commitment to continuous improvement and further strengthen our role as the cancer-care leader in our community and region.

Sincerely,



Kristin Skinner, MD

Chief, Division of Surgical Oncology

Chair, Cancer Committee | Introduction

Annual Report 2011: Cancer Program Report

The University of Rochester Medical Center and the James P. Wilmot Cancer Center, one of the Medical Center's strategic centers of excellence, has significant resources and expertise to provide quality care to patients with cancer. Significant among these resources is the strong collaboration and support among oncology specialists and a highly skilled group of oncology nurses, social workers, pharmacists and support staff.

Strong Memorial Hospital is the Rochester and Finger Lakes region's largest hospital with 739 beds

and a component of the highly respected University of Rochester Medical Center. Clinical faculty members provide a broad range of services, many recognized as best in the nation. As an academic hospital, our patients have access to the latest treatments before they are widely available. In addition to its notable programs of clinical excellence, Strong Memorial Hospital has twice earned designation as an ANCC Magnet hospital of Nursing Excellence. SMH is also approved by the Joint Commission on Accreditation of Health Care Organizations.

The Wilmot Cancer Center has received accreditations from prestigious organizations for its quality care. The program is a designated Center of Excellence by Aetna, United Resource Networks, Optum Health, MVP, Strategic Health Development Corporation and a Blue Distinction Center for Transplant. It is a Blue Distinction Center for Rare Cancers and holds accreditation from the American College of Radiology.

II Commitment To Multidisciplinary Care

Wilmot Cancer Center physicians and staff believe multidisciplinary care is the gold standard for high-quality cancer care. Patients benefit from the expertise of a variety of oncology specialists who discuss patients' stage of disease and develop treatment plans at one of our many disease-specific multidisciplinary conferences and clinics. As Figure 1 shows, the major cancer sites have frequent multidisciplinary conferences. Other diseases or programs, such as palliative care and pediatric oncology, also have regularly scheduled multidisciplinary conferences.

Our review demonstrates that in 2010, more than 1,421 patients were presented at multidisciplinary conference, (approximately 43 percent of the analytic cancer cases) 95 percent of those were presented on a prospective basis, meaning the discussion and recommendations were made in advance of the patient's treatment.



III Clinical Research

The Wilmot Cancer Center manages a robust portfolio of clinical trials, consisting of cooperative group trials through the Southwest Oncology Group, investigator initiated trials, and industry sponsored studies.

Scientific integrity and human subjects protection are chief priorities of the Wilmot Cancer Center's research program. Each protocol is subject to a review for scientific appropriateness by a committee of peers. Once it passes this review, it is studied by the Medical Center Research Subjects Review Board, which monitors protection of patients who are candidates for or already enrolled in research protocols.

Investigators are assigned study coordinators who are responsible to insure the integrity of the study requirements, collect, record and submit data to study sponsors and oversee all regulatory issues related to the study. A research nurse works with study coordinators to ensure that patients are properly educated and informed about the protocols. The nurse also provides education to members of the

nursing staff about investigational therapy and study requirements so that administration of these agents is performed in a safe manner.

In 2011, there were 160 Cancer Center Clinical trials open, accruing 513 patients. This accounts for an accrual rate of 15.6%, using the 2010 registry data for total number of analytic cases (N=3286).

IV Patient Education and Support

Support services at Wilmot Cancer Center are considered vital to providing comprehensive care for our patients and their caregivers. Wilmot Cancer Center's team of oncology social workers, its Luellen Patient and Family Resource Center and ongoing community collaboration initiatives support the needs of those in treatment as well as those seeking information about cancer.

Regarded as members of the patient's medical team, social workers can provide a variety of services for patients throughout all phases of treatment. Meeting with patients upon diagnosis informs them of the

spectrum of services available with the objective of addressing emotional and practical needs. Social workers are licensed professionals who can assist with the provision of psychosocial assessment, supportive counseling, allocation of community resources, continuity of care between inpatient and outpatient settings, assessing financial stressors and facilitating concrete needs (such as transportation and lodging) during treatment.

Wilmot Cancer Center has social workers in all clinical areas, including Blood and Marrow Transplant service, Comprehensive Breast Care Center, gynecologic oncology, hematology oncology multidisciplinary clinics, radiation oncology, inpatient medical and surgical oncology units as well as the palliative care service.

The Luellen Patient and Family Resource Center was developed to serve as the hub of patient education and information. It is home to the Hermetet library collection, relevant brochures for local and national cancer resources, as well as disease-specific information. A comfortable and versatile space, the resource center is a home for support and educational groups, as well as an ongoing lecture series, all open to the community.

Our monthly on-campus support groups facilitated by Wilmot Cancer Center staff include:

- Adult Brain Tumor Network
- Bladder Cancer Support Group
- Brain Tumor Caregivers Support Group
- Caregiver Support Group
- Advanced Insights: A support group for women with metastatic breast cancer

Wilmot Cancer Center Multidisciplinary conference schedule, Major disease sites *(Figure 1)*

Solid tumor	2nd and 4th Thursday	noon
Breast	Mondays	7:30 a.m.
Thoracic	Thursdays	4:00 p.m.
Genitourinary	1st and 3rd Wednesday	12:30 p.m.
Gastrointestinal	Tuesdays	5:00 p.m.
Lymphoma	Tuesday	12:30 p.m.
Myeloid	Mondays	noon

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- Oral, Head and Neck Cancer Connection
- Pancreatic/GI Cancer Support Group
- Rochester Bone Marrow Transplant Support Group
- Young Adults Survivor Connection Support Group

Collaboration with Community Agencies – American Cancer Society, Gilda’s Club of Rochester, Breast Cancer Coalition of Rochester, and Volunteer Legal Service Project – brings diverse offerings to our patients and prevents duplication of services. Ongoing activities in collaboration with community agencies include:

- American Cancer Society – “I Can Cope”
- Educational Classes for Patients and Families
- Gilda’s Club of Rochester – Leukemia and Lymphoma Networking Group

- GYN Cancer Advocacy and Education Group
- Multiple Myeloma Support Group
- Lung Cancer Support Group.

In addition, educational sessions are ongoing and include topics ranging from “Understanding New Mammography Guidelines” to “Financial Bootcamp for Patients, Survivors, and Caregivers”.

V Professional Education

In addition to the multidisciplinary conferences, there are numerous CME bearing conferences for medical professionals in the Cancer Center as well as the URMCM community. Cancer Center Grand Rounds

occur every Friday at noon and usually feature a noted external speaker/expert in a particular field.

Nursing Grand Rounds are held monthly and consist of clinically relevant topics, usually presented by an Advanced Practice Nurse. In addition, the Oncology Nursing Society chemotherapy/biotherapy course is offered four times a year for nursing staff at Strong Memorial Hospital and its affiliates (as well as being open to the public) to provide the educational preparation necessary for nurses administering anti-neoplastic agents.

Once a year, the ONS certification review course is offered to nursing staff who are interested in preparing for OCN certification.

Cancer Education Programs for Faculty, Staff

The Wilmot Cancer Center and the University of Rochester Medical Center offer a rigorous schedule of continuing education programs for faculty and staff to enhance patient care and research efforts.

The Cancer Center’s 2011 Grand Rounds brought experts from across the country to discuss advances in care and new challenges for study. Among the lectures:

- “National Models for Improving Breast Cancer Care” by Stephen Edge, MD, FACS Chair, Breast &

Soft Tissue Surgery, Roswell Park Cancer Institute, Buffalo, NY.

- “New Directions in Symptom Research: A Translational Pathway for Treatment-Related Symptom Control” by Charles S. Cleeland, PhD, Professor of Cancer Research, MD Anderson Cancer Center.
- “Integrating Omic Approaches for Cancer Target and Small Molecule Discovery” by Kimberly Stegmaier, MD, Assistant Professor, Harvard Medical School.

- “Shifting Etiology and Treatment in Oral Pharyngeal Carcinoma” by Theodoros Teknos, MD, Prof. of Med. Otolaryngology – Otolaryngology, University of Ohio, Comprehensive Cancer Center.

- “Developing HDAC Inhibitors for the Treatment of Renal Cell Carcinoma” by Roberto Pili, MD, Professor of Oncology, Roswell Park Cancer Institute.

In addition, Wilmot Cancer Center experts provide similar lectures for other cancer centers across the country.

VI Community Outreach

Wilmot Cancer Center doctors, nurses and scientists are involved in a variety of community outreach activities. We have close affiliations with not-for-profit agencies that support people with cancer and their families.

Wilmot experts lead support groups and special programs to address new therapies available today and the future of cancer research, clinical trial participation, coping with disease, and tips for caregivers. Gilda's Club, Breast Cancer Coalition of Rochester and the Leukemia and Lymphoma Society of Western New York regularly invite Wilmot specialists to lead support group programs and answer questions from members.

Community Outreach and Educational Offerings for the Community in 2011 included:

- "Empower yourself with Yoga" – In conjunction with the Advanced Insights Group
- Book discussion "Moments of Truth, Gifts of Love" – In conjunction with the Advanced Insights Group
- "Wills, Powers of Attorney, and Proxies" – In conjunction with the Young Adult Survivor Connections
- "The Benefits of Acupuncture During Cancer Treatments & Beyond Recovery" – Sponsored by the Integrative Oncology Lecture Series.
- "Ayurvedic Understanding of Cancer Prevention & Treatment: Ancient Medicine of India" – Sponsored by the Integrative Oncology Lecture Series.
- "Clinical Trials 101" – Sponsored by the Integrative Oncology Lecture Series.
- "How does food affect bladder cancer?" – In conjunction with the Bladder Cancer Support Group
- "Understanding and Living with Seizures" – Sponsored by the Adult Brain Tumor Group.
- "Healing on the Physical, Psychological and Spiritual Levels" – Sponsored by the Integrative Oncology Lecture Series.
- "How we cope" – Sponsored by the Adult Brain Tumor Group.
- "Thyroid Complications of Head & Neck Tumors" - Sponsored by the Oral Head & Neck Cancer Connection.
- "Why can't I open my mouth? Trismus in the Head & Neck" – Sponsored by the Oral Head & Neck Cancer Connection.
- "What your employer needs to know when diagnosed with cancer" – Sponsored by the Young Adult Survivor Group.
- "Be fit to fight your cancer; Using exercise to reduce your side effects" – Sponsored by the Just the Facts Lecture Series.
- "Lymphedema, Exercise & More; Living a full life after breast cancer" – Sponsored by the Just the Facts Lecture Series.
- "Nutrition" – Sponsored by the Just the Facts Lecture Series.
- "The role of the multidisciplinary care team and their approach to cancer" – Sponsored by the Just the Facts Lecture Series.
- "Massage Therapy and the Power and Meaning of Touch" – Sponsored by the Integrative Oncology Lecture Series.
- "Retreat Opportunities for Young Adult Survivors" – Sponsored by the Young Adult Survivor Group.
- "An Evening of Pampering" – Sponsored by the Just the Facts Lecture Series.
- "Living with a Brain Tumor" – In conjunction with the Adult Brain Tumor Group.



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Prevention and Early Detection Programs and Cancer Survivorship Celebrations included:

- Annual Men's Health Day – An event focused on screening and men's health issues, including prostate cancer.
- Community Cancer Collaborative Survivors Celebration – A victory celebration for survivors and families.
- Breast Health Day – An event focused on risk reduction, screening and early detection.
- Bone Marrow Transplant Program Annual Survivors Picnic – A program for survivors and families.
- 25th Annual Skin Cancer Screening Program – Sponsored by the Department of Dermatology.
- Tasting event to celebrate OHN cancer week – An event sponsored by the H&N Connection.
- Survivor's Celebration – Sponsored by the Adult Brain Tumor Network.

VII Faculty Recruitment Highlights for 2011

Mohamedtaki Tejani, M.D., joins us from the Fox-Chase Cancer Center at Temple University, where he recently completed a Fellowship in Hematology/Oncology. He will specialize in treating gastrointestinal cancers, one of his many research interests at Fox-Chase. Dr. Tejani is a Magna Cum

Laude graduate of Amherst College, and earned his medical degree at Dartmouth Medical School. He subsequently completed his residency and chief residency in Internal Medicine at Yale-New Haven Hospital. During his Fellowship at Fox-Chase, Dr. Tejani was involved in research related to gastrointestinal cancer, head and neck cancer, and palliative care.

Chunkit Fung, M.D., brings much-needed depth to our genitourinary team, which has been experiencing increasing patient volumes. Dr. Fung comes to the Wilmot Cancer Center from the Hospital of the University of Pennsylvania, where he completed his Fellowship program and also had a faculty appointment within the Department of Medicine. Dr. Fung earned a Bachelor's Degree in biology at Cornell University, and his medical degree from the University of Pennsylvania, where he also completed his internship and residency in Internal Medicine. His research interests included studies of coronary artery and cardiovascular risk in survivors of testicular cancer.

Gregory Connolly, M.D., joins Dr. Tejani as the newest members of our team serving patients with gastrointestinal cancers. Dr. Connolly, a native of Rochester, completed his Fellowship at the Wilmot Cancer Center in June. He previously served as Chief Resident in the Department of Internal Medicine at URM. A graduate of McQuaid High School, Dr. Connolly went on to earn his undergraduate degree at

the University of Toronto. He subsequently completed his medical degree from the State University of New York at Buffalo School of Medicine, also serving as a research assistant at Roswell Park Cancer Institute while he completed his studies at SUNY Buffalo. His research focus has included thrombosis in cancer patients and he has participated in a number of published studies.

David Dougherty, M.D., is another Wilmot Cancer Center Fellow who now joins our faculty. He is a former Chief Resident and Instructor in Internal Medicine at the Penn State Milton S. Hershey Medical Center, where he earned a number of honors, including the Arnold P. Gold Foundation Humanism and Excellence in Teaching Award. Dr. Dougherty will be caring for patients with thoracic/lung cancers. He will also be leading a special quality initiative program that will help raise the bar even higher on the care and service provided to patients at the Wilmot Cancer Center. After earning a Bachelor of Science degree in Pre-medicine with Honors from Pennsylvania State University's Eberly College of Science, Dr. Dougherty earned his medical degree from Jefferson Medical College in Philadelphia.

VIII 2011 Cancer Program Improvement Highlights:

- Improved the number of patients in which National Treatment Guidelines and staging were discussed.
- A Chemotherapy Consent Protocol was developed and implemented throughout the Cancer Center and Strong Memorial Hospital.
- The Comprehensive Breast Care Center was awarded a three year full accreditation by the *National Accreditation Program for Breast Centers*.
- Continued to increase and enhance the number and quality of support services and educational programs for patients and families.
- Continued the process to achieve *Quality Oncology Practice Initiative (QOPI)* certification. The *QOPI Certification* designation demonstrates a commitment to quality.
- Achieved an Overall Patient Satisfaction Percentile Ranking (overall mean trend) of 48% in the Outpatient Oncology area for 2011.
- Continued the process to achieve certification by the *National Quality Metrics for Breast Centers Program*.
- Our Patient Education Initiative developed and distributed the "Welcome to Wilmot" video designed as an educational tool for patients and families. This video is available to all via CCTV and You Tube.

The Wilmot Cancer Committee has established the following goals for 2012:

Clinical Services/Conferences

- Ensure the highest standard of patient evaluation and care through multi-disciplinary case review and management.
- Continue to monitor attendance at conferences; work with conference coordinators to ensure that attendance is accurate.
- Ensure that staging and use of National guidelines is a component of discussion at Cancer Conferences.
- Achieve Re-Accreditation by the American College of Surgeons.

VIX 2012 Cancer Committee Program Goals:

Quality Improvement - Programmatic

- Quality Oncology Practice Initiative (QOPI). In accordance with that process, focus on improvements in the following areas:
 - Smoking Cessation
 - Increase Hospice/Palliative Care Referrals
 - Achieve accreditation by the National Quality Metrics for Breast Centers
 - Utilizing nationally accepted standards for measuring quality, as well as data from the registry and NCDB, evaluate program performance in:
 - Palliative Care – June, 2012
 - Bone Marrow Transplant – September, 2012

Quality Improvement - Clinical

- Cancer Quality Council Improvement Initiatives
 - Patient Falls
 - CLABSI
- Patient and Family Centered Care

Program/Registry

- Maintain our high standard of the cancer registry, ensuring accurate and timely abstracting, staging and follow-up.
- Achieve >90% performance rates for CP3R information submitted via the NCDB
- Ensure participation in continuing education programs for all registrars.

Team Approach Drives Best Care for Head, Neck Cancers

Edmund “Quinn” Lewis is looking forward to sunny days driving his cherry ‘57 Chevy that he restored. With oral cancer care behind him, he’ll be polishing the classic car and showing it off.

After all, he endured aggressive chemotherapy and radiation treatment to beat the Stage 4 tongue cancer. He thanks the multidisciplinary group of doctors, nurses and staff at the James P. Wilmot Cancer Center for giving him each day.

“They saved my life, simply put,” says Lewis of Parma. “Every time I met with the doctors and nurses, I was always impressed because they were superb.”

The team of head and neck cancer specialists includes surgeons, oncologists, radiation oncologists, otolaryngologists, pathologists, nutritionists, speech therapists, nurses, social workers and other support staff. The large team offers the latest technology for surgery and radiation treatment, which is unique in the Rochester region.

Each year, about 38,000 people are diagnosed with head and neck cancers, which include the mouth (lips and tongue), salivary glands, throat (pharynx), nasal cavity, sinuses, neck, thyroid and larynx. Head and neck cancers account for approximately 3 to 5 percent of all cancers in the United States. These cancers are more common in men and in people over age 50. The most common causes of these cancers are smoking, alcohol use, poor diet and infection with the human papilloma virus (HPV).

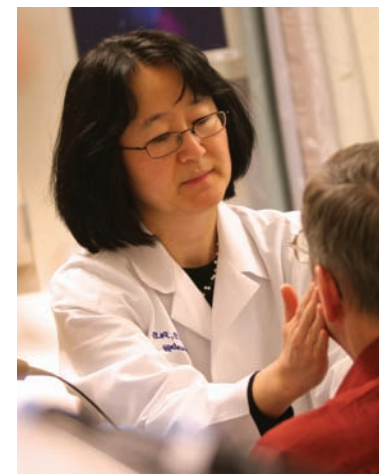
A startling find

Lewis didn’t recognize warning signs that cancer was growing in his body in late 2008. He traveled to the Adirondacks to go snowmobiling, another of his passions, and while he’d been a bit hoarse, he didn’t think it was a problem. But he was alarmed after he began coughing up what appeared to be blood.

He called his sister, a registered nurse in Lockport, to discuss what happened. That led to an appointment with his physician and then otolaryngologist Ronald Pulli, M.D., who identified the 4-centimeter tumor, which extended from the base of his tongue to his epiglottis, and the need for specialized care.

“My sister did a lot of research about my cancer and said the Wilmot Cancer Center was the place to be,” said Lewis, an Eastman Kodak Company retiree. He also received a lot of support from his son, Quinn Lewis of Hilton.

Examination by Shawn Newlands, M.D., chair of Otolaryngology and leader of the Head and Neck Oncology group, showed the disease was advanced. The multidisciplinary team met to review all of Lewis’ test results and develop a treatment plan, as they do for each new patient. The recommendation was a powerful regimen of chemotherapy followed by combination chemo/radiation therapy.



Hong Zhang, M.D., checks Edmund “Quinn” Lewis’ jaw and lymph nodes following his successful treatment for tongue cancer. The center’s radiation oncologists, oncologists, surgeons, pathologists and others provide multidisciplinary, subspecialty care.

“Surgery really was not the best option because the size and location of the tumor precluded curative surgery without significant swallowing difficulties. In cases like these, we want to preserve as much of the patient’s tongue as possible,” Newlands recalls. Head and neck oncologist Jeffrey Allerton, M.D., said the team “decided that we wanted to treat him very aggressively using both induction chemotherapy followed by concurrent chemo-radiation therapy because his tumor was bulky and the treatment may improve his chances for survival, based on the evolving medical research.”



Allerton prescribed three cycles of chemotherapy and Lewis wore an infusion pump that delivered the life-saving medication around the clock for five-day intervals every three weeks. Then he endured weekly chemotherapy in combination with radiation treatment.

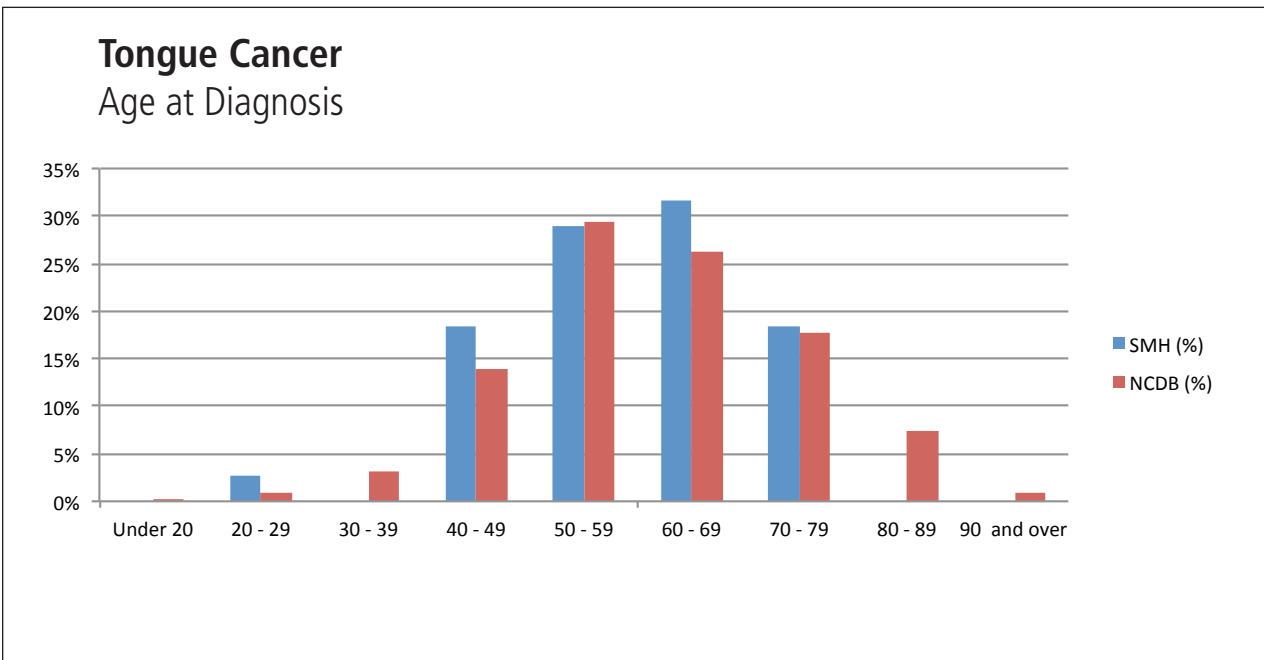
High-tech treatments

Radiation oncologist Hong Zhang, M.D., Ph.D., prescribed intensity-modulated radiation therapy (IMRT), which delivers high-precision radiotherapy that allows for the radiation dose to conform more precisely to the three dimensional shape of the tumor. IMRT also allows higher radiation doses to be focused to regions within the tumor while minimizing the dose to surrounding normal critical structures.

This treatment is delivered using the Tomotherapy Hi-Art System, which is only available at the Wilmot Cancer Center. This system combines an advanced form of IMRT, the accuracy of CT scanning technology for image-guided radiation therapy, advanced software for planning and dynamic hardware all in one treatment machine.

This technology is an integral part of the treatment of head and neck tumors, as most tumors are very close to vital organs, such as the tongue, jaw bone, eyes, ears, brain, spinal cord, salivary glands, larynx and muscles that control swallowing. To preserve organ function, these structures must be protected as much as possible, says Yuhchayou Chen, M.D., Ph.D., chair of Radiation Oncology, who has led numerous clinical studies of new therapies and treatment approaches for these cancers.

"I was pleased to see that Lewis really breezed through his induction chemotherapy," Allerton says. "It didn't





The Wilmot Cancer Center's multidisciplinary head and neck cancer team is the largest in the region. From left are, Matthew Miller, M.D., Jeff Allerton, M.D., Hong Zhang, M.D., Paul van der Sloot, M.D., Ellen Giampoli, M.D., Shawn Newlands, M.D., Yuhchayou Chen, M.D., Ph.D., and Deepinder Singh, M.D.

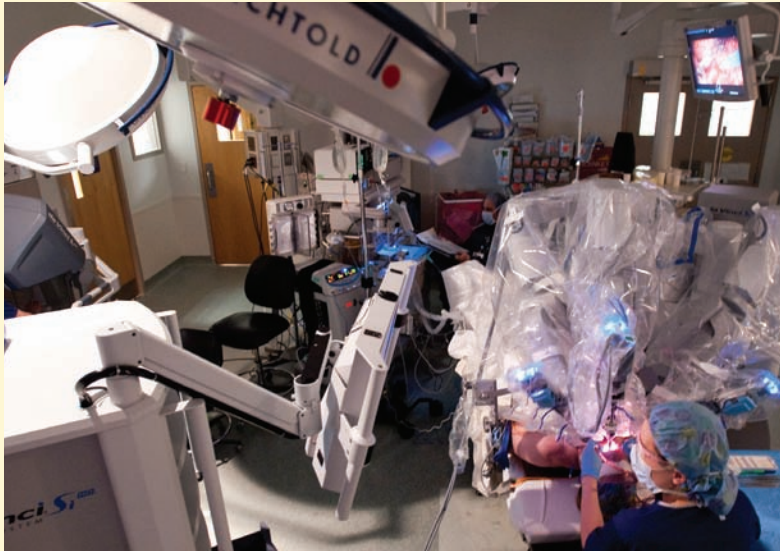
seem to bother him much at all, but he got hit hard during concurrent chemoradiation therapy."

Lewis lost 60 pounds during his treatment. "I couldn't eat regular food. I had to go for soft foods and start using a lot of gravy and sauces in my meals," he says. The radiation therapy successfully destroyed the tumor, but it caused temporary swelling of throat tissue and his salivary glands to slow down saliva production.

He had a feeding tube placed and dietitian Joanna Lipp, M.S., R.D., helped him boost the nutrition content of his diet to reverse the weight loss. In addition, speech pathologist George L. Charpiel, M.S., CCC-SLP, worked with Lewis to regain the swallowing function to further improve his diet and weight gain. "It was really good to have all of those people available to help me when I needed it," Lewis says.

The multidisciplinary approach to cancer care is what separates the Wilmot Cancer Center from others in the region. Bringing experts from all areas of cancer treatment together helps patients receive seamless care, says Newlands, who has broadened the surgical team for head and neck cancers. Matthew C. Miller, M.D., and Paul van der Sloot, M.D., are newer members of the Otolaryngology department and Wilmot Cancer Center team. They are talented surgeons who expand the breadth of expertise available to patients.

They're also increasing options for reconstruction of surgical defects and the use of the daVinci Surgical System for head and neck cancer surgeries. This technology, which is growing in popularity as a treatment for a variety of diseases and conditions, allows the Wilmot team to offer minimally invasive surgeries.



Wilmot Surgeons Introduce Minimally Invasive Robotic Surgery

Robot Enhances Surgeries for Oral, Head, Neck Cancers

James P. Wilmot Cancer Center surgeons are the first in upstate New York to incorporate the precision and dexterity of a surgical robot to remove cancerous tumors in the mouth and throat. The first transoral robotic procedure – a partial glossectomy, or removal of a

tumor at the base of the tongue—was performed by surgeon Matthew Miller, M.D., expanding the robot-assisted surgery capabilities for people with head and neck cancers.

George Maines of North Greece is grateful for the Medical Center's commitment to advancing technology and care. The surgery was less invasive and the recovery faster than he imagined when he learned of the cancer at the base of his tongue. He says "people were amazed at how quickly I was able to recover and bounce back."

"Traditional approaches to these tumors have the potential to be invasive and disfiguring – oftentimes leading to an

extensive recovery and rehabilitation period," says Miller, a fellowship-trained head and neck cancer surgeon. "The robot allows us to limit or even eliminate some of the side effects associated with more invasive surgeries while still effectively treating the cancer."

Using the high-tech robotic system, surgeons insert the slender instruments into the mouth to reach the base of the tongue, tonsils, oropharynx and throat. The benefits for patients, like Maines, are dramatic because the surgeries can be done, primarily, without incisions and offer faster recovery time and a reduced risk of infection or other complications.

Maines didn't expect a cancer diagnosis when he pointed out a lump on his neck to his doctor. It was a

2-inch tumor in a lymph node and doctors suspected it had spread from someplace else. Further investigation showed another tumor on the base of his tongue, the primary source of the cancer.

The Wilmot Cancer Center's multidisciplinary head and neck cancer team reviewed Maines' scans and test results and determined that surgery followed by radiation therapy would be the best way to treat the disease. Miller removed the tumor from his tongue using the robotic system and then made a small incision on his neck to remove the cancerous lymph nodes.

His care continued with intensity-modulated radiation therapy using Tomotherapy, which also allows daily image guided radiation therapy and adaptive radiation therapy with great precision, a key treatment for these cancers. This technique allows for the radiation dose to conform to the three-dimensional shape of the tumor. Doctors can also deliver stronger doses to specific areas of the tumor. Radiation oncologist Deepinder Singh, M.D., prescribed 33 days of treatment, using the Tomotherapy Hi-Art System, which is only available at the Wilmot Cancer Center.

"Mr. Maines is an amazing gentleman who has done extremely well following his robotic surgery and post-operative radiation treatment to his base of the tongue and neck nodes areas," Singh says. "He's tolerated his radiation treatment very well and we're pleased to see success for him."

CANCER REGISTRY REPORT

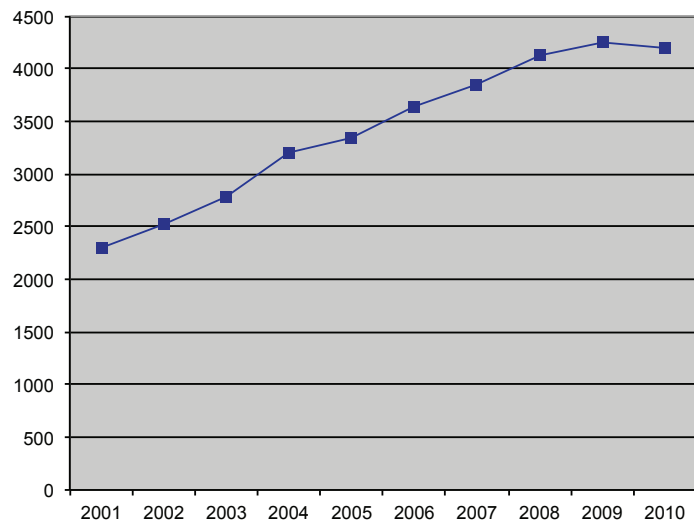
The cancer registry is a vital component of the Cancer Program, providing data for programmatic and administrative planning, research, and for monitoring patient outcomes. Data is collected according to the current standards of the Commission on Cancer (CoC) to create a detailed cancer-focused record for all reportable tumors diagnosed and/or treated at our hospital. Each record entered into the database contains information on the diagnosis, extent of disease, treatment received, recurrence of disease and lifetime follow-up for each patient. Since January 1, 2000 the Cancer Registry has collected data for a total of 37,777 cases, with 4,200 cases added for calendar year 2010.

A cancer registrar performs the collection, interpretation, analysis and reporting of cancer data. The National Cancer Registrars Association defines cancer registrars as data management experts who collect and report cancer statistics for various healthcare agencies. Registrars work closely with physicians, administrators, researchers and healthcare planners to provide support for cancer program development, ensure compliance of reporting standards, and serve as a valuable resource for cancer information with the ultimate goal of preventing and controlling cancer. The cancer registrar is involved in managing and analyzing clinical cancer information for the purpose of education, research and outcome measurement.

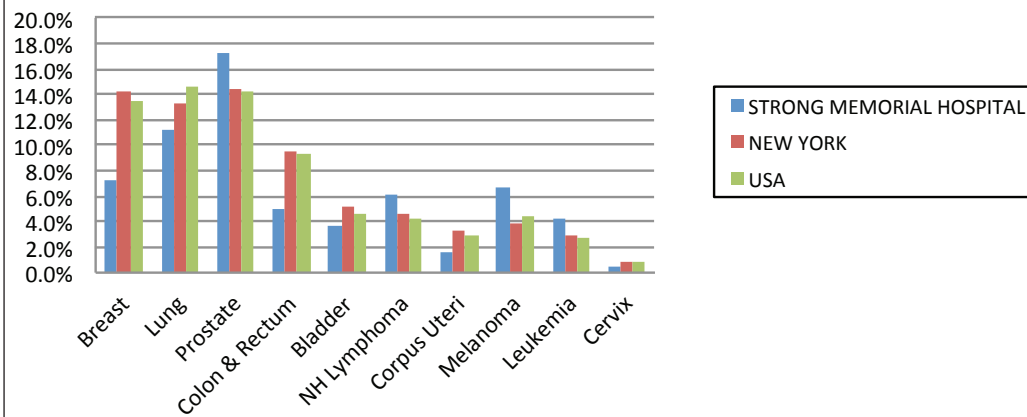
The cancer program at Strong Memorial Hospital makes accurate data collection a priority. Cancer registry data is reported to the New York State Cancer Registry where it is integrated into a population-based data system which is used to study trends in cancer incidence, diagnosis and treatment patterns, survival rates, and to investigate possible cancer clusters within the state. As an approved ACoS CoC teaching hospital cancer program, data collected is reported to the National Cancer Data Base, impacting studies of cancer incidence, patterns of care, and outcomes on a national level.



James P. Wilmot Cancer Center / Strong Memorial Hospital Annual Cases Abstracted 2000-2010



Strong Memorial Hospital 2010 Estimated New Cancer Cases for Selected Sites



Source: The American Cancer Society Cancer Facts & Figures 2010

Glossary of Terms:

Analytic: Cancer diagnosed and/or received first course of treatment at Strong Memorial Hospital

First Course of Treatment: Initial cancer-directed treatment or series of treatments planned and usually initiated within four months of diagnosis or as determined by the physician.

James P. Wilmot Cancer Center / Strong Memorial Hospital 2010 Analytic Cases - Cancer Referrals

Monroe	48%	2033
Ontario	8%	330
Livingston	5%	215
Wayne	5%	200
Steuben	3%	140
Genesee	3%	132
Broome	2%	79
Chemung	2%	77
Onondaga	2%	76
Seneca	2%	73
Orleans	2%	70
Other	18%	775
Grand Total	100%	4200

Oneida	66	Potter	8	PA	Rockingham	1	VA	Washington	1	ME
Erie	66	Lewis	8	NY	Moore	1	TN	Bell	1	TX
Cayuga	66	Chenango	6	NY	Warren	1	PA	Morris	1	NJ
Allegany ⁶⁴		County unknown	4		Union	1	PA	Claiborne	1	TN
Wyoming	60	Montgomery	4	NY	Sheboygan	1	WI	Monmouth	1	NJ
Yates	54	Franklin	4	NY	Sarasota	1	FL	Cabarrus	1	NC
Tompkins	50	Delaware	4	NY	Polk	1	FL	Middlesex	1	NJ
Tioga	35	Schenectady	3	NY	Schoharie	1	NY	Plymouth	1	MA
Schulyler	27	Miami-Dade	3	FL	Knox	1	TN	Columbia	1	NY
Jefferson	24	Canada	2		Richmond	1	NY	Butler	1	PA
Herkimer	19	Moore	2	NC	Martin	1	FL	Rockingham	1	NH
Bradford	19	Fulton	2	GA	Levy	1	FL	Hillsborough	1	NH
Cortland	16	Pasco	2	FL	Orange	1	NY	Broward	1	FL
Tioga	14	McKean	2	PA	Lee	1	FL	Washington	1	RI
Oswego	13	Marion	2	FL	Lackawanna	1	PA	Albany	1	NY
Madison	12	Etowah	2	AL	New York	1	NY	Fairfield	1	CT
Chautauqua	12	Essex	2	NY	Jackson	1	MS			
St Lawrence	11	Dutchess	2	NY	Greene	1	OH	Total Other	775	
Otsego	11	Clinton	2	NY	Hillsborough	1	FL			
Niagara	11	Blanks	2		Kings	1	NY			
Susquehanna	10	Patient resides outside of			Fulton	1	NY			
Cattaraugus	10	the state of the reportin			Flagler	1	FL			

Cancer Committee Members 2011

Brendan Boyce, M.D.	<i>Pathology</i>	Luke Schoeniger, M.D.	<i>Cancer Liason Physician</i>	Brian Martin	<i>Cancer Center Administration</i>
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John Monson, M.D.	<i>Colon Rectal Surgery</i>				
Jeffrey Peters, M.D.	<i>Surgery</i>				
Timothy Quill, M.D.	<i>Palliative Care</i>				
Randy Rosier, M.D.	<i>Orthopaedic Oncology</i>				
Rabih Salloum, M.D.	<i>Surgery, Quality Assurance</i>				

Strong Memorial Hospital 2010 Primary Site Distribution

Dominant AJCC Stage Group

Primary Site	Total	Male	Female	AnalyticNonAnalytic		Dominant AJCC Stage Group						
						0	I	II	III	IV	None	Unknown
Oral Cavity	78	51	27	64	14	1	9	7	4	44	4	9
Esophagus	79	66	13	66	13	2	23	13	19	4	6	12
Stomach	55	35	20	43	12	0	12	11	8	17	0	7
Small Intestine	31	16	15	25	6	1	11	3	5	7	2	2
Colon	148	60	88	114	34	8	21	34	36	29	2	18
Rectosigmoid Junction	17	9	8	8	9	3	2	2	4	6	0	0
Rectum	60	41	19	43	17	3	21	11	9	8	0	8
Anus and Anal Canal	15	6	9	12	3	6	1	4	1	0	0	3
Liver/Biliary	103	75	28	87	16	0	25	19	15	16	13	15
Pancreas	105	52	53	97	8	0	8	28	13	41	0	15
Larynx	26	22	4	21	5	0	6	7	1	9	0	3
Lung	474	239	235	413	61	0	128	29	110	168	1	38
Leukemia	179	108	71	118	61	0	0	0	0	0	179	0
Multiple Myeloma	60	32	28	41	19	0	0	0	0	0	60	0
Other Hematologic Disorders	67	38	29	33	34	0	0	0	0	0	67	0
Skin/Melanoma	320	184	136	262	58	155	98	19	12	12	6	18
Connective Tissue	33	21	12	29	4	0	6	5	12	6	1	3
Breast	304	3	301	197	107	53	103	78	30	9	2	29
Cervix Uteri	22	0	22	14	8 [©]	0	9	3	3	3	1	3
Corpus Uteri	75	0	75	42	33	0	46	6	10	5	1	7
Ovary	22	0	22	11	11	0	9	0	6	5	0	2
Prostate	722	722	0	610	112	0	147	324	156	44	1	50

Strong Memorial Hospital 2010 Primary Site Distribution

Dominant AJCC Stage Group

Primary Site	Total	Male	Female	Analytic	NonAnalytic	0	I	II	III	IV	None	Unknown
Kidney	170	108	62	149	21	0	85	17	31	25	5	7
Bladder	153	119	34	114	39	56	32	26	14	12	2	11
Brain/CNS	238	97	141	201	37	0	0	0	0	0	238	0
Thyroid	112	23	89	100	12	0	60	8	9	3	10	22
Pituitary Gland	65	21	44	52	13	0	0	0	0	0	65	0
Lymphoma	297	169	128	189	108	0	59	50	42	108	2	36
Unknown Primary Site	41	27	14	30	11	0	0	0	0	0	41	0
Other	129	79	50	101	28	16	17	9	9	15	58	5
Grand Total	4,200	2,423	1,777	3,286	914	304	938	713	559	596	767	323

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Wilmot Cancer Center's Hematology/Oncology division engages in a months-long Kaizen initiative

In conjunction with a URM-wide commitment to a model of Patient and Family Centered Care (PFCC), staff at the Wilmot Cancer Center's Hematology/Oncology division have been engaged in a months-long Kaizen initiative designed to identify ways in which they could further improve the patient experience and level of care provided.

Kaizen, also known as continuous improvement, is a long-term approach to work that systematically seeks to achieve small, incremental changes in processes in order to improve efficiency and quality. Kaizen can be applied to any kind of work, but its roots can be traced to the "lean" quality initiatives used in manufacturing settings. Process improvements developed through a Kaizen require every worker, not just leadership or the grass roots level, to embrace the principles of continuous improvement.

Kaizen can be roughly translated from Japanese to mean "good change." The philosophy behind kaizen is often credited to Dr. W. Edwards Deming. Dr. Deming was invited by Japanese industrial leaders and engineers to help rebuild Japan after World War II and was honored for his contributions by Emperor Hirohito and the Japanese Union of Scientists and Engineers. Deming is often referred to as the father of the Quality movement in industry and is known for his 14 points that serve as management guidelines for continuous improvement.

"In examining how we could better implement the principles of Patient and Family Centered Care at the Wilmot Cancer Center, we realized that despite our commitment to and success in delivering extremely high levels of clinical care, there were still opportunities to improve how we serve our patients," said Patti Murray, R.N., M.S., associate director for cancer services at the James P. Wilmot Cancer Center. Murray and Alok Khorana, M.D., co-chaired a 17-member cross functional team that thoroughly reviewed every aspect of the Wilmot Cancer Center operation, from the time a patient registered or



The Wilmot Cancer Center Hematology/Oncology Kaizen team.

checked in, through the delivery of cancer treatment and ancillary services, to check-out.

The committee's task was challenging. Volume at the cancer center has increased by 15% for each of the past two years, resulting in longer wait times, communication lapses between clinicians and patients, and a general decline in patient satisfaction.

The immediate goals of the Kaizen team were to identify and implement process changes that would reduce wait times, increase patient satisfaction scores as measured by an independent third party – Press Ganey, improve communication and the transfer of patients between the clinic and infusion staffs, and to establish and communicate these new expectations and commitments to patients. Elements as simple as signage (ie: changing terminology from "phlebotomy" to "lab services" to eliminate possible confusion), patient flow and tracking, patient education and utilizing electronic systems to a fuller capacity to improve efficiency were examined and evaluated.

In one example, the team found that the way patients were educated about chemotherapy treatment was inefficient and redundant, leaving patients unsure of "next steps." As a result of the Kaizen, the Wilmot Cancer Center is now benchmarking with best patient education practices at other institutions, will enhance its website, and has designated a consult room for chemo teaching

to improve room utilization and flow from exam rooms. In addition, work has begun on a chemotherapy teaching module that will be available on the website, on CCTV in the infusion rooms and on DVD for patients to review at their convenience.

"What impressed me most was the transparency and willingness of our staff to take responsibility for areas that were leading to unacceptable deficiencies in service, and to work together to identify and commit to making improvements wherever possible," said Murray.

The early returns are impressive. By eliminating previously redundant check in and check out procedures within the clinic and infusion center, patient wait times have significantly decreased. Just one month after the Kaizen exercise began in May, mean patient satisfaction scores reached 90.7, the highest score in a year. More importantly, the patient satisfaction scores have become far more consistent, indicating that the changes are not just short term gains but rather a reflection of long term staff commitment.

Kaizen experts outside of the URM setting have also taken notice. Because of their success to date, the Wilmot Cancer Center Kaizen team has been asked to present their work to the Greater Rochester Lean Consortium (GRLC), a cluster of organizations across the area which gets together to share what they are doing with lean practices at their organizations and to learn from others.

In inviting the Wilmot Cancer Center team, the GRLC cited the improvement efforts and application of lean tools at Wilmot Cancer Center as an ideal, strong example of how lean helps create value added impact within a healthcare setting.





Strong Memorial Hospital

Strong Memorial Hospital is the Rochester and Finger Lakes region's largest hospital with 739 beds and is a component of the highly respected University of Rochester Medical Center. Clinical faculty members provide a broad range of services, many recognized as best in the nation. As an academic hospital, our patients have access to the latest treatments before they are widely available. In addition to its notable programs of clinical excellence, Strong Memorial Hospital has twice earned designation as an American Nurses Credentialing Center Magnet Hospital of

Nursing Excellence. SMH is also approved by the Joint Commission on Accreditation of Health Care Organizations.

Multidisciplinary cancer care is provided by the James P. Wilmot Cancer Center, which leads our region in inpatient and outpatient care, clinical and laboratory research, and education programs. The center serves patients throughout the region's 11-counties and those who travel from across the United States and beyond, for the highly specialized and unique treatments available here. For example, our

lymphoma team is one of the most highly regarded in the Northeast, our Comprehensive Breast Care Center is the first in upstate New York, and our radiation oncologists are offering innovative therapy to those once considered incurable.

The Wilmot Cancer Center collaborates with Highland Hospital for radiation and medical oncology services. Our physicians also work closely with nearby Unity Health System and F.F. Thompson Hospital to provide radiation oncology services. In addition, the center works with other practices and hospitals in the region as part of the James P. Wilmot Community Oncology Network to expand access to the newest therapies through clinical trials.

The Wilmot Cancer Center has received accreditations from prestigious organizations for its quality care. The program is a designated Center of Excellence by Aetna, United Resource Networks, Optum Health, MVP, Strategic Health Development Corporation and a Blue Distinction Center for Transplant. It is a Blue Distinction Center for Rare Cancers and holds accreditation from the American College of Radiology.

The Samuel E. Durand Blood and Marrow Transplant Program, based in Strong Memorial Hospital, is certified as a Center of Excellence by Foundation for the Accreditation of Cellular Therapy and accredited by the National Marrow Donor Program.

WILMOT
CANCER CENTER



MEDICINE of THE HIGHEST ORDER