At NorthShore University HealthSystem (NorthShore) Kellogg Cancer Center, we offer the latest in individualized care—leveraging our understanding of patients at the molecular level to provide the most effective, personalized treatment programs.

Our collaborative team of experienced physicians, specially trained nurses and wide array of dedicated healthcare professionals is united by a commitment to provide compassionate and evidence-based, comprehensive care to each individual patient.

While patients’ success is, of course, our most important achievement, we also are proud of numerous honors recognizing NorthShore for excellence in cancer care. NorthShore has been certified by the American Society of Clinical Oncology (ASCO) Quality Oncology Practice Initiative (QOPI) as a premier medical provider for practicing the highest standards for quality cancer care. The Commission on Cancer has continuously accredited NorthShore as an Academic Comprehensive Cancer Program since 1981.

David J. Winchester, MD
Chairman, NorthShore Cancer Committee
Chief, Division of Surgical Oncology
Board of Directors/David P. Winchester, MD, Chair of Surgical Oncology

Bruce Brockstein, MD
Medical Director, NorthShore Kellogg Cancer Center
Head, Division of Hematology/Oncology
Kellogg-Scanlon Chair of Oncology

Kellogg Cancer Center also has been designated by Blue Cross Blue Shield as a Blue Distinction Center for Complex and Rare Cancer. The Blue Distinction program identifies hospitals with proven expertise in delivering specialty care.

Research is an essential element of our program, supported by our academic affiliation with the University of Chicago Pritzker School of Medicine and our alliance with the Mayo Clinic.

We are grateful for ongoing critical philanthropic support, and understand that these generous donations are essential to our ability to provide prevention, early detection, advanced treatment and supportive services to the patients and families we are so privileged to serve.
PROGRAM HIGHLIGHTS

Breast Cancer NorthShore was the first program in the Chicago region to be accredited by the American College of Surgeons’ National Accreditation Program for Breast Centers. We have a newly established high-risk screening program that includes formal risk assessment and lifestyle modifications.

Gastrointestinal Cancer Our multidisciplinary team focuses on early detection and advanced therapeutics, including minimally invasive surgical and advanced interventional radiology techniques. We look for genetic predisposition for colon cancer in all patients with colon cancer.

Gynecologic Cancer NorthShore’s Clinical Gynecologic Cancer Prevention Program includes ovarian cancer risk assessment and individualized pharmacological and surgical strategies for screening and prevention.

Head and Neck Cancers Kellogg Cancer Center’s collaborative specialists offer the latest diagnostics and personalized treatment plans for head and neck cancers, including robotic surgery for appropriate patients and clinical trials focusing on minimizing toxicity in patients at lower risk of relapse.

Hematology NorthShore’s hematology program received an award for 10 years of continuous accreditation from the Foundation for the Accreditation of Cellular Therapy (FACT).

Lung Cancer NorthShore’s emphasis on early detection allows our experienced team of specialists to diagnose a greater proportion of early-stage lung cancer cases, leading to improved outcomes. We routinely look for genetic alterations within tumors that will optimize the use of molecularly targeted therapies.

Melanoma NorthShore is one of the few institutions in the region to offer sophisticated immunotherapy for advanced melanoma patients and early access to clinical trials of new immunotherapies.

Neurologic Oncology Ongoing clinical trials provide NorthShore patients with brain tumors access to the latest drugs and innovative treatment options.

Pancreatic Cancer Our clinical pancreatic database is one of the largest in the country, and NorthShore’s ongoing studies support novel, personalized treatment plans. In 2014, NorthShore Kellogg Cancer Center was selected by the Association of Community Cancer Centers as a Community Resource Center for Pancreatic Cancer, enhancing a pathway to increased collaboration within a network of community cancer centers. Providers willing to share their knowledge and expertise in caring for patients with less common cancers.

Prostate Cancer The NorthShore Division of Urology has been repeatedly ranked among the top 100 urology programs in the United States by U.S. News & World Report. There is a major clinical and research focus on understanding who requires treatment and who can be observed safely without treatment.

Multidisciplinary teams are at the heart of advanced, comprehensive care for Kellogg Cancer Center patients. The GI cancer multidisciplinary team pictured here (back row from left) are: Dr. Claus Fimmel, Dr. Mick Meiselman, Deb Nowak, Colleen Temple, Gnathan Carpenter (front row from left) Margaret Whalen, Susan Jane Stocker, Susan Taylor, Lisa Zoberman, Dr. Mark Talamonti and Dr. Robert Marsh.

Multispecialty Teams

At NorthShore Kellogg Cancer Center, our multidisciplinary approach to treating patients with cancer includes a team of physicians, nurses and clinicians from a variety of specialties and disciplines working together. This collaborative team of professionals contribute their varied expertise to create a personalized treatment plan with each patient at its center.

Kellogg Cancer Center’s multidisciplinary approach provides optimal cancer treatment for each of our patients. Bringing together physician specialists with expertise in specific cancers, as well as clinical and psychosocial staff involved in a patient’s treatment, provides a forum for blending their collective knowledge, skills and experience. The result: an individualized cancer plan tailored to each patient.

NorthShore is part of the Mayo Clinic Care Network, which provides our patients even greater access to a broad network of experts. NorthShore and Mayo specialists share expertise and collaborate on complex disease diagnoses and treatments. Patients at NorthShore benefit from this enhanced care without the need to travel outside the region.

- Collaborative nurses
- Dietitians
- Genetic counselors
- Interventional radiologists
- Medical oncologists
- Nurse navigators (breast, GI, head and neck, lung, prostate)
- Nurse practitioners
- Nutritionists
- Oncology pharmacists
- Pathologists
- Physician assistants
- Psychologists
- Radiation oncologists
- Radiologists
- Researchers
- Social workers
- Surgical oncologists
PREVENTION AND SURVEILLANCE

MEDICAL GENETICS

NorthShore’s Center for Medical Genetics is one of the largest and busiest adult medical genetics centers in the United States. The Center is dedicated to incorporating genomic information and delivering personalized patient care, employing the latest genetic technology and information. The Center for Medical Genetics is committed to hereditary cancer research at both the clinical and translational levels.

The Center offers an experienced team of medical geneticists and genetic counselors working collaboratively with referring physicians, patients and their families to incorporate genetics and genomics into the practice of medicine. Such personalized care can lead to tailored screening, prevention and treatment that can be life-saving. Staff at the Center for Medical Genetics evaluate patients diagnosed with cancer as well as assess those potentially at risk for a hereditary cancer syndrome.

In medical genetics, the family is the patient. Patient services at the Center for Medical Genetics include an extensive evaluation of an individual’s personal and family medical history, risk assessment, and relevant genetic testing if indicated and desired. Patients can also receive guidance regarding management, screening, early detection and prevention of disease by incorporating current genetic information.

The Center for Medical Genetics also remains committed to international collaborations such as the IMPACT study, which is examining prostate cancer risk in BRCA1/2 carriers as well as families with Lynch syndrome.

Not all instances of cancer are hereditary, however. Many factors—including lifestyle, environmental exposures and diet—also come into play. In fact, most cancers—between 85 to 90 percent—are not inherited. Genetic counseling provides the best way to determine genetic susceptibility to cancer, followed by genetic testing, if applicable.

CENTER FOR PERSONALIZED MEDICINE

Personalized medicine, also referred to as individualized or precision medicine, customizes a patient’s care and treatment plan based on his or her unique genetic characteristics and health history. Through this level of personalized care, NorthShore’s Center for Personalized Medicine is able to more effectively develop a system of anticipating risk of certain cancers in a patient. Then, strategies are established to prevent the cancer, as well as better diagnose and treat cancers when they occur.

In collaboration with NorthShore’s Centers for Medical Genetics and Molecular Medicine, the Center for Personalized Medicine is a new systemwide initiative launched in 2014 that uses the knowledge of the human genome and specialized tests based on the genome to study it. The Center for Personalized Medicine takes a team approach to providing patients with personalized care. Physicians and scientists customize the most effective treatment plans for patients and develop effective disease-prevention strategies based specifically on their unique genetic blueprints. This unique expertise includes healthcare informatics, laboratory testing, medical genetics and innovative research.

This multidisciplinary team, through the integration of sophisticated genomic and health history information, can seamlessly provide patients with the best possible methods for preventing, predicting and treating various diseases and conditions. The Center for Personalized Medicine enables our physicians to learn more about our patients on a molecular level. With a better understanding of an individual’s unique genetic code and genomic information, NorthShore’s team of physician-scientists and researchers can develop individualized prevention and treatment options that positively impact patient care.

At NorthShore Kellogg Cancer Center, we advocate for patients to know their family health histories, which play a critical role in preventive care and screenings to protect them from life-threatening disease like cancer. A personal health history plays an essential role in early detection of cancer. NorthShore’s emphasis on early detection allows our experienced team of specialists to diagnose a greater proportion of early-stage cancer cases. When cancer is detected early, patients have more options for treatment as well as greater chances for improved treatment outcomes.

Cancer treatment options are rapidly evolving, and Kellogg Cancer Center is on the leading edge of care with a variety of resources that improve prevention, treatment and surveillance of many types of the disease.

For more information, visit northshore.org/cancer or call (847) 570-2112.
HEALTH HERITAGE PROGRAM
In an era when an individual’s genetic composition can make a difference in the options available for his or her medical care, understanding one’s family health history is more important than ever.
In 2014, NorthShore became the first healthcare system in the country to use Health Heritage, a new online tool that helps individuals create personalized risk reports. It links to their current Electronic Medical Record (EMR) for seamless communication with their physicians. Health Heritage allows patients to:
• Create a family health history by automatically and securely downloading key parts of their medical record from their NorthShore EMR
• Generate personalized health risk reports and recommendations that can be shared with their physicians and used to create personalized screening and prevention plans
• Review, add and update health information that relates to their risk of developing common inherited health conditions such as cancer
The dynamic program automatically links to a person’s current EMR, allowing the addition of family medical histories. Health Heritage then analyzes personal and family health history, and provides specific screening recommendations based upon the most current research. It also offers a risk assessment report to develop personalized plans and treatment options for patients.
With Health Heritage, NorthShore’s patients and their families have a powerful foundation on which to build personalized plans for improving their health, and potentially the health of family members. This secure, dynamic, family health history also will be an essential part of the legacy that our patients will leave for future generations.

HIGH-RISK BREAST AND OVARIAN HEALTH PROGRAM
NorthShore has established high-risk programs in breast and ovarian health that feature a multidisciplinary team of experts. New patients undergo a thorough review of health and family history, in addition to a review of imaging, a clinical breast exam or pelvic exam. In addition, statistical risk models to stratify individual risk of breast or ovarian cancer are used. Personalized risk assessment and screening plans are developed for each patient, and education on risk-reduction strategies are key components of the programs.
The goal of the high-risk evaluation programs for breast and ovarian health is to educate patients about their risks and determine whether they need additional tests or visits in the clinic. The programs also can reassure some patients that their risk for developing these cancers is not greater than the general population. Patients can participate in research studies that allow NorthShore to examine better ways to prevent and assess risk of breast and ovarian cancer.
The high-risk breast and ovarian programs at NorthShore empower women to be proactive for their overall health, and to create an important information legacy for family members and future generations.
Philanthropic support has been vital to the programs, including a $1 million grant from the North Suburban Healthcare Foundation to launch the high-risk breast program. Additionally, Sandy and Ron Schutz made a generous gift to further advance ovarian cancer research and promote oncology nursing education at NorthShore.

Kellogg Cancer Center patients benefit from programs designed to serve women at high risk for breast and ovarian cancer. Among the leaders of these efforts are (from left) Collaborative Nurse Ann Puglisi, Dr. Gustavo Rodriguez, Dr. Katharine Yao and Nurse Practitioner Barb Guido.
DIAGNOSIS AND TREATMENT

For the majority of patients at NorthShore Kellogg Cancer Center, a multidisciplinary meeting of specialists convenes to collectively review details of their diagnosis at diseasespecific tumor conferences. This so-called “meeting of the minds” provides a forum for all the medical professionals whose critical input creates a comprehensive, individualized treatment plan. This team includes medical oncologists, surgical oncologists, radiation oncologists, radiologists, researchers, pathologists, geneticists, oncology nurses, pharmacists, nutritionists and social workers, among others. This personalized approach creates the best course of action for each patient.

Personalized medicine takes shape at these conferences. Review of tumor pathology slides may lead to more in-depth molecular testing of specimens to characterize specific biomarkers, affording the use of more effective, targeted medicines. This may occur with FDA-approved drugs, or for others, through participation in clinical trials that are helping advance cancer care. Based upon this forum of discussion, appropriate diagnostic tests may be applied to define optimal therapy; the order of therapy; and specific treatment recommendations that may include surgery, radiation, targeted therapy, hormonal therapy, chemotherapy or a novel clinical trial.

MEDICAL ONCOLOGY

At Kellogg Cancer Center, each patient receives care from a multidisciplinary team that represents a variety of physicians and healthcare professionals. Medical oncologists specialize in treating patients with chemotherapy and other medications, and they also are the primary manager of each patient’s multidisciplinary team. NorthShore is certified by the American Society of Clinical Oncology Quality Oncology Practice Initiative as a premier medical provider for practicing the highest standards for quality cancer care.

Medical oncologists diagnose and stage a patient’s specific form of cancer and begin mapping out a treatment plan. Diagnosis, staging and recommendations for treatment require open communication and intense collaboration with other members of the multidisciplinary team. NorthShore’s use of one of the most advanced Electronic Medical Record (EMR) systems in the country enhances open communication and promotes collaboration in patient care.

Once a treatment plan is put into place, patients meet regularly with their medical oncologist, who monitors their progress and manages symptoms and side effects of treatment. As a result of this monitoring and close communication with patients, medical oncologists can make further assessments and recommendations for treatment.

Kellogg Cancer Center has on staff medical oncologists representing a wide variety of subspecialties. Like their colleagues in surgical oncology and radiation oncology, medical oncologists are active participants and leaders in regional and national research, academic and advocacy organizations. This experience and insight, along with a vital research enterprise, allows Kellogg Cancer Center patients access to the latest drugs and treatment options, as well as a wide array of clinical trials, both at NorthShore and through the University of Chicago.
RADIATION ONCOLOGY

NorthShore’s team of expert radiation oncologists offers the latest technologies and years of experience providing advanced care for all types of cancer. The Department of Radiation Medicine is accredited by the American College of Radiology for each of NorthShore’s treatment facilities located at Evanston, Glenbrook and Highland Park Hospitals.

NorthShore was one of the first Chicago area medical centers to inaugurate the new radionuclide therapy for prostate cancer bone metastases using the alpha-emitting radionuclide radon-223. Reported results indicate improved survival and fewer side effects compared to chemotherapy. NorthShore has been a leader in the development of accelerated partial breast irradiation (APBI) for patients with early-stage breast cancer, reducing the time for treatment from six and a half weeks to three weeks. More than 600 women have been treated to date with results comparable to standard therapy.

NorthShore’s stereotactic body radiation therapy program continues to grow as an option for many patients offering pinpoint precision to target radiation treatment on tumors or lesions close to critical structures within the body. Stereotactic body radiation offers doctors the ability to treat a range of indications, including benign and malignant brain tumors; metastatic tumors or recurrent brain tumors; functional brain disorders; and tumors of the head and neck, lung, liver, prostate and spine. This treatment is particularly viable for patients who cannot undergo traditional surgery because of illnesses, for tumors that are located in inoperable areas or for procedures that present increased risk of harming critical structures near the tumor. The therapy is especially effective for patients with early-stage lung cancer who are deemed to be poor operative risks.

SURGICAL ONCOLOGY

NorthShore’s Department of Surgery and Division of Surgical Oncology offer comprehensive surgical oncology care to patients at Kellogg Cancer Center by physicians who are specially trained in treating breast, endocrine, lung, gastrointestinal, hepatobiliary and pancreatic cancers, head and neck cancers, melanoma and sarcoma. NorthShore’s Kellogg Cancer Center has had an American College of Surgeons Commission on Cancer (CoC) accredited cancer program since its founding in 1981.

NorthShore was granted the National Cancer Data Base (NCDB) Participant User File (PUF). PUFs are only available through an application process to investigators associated with CoC-accredited cancer programs. The NCDB is the world’s largest cancer database, which includes approximately 70 percent of all cancer patients treated in the United States. The Patient User Files of the NCDB provide investigators with a data resource they can use to review and advance the quality of care delivered to cancer patients through analyses of cases reported to the NCDB. This has allowed NorthShore to conduct research in cancer across the United States.

The NorthShore Center for Biomedical Research Informatics (CBRI) maximizes NorthShore’s robust electronic resources and systemwide, fully integrated Electronic Medical Record (EMR) system. The CBRI includes 30 bioinformatics scientists, statisticians and staff who partner with the Department of Surgery, as well as other cancer care providers, on projects that require biostatistics and informatics in order to improve patient care. Over the past several years, in collaboration with the CBRI, NorthShore surgeons have developed comprehensive databases in pancreatic, prostate, colorectal, lung and breast surgery that allow complete, timely and accurate collection of both clinical and research data from all our patients, simultaneously improving both clinical care and research.

RADIOLOGY

NorthShore’s Department of Radiology provides expert diagnosis and treatment of cancer with a multitude of procedures. Every patient’s health issue is unique as are the procedures used by the NorthShore radiologists. Advancements in medical technology allow our physicians to use the most effective method for diagnosing and treating cancer.

Experts in treating lung cancer, thoracic surgeons Dr. John Howington (from left) and Dr. Ki Wan Kim partner with medical oncologists Dr. Thomas Hensing and Dr. Nicholas Campbell.

For more information, visit northshore.org/cancer or call (847) 570-2112
NURSE NAVIGATORS—Providing Compassionate Direction from Diagnosis to Treatment and Beyond

For many patients at Kellogg Cancer Center, a cancer diagnosis can be an all-encompassing effort. Education, treatment decisions, and juggling professional and family responsibilities are just a few of the issues patients must deal with from their initial diagnosis and throughout the course of their care.

In addition to their multispecialty care team, patients who are newly diagnosed at Kellogg Cancer Center have the added support of a specialized oncology nurse navigator to help guide them through their diagnosis and treatment. This initial, compassionate connection is an important advantage for patients, providing personalized expertise and sustained direction throughout a patient’s care.

Nurse navigators connect with patients immediately after diagnosis and proceed to help navigate through the complexities of their illness. Our navigators have direct access to all of the resources at the Kellogg Cancer Center locations at Evanston, Glenbrook and Highland Park Hospitals—imaging facilities, surgical suites, radiation therapy facilities and support services. With patients, they discuss their diagnosis and assist with needed appointments. Working collaboratively with physicians, they provide personalized education and serve as a critical, direct point of contact for patients who have questions about their diagnosis and treatment.

Nurse navigators help patients deal with myriad issues throughout their care. Using resources both on-site at Kellogg Cancer Center and within the community where patients live, they help connect patients to a variety of resources to address their individual needs.

Throughout their treatment, patients continue to have the support of a care team composed of physicians and collaborative nurses from medical oncology, surgical oncology and radiation oncology. The collaborative nurse is present when the patient meets with the physician. He or she helps coordinate the treatment plan, communicating with members of the multidisciplinary team and the patient to ensure continuity of care. Nurse navigators continue to support patients with consultation referrals and integration of many key Kellogg Cancer Center services, including patient advocates, nutritionists, social workers, integrative medicine practitioners, oncology pharmacists and others.

In their roles, nurse navigators and the collaborative nursing team can provide patients with the “big picture” and anticipate the progression of their care and treatment. The orchestration of these steps is complex but occurs with decreased patient responsibility. Such assistance eases the burden for patients, allowing them to focus on working through their treatment and returning to wellness, by alleviating a substantial time commitment associated with sequential referrals from specialist to specialist.

Even with the strongest support system in place, a diagnosis of cancer can be the biggest challenge a patient may ever face. Our team of oncology nurses provides both compassionate support and clinical expertise as they serve as a strong patient advocate.
Patients at Kellogg Cancer Center have a wide range of advanced imaging capabilities available to them if deemed critical to their diagnosis and treatment, including diversified breast imaging technology, CT scan, diagnostic X-ray, magnetic resonance imaging (MRI), ultrasound and interventional radiology. In addition, patients have available to them more sophisticated MRI technology and a variety of isotope-based imaging including PET scanning.

Kellogg Cancer Center is committed to the early detection of breast disease and advancements in women’s health. As a pre-eminent imaging center in the Chicago region and a leader in breast cancer prevention, NorthShore offers state-of-the-art breast imaging technology, including digital mammography, ultrasound and MRI. All images are interpreted by dedicated radiologists from the Department of Radiology’s Breast Imaging Section. Research shows that interpretation by breast specialty radiologists improves the rate of cancer detection. These radiologists have expertise in the diagnosis of all aspects of breast disease and work closely with surgery, oncology and pathology to provide cohesive patient care. Additionally, NorthShore investigators are studying whether MRI can benefit women diagnosed with high-risk lesions.

Patient safety is of top priority, and NorthShore has one of the few radiology programs in the Chicago area that monitors the amount of radiation to which patients are exposed. If the cumulative radiation exposure is approaching the maximum recommended safety levels, radiologists can advise a patient’s oncologist on alternative testing.

**PATHOLOGY**

Kellogg Cancer Center has been a leader in molecular pathology and diagnostics for more than 20 years. NorthShore’s Pathology Department includes board-certified physicians and scientists who are on faculty at the University of Chicago Pritzker School of Medicine, as well as certified allied health professionals, all of whom have in-depth expertise in oncology. NorthShore’s comprehensive, expert pathology lab ensures that a majority of tests and novel diagnostics are completed in-house. This advantage provides swift results to the members of a patient’s multidisciplinary team, which are used in each individualized treatment plan. As a result, physicians can begin treatments for cancer as early as possible. Pathologists are on-site and readily available to discuss individual cases with Kellogg Cancer Center physicians, and pathologists also attend multidisciplinary conferences. The expertise of our pathology staff includes subspecialty fellowship training in hematopathology, cytopathology, dermatopathology, molecular pathology and various subspecialty anatomic pathology areas, to name a few.

When it comes to molecular pathology, Kellogg Cancer Center has been ahead of the curve, incorporating molecular analysis of tumors into patient care for a number of years. Even cancers that may look the same under the microscope are molecularly distinct, and may behave differently and respond differently to therapy. At NorthShore, we are able to analyze blood DNA (germline DNA), as well as the tumor DNA (somatic DNA). Each of these approaches may help clinicians develop additional insight into optimizing interventions. As the knowledge and research surrounding tumor biology continues to rapidly improve, this enhanced technology provides patients with new cancer treatment options based on their individual molecular and genetic makeup.

**MEDICAL GENETICS**

Our research regarding the genetics of cancer, involving both germline and somatic changes, is constantly evolving. All the while, physician-scientists continue to discover the genomic architecture and “molecular fingerprint” of a cancer. Such discoveries are leading the way to increased personalized, targeted therapies.

NorthShore’s Center for Medical Genetics is an increasingly important part of the multidisciplinary team at Kellogg Cancer Center. Not only is the Center assisting patients in prevention and surveillance, it is also playing an increasing role in cancer treatment. Ten to 15 percent of cancers—Continued >
ORAL CHEMOTHERAPY MONITORING

Over the past few years, there has been a major expansion in the development and use of oral anti-cancer agents (OAA). Although these medications can be taken at home rather than in the cancer center setting, they require stringent monitoring and follow-up. Adherence to oral anti-cancer agents is very challenging because these drugs are expensive, hard to obtain, have strict dosing regimens and can have significant side effects. Monitoring these adverse effects also poses new challenges since patients take these medications at home, away from the watchful eyes of the multidisciplinary team.

To help overcome these challenges, each Kellogg Cancer Center location provides a dedicated, on-site, point-of-care Outpatient Oncology Pharmacy. These specialized pharmacies serve patients at Kellogg Cancer Center by dispensing oral anti-cancer agents and supportive care medications specific to each patient’s treatment plan. The pharmacists also are experienced with requesting authorization from insurance companies and obtaining financial coverage for medications, in conjunction with our patient financial advocates. The Kellogg Cancer Center pharmacies harness the power of NorthShore’s Electronic Medical Record (EMR), using important information to help ensure safety.

The Center’s pharmacy department has worked with the multidisciplinary team to pursue several quality improvement projects specific for oral anti-cancer agents. A special messaging system within the EMR allows oncology pharmacists to provide a double check for all OAA prescriptions, including prescriptions sent to pharmacies outside of NorthShore. A monitoring program is being piloted in a small number of patients focusing on certain select high-risk oral anti-cancer agents. This program uses an innovative monitoring tool within the EMR system, which helps healthcare providers assess adherence and side effects of oral chemotherapy regimens.

Recent research has shown that a patient’s oral chemotherapy success is closely linked to the follow-up contact from pharmacists. Kellogg Cancer Center’s on-site Outpatient Oncology Pharmacies enhance patient safety and overall continuity of care.

GENOMIC PROFILING

Genomic profiling is a key component of personalized medicine, which is the customization of healthcare that integrates information from a person’s genome (DNA and genetic variations) or that from their tumor, and applies specific preventive and treatment strategies that will uniquely benefit that individual’s clinical condition. Genomic profiling stems from our knowledge of the human genome along with available tools that can be used to effectively study the expression of thousands of genes and create an overall picture of cellular function. The culmination of this combined knowledge enables researchers and physicians to differentiate between cells that are actively dividing, or to see how certain cells respond to a specific therapy.

Ashton Hullett (left) and Kathryn Schiavo are part of the specially trained oncology pharmacy team enhancing patient safety and care.
At NorthShore Kellogg Cancer Center, the comprehensive, compassionate care offered to our patients is enhanced by the location where that care is received. Patients receive treatment in environments customized to promote healing. They have three Kellogg Cancer Center locations to choose from that provide special amenities to ease the stress of treatment and create an environment to nurture strength and promote good health.

In September 2013, Kellogg Cancer Center expanded some of these services to NorthShore’s Gurnee Ambulatory Care Center at 7900 Rollins Road, Suite 1100. The new space allows extended access beyond the Kellogg Cancer Center locations at Evanston, Glenbrook and Highland Park Hospitals. Patients and their referring physicians now have the availability of cancer experts close to home in northern Lake County.

Referring physicians can send patients for oncology and hematology consultations at the Gurnee location where patients are seen by Kellogg Cancer Center’s skilled and knowledgeable staff. In addition to the expertise of the Center’s hematologists and oncologists, the location has the convenience of being close by, eliminating lengthy travel for patients living in the area.

The Gurnee Ambulatory Care Center provides additional benefits to patients, including on-site lab and radiology services.

**GURNEE EXPANSION—Extending the Reach of Kellogg Cancer Center’s Physicians**

At NorthShore Kellogg Cancer Center, the comprehensive, compassionate care offered to our patients is enhanced by the location where that care is received. Patients receive treatment in environments customized to promote healing. They have three Kellogg Cancer Center locations to choose from that provide special amenities to ease the stress of treatment and create an environment to nurture strength and promote good health.

In September 2013, Kellogg Cancer Center expanded some of these services to NorthShore’s Gurnee Ambulatory Care Center at 7900 Rollins Road, Suite 1100. The new space allows extended access beyond the Kellogg Cancer Center locations at Evanston, Glenbrook and Highland Park Hospitals. Patients and their referring physicians now have the availability of cancer experts close to home in northern Lake County.

Referring physicians can send patients for oncology and hematology consultations at the Gurnee location where patients are seen by Kellogg Cancer Center’s skilled and knowledgeable staff. In addition to the expertise of the Center’s hematologists and oncologists, the location has the convenience of being close by, eliminating lengthy travel for patients living in the area.

The Gurnee Ambulatory Care Center provides additional benefits to patients, including on-site lab and radiology services.

**ELECTRONIC MEDICAL RECORD**

Kellogg Cancer Center has a specialist in every type of cancer. Each specialist is connected in this process with a robust, nationally recognized Electronic Medical Record (EMR) system, effectively collecting all history, diagnostic tests and consultations to maintain a seamless experience that bridges our hospital campuses, medical offices and outpatient centers. This optimizes the continuity of care, allowing the specialists to focus on the patient.

In addition to optimizing communication between each patient’s multidisciplinary treatment team, NorthShore’s EMR system offers a host of other capabilities to more...
precisely treat patients. NorthShore’s Center for Personalized Medicine builds on many of these existing strengths that include a well-established molecular pathology program, medical genetics, genomic profiling, our EMR system, a vast tumor bank and a clinical trials program. The Center supports preventive, predictive and personalized care for patients with cancer and is a practical response to the paradigm shift in medicine—an increased emphasis on predicting and preventing disease, and providing personalized therapy when disease occurs.

NorthShore’s Center for Biomedical Research Informatics (CBRI) provides advanced quantitative strengths critical to the integration and analysis of this data for the individual patient as well as for research analysis.

### CLINICAL TRIALS

At Kellogg Cancer Center, researchers are an integral part of our multidisciplinary care team. Clinical and translational research being carried out at the NorthShore Research Institute ensures that the most promising breakthroughs in the lab are translated into clinical studies that may provide immediate benefit for patients.

Clinical trials allow access to new diagnostic tools and new therapies that may identify cancers earlier, prevent recurrence or minimize side effects. For those with advanced cancers, clinical trials may provide a ray of hope when no other treatment options exist.

We continue to expand our clinical trial offerings, which allow patients, through their approved participation, access to new treatments before they are widely available. Our growing partnerships with the Mayo Clinic and the University of Chicago Pritzker School of Medicine provide patients at Kellogg Cancer Center access to an even greater variety of trials.

### ACTIVE CLINICAL TRIALS

NorthShore patients have access to a broad array of clinical trials and potentially life-saving new treatments. Among our many current trials are:

<table>
<thead>
<tr>
<th><strong>Brain Tumors</strong></th>
<th><strong>Gastrointestinal Cancer</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gliogene 2009-0488</strong> International case-control study of malignant glioma</td>
<td><strong>EH12-267</strong> Pilot study of necadjuvant and adjuvant mFOLFRINOX in localized, resectable pancreatic adenocarcinoma</td>
</tr>
<tr>
<td><strong>“ACT IV” CDX110-04</strong> International, randomized, double-blind controlled study of rindopepimut/GM-CSF with adjuvant temozolomide in patients with newly diagnosed, surgically resected, EGFVRVIII-positive glioblastoma</td>
<td><strong>CALGB80005</strong> Randomized Phase II trial of PET scan-directed combined modality therapy in esophageal cancer</td>
</tr>
<tr>
<td><strong>“ReACT” CDX110-06</strong> Phase II study of rindopepimut/GM-CSF in patients with relapsed EGFVRVIII-positive glioblastoma</td>
<td><strong>UC12-0033</strong> Genotype-guided dosing study of mFOLFRINOX in previously untreated patients with advanced gastrointestinal malignancies</td>
</tr>
<tr>
<td><strong>BTTCl1-01</strong> Randomized, double-blind, placebo-controlled trial of laczosamide for seizure prophylaxis in patients with high-grade gliomas</td>
<td><strong>N1048</strong> Phase II trial of necadjuvant FOLFOX with selective use of combined modality chemoradiation versus preoperative combined modality chemoradiation for locally advanced rectal cancer patients undergoing low anterior resection with total mesorectal excision</td>
</tr>
<tr>
<td><strong>BTTCl2-01</strong> Phase II trial of oral pazopanib plus oral topotecan antiangiogenic therapy for recurrent glioblastoma multiforme without prior bevacizumab exposure and after failing prior bevacizumab</td>
<td><strong>RTOG 9025</strong> Natural history of postoperative cognitive function, quality of life and seizure control in patients with supratentorial low-risk grade II glioma</td>
</tr>
<tr>
<td></td>
<td><strong>N107C</strong> Phase III trial of postsurgical stereotactic radiosurgery (SRS) compared with whole-brain radiotherapy (WRT) for resected metastatic brain disease</td>
</tr>
<tr>
<td></td>
<td><strong>BTTCl1-02</strong> Phase II adaptive randomized trial of bevacizumab versus bevacizumab plus vornoxstat in adults with recurrent glioblastoma</td>
</tr>
<tr>
<td></td>
<td><strong>RTOG-1122</strong> Phase II, double-blind, placebo-controlled study of bevacizumab with or without AMG 386 in patients with recurrent glioblastoma or gliosarcoma</td>
</tr>
<tr>
<td></td>
<td><strong>A071101</strong> Phase II randomized trial comparing the efficacy of heat shock protein-peptide complex-96 (HSPPC-96) (NCT #725085, Alliance IND #15380) vaccine given with bevacizumab versus bevacizumab alone in the treatment of surgically resectable recurrent glioblastoma multiforme (GBM)</td>
</tr>
<tr>
<td></td>
<td><strong>A221101</strong> Phase III randomized, double-blind, placebo-controlled study of nusinersen (Nusinersen) to reduce cancer-related fatigue in patients with glioblastoma multiforme</td>
</tr>
<tr>
<td></td>
<td><strong>AbbVie/M12-356</strong> Phase I study evaluating the safety and pharmacokinetics of ABT-414 in combination with radiation plus temozolomide or temozolomide alone for subjects with glioblastoma multiforme</td>
</tr>
<tr>
<td></td>
<td><strong>Breast Cancer</strong></td>
</tr>
<tr>
<td></td>
<td><strong>LATTE</strong> Long-term anastrozole versus tamoxifen treatment effects</td>
</tr>
<tr>
<td></td>
<td><strong>MonaLEESA EH14-008</strong> Randomized, double-blind, placebo-controlled study of LEE011 in combination with letrozole for the treatment of postmenopausal women with hormone receptor positive, HER2-negative, advanced breast cancer who received no prior therapy for advanced disease</td>
</tr>
<tr>
<td></td>
<td><strong>UC13-1-000</strong> Carboplatin, gemcitabine and mitomycin-c for advanced breast cancer and recurrent or persistent epithelial ovarian cancer</td>
</tr>
<tr>
<td></td>
<td><strong>EH14-308: A011106</strong> ALTernate approaches for clinical stage II or III Estrogen Receptor positive breast cancer NeoAdjuvant TrEatment (ALTERNATE) in postmenopausal women: A Phase III study</td>
</tr>
<tr>
<td></td>
<td><strong>Cancer Control</strong></td>
</tr>
<tr>
<td></td>
<td><strong>EH13-444</strong> Cohort study to evaluate genetic predictors for aromatase inhibitor-induced musculoskeletal symptoms (AIMSS) (coined to accrual to the Caucasian cohort, and is only open to Asian/African American)</td>
</tr>
</tbody>
</table>

### Gynecologic Cancer

**GOG0238** Randomized trial of pelvic irradiation with or without concurrent weekly cisplatin in patients with pelvic-only recurrence of carcinoma of the uterine corpus

**GOG0274** (The Outback Trial) Phase III trial of adjuvant chemotherapy as primary treatment for locally advanced cervical cancer compared to chemoradiation alone
operative chemoradiotherapy +/– panitumumab

RTOG 0839

non-small cell lung cancer (NSCLC) after first-line

evaluating the efficacy and safety of standard of care +/–

with veliparib (ABT-888) or placebo as frontline therapy

Phase I and randomized Phase II double-blind

Randomized Phase II study of IV topotecan

UC12-1726

bioreceptor

a comprehensive thoracic tumor data registry and

The establishment and maintenance of

diagnosed multiple myeloma

and prednisone versus bortezomib, melphalan and

limited-stage diffuse large B-cell lymphoma (DLBCL)

Phase II trial of PET-directed therapy for

syndromes (MDS) and chronic myelomonocytic leukemia

vorinostat (NSC# 701852) for higher-risk myelodysplastic

acute myeloid leukemia

Assessment of novel molecular markers in

CALGB 8461

Cytogenetic studies in acute leukemia

CALGB 9665

The CALGB leukemia tissue bank

C20202

Assessment of novel molecular markers in

acute myeloid leukemia

S1117

Randomized phase II study of azacitidine in combination with Lenalidomide (NSC# 703813) versus azacitidine alone versus azacitidine in combination with vorinostat (NSC# 701852) for higher-risk myelodysplastic syndromes (MDS) and chronic myelomonocytic leukemia (CMML)

S1001

Phase II trial of PET-directed therapy for limited-stage diffuse large B-cell lymphoma (DLBCL)

Onyx/Claron 2012-005

2012-005 Randomized, open-label Phase III study of carboplatin, melphalan and prednisone versus bortezomib, melphalan and prednisone in transplant-ineligible patients with newly diagnosed multiple myeloma

Lung Cancer

EH98-136

The establishment and maintenance of a comprehensive thoracic tumor data registry and bioreceptor

UC12-1726

Randomized Phase II study of IV topotecan versus CRLX101 in the second-line treatment of recurrent small cell lung cancer

E2511

Phase I and randomized Phase II double-blind clinical trial of cisplatin and etoposide in combination with veliparib (ABT-888) or placebo as frontline therapy for extensive stage small cell lung cancer

MO22097

Open-label, randomized, Phase IIIb trial evaluating the efficacy and safety of standard of care +/- continuous bevacizumab treatment beyond progression of disease (PD) in patients with advanced non-squamous non-small cell lung cancer (NSCLC) after first-line treatment with bevacizumab plus a platinum doublet-containing chemotherapy

RTOG 0839

Randomized Phase II study of preoperative chemoradiotherapy +/- panitumumab (IND# 110152) followed by consolidation chemotherapy in potentially operable locally advanced (stage IIIA, N2+) non-small cell lung cancer

RTOG 0937

Randomized Phase II study comparing prophyllactic cranial irradiation alone to prophylactic cranial irradiation and consolidative extra-cranial irradiation for extensive disease small cell lung cancer (ED-SCLC)

Skin Cancer

E3612

Randomized Phase II trial of ipilimumab with or without bevacizumab in patients with unresectable stage III or stage IV melanoma

Breast Surgery

EH80-077

Establishment and maintenance of the NorthShore University HealthSystem comprehensive data registry for breast surgeries and breast tissue bank

EH09-139

Prospective observational trial of breast MRI in newly diagnosed breast cancers

EH12-014

Improved MRI images of high-risk breast lesions

EH10-244

Peritumoral mastectomy study

EH13-033

Continuation of nipple-sparing mastectomy incision locations

H12-335

Surgical decision making for noninvasive and invasive breast cancer

EH12-109

MRI cost analysis

EH09-387

Retrospective analysis of breast MRI performed at NorthShore University HealthSystem

EH13-408

Phase II study of neoadjuvant letrozole for postmenopausal women with estrogen receptor positive DCIS

EH14-020

Piloting an in-visit decision aid for contralateral prophylactic mastectomy—Alliance

EH13-261

Retrospective review of breast cancer patients with multiple primary tumors at NorthShore University HealthSystem

EH11-277

Continuation of retrospective analysis of breast MRI performed at NorthShore University HealthSystem for newly diagnosed breast cancer

EH14-346

Alliance MRI clinical trial

Colorectal Surgery

EH10-333

Phase III prospective, randomized trial comparing laparoscopic-assisted resection versus open resection for rectal cancer

EH12-468

N1048 Phase II/III trial of neoadjuvant FOLFOX with selective use of combined modality chemoradiation versus preoperative combined modality chemoradiation for locally advanced rectal cancer patients undergoing low anterior resection with total mesorectal excision

Endocrine Surgery

EH11-069

Use of partial wave spectroscopy to determine whether follicular thyroid lesions are benign or malignant

EH12-111

Validation of thyroid malignancy risk nomogram in patients with benign indeterminate and malignant pathology

EH12-310

The occurrence of BRAF mutation in thyroid cancer: A retrospective review

EH14-263

Epigenetic chromatin conformation changes in peripheral blood to differentiate benign versus malignant thyroid lesions

EH14-068

Establishment of a multidisciplinary comprehensive database of patients for thyroid nodular disorders

Pancreatic Surgery

EH08-197T

Clinical pancreatic cancer database

EH12-060

Genomics of pancreatic cancer

EH11-302

Predictors of malignancy of pancreatic neuroendocrine tumors

EH02-186

Pancreatic tissue bank

EH02-046

Establishment and maintenance of comprehensive database

EH09-474

Analysis of predictors of postoperative morbidity and long-term survival following pancreatic surgery

EH10-332

Comparison of complications and readmission rates following laparoscopic and open distal pancreatectomy procedures

EH13-296

Retrospective analysis of association of sarcopenia with frailty and surgical outcomes in patients with pancreatic pathology

EH13-362

Outcomes of pancreatic cancer

EH13-089

Investigating gene profiles of colorectal hepatic metastases

EH13-433

Comprehensive assessments for clinical care and surgical management among individuals with pancreatic pathology

Plastic Reconstructive Surgery

EH11-124

Development and maintenance of a comprehensive breast reconstruction registry at NorthShore University HealthSystem

EH12-321

Investigation of disparities in the delivery of breast reconstruction among older patients who undergo mastectomy

EH-14-271

Does the use of ADM (acellular dermal matrix) improve breast mound projection when compared to total muscle coverage?

EH14-045

Retrospective study of pain control using Exparel® versus bupivacaine pain pump in implant-based breast reconstruction

Thoracic Surgery

EH98-136

Establishment and maintenance of a comprehensive data registry and tissue bank for lung and esophageal malignancies

EH12-430

CALGB 140503 Phase III randomized trial of lobectomy versus sublobar resection for small (≤2cm) peripheral non-small cell lung cancer

EH13-155

Best practice in VATS (video-assisted thoracoscopic surgery) lobectomy for lung cancer: Database management and analytics for a longitudinal study to optimize care for lung cancer patients

EH13-387

Non-small cell tissues sample study

EH14-324

Retrospective chart review study to look at postoperative complications in stage I and II lung cancer patients who had a video-assisted thoracoscopic procedure (lobectomy or segmentectomy)

Urologic Surgery

EH09-043

Multi-phase study of active surveillance for men with clinical stage T1c or T2a localized prostate cancer

EH10-089

Periprosthetic fat as a promoter of prostate cancer progression

EH01-129

Tissue, blood and urine banking for the Robert H. Lurie Comprehensive Cancer Center prostate tissue bank

EH10-379

Three-dimensional transrectal ultrasound for prostate cancer diagnosis and surveillance

EH12-433

Genetics of prostate cancer aggressiveness

EH13-049

Compliance and outcomes with penile rehabilitation in men after prostate cancer treatment

EH14-285

Fat and its relationship to prostate, bladder and kidney cancer

EH13-088

Mind-body health in uro-oncology

EH13-434

Transforming diagnosis of aggressive prostate cancer via nanocytology of field carcinogenesis

EH13-250

Cancer susceptibility: The ICGP Study (International Consortium for Prostate Cancer Genetics)

EH14-133

The lived experience of men with sexual dysfunction after prostate cancer treatment

EH14-031

Genomic markers in transitional cell cancer of the bladder, renal pelvis and ureter: Sample acquisition for methods development and discovery

For more information, visit northshore.org/cancer or call (847) 570-2112

NorthShore University HealthSystem

Page 11
INTEGRATIVE MEDICINE AND SUPPORT SERVICES

INTEGRATIVE MEDICINE
A growing number of patients with cancer are seeking ways to enhance their conventional oncology treatment, and many are discovering the benefits of integrative medicine and complementary therapies. Kellogg Cancer Center patients at Evanston, Glenbrook and Highland Park Hospitals have access to experienced integrative medicine practitioners specializing in acupuncture, Traditional Chinese Medicine and therapeutic massage in a tranquil, private setting.

Integrative medicine providers work collaboratively with other members of the oncology team and communicate seamlessly through the shared Electronic Medical Record (EMR) system.

Acupuncture and body work therapies have been associated with a positive impact on a range of quality-of-life issues for patients with cancer including increased energy, strength, appetite, restful sleep, digestive function, and relief of pain, nausea and dry mouth. Laser acupuncture is also available for cancer patients, particularly those dealing with lymphedema or other contraindications for needles. The low-level laser is a safe and effective, needle-less form of treatment, which offers benefits similar to those of traditional acupuncture.

Led by Medical Director Leslie Mendoza Temple, MD, NorthShore’s program is an active member of the international Consortium of Academic Health Centers for Integrative Medicine, one of the most well-respected academic collectives for integrative medicine in the world. NorthShore Integrative Medicine presented its business and clinical oncology model at the 2013 International Congress for Clinicians in Complementary and Integrative Medicine in Chicago, receiving excellent reviews for their presentation.

Thanks to ongoing philanthropic support, including generous donations from former Kellogg Cancer Center patient Vickie Burke, NorthShore is able to provide some free or sliding-scale fee services to patients who could not otherwise afford integrative medicine services, which are not always reimbursed by insurance.

Burke credits the acupuncture and bodywork therapies she received while going through chemotherapy with providing both mental and physical relief, and she encourages other patients to consider these complementary treatments.

PATIENT SUPPORT SERVICES
Individual, patient-centered care at Kellogg Cancer Center includes a wide array of support services designed to help patients maintain the best physical and emotional health throughout their entire cancer journey.

Nutrition and Dietary
Good nutrition is essential to good health. And while undergoing treatment for cancer, maintaining a healthy diet is especially important and sometimes challenging. Registered dietitians with specialized training in oncology are available for consultation and can work with patients and families to develop nutrition goals and meal plan strategies throughout therapy and into survivorship.

All Kellogg Cancer Center patients receive a non-invasive electronic screen which provides referrals to the Kellogg nutrition team and allows timely, supportive care to patients. Patients or family members who would like to learn more about nutrition may also take advantage of this valuable resource.

Kellogg Cancer Center’s nutrition team also participates in many community outreach activities directed toward the prevention of cancer. Active partnerships with the Cancer Wellness Centers and support groups such as the local chapter of the Us Too Prostate Cancer Education & Support Network and Pancreatic Cancer Foundation help educate the public about the relationship between nutrition and cancer.

Psychosocial Support
Kellogg Cancer Center’s dedicated Psychosocial Oncology Program features clinical social workers and professional counselors working collaboratively with patients and families to help manage emotional and practical needs to improve quality of life.

Many support groups are offered for patients and caregivers, including new groups initiated this year for patients with brain tumors and their caregivers, and those living with advanced cancers and their caregivers. Last year, 71 support groups for breast, prostate, head and neck, and other cancers were offered to our patients and caregivers.

A growing partnership with Cancer Wellness Centers brought some of their programs to NorthShore addressing an array of topics, including healthy sleep, talking to children and adolescents about cancer, couples and cancer, sexuality and cancer, and caring for the caregiver.

Kellogg Cancer Center is thrilled to now partner with Imerman Angels, a nonprofit organization that matches patients and caregivers with one-on-one mentors. Our patients are serving as mentors and are being matched with mentors who mirror their age, gender and type of cancer.

All patients with cancer at NorthShore are screened for distress, now considered the sixth vital sign. If they self-identify or score for significant distress, a member of the psychosocial team will follow up with them. Additionally, our psychosocial support team is engaged in clinical research. Stephanie Horgan, LCSW, is partnering with psychologist Tina Gremore, PhD, on “CouplesCare,” a clinical trial aimed at understanding optimal communication between couples undergoing care for head and neck cancer.

Financial Advocacy
Patient financial advocates meet with new patients who need assistance with a variety of issues. A team of precertification specialists work to have treatment plans preauthorized for insurance payments and can help answer patients’ billing questions.
For patients who demonstrate significant financial need, financial advocates help coordinate reduced-cost care through state programs, NorthShore’s charity care and/or pharmaceutical companies. Financial advocates work as key members of the oncology team.

Pharmacy
The Kellogg Cancer Center pharmacy team consists of specially trained and nationally certified oncology pharmacists. Each Kellogg Cancer Center location has a dedicated traditional oncology pharmacy as well as an oral chemotherapy pharmacy, and the pharmacy staff partners with physicians and nurses to develop individualized medication plans.

NorthShore’s oncology pharmacists are important resources for patients and are there to help with questions about medications as well as symptom or side effect management.

The pharmacy is a key partner in quality improvement projects and clinical trials management.

Patient Education
Knowledge is power, and patient education is an important element of Kellogg Cancer Center. Thanks to the generous philanthropic support of Debra Korman and the Ira M. Korman Family, a new Resource Center was established for patients at NorthShore Evanston Hospital in memory of former patient Ira Korman.

Specially selected books, periodicals and DVDs can be checked out, and two computer stations are equipped with carefully curated links to helpful websites. The Myra Rubenstein Weis Health (MRW) Resource Center at NorthShore Highland Park Hospital also provides educational resources for patients and families looking to stay well-informed.

New patients at Kellogg Cancer Center have a one-on-one educational meeting with a collaborative nurse to review their treatment plan and obtain answers to their questions. A comprehensive Patient Education Binder is available online or in print form for new patients.

NorthShore sponsors an “Understanding Cancer” series of educational programs and is active in community education and outreach.

LIFE Cancer Survivorship
NorthShore’s Living in the Future (LIFE) Cancer Survivorship Program establishes survivorship as a distinct phase of care in the cancer continuum and offers free services to all Kellogg Cancer Center patients. Under the direction of Carol A. Rosenberg, MD, the LIFE Program helps survivors plan for post-treatment life based on the unique risks, exposures and needs of each individual. LIFE provides one-on-one care in the creation of a survivorship care plan, MRW Survivorship 101 seminars and specialized group support. To find out more about LIFE, visit www.northshore.org/LIFE or call (847) 926-5818.

With the philanthropic support of the Coleman Foundation, Dr. Rosenberg has created the Living in the Future Cancer Survivorship course. The curriculum provides emerging health professionals, as well as those who are in long-standing practice, with a foundation of attitude, knowledge and skills related to survivorship care.

For more information, visit northshore.org/cancer or call (847) 570-2112

ADVANCE CARE PLANNING
Eliciting and documenting a patient’s end-of-life views helps maintain comfort, dignity and peace of mind for patients and their families at an often challenging and stressful time of life. NorthShore Kellogg Cancer Center’s Advance Care Planning (ACP) initiative was designed to improve quality of life for advanced cancer patients and help ensure that they receive the kind of care they desire.

Led by medical oncologist Jennifer Obel, MD, the ACP initiative at NorthShore already has trained many physicians, nurses and social workers about how to comfortably discuss ACP and end-of-life issues with patients. New patients at Kellogg Cancer Center are introduced to ACP with questions about their short- and long-term goals. Then, in a follow-up education session, patients are given an ACP guidebook to help as they contemplate various medical scenarios. When necessary or requested, social work is consulted for families needing additional assistance with these decisions.

The latest phase of the initiative involves educating residents through an innovative curriculum created in partnership with the University of Chicago Pritzker School of Medicine designed to improve residents’ proficiency in ACP outpatient discussions. The curriculum includes four components—an online module, a lecture by a physician with ACP expertise, a video-recorded ACP discussion with a patient and a supervised outpatient encounter with a patient. Residents’ response to the new curriculum has been uniformly positive in providing a much-needed hands-on experience.

Carol Flanagan (left) and Dr. Carol Rosenberg help those in the survivorship phase of cancer care with NorthShore’s Living in the Future (LIFE) Program, which offers free services to all Kellogg Cancer Center patients.
NCDB DATABASES

NorthShore has played an important role as an alpha and then beta site analyzing patient data for the nationally recognized National Cancer Data Base (NCDB), a clinical oncology database jointly sponsored by the American College of Surgeons and the American Cancer Society. With data from close to 3.5 million breast cancer cases collected, the database has been a rich source of productive research for NorthShore’s Katharine Yao, MD, Director of the Breast Surgical Program, David J. Winchester, MD, and colleagues, who have written more than 12 peer-reviewed publications and 20 presentations, earning recognition including posters of exceptional merit. Recent studies have focused on treatment trends with respect to surgery and radiation, looking at issues such as partial breast radiation and bilateral mastectomy. Three research fellows have been dedicated to this work. New NorthShore efforts led by Mihir Bhayani, MD, have included studies related to head and neck tumors, and future efforts will expand studies to include other organ sites including lung, gastrointestinal and thyroid cancers.

Access to this data-rich, vital database has not only advanced NorthShore’s research portfolio and outcomes-driven care, it has also helped physician-scientists at Kellogg Cancer Center further their knowledge to benefit patients all across the country.
Robert Marsh, MD
- Member, Eastern Cooperative Oncology Group, GI Committee
- Editorial Work: Southern Medical Journal, Cancer, Rogers Medical Intelligence Solutions CME Programs, American Journal of Clinical Oncology, Journal of the Pancreas, Lancer Oncology, European Journal of Surgical Oncology, Public Library of Science
- Invited Discussant, "Recent Innovations and Cutting-Edge Technologies in Gastroenterology and Urology," 2nd International Conference on Gastroenterology & Urology (Gastroenterology—2013) 2013
- Castle Connolly America’s Top Doctors 2013–2014

Gustavo Rodriguez, MD
- Medical Advisory Board, Chicago Ovarian Cancer Alliance, 2003–present
- Advisory Board, Gilda’s Club, Chicago, 2004–present
- Member, Cancer Prevention and Control Committee, Gynecologic Oncology Group, 1997–present
- Department of Defense Program Project Grant: Development of Vitamin D and Progesterin for the Chemoprevention of Endometrial and Ovarian Cancer (Project Director), 2010–2014
- Castle Connolly America’s Top Doctors 2013–2014
- Chicago Magazine Top Doctors 2014

Mark Talamonti, MD (continued)
- “Pearls for Avoiding Complications During Pancreatocoduodenectomy for Pancreatic Cancer,” Americas Hepato-Pancreatico-Biliary Association (AHPBA) Annual Meeting, Miami, FL, Feb. 20, 2014 (Presenter and Panel Discussant)
- “Update on Neoadjuvant Therapy for Pancreatic Cancer,” Society of Surgical Oncology Annual Meeting, Boston, MA, April 10, 2014 (Invited Discussant)

Jan Nowak, MD
- Association for Molecular Pathology, Economic Affairs Committee, 2009–present; Co-Chair, 2013–present
- College of American Pathologists Center Committee, Pathology and Laboratory Quality Center, 2009–present
- Committee Liaison and Expert Committee Member, ASCP/CAP/AMP Molecular Markers for the Evaluation of Colorectal Cancer Project
- Committee Liaison to HER2 Testing Guidelines for Gastric Cancer Project, College of American Pathologists (CAP) Personalized Healthcare Committee (PHC)
- CAP Personalized Healthcare Committee (PHC)
- Council on Governmental and Professional Affairs, PHC Working Group, 2012–present
- PHC Short Presentations in Emerging Concepts (SPEC) Working Group
- PHC Rapid Response Team Working Group
- Archives of Pathology and Laboratory Medicine, Associate Editor for Clinical Pathology, 2012–present
- CAP Guideline Metrics Expert Panel, Member, 2014–present
- CAP/ASCO Member Advisory Group, 2014–present
- Pathology Coding Caucus—AMP Representative 2005–2008; 2013–present

Richard Prinz, MD
- Vice Chairman of Surgery, NorthShore University HealthSystem, Evanston, IL, October 2009–present
- Board Member-at-Large, Central Surgical Association Foundation, 2009–2013
- Moderator: Interdisciplinary Management of Neuroendocrine Tumors (NETs), 2nd Annual New York Masters Course in Endocrine Surgery, Icahn School of Medicine at Mount Sinai, New York, NY, Dec. 6, 2013
- Pancreatectomy, Surgical Technique: Pearls and Pitfalls/Preventing Complications, 2nd Annual New York Masters Course in Endocrine Surgery, Icahn School of Medicine at Mount Sinai, New York, NY, Dec. 6–7, 2013

Daniel Shevrin, MD
- Member, ECOG GU Committee, 1997–present
- Community Co-Chair, ECOG GU Committee, 2005–present
- Member, ECOG Symptom Management Committee, 1996–present
- Member, Executive Committee, Prostate SPORE, Northwestern University, 2002–present
- Co-Director, Clinical Core, Prostate SPORE, Northwestern University, 2003–present
- Co-Director, Chicago Prostate Group Prostate Cancer Clinical Trials Consortium, 2009–present
- Castle Connolly America’s Top Doctors 2013–2014

Prem Seth, PhD
- Member, Cancer Gene Therapy Editorial Board
- Member, Cancer Biology and Therapy Editorial Board

Richard Prinz, MD
- Vice Chairman of Surgery, NorthShore University HealthSystem, Evanston, IL, October 2009–present
- Board Member-at-Large, Central Surgical Association Foundation, 2009–2013
- Moderator: Interdisciplinary Management of Neuroendocrine Tumors (NETs), 2nd Annual New York Masters Course in Endocrine Surgery, Icahn School of Medicine at Mount Sinai, New York, NY, Dec. 6, 2013
- Pancreatectomy, Surgical Technique: Pearls and Pitfalls/Preventing Complications, 2nd Annual New York Masters Course in Endocrine Surgery, Icahn School of Medicine at Mount Sinai, New York, NY, Dec. 6–7, 2013

Jose Velasco, MD
- After 26 years as Chairman of Surgery at Skokie Hospital, Dr. Velasco will retire from NorthShore University HealthSystem, as of December 2014. We thank Dr. Velasco for his many contributions and years of dedicated service.

Elaine Lee Wade, MD
- President, NorthShore Regional Division, American Cancer Society, 2007–present
- Castle Connolly America’s Top Doctors 2013–2014

David J. Winchester, MD
- Director, Rice Foundation, 1998–present
- American Joint Committee on Cancer (AJCC), 2004–present; Finance Committee, 2008–present; Vice Chairman, 2011–present
- Member of Editorial Board, American Journal of Clinical Oncology, 2006 – present, Associate Editor, 2009–present
- Member of Editorial Advisory Board, American Family Physician, 2012–present
- Journal of Surgical Oncology, Section Editor, 2014–present
- Chicago Magazine Top Doctors 2014
- Castle Connolly America’s Top Doctors 2013–2014
- “Enrolling Patients on Clinical Trials,” American College of Surgeons, San Francisco, CA, Oct. 28, 2014 (Panel Co-Moderator)
- Member of Editorial Board, Breast Diseases: A Year Book Quarterly, 1998–present
- Visiting Professorship, Leveraging the Electronic Medical Record for the Cancer Patient, Dartmouth College Geisel School of Medicine, 2013

Katharine Yao, MD
- Alliance Prevention Committee
- Secretary, Chicago Surgical Society
- American Board of Surgery, Certifying Exam Committee, Disease Site: Breast
- American Society of Breast Surgeons Publications Committee
- Vice-Chair, Quality Improvement Committee, National Accreditation Program for Breast Centers

For more information, visit northshore.org/cancer or call (847) 570-2112
2013 Cancer Data Summary

Incidence of Cancer 2013

In 2013, 4,005 new cancer cases were accessioned into the NorthShore University HealthSystem (NorthShore) Cancer Registry. Of those, 3,719 cases (93 percent) were analytic. By definition, analytic cases are those patients newly diagnosed with malignant neoplasm and/or patients who have received all or part of their first course of treatment at one of our four Hospitals. The remaining 286 cases (7 percent) were non-analytic. Non-analytic cases are patients initially diagnosed and treated at another facility who now are receiving treatment at NorthShore for progression or recurrence of their disease. **Details by site are provided in Table 1.**

Class of Case 2013

Class of Case divides cases into two groups, analytic cases (Class 00-22) and non-analytic cases (Class 30-49).

Class 00-14, which account for 3,158 cases, were those malignancies diagnosed at one of our four Hospitals. Once diagnosed with cancer, 2,926 (93 percent) of our patients remained at NorthShore for their treatment. Class 20-22, totaling 561 cases, were diagnosed elsewhere and referred here for treatment. Class 30-40, a total of 286 cases, were diagnosed and treated elsewhere and referred here for treatment of a recurrence or progression of disease.

Overall Top Five NorthShore Sites

Breast cancer continues to be our top site representing 22 percent of the total analytic cases seen at NorthShore. The next most frequent cancers seen were: lung (9 percent), prostate (8 percent), melanoma (6 percent) and non-Hodgkin lymphoma (5 percent). These top five sites represent 51 percent of all newly diagnosed cases. Total percentage may not add up to 51 percent due to rounding.

Distribution by American Joint Commission on Cancer (AJCC) Stage for the Top Five Sites Seen at NorthShore

Cancer diagnoses are classified into four or five stages depending on the site. Each stage represents how far the tumor has spread from the organ or site of origin, where an increasing value represents more tumor involvement or extension. Eighty-eight percent of our breast cancers were diagnosed at an early stage (stages 0, 1 and 2), reflecting the National (85 percent) trend toward early detection. Forty-five percent of our lung cancers (National: 31 percent), 75 percent of our prostate cancers (National: 81 percent) and 43 percent of our non-Hodgkin lymphomas (National: 40 percent) were also diagnosed with early-stage disease. With the exception of prostate cancer, for each of the top sites seen at NorthShore, detection at an early stage was higher than that seen nationally. National data was supplied by the 2014 NCDB, *Commission on Cancer, ACoS Benchmark Reports (2011 data)*, the latest year available. Data for NorthShore is from diagnosis year 2013. **See Table 2.**
### Table 1: Incidence of Cancer—2013 Data Summary

<table>
<thead>
<tr>
<th>Primary Site Analytic</th>
<th>Non-Analytic</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Cavity &amp; Pharynx</td>
<td>70</td>
<td>8</td>
<td>78</td>
</tr>
<tr>
<td>Lip</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Tongue</td>
<td>25</td>
<td>3</td>
<td>28</td>
</tr>
<tr>
<td>Salivary Glands</td>
<td>9</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Floor of Mouth</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Gum &amp; Other Mouth</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Nasopharynx</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Tonsil</td>
<td>14</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>Oropharynx</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Hypopharynx</td>
<td>7</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Other Oral Cav &amp; Pharynx</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Digestive System</td>
<td>525</td>
<td>48</td>
<td>573</td>
</tr>
<tr>
<td>Esophagus</td>
<td>24</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>Stomach</td>
<td>63</td>
<td>8</td>
<td>71</td>
</tr>
<tr>
<td>Small Intestine</td>
<td>18</td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td>Colon Excluding Rectum</td>
<td>145</td>
<td>10</td>
<td>155</td>
</tr>
<tr>
<td>Rectum &amp; Rectosigmoid</td>
<td>63</td>
<td>5</td>
<td>68</td>
</tr>
<tr>
<td>Anus, Anal Canal &amp; Anorectum</td>
<td>18</td>
<td>9 27 1%</td>
<td></td>
</tr>
<tr>
<td>Liver &amp; Intrahepatic Bile Duct</td>
<td>27</td>
<td>3 30 1%</td>
<td></td>
</tr>
<tr>
<td>Gallbladder</td>
<td>9</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Other Biliary</td>
<td>18</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>Pancreas</td>
<td>131</td>
<td>4</td>
<td>135</td>
</tr>
<tr>
<td>Retroperitoneum</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Peritoneum, Omentum &amp; Mesentery</td>
<td>5  1 6 0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Digestive Organs</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Respiratory System</td>
<td>371</td>
<td>16</td>
<td>387</td>
</tr>
<tr>
<td>Nose, Nasal Cavity &amp; Middle Ear</td>
<td>1</td>
<td>0 0%</td>
<td></td>
</tr>
<tr>
<td>Larynx</td>
<td>17</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Lung &amp; Bronchus</td>
<td>353</td>
<td>13</td>
<td>366</td>
</tr>
<tr>
<td>Bones &amp; Joints</td>
<td>7</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Soft Tissue</td>
<td>25</td>
<td>8</td>
<td>33</td>
</tr>
<tr>
<td>Skin Excluding Basal &amp; Squamous</td>
<td>242</td>
<td>5 247 6%</td>
<td></td>
</tr>
<tr>
<td>Melanoma—Skin</td>
<td>233</td>
<td>5</td>
<td>238</td>
</tr>
<tr>
<td>Other Non-Epithelial Skin</td>
<td>9</td>
<td>0 9 0%</td>
<td></td>
</tr>
<tr>
<td>Basal &amp; Squamous Skin</td>
<td>0</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Breast</td>
<td>830</td>
<td>27</td>
<td>857</td>
</tr>
<tr>
<td>Female Genital System</td>
<td>197</td>
<td>43</td>
<td>240</td>
</tr>
<tr>
<td>Cervix Uteri</td>
<td>19</td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td>Corpus &amp; Uterus, NOS</td>
<td>107</td>
<td>6</td>
<td>113</td>
</tr>
<tr>
<td>Ovary</td>
<td>49</td>
<td>8</td>
<td>57</td>
</tr>
<tr>
<td>Vagina</td>
<td>2</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Vulva</td>
<td>12</td>
<td>13</td>
<td>25</td>
</tr>
<tr>
<td>Other Female Genital Organs</td>
<td>8</td>
<td>0 8 0%</td>
<td></td>
</tr>
<tr>
<td>Male Genital System</td>
<td>317</td>
<td>36</td>
<td>353</td>
</tr>
<tr>
<td>Prostate</td>
<td>306</td>
<td>36</td>
<td>342</td>
</tr>
<tr>
<td>Testis</td>
<td>7</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Penis</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Urinary System</td>
<td>272</td>
<td>13</td>
<td>285</td>
</tr>
<tr>
<td>Urinary Bladder</td>
<td>152</td>
<td>12</td>
<td>164</td>
</tr>
<tr>
<td>Kidney &amp; Renal Pelvis</td>
<td>107</td>
<td>1</td>
<td>108</td>
</tr>
<tr>
<td>Ureter</td>
<td>7</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Other Urinary Organs</td>
<td>6</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Eye &amp; Orbit</td>
<td>10</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Brain &amp; Other Nervous System</td>
<td>207</td>
<td>11 218 5%</td>
<td></td>
</tr>
<tr>
<td>Brain</td>
<td>55</td>
<td>3</td>
<td>58</td>
</tr>
<tr>
<td>Cranial Nerves Other Nervous System</td>
<td>152</td>
<td>8 160 4%</td>
<td></td>
</tr>
<tr>
<td>Endocrine System</td>
<td>212</td>
<td>13</td>
<td>225</td>
</tr>
<tr>
<td>Thyroid</td>
<td>152</td>
<td>7</td>
<td>159</td>
</tr>
<tr>
<td>Other Endocrine Including Thymus</td>
<td>60</td>
<td>6 66 2%</td>
<td></td>
</tr>
<tr>
<td>Lymphomas</td>
<td>188</td>
<td>4</td>
<td>192</td>
</tr>
<tr>
<td>Hodgkin Lymphoma</td>
<td>15</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Non-Hodgkin Lymphoma</td>
<td>173</td>
<td>4</td>
<td>177</td>
</tr>
<tr>
<td>Myeloma</td>
<td>41</td>
<td>5</td>
<td>46</td>
</tr>
<tr>
<td>Leukemia</td>
<td>106</td>
<td>11</td>
<td>117</td>
</tr>
<tr>
<td>Mesothelioma</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Kaposi Sarcoma</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>94</td>
<td>13</td>
<td>107</td>
</tr>
<tr>
<td>Total</td>
<td>3,719</td>
<td>286</td>
<td>4,005</td>
</tr>
</tbody>
</table>

### Table 2: Stage of Diagnosis—2011/2013 Data

Comparison of National Cancer Data Base (NCDB) to NorthShore Data

<table>
<thead>
<tr>
<th>Stage</th>
<th>NorthShore (%)</th>
<th>NCB (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>18.8%</td>
<td>20.2%</td>
</tr>
<tr>
<td>I</td>
<td>43.7%</td>
<td>41.3%</td>
</tr>
<tr>
<td>II</td>
<td>25.8%</td>
<td>23.8%</td>
</tr>
<tr>
<td>III</td>
<td>9.2%</td>
<td>8.3%</td>
</tr>
<tr>
<td>IV</td>
<td>2.4%</td>
<td>3.9%</td>
</tr>
<tr>
<td>NA</td>
<td>0.0%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Unknown</td>
<td>0.1%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage</th>
<th>NorthShore (%)</th>
<th>NCB (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0.3%</td>
<td>0.3%</td>
</tr>
<tr>
<td>I</td>
<td>33.7%</td>
<td>22.0%</td>
</tr>
<tr>
<td>II</td>
<td>10.5%</td>
<td>8.6%</td>
</tr>
<tr>
<td>III</td>
<td>17.8%</td>
<td>20.0%</td>
</tr>
<tr>
<td>IV</td>
<td>36.8%</td>
<td>43.7%</td>
</tr>
<tr>
<td>OC</td>
<td>0.0%</td>
<td>0.1%</td>
</tr>
<tr>
<td>NA</td>
<td>0.0%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Unknown</td>
<td>0.8%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage</th>
<th>NorthShore (%)</th>
<th>NCB (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>27.4%</td>
<td>23.4%</td>
</tr>
<tr>
<td>I</td>
<td>47.1%</td>
<td>57.1%</td>
</tr>
<tr>
<td>II</td>
<td>11.4%</td>
<td>10.1%</td>
</tr>
<tr>
<td>III</td>
<td>12.8%</td>
<td>6.1%</td>
</tr>
<tr>
<td>IV</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Unknown</td>
<td>1.3%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage</th>
<th>NorthShore (%)</th>
<th>NCB (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>43.8%</td>
<td>25.7%</td>
</tr>
<tr>
<td>I</td>
<td>46.8%</td>
<td>42.3%</td>
</tr>
<tr>
<td>II</td>
<td>4.3%</td>
<td>13.1%</td>
</tr>
<tr>
<td>III</td>
<td>3.0%</td>
<td>8.3%</td>
</tr>
<tr>
<td>IV</td>
<td>2.1%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Unknown</td>
<td>0.0%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage</th>
<th>NorthShore (%)</th>
<th>NCB (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>I</td>
<td>29.5%</td>
<td>25.1%</td>
</tr>
<tr>
<td>II</td>
<td>13.3%</td>
<td>14.4%</td>
</tr>
<tr>
<td>III</td>
<td>16.2%</td>
<td>16.8%</td>
</tr>
<tr>
<td>IV</td>
<td>37.0%</td>
<td>32.6%</td>
</tr>
<tr>
<td>NA</td>
<td>2.3%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Unknown</td>
<td>1.7%</td>
<td>9.7%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Totals may not equal 100 due to rounding.

Source: 2013 NCDB, Commission on Cancer

*2011 latest data available as of 9/3/2014
Improving Outcomes

LIFE Survivorship Program Proven To Be Valuable Patient Resource

The Institute of Medicine and National Research Council 2005 report, *From Cancer Patient to Cancer Survivor: Lost in Transition*, recommends that patients with cancer who are completing their course of treatment be “provided with a comprehensive care summary and follow-up plan that is clearly and effectively explained.” The recommendation suggested that these plans would help cancer survivors avert getting “lost” in the transitions from the oncology care they received during treatment to the next phases of their life or stages of their disease course.

Our Living in the Future (LIFE) Cancer Survivorship Program at NorthShore University HealthSystem, established by Carol Rosenberg, MD, in 2007, is the first comprehensive survivorship program to be developed and implemented in northern Illinois. The LIFE Survivorship Program was initially offered to breast cancer patients, but has since encompassed all cancer survivors in our cancer care continuum.

In 2014 Dr. Rosenberg conducted a retrospective study of all 1,713 patients (2007-2014) who had received a risk adapted visit (RAV) and a survivorship care plan (SCP) to evaluate the degree to which a RAV promotes individualized healthcare and self-management as survivors transition from active treatment to follow-up care.

Patients anonymously completed a post-RAV evaluation on the day of their visit and then another evaluation at least one year after their RAV. Respondents to the immediate post-RAV survey scaled statements as strongly agree/ agree/ disagree/ strongly disagree. The results of these evaluations were reviewed with the following results:

- 94 percent felt more confident in their ability to communicate information about their cancer treatments to other members of their healthcare team
- 90 percent felt more comfortable recognizing signs and symptoms to report to their healthcare provider
- 98 percent had a better appreciation for potentially helpful community programs and services (Percent represents strongly agree and agree)

In reviewing the evaluation of the program after at least one year, respondents were asked if the survivorship care plan had been useful in any of the five following ways:

1. To summarize medical information
2. To reinforce follow-up care
3. To recognize symptoms to report
4. To identify lifestyle practices that promote health
5. For assistance in identifying local resources for support

- 100 percent responded that it had been useful in at least 1 way
- 97 percent responded that it had been useful in at least 2 ways
- 93 percent responded it had been useful in at least 3 ways
- 91 percent responded that it had been useful in at least 4 ways
- 85 percent responded that it had been useful in all 5 ways

Also, 72 percent of respondents reported that they had discussed their SCP with their primary care physician or other healthcare provider, 97 percent stated they made at least one positive lifestyle change, 89 percent attended at least one LIFE health promotion seminar, and 80 percent continue to work on wellness goals.

Participation in a LIFE survivorship visit following treatment helps survivors construct a useful understanding of their cancer experience to guide self-care behavior and has proven to be a valuable patient resource.

Oncology Conferences

**Breast Cancer Conferences**
NorthShore Evanston Hospital
Kellogg Room G868, Mondays, 7 a.m.
NorthShore Glenbrook and Highland Park Hospitals Videocast

**Colorectal Cancer Conference**
NorthShore Evanston Hospital
Kellogg Room G868, Fridays, 7 a.m.
NorthShore Glenbrook and Highland Park Hospitals Videocast

**Genitourinary Cancer Conferences**
NorthShore Evanston Hospital
Kellogg Room G868, 1st and 3rd Thursdays, 5:30 p.m.
NorthShore Glenbrook and Highland Park Hospitals Videocast

**Gynecology Cancer Conferences**
NorthShore Evanston Hospital
Kellogg Room G868, Thursdays, 7 a.m.
NorthShore Glenbrook and Highland Park Hospitals Videocast

**Hematology/Pathology Conferences**
NorthShore Evanston Hospital Pathology Conference Room
Wednesdays, 8 a.m.
NorthShore Glenbrook and Highland Park Hospitals Videocast

**Neuro-Oncology Cancer Conferences**
NorthShore Evanston Hospital
Kellogg Room G868, 1st and 3rd Thursdays, 8 a.m.
NorthShore Glenbrook and Highland Park Hospitals Videocast

**Hepatic Biliary Pancreas Cancer Conferences**
NorthShore Evanston Hospital
Kellogg Room G868, Fridays, 7 a.m.
NorthShore Glenbrook and Highland Park Hospitals Videocast

**Neuro-Oncology Cancer Conferences**
NorthShore Evanston Hospital
Kellogg Room G868, 1st and 3rd Thursdays, 5:30 p.m.
NorthShore Glenbrook and Highland Park Hospitals Videocast

**Thoracic Cancer Conferences**
NorthShore Evanston Hospital
Kellogg Room G868, Tuesdays, noon
NorthShore Glenbrook and Highland Park Hospitals Videocast
Physician Teams

Brain & Spine/Neurologic
Julian E. Bailes, MD
Shakeel Chowdhry, MD
Dennis Groothuis, MD
Nina Martinez, MD
Ryan Merrell, MD

Breast
Ermilo Barrera, MD
Michael A. Howard, MD
Lawrence Krause, MD
Teresa Murray Law, MD
Barbara Loris, MD
Douglas Merkel, MD
Catherine Pesce, MD
Mark Sisco, MD

Gastrointestinal
Janardan Khandekar, MD
Tricia Moo-Young, MD
Richard Prinz, MD
David J. Winchester, MD

Endocrine
Janardan Khandekar, MD
Tricia Moo-Young, MD
Richard Prinz, MD
David J. Winchester, MD

Gynecologic
Elena Diaz, MD
Jean Hurtreau, MD
Carolyn Kirschner, MD
Gustavo Rodriguez, MD

Head & Neck
Bruce Brockstein, MD
Mihir Bhayani, MD
Nicholas Campbell, MD
Thomas Hensing, MD
Aaron Friedman, MD

Hematology
Matthew Adess, MD
Alla Gimelfarb, MD
David Grinblatt, MD
Britt Hanson, DO
Jagoda Jasielec, MD

Lung/Thoracic
Nicholas Campbell, MD
Alla Gimelfarb, MD
Thomas Hensing, MD
John Howington, MD
Ki Wan Kim, MD

Medical Genetics
Peter Hulick, MD
Shashanna Ndong, MD

Melanoma/Skin Cancer
Ermilo Barrera, MD
Bruce Brockstein, MD
Britt Hanson, DO
Sarah Kasprovicz, MD
Bernhard Ortel, MD
Jason Waldinger, MD
David J. Winchester, MD
Katharine Yao, MD

Radiation Oncologists
William Bloomer, MD
Ranjeet Nanda, MD
Vathsala Raghavan, MD
Arif Shaikh, MD

Sarcoma/Bone
Marshall Baker, MD
Ermilo Barrera, MD
Bruce Brockstein, MD
Mark Talamonti, MD
David J. Winchester, MD

Physician Directory

Matthew Adess, MD
Medical Director, Highland Park Kellogg Cancer Center
Expertise: GI Oncology; Benign and Malignant Hematopathy
Locations: GBK, GR, HPK

Julian E. Bailes, MD
Chair, Department of Neurosurgery
Co-Director, NorthShore Neurological Institute
Expertise: Brain and Spine Tumor Surgery
Locations: EVM, HPS

Marshall Baker, MD
Expertise: Pancreatic Cancer and Disease Management;
Liver and Biliary Surgery; Oncologic Surgery; General Surgery
Locations: EVK, EVS, GBM, VH

Ermilo Barrera, MD
Expertise: Breast Cancer and Disease Management;
Melanoma; Sarcoma
Locations: GBK, GBM

Mihir Bhayani, MD
Expertise: Head and Neck Cancers
Locations: EVK, VH

William Bloomer, MD
Chair, Department of Radiation Oncology
Expertise: Breast Cancer, Prostate Cancer, Lung and Gastrointestinal Cancer
Locations: EVK, HPK

Michael Blum, MD
Expertise: Urologic Oncology; Sexual Dysfunction; Infertility
Locations: EV, HPS

Charles Brendler, MD
Vice Chairman, Department of Surgery
Expertise: Prostate Cancer and Prostate Health
Location: GBK

Bruce Brockstein, MD
Division Head, Hematology/Oncology Medical Director, Kellogg Cancer Center
Expertise: Head and Neck; Melanoma; Sarcoma
Locations: EVK, HPK

Nicholas Campbell, MD
Expertise: Lung Cancer; Esophageal Cancer; Head and Neck Cancers
Locations: EVK, HPK

Continued >

Remembering Physician Leader Nicholas A. Vick, MD

Dr. Nicholas A. Vick

Kellogg Cancer Center lost one of its foundational figures with the death this October of Nicholas A. Vick, MD, the Ruth Cain Ruggles Chair of Neurology, Emeritus. The founder of NorthShore’s Department of Neurology, Dr. Vick was recognized as an early leader in the international field of neuro-oncology and was a long-standing champion for generations of grateful patients, and a mentor and role model to many fellow physicians.

His career-long interest in brain tumors led him to publish more than 100 articles and serve on editorial boards of several journals and various NIH (National Institutes of Health) study sections. He was a passionate teacher—graduating classes at Northwestern University Medical School voted him outstanding teacher awards nine times in the 31 years he was on faculty there, before becoming Clinical Professor of Neurology at the University of Chicago Pritzker School of Medicine. He was a recipient of the Alumni Award for Distinguished Service from the University of Chicago.

His contributions to NorthShore are too numerous to list but include service with distinction as President of the Professional Staff and as the inaugural Chairman of the Physician Philanthropy Champions Committee. He was very active at the national level, including serving as a past Director of the American Board of Neurology and Psychiatry, and a past Vice President of the American Neurological Association.

Always a staunch advocate for Kellogg Cancer Center and its patients, Dr. Vick will be missed by many, but will not soon be forgotten.
<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Expertise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shakeel Chowdhry, MD</td>
<td>GBK</td>
<td>Expertise: Brain and Spine Tumor Surgery; Stereotactic Radiosurgery</td>
</tr>
<tr>
<td>Peter Colegrove, MD</td>
<td>GBK</td>
<td>Expertise: Sexual Dysfunction; Urologic Oncology; Incontinence; Prostate Health</td>
</tr>
<tr>
<td>Elena Diaz, MD</td>
<td>GBK</td>
<td>Expertise: Cervical Cancer; Endometrial Cancer; Fallopian Tube Cancer; Ovarian Cancer; Uterine Cancer; Vaginal Cancer; Vulvar Cancer</td>
</tr>
<tr>
<td>Aaron Friedman, MD</td>
<td>GBK</td>
<td>Expertise: Benign and Malignant Laryngeal Tumors; Vocal Cord Cancer</td>
</tr>
<tr>
<td>Alla Gimelfarb, MD</td>
<td>GBK</td>
<td>Expertise: Benign and Malignant Hematology</td>
</tr>
<tr>
<td>David Grinblatt, MD</td>
<td>GBK</td>
<td>Expertise: Benign and Malignant Hematology</td>
</tr>
<tr>
<td>Dennis Groothuis, MD</td>
<td>SK</td>
<td>Program Director, Neuro-oncology</td>
</tr>
<tr>
<td>Britt Hanson, DO</td>
<td>GBK</td>
<td>Expertise: Melanoma; Genitourinary Cancer; Benign and Malignant Hematology</td>
</tr>
<tr>
<td>Brian Helfand, MD, PhD</td>
<td>GBK</td>
<td>Expertise: Prostate Cancer; Benign Prostatic Hyperplasia; Laparoscopic Surgery; Robotic Assisted Surgery; Laser Surgery</td>
</tr>
<tr>
<td>Thomas Hensing, MD</td>
<td>GBK</td>
<td>Expertise: Lung Cancer; Esophageal Cancer; Head and Neck Cancer</td>
</tr>
<tr>
<td>Michael A. Howard, MD</td>
<td>GBK</td>
<td>Expertise: Plastic Surgery; Breast Reconstruction</td>
</tr>
<tr>
<td>John Howington, MD</td>
<td>GBK</td>
<td>Division Head, Thoracic Surgery; Expertise: Minimally Invasive Thoracic Surgery; Lung and Esophageal Cancer; Mediastinal Tumors Locations: EVK, HPK</td>
</tr>
<tr>
<td>Peter Huick, MD</td>
<td>GBK</td>
<td>Division Head, Medical Genetics; Expertise: Medical Genetics</td>
</tr>
<tr>
<td>Jean Hurteau, MD</td>
<td>SK</td>
<td>Expertise: Cervix Cancer; Endometrial Cancer; Fallopian Tube Cancer; Ovarian Cancer; Uterine Cancer; Vaginal Cancer</td>
</tr>
<tr>
<td>Jagoda Jasielec, MD</td>
<td>EVK</td>
<td>Expertise: Benign and Malignant Hematology</td>
</tr>
<tr>
<td>Lynne Kaminer, MD</td>
<td>GBK</td>
<td>Division Head, Hematology; Expertise: Benign and Malignant Hematology</td>
</tr>
<tr>
<td>Sarah Kasprowicz, MD</td>
<td>GBK</td>
<td>Expertise: Cutaneous Complications of Cancer Therapy</td>
</tr>
<tr>
<td>Thomas Keeler, MD</td>
<td>GBK</td>
<td>Expertise: Urolithiasis; Urologic Oncology; Incontinence</td>
</tr>
<tr>
<td>Janardan Khandekar, MD</td>
<td>GBK</td>
<td>Director, Center for Molecular Medicine; Expertise: Endocrine; Breast Cancer; Location: EVK</td>
</tr>
<tr>
<td>Ki Wan Kim, MD</td>
<td>SK</td>
<td>Expertise: Thoracoscopy; Pulmonary Resection; Lung Cancer</td>
</tr>
<tr>
<td>Carolyn Kirschner, MD</td>
<td>GBK</td>
<td>Expertise: Obstetrics/ Gynecology; Expertise: Medical Genetics</td>
</tr>
<tr>
<td>Lawrence Krause, MD</td>
<td>GBK</td>
<td>Expertise: Breast Cancer; Head and Neck Cancers</td>
</tr>
<tr>
<td>Teresa Murray Law, MD</td>
<td>GBK</td>
<td>Expertise: Breast Cancer; Prostate Cancer; Genitourinary Cancer; Location: EVK, GR, HPK</td>
</tr>
<tr>
<td>Barbara Loris, MD</td>
<td>GBK</td>
<td>Expertise: Breast Health; Breast Disease and Surgery; General Surgery</td>
</tr>
<tr>
<td>Robert Marsh, MD</td>
<td>GBK</td>
<td>Expertise: GI Oncology; General Surgery</td>
</tr>
<tr>
<td>Nina Martinez, MD</td>
<td>GBK</td>
<td>Expertise: Brain Cancer; Brain Metastasis; Brain Tumor; Neurologic Complications of Cancer; Tumor in the Central Nervous System (Brain or Spine)</td>
</tr>
<tr>
<td>Michael McGuire, MD</td>
<td>GBK</td>
<td>Division Head, Urology; Expertise: Prostate Cancer; Bladder Cancer; Kidney Cancer; Testis Cancer</td>
</tr>
<tr>
<td>Douglas Merkel, MD</td>
<td>GBK</td>
<td>Expertise: Breast Cancer; General Surgery</td>
</tr>
<tr>
<td>Ryan Merrell, MD</td>
<td>GBK</td>
<td>Expertise: Brain Cancer; Brain Tumor; Neurologic Complications of Cancer; Tumor in the Central Nervous System (Brain or Spine)</td>
</tr>
<tr>
<td>Tricia Moo-Young, MD</td>
<td>GBK</td>
<td>Expertise: Minimally Invasive Approaches to Endocrine Disorders; Thyroid and Parathyroid Surgery; Adrenal Disorders; Pancreatic Exocrine; Cancer and Disease Management</td>
</tr>
<tr>
<td>Joseph Muldoon, MD</td>
<td>GBK</td>
<td>Expertise: Colon and Rectal Surgery; Inflammatory Bowel Disease; General Surgery</td>
</tr>
<tr>
<td>Ranjeev Nanda, MD</td>
<td>GBK</td>
<td>Expertise: Stereotactic Radiosurgery; Brain Tumors; Head and Neck Cancers</td>
</tr>
</tbody>
</table>
Shashanna Ndong, MD
Expertise: Medical Genetics
Location: EVS, GBK

Kristian Novakovic, MD
Expertise: Kidney Cancer; Prostate Cancer; Minimally Invasive Techniques: Advanced Laparoscopy and daVinci Robot
Locations: GBK, HPS, VH

Jennifer Obel, MD
Expertise: GI Oncology; Breast Cancer
Locations: EVK, GBK

Bernhard Ortel, MD
Division Head, Dermatology
Expertise: Skin Cancer
Location: SKM

Sangtae Park, MD, MPH
Expertise: Single Port Laparoscopic Surgery; Robotic Surgery; Urolithiasis; Urologic Oncology
Locations: EV, GB

Catherine Pesce, MD
Expertise: Breast Cancer; Breast Health; Breast Disease and Surgery
Locations: HPS, HPK

Richard Prinz, MD
Expertise: Endocrine Surgery; Thyroid, Parathyroid, and Pancreatic Surgery and Management; Biliary and General Surgery
Locations: EVS, HPS, MP

Vathsala Raghavan, MD
Expertise: Breast Cancer; Gynecologic Oncology; Head and Neck; Thyroid Cancers
Locations: GB, HPK

Gustavo Rodriguez, MD
Division Head, Gynecologic Oncology
Expertise: Gynecologic Oncology
Locations: EVK, HPK

Arif Shaikh, MD
Expertise: Stereotactic Radiosurgery; Head and Neck; Lung Cancer; Gynecologic and Breast Tumors
Locations: EV, GBK

Daniel Shevrin, MD
Medical Director, Glenbrook Kellogg Cancer Center
Expertise: Prostate Cancer; Genitourinary Cancer
Locations: EV, GB

Mark Sisco, MD
Expertise: Plastic Surgery; Breast Reconstruction
Location: NMB

James Spitz, MD
Expertise: Colon and Rectal Surgery; Colonoscopy; General Surgery
Locations: GBM, HPS

Mark Talamonti, MD
Department Chair, Surgery
Expertise: Gastrointestinal Surgical Oncology; Pancreatic Cancer; Primary and Metabolic Liver Tumors; Neuroendocrine Tumors; Foregut Cancers of the Esophagus
Location: EVK

Michael Ujiki, MD
Expertise: General Surgery; Weight Loss Surgery; Minimally Invasive Surgery; Laparoscopic Surgery; Endoscopic Revisionsal Surgery
Locations: EVS, GBM

Elaine Lee Wade, MD
Expertise: Breast Cancer; Benign Hematology
Locations: EVK, GBK

Jason Waldinger, MD
Expertise: Skin Cancer
Location: HPM

David J. Winchester, MD
Division Head, Surgical Oncology
Expertise: Surgical Oncology with Emphasis on Breast, Endocrine, Melanoma and Sarcoma
Locations: EVK, EVS, GBB, GBM

Katharine Yao, MD
Director, Breast Program
Expertise: Breast Cancer; Breast Health; Breast Disease and Surgery; Melanoma
Location: EVK

Locations

Evanston Hospital (EH)
2650 Ridge Avenue
Evanston, IL 60201

Evanston Kellogg Cancer Center (EVK)
2650 Ridge Avenue
Evanston, IL 60201

Evanston Specialty Suites (EVS)
1000 Central Street, Suite 800
Evanston, IL 60201

Glenbrook Kellogg Cancer Center (GBK)
2180 Pfingsten Road, Suite 2000
Glenview, IL 60026

Glenbrook Medical Building (GBM)
2050 Pfingsten Road, Suite 128
Glenview, IL 60025

Gurnee Ambulatory Care Center (GR)
7900 Rollins Road
Gurnee, IL 60031

Highland Park Hospital (HPH)
777 Park Avenue West, Room 1260
Highland Park, IL 60035

Highland Park Kellogg Cancer Center (HPK)
757 Park Avenue West, Suite 1810
Highland Park, IL 60035

Highland Park Specialty Care Center (HPS)
757 Park Avenue West, Suite 2850
Highland Park, IL 60035

Mount Prospect Medical Building (MP)
1329 Wolf Road
Mount Prospect, IL 60056

Northbrook Medical Building (NMB)
501 Skokie Boulevard
Northbrook, IL 60062

NorthShore Medical Group (HPM)
1160 Park Avenue West, Suite 1N
Highland Park, IL 60035

NorthShore Medical Group (SKM)
9933 Woods Dr., Suite 200
Skokie, IL 60077

NorthShore Neurological Institute (EVM)
1000 Central Street, Suite 880
Evanston, IL 60201

Skokie Ambulatory Care Center (SK)
9650 Gross Point Road, Suite 3000
Skokie, IL 60076

Vernon Hills Specialty Suites (VH)
225 North Milwaukee Avenue
Vernon Hills, IL 60061

For more information, visit northshore.org/cancer or call (847) 570-2112
2014 Cancer Committee

Chairman
David J. Winchester, MD, FACS
Chief, Division of Surgical Oncology
Clinical Professor, Surgery

Vice Chairman
Bruce Brockstein, MD
Division Head, Hematology/Oncology
Kellogg-Scanlon Chair of Oncology
Medical Director, Kellogg Cancer Center
Clinical Associate Professor, Medicine

Physician Membership*

Matthew Adess, MD
Senior Clinician Educator
Hematology/Oncology

Marshall Baker, MD, FACS
Clinical Associate Professor
Surgical Oncology

Kristina Drabkin, DO
Clinical Assistant Professor
Oncology Rehab Program

David Grinblatt, MD
Clinical Associate Professor
Hematology/Oncology

Thomas Hensing, MD
Clinical Associate Professor
Hematology/Oncology

Carolyn Kirschner, MD, FACS
Clinical Assistant Professor
Gynecologic Oncology

Ross Levy, MD
Clinical Educator
Dermatology

Ryan Merrell, MD
Clinical Assistant Professor
Neuro-Oncology

Geraldine Newmark, MD
Vice Chairman, Outpatient Imaging
Clinical Assistant Professor
Diagnostic Radiology

Kristan Novakovic, MD
Clinical Assistant Professor
Urologic Surgery

Jennifer Obel, MD
Senior Clinician Educator
Hematology/Oncology

James L. Padgett
Clinical Assistant Professor
Pathology

Vathsala T. Raghavan, MD
Senior Clinician Educator
Radiation Oncology

Carol A. Rosenberg, MD
Director, LIFE Program
Cancer Survivorship Program
Clinical Associate Professor, Medicine

Gail Rosseau, MD
Clinical Assistant Professor
Neurological Surgery

Arif Shaik, MD
Clinical Assistant Professor
Radiation Oncology

Elaine Lee Wade, MD
Associate Director of the
Patricia G. Nolan Center
for Breast Health
Clinical Assistant Professor
Hematology/Oncology

Katharine Yao, MD, FACS
Director, Breast Program
Clinical Associate Professor
Surgical Oncology

Ancillary Membership

Yousuf Azhar
Health Information Technology

Tyler A. Bauer, MBA, MA, LCPC
Assistant Vice President, Medical Group
NorthShore Kellogg Cancer Center

Jonella Black, PT, MS
Physical Therapy

Jennifer Briggs, MSW
Regional Director, Health Initiatives
American Cancer Society

Agnes Brugger, RN
Surgical Research

George Carro, RPh, MS, BCOP
Senior Director, Oncology Pharmacy

Katie Durbin, LCSW
OncoPsychosocial Program

Carolyn Edwards, RN, OCN, CTR
Assistant Director of the
Patricia G. Nolan Center
for Breast Health
Clinical Assistant Professor
Hematology/Oncology

Katharine Yao, MD, FACS
Director, Breast Program
Clinical Associate Professor
Surgical Oncology

Katharine Yao, MD, FACS
Director, Breast Program
Clinical Associate Professor
Surgical Oncology

* All academic affiliations are with the
University of Chicago Pritzker School of Medicine

For more information, please visit northshore.org/cancer or call (847) 570-2112