Overview of Clinical Quality Measures and Outcomes
Through our exceptional health care services, we reveal the healing presence of God.
When you do something really well, people seek you out. And when you do it really well within the local community, you become part of the fabric of life there. SSM Cancer Care has been doing just that in fulfilling its mission of providing the best in comprehensive cancer diagnosis and treatment close to home for thousands of St. Louis-area residents.

Our vision is to provide high-quality, advanced cancer care in convenient locations. We recognize that seeking out and traveling long distances to obtain needed treatment only adds to a patient’s burden. We seek to lighten that burden by offering everything a patient needs, delivered in a compassionate manner, within the local community. All locations are accredited by the Commission on Cancer of the American College of Surgeons for our comprehensive program designed to treat the entire person – physical, emotional, and spiritual, as well as the many needs of the patients’ families.

SSM Cancer Care physicians have been educated in some of the nation’s most revered clinical settings including M.D. Anderson Cancer Center, Memorial Sloan Kettering Cancer Center, the Mayo Clinic, Saint Louis University and Washington University. They then bring that knowledge back to us in the form of best practices and keen clinical skills that enhance the patient experience even more. The fact that these fine physicians have chosen to practice with SSM Cancer Care speaks volumes about our reputation and provides a solid foundation on which to build the best possible diagnostic and treatment capabilities. When combined with the state-of-the-art equipment and facilities available at SSM Cancer Care locations, patients reap great benefits.

In fact, I am proud to point out that there’s not much in the way of modern cancer care that we cannot provide through SSM Cancer Care programs. We enjoy powerful and recent technological innovations in radiation and other clinical areas. Our industry-leading technologies include: TomoTherapy®, digital mammography, PET CT, MammoSite®, brachytherapy, breast MRI with biopsy capability, stereotactic breast biopsy, multi-slice CTs, image-guided radiation therapy (IGRT), intensity-modulated radiation therapy (IMRT), electronic health record (EHR), computer-aided detection (CAD) and more. We have our CyberKnife® technology which is a targeted radiosurgery system that provides a non-invasive alternative to surgical treatment of tumors.

In addition SSM Cancer Care has an affiliation with Saint Louis University that benefits our patients and physicians by allowing for our participation in clinical research trials. In this way, SSM Cancer Care is not only providing current best practices, but is helping to transform and improve the future of cancer treatment. Research trials will be conducted in SSM Cancer Care facilities, and subjects will enjoy the same convenience that they do to obtain other services.

This type of activity points to the high level of care coordination that is a hallmark of SSM Cancer Care. Our physicians and other clinical specialists and staff communicate throughout the system with a powerful electronic health record (EHR) that provides complete and instant access from any Internet-equipped computer. Notes, lab results and images are shared and care is coordinated by a team of providers who are intent on ensuring that a patient receives appropriate and complete care without the unnecessary duplication of services. The EHR also collects information that can be examined for important data trends and outcomes, allowing for internal monitoring and adjustments to guarantee the use of best practices in an efficient setting.

Compassion, Quality, Convenience. These are the watchwords by which we guide SSM Cancer Care, and we look forward to continuing this tradition and changing lives along the way. We remain committed to our mission: “Through our exceptional health care services, we reveal the healing presence of God.”
SSM Breast Care is making great strides to improve the patient experience across the SSM Cancer Care network. The Breast Care Steering Committee meets every two months to review mammogram, biopsy and cancer statistics at each site in order to identify issues that need improvement. This multidisciplinary group includes physicians, nurses and ancillary personnel. Together, we strive to provide excellence for our patients and care that is beyond expected standards.

Nurse navigators, also known as breast health specialists, work at each location and are integral to caring for patients who require biopsy. They communicate with the ordering physician, are often present for the biopsy procedure, and follow up with the patient. They also assist with the coordination and facilitation of breast cancer support groups. The nurse navigators document ordering physicians’ preferences and continually add to a growing database of information that helps streamline the ordering process.

Core needle biopsy has become the care standard at our facilities, and only rarely does a patient require surgical biopsy. Across SSM Breast Care, our core needle biopsy rate is over 94 percent and is currently better than the national average. See page 15.

Along the same line, minimally invasive staging of the axilla is becoming standard procedure. SSM Breast Care has implemented a policy for all patients with a BIRAD category 4c or 5 mammogram/ultrasound that calls for an axillary ultrasound as well. This allows needle biopsy of any suspicious lymph nodes, often in conjunction with the breast lesion biopsy. A positive lymph node saves the patient the surgical step of a sentinel lymph node biopsy, and is particularly useful when chemotherapy is prescribed prior to definitive breast surgery in a neoadjuvant fashion.

The U.S. Preventive Services Task Force (USPSTF) made controversial recommendations in 2009 that suggested women of average risk begin annual screening mammograms at age 50. Along with many respected national organizations that focus on cancer care, SSM Breast Care disagrees with this recommendation. We continue to recommend annual screening mammography starting at age 40 for most women. Those identified to have a higher risk may require earlier annual exams and/or breast MRI.

Screening rates have decreased across the network, while our statistics indicate an increase in patients presenting with Stage II and III disease. We maintain that the only way to improve this diagnostic statistic and create better patient outcomes is to encourage annual screening mammography beginning at age 40.
When diagnosing and treating the lung and esophagus, SSM Cancer Care physicians and staff can choose from a variety of techniques that promise accuracy and efficacy. These include lung-volume reduction surgery, esophageal cancer treatment, lung cancer surveillance, video-assisted thoracic surgery (VATS), thoracoscopic surgery, stereotactic radiosurgery, and robotic surgery.

We offer the CyberKnife® Stereotactic Radiosurgery System, a noninvasive outpatient treatment for otherwise inaccessible lung lesions. This procedure has become known for its highly effective targeting technology while offering a low risk and complication rate. Using the technology, we are able to target and deliver radiation to tumors while sparing surrounding tissue.

Treating lung cancer patients with CyberKnife, as opposed to more invasive or less precise procedures, results in improved quality of life for the patient and increased accuracy and access for the physician. The CyberKnife clinical team is outstanding. Specialists who work together include a surgeon, radiation oncologist, medical oncologist, physicist, radiation therapy technicians, nurses and other healthcare professionals.

Patients needing a more invasive form of treatment may be candidates for VATS, which saves the patient from traditional thoracotomy or sternotomy. Patients presenting with Stage I and II cancers that require lobectomy with lymphadenectomy and those with peripheral lung tumors that can be removed by wedge resection may be VATS candidates. The procedure uses CT visualization, and percutaneous CT-guided localization wires help identify tumorous lung nodules. In this way, the wires are used to assist VATS in cases that require sublobectomy resection.

Minimally invasive laparoscopic procedures are also offered through SSM Cancer Care. Patients undergoing laparoscopy generally heal faster and experience less post-surgical pain. Complication rates are lower, hospital stays are shorter and patients sooner return to normal activities.

Using this range of treatment options, our physicians are able to provide positive outcomes for our patients. Cases are discussed and reviewed by our Thoracic Oncology Steering Committee, which brings together the expertise and experience of our clinical team to collaborate on each case in order to ensure excellent care. We are proud to offer the most recent advances that have made lung cancer treatment more effective, offering hope to our patients.

We are proud to offer the most recent advances that have made lung cancer treatment more effective, offering hope to our patients.
Working under the banner of the South Region, SSM St. Mary’s Health Center recently received full three-year certification as a “community hospital comprehensive cancer program” from the American College of Surgeons Commission on Cancer.

SSM St. Clare Health Center, the other comprehensive health care facility in the South Region, boasts some of the newest innovations in patient care and communication, and we anticipate future Commission on Cancer certification will be given to South Region facilities as a single entity, recognizing our shared leadership and technologies.

Beyond the SSM St. Mary’s and SSM St. Clare Health Centers, the South Region works with SSM Cancer Care colleagues on multidisciplinary task forces through which we share best practices and provide collaborative services. For instance, our breast care program involves cooperative efforts between breast surgeons, diagnosticians and nurse navigators across the entire St. Louis and St. Charles County area. Similarly, we’re working to create a collaborative lung cancer program that will combine the best of the entire SSM Cancer Care family.

The South Region provides patients with some of the best diagnostic and treatment technologies available. These include our use of endoscopic ultrasound, brachytherapy and MammoSite®. Surgeons specializing in breast care perform procedures in our facilities, offering a depth of knowledge and experience.

We also continue to develop ancillary services across facilities. Offering patient support services and access to national resources are among the priorities we are pursuing as a group. And we are taking our expertise to patients outside the immediate service area through outreach at Hermann Regional Hospital in Hermann Area District Hospital in Hermann, MO, where patients can see our physicians at specialty outreach clinics. The early success of these efforts are leading us to consider expanding the outreach program to other rural facilities.

The South Region’s recent growth also has resulted in the need for additional clinical space. We are planning for a new outpatient center that will allow for continued growth of our cancer care services.

Finally, with continued growth comes the need for additional physicians and mid-level providers. We are pleased to welcome several new colleagues to SSM Cancer Care in the South Region.
Dan Luedke, MD, Cancer Committee Director, SSM Cancer Care, St. Charles County

St. Charles County is becoming a hub for exciting advances in cancer care. SSM St. Joseph Health Center, SSM St. Joseph Medical Park and SSM St. Joseph Hospital West offer many of the most advanced treatments available, performed by some of the area’s most talented physicians.

One particular program that is unique to this area is the International Early Lung Cancer Action Program (I-ELCAP). SSM Cancer Care at St. Joseph Health Center is currently the only facility in the state to serve as an I-ELCAP screening site. However SSM Cancer Care at St. Clare Health Center will become a screening site in 2012.

At SSM St. Joseph Health Center, I-ELCAP has been underway for five years and is an international collaborative effort to study early diagnosis of lung cancer using low-dose screening CT of the chest paired with smoking cessation programming. To date, we have conducted about 500 screening exams at SSM St. Joseph Health Center and have detected about nine early lung cancers as a result. These patients were diagnosed with Stage I disease, underwent lung resection, and are now disease-free. I-ELCAP data show that patients treated for Stage I disease have a 78 percent survival rate at five years, compared to a 15 percent five-year survival rate for those who are not diagnosed early.

In addition, CT radiation doses have decreased, and our ability to read the images accurately has increased in the past several years, resulting in fewer procedures performed on benign cases. Our clinicians are trained to read scans using the I-ELCAP method, which results in more accurate interpretation, fewer unnecessary procedures and better care for patients who are diagnosed with malignancies.

Another example of the technological advancement available to our physicians and patients is the endobronchial ultrasound, a relatively new procedure that allows us to perform transbronchial needle aspiration. Using this non-surgical, outpatient technique, we can obtain tissue or fluid samples from the lungs and nearby lymph nodes. No incisions are needed as we insert the bronchoscope through the mouth. A special endoscope with an ultrasound processor and a fine-gauge aspiration needle are guided through the trachea. Rapid onsite pathologic evaluations are possible with this fast and accurate procedure.

Within our service area, we continue to strive for standardized care that meets the guidelines of the National Comprehensive Cancer Network for diagnosis, treatment and follow-up care. Our goal is to create an environment in which our entire team provides consistent, high-quality care. Our patients can expect the same excellent care experience at any of our facilities.

To this end, we focus on a multidisciplinary approach to care coordination, and the system-wide electronic health record allows us to be consistent in monitoring and providing care across facilities. Thus, we are creating a multidisciplinary and multicentric system, but one in which quality is consistently high. Demonstrated outcomes are shared in order to improve practice across the network, and performance standards help guide our clinical practice.

We feel confident that continuation of these efforts will further enhance the physician and patient experience, making SSM Cancer Care locations in St. Charles County outstanding places to provide and receive cancer care.

Our goal is to create an environment in which our entire team provides consistent, high-quality care. Our patients can expect the same excellent care experience at any of our locations.
Serving as chairman of Medical Oncology and Hematology at SSM DePaul Health Center, I am pleased and proud to work with a diverse team of experts in fields including pathology, radiation oncology, radiology, surgery, palliative care, pulmonary medicine, medical oncology, pastoral care, oncology data services, breast imaging services, hospice, clinical education, nutrition, community health and care coordination. The fine physicians, nurses and other specialists on this multidisciplinary team work together, recognizing the importance of all to benefit the individual patient.

The final value listed at right, community, is evident in the engaged and vigorous medical setting in which we are privileged to operate. Our clinical colleagues understand the benefits of collaboration and communication from diagnosis through follow-up care. This collaborative process is evident in the individualized care approaches we create for our patients.

The oncology committee follows standards mandated by the Commission on Cancer (CoC), meeting regularly as required. Oncology data services tracks demographics, site specification, histology, staging, treatment and survival information. The data collected is readily available and allows analysis of anatomical sites, stage, histology, procedures, treatment and survival. It is used to analyze current statistical trends, evaluate patient care and treatment, and predict future geographic growth.

Patients also are followed for the purpose of continuous medical surveillance, documenting subsequent treatments and/or recurrence throughout the patient’s life. This data is compiled and used to provide end results and survival statistics. We are proud to note that the follow-up rate continually meets CoC requirements.

Physicians are well aware that cancer care continually changes to include an array of new technologies, procedures, medications and supportive services. As health care professionals, we must understand and be prepared to incorporate these advances into our practice for our patients’ benefit. We are able to share the latest findings and developments in our various specialties in order to enhance the patient experience and provide superior care in a coordinated fashion. Multidisciplinary cancer conferences and our annual oncology symposium keep physicians abreast of new developments that may affect their work. In addition, physicians communicate regularly with colleagues via electronic messaging and information sharing.

Our facilities boast some of the most advanced technologies currently available, such as the da Vinci® Surgical System for minimally invasive, robotic-assisted procedures; the TomoTherapy Hi-Art System®, which delivers a very sophisticated form of intensity-modulated radiotherapy (IMRT), and combines treatment planning, CT image-guided patient positioning and treatment delivery into one integrated system; and MammoSite®, a patented process in which radiation is delivered into the breast after a tumor has been removed through a lumpectomy.

The resources provided through SSM Cancer Care are available to our clinicians and patients, creating a complete service line with the breadth and depth needed to successfully diagnosis and treat virtually any type of malignancy.

The continuum of support following treatment — such as counseling, discharge planning, hospice, nutrition, pastoral care and support groups — is also crucial to patient success and are an important component of every overall cancer care plan.

Residents of the northern portion of the SSM Health Care - St. Louis service area are well served through the continuing efforts of the fine physicians and staff who provide SSM Cancer Care services at DePaul Health Center.
**Multidisciplinary Care**

*and the Tumor Conference*

Regardless of the type of cancer diagnosed for a patient or the facility where that patient is seen, SSM Cancer Care brings together a team of experienced medical professionals to ensure the best possible care and outcomes.

Physicians, nurses and ancillary staff all share a commitment to excellence and recognize that a collaborative approach is the best way to achieve their goals. Therefore, communication between specialists, nursing staff, therapists, home health providers and support staff is crucial and is facilitated through both electronic and personal means.

Through the system wide electronic health record implemented by SSM Health Care in 2008, any physician can access patient records through a secure Internet-based portal. All lab results, diagnostic and treatment notes are accessible, and physicians also can communicate through the system. In addition to the EHR, physicians have access to a Picture Archiving and Communication System (PACS) to facilitate the sharing of diagnostic imaging. Patients, nurses and doctors no longer have to suffer from the time wasted tracking down images or searching for missing paper charts and reports. With PACS and the EHR, all information collected on any patient is available the moment it is entered into the system.

Face-to-face communication remains valuable, regardless of electronic advances. Therefore, SSM Cancer Care physicians schedule regular “tumor conferences” during which individual cases are reviewed and discussed by a multidisciplinary team. These meetings are an important part of the patient care process and allow for all specialists to agree upon the most effective treatment approach, considering individual patient circumstances.

In addition, tumor conference participants can literally bring to the table information gleaned from the latest research findings in their specialty fields and suggest potential participation in clinical trials underway through our research partners, such as Saint Louis University School of Medicine. The ability to sit down and share such current and relevant information enhances the coordinated care our patients receive.

Poet John Donne wrote, “No man is an island.” When it comes to providing the best in cancer care, no physician is an island, and SSM Cancer Care is dedicated to making sure no physician feels marooned.
In 2005, SSM St. Mary’s Health Center was the first local SSM Cancer Care/SSM Breast Care facility to implement the “nurse navigator” for breast care program, which has been successful since the beginning. Over time, SSM Cancer Care invested in developing this patient-centered program, and it is now an important resource for our patients as they travel through the diagnosis and treatment process.

These specially trained individuals work with patients from the first sign of a potential cancer diagnosis and help them travel the sometimes daunting path of diagnosis, treatment and follow-up care. Patients come to rely on their nurse navigators as primary sources of information, assistance and support. Therefore, we find that many patients desire treatment at the same facilities that their navigators staff.

One of the first major signs of the program's success has been a notable increase in the retention rate for surgical care at facilities that pair patients with nurse navigators. In 2005, the retention rate was about 35 percent; in 2011 it was about 90 percent. This statistic alone speaks volumes about the importance of the nurse navigator program.

While patient benefits are clear, referring physicians also appreciate the coordinated approach the nurse navigators provide. As a result, the program has become more popular with physicians and has experienced steadily increasing volume.

The nurse navigator program is still young, yet we know that since the program’s inception patients experience a shorter period of time between initial positive screening results and cancer diagnosis. Whereas women used to wait about a month to receive a definitive diagnosis after a positive screening mammogram, the current length of time is only about a week. Patients experience less anxiety as a result, and the nurse navigators note physician preferences in ordering so that the entire process is streamlined.

In 2008, after noting the initial success of the program, nurse navigators were introduced across the SSM Cancer Care network. Processes have been standardized in order to create a consistent experience for physicians and patients.

With the overall success of the breast nurse navigator program, in 2011 we implemented nurse navigators for our thoracic program as well.

The nurse navigators who are part of the SSM Cancer Care community are proud of the role they play in coordinating care and enhancing communication between patients and physicians. We strive to create an easy, quick and efficient progression from screening through follow-up and believe our efforts are paying off in this important patient care realm. At the same time, we know we are living the SSM Healthcare mission of “revealing the healing presence of God.”
Radiation Oncology

The SSM Cancer Care radiation oncology program provides a full array of advanced technology and techniques for physicians and other clinical staff to choose from.

Among the most state-of-the-art, the CyberKnife® Stereotactic Radiosurgery System is increasingly used for tumors that are inaccessible using traditional radiation approaches. The CyberKnife has a number of uses from treating early lung cancer to brain or liver metastasis.

A newer use for CyberKnife is for early prostate cancer treatment. SSM Cancer Care participated in an early stage prostate trial, and five-year follow-up results suggest that the CyberKnife treatment, which spares healthy tissue, is as effective as radical prostatectomy in cases where the patient is not a surgical candidate.

Other radiation oncology services include:
- 3D (CT) simulation;
- PET/CT fusion treatment planning;
- superficial (electron) radiotherapy;
- conformal radiotherapy;
- high-dose rate (HDR) brachytherapy, a form of internal radiation therapy in which the radioactive material is placed inside or near the area requiring treatment;
- intensity-modulated radiotherapy (IMRT), which delivers precise radiation doses to a tumor or within specific areas of a tumor;
- image-guided, multi-leaf radiotherapy (TomoTherapy), which delivers a very sophisticated form of IMRT, and combines treatment planning, CT image-guided patient positioning, and treatment delivery into one integrated system; and
- radio-isotope radiotherapy.

Using the specialized equipment that these therapies require, radiation is delivered in a precise fashion while sparing surrounding tissues. Targeting is completed prior to every treatment, ensuring accuracy through tumor visualization. Patients experience fewer side effects and a shortened treatment course.

Early breast cancers without positive lymph nodes may be treated with accelerated partial breast radiation via MammoSite. Using this technology, patients undergo two treatments per day for five days – a much shorter and more convenient schedule than the traditional multi-week radiation therapy but with comparable results. SSM Cancer Care radiation oncologists work closely with surgeons and are recognized as an experienced team.

Patient satisfaction ratings, compiled by a third-party survey organization, Press Ganey, show our patients are among the most satisfied in the nation. As radiation oncology continues to advance in precision and application, our team of specialists will be ready to provide the most effective treatments for patients in convenient locations.
Genetic Consultation

SSM Cancer Care’s genetic consultation program, in association with Saint Louis University, provides complete assessment of medical and family history to determine if a patient may have an inherited predisposition to disease. Our certified genetic counselor follows the American College of Genetic Counselors national guidelines to generate individual recommendations.

Breast, ovarian and colon cancers are the most common for which genetic consultation is requested. Patients benefit from accurate information, and physicians appreciate the assistance of a genetic counselor in communicating and educating patients about risk factors and test results.

Referrals are handled quickly, and patients are scheduled for an hour-long assessment followed by another hour-long appointment to review results. By seeing a genetic counselor, patients are guaranteed the most thorough and understandable information while physicians can rest assured that this part of the clinical experience is being handled effectively, freeing them to focus on next steps as indicated by genetic test results.

Consultations typically involve:
- discussing the potential benefits and limitations of genetic testing;
- providing information about the cost of testing and insurance coverage;
- reviewing current laws about the privacy of genetic information;
- coordinating the appropriate testing; and
- reviewing genetic test results and explaining what they mean for the patient and family.

We are proud to make this service available through SSM Cancer Care at St. Mary’s Health Center and St. Joseph Medical Park, offering our patients a complete range of specialized services in a comfortable setting.
Palliative Care

Medicare defines palliative care as: “Patient and family-centered care that optimizes quality of life by anticipating, preventing and treating suffering. Palliative care throughout the continuum of illness involves addressing physical, intellectual, emotional, social and spiritual needs, while facilitating patient autonomy, access to information and choice.”

SSM Health Care - St. Louis' palliative care services work to fulfill that definition with compassion and skill. Whereas palliative care used to be considered an end-of-life service, today's paradigm places palliative care at any point in a serious illness, concurrent with life-prolonging treatment and continuing as bereavement services following patient death.

Palliative care providers strive, first and foremost, to relieve patient suffering. Coordinating continuity of care across settings and enhancing communication and decision-making between patients, families, health care professionals and support providers, such as clergy, are also key aspects of our work.

Working together, the palliative medicine team helps relieve pain and other symptoms, provides support throughout all phases of illness, facilitates discussion about goals of care, discusses care options for inpatients and those who will be receiving treatment in other settings, and provides community resources. And these efforts not only have been shown to increase patient comfort and satisfaction but also decrease costs by allowing patients to make realistic, coordinated treatment choices.

Since 2007, the palliative care team based at SSM St. Mary's Health Center has seen an increase in consults from about 103 per year to an estimated 430 in 2010. Thirty-nine percent of our consults are for cancer patients. Other diagnoses that benefit from our services include dementia, heart disease, lung disease, stroke, kidney disease and infection.

While we are pleased to note that physicians are referring more patients to palliative care services, almost half of these referrals continue to come very late in the course of illness. In many cases, our team can benefit patients and physicians by entering the process sooner.

Ninety percent of physicians we interviewed believe that palliative care is important, and 95 percent of patients want a frank discussion of their prognosis and advance directives. Whether patients need assistance dealing with pain management, dyspnea, nausea, fatigue, insomnia or delirium, we are here to provide holistic, interdisciplinary care for patients with serious chronic life-limiting illness while promoting quality of life and maintaining human dignity.
The hardest part of conquering any challenge is dealing with the unknown. Patients faced with a diagnosis of cancer know this well. Cancer is not something most of us take the time to learn about unless a family member or friend has been affected. But, for those who have felt the impact of this disease, it’s comforting to know that information and help is available.

SSM Cancer Care Resource Center was developed to serve as an information resource when patients and families need it most. The resource center provides a single location where those impacted by cancer can learn more about the disease, possible treatment options and support programs. A wide variety of materials focusing on the prevention and early detection of cancer are also available.

A Community Resource
SSM Cancer Care wants to provide patients and family members with the educational tools they need to better understand the disease. Our resource center is a free information resource that complements our care and treatment options provided at SSM St. Joseph Health Center in St. Charles, SSM St. Joseph Medical Park in St. Peters, SSM St. Joseph Hospital West in Lake Saint Louis, and SSM St. Clare Health Center in Fenton, MO.

Staff can direct patients and family members to the resources they need, such as:
- information on new technology, treatments and health information in the news;
- pamphlets, articles, internet searches and books.
- free wigs and turbans, if eligible; and
- cancer screenings, educational programs, smoking cessation classes, and area support groups for both caregivers and patients.

SSM Cancer Care nurses and local oncology specialists also are available to present lectures to community organizations on a variety of topics related to cancer prevention, early detection and treatment.
SSM Breast Care

Research and clinical evidence have shown that preventive care and early detection of breast cancer are key to creating the best possible outcomes. SSM Breast Care provides convenient, comprehensive services in a caring, compassionate environment.

The Breast Care team is composed of physicians, nurses, technologists and support staff who meet on a regular basis to collaborate on treatment strategies and engage in case reviews. We use a full range of state-of-the-art diagnostic and treatment technologies, including digital mammography for screening, ultrasound, MRI, ultrasound-guided biopsy, MRI-guided biopsy and stereotactic biopsy.

Nurse navigators meet individually with patients who require a biopsy or further diagnostic assessment and remain a primary patient resource throughout the diagnostic and treatment process. The nurse navigators not only answer questions and assist with scheduling, they often accompany patients to tests and procedures, decreasing patient anxiety and providing step-by-step information. Genetic counseling services also are available for patients who may require or request gene testing and result interpretation.

Surgical and radiation oncology services through SSM Cancer Care allow patients to remain close to home for treatment without compromising quality. Radiation oncology services include external beam therapy, IMRT and partial-breast radiation (MammoSite®). Chemotherapy also is available at SSM Cancer Care facilities, several of which have been specially designed to create a healing environment in which patients experience less stress.

Cancer Resource Centers throughout the network provide ongoing education and supportive services for patients. For instance, patients can benefit from weight management and nutrition consultation, wig fitting, post-mastectomy garment fitting, individual and family support groups. SSM Cancer Care offers exercise classes for survivors and current patients through a partnership with local YMCAs, including access to LIVESTRONG at the YMCA, a 12-week program for adult and survivors.

The whole range of technologies and services provided through SSM Breast Care reflects our commitment to treating the whole patient — mind, body and spirit. Through our compassionate and holistic approach, we seek to enhance healing and ensure our patients receive top-quality, consistent care experiences.

Through our compassionate and holistic approach, we seek to enhance healing and ensure our patients receive top-quality, consistent care experiences.
Quality Outcomes and Measures - Breast Care

**Sentinel Lymph Node Biopsy**

- **2010**: 87.9%
- **2011**: 94.6%
- **National Average**: 80%

Good

**Radiation Therapy Administered within One Year of Breast Conservation Surgery**

- **SSMCC**:
  - 2004: 93.8%
  - 2005: 91.0%
  - 2006: 92.5%
  - 2007: 98.4%
  - 2008: 97.3%
  - 2009: 97.6%

- **National Avg.**:
  - 2004: 84.5%
  - 2005: 84.7%
  - 2006: 86.1%
  - 2007: 86.9%
  - 2008: 88.4%
  - 2009: 88.1%

Good

Source: American College of Surgeons Commission on Cancer: National Cancer Database (NCDB): Cancer Program Practice Profile Reports (CP3R)

*2009 is most recent date that NCBD has available.*
**Quality Outcomes and Measures - Breast Care (continued)**

*2009 is most recent date that NCBD has available.

### Combination Chemo Considered/Administered within Four Months Diagnosis of Breast Cancer SSM St. Louis

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**Source:** American College of Surgeons Commission on Cancer: National Cancer Database (NCDB): Cancer Program Practice Profile Reports (CP3R)

### Tamoxifen Considered/Administered within One Year of diagnosis of Breast Cancer SSM St. Louis

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<td>2009</td>
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</table>

**Source:** American College of Surgeons Commission on Cancer: National Cancer Database (NCDB): Cancer Program Practice Profile Reports (CP3R)
Quality Outcomes and Measures - Breast Care (continued)

Likelihood of Recommending

- 2009: 93.3%
- 2010: 98%
- 2011: 98.4%

97.2% benchmark Press Ganey

Source: SSM Breast Care Patient Satisfaction Surveys.

Timeliness of Treatment - Breast

Time between diagnostic mammogram and needle/core biopsy

- 2009: 6.43 days
- 2010: 4.8 days
- 2011: 4.46 days
- National Average: 7.1 days

Source: National Quality Measures for Breast Centers Phase II Data Comparison Report
Physicians who specialize in prostate and kidney cancer treatment are increasingly garnering benefits from robotic-assisted surgical procedures, which offer a variety of improvements in precision and visualization of the surgical site. The SSM Robotic Surgery Institute at DePaul Health Center offers state-of-the-art equipment for use by SSM Cancer Care surgeons.

Our third-generation da Vinci® Si Surgical System incorporates:

- advanced, three-dimensional, high-definition visualization for the surgeon with up to 10 times magnification;
- EndoWrist 360-degree rotation instrumentation, permitting dexterity and range of motion far greater than the human hand; and
- intuitive motion technology, which translates a surgeon’s hand motions into precise movements of micro-instruments within the surgical site.

This technology provides outstanding clarity and detail along with precision and the ability to operate in smaller spaces than with older robotic surgery systems.

Using the da Vinci Si, minimally invasive prostatectomy results in effective cancer control, faster return of continence and sexual function, less pain and scarring, shorter hospital stays and quicker recovery than traditional prostate surgery.

The da Vinci Si equipment also allows surgeons to perform partial nephrectomies. Kidney patients receive many of the same benefits as those who undergo prostate surgery, and kidney cancer recurrence rates are documented at only about 1 to 3 percent in cases using robotic-assisted partial nephrectomy.

Additional treatment modalities are provided and recommended on an individualized basis. For instance, brachytherapy for prostate cancer treatment is available at SSM Cancer Care at St. Clare Health Center, DePaul Health Center, St. Joseph Hospital West, St. Joseph Medical Park and St. Mary’s Health Center.

The da Vinci Si Surgical System is a jewel in the crown of the SSM Cancer Care range of state-of-the-art technologies. Physicians seeking the most advanced and effective treatment options for prostate and kidney patients will find they need look no further than SSM Cancer Care.
The treatment of colorectal cancer used to rely primarily on traditional open surgery.

Now, patients benefit tremendously from minimally invasive surgical approaches. Research indicates that laparoscopic surgery of colorectal cancer is associated with a lower rate of complications compared with open resection, a shorter length of stay in the hospital, a reduced need for skilled care following surgery and a lower mortality rate.

SSM Cancer Care physicians use some of the most advanced medical technology available to deliver positive outcomes while minimizing patient risk and discomfort. Conventional laparoscopic surgery is performed for selected patients and offers many advantages, as noted above. However, in challenging or complex cases, even laparoscopic procedures may be limited. The robotic-assisted surgical system is a comprehensive tool for minimally invasive colorectal surgery. According to a study published in Annals of Surgical Oncology (2007;10:1245), robotic-assisted surgery may result in better cancer control as well as quicker return to a normal diet and normal bowel function. There is less pain, less blood loss and decreased incidence of wound infection. Hospital stays and recovery times are shorter.

SSM Cancer Care specialists meet twice a month to review challenging and interesting cases of colorectal cancer in order to determine the best mode of treatment for the patient. Our radiation oncology and chemotherapy services provide adjuvant treatment in convenient and familiar settings for many patients. This reduces stress and time spent traveling to and from treatment facilities. Of course, our physicians recognize that prevention is key and the colorectal surgeons regularly communicate with colleagues within the network regarding colonoscopy findings and recommendations.

In addition, the SSM Cancer Care community resources and education specialists continue to share information regarding the importance of screening and early detection with the general public. The SSM Cancer Care genetic counselor is a valuable resource for patients who may require genetic testing and interpretation. Even patients already diagnosed may benefit from genetic testing. We know colorectal cancers with changes in the K-ras or BRAF genes are not likely to be helped by drugs such as cetuximab (Erbitux) or panitumumab (Vectibix). Testing for these gene changes may help inform treatment decisions.

Whether preventative, diagnostic or curative, SSM Cancer Care physicians and staff are dedicated to providing effective and compassionate care in convenient locations.
**Quality Outcomes and Measures - Colon**

**Radiation Therapy Considered/Administered within Six Months of Diagnosis for AJCC T4N0M0 or Stage III after Rectal Resection**

- **SSMCC**: 100.0% 100.0% 100.0% 100.0% 100.0% 100.0%
- **National Avg.**: 87.3% 87.3% 89.9% 89.6% 90.2% 90.9%

**Adjuvant Chemotherapy Considered/Administered within Four Months for Patients with AJCC Stage III Colon Cancer**

- **SSMCC**: 88.5% 95.2% 100.0% 100.0% 100.0% 100.0%
- **National Avg.**: 84.8% 86.3% 87.9% 89.3% 90.4% 89.9%

*2009 is most recent date that NCBD has available.*

Source: American College of Surgeons Commission on Cancer: National Cancer Database (NCDB): Cancer Program Practice Profile Reports (CP3R)
Lung cancer remains one of the more difficult and elusive cancers to diagnose and treat. However, physicians and researchers working with SSM Cancer Care are making strides to improve the prognosis for lung cancer patients through earlier detection and highly effective treatments.

SSM Cancer Care at St. Joseph Health Center is currently the only site in Missouri participating in the International Early Lung Cancer Action Program (I-ELCAP). Daniel Luedke, MD, an oncologist with SSM Cancer Care, is directing our participation in this important international trial, which involves 48 institutions in nine countries, dedicated to studying the benefits associated with early detection of lung cancer by CT screening, and the best practices for using it. An additional I-ELCAP site is anticipated to open at SSM St. Clare Health Center in Fall 2012.

If lung cancer can be detected in its earliest stages, prognosis improves dramatically, and as many as 92 percent of patients can be treated successfully to the point of remission. Thus, patients participating in I-ELCAP may be among the most fortunate in terms of using the latest technologies and research findings to improve long-term survival.

To qualify for I-ELCAP screening, patients must be age 40 or older, be a current or former smoker, have no prior cancers, and pay for the screening exam. Scheduling is managed by the CT Lung Screening coordinator who can be reached at 1-877-947-LUNG (5864).

Additional research is being conducted with the Southwest Oncology Group, a clinical research cooperative supported by the National Cancer Institute that designs and conducts large-scale trials of new cancer treatments and prevention regimens.

If lung cancer is diagnosed, SSM Cancer Care physicians collaborate on best practices treatment and report to an oncology steering team that provides guidance and oversight. Our multidisciplinary team includes cancer specialist and pulmonologists along with radiologists and specialized technicians and nurses. Using state-of-the-art equipment and techniques to test and stage cancers in all pertinent nodal stations, we provide fast and accurate diagnosis.

Available treatment technologies at our facilities include lung-volume reduction surgery, lung cancer surveillance, video-assisted thoracic surgery (VATS), thoracoscopic surgery and stereotactic radiosurgery.

The CyberKnife® Stereotactic Radiosurgery System is one of the most advanced forms of treatment in the nation, and is available through SSM Cancer Care. This painless technology features a frameless robotic system that directs radiation to any part of the body from any direction, making it possible to treat previously inoperable tumors.

The patient receives a high-resolution CT scan to determine the size, shape and exact location of the tumor. This data is then transferred to the CyberKnife, and the desired dose of radiation is calculated. The robotic arm will then slowly move around the patient and deliver radiation to the tumor while minimizing exposure to surrounding healthy tissue. With CyberKnife, setup, planning and radiation delivery can take place during different visits, unlike other frame-based technology treatments, allowing a patient to return home after setup and return on a separate day for treatment delivery.

Through our coordinated approach to diagnosis and treatment, our patients have hope.
**Quality Outcomes and Measures - Thoracic**

*Jan.-Dec. 2011 is most recent date that The Advisory Board Company has available.*

**Dissection of Nodal Stations**

- Average Number of Lymph Nodes
- SSMCC Score: 8
- National Average: 4
- **Good**

**30 Day Surgical Mortality (Lobectomy)**

- Mortality within 30 days
- SSMCC Score: 0.00%
- National Average: 1.70%
- **Good**

**Timeliness of Treatment - Thoracic**

- Days from presentation to first course of treatment
- SSMCC Score: 35.79
- National Average: 106
- **Good**

Source: Oncology Roundtable Interviews and Analysis - The Advisory Board Company
SSM Cancer Care offers exceptional care of brain and spinal disorders through the SSM Neurosciences Institute. This multidisciplinary institute, composed of health care professionals at all levels, is the overarching structure through which we provide ongoing care and new treatment approaches across facilities and regions.

Medical staff currently working within the institute include:

- neuro-interventionists
- neurosurgeons
- neurologists
- radiologists
- physiatrists
- pain management specialists

These physicians are supported by a comprehensive team of therapists, and specially trained nurses and technicians in a technology-rich environment where patient referrals are handled quickly and efficiently. Follow-up care from nurse practitioners, physical therapists, sleep specialists, dietitians, counselors and other specialists is available as needed.

We can diagnose and treat cancer and skull-based brain tumors, including:

- acoustic neuroma
- adenomas
- anaplastic astrocytoma
- astrocytoma
- chordomas (Tumor of the spine and skull base)
- epidermoid
Neuro-Oncology

- glioblastoma
- glioma
- meningioma (Tumor of the central nervous system)
- metastatic brain tumors
- mixed glioma
- oligogendroglioma
- tumors (acoustic, orbital, pituitary)

Available technology includes:

- **CyberKnife® Stereotactic Radiosurgery System**
  Patients who have certain types of brain or spinal tumors may be treated with stereotactic radiosurgery. CyberKnife offers patients a painless outpatient experience with virtually no side effects by using image-guided robotics to deliver a focused radiation beam. Physicians are able to treat tumors that traditional surgery or radiation treatments could not reach while leaving healthy tissue untouched.

- **O-Arm®** – Both SSM DePaul and SSM St. Clare Health Centers feature O-Arm technology for real-time, 3D surgical imaging. The O-Arm shows three planes, providing surgeons with a more accurate verification of implant placement while removing the need for the patient to leave the surgical suite for verification imaging.

Additional technologies available through the SSM Neurosciences Institute include:

- X-rays
- 64-slice computed tomography (CT)
- positron emission tomography (PET)
- single photon emission computed tomography (SPECT)
- wide-bore resolution and 3T magnetic resonance imaging (MRI)
- carotid ultrasound
- electroencephalogram
- echocardiogram

In some cases, through our ongoing collaboration with Saint Louis University School of Medicine, patients may qualify for experimental treatment. SSM Neurosciences Institute physicians who also serve on the SLU faculty conduct research that will lead us to the next level of diagnosis and treatment.

Each facility is networked through an electronic health record system, now fully implemented and integrated across SSM Health Care–St. Louis and its affiliate physician organizations. The system includes e-prescribing, chart recall, access to lab results and PACS, which provides immediate image viewing. GE Medical Systems is the major vendor for PACS, while Epic Systems Corp. is the primary vendor for our electronic health record. Our secure physician portal allows access to all this as well as to a wide array of useful reference materials, including hospital census reports, current medical journals, and the CDC and ICD-9 codes.
Hysterectomy remains one of the staples of gynecologic oncology. Yet many physicians who are aware of recent statistics are finding that robotic-assisted hysterectomy is preferable to open abdominal hysterectomy. Our gynecologic oncologists with SSM Cancer Care are leaders in the field of robotic-assisted procedures for early stage gynecologic cancer.

Working as part of the SSM Robotic Surgery Institute, our physicians use the da Vinci® Si Surgical System to perform minimally invasive, robotic-assisted procedures that reduce pain, recovery and scarring associated with hysterectomy. This approach also helps patients preserve fertility and yields greater lymph node harvest for more comprehensive cancer staging.

Other gynecologic treatments using the da Vinci Si System address chronic pelvic pain and abnormal bleeding. Surgeons appreciate the 10X magnification of the surgical field, clear visualization of adjacent structures and ability to suction easily. The result is less blood loss and fewer complications, such as blood clots. Patients are often ambulatory within 24 hours and require fewer pain medications.

Our radiation oncologists use high dose rate (HDR) radiation to treat gynecologic and breast cancers. Ovarian, uterine and cervical cancers can be treated using HDR brachytherapy in which radiation is concentrated at the treatment site through temporary radiation placement or radioactive seed implantation. Most of these procedures currently are performed at SSM St. Mary’s Health Center and SSM DePaul Health Center.

An additional array of traditional technologies – surgical, radiological and chemotherapeutic – also are available through SSM Cancer Care, and physician researchers are collaborating with colleagues at Saint Louis University to participate in clinical trials of new therapies. Primarily offered at SSM St. Mary’s Health Center and SSM St. Joseph Hospital West, these studies will reveal new information to further enhance gynecologic cancer treatment.

Patients are often ambulatory within 24 hours and require fewer pain medications.
Research is a fundamental component of oncology. This starts in the laboratory with advances in basic science. Over the last several years, many large scale research programs such as The Cancer Genome Atlas (TCGA) have used advanced technology to reveal new insights into the molecular basis of cancer. As the cancer genome is mapped, the aberrances that occur on a molecular level in cancer cells provide new targets for therapy. These new “targeted” drugs offer the potential of improved anti-cancer effect with limited collateral damage to otherwise healthy cells. Ideally, each patient diagnosed with cancer would have the unique fingerprint of their cancer identified such that a treatment program could be individualized. This era of “personalized medicine” would allow for the optimal treatment for each person with the least side effects.

Clinical trials are the only path through which all of these new promising agents are ultimately proven to be effective therapy. Despite this, only about 3 percent of adult cancer patients in the United States participate in clinical trials. To help meet this need in our community, SSM Cancer Care and Saint Louis University School of Medicine have formed a cancer research alliance designed to bring academic medical center trials to the community.

This unique partnership will allow SSM Cancer Care physicians the ability to offer a variety of clinical trials to their patients. Many of these trials are sponsored by nationally recognized leaders in oncology research such as the Southwest Oncology Group (SWOG), the National Surgical Adjuvant Breast and Bowel Project (NSAPB), the Radiation Therapy Oncology Group (RTOG) and the American College of Surgeons Oncology Group (ACOSOG). In addition, this research alliance will provide access to a variety of pharmaceutical sponsored clinical research as well as the opportunity to develop investigator-initiated research protocols within the network.

SSM Cancer Care has developed a cadre of specifically trained research nurses and support staff who will work directly with patients as well as interface with the research and regulatory team at Saint Louis University. The shared goal is to provide access to the latest developments in clinical research at SSM Cancer Care locations throughout the St Louis region.

SSM Cancer Care is currently offering a variety of clinical trials though the research alliance for patients with breast and lung cancer and plans to expand the research platform significantly in the coming months.

“This is a great opportunity for the oncology community in our region” states Dr. James Beattie, one of the regional research directors for SSM Cancer Care. “Not only does it provide access to the latest treatments for our patients but it also strengthens the relationship with SSM Cancer Care physicians and their colleagues at Saint Louis University. It also allows community oncologists to interact directly with national leaders in cancer research.”
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Our mission statement — “Through our exceptional health care services, we reveal the healing presence of God” — is embodied by the 12,000 employees and 2,500 staff physicians of SSM Health Care – St. Louis. We provide comprehensive health care services, but specialize in heart, cancer, neurosciences, pediatrics, weight loss, sleep, imaging, behavioral health, rehab and fetal surgery. SSM Health Care – St. Louis includes Cardinal Glennon Children’s Medical Center, DePaul Health Center, St. Clare Health Center, St. Joseph Health Center, St. Joseph Health Center – Wentzville, St. Joseph Hospital West and St. Mary’s Health Center.

Go to [www.ssmhealth.com](http://www.ssmhealth.com) for more information.