Blessing Hospital Cancer Program
2012 Annual Report
Using 2011 Cancer Registry Data

Blessing Hospital Cancer Center Garden Photographs

Urinary Bladder Cancer 2012 Annual Report
Featured Site
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Blessing Hospital
Comprehensive Community Cancer Program
Cancer Committee Members 2012

**PROGRAM CHAIRMAN**
Christian Zwick, D.O., Program Chairman, General Surgery

**PROGRAM COMMITTEE COORDINATORS**
William Birsic, MD
Teena Sparks, CTR/Vera Bickhaus, CTR
Cathy Brogdon, Data Analyst/Ashley Pollock, RN, BSN, OCN
Linda Vallier, RN, BSN
Stephanie Willey, RN, BSN

Cancer Liaison Physician, General Surgery
Program Quality Control of Registry Data, Cancer Registrars
Cancer Conference and Breast/Colorectal Multi-Team Coordinator
Program Quality Improvement Coordinator
Oncology Community Outreach Coordinator

**PROGRAM PHYSICIAN MEMBERSHIP**
M. Amjad Ali, MD Oncology/Hematology
Kathryn Arrambide, MD Oncology/Hematology
Robert Gutekunst, MD Pathology
Mark Kuhl, MD Radiation Oncology
David Lockhart, MD Hospice/Palliative Care
Richard O’Halloran, MD Urology
John Schlepphorst, MD Radiology
Rex Schulz, MD Pathology
Raymond Smith, MD Oncology/Hematology
Young Yu, MD Radiation Oncology

**Required Physician Members**
- General Surgeon
- Cancer Liaison Physician
- Medical Oncologist
- Pathologist
- Radiation Oncologist
- Diagnostic Radiologist

**Other Required Members**
- Cancer Program Administrator
- Oncology Nursing
- Social Worker / Case Manager
- Certified Tumor Registrar
- Quality Improvement Coordinator
- Palliative / Hospice Care Member
- Clinical Research Representative
- Genetics Professional Counselor
- Community Outreach Coordinator

**PROGRAM ANCILLARY MEMBERSHIP**
Brenda Blickhan, RN, OCN, Medical Oncology Department
Jeri Conboy, Ph.D, Director, Hospice and Palliative Care
Karen Dames, BSN, RN, Compliance Officer
Karen Kerns, Rehabilitation Director
Sara Heinecke, RN, OCN, Radiation Therapy Department
Sheila Hermesmeyer, RN, BSN, OCN, Breast Oncology Navigator
Bonnie Kleissle, MPH, CCPA, Cancer Program Administrative Director
Claudia Lasys, MSW, LCSW, OSW-C, Social Worker/Clinical Therapist
Donna McCain, RN, MS, Supervisor Educational Services

Carrie Smith, MD, RD, CSO, LDN, Clinical Dietician
Carla Smith, RN, MSN, AOCNS, Oncology Nurse Leadership
Kelly Sorrill, CCRP, Clinical Coordinator Research Professional
Mike VanSteel, RN-BC, ONC, NE-BC, MSN, Director, Med Surg Svs
Lori Wilkey, BA, BTRM, Breast Center Manager
TOP TO BOTTOM, BACK ROW: Carla Smith, Robert Gutekunst, M.D., Raymond Smith, M.D., Brenda Blickhan, Teena Sparks, Sara Heinecke, Carrie Smith, Kimi Yuchs, Donna McCain, Kelly Sorrill, Vera Bickhaus, Karen Kerns, Ashley Pollock, and Linda Vallier.

TOP TO BOTTOM, FRONT ROW: John Schlepphorst, M.D., Lori Wilkey, Karen Dames, Christian Zwick, D.O., Bonnie Kleissle, David Lockhart, M.D., Mark Khil, M.D., Joyce Hildebrand, and Jeri Conboy.

PHYSICIAN MEMBERS NOT PICTURED: M. Amjad Ali, M.D., Kathryn Arrambide, M.D., William Birsic, M.D., Richard O’Halloran, M.D., Rex Schulz, M.D., and Young Yu, M.D.

ANCILLARY MEMBERS NOT PICTURED: Cathy Brogdon, Sheila Hermesmeyer, Claudia Lasys, Mike VanSteel, and Stephanie Willey.
Another year has passed for the Cancer Program at Blessing Hospital. At the end of this time period, I am able to reflect back on our many accomplishments. As always, excellence is central to all of our endeavors. The responsibilities of our Cancer Liaison Physician were expanded in 2012. The physician in this important leadership role has come to task and continues to provide strong leadership and direction to the Cancer Program.

Patients with breast cancer are always a special group of individuals with specific concerns and expectations. We have added a full-time navigator position to address their many needs and accompany them through their journey.

The new standards developed by the Commission on Cancer require accredited programs to offer palliative care to patients. We will continue to work towards preventing and relieving the suffering of cancer patients by providing the best possible quality of life, regardless of age, cancer stage and treatment plan.

Our robotic surgery program allows us to offer less invasive surgical treatments for certain types of cancer. We will continue to offer laparoscopic and open procedures for a wide variety of diagnoses.

Through our community outreach programs, we continue to strive to serve as many patients as possible. In 2011-2012 we have worked hard to provide these services to many underserved areas as well as to rural areas of Missouri. We are proud of our partnerships in the community and the outreach programs in which we participate. Our committed professionals and volunteers contribute countless hours to the community and the tri-state area in many different health events.

Inspired by the success of our Breast Multidisciplinary Team, we now have in place a Colorectal Multidisciplinary Team. During these meetings, we review cases to assure that we are meeting the highest standards in the treatment of these tumors. We continue to focus on evidence-based guidelines provided by the National Comprehensive Cancer Network (NCCN). We incorporate these guidelines during the conferences and use them extensively in patient care. Lymphedema is sometimes a consequence of the surgical treatment of breast cancer. In 2011 we began offering Lymphedema Screenings at the Blessing Cancer Center to identify patients who are suffering from this side effect. A variety of services are available to treat and prevent lymphedema through the Physical Therapy Departments at Blessing Hospital and Quincy Medical Group.

Our clinicians have the latest technology and newest drugs to optimize their patients’ outcomes. Delivering this type of care with compassion and respect for patients and their families continues to be of utmost importance to the Cancer Program at Blessing Hospital.

I would like to offer my appreciation to all those who have worked diligently to develop this annual report and all the committed staff who served on our Cancer Committee. Without them it would be impossible to provide high quality cancer care to our patients and community.

Christian Zwick, D.O., General Surgeon
Cancer Committee Chairman
Message From The Administrator Director
Bonnie Kleissle

Over one million people will be diagnosed this year with cancer. It is the leading cause of death among people under the age of 85. Although these statistics are alarming, we feel we can and have made a difference. Whether you are a patient, a family member, or a referring physician, Blessing Cancer Center offers you comprehensive, state-of-the-art, compassionate patient centered cancer care. We are committed to providing the best possible care for people in the Tri-State region, as well as conducting state-of-the-art clinical trials to bring new discoveries that will lead to cures.

We are committed to the future, a future for anyone whose life has been touched by cancer or may at risk. We are a community of caring people; a place where patients know the finest medical and scientific minds will collaborate on their cancer care; where the most up-to-date advances in treatment and prevention are made available; where caring people work together every day to offer hope and healing. I hope that your experiences throughout your treatment and healing are positive and that you will soon join the ranks of the millions of cancer survivors. Throughout the past and upcoming years, we are continuing to build our reputation on a solid foundation to create the leading cancer program in the Tri-State region. We deliver our care with state-of-the-art equipment and technology that offers proven benefits. Our long list of tools and equipment, which is unparalleled in the Tri-State area, includes the most advanced treatment planning and positioning software, stereotactic radiosurgery, high-powered linear accelerators, and high-definition imaging systems. Blessing Cancer Center is able to offer such high quality care to the people of Quincy, Illinois, and beyond. Each time we celebrate a new year in our community, I feel more optimistic about what the future holds, not only for the Blessing Hospital Cancer Program, but also for the entire field of oncology as a whole. The information within these pages represents the generous acts of so many people who depended on their hope for a different future, not only for themselves, but also for many others. As we highlight the significant initiatives from the past year in this report, we also look for better ways to improve the future health and wellness of our community in cancer care.

The Cancer Program was surveyed in 2011 by the American College of Surgeons’ Commission on Cancer and was awarded accreditation as Comprehensive Community Program with Commendation. This accreditation with commendation validates the commitment that we have made to provide the very best cancer care for the people of this community. As the accomplishments of the past year continue to drive future projects of our Cancer Committee, we look forward to another year of growth and progress within the cancer program at Blessing Hospital. Thank you for reading and for sharing hope for a better future in cancer care and beyond. I hope you will join us as a partner in our vital effort to control and ultimately defeat this disease.

Bonnie Kleissle, MPH, CCPA,
Administrative Director,
Blessing Cancer Program
The Blessing Cancer Center Administrative Team

BACK ROW, LEFT TO RIGHT: Vera Bickhaus, Jo Fuller, Bonnie Kleissle, Claudia Lasys, Ashley Pollock, Stephanie Willey, Teena Sparks, and Cathy Brogdon.

FRONT ROW, LEFT TO RIGHT: Rosie Scott, Carrie Smith, and Carla Smith.
Patients receive nationally accredited radiation therapy at the Blessing Cancer Center. Radiation therapy attacks cancer cells using sharply focused, high doses of radiation, applied from outside the body through a beam generated by a linear accelerator. Radiation therapy applies the maximum amount of treatment to cancer cells, with minimal damage to surrounding healthy tissue. Blessing’s linear accelerators use Intensity Modulated Radiation Therapy and Image Guided Radiation Therapy systems in order to deliver the highest level of care to the patient’s tumor and significantly reduce side effects to surrounding healthy tissues and organs. In addition to external beam therapy, the Blessing Radiation Therapy staff performs Brachytherapy, a technique that puts tiny radiation sources inside a tumor or as close to the tumor as possible.

Renowned and respected by cancer specialists throughout the Midwest, Blessing’s Radiation Therapy Department is led by two board-certified radiation oncologists, Young Yu, M.D. and Mark Khil, M.D. These experienced physicians work full-time at Blessing and are on-site daily to oversee the radiation treatments of each cancer patient. Radiation Therapy team also includes a certified Ph.D. physicist; two certified dosimetrists, and certified radiation therapists. Blessing’s Radiation Therapy Department is accredited by the American College of Radiation Oncology (ACRO). The Radiation Therapy Department was just surveyed as a part of their re-accreditation on November 6, 2012. The ACRO accreditation process ensures radiation therapy facilities, staff, and treatment programs are in accordance with modern accepted standards for radiation oncology delivered in the United States. Blessing Radiation Therapy Department treats an average of 400 new patients a year, delivering a total of 9,000 radiation therapy treatments annually.

The Blessing Hospital Radiation Therapy has been using the linear accelerator, Trilogy, for 4 years, and has been using it for stereotactic radiosurgery procedures since 2010. It provides tremendous versatility and precision for customizing treatments according to the specifics of each patient’s case. The Trilogy offers three major advancements in the delivery of radiation therapy:

1. Radiosurgery for intracranial and extracranial cancers.
2. Onboard imaging capability with CT as well as conventional kilovoltage x-ray.
3. Gated radiation therapy to overcome respiratory movement during the course of radiation therapy.

Since stereotactic radiation program started, 16 stereotactic radiosurgery brain cases were done and 14 stereotactic body radiation treatments were completed. The above features will give us the capability of delivering the most precise method of external beam radiation therapy with further protection of surrounding healthy normal tissues. It is a carefully controlled procedure delivered in a single session, or over several sessions, with high doses of radiation rather than targeting a tumor over a longer period of time. The Blessing Hospital Radiation Therapy Department also has completed the conversion to electronic medical records (EMR) which was initiated first part of 2010.

Young Yu, M.D. Radiation Oncologist
Radiation Therapy Team

BACK ROW, LEFT TO RIGHT: Deanna Marcionetti, Michelle Schafer, Stacey Zumbahlen, Jeff Trame, Shelley Echternkamp, Kevin Novel, Chad Powell, Sara Heinecke, Megan Hale, Lori Flesner, and Valerie Satterthwaite.

MIDDLE ROW, LEFT TO RIGHT: Nichole Arnold, Carol Akers, Gina Eickelschulte, and Judy Young.

FRONT ROW, LEFT TO RIGHT: Haifeng Tu, Ph.D., Mark Khil, M.D., Young Yu, M.D., Bonnie Kleissle, and Wanda Aden.
November 26, 2012  To:  Blessing Hospital Cancer Committee  From:  Kathryn Arrambide, M.D.
Re: Standard 4.6, American College of Surgeons Accreditation for Cancer Centers

Report reviewing adherence to quality standards within the Blessing Cancer program in the 2011 reporting year. The topic selected to be measured was the recommendation for and prescription of hormonal therapy for early stage breast cancer patients who were estrogen receptor (ER) positive. Standard 4.6 The guidelines for patient management and treatment currently required by the Commission on Cancer (CoC) are followed. The guideline selected for review was the requirement for consideration of tamoxifen or a third generation aromatase inhibitor within one year of diagnosis for women with ER positive tumors. The CoC has established that this guideline is applicable to patients with T1cN0M0 or stage II or III, ER positive tumors; however, since the Blessing Cancer program serves a large number of such patients, it was elected to review compliance in detail in patients with stage I disease newly diagnosed in 2011. The findings were as follows:

- Of the ninety-two patients with cancer of the breast diagnosed in 2011, seventy-six patients had ER positive stage I disease.
- In seventy-five of the seventy-six patients, there was clear documentation of the consideration and discussion of hormonal therapy.
- The one patient in whom there is no documentation of such, a discussion was under the care of a primary physician outside of the Blessing system. Only limited records are available. When asked, the outside physician stated that the patient was not on hormonal therapy.
- In four patients, it is clearly documented that, although the health care provider recommended hormonal therapy, the patient declined.
- One patient who initially refused hormonal therapy later reconsidered and started hormonal therapy within a year of diagnosis.
- One patient was recommended tamoxifen and a second patient was recommended aromatase inhibitor, but both patients were lost to follow-up. It is unclear whether the patient ultimately went on hormonal therapy.
- Two patients began hormonal therapy, but stopped early due to side effects.
- One patient was delayed in taking hormonal therapy because the physician reported she needed lung surgery.
- One patient was recommended not to receive hormonal adjuvant therapy due to high risk of thromboembolism.
- Interestingly, of the seventy-five ER positive patients recommended to have hormonal-based therapy, seventy-two were recommended to have tamoxifen or a third generation aromatase inhibitor.
- Three were prescribed raloxifene, one was switched to raloxifene due to intolerance of tamoxifen, and two were started de novo. Presently, raloxifene is not approved for adjuvant therapy of breast cancer.
- One other patient was placed on low dose megestrol acetate, another drug not approved for adjuvant therapy. The reason for this choice is not entirely clear.

At present, each new breast cancer diagnosis is discussed at Breast Cancer Multi-modality conference where general recommendations are made for the consideration of the primary treating physician. National Comprehensive Cancer Network (NCCN) and American College of Surgeons (ACOS) CoC recommendations as well as updates and new research studies are discussed within the group and a set of consensus recommendations are issued. This process allows for continuous monitoring for adherence to guidelines and for quality improvement in patient care.

Kathryn Arrambide, M.D., Medical Oncology
Medical Oncology Team


MIDDLE ROW, LEFT TO RIGHT: Cheryl Carter, Susie Wand, Geri Black, Kiley McGlauchlen, Ashley Cain, Jennifer Vincent, Penny Hoener, Sarah Pruett, Leslie Dean, and Kelly Sorrill.

FRONT ROW, LEFT TO RIGHT: Desiree Epping, Kathy Beswick, and Jenny Terwelp.
The role of the Cancer Liaison Physician (CLP) began in the 1960s, by the Commission on Cancer (CoC), in order to promote communication between the CoC and the leaders of the physicians serving in CoC accredited cancer programs. I have served in capacity since 2000, and I am pleased to continue this important work. In order to better define the role of the Cancer Liaison Physician, the CoC has created a new standard (4.3) that became effective January 1, 2012. Standard 4.3 provides that:

A Cancer Liaison Physician serves in a leadership role within the Cancer Program and is responsible for the evaluating, interpreting and reporting of the program’s performance using the National Cancer Data Base data to the cancer committee at least four times a year.

This new standard more clearly defines the role as the Cancer Liaison Physician and I look forward to continuing my duties with the support of our outstanding personnel. The CoC has developed tools to meet this important standard, and throughout 2012, I attended webinars to help hone my knowledge of this evolving role and successfully completed all requirements as the CLP. Working closely with our excellent Cancer Registrars, our Community Outreach Coordinator, and all the physicians that comprise the leadership of our cancer program, I can say with pride that Blessing Hospital’s cancer program will continue to maintain the highest standard of care that can be delivered to the people of the Tri-state area.

William I. Birsic, M.D., General Surgeon  
Cancer Committee Liaison
The Cancer Registry plays a very active and important role in the Cancer Program at Blessing Hospital. On November 3, 2011, we had our three-year approval survey in accordance with complying with American College of Surgeons (ACoS) and Commission on Cancer (CoC) standards. As a Community Hospital Comprehensive Program, we renewed our three-year accreditation and also achieved full commendations. The registry began making an important contribution both locally and nationally, reporting cancer data to the Illinois State Cancer Registry, to the NCDB (National Cancer Data Base) and to the American Cancer Society in 1965.

In accordance with the Commission on Cancer approval standards, our 2011 Cancer Registry data met the established quality criteria for the NCDB and was submitted with zero errors. The current reference date is January 1, 1995. The registry is comprised of 10,969 analytic/non-analytic cases admitted from 1995-2011. Of this number, 3,849 patients are followed up on a 12-month basis. In 2011 there were 595 cases in total added to the Cancer Registry Database System. This report serves as our 2012 Annual Report based on 2011 data.

The registry is currently staffed by Teena Sparks and Vera Bickhaus, Certified Tumor Registrars (CTR), credentialed by the National Cancer Registrars Association (NCRA), and Cathy Brogdon, currently receiving education to become certified as a tumor registrar. Registrars are data management experts whose goals are to collect and analyze statistics, perform studies, report cancer, maintain data, and maintain statistics on all patients diagnosed and/or treated with cancer or certain blood disorders at Blessing Hospital. We also maintain the same data on benign brain tumors. Along with clinical data services, cancer committee, cancer conferences and quality improvement programs, the Cancer Registry is one of the five elements to a successful Commission-approved cancer program. The registry maintains confidential data on patient identification, cancer identification, stage of disease at initial diagnosis, first course treatment, recurrence, treatment for recurrence or progression and lifetime follow-up of each cancer patient included in the database.

Through the Cancer Registry’s lifetime follow-up, physicians and/or patients are contacted annually to update each patient’s progress. The goal of the follow-up is to ensure that the patients receive regular medical care and provide the basis for survival statistics. Successful follow-up of more than 90% is maintained on the patients in the database system. Registrars fulfill data requests from physicians, administrators, and health care planners to provide support for cancer program development. Registrars attended the National Cancer Registrars Association Annual Educational Conference and other national/state educational conferences and seminars to remain certified and current with new trends in cancer diagnosis treatment modalities, related computer applications and reporting requirements. The Cancer Registry would like to express our sincere appreciation to the Cancer Committee and our Cancer Liaison Physician for their leadership and support to the Cancer Registry. As Certified Tumor Registrars, we are proud to be a part of the team made up of physicians, nurses, administration, community outreach and all staff of the Cancer Program who contribute to the diagnosis, treatment and care of our patients.
Blessing Hospital Comprehensive Community Cancer Program
Commission on Cancer (CoC) - Cancer Program Standards 2012: Ensuring Patient-Centered Care (Page 14-15)

Dedication
The Commission on Cancer dedicates the new cancer program standards to those individuals who trust their care to providers at CoC-accredited facilities. We dedicate these standards to all those treated in the past, to those under treatment now, and to those who will grant us the great privilege of treating them in the years to come. Volunteers and CoC staff worked together to develop these standards with the solitary goal of ensuring that patients with cancer will receive the highest quality care close to home.

Comprehensive Community Cancer Program—The facility accesses more than 500 newly diagnosed cancer cases each year. The facility provides a full range of diagnostic and treatment services whether on-site or by referral. Participation in cancer-related clinical research is required either by enrolling patients in cancer-related clinical trials or by referring patients for enrollment at another facility or through a physician’s office. Participation in the training of resident physicians is optional.

Commission on Cancer Standards

1.1 - Diagnostic and treatment services are provided by or referred to physicians who are currently board certified in their general specialty or are in the process of becoming board certified.
1.2 - Membership of the cancer committee is multidisciplinary, representing physicians from the diagnostic and treatment specialties and non-physician from administrative and supportive services. Coordinators who are responsible for specific areas of program activity are designated from the membership.
1.3 - Attendance for commendation is set at 75% and regular attendance is 50%. Attendance may include participation through conference or teleconference calls.
1.4 - 2012 meeting dates were set and presented to committee.
1.5 - Cancer Program Goals and Programmatic goal: 1) Cancer Program goal - A plan was developed to educate the community regarding the benefits of Hospice Services and their families. 2) Our programmatic goal was met by developing and implementing a Cancer Center advisory group to communicate the “voice of the customer” for purpose of furthering the mission, goals, programs, and services at Blessing Cancer Center for future services.
1.6 - Quality Control – Physicians reviewed minimum of 10% of abstracts quarterly for quality of registry data.
1.7 - Cancer conference coordinator monitored and evaluated cancer conference activities. In 2012, the minimum of 15% of analytic cases presented at cancer conference was exceeded.
1.8 - Annual community outreach coordinator monitored the effectiveness of community outreach activities and reported this to the committee.
1.9 - Clinical trial accrual requirement met with a minimum of 2% required and minimum of 4% accrual required for commendation. In 2012, accrual was 4.18%.
1.10 - Annually, at least one cancer-related educational activity is required - The CME schedule and report of cancer-related topics were presented to committee.
2.2, 2.3, and 2.4 requirements met in 2012: 1) Certified oncology nursing care provided. 2) Genetic counseling provided, on-site or by referral. 3) Palliative care services are available to patients at Blessing Hospital.

3.1 - To be phased in for 2015 - In the process of establishing a patient navigation process.

3.2 - To be phased in for 2015 - Psychosocial distress screening was developed and implemented in 2011.

3.3 - To be phased in for 2015 - Survivorship care plan is currently being developed.

4.1 - Requirement of one cancer prevention program to meet needs of our community - Smoking cessation cancer prevention program at community grade schools met this standard in 2012.

4.2 - In 2012, screenings consisted of breast, skin, oral, colon and prostate. Stephanie Willey reported that since January 2012, an outreach educator attended 15 events, reaching over 2,000 people with message of early detection and prevention. The Derma scan was utilized at 11 of these events, reaching about 650 people. Cancer posters, focusing on the cancer of the month, are placed monthly in several areas of the Cancer Center. (See page 22-25 for skin, oral, prostate, and colon screening results, and “No Tobacco Program” in Adams county for 2012.)

4.3, 4.4 and 4.5 - Cancer Liaison Physician met all requirements for leadership role in 2012 and evaluated, interpreted and reported quarterly to the committee the program’s performance using the National Cancer Data Base (NCDB) data. Specified accountability and quality improvement measures defined by the CoC were also reported.

4.6 - Assessment of evaluation and treatment planning - Dr. Arrambide assessed whether patients within the program are evaluated and treated according to evidence-based guidelines (for study and results, see page 10 for details).

4.7 and 4.8 - Quality Improvement requirements met for 2012 – 1) An addition of MRI in radiology. 2) A letter sent to physicians advocating it is better to utilize a closed tip port vs. an open tip port and better port access with jugular vs. subclavian access, this based upon the port study from 2011. Two studies of quality were completed in 2012: 1) A nutritional study - A comparative, retrospective study of data related to nutritional services provided to patients with cancer at Blessing Cancer Center to determine whether a reduction in available registered dietitian hours has negatively impacted clinical outcomes for patients with cancer at the Blessing Cancer Center. 2) Booty clamp study - A study to show less port fractures in patients with cancer who were treated at Blessing Cancer Center when a booty clamp device is used during surgical port insertion as compared to when a hemostat is used during surgical port insertion.

5.1, 5.2, 5.3, 5.4, 5.5, 5.6, and 5.7: 1) Cases abstracted by a CTR. 2) 90% of cases abstracted within 6 months of date of first contact. 3) Follow-up requirements met in 2012 - 80% for all patients in registry from 1995 (reportable date) and 90% cases within last five years. 4) All analytic cases were submitted on time to the NCDB (National Cancer Data Base) and came back clean. 5) There were no special study requirements from CoC in 2012.
Diagnosed and or Treated at Blessing Hospital All Sites 2011

CLASS OF CASE REPORT
BLESSING HOSPITAL 2011 (NO. 595)

145 / 24%
21 / 3.5%
69 / 11.5%
360 / 61%

**CLASS 0** - Diagnosis at Blessing Hospital, all first course treatment* performed elsewhere or decision not to treat made at another facility.

**CLASS 1** - Diagnosis at Blessing Hospital, all or part of first course of treatment performed at Blessing Hospital.

**CLASS 2** - Diagnosis elsewhere, all or part of first course of treatment performed at Blessing Hospital.

**CLASS 3** - Diagnosis and all first course of treatment elsewhere, presents at Blessing Hospital for treatment with recurrence or persistent disease.

*First course of treatment is estimated to be approximately six months after date of first contact and/or diagnosis date.
<table>
<thead>
<tr>
<th>SITE</th>
<th>MALE</th>
<th>FEMALE</th>
<th>TOTAL</th>
<th>% OF TOTAL CASES*</th>
<th>NTNL % OF TOTAL EST. CASES**</th>
</tr>
</thead>
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<tr>
<td>Lung</td>
<td>63</td>
<td>50</td>
<td>113</td>
<td>19.0%</td>
<td>226,580 / 14.4%</td>
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<td>Breast</td>
<td>0</td>
<td>90</td>
<td>90</td>
<td>15.0%</td>
<td>230,480 / 14.7%</td>
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<td>Prostate</td>
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<td>0</td>
<td>72</td>
<td>12.0%</td>
<td>240,890 / 15.3%</td>
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<tr>
<td>Colorectal / Anorectal</td>
<td>31</td>
<td>29</td>
<td>60</td>
<td>10.0%</td>
<td>147,030 / 9.3%</td>
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<tr>
<td>Urinary Bladder/Ureter</td>
<td>27</td>
<td>8</td>
<td>35</td>
<td>6.0%</td>
<td>71,980 / 4.5%</td>
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<tr>
<td>Melanoma</td>
<td>17</td>
<td>13</td>
<td>30</td>
<td>5.0%</td>
<td>76,330 / 4.8%</td>
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<tr>
<td>Lymphoma</td>
<td>16</td>
<td>12</td>
<td>28</td>
<td>5.0%</td>
<td>75,190 / 4.7%</td>
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<tr>
<td>Brain / CNS</td>
<td>7</td>
<td>15</td>
<td>22</td>
<td>4.0%</td>
<td>22,340 / 1.4%</td>
</tr>
<tr>
<td>Head and Neck</td>
<td>13</td>
<td>4</td>
<td>17</td>
<td>3.0%</td>
<td>39,400 / 2.4%</td>
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<tr>
<td>Kidney / Renal Pelvis</td>
<td>7</td>
<td>8</td>
<td>15</td>
<td>2.5%</td>
<td>60,920 / 3.8%</td>
</tr>
<tr>
<td>Corpus Uteri</td>
<td>0</td>
<td>15</td>
<td>15</td>
<td>2.5%</td>
<td>46,470 / 2.9%</td>
</tr>
<tr>
<td>Other &amp; unspecified primary sites</td>
<td>5</td>
<td>8</td>
<td>13</td>
<td>2.1%</td>
<td>30,500 / 1.9%</td>
</tr>
<tr>
<td>Leukemia</td>
<td>7</td>
<td>6</td>
<td>13</td>
<td>2.1%</td>
<td>44,600 / 2.8%</td>
</tr>
<tr>
<td>Pancreas</td>
<td>4</td>
<td>8</td>
<td>12</td>
<td>2.0%</td>
<td>44,030 / 3.0%</td>
</tr>
<tr>
<td>Thyroid / Other Endocrine</td>
<td>3</td>
<td>7</td>
<td>10</td>
<td>1.6%</td>
<td>50,400 / 3.2%</td>
</tr>
<tr>
<td>Ovary</td>
<td>0</td>
<td>8</td>
<td>8</td>
<td>1.3%</td>
<td>21,990 / 1.4%</td>
</tr>
<tr>
<td>Larynx</td>
<td>6</td>
<td>0</td>
<td>6</td>
<td>1.0%</td>
<td>12,740 / 0.8%</td>
</tr>
<tr>
<td>Stomach</td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>1.0%</td>
<td>21,520 / 1.3%</td>
</tr>
<tr>
<td>Small Intestine</td>
<td>1</td>
<td>5</td>
<td>6</td>
<td>1.0%</td>
<td>7,570 / 0.4%</td>
</tr>
<tr>
<td>Sarcoma</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>1.0%</td>
<td>10,980 / 1.0%</td>
</tr>
<tr>
<td>Multiple Myeloma</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>0.6%</td>
<td>20,520 / 1.3%</td>
</tr>
<tr>
<td>Liver / Gallbladder and Other Biliary</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>0.6%</td>
<td>35,440 / 2.2%</td>
</tr>
<tr>
<td>Vulva</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>0.6%</td>
<td>4,340 / 0.2%</td>
</tr>
<tr>
<td>Testis</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0.5%</td>
<td>8,290 / 0.5%</td>
</tr>
<tr>
<td>Esophagus</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0.5%</td>
<td>16,980 / 0.1%</td>
</tr>
<tr>
<td>Cervix Uteri</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0.1%</td>
<td>12,710 / 0.8%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>298</td>
<td>297</td>
<td>595</td>
<td>595 /100%</td>
<td>1,580,220, / 100%</td>
</tr>
</tbody>
</table>

**2011 REGISTRY STATISTICS**

**Percentage of total cases entered into registry in 2011.**

**Percentage of estimated new cancer cases nationwide according to The American Cancer Society Cancer Facts & Figures, 2011**
Registry Statistics 2011, All Sites, At Blessing Hospital

SUMMARY OF STATISTICS

<table>
<thead>
<tr>
<th>Cases Type</th>
<th>2011 Cases</th>
<th>2012 Cases</th>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytic Cases</td>
<td>574</td>
<td>576</td>
<td>White</td>
</tr>
<tr>
<td>Non-Analytic Cases</td>
<td>21</td>
<td></td>
<td>Black</td>
</tr>
<tr>
<td>Total Cases</td>
<td>595</td>
<td></td>
<td>Hispanic</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pakistan</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Asian</td>
</tr>
</tbody>
</table>

AJCC Cancer Staging was utilized in abstracting all eligible 2011 cases.

- The top five most frequently seen cancers in 2011 at the Blessing Cancer Center totaled 370 cases or 62%. Lung cancer is the number one ranking for 2011 diagnosed and/or treated at the Blessing Cancer Center. There were 113 total lung cases with 63 male and 50 female. Breast closely followed with 90 female cases. Third and fourth sites were prostate and colorectal/anorectal, 72 and 60 cases, respectively. Fifth most frequent site is urinary bladder/ureter with 35 cases. When compared to National (estimated by the American Cancer Society), top five most frequently seen cancers in 2011 were prostate, breast, lung, colorectal/anorectal and melanoma, 58.5% of total cases.

- Lung cases at Blessing Cancer Center, with a total of 113 cases at 19% of total cases diagnosed in 2011, ranks 4.6% higher than National which is 14.4%; however, prostate at 12% when compared to National at 15.3%, ranks 3.3% lower. When compared to National, urinary bladder cases at 6.0%, ranks 1.5% higher than National at 4.5%.

- Colorectal/anorectal cancer incidence at Blessing Hospital for 2011 closely compares to National at 10.08% and 9.3%, respectively. At Blessing, breast at 15.0%, melanoma 5.0% and lymphoma 5.0% closely compares to National being less than 1.0% higher.

- Hematopoietic diseases which include leukemia, lymphoma, multiple myeloma, and other hematopoietic diseases at our facility when compared to National at 8.1%, closely compares at 7.7%.

- The Cancer Committee approved the use of our 2011 data by The American Cancer Society.
<table>
<thead>
<tr>
<th>States / Counties</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iowa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Davis</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Lee</td>
<td>32</td>
<td>15</td>
</tr>
<tr>
<td>Illinois</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adams</td>
<td>351</td>
<td>357</td>
</tr>
<tr>
<td>Brown</td>
<td>20</td>
<td>16</td>
</tr>
<tr>
<td>Cass</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>De Kalb</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Fulton</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hancock</td>
<td>38</td>
<td>42</td>
</tr>
<tr>
<td>Henderson</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Henry</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Livingston</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Macoupin</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Macoupin</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Mc Donough</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Morgan</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Pike</td>
<td>43</td>
<td>63</td>
</tr>
<tr>
<td>Schuyler</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Scott</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Warren</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Missouri</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adair</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Clark</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Knox</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Lewis</td>
<td>34</td>
<td>35</td>
</tr>
<tr>
<td>Marion</td>
<td>10</td>
<td>22</td>
</tr>
<tr>
<td>Monroe</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Pike</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Ralls</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Schuyler</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Scotland</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Shelby</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Wisconsin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brown</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total Patients</td>
<td>566</td>
<td>595</td>
</tr>
</tbody>
</table>
Five Most Frequent Sites
Blessing Hospital 2011

**MALE**

- Prostate: 67 / 24%
- Lung: 59 / 21%
- Colorectal: 31 / 11%
- Bladder: 27 / 9%
- Lymphoma: 13 / 5%

**FEMALE**

- Breast: 89 / 31%
- Lung: 67 / 17%
- Colorectal: 24 / 8%
- Uterus: 14 / 5%
- Melanoma: 11 / 4%

**MALE — All Other Sites - 31%**

**FEMALE — All Other Sites - 34%**
Age At Diagnosis By Sex Report 2011
All Sites (No. 595)

Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>90+</td>
<td>5 / 0.8%</td>
<td>14 / 2.3%</td>
</tr>
<tr>
<td>80-89</td>
<td>36 / 6.0%</td>
<td>45 / 7.5%</td>
</tr>
<tr>
<td>70-79</td>
<td>72 / 12%</td>
<td>78 / 13%</td>
</tr>
<tr>
<td>60-69</td>
<td>76 / 12.7%</td>
<td>92 / 15.4%</td>
</tr>
<tr>
<td>50-59</td>
<td>62 / 10.4%</td>
<td>51 / 8.5%</td>
</tr>
<tr>
<td>40-49</td>
<td>28 / 4.8%</td>
<td>19 / 3.1%</td>
</tr>
<tr>
<td>0-39</td>
<td>11 / 1.8%</td>
<td>7 / 1.1%</td>
</tr>
</tbody>
</table>

No. of Patients
Graph 1
Skin Screening May 22, 2012
Blessing Cancer Center, Quincy, IL

<table>
<thead>
<tr>
<th></th>
<th>Suspicious</th>
<th>Negative</th>
<th>Total Screened</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>79</td>
<td>150</td>
<td>229</td>
</tr>
</tbody>
</table>

34% Suspicious
66% Negative

Graph 2
Oral Screening May 22, 2012
Blessing Cancer Center, Quincy, IL

<table>
<thead>
<tr>
<th></th>
<th>Suspicious</th>
<th>Negative</th>
<th>Total Screened</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>192</td>
<td>193</td>
</tr>
</tbody>
</table>

<1% Suspicious
99% Negative
### Blessing Hospital Cancer Center
**Prostate Screenings 2012**
*Submitted by Community Outreach Educator*

<table>
<thead>
<tr>
<th>PSA Results</th>
<th>Sub-Total by Category</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSA 0 - 1.9</td>
<td>149</td>
<td>75%</td>
</tr>
<tr>
<td>PSA 2.0 - 3.9</td>
<td>34</td>
<td>17%</td>
</tr>
<tr>
<td>PSA 4.0 or higher</td>
<td>13</td>
<td>7%</td>
</tr>
<tr>
<td>PSA Not Performed</td>
<td>2</td>
<td>1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DRE Results</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative</td>
<td>184</td>
<td>93%</td>
</tr>
<tr>
<td>Suspicious</td>
<td>13</td>
<td>66%</td>
</tr>
<tr>
<td>DRE not performed</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>DRE Unknown</td>
<td>1</td>
<td>-1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Participants</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Age</td>
<td>60.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>8</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2</td>
</tr>
<tr>
<td>White</td>
<td>178</td>
</tr>
<tr>
<td>Unknown</td>
<td>10</td>
</tr>
</tbody>
</table>

3 from Outside Territories
Blessing Hospital Cancer Center
Colorectal Screening 2012
Submitted by Community Outreach Educator

FOBT Colorectal Drive-Thru Screening
March 27, 2012
Blessing Cancer Center, Quincy, IL

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kits Processed</td>
<td>54</td>
<td>57%</td>
</tr>
<tr>
<td>Kits Not Returned</td>
<td>39</td>
<td>43%</td>
</tr>
<tr>
<td>Positive Results</td>
<td>4</td>
<td>8%</td>
</tr>
<tr>
<td>Negative Results</td>
<td>50</td>
<td>92%</td>
</tr>
</tbody>
</table>

FOBT Screening Participants by Territories
Blessing Cancer Center, March 27, 2012
The program consists of three parts that includes: information sharing on the health hazards of tobacco products, packaging and cost, and peer pressure. The students then sign a contract agreeing not to use tobacco products knowing the information they have received. These contracts are given to the students to take home to share the pledge to remain tobacco free. The children then seal the contract with their handprint on poster paper which is displayed in the classroom as an additional reminder. A poster with information is shared along with the Mr. Gross Mouth model and Tar in a Jar.

Each child receives a booklet entitled “101 Things to Know about Tobacco” and additional information from the American Cancer Society on second hand smoke. Each teacher takes time with her class to review the booklet and information. The booklet and contracts have been provided by the Adams County Substance Abuse Coalition.

Staff: Stephanie Willey, RN, BSN Community Outreach Educator and Amanda Crumrine, Med, Adams County Health Department.
Blessing Cancer Center
Special Oncology Event
Oncology Nurses’ Week
May 6-12, 2012
According to AJCC stage by sex figures, page 31, about fifty percent of bladder cancers at the time of diagnosis are non-invasive or in situ cancer. Thirty-five percent have invaded into the bladder muscle. About ten percent have spread to the perivesicle tissues and about 4% of bladder cancers have spread to distant sites. In 2011, fifty-six percent of patients at Blessing Hospital had non-invasive or in situ cancers. Thirty six percent of cancers had invaded the bladder wall, and in eight percent, distant spread was noted.

At Blessing Hospital, the pathologists stage bladder cancer using national standards. Initially, the primary tumor is assigned a grade followed by a determination as to what depth the tumor has grown into the various tissue layers. Then the regional lymph nodes (N) are examined for metastatic disease. Biopsies from suspicious lesions in other organs (M) will confirm spread (page 32).

Blessing Hospital 2011 figures on page 33, showed that the majority of cancers at stage 0 were also low grade (85%) at the time of diagnosis. The high grade lesions showed aggressive behavior with greater potential to spread to regional lymph nodes (N) as well as other organs (M) at the time of diagnosis.

After the diagnosis of cancer of the bladder is established at cystoscopy, the patient has a transurethral resection of the bladder tumor (TURBT). The pathologist processes the tissue and determines the stage and grade of the cancer. Then the urologist decides to treat with surveillance, a second TURBT, immunotherapy, intravesical chemotherapy, IV chemotherapy, radiation or cystectomy. At Blessing Hospital, 44% of patients had a TURBT only, 25% had TURBT along with intravesical chemo. For advanced disease (Stage IV), two patients underwent radical cystectomy and IV chemotherapy. At Blessing, six percent of patients who were diagnosed with high stage disease or had significant co-morbidities and were too high risk for surgery were treated with TURBT, chemotherapy and immunotherapy. Of these groups, 19% had a TURBT and immunotherapy (page 34).

Although some bladder tumors are completely resected initially, there is a high chance of tumor recurrence. Recurrences are detected at cystoscopy, usually every three to six months. Flow cytometry, image cytometry, and tumor markers to detect recurrences are not as sensitive as cystoscopy. At Blessing, sixty-one percent had no evidence of recurrent disease, fourteen percent responded to subsequent treatment which rendered them disease free, and twenty-five percent showed evidence of persistent disease, even after treatment (page 35).

Smoking is one of the main causative factors for bladder cancer. A study conducted by the National Cancer Institute between October 1995 and December 2006, showed smokers were four times as likely to develop bladder cancer. Former smokers have twice the risk for bladder cancer. Smoking is noted in 50% of men and women who develop bladder cancer. Blessing statistics confirm 62% of women and 68% of men with bladder cancers are currently smoking or have smoked in the past (page 36).
The five-year survival during years 2003-2005, according to stages 0, I, and IV, was higher at Blessing. The chart demonstrates this fact. Statistics show at Blessing vs. NCDB, respectively, Stage 0 - 80% vs. 77%, Stage I - 72% vs. 65% and Stage IV - 25% vs. 11%. The NCDB figures for stages II and III were higher than Blessings: Stage II - 27% vs. 37% and Stage III - 0% vs. 28% (page 39). Were there significant co-morbidities in the Stage III group to account for this difference? At the time of diagnosis, there was very little over the five year period. Fortunately, during years of 2005-2010, stage 0 figures were fairly constant averaging around 50% (page 40). This early diagnosis meant earlier treatment and better survival.

Blessing treatment figures during 2000-2010 are comparable to the NCDB. Seventy-nine percent of patients at Blessing and seventy-one percent of patients in the NCDB had surgery. These figures confirm that TURBT is the most beneficial (page 41).

In summary, even though great strides have been taken to reduce the number of people smoking, this habit is still very popular. Educating our students in the elementary, middle and high schools is very important. Repeated efforts directed at this student body should warn them of the potential for developing cancer if they elect to smoke. Undoubtedly, peer pressure is a major factor as these young people continue to smoke. Parents have a great influence over their children. Moms and dads who have never smoked, quit smoking, or are smokers should emphasize the negative impact of smoking on their children’s lives. As a member of the cancer committee at Blessing Hospital, the community outreach coordinator reports yearly to the cancer committee the numbers of the “No Tobacco Program” offered to our community. By educating these students, this is one way we meet our goal every year by asking these students to be accountable in their decision not to smoke. This program has been very successful. In 2012, fourth graders at ten area schools were seen in 37 classrooms totaling 833 students (page 25).

Comparing the NCDB figures with Blessing Hospital, it is apparent that early diagnosis is being made. PCPs are usually the first individuals to note signs or symptoms related to bladder cancer. Investigating microscopic hematuria, especially if these are risk factors, will diagnose bladder cancer earlier. Blessing bladder cancer figures when compared to the NCDB, confirm that the Blessing urologists and oncologists continue to meet the national standards. Early diagnosis with accurate grading and staging is the gold standard for the urologists and oncologists at Blessing. They offer their patients a variety of treatment modalities which will improve survival and quality of life for them. Blessing Cancer Center has the resources and vision to continue to strive for the optimum improvement for patients with bladder cancer.

Richard O’Halloran, M.D., Urologist
According to the American Cancer Society 2011 Facts and Figures, men are about 3 times more likely to get bladder cancer during their lifetime than women. Overall, the chance men will develop this cancer during their life is about 1 in 26. For women, the chance is about 1 in 86. (The risk for a particular person may be higher or lower, based on risk factors such as whether or not they smoke). About 9 out of 10 people with this cancer are over the age of 55.

In 2011 at Blessing Hospital, there were 8 women and 28 men diagnosed with bladder cancer, 22% and 78%, respectively. Two patients were diagnosed under the age of 50 and 34 diagnosed 50 and over. Majority of patients diagnosed at Blessing Hospital were between ages 60–89.
In about half of all cases, patients are first diagnosed with bladder cancer while it is still confined to the inner layer of the bladder (non-invasive or in situ cancer). About 35% have bladder cancer that has invaded into deeper layers but is still contained in the bladder. In most of the remaining cases, the cancer has spread to nearby tissues outside the bladder. Rarely (in about 4% of cases) it has spread to distant sites.

In 2011 at Blessing Hospital, there is a close comparison with 56% of patients diagnosed with non-invasive or in situ cancer, 36% were diagnosed with invasion into deeper layers, but still contained in the bladder, and 8% were diagnosed with distant spread.
STAGING OF BLADDER CANCER

Anatomic Stage / Prognostic Groups

<table>
<thead>
<tr>
<th>Stage 0is</th>
<th>Tis</th>
<th>N0</th>
<th>M0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 0a</td>
<td>Ta</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage I</td>
<td>T1</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage II</td>
<td>T2a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T2b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage III</td>
<td>T3a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T3b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T4a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IV</td>
<td>T4b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>Any T</td>
<td>N1-3</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>Any T</td>
<td>Any N</td>
<td>M1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

T0 - No evidence of primary tumor.
TX - Primary tumor cannot be assessed.
Tis – Very early, high grade, cancer cells are detected only in the innermost layer of the bladder lining (carcinoma in situ).
Ta – The cancer is just in the innermost layer of the bladder lining, non-invasive papillary tumor.
T1 – The cancer has started to grow into the connective tissue beneath the bladder lining or invasion of subepithelial connective tissue.
T2 – The cancer has grown through the connective tissue into the muscle (muscularis propria).
T2a – The cancer has grown into the superficial muscle (inner half).
T2b – The cancer has grown into the deeper muscle (outer half).
T3 – The cancer has grown through the muscle into the fat layer (invades perivesical tissue).
T3a – The cancer in the fat layer can only be seen under a microscope (microscopic invasion).
T3b – The cancer in the fat layer can be seen on tests, or felt by your doctor during an examination under anesthetic (macroscopic invasion).
T4 – The cancer has spread outside the bladder (prostatic stroma, seminal vesicles, uterus, vagina, pelvic wall, abdominal wall).
T4a – The cancer has spread to the prostate stroma, womb (uterus) or vagina.
T4b – The cancer has spread to the wall of the pelvis or abdomen.

NX – Lymph nodes cannot be assessed.
N0 – No cancer in any lymph nodes.
N1 – One affected lymph node in the pelvis — the lower part of your tummy, inside your hip bones (hypogastric, obturator, external iliac, or presacral lymph nodes).
N2 – Multiple regional lymph nodes metastasis in the true pelvis (hypogastric, obturator, external iliac, or presacral lymph nodes).
N3 – One or more affected lymph nodes in the groin (common iliac lymph nodes).

M0 – No distant metastasis.
M1 – As with most cancers, there are two stages for cancer spread or metastases. Either the cancer has spread to another body organ (M1) or it hasn’t (M0). If bladder cancer does spread to another part of the body, it is most likely to go to the bones, lungs or liver. If your cancer has spread, you have advanced bladder cancer.
BLADDER CANCER
Blessing Hospital 2011
Stage at Diagnosis
Low Grade / High Grade Tumors

- Low grade papillary urothelial carcinoma – slow growing and unlikely to spread
- High grade papillary urothelial carcinoma – more quickly growing and more likely to spread
The main types of treatment for cancer of the bladder are surgery, intravesical therapy or immunotherapy, chemotherapy, and radiation therapy. A type of treatment may be given alone or in combination with other types, depending on the stage of the cancer. Surgery, alone or with other treatments, is used in nearly all cases. Surgery is often able to remove early bladder tumors successfully such as transurethral resection of bladder tumor or TURBT. Removing the entire bladder (radical cystectomy) could be recommended for patients with high risk for eventually developing recurrent bladder cancer, but it can have major side effects. If the entire bladder is not removed, other treatments may be given to try to reduce the risk of new cancers. Whether or not other treatments are given, close follow-up is needed to look for signs of new cancers in the bladder.

At Blessing, 44% received TURBT alone, 25% received TURBT and intra-operative Mitomycin-C (chemotherapy), 19% received TURBT followed by BCG treatments in the office (Immunotherapy). Six percent received TURBT, intra-operative Mitomycin-C and BCG treatments in the office, and 6% received TURBT followed by radical cystectomy and IV chemotherapy. For Stage 0 and II, all patients had TURBT and chemo. One Stage IV patient received TURBT/ chemo and two patients had radical cystectomy and chemotherapy. Although radiation therapy is an option for treatment, zero percent of patients at Blessing received radiation therapy during first course of therapy (within first six months after date of diagnosis).
For some people with bladder cancer, treatment may remove or destroy the cancer. When cancer comes back after treatment, it is called recurrence. This is a very common concern in people who have had cancer. For other people, the bladder cancer may never go away completely. These people may get regular treatments with chemotherapy, radiation therapy, or other therapies to help keep the cancer in check. People who have had bladder cancer are at high risk of developing a second bladder cancer, so it is very important to go to all of your follow-up appointments. In people with no signs of cancer remaining, most experts recommend repeat exams every 3 to 6 months to see if the cancer is growing back or if there is a new cancer within the urinary system. Be sure to follow your doctor’s advice about follow-up tests. Some doctors recommend other lab tests as well, such as flow cytometry, image cytometry, or tumor marker tests. There are many different kinds of urine tests that can help see if the cancer is coming back, but so far none of these can take the place of cystoscopy.

At Blessing, 61% has no evidence of disease to date, 14% disease free after recurrence and subsequent treatment, 6% never disease free after recurrence and subsequent treatment, and 19% never disease free.
Smokers’ risk of getting bladder cancer is higher than previously reported, according to a study by researchers at the National Cancer Institute that was published in the Journal of the American Medical Association. And the risk for women who smoke is just as high as it is for men. Researchers analyzed data from nearly 500,000 people who had taken part in the questionnaire-based NIH-AARP Diet and Health Study and were followed between October 1995 and December 2006. Researchers found that smokers were about 4 times as likely to get bladder cancer as people who never smoked. Previous research had showed smokers were about 3 times as likely to get bladder cancer. Quitting lowered the risk, and the longer smokers had been tobacco-free, the lower their risk. On average, former smokers were about twice as likely to get bladder cancer as people who had never smoked. While previous studies showed that smoking was responsible for 20% to 30% of bladder cancers in women, the new study found that smoking now accounts for about half of female bladder cancer cases. It also shows that smoking is responsible for about half of male bladder cancer cases, which is similar to previous studies.

At Blessing 62% of women diagnosed with bladder cancer in 2011 are either current smokers or have past history of smoking and 68% likewise for men.
The National Cancer Data Base (NCDB) is a nationwide oncology outcomes database that currently collects information on approximately 70% of all new invasive cancer diagnoses in the United States each year and serves as a powerful clinical surveillance and quality improvement mechanism for cancer programs participating in the American College of Surgeons (ACoS) Commission on Cancer (CoC) approvals program. Currently, the NCDB receives over one million cancer case reports annually from more than 1,430 hospitals. The NCDB is recognized as the largest clinical registry in the world. NCDB data are used to explore trends in cancer care, to examine regional and national benchmarks, and to serve as the basis for quality improvement activities.

Data reporting to the NCDB is highly standardized and similar to other state health departments and federal cancer registry data systems, including the NCI’s Surveillance Epidemiology and End Results (SEER) program and the Centers for Disease Control’s National Program of Cancer Registries (NPCR). Data reported from CoC-approved hospitals are abstracted from patient charts by Certified Tumor Registrars (CTR) who undergo training specific to cancer registry operations. In recent years, the training and certification requirements for CTRs has increased significantly, focusing on many of the nuances of cancer care. If data points are missing, registrars can query the treating physicians to obtain the necessary data to complete the record.

The NCDB is a large, powerful database providing multiple opportunities for clinical studies and quality-improvement endeavors. Importantly, the NCDB can be used to benchmark hospitals on performance measures and serve as an impetus for quality improvement initiatives at the hospital level. Cancer registration activities are expensive for hospitals, but the benefits are clearly demonstrated by the NCDB’s extensive efforts to feed important information back to participating institutions. The NCDB is the only cancer registry that provides feedback data to hospitals in such a manner. It is the responsibility of surgeons, and their colleagues in other oncologic specialties, to work collectively, and with their hospital’s cancer registrars, to continuously review and improve the accuracy, completeness and quality of the hospital’s cancer registry data, and thus the quality of the data reported to the NCDB.

Although the NCDB is a tremendous repository of oncologic data, perhaps the most important aspect is its ability to benchmark hospitals, and feed information back to the public and to participating hospitals. The NCDB offers public benchmark reports for the eleven most commonly diagnosed solid-organ tumors in the United States. These reports currently provide data on more than 5.0 million patients, allowing users to define queries based on patient gender, age, ethnicity, histology, stage, first-course therapy, type of surgical resection, hospital type, and geographic location. The NDCB also offers five-year survival reports stratified by the AJCC staging.
**Bladder Cancer Gender And Age Comparisons**

**Gender of Urinary Bladder Cancer Diagnosed 2000-2010**
- **Blessing Hospital N = 319**
  - 246 / 77% (Male)
  - 73 / 23% (Female)

**Gender of Urinary Bladder Cancer Diagnosed 2000-2010**
- **National Cancer Data Base N = 488865**
  - 366,381 / 75% (Male)
  - 122,484 / 25% (Female)

**Age Group of Urinary Bladder Cancer Diagnosed 2000-2010**
- **Blessing Hospital N = 319**

<table>
<thead>
<tr>
<th>AGE</th>
<th>NUMBER</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-39</td>
<td>1</td>
<td>0.31%</td>
</tr>
<tr>
<td>40-49</td>
<td>8</td>
<td>2.51%</td>
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<tr>
<td>50-59</td>
<td>33</td>
<td>10.34%</td>
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<tr>
<td>60-69</td>
<td>52</td>
<td>16.3%</td>
</tr>
<tr>
<td>70-79</td>
<td>110</td>
<td>34.48%</td>
</tr>
<tr>
<td>80-89</td>
<td>94</td>
<td>29.47%</td>
</tr>
<tr>
<td>90 and over</td>
<td>21</td>
<td>6.58%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>319</td>
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</table>

**Age Group of Urinary Bladder Cancer Diagnosed 2000-2010**
- **National Cancer Data Base N = 488,865**

<table>
<thead>
<tr>
<th>AGE</th>
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<th>PERCENTAGE</th>
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<tbody>
<tr>
<td>Under 20</td>
<td>316</td>
<td>0.06%</td>
</tr>
<tr>
<td>20-29</td>
<td>902</td>
<td>0.18%</td>
</tr>
<tr>
<td>30-39</td>
<td>4,202</td>
<td>0.86%</td>
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<tr>
<td>40-49</td>
<td>19,872</td>
<td>4.06%</td>
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<tr>
<td>50-59</td>
<td>62,645</td>
<td>12.81%</td>
</tr>
<tr>
<td>60-69</td>
<td>116,767</td>
<td>23.81%</td>
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<tr>
<td>70-79</td>
<td>157,838</td>
<td>32.29%</td>
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<tr>
<td>80-89</td>
<td>109,319</td>
<td>22.36%</td>
</tr>
<tr>
<td>90 and over</td>
<td>17,004</td>
<td>3.48%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>488,865</td>
<td>100%</td>
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</table>
**BLADDER CANCER**

*Observed Survival by Stage 2003 - 2005*  
*Blessing Hospital Vs. National Cancer Data Base (NCDB)*

---

**Observed Survival / Best AJCC Stage**  
Urinary Bladder 2003-2005  
National Cancer Data Base - All Hospitals (No. = 79,540)

<table>
<thead>
<tr>
<th>Stage</th>
<th>0</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
<td>Stage 0</td>
<td>100%</td>
<td>95.4%</td>
<td>91.0%</td>
<td>86.5%</td>
<td>82.2%</td>
<td>77.7%</td>
</tr>
<tr>
<td>Stage I</td>
<td>100%</td>
<td>90.7%</td>
<td>82.9%</td>
<td>76.4%</td>
<td>70.6%</td>
<td>65.5%</td>
</tr>
<tr>
<td>Stage II</td>
<td>100%</td>
<td>69.9%</td>
<td>54.7%</td>
<td>46.6%</td>
<td>41.5%</td>
<td>37.4%</td>
</tr>
<tr>
<td>Stage III</td>
<td>100%</td>
<td>63.7%</td>
<td>45.8%</td>
<td>37.5%</td>
<td>32.2%</td>
<td>28.7%</td>
</tr>
<tr>
<td>Stage IV</td>
<td>100%</td>
<td>41.5%</td>
<td>22.7%</td>
<td>16.1%</td>
<td>13.0%</td>
<td>11.5%</td>
</tr>
</tbody>
</table>

---

**Observed Survival / Best AJCC Stage**  
Urinary Bladder 2003-2005  
Blessing Hospital (No. = 67)

<table>
<thead>
<tr>
<th>Stage</th>
<th>0</th>
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<th>2</th>
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<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 0</td>
<td>100%</td>
<td>89.2%</td>
<td>83.7%</td>
<td>83.7%</td>
<td>80.9%</td>
<td>80.9%</td>
</tr>
<tr>
<td>Stage I</td>
<td>100%</td>
<td>90.9%</td>
<td>81.8%</td>
<td>72.7%</td>
<td>72.7%</td>
<td>72.7%</td>
</tr>
<tr>
<td>Stage II</td>
<td>100%</td>
<td>45.5%</td>
<td>45.5%</td>
<td>27.3%</td>
<td>27.3%</td>
<td>27.3%</td>
</tr>
<tr>
<td>Stage III</td>
<td>100%</td>
<td>25.0%</td>
<td>25.0%</td>
<td>25.0%</td>
<td>25.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Stage IV</td>
<td>100%</td>
<td>50.0%</td>
<td>50.0%</td>
<td>25.0%</td>
<td>25.0%</td>
<td>25.0%</td>
</tr>
</tbody>
</table>
BLADDER CANCER
Blessing Hospital Vs. National Cancer Data Base (NCDB) Stage at Diagnosis 2005 - 2010

### Stage 0
- **Year**: 2005 - 2010
- **Percentage Distribution**:
  - 2005: 44%
  - 2006: 52%
  - 2007: 52%
  - 2008: 54%
  - 2009: 51%
  - 2010: 52%

### Stage I
- **Year**: 2005 - 2010
- **Percentage Distribution**:
  - 2005: 23%
  - 2006: 21%
  - 2007: 24%
  - 2008: 23%
  - 2009: 24%
  - 2010: 23%

### Stage II
- **Year**: 2005 - 2010
- **Percentage Distribution**:
  - 2005: 23%
  - 2006: 21%
  - 2007: 14%
  - 2008: 24%
  - 2009: 12%
  - 2010: 13%

### Stage III
- **Year**: 2005 - 2010
- **Percentage Distribution**:
  - 2005: 6%
  - 2006: 5%
  - 2007: 5%
  - 2008: 5%
  - 2009: 10%
  - 2010: 5%

### Stage IV
- **Year**: 2005 - 2010
- **Percentage Distribution**:
  - 2005: 4%
  - 2006: 5%
  - 2007: 5%
  - 2008: 5%
  - 2009: 6%
  - 2010: 5%
BLADDER CANCER
First Course of Treatment Comparisons 2000 - 2010

<table>
<thead>
<tr>
<th>Treatment Type</th>
<th>Blessing Hospital</th>
<th>%</th>
<th>NCDB</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgery Only</td>
<td>228</td>
<td>71.47%</td>
<td>340,367</td>
<td>69.62%</td>
</tr>
<tr>
<td>Surgery &amp; Chemo</td>
<td>23</td>
<td>7.21%</td>
<td>48,629</td>
<td>9.95%</td>
</tr>
<tr>
<td>Surgery &amp; BRM</td>
<td>21</td>
<td>6.58%</td>
<td>37,452</td>
<td>7.66%</td>
</tr>
<tr>
<td>Other Specified Therapy</td>
<td>40</td>
<td>12.54%</td>
<td>41,853</td>
<td>8.56%</td>
</tr>
<tr>
<td>No First Course Rx</td>
<td>7</td>
<td>2.19%</td>
<td>20,564</td>
<td>4.21%</td>
</tr>
<tr>
<td>Total</td>
<td>319</td>
<td>100%</td>
<td>488,865</td>
<td>100%</td>
</tr>
</tbody>
</table>
References


Page 37, 38, 39, 40 and 41 -
- https://web5.facs.org/Cancer/Hospital/Home.mvc?PersonID=3204768&CompanyID=0&PerCoFunctionID=0&ChaperID=0&StandardID=0&StandardGroupId=0&Year=0&AttachmentCategoryId=0&SurveyID=0&CategoryId=0&RecordID=0
Cancer Center Services

The Cancer Center at Blessing Hospital’s main phone number is (217) 277-3500

ADMINISTRATIVE DIRECTOR - Bonnie Kleissle, MPH, CCPA, Ext. 7716.
RADIATION ONCOLOGY DEPT./ RADIATION ONCOLOGISTS – Young Yu, M.D. and Mark Khil, M.D., Ext 7800.
RADIATION THERAPY NURSE - Sara Heincke, RN, OCN Ext. 7804 along with radiation staff members at Ext. 7800.

ONCOLOGY CLINICAL NURSE SPECIALIST - Carla Smith, RN, MSN, AOCNS, Ext. 7706.
ONCOLOGY RESOURCE COORDINATOR - Ashley Pollock, RN, OCN, Ext. 7705.
ONCOLOGY CLINICAL DIETICIAN - Carrie Smith, MSRD, CSO, LDN, Ext. 7707.
COMMUNITY OUTREACH EDUCATOR - Stephanie Willey, BS, RN, Ext. 7718.
SOCIAL WORKER / CLINICAL THERAPIST - Claudia Lasys, MSW, LCSW, OSW-C, Ext. 7717.
FINANCIAL COUNSELOR - Rosie Scott, Ext. 7709.

HOSPICE - 217/223-8400, Ext. 5521.
PALLIATIVE CARE CONSULTATION SERVICES - Jerri Conboy, Ph.D., Ext. 4701 or Sharon Olson, RN, MS. Ext. 4710.
APPEARANCE CENTER - Jo Fuller at Ext 7715 or Rosie Scott at Ext. 7709.
COMPLEMENTARY SERVICES - Music Therapy and Pet Therapy, contact Jo Fuller, Ext. 7715.
PEER TO PEER PROGRAM - Former cancer patients volunteer to be peer advocates who offer support and encouragement to current cancer patients. Call The Cancer Center, Ext. 7715.

BREAST CANCER SUPPORT GROUP - A monthly support group who meets on the 1st Tuesday of each month at The Cancer Center, 6:00-8:00 PM. Contact Rosie Scott at Ext. 7709.
REACH FOR RECOVERY - Bobbie Wellman, RN, 217/223-8400, Ext. 6365 or call the Cancer Center, Ext. 7715. This is a personalized service for breast cancer patients.

BREAST CANCER NAVIGATOR: Sheila Hermesmeyer, RN, OCN, Ext. 4300.

LOOK GOOD FEEL BETTER – Teaches beauty techniques to women in active cancer treatment. For reservations call Ext. 7709.

HOSPITALITY HOUSE - Located at 1129 Oak Street, the Quincy Hospitality House offers short term, affordable housing for anyone undergoing cancer treatment and needing a place to stay. For information call 217/228-3022 or 217/223-8400.

TRANSPORTATION – Patients are encouraged to contact The American Cancer Society (800-252-5302) or Rosie Scott. 217/223-8400, at Ext. 7709 for information about transportation services.

Blessing Cancer Center
This report and 2013 Cancer Center Calendar Can Be Viewed On-Line At http://www.blessinghealthsystem.org/ Patient services, Cancer Center