Great Lakes Cancer Institute
McLaren Regional Medical Center

Cancer Program and Tumor Registry
2008 Annual Report
(2007 Statistical Data)
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References

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GREAT LAKES CANCER INSTITUTE
McLaren Regional Medical Center Campus
Great Lakes Cancer Institute continues to move forward.

We now have four medical oncologists at the Great Lakes Cancer Institute including Dr. Madan Arora, Dr. David Eilender and also Dr. Sunil Nagpal who has joined us last July. Dr. Edward Naill has also joined the radiation oncology department. Dr. Hesham Gayar, Dr. Jack Nettleton and Dr. Naill are also managing two Great Lakes Cancer Institute sites in Lapeer and Owosso. We are also proud to announce that McLaren is recruiting a second surgical oncology fellow to its program. It is the only surgical oncology program in the state of Michigan. We thank Dr. Sukamal Saha for all his diligence in putting this program together of course with help from the administration, who is very supportive of our program. Thanks also goes to Karla Grunow, the new director of Cancer Care Services at Great Lakes Cancer Institute at McLaren in Flint. Gratitude goes out to the Great Lakes Cancer Institute medical director, workers, discharge planners, hospice personnel, visiting nurses, palliative care team, pharmacists and nurses in the Great Lakes Cancer Institute on Beecher Road and also the oncology unit.

Last fall, you witnessed a very informative comprehensive cancer conference on breast and GI cancers. International speakers were present.

A Message from the Director

T. Trevor Singh, MD, FACP CANCER COMMITTEE CHAIR MEDICAL DIRECTOR, MEDICAL ONCOLOGY
Facility Expansion at Great Lakes Cancer Institute-McLaren

The Great Lakes Cancer Institute-McLaren has increased the overall footprint of the facility by 13,000 square feet, nearly doubling its size. The all new chemotherapy treatment area was completed in early spring of 2007. It has 14 private chemotherapy infusion stations equipped with private televisions at each station and comfortable waiting areas for caregivers. Renovation also allowed for additional examination rooms and a private IV treatment area. Once the new Medical Oncology Suite was constructed, an expansive renovation of the Radiation Oncology suite followed. It has a fresh new look with more exam rooms and a conference space for multidisciplinary conferences and support group meetings.

The spacious reception area features a Patient Resource Library staffed by American Cancer Society volunteers. The resource library provides access for patients and caregivers to educational materials, online information and cancer support. The entire project was completed in early 2008.
2) A Patient Resource Library, just off the Radiation Oncology waiting area offers educational information and internet access. The library is staffed by American Cancer Society volunteers.

3) Sophisticated treatment planning is provided with a CT simulator located in the Radiation Oncology Suite.

4) A sun-filled, spacious treatment room provides a brighter space to receive intravenous treatments in the medical oncology suite.
McLaren Celebrates Partnership in Cancer Care

In 2008, McLaren Regional Medical Center expanded its reach to serve patients of mid-Michigan. Two brand new facilities, the Great Lakes Cancer Institute in Lapeer and Memorial Healthcare’s Cancer Center in Owosso, partner with McLaren Regional Medical Center for their radiation oncology services. This partnership enables patients in the Shiawassee County and Lapeer County regions who need radiation therapy services to receive this advanced technology closer to home.

The new Great Lakes Cancer Institute in Lapeer, which opened in February 2008, offers state-of-the-art treatment with a soothing lodge-like atmosphere, complete with a stone fireplace and a lake view. The Cancer Center located within Memorial Healthcare’s new Medical Arts Building, opened in May 2008. The spacious and contemporary space includes the highest standard of care in radiotherapy, offered through the Varian Dynamic Targeting® Image Guided Radiotherapy system.
Support Making Strides for Breast Cancer

Each year, during the month of October, McLaren Regional Medical Center employees join together to support the American Cancer Society’s Making Strides for Breast Cancer Walk as the GLCI-McLaren team. Group efforts such as the sale of t-shirts, flowers, and baked goods raised over $1,000 for the ACS. Contributions by individual employees participating in the walk and their sponsors add up to a large donation to the local chapter of the American Cancer Society.

Free Breast Cancer Screenings

All women ages 18 and over who do not receive an annual breast examination were invited to attend one of the free breast cancer screenings held in October. The physician-conducted physical exams were provided free of charge. Those who qualified were given a certificate for a free mammogram. MRMC has a long-standing tradition of supporting breast cancer prevention initiatives in the community and is a member of the Genesee County Cancer Connection, a program of the Healthcare Council of Mid-Michigan.
Cancer Survivors Celebrate

Each year the hundreds of patients receive cancer treatment at McLaren Regional Medical Center and the Great Lakes Cancer Institute-McLaren. The outcomes for surviving cancer continue to improve, thanks in part to early detection and treatment advances.

There are now over 3,000 individuals who have undergone treatment for cancer at McLaren and are cancer survivors. On June 12, McLaren hosted its 13th Annual Cancer Survivor Celebration.

The invitation-only event treated guests to deluxe ice cream sundaes, cake, and live music. Guests also enjoyed the featured speaker, Flint journal columnist and cancer survivor, Brenda Brissette Mata, who shared her personal experience with cancer with frank honesty and humor.
Relay For Life

Relay For Life is a fun-filled overnight event designed to celebrate survivorship and raise money for research and programs of the American Cancer Society. During the event, teams of people gather at schools, fairgrounds, or parks and take turns walking or running laps. Each team tries to keep at least one team member on the track at all times.

At events in 4,800 communities nationwide, teams of families, friends and coworkers join together to CELEBRATE the lives of those who have battled cancer, REMEMBER those lost and FIGHT BACK against a disease that takes too much.

McLaren Regional Medical Center proudly sponsored four of the Relays in Genesee County in 2007. Many McLaren employees participated in Relay for Life events in their communities.
McLaren’s Community Support Comes Full Circle

Representatives from McLaren Regional Medical Center were on hand to supply icy cold water to the nearly 800 bikers at the 2007 Full Circle Breast Cancer Motorcycle Ride. Local cancer treatment centers and the American Cancer Society receive proceeds from the annual event. The Great Lakes Cancer Institute-McLaren uses the donation to assist breast cancer patients with expenses they incur during treatment. It may be for gas money to get to their treatments, pay the heating bill, or prescriptions not covered by insurance.

1) McLaren representatives were on hand to show their support of the event.

2) Breast Cancer affects not just women but their families as well.
2007 Data Summary

Total Number of Cases Reviewed ........................................... 1,985
Total Number of Completed Cases .......................................... 1,220
Total Number of analytic Cases (diagnosed and/or treated at McLaren) .............. 1,125
Total Number of Cases Reportable to State of MI Cancer Registry ......................... 88
Total Number of Cases Reviewed that were Non-Reportable ............................... 677

2007 Research Protocol Enrollment

Eastern Cooperative Oncology Group (ECOG) .................................. 3
National Surgical Adjuvant Breast and Bowel Project (NSABP) .................. 8
Pharmaceutical Company Sponsored Research .................................. 1
Radiation Therapy Oncology Group (RTOG) .................................... 8
University Related Research ........................................................... 11
Locally Developed, Peer-Reviewed Studies ..................................... 2
Research Not Otherwise Specified ................................................. 256
Total Number of Patients Entered in Research Protocols ..................... 289
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Cancer Program and Tumor Registry 2008 Annual Report 13
### 2007 Gender Distribution
1,125 Analytic Cases

- Female: 51%
- Male: 49%

### 2007 Race/Ethnicity Distribution
1,125 Analytic Cases

- White: 85%
- Black: 11%
- Other: 4%

### 2007 County Distribution
1,125 Analytic Cases

- Genesee: 75%
- Shiawassee: 9%
- Lapeer: 8%
- Oakland: 2%
- Other: 6%

### Distribution of Top Five Malignancies for 2007
1,125 Analytic Cases

- Breast: 18%
- Lung: 17%
- Prostate: 17%
- Colorectal: 11%
- Non-Hodgkin Lymphoma: 4%
- Other: 33%
2007 Distribution by Age at Diagnosis

1,125 Analytic Cases

- Male
- Female

2007 Distribution by AJCC Stage

1,125 Analytic Cases

- Male
- Female

Cancer Program and Tumor Registry 2008 Annual Report
2007 Distribution of Four Major Sites by Age at Diagnosis

1,125 Analytic Cases

- Breast
- Colorectal
- Lung
- Prostate

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2007 Distribution of Four Major Sites by AJCC Stage

1,125 Analytic Cases

- Breast (204 Cases)
- Colorectal (119 Cases)
- Lung (188 Cases)
- Prostate (190 Cases)

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</tr>
<tr>
<td>III</td>
<td>15</td>
</tr>
<tr>
<td>IV</td>
<td>20</td>
</tr>
<tr>
<td>Unknown</td>
<td>25</td>
</tr>
<tr>
<td>N/A</td>
<td>30</td>
</tr>
</tbody>
</table>
Initial Therapy – Breast Cancer
204 Analytic Cases

- Srg/Rad/Chm/Hrm 22%
- Srg/Rad Hrm 30%
- Srg/Chm/Hrm 4%
- Srg/Hrm 7%
- Srg/Rad/Chm 11%
- Srg/Rad 4%
- Other 5%
- No Trt 2%
- Surg 9%
- Srg/Chm 6%

Initial Therapy – Colorectal Cancer
119 Analytic Cases

- Surg 46%
- Srg/Rad/Chm 20'
- Srg/Rad/Chm 20%
- Srg/Chm 20%
- Other 2%
- No Trt 6%
- Srg/Rad 3%
- Rad/Chm 3%
Initial Therapy – Lung Cancer
188 Analytic Cases

- Srg/Chm: 9%
- Rad/Chm: 22%
- Rad: 10%
- Surgery: 22%
- Srg/Rad/Chm: 6%
- Other: 5%
- No Trt: 15%
- Chemo: 11%

Initial Therapy – Prostate Cancer
190 Analytic Cases

- Rad: 33%
- Surgery: 37%
- Srg/Rad: 3%
- Rad/Hrm: 22%
- No Trt: 2%
- Other: 3%
### 2003-2007 Top Four Malignancies

#### Number of Cases by Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Breast</th>
<th>Colorectal</th>
<th>Lung</th>
<th>Prostate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>145</td>
<td>111</td>
<td>163</td>
<td>112</td>
</tr>
<tr>
<td>2004</td>
<td>170</td>
<td>103</td>
<td>167</td>
<td>108</td>
</tr>
<tr>
<td>2005</td>
<td>185</td>
<td>104</td>
<td>176</td>
<td>102</td>
</tr>
<tr>
<td>2006</td>
<td>189</td>
<td>124</td>
<td>208</td>
<td>145</td>
</tr>
<tr>
<td>2007</td>
<td>204</td>
<td>119</td>
<td>189</td>
<td>190</td>
</tr>
</tbody>
</table>
Colon Cancer continues to be a major health problem in the United States with the disease affecting over 112,000 individuals for the year 2007, according to the American Cancer Society’s Cancer Facts and Figures 2007. Colon cancer is ranked as the third most common cancer diagnosed among men and women. Incidence rates have declined over the last two decades from 66.3 cases per 100,000 in 1985 to 49.5 in 2003. This is attributed to an increase in colorectal screening. McLaren has offered colorectal screening for the last several years and continues to see an increase in the number of participants each year. An estimated 52,180 deaths are expected to occur in 2007 from colon and rectal cancer. This accounts for approximately 10% of all cancer deaths. Mortality rates have also decreased over the last twenty years resulting from early detection and treatment.

We reviewed 445 Class 1 (diagnosed and treated at McLaren) colon cases at McLaren for the years 2000-2007, 341 Class 1 patients from Bay Regional Medical Center for the same years, and 359,212 Class 1 cases from the National Cancer Data Base for the years 2000-2005. We will do a comparison of gender, age at diagnosis, stage of disease, initial treatment, and observed survival.

We then looked at Class 1 cases for the years 2003-2007 for McLaren and Bay Regional Medical Center as AJCC staging changed beginning with 2003 cases and NCDB data was only available up through 2005. This five-year period includes 281 patients from McLaren and 212 patients from Bay.
Gender Distribution

Graph shows the gender distribution among all three data sets, which are all very comparable. The majority of patients diagnosed with colon cancer were female.

Distribution by Age at Diagnosis

Graph illustrates the distribution of age at diagnosis. The most common age group diagnosed with colon cancer for all three data sets was 70-79. The age group, 60-69, was the second most common age group among McLaren patients while 80+ was most common for NCDB and Bay.
Distribution by AJCC Stage

Graph reveals the majority of patients were diagnosed with Stage III disease at McLaren, while NCDB and Bay patients were diagnosed with Stage II disease. This may be attributable to McLaren surgeons performing sentinel lymph node mapping on a large group of McLaren patients enabling this group of patients to be more accurately staged due to use of this procedure.

![Distribution by AJCC Stage](image)

Initial Treatment

Graph illustrates initial or first course of treatment among the three data sets. Surgery was the most prevalent treatment followed by the combination of surgery and chemotherapy. As you can see from the McLaren data set, only 50% of patients were treated with surgery compared to NCDB at 67% and Bay at 60%. However, as you can see from the surgery/chemotherapy combination, McLaren treated more patients with combination therapy (34%) when compared to NCDB at 22% and Bay at 29%. This again is probably due to patients being more accurately staged by performing sentinel lymph mapping, which detects microscopic disease in the lymph nodes that may not otherwise be found.

![Initial Treatment](image)
Subsite Distribution

Graph demonstrates the subsite distribution among McLaren and Bay patients. Colon cancer was most commonly found in the cecum at McLaren accounting for 28% of cases, followed by sigmoid at 25%. Bay had an equal distribution at 27% each for cecum and sigmoid. When we looked at left-sided verses right-sided colon cancers, both McLaren and Bay had more right-sided colon cancers at 54% and 49% respectively while left-sided colon cancers revealed 33% for McLaren and 35% for Bay.

Tumor Grade

When looking at tumor grade among the two groups, moderately differentiated or Grade 2 was the most prominent grade of tumor at diagnosis seen in Table 1 below. McLaren’s data revealed 54% while Bay’s data revealed 63%. Grade 1, well differentiated tumors revealed 17% and 15% respectively.

<table>
<thead>
<tr>
<th>Facility</th>
<th>Total Cases</th>
<th>Well Differentiated</th>
<th>Moderately Differentiated</th>
<th>Poorly Differentiated</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>McLaren</td>
<td>281 cases</td>
<td>48 cases 17%</td>
<td>153 cases 54%</td>
<td>38 cases 14%</td>
<td>42 cases 15%</td>
</tr>
<tr>
<td>Bay</td>
<td>212 cases</td>
<td>31 cases 15%</td>
<td>134 cases 63%</td>
<td>30 cases 14%</td>
<td>17 cases 8%</td>
</tr>
</tbody>
</table>
Next, we looked at the number of lymph nodes removed at the time of surgery for both McLaren and Bay. At McLaren, 220 of the 281 patients had lymph nodes removed at the time of surgery. Of the 220 patients, 21 patients had 12 or more lymph nodes removed at the time of surgery, which reveals a 55% compliance rate. This is comparable to McLaren’s estimated compliance rate from the e-QuIP for Colorectal Cancer Study from 2003-2005. This is an initiative spearheaded by the American College of Surgeons through NCDB for all approved facilities. McLaren’s performance rate was 56.1%. A study was completed to determine McLaren’s compliance rate for 2008. Thirty charts were reviewed, and our compliance rate for colorectal cancer patients was 70%. This table shows a significant improvement over the last year.

### Number of Lymph Nodes Removed at Surgery

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Number of Patients that had Lymph Node Surgical Dissection</th>
<th>Total Number of Patients in Group</th>
<th>Compliance Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-2007</td>
<td>121</td>
<td>220</td>
<td>55%</td>
</tr>
<tr>
<td>2003-2005</td>
<td>46</td>
<td>82</td>
<td>56%</td>
</tr>
<tr>
<td>2008</td>
<td>21</td>
<td>30</td>
<td>70%</td>
</tr>
</tbody>
</table>

**Note:** McLaren had 84 patients in this group of 220 patients that had sentinel lymph node mapping during the surgical procedure compared to Bay’s one patient out of 183.

### Number of Patients With > 12 Lymph Nodes Examined

**SLNM vs MRMC (2003-2007)**

<table>
<thead>
<tr>
<th>Stage</th>
<th>SLNM</th>
<th>MRMC</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>9/27 (33%)</td>
<td>5/29 (17%)</td>
<td>76/127</td>
</tr>
<tr>
<td>I</td>
<td>13/27 (48%)</td>
<td>23/62 (37%)</td>
<td>36/90</td>
</tr>
<tr>
<td>IIA</td>
<td>18/20 (90%)</td>
<td>25/49 (51%)</td>
<td>43/69</td>
</tr>
<tr>
<td>IIB</td>
<td>4/5 (80%)</td>
<td>3/7 (43%)</td>
<td>7/12</td>
</tr>
<tr>
<td>IIIA</td>
<td>2/2 (100%)</td>
<td>2/5 (40%)</td>
<td>4/7</td>
</tr>
<tr>
<td>IIIB</td>
<td>10/18 (56%)</td>
<td>21/36 (58%)</td>
<td>31/54</td>
</tr>
<tr>
<td>IIIC</td>
<td>7/7 (100%)</td>
<td>23/26 (88%)</td>
<td>30/33</td>
</tr>
<tr>
<td>IV</td>
<td>13/21 (62%)</td>
<td>19/52 (37%)</td>
<td>32/73</td>
</tr>
</tbody>
</table>

**Note:** Table shows a comparison of the number of patients with more than 12 lymph nodes between SLNM patients by Dr. Saha vs other patients undergoing conventional surgery between 2003-2007 at MRMC.
Graph shows a comparison of patients with more than 12 lymph nodes between SLNM group vs all MRMC group.

1998-2000 Five-Year Observed Survival

Graph shows the five-year survival rate among all three groups. Observed survival was the only data comparison that was available for all three groups. Observed survival accounts for all deaths, regardless of cause. Therefore, this survival method does not accurately reflect patients that died specifically from their disease. This survival data combined all stages of disease as the number of patients in the McLaren and Bay data sets were much smaller than that of NCDB. At the end of five years, the NCDB Survival rate was 52% while McLaren and Bay were 45% and 46% respectively.
# Five-Year Observed Survival by Stage

Table shows 5-year observed survival for each data set by individual stage. For McLaren and Bay, the number of patients included in each stage are reflected as well as the number surviving at the end of the five-year period. NCDB numbers were not available for inclusion in this table.

<table>
<thead>
<tr>
<th>Best Stage</th>
<th>Facility</th>
<th>Starting # of Pts in Group</th>
<th>Ending # of Pts in Group</th>
<th>At Diag 100%</th>
<th>End of 1st Year 93%</th>
<th>End of 2nd Year 90%</th>
<th>End of 3rd Year 85%</th>
<th>End of 4th Year 82%</th>
<th>End of 5th Year 78%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>NCDB</td>
<td># NA</td>
<td># NA</td>
<td>100%</td>
<td>93%</td>
<td>90%</td>
<td>85%</td>
<td>82%</td>
<td>78%</td>
</tr>
<tr>
<td></td>
<td>MRMC</td>
<td>6</td>
<td>1</td>
<td>100%</td>
<td>67%</td>
<td>67%</td>
<td>50%</td>
<td>17%</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td>BRMC</td>
<td>3</td>
<td>3</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>I</td>
<td>NCDB</td>
<td># NA</td>
<td># NA</td>
<td>100%</td>
<td>92%</td>
<td>87%</td>
<td>83%</td>
<td>80%</td>
<td>74%</td>
</tr>
<tr>
<td></td>
<td>MRMC</td>
<td>53</td>
<td>34</td>
<td>100%</td>
<td>92%</td>
<td>79%</td>
<td>73%</td>
<td>65%</td>
<td>65%</td>
</tr>
<tr>
<td></td>
<td>BRMC</td>
<td>28</td>
<td>24</td>
<td>100%</td>
<td>93%</td>
<td>89%</td>
<td>89%</td>
<td>88%</td>
<td>88%</td>
</tr>
<tr>
<td>II</td>
<td>NCDB</td>
<td># NA</td>
<td># NA</td>
<td>100%</td>
<td>87%</td>
<td>82%</td>
<td>76%</td>
<td>71%</td>
<td>64%</td>
</tr>
<tr>
<td></td>
<td>MRMC</td>
<td>50</td>
<td>24</td>
<td>100%</td>
<td>76%</td>
<td>60%</td>
<td>56%</td>
<td>52%</td>
<td>52%</td>
</tr>
<tr>
<td></td>
<td>BRMC</td>
<td>46</td>
<td>27</td>
<td>100%</td>
<td>87%</td>
<td>83%</td>
<td>70%</td>
<td>63%</td>
<td>59%</td>
</tr>
<tr>
<td>III</td>
<td>NCDB</td>
<td># NA</td>
<td># NA</td>
<td>100%</td>
<td>79%</td>
<td>63%</td>
<td>62%</td>
<td>58%</td>
<td>49%</td>
</tr>
<tr>
<td></td>
<td>MRMC</td>
<td>51</td>
<td>27</td>
<td>100%</td>
<td>84%</td>
<td>72%</td>
<td>63%</td>
<td>59%</td>
<td>55%</td>
</tr>
<tr>
<td></td>
<td>BRMC</td>
<td>25</td>
<td>12</td>
<td>100%</td>
<td>88%</td>
<td>76%</td>
<td>60%</td>
<td>56%</td>
<td>36%</td>
</tr>
<tr>
<td>IV</td>
<td>NCDB</td>
<td># NA</td>
<td># NA</td>
<td>100%</td>
<td>42%</td>
<td>22%</td>
<td>13%</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>MRMC</td>
<td>16</td>
<td>2</td>
<td>100%</td>
<td>41%</td>
<td>14%</td>
<td>11%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>BRMC</td>
<td>27</td>
<td>0</td>
<td>100%</td>
<td>48%</td>
<td>30%</td>
<td>19%</td>
<td>15%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Excluding Patients
SLNM (195 pts) vs SEER (144,955 pts)

Included

37 Patients
Stage I
46 Patients
Stage II
45 Patients
Stage III
111 Patients
Included

195 Patients

144,955 Patients

6,741 Patients
30,927 Patients
16,269 Patients
1,535 Patients
47,168 Patients


Survival Results
SLNM (128 pts) vs SEER (89,483 pts)

<table>
<thead>
<tr>
<th>Stage</th>
<th>SLNM</th>
<th>Conventional (SEER)</th>
<th>NCDB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total # of Patients Included</td>
<td>Lost to Follow-up*</td>
<td>5-Year Disease Specific Survival</td>
</tr>
<tr>
<td>I</td>
<td>37</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>II</td>
<td>46</td>
<td>5</td>
<td>91.2%</td>
</tr>
<tr>
<td>III</td>
<td>45</td>
<td>8</td>
<td>81.8%</td>
</tr>
<tr>
<td>Total</td>
<td>128</td>
<td>17 (13.3%)</td>
<td>91.0%</td>
</tr>
</tbody>
</table>

Table shows the survival analysis comparison between MRMC patients undergoing SLNM vs SEER’s database for Stages I, II, and III vs NCDB’s observed survival, which is not disease specific.
Five-Year Survival of NCDB Data by Stage

Source: National Cancer Database, Oct. 9, 2008
In conclusion, McLaren, Bay and NCDB data is comparable. There were more females diagnosed with colon cancer than males. The majority of patients were diagnosed in the 70th decade of life. McLaren’s data differed as far as stage of disease at diagnosis. More patients were diagnosed with Stage III disease at McLaren compared to Stage II among NCDB and Bay’s data. This can most likely be attributed to staging accuracy because of use of the sentinel lymph node mapping being performed as part of the surgical procedure. Initial treatment was similar among all three groups with surgery dominating treatment modalities followed by the combination of surgery and chemotherapy. NCDB had a higher 5-year observed survival when compared to McLaren and Bay’s data. However, this could be attributed to the small number of patients for each individual hospital compared to over 350,000 patients among the NCDB data set.
Multidisciplinary Oncology Service

The Great Lakes Cancer Institute at McLaren Regional Medical Center (GLCI-McLaren) provides a comprehensive cancer program that treats a broad scope of cancer conditions.

A multidisciplinary approach implements the most current philosophies in cancer therapy. Exact location and progression of the disease are determined with precision using the superior diagnostic imaging capabilities located on the campus of McLaren Regional Medical Center.

The McLaren Imaging Center is designated as a Breast Imaging Center of Excellence by the ACR. The designation means that the breast imaging services at this center are fully accredited in mammography, stereotactic breast biopsy, breast ultrasound and ultrasound-guided breast biopsy.

In addition to digital mammography, The McLaren Imaging Center offers MRI, and CT imaging. The digital images pass through a sophisticated Computer-Aided Detection System (CAD). GLCI-McLaren utilizes PET/CT imaging to aid in radiation treatment planning for many cancer cases.

Personal Care plans, coordinated by a team of physicians, may employ chemotherapy or immunology, radiation therapy, surgery, or a combination of treatment modalities.

Medical Oncology and Hematology Services:

- Biologic Therapy
- Chemotherapy
- Clinical Trials
- Hormone Replacement Therapy
- Targeted Therapy
- Genetic Counseling
- IV Therapy
Forms of Radiation Delivery Available:
- Intensity Modulated Radiation Therapy (IMRT)
- TomoTherapy
- Brachytherapy
- Radioimmunotherapy

Surgical Oncology
Many skilled surgeons are available at McLaren. While treatment options are a choice between a surgeon and patient, McLaren is equipped to accommodate most all procedures from conventional to the most progressive.

Specially-trained surgeons now utilize the daVinci robotic surgical system for qualifying cancer cases. The robotic surgical system allows surgeons to perform minimally-invasive surgery with a high-definition field of vision and increased surgical dexterity. These benefits result in less pain and a quicker recovery time for patients compared to open surgery.

Under the direction of Dr. Saha, McLaren Regional Med Center offers a Surgical Oncology Fellowship Program for candidates displaying a keen interest in pursuing a career in surgical oncology. The two-year program offers solid exposure to sub specialties, vast clinical and basic science research leading to presentations and publications, pre-operative, diagnostic work-up, surgical technique, and experience in lymphatic mapping. The program accepts one to two fellows each year.

References
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National Cancer Data Base Comparison Benchmark and Survival Reports
Cancer Facts & Figures 2007, American Cancer Society
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