

Cancer Committee Chairman Report 2011

In 2011, the GMC cancer program continued expansion of its services. The Gwinnett Breast Center program, accredited by National Accreditation Program for Breast Center, provided individualized, patient-centered cancer care, physician and associate involvement in the multidisciplinary case conferences and patient management is providing patients with state-of-the-art, compassionate diagnosis and treatment. Guidelines for the use of diagnostics, including breast MRI, ensure optimal testings and expedited treatment.

The addition of screening risk assessment on screening mammograms informs patients and physicians of the individual's cancer risk and thus guides future testing and preventative strategies. Women's monthly support group for women with breast cancer continues to help patients cope with this disease.

Other initiatives in 2011 were directed at raising awareness in the community of cancer risk and of opportunities for early detection and prevention. Among these were provision of head and neck screening as well as free screening for lymphedema patients at Gwinnett's Relay for life. GMC also held *Fresh Start* programs for patients and employees, *Look Good Feel Better* for women with cancer and participated in the *Great American Smoke Out*.

Furthermore, patients had access to clinical trials through the Atlanta CCOP, the Care-a-Van visited multiple communities and a survivorship program was launched, with links to the ACS Survivorship Tool and the ASCO template for a cancer treatment summary.

The GMC cancer program continues to attract greater involvement from physicians, staff and community with many exciting changes anticipated as we strive to provide the greater Gwinnett community with compassionate, patient-centered, state-of-the-art cancer care close to home.

Alexander Saker, MD
Chairman, Cancer Committee

Our mission is to offer our community compassionate cancer care through a network of integrated services and programs promoting the delivery of health and wellness in partnership with our patients and physicians.

Our vision is to be a premier comprehensive community cancer program that makes a difference in the lives of those who experience cancer.

The Oncology Data Center

The Oncology Data Center (ODC) is an information system designed for the collection, management and analysis of data on persons with the diagnosis of malignant (or neoplastic disease) and benign brain tumors. The information maintained in the registry includes demographic information, medical history, diagnostic findings, cancer information (including primary site, histology cell type and extent of disease and/or stage), cancer therapy (including surgery, radiation therapy, chemotherapy, home and/or immunotherapy) and follow-up (annual information concerning treatment, recurrence and patient status).

In 2010, the ODC processed 1,336 analytic cases (patients diagnosed since the reference date and/or all of the first course of treatment for or diagnosed elsewhere and all or part of the first course of therapy at GMC) and 346 non-analytic cases (diagnosed elsewhere and received all of the first course of treatment elsewhere and seen at hospital now with active disease). The top three women's cancers in 2010 were breast, lung and thyroid gland. The top three men's cancers in 2010 were lung, prostate gland and bladder. All four of the associates in the ODC are Certified Tumor Registrars.

The Oncology Data Center collects the required data items mandated by the American College of Surgeons, Georgia Comprehensive Cancer Registry and SEER (Surveillance Epidemiology and End Results), while maintaining strict patient confidentiality. The ODC reports monthly to the Georgia Center for Cancer Statistics and reports yearly to the National Cancer Database.

Breast Cancer

Annual mammography has shown the ability to reduce the mortality rate from breast cancer in a population by 15 to 50 percent. Mammography is the gold standard for detecting malignancy but there are limitations. Studies have shown as many as 20 percent of breast cancers will be missed by mammography. Approximately 10 percent of women are recalled for additional work up and a significant portion prove to have no abnormality, resulting in unnecessary anxiety and cost. A major factor contributing to the limited performance of mammography is the superimposition of tissue that is created by the overlap of normal breast structures in a two-dimensional mammographic projection. These overlapping structures can obscure a lesion making it more difficult to perceive or rendering it completely mammographically occult. Tissue superimposition hides pathologies or mimics pathologies in 2D mammography. 3D mammography (tomosynthesis) improves visibility by reducing superimposition. Tomosynthesis is a method of imaging the breast in three dimensions (3D). The X-ray tube moves in an arc across the breast. A series of low dose images are acquired from difference angles. The total dose is approximately the same as a 2D mammogram. The projection images are reconstructed into 1 mm slices. Tomosynthesis results in better sensitivity of detecting cancers and few recalls from screening mammograms reducing cost and patient anxiety. Tomosynthesis technology was FDA approved in February 2011. Gwinnett Breast Center has four dimensions mammogram units that have the capability of performing 2D and 3D (tomosynthesis) mammography.

In August 2011, the Gwinnett Breast Center at GMC-Lawrenceville opened as a 17,584 square foot, state-of-the-art imaging center of excellence awarded by the American College of Radiology. The Gwinnett Breast Center combines the Marion Allison Webb Center of Screening Mammography and the Sandra J. Strickland Diagnostic Center. The center provides enhanced customer experience with one location for breast imaging patients, increased coordination of care and additional scheduling capacity. The services include screening and diagnostic digital mammography, diagnostic breast ultrasound, bone densitometry, breast MRI, image-guided needle localizations for surgery and image-guided biopsies including stereotactic core biopsy, ultrasound-guided fine needle aspiration, ultrasound-guided core biopsy and MRI-guided core biopsy. Board-certified radiologists interpret all breast imaging studies and perform all breast imaging procedures.

Kimberly Hutcherson, MD

2006 and 2010 GMC Breast Data

There were 249 analytic breast cases in 2006 and 306 analytic breast cases in 2010. This is a 19 percent increase in five years. Graph 1 shows the age ranges for 2006 and 2010 breast cases. There were more patients diagnosed in the 50-59 age range for 2006 as well as in 2010. The second highest in 2006 was 40-49 in 2006 as well as in 2010.

Graph 2 shows the patients by their AJCC stage. In 2006, Stage 1 was the highest diagnosed AJCC stage, the second highest was AJCC stage 0. In 2010 Stage IA was the highest AJCC stage, the second highest was Stage 0 also.

Graph 3 shows the first course of treatment.(D-biopsy, C-chemo, R-radiation therapy, S-surgery H-Hormone). The highest first course of treatment for 2006 was biopsy and surgery, the second is surgery, radiation therapy and hormone. The highest first course of treatment for 2010 was biopsy and surgery, and the second was surgery alone. The survival is similar in both GMC and NCDB.

Graph 1

Age	2006	2010
0-29	1	3
30-39	17	17
40-49	53	74
50-59	80	86
60-69	52	73
70-79	37	33
80-89	6	18
90+	0	2

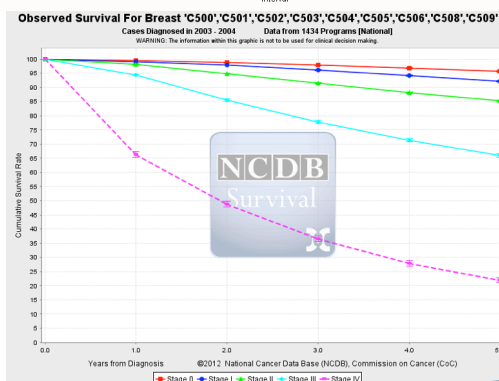
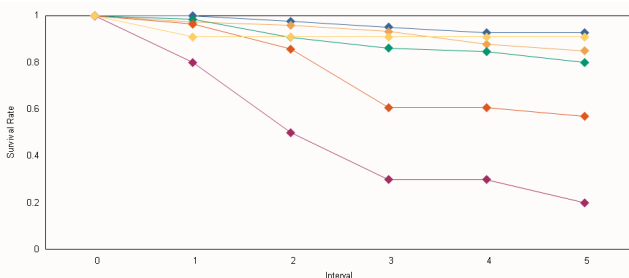
Graph 3

Initial Treatment	2006	2010
C	1	3
D	12	30
DC	1	6
DH	1	0
DRC	1	2
DRH	1	0
DS	36	56
DSC	19	29
DSCH	7	9
DSCO	1	0
DSH	16	22
DSR	15	9
DSRC	10	12
DSRCH	7	14
DSRH	19	36
RH	1	0
S	35	0
SC	7	24
SCH	8	8
SH	2	2
SR	18	5
SRC	9	8
SRCH	7	7
SRH	12	15
DCH	0	1
P	0	1

Graph 2

Stage	2006	2010
0	54	66
1	89	2
1a	0	116
1b	0	15
2	0	0
2a	41	36
2b	24	21
3	0	0
3a	4	12
3b	3	6
3c	6	9
4	9	15

5 Year Survival for Breast Cancer



Prostate Cancer

Gwinnett Medical Center provides excellent care to a large number of patients diagnosed with prostate cancer. Prostate cancer is the most common non-cutaneous cancer in American men. It results in an estimated 28,000 deaths per year in the US, making it the second most lethal cancer in men behind lung cancer. It is estimated that there will be approximately 241,000 cases diagnosed in the US per year. Thankfully, the death rate from prostate cancer has decreased more than 40 percent since the introduction of the prostate specific antigen (PSA) blood test. Additional testing can help guide which patients benefit from a biopsy. These include the free PSA measurement and the PCA 3 test which measures urine levels of genetic material specific to prostate cancer.

Gwinnett Medical Center offers a comprehensive diagnostic approach including CT scans, bone scans, MRI's and prostascint scans if necessary.

Prostate cancer is often curable when detected early. Depending on the situation, possible management approaches include: active surveillance, surgery, radiation therapy, hormonal therapy, cryotherapy, chemotherapy and vaccine treatment.

Recent major improvements include efforts to minimize side effects of treatment. Intensity-modulated radiation therapy and image-guided radiation therapy aid in maximizing radiation dose to the prostate while minimizing dose to surrounding normal structures.

Advances also include the use of robotic surgery for removal of the prostate.

Gwinnett Medical Center is the home of advanced screening, diagnosis and treatment of prostate cancer. This is provided by a caring and experienced staff.

Philip D. Shrake, MD
Radiation Oncology

2006-2010 Analytic Prostate Cancer

In 2010 there were 137 prostate patients and in 2006 there were 135. That was an increase of two patients.

Graph 1 shows the difference of stage from 2010 to 2006. There were more Stage 2 in 2006. Both had one Stage 4 in each year. Graph 2 shows age at diagnosis. Both graphs show age 60-69 to be the highest age at diagnosis.

In both years, the highest treatment was biopsy and radiation therapy. Initial treatment was somewhat different in the two years, with radiation being the highest treatment. (D=biopsy, C=chemo, R=radiation therapy, S=surgery H=Hormone). Survival rates are similar with GMC and NCDB.

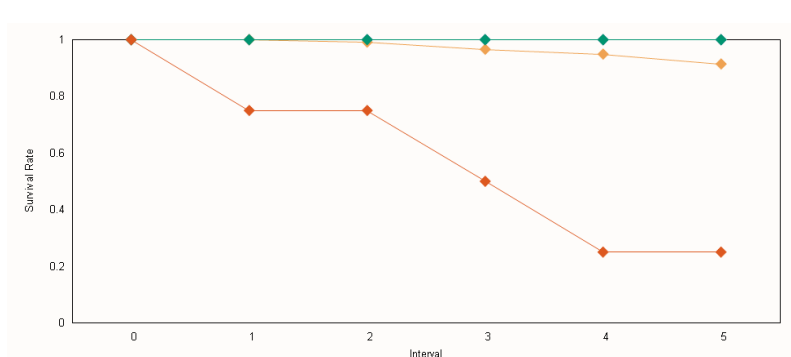
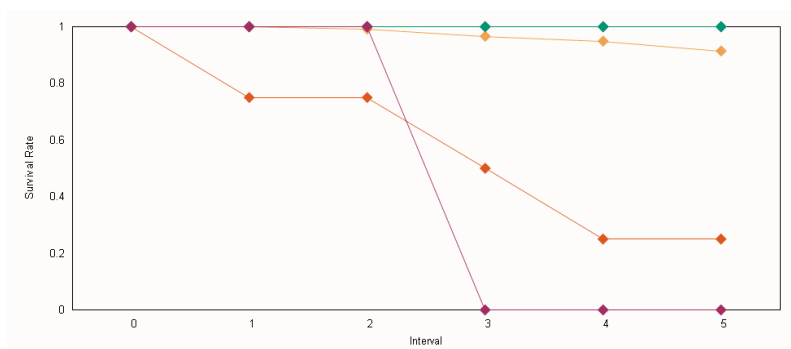
Graph A

Stage	2006	2010
1	0	30
2	131	19
2a	0	23
2b	0	58
3	0	5
4	3	1

Graph B

Age	2006	2010
0-29	0	0
30-39	0	0
40-49	7	1
50-59	39	29
60-69	53	73
70-79	32	30
80-89	4	3
90+	0	1

5 Year Survival for Prostate Cancer



Graph C

Initial Treatment	2006	2010
D	6	4
DR	25	68
DS	5	9
R	70	31
S	16	23
SR	0	1
DRC	6	0
DRH	1	0
DSR	1	0
RH	5	0
SRH	1	0

2010 GMC Cancer

In Graph 1 you see the 2010 GMC all cancers by age. The top age is 60-69 with 50-59 coming in second.

Graph 2 shows which counties the patients are coming from. The top county is Gwinnett with 1,014, second being Barrow with 76, third being Walton with 65, fourth being Jackson with 43, fifth being Hall with 28, sixth being Dekalb with 27 and seventh being Fulton with 22.

Graph 3 shows the GMC patients break down by AJCC stage. The top stage is AJCC Stage 1. This shows that we are diagnosing our cancers at an earlier stage.

Graph 1

Age	2010
0-29	31
30-39	78
40-49	181
50-59	317
60-69	344
70-79	270
80-89	99
90+	16

Graph 2

County at Diagnosis	2010
Gwinnett	1,014
Barrow	76
Walton	65
Jackson	43
Hall	28
Dekalb	27
Fulton	22
Other	61

Graph 3

Stage	2010
0	119
1	190
1a	188
1b	37
2	46
2a	112
2b	101
3	42
3a	49
3b	55
3c	26
4	161
4a	20
4b	23
4c	4



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