GVH GRAND VIEW HOSPITAL



Cancer Program Annual Report

Cancer Committee Activities 2012

Cancer Registry Data, 2011 Some comparison data reflects NCDB & GVH 2010 Data

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Grand View Hospital Cancer Program Annual Report

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Cancer Committee 2012

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Medical Oncology, Chairman Radiology **Radiation Oncology** Pathology, Cancer Conference Coordinator* Gastroenterology **Diagnostic Radiology** Surgery, CoC Liaison* **GVMP**, Family Practice **American Cancer Society** Manager, Radiation Oncology Vice President, Nursing Nursing Education **Director, Marketing & Promotions Community Outreach Coordinator* Referral Coordinator Breast Care Coordinator and Psycho-Social Coordinator*** Manager, Hospice Quality Improvement Coordinator* **Bux-Mont Oncology** Pharmacy **Registry Data Quality Coordinator*** Clinical Research Coordinator* Lymphedema Therapist **Case Management** Manager, Clinical Nutrition

*Committee Coordinators for Commission on Cancer designated program activities.

2012 Program Activities

<u>Overview</u>

The Cancer Committee continues to meet quarterly. In addition, the Physician Quality Subcommittee meets six times a year to focus on national standards of care, the National Quality Forum benchmarking and monitors for the Grand View Hospital Quality Dashboard. The Cancer Committee continued its commitment to provide high quality diagnostic and treatment services, clinical trials, education, wellness programs, and patient and family support in a unified effort within our community.

Cancer Conferences

Tumor Board Cancer Conferences exceeded the bimonthly conference frequency recommended by the Commission on Cancer with the Cancer Committee establishing a goal of weekly conferences, as well as a 100% attendance requirement for medical oncology, radiation oncology, surgery, radiology and pathology. A total of 45 conferences (22 general and 23 breast) were held to provide a forum for multidisciplinary consultative discussion of patient management, as well as to provide continuing education for physician and staff. During the year, approximately 300 patients were presented for prospective discussion of diagnosis, staging and treatment planning based on national guidelines.

In May 2012, the Committee invited Dr. Robert Bridwell, Medical Advisor for IBA molecular of North America, to meet with Oncologists, Surgeons, Pulmonologist, Pathologists and Radiation Oncologists to discuss new updates to NCCN guidelines for usage of PET/CT.

In December 2012, the Committee invited Dr. Nevena Damjanov, Director, Clinical Research Programs and Director of GI Oncology, Abramson Cancer Center at the Penn Presbyterian Medical Center to meet with Oncologists, Surgeons, Pulmonologists, Pathologists, Gastroenterologists and Radiation Oncologists to discuss the Oncotype DX Colon cancer test for Stage II colon cancer.

Noted accomplishments in 2012

- An approved list of Oncology Clinical Trials at Grand View Hospital was made available to the public via the internet on the GVH Cancer Care Page. Physicians and the public can now access detailed Clinical Trials information remotely via the web from anywhere.
- During the absence of a tumor registrar, a team was formed to continue the good work of our cancer program. A tremendous effort was made to continue to provide quality care to our patients, ongoing work to meet all of the Commission on Cancer standards and preparation for our Commission on Cancer certification on March 19, 2012. This work led to a very successful Commission on Cancer Survey.

Noted accomplishments in 2012

- Cathy Haberle, Breast Care Coordinator participated in an original research study for a nurse navigation quality improvement project, partnering with Fox Chase and several FCCC partner hospitals. The project won a first place award for original research at a national nursing navigation conference and will be published later this year.
- Grand View Medical Practices continued to develop a program that would improve colon cancer screening. The program went live in March 2012. The program is an information sharing collaboration between GVMP and BuxMont GI and Centers for GI Health. It has produced a more efficient referral system and a means to track those referrals in a meaningful way.

Grand View Radiation Oncology

• The Radiation Oncologist and departmental staff plan and deliver courses of radiation treatments to patients with various cancer diagnoses. Several methods of treatment planning and delivery are available. These methods include 3 Dimensional, Intensity Modulated Radiation Therapy (IMRT), Image Guided Radiation Therapy (IGRT), Low Dose Rate prostate seed implants (LDR) brachytherapy and, through the Nuclear Medicine department, radioactive material is used in the treatment of patients with thyroid cancer and patients with many areas of bony metastases.

In 2011:

- 5022 treatments were delivered to 370 individual patients.
- 292 of these patients were new, in that they have not received radiation treatments at GVH in the past.
- A total of 34 prostate seed implants were performed.
- In May, 2011, the radiation oncology department was officially named "The Longacre Family Radiation Oncology Center" in recognition of the family's generosity and leadership spanning 50 years, across 3 generations. The Longacre family chose the radiation oncology unit because of the compassionate care they received while a family member was being treated.

Breast Care Program

Cathy Haberle, RN, BSN, CHPN, CBCN Breast Care Coordinator continues to provide support through diagnostic testing and treatment for breast abnormalities, assistance with arrangements for procedures to ensure timeliness and continuity of care through all modalities of treatment, and offers support and follow-up. Ms. Haberle educates patients and assists patients in need, connecting them with valuable community resources. The program has increased the availability of biopsy procedure slots and has a process in place to schedule urgent biopsies more quickly.

Ms. Haberle conducted monthly breast cancer support groups with a alternating format of general support with scheduled speakers on topics for breast cancer survivors; organized the Look Good Feel Better programs every two months during the year, and provided additional educational topics and community outreach during the remainder of the year.

Yoga for cancer patients and caregivers program was started in the fall of 2011 and has been a great success. The program runs for 6 week sessions on a continuous basis throughout the year.

Community Outreach and Support Services

The Public Relations Department offered a new, on-going exercise program this year: Yoga for Cancer Survivors and Caregivers. Educational programs offered in 2012 featured topics including nutrition, physical rehabilitation, breast health, lung cancer, survivorship, and skin cancer. Among the vehicles used to promote cancer-related programs and services were *Health View* (Grand View's calendar/newsletter), *LifeStages* (Grand View's women's & children's service line newsletter), the annual report, gvh.org (hospital web site), gvh100.org (centennial website), as well as news releases sent to local newspapers. In October, the department offered a special ladies night out on breast cancer featuring gynecologist Michael Chmielewski, MD, and breast care coordinator Cathy Haberle, RN.

Clinical Trials

GVH received a commendation from the Commission on Cancer for its accrual to clinical trials in the years 2009-2011. The Committee continues its efforts to increase accrual for the year 2012.

Lymphedema Therapy

Radiation therapy, lymph node removal, or surgery can affect your lymphatic system. Lymphedema is an over-accumulation of protein-rich fluid that causes abnormal swelling in one or more areas of the body.

Grand View's certified Lymphedema Therapists use manual lymph drainage/complete decongestive therapy a highly successful technique to treat and control lymphedema. It involves manual lymph drainage (a type of light massage that redirects the flow of lymph fluid) as well as meticulous skin and nail care, compression bandaging and exercise.

Physical Medicine and Rehabilitation had 144 Lymphedema referrals in 2011 which was an 8% increase over 2010 referrals.

2012 Goals

• 1.5 meets and sets at least one programmatic goal each year:

<u>Coordination of new structure for the Tumor Registrar Function</u> Increase staffing level to 1.5 FTE Hire of new on-site registrars Minimize outsourcing of registry work

• 1.5 meets and sets at least one **clinical** goal each year:

<u>Oncotype Dx</u> Develop a process for timely ordering of Oncotype DX breast assay testing Define physician roles Availability of results for treatment consultation

 4.7 Quality Improvement Coordinator and Oncology Nurse develop two plans that analyze and document the required studies that measure the quality of care and outcomes for patients with cancer. (#1)

<u>Smoking Evaluation</u> Assess the frequency of patient queried about tobacco usage

• 4.7 Quality Improvement Coordinator and Oncology Nurse develop two plans that analyze and document the required studies that measure the quality of care and outcomes for patients with cancer. (#2)

<u>Chemotherapy Education</u> Evaluating the clarity of the educational materials provided to patients

4.8 Quality Improvement Coordinator and Oncology Nurse implement two patient care improvements. (#1)

<u>Personal Health Organizer</u> Expand on the success of the "Guiding You on Your Path" Notebook Disease Specific Co-brand with ACS Time and cost saving tool

• 4.8 Quality Improvement Coordinator and Oncology Nurse implement two patient care improvements. (#2)

<u>Tobacco Use</u> Identifying tobacco users that have received smoking cessation information

Cancer Registry Review of 2011 Data

The Grand View Hospital Cancer Registry maintains detailed information on all patients diagnosed and/or treated for malignancies since 1996. The database includes a total of 9217 patients, of which 8027 are considered analytic cases initially diagnosed and/or treated at GVH and included in studies and analysis. The remaining patients (non-analytic) were seen following initial diagnosis and completion of first course treatment for recurrence, progressive disease or other subsequent cancer-related management. There are currently 4576 living patients, who remain in active follow-up on an annual basis.

In 2011, there were 559 patients initially diagnosed and/or treated at Grand View Hospital with an additional 94 patients seen for care subsequent to first course treatment, for a total of 653 new cases. The 2011 data is consistent with previous years (Figure 1 and Table 1).

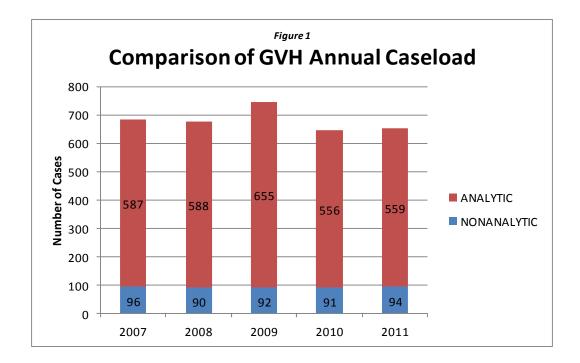


Table I

Class	Description	2007	2008	2009	2010	2011
	Diagnosed at GVH - all of 1st course treatment elsewhere	35	42	45	58	21
Analytic	Diagnosed at GVH - all or part of 1st course treatment at GVH	447	425	462	341	407
	Diagnosed elsewhere - all or part of 1st course treatment at GVH	105	121	148	157	131
Non- Analytic	Seen at GVH for progression, subse- quent treatment, palliation, pathology only, etc.	96	90	92	91	94
All Cases	Total accessions for the year	683	678	747	647	653

A detailed distribution of cases by primary site, sex and AJCC stage at diagnosis follows in Table 2. For 2011, 42% of Grand View Hospital's newly diagnosed cases, or cases receiving first course of treatment, was directed toward early disease Stage 0 or Stage 1.

		SE	X	AJCC STAGE GROUP						
PRIMARY SITE	TOTAL	М	F	0	I		III	IV	UNK	N/A
ALL SITES	559	265	294	70	165	110	53	76	54	31
ORAL CAVITY	8	6	2	0	3	0	1	3	1	0
LIP	1	0	1	0	1	0	0	0	0	0
TONGUE	3	2	1	0	2	0	0	1	0	0
OROPHARYNX	1	1	0	0	0	0	1	0	0	0
HYPOPHARYNX	0	0	0	0	0	0	0	0	0	0
OTHER	3	3	0	0	0	0	0	2	1	0
DIGESTIVE SYSTEM	89	49	40	0	14	14	20	26	13	2
ESOPHAGUS	10	8	2	0	0	1	2	4	3	0
STOMACH	7	4	3	0	2	1	1	2	1	0
COLON	33	14	19	0	9	5	6	9	4	0
RECTUM	14	9	5	0	1	3	5	3	2	0
ANUS/ANAL CANAL	1	0	1	0	0	0	1	0	0	0
LIVER	3	3	0	0	1	0	1	0	0	1
PANCREAS	12	7	5	0	1	2	2	7	0	0
OTHER	9	4	5	0	0	2	2	1	3	1
RESPIRATORY SYS-										
TEM	73	45	28	0	22	5	14	27	5	0
NASAL/SINUS	0	0	0	0	0	0	0	0	0	0
LARYNX	2	1	1	0	0	0	0	1	1	0
LUNG/BRONCHUS	68	42	26	0	20	5	14	26	3	0
OTHER	3	2	1	0	2	0	0	0	1	0
BLOOD & BONE MAR-		-	~	0	•		•	•	•	
ROW LEUKEMIA	11	5	6	0	0	0	0	0	0	11
	6	2	4	0	0	0	0	0	0	6
MULTIPLE MYELOMA	2	2	0	0	0	0	0	0	0	2
OTHER	3	1	2	0	0	0	0	0	0	3
BONE	0	0	0	0	0	0	0	0	0	0
	U	U	0	0	0	0	0	U	0	U
CONNECT/SOFT TIS-										
SUE	4	2	2	0	1	2	0	1	0	0
	т	-	-	5		-	0		0	
SKIN	25	13	12	12	8	1	1	0	3	0
MELANOMA	23	11	11	12	7	0	1	0	2	0
										-
OTHER	3	2	1	0	1	1	0	0	1	0

Table 2GVH Analytic Cases, 2011: Primary Site Distribution by Sex and Stage

Shaded rows indicate top 5 sites.

		SE	Х		AJCC STAGE GROUP						
PRIMARY SITE	TOTAL	М	F	0	I	П		IV	UNK	N/A	
BREAST	129	7	122	33	45	38	8	3	2	0	
FEMALE GENITAL	35	0	35	0	19	2	3	2	9	0	
CERVIX UTERI	1	0	1	0	1	0	0	0	0	0	
CORPUS UTERI	28	0	28	0	15	1	3	1	8	0	
OVARY	4	0	4	0	2	0	0	1	1	0	
VULVA	2	0	2	0	1	1	0	0	0	0	
OTHER	0	0	0	0	0	0	0	0	0	0	
MALE GENITAL	80	80	0	0	29	39	1	1	10	0	
PROSTATE	77	77	0	0	23	39	1	1	9	0	
TESTIS	3	3	0	0	2	0	0	0	1	0	
OTHER	0	0	0	0	0	0	0	0	0	0	
OTTER	0	0	0	0	0	0	0	0	0	0	
URINARY SYSTEM	48	32	16	25	6	5	0	3	9	0	
BLADDER	44	30	14	25	6	4	0	1	8	0	
KIDNEY/RENAL	4	2	2	0	0	1	0	2	1	0	
OTHER	0	0	0	0	0	0	0	0	0	0	
BRAIN & CNS	4	2	2	0	0	0	0	0	0	4	
BRAIN (BENIGN)	0	0	0	0	0	0	0	0	0	0	
BRAIN (MALIGNANT)	2	1	1	0	0	0	0	0	0	2	
OTHER	2	1	1	0	0	0	0	0	0	2	
ENDOCRINE	11	2	9	0	7	2	2	0	0	0	
THYROID	11	2	9	0	7	2	2	0	0	0	
OTHER	0	0	0	0	0	0	0	0	0	0	
UTHER	0	0	0	0	0	0	0	0	0	0	
LYMPHATIC SYSTEM	28	14	14	0	11	2	3	10	2	0	
HODGKIN'S DISEASE	3	3	0	0	0	1	1	1	0	0	
NON-HODGKIN'S	25	11	14	0	11	1	2	9	2	0	
	14	0	6	0	0	0	0		0	1.4	
UNKNOWN PRIMARY	14	8	6	0	0	0	0	0	0	14	
OTHER/ILL-DEFINED	0	0	0	0	0	0	0	0	0	0	

Table 2 continued GVH Analytic Cases, 2011: Primary Site Distribution by Sex and Stage

Number of cases excluded: 2

This report EXCLUDES CA in-situ cervix cases, squamous and basal cell skin cases, and intraepithelial neoplasia cases.

Shaded rows indicate top 5 sites.

The top 5 sites at GVH (Figure 2) remain consistent with previous years: 1-breast, 2-prostate, 3- lung, 4-colorectal and 5-bladder as detailed below (Table 3).

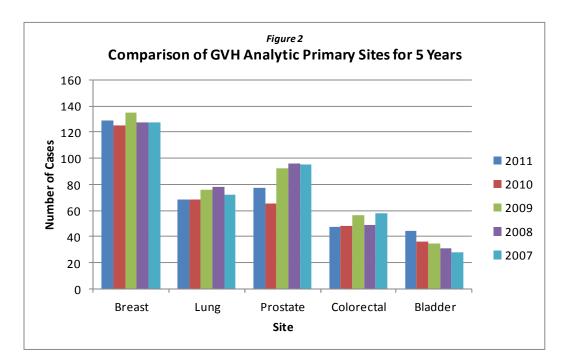
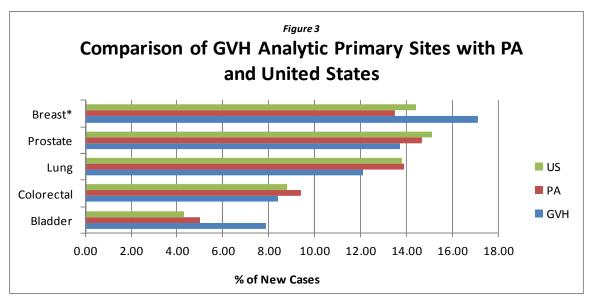


Table 3

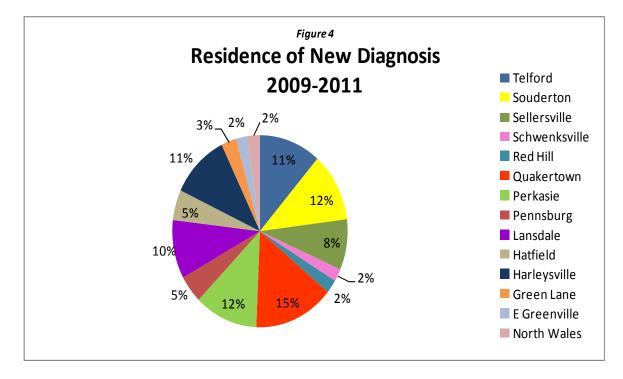
I		Breast	Lung	Prostate	Colorectal	Bladder
	2011	129	68	77	47	44
	2010	125	68	65	48	36
ſ	2009	135	76	92	56	35
	2008	127	78	96	49	31
	2007	127	72	95	58	28

A comparison of the Grand View top 5 primary sites in proportion to its total newly diagnosed and/or treated patients in 2011 is compared with American Cancer Society Facts & Figures 2011 estimates for Pennsylvania and the United States in Figure 3. The larger percent of GVH breast cases (17.1%) compared to 13.5% and 14.4% for PA and the US respectively, may well reflect the availability of diagnostic and treatment services, as well as community outreach efforts to increase breast cancer awareness in our community.



Number of New Cases-Quantified Above

#	Breast	Lung	Prostate	Colorectal	Bladder	Total
GVH	129	68	77	47	44	559
PA	10570	10900	11500	7360	3920	78030
US	230480	221130	240890	141210	69250	1596670



GVH Breast Cancer Evaluation

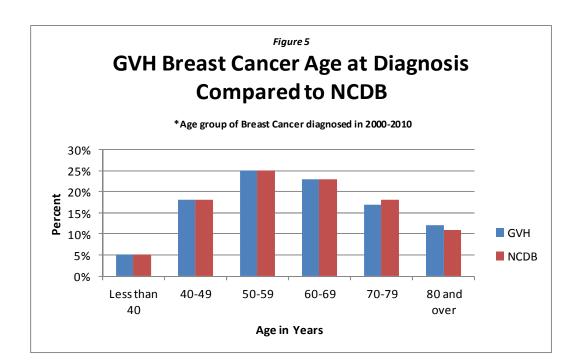
A retrospective review of the Breast Cancer experience at Grand View Hospital includes 643 Patients initially diagnosed and/or treated at our hospital during the period of 2007-2011 (Table 4).

YEAR	NEW PATIENTS
2011	129
2010	125
2009	135
2008	127
2007	127

Table 4Grand View Hospital Breast Cancer Patients by Year

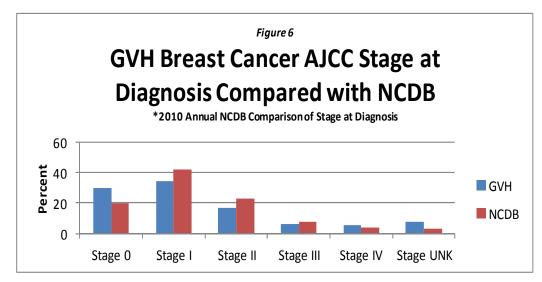
Demographics

The age demographics of the Grand View Hospital study population in Figure 5 are congruent to National Cancer Data Base (NCDB) data.



Stage at Diagnosis

Grand View Hospital Breast Patient Stage at diagnosis is comparable to the NCDB with 64 percent of the GVH patients presenting with early Stage 0 and Stage I disease by comparison to 62 percent for NCDB Stage 0 and Stage I cases (Figure 6). A notable distinction is seen with Stage 0 however, with Grand View's Stage at diagnosis being 30% by comparison with the NCDB's 20%. Grand View Hospital's Stage II, III and IV cases are comparable to the national information.



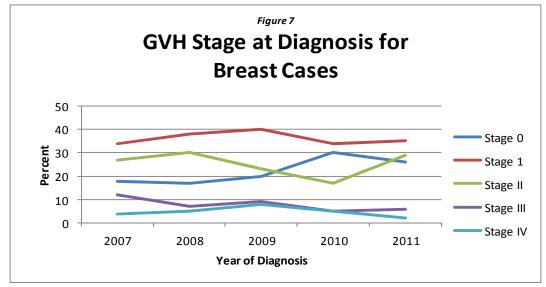
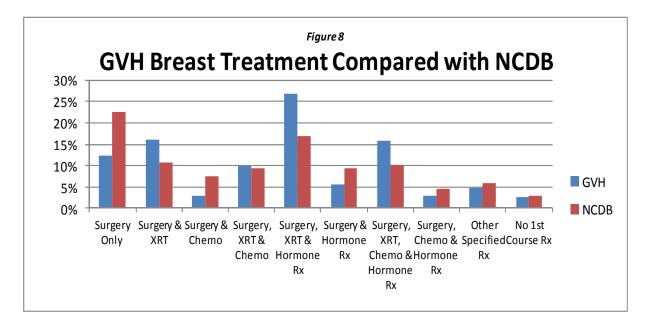


Table 5 GVH Stage at Diagnosis for Breast Cases-quantified above

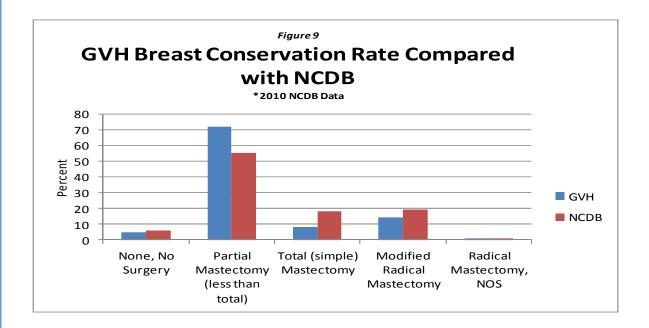
	2007	2008	2009	2010	2011
Stage 0	18	17	20	30	26
Stage 1	34	38	40	34	35
Stage II	27	30	23	17	29
Stage III	12	7	9	5	6
Stage IV	4	5	8	5	2
N/A UNK	5	3	0	9	2

Treatment

The majority of Grand View Hospital's breast cancer patients (80 percent) in the study underwent multimodality therapy with surgery, radiation, and systemic therapy in the form of chemotherapy and/or hormonal therapy as compared to 69 percent of the NCDB patients. Only 12 percent of Grand View Hospital's patients underwent surgery alone as compared to 22% of the NCDB population which speaks to the Clinicians and the Registry working cooperatively to ensure completeness of data.

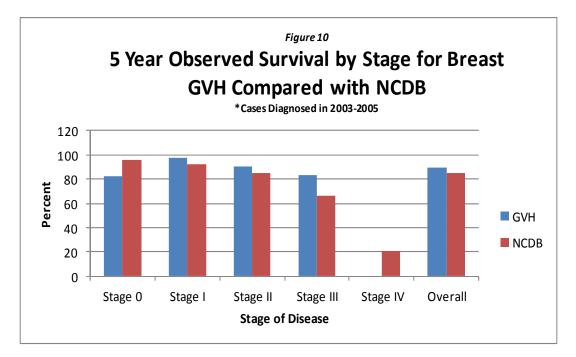


Grand View Hospital's breast conservation rate of 72 percent has remained stable for 5 years and exceeds the NCDB rate of 55 percent (Figure 9).



<u>Survival</u>

Grand View Hospital's overall breast cancer 5 year observed survival rate for all stages is 89.3 percent, compared to 85.4 percent for the National Cancer Data Base (Figure 10). The Stage 0 observed 5 year survival rate for Grand View Hospital is lower than the Stage 0 national 5 year survival rate of 95.6 percent; however, Grand View Hospital's stage I, stage II and stage III survival rates exceed the national figures and have improved since the previous breast study in 2009.





	Stage 0	Stage I	Stage II	Stage III	Stage IV	Overall
GVH	82.30%	97.60%	90.40%	83.30%	*	89.30%
NCDB	95.60%	92.10%	85.30%	66.10%	20.90%	85.40%

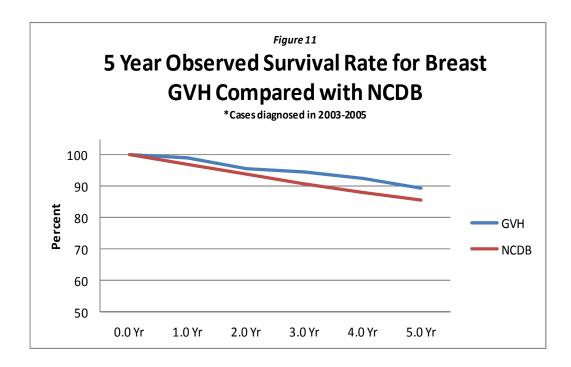


Table 7
Observed Survival Rate for Breast
Compared with NCDB

	0.00 Yr	1.0 Yr	2.0 Yr	3.0 Yr	4.0 Yr	5.0 Yr
GVH	100%	99.10%	95.70%	94.50%	92.60%	89.30%
NCDB	100	97	93.9	90.8	88	85.4

American Cancer Society Guidelines for the Early Detection of Cancer

The following cancer screening guidelines are recommended for those people at average risk for cancer (unless otherwise specified) and without any specific symptoms.

People who are at increased risk for certain cancers may need to follow a different screening schedule, such as starting at an earlier age or being screened more often. Those with symptoms that could be related to cancer should see their doctor right away.

Cancer-related checkup

For people aged 20 or older having periodic health exams, a cancer-related checkup should include health counseling, and depending on a person's age and gender, might include exams for cancers of the thyroid, oral cavity, skin, lymph nodes, testes, and ovaries, as well as for some non-malignant (non-cancerous) diseases. Special tests for breast cancer are recommended as outlined below.

Breast cancer

+ Yearly mammograms are recommended starting at age 40 and continuing for as long as a woman is in good health.

+ Clinical breast exam (CBE) should be part of a periodic health exam, about every 3 years for women in their 20s and 30s and every year for women 40 and over.

+ Women should know how their breasts normally feel and report any breast change promptly to their health care providers. Breast self-exam (BSE) is an option for women starting in their 20s.

Women at high risk (greater than 20% lifetime risk) should get an MRI and a mammogram every year. Women at moderately increased risk (15% to 20% lifetime risk) should talk with their doctors about the benefits and limitations of adding MRI screening to their yearly mammogram. Yearly MRI screening is not recommended for women whose lifetime risk of breast cancer is less than 15%.

National Comprehensive Cancer Network (NCCN) Guidelines for Patients

The National Comprehensive Cancer Network (NCCN) aims to offer the most current and trustworthy cancer information to patients and their families in a manner that is easy to understand. To reach this goal, the NCCN has developed the NCCN Guidelines for Patients. These guidelines are meant to help patients talk with doctors and make the best decisions possible. They are based on the NCCN Guidelines that are developed for doctors. For more information on NCCN or the most recent NCCN Patient Guidelines, visit NCCN.com.

National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology

Grand View Hospital utilizes the NCCN Guidelines as a resource to address the current standards for diagnosis, treatment and follow-up for each patient. The NCCN Guidelines are the most complete and most frequently updated clinical practical guidelines in medicine. They give a step by step course of action that many cancer doctors follow to make sure their decisions are well informed. Recommendations in the NCCN Guidelines are based on clinical trials and the experience of NCCN panel members which include nearly 900 well-known experts from 21 NCCN Member Institutions.

Doctors use the NCCN Guidelines to inform their decisions when diagnosing and treating people with cancer. There are guidelines for 97% of the tumors seen among patients treated at cancer clinics. By identifying what is the standard of care, the NCCN Guidelines can help patients in two ways. First they can reduce the number of differences in how patients are treated. Second, patients can get the best care for their situation. It is important to note that a certain treatment may not be right for everyone. This is because each patient has his or her own medical history and circumstances.

References:

American Cancer Society, Cancer Facts & Figures, 2011

American College of Surgeons Commission on Cancer, National Cancer Data Base (NCDB)

American Joint Committee on Cancer, AJCC Cancer Staging Manual, 7th Edition

NCCN Guidelines for Patients, Breast Cancer. Version 2.2011