UNCLASSIFIED

AD NUMBER

ADB241630

NEW LIMITATION CHANGE

TO

Approved for public release, distribution unlimited

FROM

Distribution authorized to U.S. Gov't. agencies only; Proprietary Info.; Sep 98. Other requests shall be referred to U.S. Army Medical Research and Materiel Comd., Fort Detrick, MD 21702-5012.

AUTHORITY

USAMRMC ltr, 8 Jan 2003

THIS PAGE IS UNCLASSIFIED

AD_____

AWARD NUMBER DAMD17-96-1-6325

TITLE: A Subacute Care Intervention for Short-Stay Breast Cancer Surgery Self-Test Kit: Rapid Diagnosis of Urogenital Infections in Military Women

PRINCIPAL INVESTIGATOR: Gwen K. Wyatt, R.N., Ph.D.

CONTRACTING ORGANIZATION: Michigan State University
East Lansing, Michigan 48824-1046

REPORT DATE: October 1998

TYPE OF REPORT: Annual

PREPARED FOR: U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Distribution authorized to U.S. Government agencies only (proprietary information, September 1998). Other requests for this document shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott Street, Fort Detrick, Maryland 21702-5012.

The views, opinions and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy or decision unless so designated by other documentation.

DTIC QUALITY INSPECTED 2

NOTICE

USING GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA INCLUDED IN THIS DOCUMENT FOR ANY PURPOSE OTHER THAN GOVERNMENT PROCUREMENT DOES NOT IN ANY WAY OBLIGATE THE U.S. GOVERNMENT. THE FACT THAT THE GOVERNMENT FORMULATED OR SUPPLIED THE DRAWINGS, SPECIFICATIONS, OR OTHER DATA DOES NOT LICENSE THE HOLDER OR ANY OTHER PERSON OR CORPORATION; OR CONVEY ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY RELATE TO THEM.

LIMITED RIGHTS LEGEND

Contract Number: DAMD17-96-1-6325
Organization: Michigan State University
Location of Limited Rights Data (Pages):

Those portions of the technical data contained in this report marked as limited rights data shall not, without the written permission of the above contractor, be (a) released or disclosed outside the government, (b) used by the Government for manufacture or, in the case of computer software documentation, for preparing the same or similar computer software, or (c) used by a party other than the Government, except that the Government may release or disclose technical data to persons outside the Government, or permit the use of technical data by such persons, if (i) such release, disclosure, or use is necessary for emergency repair or overhaul or (ii) is a release or disclosure of technical data (other than detailed manufacturing or process data) to, or use of such data by, a foreign government that is in the interest of the Government and is required for evaluational or informational purposes, provided in either case that such release, disclosure or use is made subject to a prohibition that the person to whom the data is released or disclosed may not further use, release or disclose such data, and the contractor or subcontractor or subcontractor asserting the restriction is notified of such release, disclosure or use. This legend, together with the indications of the portions of this data which are subject to such limitations, shall be included on any reproduction hereof which includes any part of the portions subject to such limitations.

THIS TECHNICAL REPORT HAS BEEN REVIEWED AND IS APPROVED FOR PUBLICATION.

_____ _____

_____ _____

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY *(Leave blank)*	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	October 1998	Annual (15 Sep 97 - 14 Sep 98)

4. TITLE AND SUBTITLE
A Subacute Care Intervention for Short-Stay Breast Cancer Surgery

5. FUNDING NUMBERS
DAMD17-96-1-6325

6. AUTHOR(S)
Gwen K. Wyatt, RN,Ph.D.

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
Michigan State University
East Lansing, Michigan 48824-1046

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)
U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

10. SPONSORING / MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES

19990209 122

12a. DISTRIBUTION / AVAILABILITY STATEMENT
Approved for Public Release; Distribution Unlimited
Distribution authorized to U.S. Government agencies only (proprietary information, October 1998). Other requests for this document shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott Street, Fort Detrick, Maryland 21702-5012.

12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200 words)*
The purpose of this study is to add to the scientific basis for providing subacute care in the home, by testing the effects of an immediate post-operative intervention designed to facilitate quality of life as well as physical and psychological well-being after diagnosis and surgery for breast cancer. A 2-group randomized clinical trial with repeated measures will examine the effects of the intervention. The control group (n=100) will receive customary medical care. The intervention group (n=100) will receive individual physical and psychological support in the home through a minimum of 2 telephone calls and 2 in-home visits from a registered nurse within the first 14 post-operative days. To participate in the study, a woman must be at least 21 years of age, be scheduled for breast cancer surgery and, ultimately, discharged from the hospital within 48 hours. Data collection for both groups occurs at recruitment prior to surgery and again at 4 weeks post-surgery before beginning adjuvant therapy. Between group comparisons of quality of life, physical and psychological well-being will be made. We hypothesize that, compared to the control participants, recipients of the intervention will report 1) higher quality of life, 2) fewer surgical wound complications, 3) higher physical functioning, 4) lower anxiety levels, 5) fewer physical symptoms, and 6) lower out-of-pocket expenses associated with health care during the intervention period. While data is still too limited for extensive statistical analysis, both physicians and intervention participants report anecdotally that they are pleased with the outcomes of the study, e.g., lower anxiety and comprehensive post-surgical education.

14. SUBJECT TERMS
Breast Cancer Quality of Life, Subacute Care, Short-Stay Surgery, Improved Outcomes, Cost Containment, Return to Productivity

15. NUMBER OF PAGES
267

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	Limited

NSN 7540-01-280-5500
Standard Form 298 (Rev. 2-89)
Prescribed by ANSI Std. Z39-18 298-102
USAPPC V1.00

FOREWORD

Opinions, interpretations, conclusions and recommendations are those of the author and are not necessarily endorsed by the U.S. Army.

GW Where copyrighted material is quoted, permission has been obtained to use such material.

GW Where material from documents designated for limited distribution is quoted, permission has been obtained to use the material.

GW Citations of commercial organizations and trade names in this report do not constitute an official Department of Army endorsement or approval of the products or services of these organizations.

N/A In conducting research using animals, the investigator(s) adhered to the "Guide for the Care and Use of Laboratory Animals," prepared by the Committee on Care and Use of Laboratory Animals of the Institute of Laboratory Resources, National Research Council (NIH Publication No. 86-23, Revised 1985).

GW For the protection of human subjects, the investigator(s) adhered to policies of applicable Federal Law 45 CFR 46.

N/A In conducting research utilizing recombinant DNA technology, the investigator(s) adhered to current guidelines promulgated by the National Institutes of Health.

N/A In the conduct of research utilizing recombinant DNA, the investigator(s) adhered to NIH Guidelines for Research Involving Recombinant DNA Molecules.

GW In the conduct of research involving hazardous organisms, the investigator(s) adhered to the CDC-NIH Guide for Biosafety in Microbiological and Biomedical Laboratories.

Gwen Wyatt 10-1-98

PI - Signature Date

A Subacute Care Intervention for Short-Stay Breast Cancer Surgery

TABLE OF CONTENTS

PART ONE - Report

Front Cover i

SF298 ii

Foreword iii

Table of Contents iv

Introduction 1

Body 6

Conclusions 27

References 31

Tables 33

PART TWO - Appendices

Grant Productivity Report . . . . . Appendix A

1997-1998 Published Journal Articles . . . . . Appendix B

Limited Distribution Materials - Submitted Abstracts and Manuscripts . . . . . Appendix C

Nurse Charting Form (Revised) . . . . . Appendix D

Chart Audit Protocol . . . . . Appendix E

Quality Assurance Protocol . . . . . Appendix F

Curriculum Vitae . . . . . Appendix G

Study Design (Revised) . . . . . Appendix H

Participant Resource List . . . . . Appendix I

Study Web Site . . . . . Appendix J

1997-1998 Grant Abstracts . . . . . Appendix K

Continuing Education Participation by Grant Personnel . . . . . Appendix L

A Subacute Care Intervention for Short-Stay Breast Cancer Surgery

INTRODUCTION

I. SUBJECT OF GRANT

The **subject** of this grant is the provision of a cost effective, highly targeted, randomized clinical trial (intervention) which provides two weeks of post-surgical nursing care in the home for women following short-stay surgery for breast cancer.

II. PURPOSE OF GRANT

This study is designed to address the well-documented, but unmet, physical and psychological needs of women undergoing surgery for breast cancer.[1,2,3,4] The **purpose** of this study is to support women during the immediate post-operative phase in order to facilitate return to pre-surgical quality of life and improved physical and psychological well-being at a reasonable cost following surgery for breast cancer.

III. SCOPE OF RESEARCH

The **scope** of this study is to test the impact of a short-term (14 days post-surgical), subacute care intervention for women (21 years of age and older) who have undergone short-stay surgery (48-hours or less) for breast cancer. When compared to conventional short-stay surgical care, the subacute care in-home intervention is targeted to help women attain optimal recovery during their immediate post-surgical phase and assist them in regaining their pre-surgical health status prior to initiating adjuvant therapy. The broader impact of this study may include contributions to policy on length of stay for breast cancer surgery, dose of post-surgical nursing care needs, and standardizing customary costs for care.

The **technical objectives** of the study are to:

A. Test the effects of a nursing intervention consisting of immediate post-operative (1-14 days) telephone and in-home nursing assessment and care, by describing and comparing the physical and psychological well-being between 2 groups of women with breast cancer: the intervention group, who receive conventional post-surgical medical care plus a 14 day treatment (nursing care in the home and phone contacts) consisting of individual physical and psychological support, self-care, and education; and the control group, who receive conventional post-surgical medical care with or without nursing care provided by a home care agency and ordered by their surgeon.

B. Compare intervention and control group perceptions on the dimensions of physical functioning, anxiety status, quality of life, and self-care knowledge.

C. Compare the control and intervention groups' out-of-pocket expenses which are sustained by the women and their families in relation to the breast surgery, costs of treatment, and related services during the first month after hospital discharge. Further comparisons are being made on the overall financial impact of the illness and surgery on family finances, e.g., savings, employment, income, etc. Along with commonly occurring out-of-pocket costs, the analysis includes an assessment of the types and costs of complementary (alternative) therapies used by both groups to treat cancer.

IV. BACKGROUND OF PREVIOUS WORK

Since 1991, the principal investigator has studied the quality of life of long-term female cancer survivors and newly diagnosed mid-life and older women with cancer, receiving funds from the Oncology Nursing Society, Michigan State University (MSU) College of Nursing, and the American Cancer Society (through an institutional grant to the MSU Cancer Center). Each study has examined the needs of women with cancer (most commonly breast cancer) and their expressed concerns through the course of their disease and return to productivity. This current DoD research allows for an expansion of these initial findings by instituting a program of subacute care that incorporates previously identified needs of women with cancer.

A pilot study (conducted by Wyatt in 1995) of 18 female breast cancer survivors revealed that in the 2 weeks following breast surgery, women experienced multiple symptoms, both physical and psychological.[5] Participants were recruited from physicians' offices and from support groups for breast cancer survivors. They ranged in age from 30 to 83, with a mean age of 50. Twelve had completed at least some college or trade school, and all had finished high school. All respondents were white, 16 were married, and 2 were divorced. A majority of respondents (N=11) had spent two or more days in the hospital following surgery.

Reflecting on the two weeks immediately post-operative, more than half of the participants reported experiencing physical symptoms directly related to the surgery. The symptoms were tenderness (N=15), swelling (N=12), excess drainage (N=13), pain (N=16) with a mean pain rating of 6.19 on a 10-point scale with 1 being least painful and 10 being most painful, tingling (N=12), lack of sensation (N=8), and tightness in the chest wall (N=11). Further, at least half of the women experienced psychological symptoms such as, trouble sleeping (N=10), fatigue (N=15), inability to concentrate (N=14), weakness (N=14), numbness (N=17), waking in the night to urinate (N=11), lack of interest in sex (N=11), and mood swings (N=9). All participants reported some area of decreased ability to engage in physical functioning through daily activities. The most frequently reported difficulties were with moderate activities, such as moving a table and strenuous activities, such as lifting a heavy object, carrying groceries, climbing more than one flight of stairs, or walking several blocks. Finally, psychological distress was a common factor among the participants (N=16). The most commonly reported problems were feeling that "everything is an effort," that "life is a failure," that they were "fearful about the future," and that they were "happy" only some of the time. Despite the considerable range of negative effects after breast cancer surgery, respondents reported scarce use of resources outside of their families for health care. Most common were follow-up visits to their surgeon by 15 women. They averaged 2.5 visits, with a range of 0 to 10 in the two weeks following surgery. Other services used by

participants included their primary physician (N=2), additional hospital admissions (N=3), emergency room visits (N=2), housekeeping service (N=1), transportation assistance (N=2), and psychologist (N=2). A variety of needs experienced by these women in the 2 weeks following breast cancer surgery appeared to be unmet. This is despite an average hospital stay of 2.86 days. With earlier discharges this problem will exacerbate, and the health care system must ensure that patient's needs are met in the home or through outpatient and ambulatory care.

The need for subacute nursing care interventions among women newly diagnosed with breast cancer has been further highlighted by results from focus groups conducted by Co-Principal Investigators on this DoD grant, Given and Given.[6] The 30 women who participated were unanimous in pressing for transition care to include a patient advocate during the initial treatment for cancer who could: provide information, assist with symptom management, present exercise regimens to improve upper body functioning, suggest community resources, and communicate a plan for continuity of care between physicians and women. The women wanted to know about resources for questions regarding radiation and chemotherapy, and a regular source to contact with their questions.

In a study entitled, "Quality of Life of Long-Term Female Cancer Survivors" funded by the Oncology Nursing Society in 1992, Wyatt found that women with breast cancer perceived a need for greater support during the immediate post-surgery transition phase when they had numerous physical and psychological issues to confront.[7] While long-term survivors resolved many of their own issues, they believed they could have regained productivity sooner with transition care that included information and support for physical and psychological well-being. Respondents suggested the need for a trajectory of care with significant emphasis on the post-surgery, pre-adjuvant therapy period.

The Co-Principal Investigators of this research team, Given and Given, have been engaged in the following nine funded research projects: Caregiver Responses to Managing Elderly Patients at Home, NIA (#R01 AGO6584), 1986-1988, 1989-1993; Family Homecare for Cancer--A Community-Based Model, NINR and NCI (#RO1 NR01915), 1989-1991, 1993-1997, 1998-2002; Family Homecare for Cancer Patients, ACS (#PBR-32A),1988-1990; Impact of Alzheimer's Disease on Family Caregivers, NIMH (#1 RO1 MH41766), 1987-88 and 1989-1991; Costs of Cancer Care to Patients and Families, NCI Contract DHHS P.O.#263-MD-101487-1; Rural Partnership Linkage for Cancer Care, NCI (#1 RO1 CA56338), 1992-1998; Cancer Prevention, Outreach and Access to Care for the State of Michigan, Department of Community Health (State of Michigan), 1996-1997; Cancer Care Intervention to Improve Functioning and Psychosocial Outcomes in Newly Diagnosed Cancer Patients and their Families, Walther Cancer Institute, 1996-1998; and Care, Prevention, Outreach and Cancer Control (Supportive Care) for Cancer Patients, Department of Community Health (State of Michigan), 1997-1998, 1998-1999. This research program uses longitudinal designs and community-based clinical trials to address a set of principal themes: 1) the changes in functioning and needs for home care, 2) the social, psychological, physical, and financial impact of these dependencies upon the families who provide care (caregivers), and 3) families' use of community services to sustain home care.

In a study funded by the American Cancer Society Institutional Grants Program in 1994 entitled, "Quality of Life of Midlife and Older Women Following Breast Cancer Surgery", Wyatt interviewed 48 women with breast cancer.[8] The research revealed that women in higher income brackets recovered physical functioning more quickly than their lower income counterparts. One explanation for this finding is that higher income women are better able to pay for services to speed their recovery. An earlier transition back to pre-surgery productivity may be the longer-term benefit of additional assistance during the acute post-surgery time period.

Negative financial consequences have been documented by Given and Given (Family Homecare for Cancer: A Community Based Model #RO1 NR01915) in a summary of preliminary data post-discharge (compiled by Wyatt in 1994) following breast cancer surgery from older women who were newly diagnosed with cancer.[9] From a total of 24 cases, 6 had outpatient surgery, 7 women had one-day surgery, 5 were hospitalized for two nights after surgery, and another 5 women were hospitalized for three or more nights. Fourteen of the 24 women became heavily reliant upon a family member for care as a substitute for formal care, resulting in cost shifting from the health care system to the family. For example, one woman was forced to move in with her sister, whereas four others had a female family member move into their home post-surgery. One woman not only had no one to care for her, but her husband required care as well. This participant was forced to be a caregiver as well as a patient. Even though the majority of women had a family member to assist them, two had a total of eight visits from a visiting nurse service (VNS) for additional wound care, two needed community services for transportation to medical appointments, and one needed 50 visits from a home health aide in the first 3 months after surgery. One women used a VNS six times because there was no one to help her. Another woman used a housekeeping service two times in the three months following surgery; she also did not have a regular family caregiver. Eight of the women had to return to their primary care physician (total of 14 visits) within the first three months following surgery for complications related to their cancer, 22 returned to their surgeon for wound care (total of 75 visits), and there was one urgent care visit for pneumonia two weeks after surgery. Self-reported out-of-pocket expenses for 16 women totaled $7,274 ($\bar{x}$ $454.63) in the 4 weeks following surgery, while six women had no expenses and two did not know.

Recently, four additional research projects by the investigators on this study have been funded. Wyatt, Given, and Given received a two year grant (1998-2000) from the Mary Margaret Walther Foundation to study complementary therapy use with cancer patients during active treatment. Given and Given received funding for three additional research projects: 1) a two year grant (1998-2000) from Indiana University and the Mary Margaret Walther Foundation to study prostate cancer, 2) a 1 year grant (1998-1999) from the state of Michigan to continue research with breast, colon, and lung cancer patients undergoing chemotherapy, and 3) a four year grant (1998-2002) from the National Cancer Institute (NCI) for a study entitled "Family Home Care for Cancer: A Community Based Model." Wyatt, Given, and Given plan to submit a research proposal regarding end-of-life issues and cancer patients to the National Cancer Institute and Office of Alternative Medicine in 1999. Members of this team have submitted several manuscripts

over the past year with a few recently accepted for publication. See **Appendix A** for the staff productivity report, **Appendix B** for current publications, and **Appendix C** for limited distribution abstracts and manuscripts.

This program of research is critical in order to keep pace with rapidly changing health care systems which deliver care to cancer patients. Our research team continues to evaluate the supportive care needs of patients and to focus our research trajectory accordingly.

BODY

I. STATEMENT OF WORK (As Submitted with Original Proposal)

TASK	TIME PERIOD	ACTIVITIES
Task 1	Prefunding Period (following notification of funding)	Orient physicians to study at all sites.
Task 2	Months 1 - 6	Clear IRBs of all agencies. Recruit and train research personnel.
Task 3	Months 7 -12	Begin participant recruitment, intervention, and data collection. (n=25)
Task 4	Months 13 - 18	Continue participant recruitment, intervention, and data collection. Monitor accrual. (n=50)
Task 5	Months 19 - 24	Continue participant recruitment, intervention, and data collection. Monitor accrual. (n=50)
Task 6	Months 25 - 30	Complete participant recruitment, intervention, and data collection. Begin data entry. (n=50)
Task 7	Months 31 - 36	Continuing recruitment, intervention, and data collection. Accelerate recruitment if necessary to account for any participants who do not complete intervention. (n=50)
Task 8	Months 37 - 42	Complete recruitment if needed (n=25). Complete data entry on computer. Begin preliminary data analysis.
Task 9	Months 43 - 48	Complete statistical analysis. Prepare research reports. Prepare manuscript for publication.

A. Task 1, Prefunding Period, Orient physicians to study at all sites.
Notification of funding occurred approximately September 1, 1996 and funding began September 15, 1996. Since there was minimal opportunity to begin this activity during the pre-funding period, physician orientation was moved to the time period for Task 2 (months 1 through 6).

The Principal Investigator and one Co-Principal Investigator initially introduced the study to surgeons at a surgical grand rounds meeting. An information packet containing the study design, abstract, brochure, consent form, and a letter of agreement between the study and the surgeon was distributed to each surgeon. Within a few weeks following this meeting, the Principal Investigator and a study nurse met with each surgeon individually to describe the study and to explain the potential benefits to his/her patients. At the conclusion of each meeting, the surgeon was asked to sign the letter of agreement between the study and him/herself. The agreement outlines the protocol to be followed with the intervention participants, and explains that women who meet the study criteria have a 50-50 chance of receiving the intervention. Each surgeon was also informed that he/she would receive two reports, an interim (at approximately 7 days post-operatively) and final (at 14 days post-operatively), for each of his/her patients in the intervention arm of the study. During this Task 1 time period, eleven surgeons began participating in the study.

B. Task 2, Months 1-6, Clear IRBs of all agencies. Recruit & train research personnel.
IRBs for five sites (MSU, Ingham Regional Medical Center, Sparrow Hospital, St. Lawrence Hospital, and St. Joseph Mercy Oakland Hospital) were cleared between September 1996 and May 1997. SPAs were submitted and approved for each site as IRBs were obtained. IRB and SPA activity is complete. We will maintain current IRBs through annual renewals.

While our five sites are providing adequate recruitment, we will include additional sites during year two if needed to maintain accrual of participants. We have letters of agreement with three additional sites. These sites will be activated by obtaining IRB and SPA approvals if at any time they are needed to maintain participant recruitment goals.

Research personnel have been hired and oriented. They are fully functional in their roles at this time. Intervention nurses have been hired and oriented to accommodate the number of participants currently in protocol.

C. Additional Activities, months 1 - 6.
In addition to the Statement of Work tasks, the following materials and procedures have been developed and implemented:

1. **Policy and Procedure Guidelines**: Detailed guidelines have been prepared to provide consistency across the key activities of the study (i.e., ***recruitment***, ***intervention***, ***interview***, ***chart audit***, and ***quality assurance***).

a. Recruitment guidelines include the position description for recruiters, randomization procedure instructions, detailed instructions for the recruitment of patients and obtaining consent, pre-test questionnaires, agency consent forms, communications guidelines for interactions with agencies and patients, instructions for computerized entry (Paradox Program) of recruitment data, study brochure, and recruitment resources.

b. Intervention guidelines include a professional nursing overview, the position description for intervention nurses, information regarding confidentiality, universal precaution guidelines, health care referral policy, and attrition information.

c. Interview guidelines include an interviewer training module, guidelines for conducting interviews, instructions for completing paper documentation (forms and letters), and instructions for the Computerized Interview Version 3 (Ci3) data entry program.

d. Chart Audit guidelines provide detailed instructions on obtaining diagnosis and treatment information from patients' medical charts.

e. Quality Assurance (QA) guidelines include directions for QA review of recruitment, intervention, interview, and chart audit materials.

2. Intervention Protocol: Intervention protocol and documentation guidelines have been created and standardized via customized computerized entry (Paradox). A standardized protocol for our 14 day nursing intervention is in place. Documentation of the protocol is entered on a paper chart immediately following each intervention encounter. At the conclusion of the fourteen day protocol, the nurse enters her paper chart into our customized, computerized data program (Paradox). The individual pages of the paper chart mirror the individual screens of the computerized data entry screens. Once nurses become familiar with the paper chart, our goal is to assist the nurse in the transition to direct data entry (immediately following each protocol encounter) into the computerized program. The computerized data entry program allows continual access to summary information such as, most frequently assessed symptoms, most frequently occurring nursing diagnosis, and most frequently used nursing interventions. All computerized data are backed up daily. See **Appendix D** for the revised charting form.

3. Data Collection Protocol: The data collection tools have been computerized on a Ci3 software program and are fully operational. **Pre-test** data, which is collected prior to surgery via self-administered paper copy (see Year One Report - Appendix I), is entered into our Ci3 program immediately following collection at recruitment. **Post-test** data collection is conducted via telephone interview, and is entered directly into our Ci3 program as the interview is conducted. The initial few interviews were collected via telephone, but were recorded on paper copies while preparing the customized

computerized program (see Year One Report - Appendix N). Currently, all interviews are entered directly into our computerized program without a paper copy step. All computerized data are backed up daily.

4. Chart Audit Protocol: Basic chart data are collected via paper copy and then entered into our computerized program (Ci3). While not part of the original proposal, we have developed a new computer-based program in Ci3 to track post-protocol complications which occur up to four months post-surgery for both control and intervention participants (see **Appendix E**).

5. Quality Assurance Protocol: The quality assurance programs for recruitment activities, intervention protocol, and interview data entry are in place. Both research staff and the Principal Investigator (P.I.) participate in quality assurance reviews on a regular basis. The P.I. reviews weekly recruitment reports. The P.I. also conducts a complete QA on protocol entries for every tenth intervention participant (in the Paradox computerized program). In addition, the P.I. spot checks multiple Paradox entries. Finally, the P.I. reviews a complete audio taped versions of every tenth telephone post-test interview. See **Appendix F** for quality assurance forms.

D. Task 3, Months 7-12, Begin participant recruitment, intervention, data collection (n=25). The anticipated n=25 was exceeded and a total of n=30 were recruited into the study during this time period. This number included 28 participants from the Lansing sites and 2 participants from St. Joseph Mercy Oakland Hospital in Pontiac. Recruitment and intervention protocols are in full operation. Post-test interviews were completed on n=25.

E. Task 4, Months 13-18, Continue participant recruitment, intervention, and data collection (n=50). The anticipated n=50 for this time period was met. This number includes 46 participants from the Lansing sites and 4 participants from St. Joseph Mercy Oakland Hospital in Pontiac. The total number of women recruited into the study to date equals 75. Recruitment and intervention protocols continue to be in full operation. Post-test interviews have been completed on n=65. To date, the study been unable to collect post-test data on one participant. Every attempt was made to schedule the post-test interview which is usually conducted by telephone. After several canceled interview appointments, a paper copy of the instrument was mailed with detailed instructions and a stamped, return addressed envelope in which the participant could return it to the study office. Follow-up calls were made to facilitate completion of the interview. After many attempts, it became apparent that the patient had decided not to participate further in the study. We felt that it was beyond human subjects protocol to continue contacting the participant to complete the final interview.

F. Task 5, Months 19-24, Continue participant recruitment, intervention, and data collection (n=50). Recruitment and intervention protocols continue to be in full operation. The study has thus far recruited a total of n=111, with 36 participants being

recruited during this time period. Interviews have been completed on n=100 (including 90 patients from the Lansing sites, 9 patients from St. Joseph Mercy Oakland Hospital, and 1 patient from Hayes Green Beach Hospital). Accrual has been slightly less than anticipated during months 19-24. One of the reasons for this is that a primary surgeon affiliated with the study (from whom we recruit a large number of patients) has been ill over the past several months and is not seeing patients. This has led to a slight decrease in the number of eligible patients for the study. In response to this decrease, we have taken steps to increase our pool of eligible participants by adding three new surgeons, and are in the process of contacting a fourth surgeon. A second reason for the decreased accrual rate is that we have been slightly less aggressive on recruiting participants since our attrition rate has been very low. Rationale for the n=125 by the end of Year Two and n=250 by the end of year 4 was to account for much higher attrition rates than we have experienced thus far. Our power analysis was based on 200 complete data sets (allowing for a total attrition rate of n=50). Based on our low attrition rate thus far and the addition of three new surgeons to the study, we believe there will be no difficulty in obtaining the planned total n=250 by the end of the study.

G. Additional Activities and Changes, Year Two.

In response to a variation in recruitment during months 19-24, two additional sites were opened at William Beaumont Hospital (Royal Oak and Troy campuses) and Hayes Green Beach Hospital (Charlotte). The two sites will give wider representation to the data by giving both urban (Beaumont) and rural (Charlotte) perspectives to breast cancer care. The surgeons at these new sites include Dr. C. William Mercer, Dr. Jane Pettinga, and Dr. Deborah Ruark. We are now accruing patients from their breast cancer case loads and have created new resource lists for patients recruited from these sites. The study now has a total of 14 participating surgeons.

The study design was revised to include a chart audit which takes place four months after each participant's surgery. While the 4 week chart audit that was initially planned for the study was valuable, we are able to obtain much more comprehensive information by conducting the chart audit at the 4 month period. Often times pertinent data, such as laboratory reports, are not yet posted in the charts at 4 weeks post-operatively, and many other significant post-surgical events have the potential of developing several weeks after this period. With the 4 month audit, we now have more complete information on cancer stage, lymph node status, development of infections, seroma formation, and additional surgeries. The chart audit has been computerized and all data are entered into the Ci3 data management program. This is the same program used with the Pre-Surgery Instrument data and the Post-Surgical Interview data.

A minor change was implemented with the post-surgical data collection phase of the study. Before conducting the final telephone interview, a reminder letter and two parts of the instrument (Quality of Life and State-Trait Anxiety) along with instructions are mailed to the participants. Both instruments have multiple choice answers and proved to be difficult for some participants to answer when they could only hear their options over

the telephone rather than seeing the choices. This new procedure has proven very successful. Interviewers have reported a decrease of 10-15 minutes in the time it takes to conduct the interview.

A few changes have occurred at participating sites. St. Lawrence Hospital merged with Sparrow Hospital in 1998 and the two sites now go by the name Sparrow Health System. The name of another participating site, Michigan Capital Medical Center, has been changed to Ingham Regional Medical Center. Institutional Review Board (IRB) approvals have not been affected and our IRB contact at the Department of Defense (DoD), Catherine Smith, was informed of these changes as they occurred. A point of clarification should be noted with one of our new sites, William Beaumont Hospital. While it is one corporate structure, it is comprised of two distinct urban hospitals which are located approximately 20 miles apart in the cities of Troy and Royal Oak. The two participating surgeons from this site, Dr. Pettinga and Dr. Ruark, are allowed to use surgical facilities at both campuses. To account for this, we have obtained IRB approval for both campuses.

A personnel change also occurred during Year Two. Our faculty statistician, Dr. Dorothy Pathak, was awarded two extensive research grants from the National Cancer Institute (NCI) and DoD. Therefore, we are currently transitioning a new statistician into our study. We are pleased to have Dr. Wenjiang Fu, who has been a colleague of Dr. Pathak's in the Department of Epidemiology at Michigan State University (MSU) since April of 1998, on our grant staff. During the summer of 1998, he oriented to our grant under the guidance of Dr. Pathak. Dr. Fu is well qualified to assist us with data analysis for the study. See **Appendix G** for Curriculum Vitae.

II. EXPERIMENTAL METHODS

A. Design (please see Appendix H)

A 2-group randomized controlled clinical trial with repeated measures is examining the effects of a short term intervention consisting of the combination of a telephone and in-home intervention. The intervention lasts 14 days and focuses on physical and psychological subacute care following short-stay breast cancer surgery. Participants are randomly assigned to the intervention or control group. The intervention group receives the telephone and in-home study protocol; the control group receives conventional post-surgical medical care.

Data are collected on all participants 3 times over a period of 4 months (at recruitment, four weeks post-surgery, and four months post-surgery). Data collection at recruitment and four weeks post-surgery is through a combination of self-administered written questionnaires and telephone interviews with the women. The rationale for this schedule is to obtain baseline data and to compare them with data collected after the intervention which allows us to assess the immediate efficacy of the intervention. Data collection at four months post-surgery is in the form of a medical chart audit. Information is gathered on cancer stage, incidence of

infection, seroma formation, additional surgeries, and other medical concerns that develop after initial breast cancer surgery. The four month time period allows us to see the trajectory of post-surgical follow-up care.

B. Sample

Participants are women age 21 and older, able to speak and read English, and admitted for short-stay surgery (48 hours or less) as a first treatment for breast cancer. For this study, surgery refers to mastectomy with lymph node dissection, mastectomy without lymph node dissection, or lumpectomy with lymph node dissection. Exclusionary criteria are pregnancy, in situ tumors, reconstructive surgery concurrent with removal of cancerous tissue, an acute episode of medically diagnosed mental illness at the time of current breast cancer diagnosis, and a home address of more than 40 miles away from the surgeon's office. Most women are stage I or II since women with these stages generally undergo surgery as their initial treatment. English speaking skill is necessary to ensure that directions related to the data instruments and protocol teaching are understood. A total of 200 complete data sets are targeted for inclusion during the grant period. We anticipated accruing a sample of 250 in order to account for attrition and to secure 200 full data sets. However, we have had minimal data loss (i.e. one post-test interview), so we should exceed the 200 necessary for final analyses.

C. Recruitment

Fourteen surgeons are currently providing potential recruits to the study. A target goal of ten participants per month has been set to meet the accrual objective of the grant. This recruitment goal allows for decreased accrual through winter holiday times and summer vacation periods. Recruitment continues as stated in the Year One Annual Report. Women are initially introduced to the study by a brochure written in lay language. This is followed-up by a nurse recruiter who gives the women detailed information about the study (Please see Year One Annual Report for details).

D. Accrual

Actual accrual of participants has been successful despite the short window of time between diagnosis and surgery. Of the women who have been contacted about participating in the study, 82% have been successfully accrued. Our attrition rate is n=0 with one anomaly where the post-test data was not completed (as mentioned in "Task 4 - Months 13-18"). We attribute the success of accrual to the fact that all study recruiters are registered nurses who are well informed about breast cancer, the surgical process and other health issues about which women may have questions. Recruiters are also instructed to consider the psycho-social issues facing cancer patients and employ empathy and active listening during recruitment.

E. Randomization

Once accrued and baseline data are collected, women are randomly assigned to the intervention or control groups. The recruiter telephones the central research office, where a research assistant selects the next randomized card. The research assistant provides the

recruiter (intervention group only) with the name of the nurse intervenor assigned to this participant. To date, the randomization procedure is working well.

F. Control Group

The control group was further divided for this report into two subgroups (**Control A** and **Control B**), since some surgeons order an agency home care nurse when their patients are assigned to our control group. This plan to consider two subgroups (**A** and **B**) within our control sample was anticipated and outline in our Year One Annual Report (page 20). **Control A** participants receive conventional post-operative medical care and surgeon-ordered home care provided by an agency nurse. Participants in **Control B** receive only conventional post-operative medical care following surgery, without any home nursing care.

At the conclusion of participation in the study (3 to 5 weeks post-surgery), all control participants (groups **A** and **B**) receive a resource packet (see **Appendix I**) that the intervention group received during their participation, and they also receive a $10 check for contributing to the study. Through informal comments at the end of the interview, control participants have indicated the benefits gained by participating in the study. A common acknowledgment is that the comprehensive interview allows them to look at their cancer experience more holistically and to "put everything into perspective."

G. Intervention Group

The subacute care intervention is accomplished through a minimum of four contacts (two phone calls and two home visits) by a nurse intervenor. The first phone contact is made within the first post-discharge day to assess any immediate needs and to schedule the first home visit. The first visit focuses on **physical** issues related to surgery, symptoms, wound and drain care, and quality of life assessment. The second phone contact occurs between the first and second in-home visits to provide an ongoing link to the health care system, assess physical and psychological needs, and to schedule the second visit. Women are also encouraged to contact their intervention nurse between visits if needs or questions arise. At the second visit, the intervention focuses upon **psychological** issues, provides follow-up on physical concerns and education regarding breast self exam, arm range-of-motion exercises, and lymphedema prevention. Information on community resources is also provided with the goal of increasing access to opportunities for ongoing support.

Finally, one or two additional phone contacts or visits by the nurse intervenor are sometimes necessary during the two week period following surgery to ensure a timely return to pre-surgical activities.

The intervention continues to run smoothly and appears to be meeting women's needs. A high level of satisfaction from participating surgeons has been noted as evidenced by zero attrition of surgeons.

H. Intervention Protocol

While the protocol consists of a minimum of two telephone calls and two in-home visits for each woman in the intervention arm of the study, some women may receive additional encounters if assessed as necessary by the home care nurse. All protocol steps are covered by the nurse during the first fourteen post-operative days in the participant's home. The intervention protocol continues successfully as in Year One. Please see the Year One Report, Appendix K for details on the protocol.

I. Data Collection (please see **Table 1** for data collection schedule and instruments)

Data are collected at 3 points over a four month period: at entry into the study (baseline), at 4 weeks post-surgery, and at 4 months post-surgery. Baseline data are collected from all participants at the time of recruitment and prior to randomization. Data is collected by a nurse from the patient's medical records and by a self-administered instrument which is completed by the participant prior to surgery. Once the nurse intervenor completes the intervention with a participant, she contacts the research office so the participant can be assigned to a nurse interviewer for the data collection which occurs four weeks after surgery. The nurse who provides the intervention is never the same nurse who conducts the final interview. This is done to minimize potential bias across roles on the grant.

The 4-week data collection occurs after the completion of the intervention and prior to re-entry into the formal health care system for adjuvant therapy. Data are collected by a one hour telephone interview with the participant which is conducted by one of two study nurses. The nurse who conducts the interview is different from the nurse who recruits the patient or provides the intervention. These 4-week data provide information on the immediate effectiveness of the intervention. In some cases, women are referred for chemotherapy as early as three weeks post-surgically. We have allowed for a variation of one week before or after the standard four week data collection point, which allows for a range between three to five weeks post-surgery for the interview to be conducted. In most cases, this added flexibility to our interview time frame allows us to conduct the post-test interview prior to the women commencing adjuvant therapy.

The 4-month data collection is a medical chart audit conducted by a study nurse while recruiting new patients at participating sites. By combining the recruitment and chart audit tasks, the nurse reduces the number of trips to the surgical practice sites and saves on time and resources. Information on clinical measures (such as stage of disease), return visits to the surgeon, further surgeries, and complications is gathered through the audit. These 4-month data provide information on the post-protocol medical events encountered and needs of women following breast cancer surgery.

J. Data Analysis

1. Baseline evaluation. Frequency distribution and measures of central tendency and variability were calculated for all variables of interest. The variables can be grouped into four broad categories as 1) Physical; 2) Psychological; 3) Quality of Life; and 4) Costs. Within each category several individual measures were analyzed as well. The baseline

comparisons were done to evaluate if the groups are the same on demographic and other variables that could impact on the outcome variables to be evaluated post-intervention. The statistical methods used to assess for these differences were modified for two reasons: 1) The control group was separated as **Control A** (conventional post-operative medical care **plus** surgeon-ordered home care provided by an agency nurse) and **Control B** (only conventional post-operative medical care); and 2) our initial plan to adjust for possible site differences was not applicable since 90 of the 100 subjects were recruited from the Lansing sites while only 9 were from St. Joseph Mercy Oakland Hospital and 1 was from Hayes Green Beach Hospital. Consequently, for all continuous variables, one-way analyses of variance (ANOVA) was used to assess for baseline differences when comparing all three groups, or a two sample t-test was used when the two control groups were combined and compared to the intervention group[10]. If the assumptions of normality and equality of variances were not satisfied, we used non-parametric equivalents of these two tests. If differences were observed, analysis of covariance was used for the post-intervention comparisons[10]. For the discrete variables we used the chi-square test for comparison of distributions in proportions across several levels of categorical variables in the three or two groups as appropriate, for a given comparison[11, 12].

2. Intervention evaluation. The primary outcome variables of interest post-intervention were the various aspects of physical function and quality of life for the patients. We hypothesized that the intervention group would have fewer physical functioning limitations and higher quality of life, than the non-intervention group. For both instruments (Functional Status and Quality of Life), the outcome measures evaluated included the overall summary value for each instrument as well as the single items which comprise the summary value on each scale. The overall measures were treated as continuous and the individual items being on the Likert scale were tested for changes in distribution of proportions. For analysis of the continuous variables, we used both one-way analysis of variance and analysis of covariance. In evaluating Anxiety (both State and Trait), the post-intervention comparisons were adjusted for the appropriate pre-intervention value and the level on the other sub-scale of anxiety measure[10]. Similarly, in evaluating the quality of life measures, analysis of covariance was used in order to adjust for the baseline quality of life levels. The conclusions from the analysis of covariance for both anxiety and quality of life measures remained the same as with two sample and paired t-tests. Consequently, in this report we present results based on two-sample and paired t-test comparisons since they provide clearer interpretation. In all our analysis, no adjustments were made for community sites, since most of our subjects were from Lansing.

All of the above mentioned analyses were carried out in SAS[13] or SPSS[14] statistical packages available to the investigators on their office computers.

III. RESULTS

The following results are presented in relation to tasks 1-5 of the Statement of Work (see page 6), and the specific aims of the study. The specific aims are:

1. **Improved surgical recovery and self-care knowledge**
2. **Higher functional status (ADLs)**
3. **Fewer symptoms**
4. **Lower anxiety levels**
5. **Higher quality of life**
6. **Less frequent use of health services**
7. **Fewer out-of-pocket payments for health services**

In an effort to most accurately represent the data, analyses were performed on three groups (**intervention**, **control A** and **control B**). The **intervention** group received conventional medical care and the **study home nursing intervention** protocol. **Control A** received conventional medical care and an **agency home care nurse** ordered by the surgeon. **Control B** received conventional medical care and **no home care nurse** (please see page 12 for details on the branching of control participants into groups A and B). We currently have **111** women enrolled in the study. This report provides preliminary data on **100** women who have completed the study. Data are collected at baseline (pre-surgery) and approximately four weeks after surgery. With our sample size of 100 at the end of Year Two, we currently have 51 participants in the **intervention** group, 28 in the **control A** group, and 21 in the **control B** group. Due to this sample size, our analysis is limited at this time and will be much more reflective of our project once we have our total sample of 200+ by the completion of the study. (Please see **Table 1** for a list of the data collection instruments and schedule.)

A. Pre- and Post-Test Interview Data

1. Demographics (please see Table 2)

To date, data have been collected on 51 **intervention** participants, 28 **control A** participants, and 21 **control B** participants. Between group differences in categorical variables (e.g., race, marital status) were assessed using chi-square analysis for contingency tables, while group differences for continuous variables (i.e. income and age) were assessed using one-way analysis of variance (ANOVA). There were no significant differences between the three groups on any of the demographic variables; therefore the following data reflect the total sample. The majority of women were Caucasian (93%), married (57%), had at least some college education (68%), and were employed prior to surgery (58%). The mean age of the sample was 58 years. The average annual household income was $44,777. The majority of women had a lumpectomy with axillary node dissection (76%).

2. Surgical Recovery and Self-Care Knowledge

a. *Antibiotic Use to Prevent or Treat Infection* (please see **Table 3**): Between group differences on antibiotic use were assessed using chi-square analysis. There

were no significant differences found between groups. The majority of women did not use antibiotics (71%) following their surgery. Of the 29% who did use antibiotics, 21% were used to prevent infection, 8% were used to treat infection.

Among those who used antibiotics, the group specific distributions for prevention versus treatment of infection were: **intervention**, 25.5% and 9.8%; **control A**, 28.6% and 7.1%; and **control B** 0% and 4.8%, respectively.

b. *Surgical Arm Range-of-Motion(ROM) Status* (please see **Table 4-A**): The intervention and the control groups provided pre- and post-test self assessments on arm range-of-motion. Range-of-motion(ROM) was evaluated on a five point scale where "1" was defined as not able to lift the arm on the surgical side, and "5" was defined as able to lift the arm directly over their head. Chi-square analysis was used to assess for differences between groups. Among the **intervention** participants, 63% of women maintained the same ROM from before to after surgery, and 37% reported a decrease in ROM after surgery by a score of one. Among **control A** participants, 85% maintained ROM from before to after surgery, and 15% reported a decrease after surgery. Of the **control B** participants, 76% maintained their ROM from before to after surgery, and 24% experienced a decrease after surgery.

c. *Breast Self-Exam (BSE) Knowledge and Technique* (please see **Table 4-B**): Differences in BSE knowledge (yes/no) and technique (checking for lumps and/or using the pads of the fingers) between groups were assessed using chi-square analysis. No significant differences were found. When responding on BSE knowledge, 98% of **intervention** participants, 96.4% of **control A** participants, and 90.5% of **control B** participants reported understanding the procedure. When asked about the techniques used for BSE, 96.1% of the **intervention** group, 96.4% of the **control A** group, and 90.5% of the **control B** group reported using the technique correctly.

d. *Lymphedema Prevention* (please see **Table 5**): Lymphedema prevention was measured in terms of education received (yes/no) and the number of times involved in a teaching session. Both chi-square analysis and non-parametric t-tests were used to assess for differences in lymphedema prevention. Among the **intervention** participants, a significantly greater number reported receiving education on lymphedema prevention ($p<.001$), than the other two groups. Further, among those who did report receiving education, across the three groups, **intervention** participants received a significantly greater number of teaching sessions ($p<.005$).

3. Functional Status (ADLs)

a. *Frequency of Limitations* (please see **Table 6**): Before- and after-surgery functional status data were self-reported by women, and collected during the post-surgical interview. Participants were questioned about 23 possible limitations in

functional status on a three point scale ranging from "not limited at all" to "limited a lot". For the 23 functional activities, participants were asked to first recall their functional level prior to surgery, and then to report their current post-surgical level. Chi-square analysis was used to assess for between group differences at both time periods. No significant differences were found between groups for either time period, however, all three groups reported more limitation after surgery. The five most frequently reported limitations post-surgery are provided in table 5, with moderate activity, vigorous activity, and lifting objects over 10 pounds common across all groups.

b. *Severity of Limitations* (please see **Table 7**): For the three most commonly reported limitations by all groups, we further assessed the severity of these limitations using the chi-square test. No significant differences were found. The three groups were most similar on the severity of limitation experienced with moderate activities (**intervention**=38.7%, **control A**=41.2%, and **control B**=35.3%). The two groups who received nursing care (**intervention** and **control A**) were also similar on the degree of limitation experienced with vigorous activity (37.1% and 35.3% respectively), and reported less severity than the **control B** group (42%).

4. Symptoms Experienced Following Surgery

a. *Frequency* (please see **Table 8**): Participants were asked to report on their symptom experience following surgery. They were first asked if they had experienced any of the 21 listed symptoms (yes/no) during the last two weeks. If they had experienced a symptom, they were then asked to rate the severity on a three point scale (mild, moderate, or severe). To compare for possible differences in the mean number of symptoms experienced within each group, the total number of symptoms experienced was calculated for each participant. This continuous variable was assessed using one-way analysis of variance (ANOVA). For specific symptoms, a chi-square test for contingency tables was used to compare the severity of selected symptoms between groups. The mean number of symptoms reported by each of the three groups (**intervention**, **control A**, and **control B**) was not significantly different. The two most commonly reported symptoms by all groups were pain and fatigue. When considering symptoms that were reported by 50% or more of each group, the **intervention** group reported pain, fatigue, limited ROM, and numbness; the **control A** group reported pain, fatigue, limited ROM, and difficulty sleeping; and the **control B** group reported pain, fatigue, limited ROM, and numbness.

b. *Degree of Limitation* (please see **Table 9**): Of those who experienced one or more symptoms following surgery, all were asked to rate the extent to which each symptom limited their regular daily activities on a five point scale (not at all, small, some, great, very great). Between group differences in the degree of limitation experienced were assessed using chi-square analysis. The three most frequently

reported symptoms in all groups were pain, fatigue, and limitations in arm range-of-motion. Numbness and trouble sleeping were also commonly experienced by the groups. For between group comparisons on the degree of limitation experienced, no limitation versus any limitation (small, some, great, and very great extent combined), there were no significant differences.

5. Anxiety (please see **Table 10**)
State and trait anxiety were measured for all participants before and after surgery. Both the state and trait instruments consisted of 20 items each, which were rated on a 1 to 4 scale, where 1 equaled least anxiety and 4 equaled most anxiety. Paired sample t-tests were run to compare pre- and post-surgery scores within each group. No differences were observed in state or trait anxiety before surgery for the three groups. However, for state anxiety, women who had a nurse (**intervention** or **control A**) reported a significant decrease from before to after surgery ($p<.02$). Women who did not have a nurse (**control B**) did not experience this significant decrease. There was no significant change in trait anxiety for any of the three groups.

6. Quality of Life (please see **Table 11**)
Quality of life was measured for all participants before and after surgery. Six subscales covered various areas of quality of life: physical well-being, family and social well-being, relationship with doctors, emotional well-being, functional well-being, and additional concerns. Each subscale consists of 2 to 7 items. In this report, all items are scored on a 0 to 4 point scale where 0 equals the lowest quality of life and 4 equals the highest quality of life. Baseline between group differences were assessed using t-tests, and no between group differences were observed. For the pre- to post-surgery comparisons, a paired samples t-test was used. All three groups reported a significant decrease in physical well-being ($p<.02$), when comparing pre- and post-test responses. A trend towards improvement in emotional well-being from before to after surgery was observed for women who had a nurse (**intervention** and **control A**), although it was not at a significant level. The **control B** group reported a decrease in all other areas of quality of life from pre- to post-surgery, but not at a significant level.

7. Use of Health Services (please see **Table 12**)
The length of hospital stay and utilization of seven health services by the three groups within one month post-surgery were compared using the chi-square test for categorical variables and one-way analysis of variance (ANOVA) or its non-parametric equivalent (Kruskal-Wallis test) for continuous variables. The number of hours after surgery that each woman was discharged from the hospital was calculated by subtracting admission date/time from discharge date/time. The majority of the total sample (87%) were discharged within the anticipated 48 hours

or less after surgery. A higher percentage of **control** participants (**A & B combined**) exceeded the 48 hour stay after surgery, when compared to the **intervention** participants.

In addition, all participants were asked about seven health services they had utilized since surgery. Visits to their primary care provider were reported by 7.8 % of the **intervention** group, 17.9 % of the **control A** group, and 14.3 % of the **control B** group. Visits to the emergency room were reported by 3.9% of the **intervention** group, 3.6% of the **control A** group, and 14.3 % of the **control B** group. The study home care nurses made an average of 3 visits per **intervention** participant, while **control A** participants received an average of 7 visits from an agency nurse.

8. Use of Complementary Therapies (please see **Table 13**)
The use of 19 various complementary therapies was evaluated. Of these therapies, six were never used by any of the participants. The frequencies for the thirteen therapies that had at least one use reported are described below. To test for between group differences in the use of complementary therapies, chi-square and non-parametric t-tests were used. A significant difference was observed in the frequency of use, with the **control A** group being the highest users (75%) in comparison with the intervention (47.1%) and control B (47.6%) groups. Similarly, the mean number of CTs used by **control A** participants was significantly higher ($p<.05$) than the mean number used by the other two groups. Further, the **control A** group used significantly more therapies per participant than did either of the other two groups ($p<.02$). The most frequently used therapy by the three groups was special vitamin therapy. When looking at the variety of therapies used, the **intervention** group used 12 different types of therapies, **control A** used 10 types of therapies, and **control B** used 5 types of therapies.

9. Out-of-Pocket Expenses Following Surgery (please see **Table 14**)
Participants were asked to estimate their out-of-pocket costs in five areas: complementary therapies, medications, special supplies (e.g., dressings for the surgical wound), additional costs (e.g., travel expenses to doctor appointments), and total estimated out-of-pocket costs incurred over the four week period following surgery. Non-parametric t-tests and one-way analysis of variance (ANOVA) were used to assess for differences in out-of-pocket costs by the three groups. The cost incurred by **control A** participants for complementary therapy use was significantly higher than the cost incurred by intervention and control B participants ($p<.05$). Among the other expenses assessed, the additional costs category proved to be most expensive for the three groups, and the **control A** group incurred the greatest additional expense ($\bar{x}$=$99.40). Of the total out-of-pocket costs incurred, the **control B** participants spent the greatest amount of money ($\bar{x}$=$176.70).

B. Intervention Protocol Data

Intervention protocol data is obtained only for the **intervention** group; therefore this portion of the report is not a comparative analysis with the **control** groups.

1. Demographics Related to the Protocol Intervention (please see **Table 15**)

The mean number of home visits per participant was 2.98 visits, and the mean number of phone contacts was 4.53. In terms of nursing care time, the mean amount of time spent providing direct nursing care was 57.75 minutes per visit; the mean amount of time spent per telephone encounter was 8.58 minutes in direct assessment and consultation between patient and nurse; and an additional mean of 0.69 minutes was spent on coordination of care with other health professionals via telephone. Record-keeping per home visit averaged 46.72 minutes.

2. Most Frequently Occurring Nursing Diagnoses (please see **Tables 15 & 16**)

For the overall group of participants (n=100), a total of 36 diagnoses (problems) have been utilized with a mean of 14.83 diagnoses per participant. Thirteen of the diagnoses are included in our standard protocol. The remaining 23 have been opened to meet the individual needs of the various participants. Please see Table 16 for a list of the 25 most frequently used diagnoses.

3. Most Frequently Used Nursing Interventions (please see **Table 17**)

To date, 154 different interventions have been carried out by the intervention nurses to meet the needs of the women in the intervention arm of the study. Forty-five interventions are part of the standard protocol for all intervention participants. The additional 109 were implemented to individualize care for the various women's specific needs. This is an increase of 50 interventions implemented as compared to year one. Table 17 highlights the 26 most frequently used interventions.

4. Incision Care Needs (please see **Table 18**)

The incision care needs assessed were drainage over 100cc per day, clogged tubing, incision assessment (redness, swelling, tenderness, warmth), viscosity of drainage at the incision site, appearance and viscosity of drainage in the drainage system, assistance with dressing change, and hematoma/seroma formation. The women were evenly divided between needing help in one or more of these areas (n=24) or being independent with teaching (n=26). The sample of those needing assistance (n=24) was divided into three groups based on the number of nurse visits they received, i.e., one standard deviation above and below the mean (2.9 visits per participant). Among those needing assistance, the number of needs per woman ranged from 1 to 5. Of the 24 who needed assistance with incision care, the group with the highest percentage of needs (64%) also received the most nursing visits (1 SD above the mean=2.9 visits).

Conversely, the group with the lowest percentage of needs (41%) received the fewest nursing visits (1 SD below the mean=2.9 visits). The three groups are not statistically different from each other at this time.

IV. DISCUSSION

The following discussion is based on a sample size of n =100. It is presented in relation to tasks 1-5 of the Statement of Work (see page 6), the specific aims, and the hypothesis of the study.

A. Specific Aims and Hypothesis

When compared to conventional short-stay surgical care, the subacute care in-home intervention is targeted to help women attain optimal recovery during their immediate post-surgical phase and assist them in regaining their pre-surgical health status prior to initiating adjuvant therapy. This study is testing the hypothesis that when compared to women with breast cancer who receive conventional post-surgical care, recipients of the subacute care intervention will report:

1. **Improved surgical recovery and self-care knowledge**
2. **Higher functional status (ADLs)**
3. **Fewer symptoms**
4. **Lower anxiety levels**
5. **Higher quality of life**
6. **Less frequent use of health services**
7. **Fewer out-of-pocket payments for health care services**

B. Post-Test Interview Data Discussion

1. Demographics

Since there was no significant difference between the three groups (**intervention**, **control A**, **control B**) on demographics, all groups were combined and demographics were reported as a total sample. The similarity among groups was anticipated due to our randomization process. The majority of the sample were Caucasian, married women who had a lumpectomy with axillary node removal. Further, the sample consists of middle aged women (mean = 58 years) of middle income (approximately $48,000 per year), relatively well educated with the majority having at least some college education.

2. Surgical Recovery and Self-Care Knowledge

a. *Infection Status and Antibiotic Use*: Women who had a nurse, whether in the **intervention** group or the **control A** group, were more likely to receive both preventive and treatment use of antibiotics. It is possible that participants who had a nurse were more likely to have early signs and symptoms of infection detected; therefore accounting for greater overall use of antibiotics. This early detection of infection is key to recovery from breast cancer, since even a mild infection can later lead to lymphedema development.

b. *Surgical Arm Range-of-Motion (ROM) Status*: The majority of patients from all groups maintained ROM from before to after surgery. Among those who reported a change after surgery (decrease by a score of 1 on a five point scale), the **intervention** group currently is reporting the highest percentage; however not significantly different than the **controls (A** and **B)**. A part of the nursing protocol for intervention participants is to teach and encourage ROM exercises following surgery. This teaching makes participants very aware of the extent of their ROM. Therefore, we may actually have more accurate data on the intervention women.

c. *Breast Self-Exam (BSE) Knowledge and Technique*: Since the knowledge and technique results were very similar between the two groups who had a nurse (**intervention** and **control A**), it may be that having any form of nursing care can improve this skill.

d. *Lymphedema Prevention*: The **intervention** group reported significantly more teaching on prevention of this serious complication. Since the majority of the sample had lymph node dissection, this is critical information. Lymphedema can occur months after surgery and women must be educated on the techniques for prevention. If we were to follow our intervention subjects for 12 months or longer, we hypothesize that we would see less lymphedema development.

3. Functional Status (ADLs)

a. *Frequency and Severity of Limitations*: The three groups are reporting increased limitation four weeks after surgery related to vigorous activities, moderate activities, and lifting activities that involve ten pounds or more. Since these are more strenuous activities, it may take the women longer than a month to resume their pre-surgical levels of activity. Other frequently reported limitations involved more basic ADLs such as lifting and carrying groceries and washing the upper part of the back. These ADL related activities are more likely to be regained within the first few months after surgery since they are used in day-to-day living. We will continue to monitor the trends in this data.

4. Symptoms Experienced Following Surgery

a. *Frequency and Severity*: All three groups reported experiencing a comparable number and range of symptoms. Following the trend established during year one of the study, we continue to see pain and fatigue as the most common symptoms reported. Other commonly reported symptoms among groups included limited range-of-motion, numbness, and trouble sleeping. Among participants reporting pain, women who had a nurse (**intervention** or **control A**) most frequently reported the severity of the pain as mild; whereas the **control B** group, who did not have a nurse, most often reported the severity as moderate. We will watch to see if this trend continues as our sample increases, since this may indicate that having a nurse involved in care improves pain management.

b. *Degree of Limitation*: Among all the symptoms, limited ROM was rated as causing the most limitation by each of the three groups. Of those who reported pain as causing limitation, the greatest percentage of **intervention** participants reported that pain limited them to a small extent, while both **control** groups (**A & B**) reported that pain limited them to some extent, i.e., greater than small. The study nurse may be fine tuning pain management to help minimize limitations.

5. Anxiety

Our preliminary results show a significant decrease in state anxiety for the **intervention** group and **control A** group (who had an agency nurse caring for them) from before to after surgery. Again we are seeing the trend that participants are coping better if they have the support of a nurse in the home. Also as expected, there was no significant change in trait anxiety for any of the three groups. We anticipate these trends to continue.

6. Quality of Life

As would be expected, physical well-being showed the greatest decline after surgery across all three groups. This can be attributed to the fact that women were only 3 to 5 weeks out from surgery at the time of the final telephone interview, and they were still recovering. The only improvement that occurred over time was in the emotional well-being of women who had a nurse (**intervention** and **control A**), with the intervention group nearest to a statistically significant improvement. Women who did not have a nurse (**control B**) showed a decline in all areas of quality of life. These findings suggest that nursing care may have an impact on the emotional issues that women encounter following breast cancer surgery. From our preliminary findings, physical concerns continue at one month post-surgery along with several other quality of life areas. The trend in our data suggests that as nurses help women explore their issues and concerns, they may be able to enhance the emotional well-being of their patients.

7. Use of Health Services

A major goal of this study is to provide cost effective, comprehensive, physical care, emotional care, and health education to women following breast cancer surgery. These initial trends demonstrate that the women in the **intervention** group are reporting the lowest percentage of primary care visits and re-hospitalizations after surgery among the three groups. In addition, having nursing care (**intervention** or **control A**), reduced the percentage of emergency room visits. The length of hospital stay for surgery has decreased in all groups as compared to year one of the study. The **intervention** group continues to be discharged earlier than the **controls** (**A** and **B**). In addition, the study nurses are visiting intervention participants less than half as many times as the agency nurses, with comparable or better results. The trends we are seeing, can all help reduce the

overall cost of breast cancer treatment. We will be watching closely, as our sample size increases, to see if these patterns continue to develop in a cost saving direction.

8. Complementary Therapies

It appears that a significant number of breast cancer patients are using complementary therapies in addition to customary medical care. We realize that complementary therapies are becoming a national trend among cancer patients. We believe that complementary therapies may make a significant contribution to out-of-pocket costs.

It is interesting to note that **control A** participants seem to be the most involved in supplementing their care with complementary therapies since they are reporting the highest frequency of visits. This higher use may be an attempt to supplement care provided by the agency nurse and the surgeon, or it may simply be that this is a sample which is more interested in exploring such therapies. We will continue to watch to see if this trend becomes significant.

9. Out-of-Pocket Expenses

While our cost data is beginning to accrue, participants are very reluctant to discuss finances. Also, they often have not received their final bills when we conduct our interview at 4 weeks post-surgery. We are in the process of conducting follow-up phone calls at 2-3 months after surgery to enrich our cost data. While the mean out-of-pocket cost for the **intervention** group is lower than the **combined control** groups (**A & B**), it is not significantly lower at this point in the study. The costs for complementary therapies were highest for the **control A** group, along with the fact that they are the greatest users.

C. Intervention Protocol Data Discussion

1. Demographics Related to the Protocol Intervention

When comparing our intervention data with our post-test interview data, we are able to begin to see some differences between our **control A** and **intervention** participants. Consistent with year one findings, the **intervention** participants are requiring less than half the number of home visits when compared to **control A** participants who receive agency home care. This may be partially accounted for by the fact that our intervention nurses provide self-care instruction during their visits, rather than performing care for the woman. This approach encourages independence and self-care competency for women in the intervention arm of the study. In addition, the intervention nurses make an average of 5 telephone contacts to the women, which assists the women in managing their own care. If we are able to demonstrate that the **intervention** women do as well or better than the **control A** women with a statistically significant sample, our data will contribute to the identification of the optimal amount of nursing care needed in the first two weeks following breast cancer surgery. While we do not have information on agency

home care in terms of the amount of time spent in the home per visit, record keeping, and coordination of care by the nurses, we feel that the less than one hour per home visit spent by our intervention nurses along with the 47 minutes of record-keeping time is very reasonable and cost effective.

2. Nursing Diagnoses

Our standardized protocol provides for assessment of seven major nursing diagnosis categories which are specific for the post-surgical breast cancer patient: pain, fatigue, constipation, anxiety, quality of life, incision care, and educational needs. In addition to the protocol diagnoses, our home care nurses individualize their assessment to each woman's needs. Some of these additional areas of need deal with nausea, community resource needs, depression, and education regarding potential seroma formation. The additional nursing diagnoses, at this time, appear to be addressing unique needs of individual women, and we will continue to assess these extra needs on a per participant basis.

3. Nursing Interventions

For year two (n=51), our intervention sample has increased from year one (n=11). This increase in number of participants accounts for the wider variety of interventions being implemented to meet the individual needs of women in the study. Further, our protocol incorporates services that are currently not reimbursable, but are essential to the woman's rehabilitation, such as emotional support, quality of life counseling, and health education about the prevention of post-surgical complications and restorative care.

4. Incision Care Needs

As would be expected, the non-significant trend is toward the women with the most self-care needs also receiving the most home visits. We will continue watching for patterns in incision care needs as our sample size grows over the next two years. In future reports, we will have a sufficient sample size to analyze additional variables from our nursing protocol chart data.

CONCLUSIONS

I. SUMMARY OF RESULTS

A. Overall Summary

From the data obtained thus far, it appears that women in the **intervention** arm of the study are receiving follow-up care in the home on the average of **3 visits** and **5 phone calls** in the first 14 days post-operatively by a registered nurse. Our **control A** women, who receive agency home care, are currently receiving **over twice the number of home visits** as our intervention participants. Generally, with our limited sample, we are finding that there are differences in several recovery factors when women have in-home nursing care after breast cancer surgery. On many of our variables, the participants receiving care from agency nurses are recovering comparably to the women receiving care from our study nurses. The major differences appear to be in cost savings, education regarding the prevention of lymphedema, and fewer visits to primary care providers. One of the major goals of the intervention is to empower women through self-care instruction and support. It appears that many self-care questions are handled through phone contacts with our study nurses, with only a minimal number of home visits required to meet each participant's recovery needs following surgery. Such findings could potentially translate into national policy for discharge planning in terms of cost, length of hospital stay, and optimal amount of nursing care needed.

B. Policy Implications

In regards to policy changes related to care following breast cancer surgery, we have kept abreast of happenings at the state and national levels. Currently, managed care organizations in several states advocate hospital stays of 24 hours or less for breast cancer surgery, arguing that savings of up to 75% of total cost can be realized. Detractors refer to such short-stays as the "drive through mastectomy" and say that it lowers costs to the detriment of the patient, who is sent home with drainage equipment to monitor, dressings to change, and other care needs formerly performed by hospital nurses. The controversy prompted New York Lt. Governor, Betsy McCaughey Ross, to push Congress to pass a 48-hour minimum stay law, similar to the one that already covers birthing[15]. In California's Senate, Assembly woman Liz Figueroa (D-Freemont), introduced a bill which would allow the attending physician and surgeon to determine the length of stay after consultation with the patient. Furthermore, it requires a follow-up visit by a licensed health care provider within 48 hours of discharge when ordered by a physician or surgeon[16].

Senator Alfonse D'Amato (R-N.Y.) is supporting a bill in the Senate that would base length of hospitalization for mastectomy patients on the needs of the patient as determined by patient and doctor. Representative Rosa DeLauro (D-Conn.) authored a bill that is currently in the House and supported by President Clinton. This bill requires insurance companies to pay for 48 hours of hospitalization if mastectomy patients choose to stay for that length of time[17, 18]. A bill has been introduced to the South Carolina legislature which proposed to amend the 1976 Code of Laws of South Carolina. It states that all health maintenance organizations and health insurance companies will provide at least 48 hours of hospitalization for mastectomy patients if considered medically necessary by the attending physician. If the patient is released from the hospital in less than 48 hours, home health service must be provided if ordered by the physician[19].

In 1998, the Oncology Nursing Society issued a position statement on short-stay surgery for breast cancer. The position states that decisions regarding length-of-stay must be made solely between the patient and health care provider, and are not to be influenced by financial incentives. Decisions about stay must be based on individual patient variables, e.g., age, type of surgery, caregiver support or burden, and health care provider evaluation. An interdisciplinary team must be used post-surgically (as well as pre-surgically) to evaluate readiness for discharge. Several issues must be addressed with patients and caregivers including physical care, symptom management, and the social/psychological/emotional impact of breast cancer. Both patients and caregivers must be physically and psychologically ready to manage post-surgical care at home. Referrals to home care, Reach-to-Recovery, and other such programs must be made prior to hospital discharge and utilization of these services must be evaluated in a timely manner. Finally, policies that mandate mastectomies on an out-patient basis must be eliminated[20].

C. Disseminating Preliminary Findings

In an effort to disseminate information about the study and the issue of short-stay surgery for breast cancer, staff members have accomplished the following:

1. Development of Web Page: Provides information about various aspects of the study including an overview, purpose, specific aims, design, protocols, instruments used, funding, bibliography of study-related articles, participating surgeons, and patient resources. It also gives web surfers links to several other cancer related sites. The web site can be accessed through the following URL: www.msu.edu/~nurse/bc (see **Appendix J**).

2. News Releases/Radio Interviews/Television Appearances: The principal investigator on the study, Dr. Wyatt, has been interviewed for several media events addressing the issue of short-stay surgery for breast cancer patients. In October of 1997, she was interviewed by a local cable television program "Meridian Magazine" regarding breast cancer awareness. She has also recently been

interviewed for news releases and a Breast Cancer Source Guide produced by the Michigan State University (MSU) Communications Department, and for a newsletter published by the MSU College of Nursing. The study was recently profiled on the MSU Science Coalition Web Site in a feature entitled "From Hospital to Home" during the month of June. (See **Appendix A** for grant productivity report).

3. Abstracts and Presentations: Dr. Wyatt and two nurse/research assistants on the study have had abstracts accepted for presentation and publication. Dr. Wyatt's abstract dealt with the computerized documentation program which the grant is utilizing to bridge the gap between nursing related outcomes and the research process. The information was presented in poster format at the Oncology Nursing Society's annual research conference held during the month of May in San Francisco, California. Kathryn Beckrow, RN, presented a paper (dealing with the conceptual model on which the study is based) at the Michigan Family Practice Research Day held in April at Michigan State University. Mary Bloomfield, RN, also presented a paper (dealing with post-operative seroma formation following breast cancer surgery) at Michigan Family Practice Research Day. Both abstracts were printed in the Michigan Family Practice Day Proceedings Book. (See **Appendix A** for grant productivity and **Appendix K** for abstracts).

4. Summer Research Presentation Series: During the summer of 1998, the study sponsored its second annual research presentation series. The series was developed with the intent of providing an intellectually enriching experience for staff members of the Nursing Care for Breast Cancer study by highlighting various aspects of breast cancer research. This year, the series was open to a university-wide audience with interdisciplinary participation in terms of presenters and attendants. The topic areas covered over three presentations included "Estimating Resource Utilization and Costs in Studies of Treatment Effectiveness", "Music and Healing for Women with Breast Cancer", and "Impaired Cognition in Cancer Patients." All presentations were informally evaluated by participants as valuable and informative. In addition, Dr. Wyatt, Kathryn Beckrow, and Mary Bloomfield presented information on breast cancer at a continuing education program for nurses sponsored by the MSU College of Nursing. (See **Appendix L** for program brochures).

II. FUTURE WORK

In addition to future research possibilities submitted in the Year One Annual Report, we have begun to pursue supportive measures that encompass the time period beyond 4 weeks post-surgery. As each woman completes her participation in our study, we are becoming more aware of concerns related to continued treatment. Emotional care is not only needed in relation to surgery but may be even more necessary when questions or concerns regarding adjuvant therapy (radiation and/or chemotherapy) and other life issues arise. Based on findings from this study and related projects conducted by this

research team, it is clear that women are turning to complementary therapies to help them through the adjuvant therapy phase. In response to these needs, we plan to create a systematic approach to a program of complementary therapies which could support women physically and emotionally through this next phase of treatment and ultimately lead to a higher quality of life.

Finally, another focus for future work is with women not fortunate enough to sustain a cure or remission of their cancer (i.e. women with terminal breast cancer). These women also have issues to be addressed whether they are receiving palliative treatment (aimed at reducing discomfort rather than providing a cure) or aggressive chemotherapy treatments (intended to prolong life, but that are very taxing on the body). Along with the conventional medical care that is currently available, many women are turning to complementary therapies to provide symptom control and psychological comfort. Again we would like to facilitate standardized use of therapies that could assist women in attaining the highest quality of life possible during the end-of-life period.

REFERENCES

1. Oberst, M.T., & Scott, D.W. (1988). Post-discharge distress in surgically treated cancer patients and their spouses. Research in Nursing & Health, 11(4), 223-233.

2. Ganz, P.A., Schag, C.C., Polinsky, M.L., Heinrich, R.L., & Flack, V.F. (1987). Rehabilitation needs and breast cancer: The first month after primary therapy. Breast Cancer Research and Treatment, 10, 243-253.

3. Polinsky, M.L., Fred, C., & Ganz, P.A. (1991). Quantitative and qualitative assessment of a case management program for cancer patients. Health and Social Work, 16, 176-183.

4. Ellis, C. (1994). Short-stay surgery for mastectomy. Quality of Life: A Nursing Challenge, 3, 21-24.

5. Wyatt, G. (1995). [Home care pilot data from 18 breast cancer survivors]. Unpublished data.

6. Given, B., & Given, C.W. (1994). Supportive Care for Older Women with Breast Cancer. Grant # CA/NR/Ag-91-24 funded by the U.S. Department of Health & Human Services, Public Health Services.

7. Wyatt, G., Kurtz, M.E., & Liken, M. (1993). Breast cancer survivors: An exploration of quality of life issues. Cancer Nursing, 16(6), 440-448.

8. Wyatt, G. (1994). Short Term Sequelae of Midlife and Older Women Following Breast Cancer Surgery. Grant funded by an American Cancer Society Institutional grant to Michigan State University Cancer Center. Unpublished data.

9. Wyatt, G. (1994). From Given, B., & Given, C. W. Family Home Care for Cancer: A Community-Based Model. Grant #RO1 NR01915, NCNR 1987-1989, funded by NCI/National Institute of Nursing Research. [Preliminary unpublished data from older, newly discharged cancer patients].

10. Zar J. H. (1984). Biostatistical analysis (2nd ed.). Englewood Cliffs: Prentice Hall.

11. Fleiss, J.L. (1981). Statistical Methods for Rates and Proportions (2nd ed.). New York: John Wiley & Sons.

12. Schlesselman, J. J. (1982). Case-control studies: Design, conduct, analysis. New York: Oxford University Press.

13. SAS Institute, Inc. (1988). SAS/STAT User's Guide, Release 6.03 Edition, Cary, North Carolina.

14. SPSS, Inc. (1998). SPSS Base 8.0 User's Guide for Windows, Chicago, Illinois.

15. Rutz, D. (December 23, 1996). Doctors, patients question mastectomy as outpatient surgery [On-Line]. Available: www.cnn.com.

16. United Press International (August 25, 1997). Mastectomy care bill advances [On-Line]. Available: www.yahoo.com.

17. Mann, J. (September 10, 1997). Breast cancer bills need undivided attention [On-Line]. Available: www.washingtonpost.com.

18. Recer, P. (1998, June 3). Hospital stay may help mastectomy patients: Bills proposed to make insurance companies pay. The State News, p. 2.

19. Meacham (1997, March 3). General Bill #3616: Mastectomy, health insurance policies to pay for hospitalization of patient for forty-eight hours [On-Line]. Available: www.lpitr.state.sc.us /bills/3616.

20. ONS Issues position statement on short-stay surgery for breast cancer (1998). Oncology, 12(4), 482.

TABLES

Table		Page
1.	Data Collection Schedule	34
2.	Demographics	35
3.	Surgical Recovery and Self Care Knowledge - Antibiotic Use to Prevent or Treat Infection	36
4.	A). Surgical Recovery and Self Care Knowledge - Surgical Arm Range-of-Motion	37
	B). Surgical Recovery and Self Care Knowledge - Breast Self-Exam Knowledge/Technique	37
5.	Surgical Recovery and Self Care Knowledge - Lymphedema Prevention	38
6.	Functional Status - Five Most Frequently Reported Limitations	39
7.	Functional Status - Severity of Limitations	40
8.	Symptoms Experienced Following Surgery - Frequency	41
9.	Symptoms Experienced Following Surgery - Degree of Limitation	42
10.	STATE and TRAIT Anxiety Over Time	43
11.	Quality of Life Over Time	44
12.	Use of Health Services - Comparisons Across Groups	45
13.	Use of Complementary Therapies	46
14.	Out-of-Pocket Expenses Following Surgery	47
15.	Demographic Protocol Data - Intervention Participants	48
16.	Nursing Diagnoses Used - Intervention Participants	49
17.	Nursing Interventions Used - Intervention Participants	50
18.	Incision Care Needs - Intervention Participants	51

Table 1

DATA COLLECTION SCHEDULE

MEASURES	PRE-SURGERY	POST-SURGERY (4 Weeks)
Demographic Data Sheet	X	N/A
Functional Status (Modified SF-36)	X	X
Symptom Experience (Modified)	N/A	X
Healing Process	N/A	X
Anxiety (Speilberger State-Trait)	X	X
Quality of Life FACT-B	X	X
Out-of-Pocket Health Costs	N/A	X
Chart Audit (cancer stage, surgery, lymph node involvement)	N/A	X

Table 2

DEMOGRAPHICS

	Intervention (n=51)		Control A* (n=28)		Control B** (n=21)		Total Controls A & B (n=49)		Study Total (n=100)	
	n	%	n	%	n	%	n	%	n	%
Ethnicity										
Caucasian	48	94.1%	24	85.7%	21	100.0%	45	91.8%	93	93.0%
Other	3	5.9%	4	14.3%	0	0.0%	4	8.2%	7	7.0%
Marital Status										
Married	28	54.9%	19	67.9%	10	47.6%	29	59.2%	57	57.0%
Divorced/Separated	11	21.6%	4	14.3%	3	14.3%	7	14.3%	18	18.0%
Never married	8	15.7%	2	7.1%	1	4.8%	3	6.1%	11	11.0%
Widowed	4	7.8%	3	10.7%	7	33.3%	10	20.4%	14	14.0%
Employment Status										
Employed before surgery	26	51.0%	18	64.3%	14	66.7%	32	65.3%	58	58.0%
Not employed before surgery	25	49.0%	10	35.7%	7	33.3%	17	34.7%	42	42.0%
Education										
Completed graduate degree	8	15.7%	6	21.4%	6	28.6%	12	24.5%	20	20.0%
Completed college	9	17.6%	5	17.9%	1	4.8%	6	12.2%	15	15.0%
Completed some college	16	31.4%	12	42.9%	5	23.8%	17	34.7%	33	33.0%
Completed high school	11	21.6%	3	10.7%	6	28.6%	9	18.4%	20	20.0%
Completed some high school	5	9.8%	1	3.6%	2	9.5%	3	6.1%	8	8.0%
Completed grade school	2	3.9%	1	3.6%	1	4.8%	2	4.1%	4	4.0%
No formal education	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Type of Surgery										
Lumpectomy with node removal	41	80.4%	20	71.4%	15	71.4%	35	71.4%	76	76.0%
Mastectomy without node removal	7	13.7%	7	25.0%	6	28.6%	13	26.5%	20	20.0%
Mastectomy with node removal	3	5.9%	1	3.6%	0	0.0%	1	2.0%	4	4.0%

	Intervention				Control A*				Control B**				Total Controls A & B				Study Total			
	n	M	SD	Min-Max	n	M	SD	Min-Max	n	M	SD	Min-Max	n	M	SD	Min-Max	n	M	SD	Min-Max
Income ($)	36	44,199	33,550	295-130,000	20	47,555	37,236	2,500-140,000	16	42,603	29,858	1,650-110,000	36	45,354	33,778	1,650-140,000	72	44,777	33,432	295-140,000
Age (years)	51	57.06	11.60	34-85	28	60.96	11.41	39-83	21	57.67	9.80	34-74	49	59.32	10.77	34-83	100	58.28	11.21	34-85

*Received nursing care provided by an agency nurse
**Received no nursing care

Table 3

SURGICAL RECOVERY AND SELF CARE KNOWLEDGE - *ANTIBIOTIC USE TO PREVENT OR TREAT INFECTION*

	No Antibiotic Use		Used Antibiotics					
	Total		*To Prevent Infection*		*To Treat Infection*		*Total*	
	n	%	n	%	n	%	n	%
Total (n=100)	71	71.0%	21	21.0%	8	8.0%	29	29.0%
Intervention (n=51)	33	64.7%	13	25.5%	5	9.8%	18	35.3%
Control A* (n=28)	18	64.3%	8	28.6%	2	7.1%	10	35.7%
Control B** (n=21)	20	95.2%	0	0.0%	1	4.8%	1	4.8%

*Received nursing care provided by an agency nurse
**Received no nursing care

Table 4-A

SURGICAL RECOVERY AND SELF-CARE KNOWLEDGE - *SURGICAL ARM RANGE-OF-MOTION (ROM)*

	Intervention (n=49)		Control A‘ (n=26)		Control B“ (n=21)		Total Controls A & B (n=47)	
	n	%	n	%	n	%	n	%
Maintained ROM *from before to after surgery*	31	63%	22	85%*	16	76%	38	81%
Change in ROM (decrease of 1 on a 5 pt. scale) *from before to after surgery*	18	37%	4	15%	5	24%	9	19%

*.025< p <.05

Table 4-B

SURGICAL RECOVERY AND SELF-CARE KNOWLEDGE - *BREAST SELF-EXAM (BSE) KNOWLEDGE AND TECHNIQUE*

	Intervention (n=51)		Control A‘ (n=28)		Control B“ (n=21)		Total Controls A & B (n=49)	
	n	%	n	%	n	%	n	%
Knowledge of BSE	50	98.0%	27	96.4%	19	90.5%	46	93.9%
BSE Technique (check for lumps and/or use pads of fingers)	49	96.1%	27	96.4%	19	90.5%	46	93.9%

‘Received nursing care provided by an agency nurse
“Received no nursing care

Table 5

SURGICAL RECOVERY AND SELF-CARE KNOWLEDGE - *LYMPHEDEMA PREVENTION*

	Intervention		Control A*		Control B**		Total Controls A & B	
	n	%	n	%	n	%	n	%
Received teaching for lymphedema prevention	45/48	93.8%*	15/27	55.6%	12/21	57.1%	27/48	56.3%

	Intervention			Control A*			Control B**			Total Controls A & B		
	n	M	SD	n	M	SD	n	M	SD	n	M	SD
Number of times taught	45/48	2.13**	1.38	15/27	1.47	0.92	12/21	1.33	0.65	27/48	1.41	0.80

*$p<.001$
**$p<.005$

*Received nursing care provided by an agency nurse
**Received no nursing care

Table 6

FUNCTIONAL STATUS - *FIVE MOST FREQUENTLY REPORTED LIMITATIONS*

Intervention (n=51)

	Before		After		Change
	n	%	n	%	%
Moderate Activity	3	5.9%	35	68.6%	62.7%
Vigorous Activity	12	23.5%	40	78.4%	54.9%
Lifting Objects > 10 lbs.	7	13.7%	34	68.0%	54.3%
Reaching Into Cupboard	2	3.9%	38	74.5%	70.6%
Lifting/Carrying Groceries	3	5.9%	30	58.8%	52.9%

Control A* (n=28)

	Before		After		Change
	n	%	n	%	%
Moderate Activity	3	10.7%	20	71.5%	60.8%
Vigorous Activity	5	17.9%	21	75.0%	57.1%
Lifting Objects >10 lbs.	4	14.3%	20	74.0%	59.7%
Reaching Into Cupboard	3	10.7%	19	67.8%	57.1%
Pushing Heavy Objects	4	16.0%	14	60.8%	44.8%

Control B (n=21)**

	Before		After		Change
	n	%	n	%	%
Moderate Activity	5	23.8%	15	71.4%	47.6%
Vigorous Activity	6	30.0%	17	85.0%	55.0%
Lifting Objects >10 lbs.	0	0.0%	11	52.4%	52.4%
Pushing Heavy Objects	3	14.3%	14	66.7%	52.4%
Washing Upper Part of Back	2	10.0%	11	55.0%	45.0%

*Received nursing care provided by an agency nurse
**Received no nursing care

Table 7

FUNCTIONAL STATUS - *SEVERITY OF LIMITATIONS*

	Intervention		Control A*		Control B**		Total Controls A & B	
	n	%	n	%	n	%	n	%
Moderate Activity								
No change in Severity from Pre to Post	19/31	61.3%	10/17	58.8%	11/17	64.7%	21/34	61.8%
Increase in Severity from Pre to Post	12/31	38.7%	7/17	41.2%	6/17	35.3%	13/34	38.2%
Vigorous Activity								
No Change in Severity from Pre to Post	22/35	62.9%	11/17	64.7%	10/12	83.3%	21/29	72.4%
Increase in Severity from Pre to Post	13/35	37.1%	6/17	35.3%	2/12	16.7%	8/29	27.6%
Lifting Objects 〉10 lbs								
No Change in Severity from Pre to Post	21/36	58.3%	11/17	64.7%	10/12	83.3%	21/29	72.4%
Increase in Severity from Pre to Post	15/36	41.7%	6/17	35.3%	2/12	16.7%	8/29	27.6%

*Received nursing care provided by an agency nurse
**Received no nursing care

Table 8

SYMPTOMS EXPERIENCED FOLLOWING SURGERY - *FREQUENCY*

	Mean # of Symptoms (four weeks after surgery)	Reported Range of # of Symptoms	Possible Range of Total Symptoms
Intervention (n=51)	6.18	0-14	0-21
Control A‘ (n=28)	6.11	1-12	0-21
Control B“ (n= 21)	5.95	0-13	0-21
Total Controls A & B (n=49)	6.04	0-13	0-21

Symptoms Reported by 50% or More of Each Group (four weeks after surgery)

	Intervention			Control A‘			Control B“	
	n	%		n	%		n	%
Pain			**Pain**			**Pain**		
No	15	29.4%	No	9	32.1%	No	8	38.1%
Yes	36	70.6%	Yes	19	67.9%	Yes	13	61.9%
Mild	22	43.1%	Mild	9	32.1%	Mild	6	28.6%
Moderate	11	21.6%	Moderate	8	28.6%	Moderate	7	33.3%
Severe	3	5.9%	Severe	2	7.1%	Severe	0	0.0%
Fatigue			**Fatigue**			**Fatigue**		
No	16	31.4%	No	5	17.9%	No	8	38.1%
Yes	35	68.6%	Yes	23	82.1%	Yes	13	61.9%
Mild	16	31.4%	Mild	12	42.9%	Mild	7	33.3%
Moderate	14	27.5%	Moderate	11	39.3%	Moderate	6	28.6%
Severe	5	9.8%	Severe	0	0.0%	Severe	0	0.0%
ROM			**ROM**			**ROM**		
No	23	45.1%	No	12	42.9%	No	9	42.9%
Yes	28	54.9%	Yes	16	57.1%	Yes	12	57.1%
Mild	14	27.5%	Mild	7	25.0%	Mild	6	28.6%
Moderate	12	23.5%	Moderate	8	28.6%	Moderate	5	23.8%
Severe	2	3.9%	Severe	1	3.6%	Severe	1	4.8%
Numbness			**Sleep**			**Numbness**		
No	14	27.5%	No	13	46.4%	No	4	19.0%
Yes	37	72.5%	Yes	15	53.6%	Yes	17	81.0%
Mild	16	31.4%	Mild	7	25.0%	Mild	6	28.6%
Moderate	14	27.5%	Moderate	7	25.0%	Moderate	9	42.9%
Severe	7	13.7%	Severe	1	3.6%	Severe	2	9.5%

‘Received nursing care provided by an agency nurse

“Received no nursing care

Table 9

SYMPTOMS FOLLOWING SURGERY - *DEGREE OF LIMITATION*

Intervention			Control A*			Control B**		
	n	%		n	%		n	%
Pain (n=35)			**Pain (n=19)**			**Pain (n=13)**		
Not at all	13	37.1%	Not at all	6	31.6%	Not at all	5	38.5%
Small extent	10	28.6%	Small extent	3	15.8%	Small extent	3	23.1%
Some extent	7	20.0%	Some extent	6	31.6%	Some extent	4	30.8%
Great extent	4	11.4%	Great extent	2	10.5%	Great extent	1	7.7%
Very great extent	1	2.9%	Very great extent	2	10.5%	Very great extent	0	0.0%
Total Limitations	22	62.9%	Total Limitations	13	68.4%	Total Limitations	8	61.5%
Fatigue (n=34)			**Fatigue (n=23)**			**Fatigue (n=13)**		
Not at all	13	38.2%	Not at all	9	39.1%	Not at all	5	38.5%
Small extent	6	17.6%	Small extent	7	30.4%	Small extent	2	15.4%
Some extent	8	23.5%	Some extent	4	17.4%	Some extent	6	46.2%
Great extent	7	20.6%	Great extent	2	8.7%	Great extent	0	0.0%
Very great extent	0	0.0%	Very great extent	1	4.3%	Very great extent	0	0.0%
Total Limitations	21	61.8%	Total Limitations	14	60.9%	Total Limitations	8	61.5%
ROM (n=27)			**ROM (n=16)**			**ROM (n=12)**		
Not at all	7	25.9%	Not at all	5	31.3%	Not at all	4	33.3%
Small extent	6	22.2%	Small extent	4	25.0%	Small extent	3	25.0%
Some extent	11	40.7%	Some extent	5	31.3%	Some extent	2	16.7%
Great extent	1	3.7%	Great extent	2	12.5%	Great extent	3	25.0%
Very great extent	2	7.4%	Very great extent	0	0.0%	Very great extent	0	0.0%
Total Limitations	20	74.1%	Total Limitations	11	68.8%	Total Limitations	8	66.7%
Numbness (n=36)			**Sleep (n=15)**			**Numbness (n=17)**		
Not at all	21	58.3%	Not at all	9	60.0%	Not at all	11	64.7%
Small extent	8	22.2%	Small extent	1	6.7%	Small extent	2	11.8%
Some extent	5	13.9%	Some extent	4	26.7%	Some extent	3	17.6%
Great extent	1	2.8%	Great extent	1	6.7%	Great extent	1	5.9%
Very great extent	1	2.8%	Very great extent	0	0.0%	Very great extent	0	0.0%
Total Limitations	15	41.7%	Total Limitations	6	40.0%	Total Limitations	6	35.3%

*Received nursing care provided by an agency nurse

**Received no nursing care

Table 10

STATE ANXIETY OVER TIME
1= least anxious to 4= most anxious

	Intervention (n=51)		Control A* (n=28)		Control B** (n=21)	
Time	**M**	**SD**	**M**	**SD**	**M**	**SD**
Before surgery	2.09*	0.72	2.24*	0.87	2.12	0.65
After surgery	1.83*	0.64	1.84*	0.71	1.97	0.60

*$p<.02$

TRAIT ANXIETY OVER TIME
1= least anxious to 4= most anxious

	Intervention (n=50)		Control A* (n=27)		Control B** (n=21)	
Time	**M**	**SD**	**M**	**SD**	**M**	**SD**
Before surgery	1.97	1.12	1.83	0.61	1.81	0.65
After surgery	1.76	0.51	1.65	0.56	1.81	0.49

*Received nursing care provided by an agency nurse
**Received no nursing care

Table 11

QUALITY OF LIFE OVER TIME

0=lowest quality of life to 4=highest quality of life

Intervention (n=50)						
	Before Surgery			After Surgery		
Sub-scales	**M**	**SD**	**Min/Max**	**M**	**SD**	**Min/Max**
Physical well-being	3.50*	0.69	0.17-4.00	2.96*	1.17	0.00-4.00
Social and family well-being	3.35	0.74	1.33-4.00	3.34	0.80	0.00-4.00
Relationship with doctors	3.69	0.71	0.00-4.00	3.57	0.69	0.50-4.00
Emotional well-being	2.71	0.83	1.00-4.00	2.96	1.01	0.50-4.00
Functional well-being	3.11	0.88	0.00-4.00	3.12	0.73	1.14-4.00
Additional concerns	2.75	0.58	0.00-4.00	2.72	0.77	0.57-4.00
Control A⁺ (n=28)						
	Before Surgery			After Surgery		
Sub-scales	**M**	**SD**	**Min/Max**	**M**	**SD**	**Min/Max**
Physical well-being	3.50*	0.40	2.33-4.00	2.90*	1.24	0.00-4.00
Social and family well-being	3.61	0.54	1.67-4.00	3.38	0.62	1.67-4.00
Relationship with doctors	3.77	0.42	2.50-4.00	3.61	0.55	2.00-4.00
Emotional well-being	2.70	0.96	0.83-4.00	2.94	1.07	0.67-4.00
Functional well-being	2.97	0.76	1.00-4.00	2.95	0.77	0.71-4.00
Additional concerns	2.65	0.62	1.43-3.71	2.62	0.82	1.00-3.86
Control B⁺⁺ (n=21)						
	Before Surgery			After Surgery		
Sub-scales	**M**	**SD**	**Min/Max**	**M**	**SD**	**Min/Max**
Physical well-being	3.60*	0.56	2.17-4.00	2.68*	1.35	0.00-4.00
Social and family well-being	3.58	0.66	1.67-4.00	3.28	0.78	1.83-4.00
Relationship with doctors	3.69	0.49	2.50-4.00	3.64	0.76	1.00-4.00
Emotional well-being	2.91	0.72	1.33-4.00	2.77	1.05	0.50-4.00
Functional well-being	3.04	0.84	0.71-4.00	3.02	0.76	1.43-4.00
Additional concerns	2.67	0.70	1.29-3.71	2.57	0.85	1.14-3.71

*$p<.02$ (when compare before and after surgery means within groups)

⁺ Received nursing care provided by an agency nurse

⁺⁺ Received no nursing care

Table 12

USE OF HEALTH SERVICES - *COMPARISONS ACROSS GROUPS*

	Intervention (n=51)				Control A* (n=28)				Control B** (n=21)				Total Controls A & B (n=49)				Study Total (n=100)			
Initial Surgery	**n**	**%**	**M◊**	**SD**	**n**	**%**	**M◊**	**SD**	**n**	**%**	**M◊**	**SD**	**n**	**%**	**M◊**	**SD**	**n**	**%**	**M◊**	**SD**
Hospital stay ≤ 48 hrs.	48	94.1%	17.58	10.24	22	78.6%	21.22	13.43	17	81%	23.57	9.12	39	80%	22.24	11.66	87	87%	19.67	11.09
Hospital stay > 48 hrs.	3	6.0%	80.00	14.18	6	21.4%	59.38	11.05	4	19%	50.44	14.63	10	20%	55.80	9.51	13	13%	61.38	14.63

	Intervention (n=51)				Control A* (n=28)				Control B** (n=21)				Total Controls A & B (n=49)			
Services/Visits	**n**	**%**	**M◊**	**SD**	**n**	**%**	**M◊**	**SD**	**n**	**%**	**M◊**	**SD**	**n**	**%**	**M◊**	**SD**
Surgeon Post-op	51	100.0%	2.54	2.46	28	100.0%	2.82	1.56	21	100.0%	2.48	1.50	49	100.0%	2.67	1.53
Laboratory	10	19.6%	1.02	0.90	9	32.1%	1.58	1.10	4	19.0%	1.25	1.26	13	26.5%	1.48	1.11
Primary Care	4	7.8%	1.00	0.00	5	17.9%	1.00	0.00	3	14.3%	1.00	0.00	8	16.3%	1.00	0.00
Emergency Room	2	3.9%	1.00	0.00	1	3.6%	1.00	0.00	3	14.3%	1.00	0.00	4	8.2%	1.00	0.00
Re-hospitalization	7	13.7%	1.00	0.00	5	17.9%	1.00	0.00	3	14.3%	1.00	0.00	8	16.3%	1.00	0.00
Social Worker	4	7.8%	1.00	0.00	0	0.0%	0.00	0.00	0	0.0%	0.00	0.00	0	0.0%	0.00	0.00
Home Care Nurse *from study*	51	100.0%	2.98	1.01	---	---	---	---	---	---	---	---	---	---	---	---
from agency service	---	---	---	---	27	100.0%	7.00	5.78	---	---	---	---	27	55.1%	7.00	5.78

◊ Mean number of visits by those who used services
*Received nursing care provided by an agency nurse
**Received no nursing care

Table 13
USE OF COMPLEMENTARY THERAPIES

	Intervention (n=51)		Control A* (n=28)		Control B** (n=4)	
	n	%	n	%	n	%
Used one or more CTs	24/51	47.1%	21/28	75.0%*	10/21	47.6%
Variety of CTs used	12/13	92.3%	10/13	76.9%	5/13	38.5%
	M	SD	M	SD	M	SD
Average number of CT's used	0.86	1.17	1.54**	1.29	0.67	0.86

Frequency of Therapy Use	n	%	n	%	n	%
Special Vitamin Therapy	16	31.4%	18	64.3%**	8	38.1%
Therapeutic Massage	4	7.8%	5	17.9%	0	0.0%
Guided Imagery	4	7.8%	3	10.7%	1	4.8%
Herbal Therapy	3	5.9%	5	17.9%	2	9.5%
Spiritual Healing	3	5.9%	4	14.3%	0	0.0%
Special Cancer Diet	3	5.9%	0	0.0%	1	4.8%
Special Cultural Therapies	3	5.9%	0	0.0%	0	0.0%
Relaxation Audio Tapes	1	2.0%	3	10.7%	1	4.8%
Relaxation Video Tapes	1	2.0%	1	3.6%	0	0.0%
Yoga Therapy	1	2.0%	1	3.6%	0	0.0%
Acupuncture Treatment	1	2.0%	0	0.0%	0	0.0%
Therapeutic Touch	1	2.0%	1	3.6%	0	0.0%
Chiropractic Treatment	0	0.0%	2	7.1%	0	0.0%

*p <0.05
**p <0.02

*Received nursing care provided by an agency nurse
**Received no nursing care

Table 14

OUT-OF-POCKET EXPENSES FOLLOWING SURGERY

	Intervention (n=51)				Control A‘ (n=28)				Control B“ (n=21)				Total Controls A & B (n=49)			
	n	M	SD	Min-Max	n	M	SD	Min-Max	n	M	SD	Min-Max	n	M	SD	Min-Max
Complementary Therapies	30	$20.50	37.83	$0-151	22	$47.68*	63.98	$0-255	14	$11.07	13.88	$0-50	36	$33.44	53.43	$0-255
Medications	34	$18.97	21.28	$2-100	18	$18.22	14.79	$4-50	17	$25.18	48.78	$2-192	35	$21.60	35.24	$2-192
Special Supplies	25	$31.56	70.23	$3-360	12	$14.75	13.61	$2-50	6	$17.00	12.59	$4-30	18	$15.50	12.95	$2-50
Additional Costs	10	$64.80	64.59	$3-200	10	$99.40	98.28	$6-300	5	$48.80	46.87	$10-100	15	$82.53	86.30	$6-300
Total Out-of-Pocket	41	$124.55	163.76	$3-789	24	$109.29	95.94	$4-336	20	$176.70	550.04	$5-2500	44	$139.93	289.30	$4-2500

*$p<.05$

‘Received nursing care provided by an agency nurse
“Received no nursing care

Table 15

DEMOGRAPHIC PROTOCOL DATA- *INTERVENTION PARTICIPANTS*

Variable	M	SD	Min-Max
Number of visits per participant	2.98	1.01	2-6
Number of phone contacts per participant	4.53	1.46	2-7
Number of nursing diagnoses (problems) opened per participant	14.83	2.07	12-25
Home visit direct care time per visit (minutes)	57.75	23.09	0-135
Home visit record-keeping time per participant (minutes)	46.72	21.90	0-90
Telephone direct care time per contact (minutes)	8.58	7.56	0-60
Telephone coordination of care time with other health providers (minutes)	0.69	3.15	0-20

Table 16

NURSING DIAGNOSES USED - *INTERVENTION PARTICIPANTS*

Categories	Protocol Diagnoses	Number of Times Used
1. Pain	Pain, acute	55
2. Fatigue	Activity intolerance	53
3. Constipation	Constipation	51
4. Anxiety	Anxiety	49
5. Quality of life	Alteration in quality of life	32
6. Incision Care	Skin integrity/surgery	55
	Knowledge deficit, milk drain	49
	Knowledge deficit, empty drain	49
	Knowledge deficit, record drainage	49
	Knowledge deficit, dressing change	41
7. Health Education	Knowledge deficit, BSE	54
	Knowledge deficit, ROM affected arm	51
	Knowledge deficit, lymphedema prevention	50
Categories	**Additional Diagnoses**	**Number of Times Used**
1. Incision care	Self-care deficit, clogged drainage tube	7
	Self-care deficit, dressing change	5
	Knowledge deficit, seroma signs and symptoms	5
2. Quality of life	Activities of daily living, functional alterations	14
	Emotional alterations	5
	Social/family alterations	4
	Sexual/body image alterations	2
	Physical, altered	3
3. Nausea	Nausea	7
4. Depression	Depression, side effects	4
	Knowledge deficit, community resources	4
5. Fatigue	Fatigue, acute	4

Table 17

NURSING INTERVENTIONS USED - *INTERVENTION PARTICIPANTS*

Interventions	Methods	Frequency
1. Give educational materials	Teaching	226
2. Over-the-counter medications	Prescribing	102
3. Medications	Teaching	96
4. Breast self-exam	Teaching	71
5. Exercise, range-of-motion	Teaching	67
6. Lymphedema prevention	Teaching	66
7. Exercise, range-of-motion	Demonstrating	63
8. Functional level (surgical arm)	Evaluating	62
9. Exercise, range-of-motion	Evaluating	58
10. Infection control	Teaching	58
11. Skin care, wound	Teaching	56
12. Quality of Life	Assessing	55
13. Pain control	Assessing	54
14. Support group	Referring	54
15. Quality of Life	Evaluating	53
16. Sleep/rest hygiene	Teaching	53
17. Fatigue	Assessing	52
18. Support re' individual	Counseling	51
19. Pain control	Evaluating	50
20. Anxiety	Assessing	49
21. Constipation - bowel management	Evaluating	49
22. Fatigue	Evaluating	48
23. Lymphedema knowledge	Evaluating	48
24. Skin integrity, incision	Assessing	48
25. Dressing change	Teaching	46
26. Drain care	Teaching	36

Table 18

INCISION CARE NEEDS - *INTERVENTION PARTICIPANTS*

	No Incision Needs		One or More Incision Needs	
	n	**%**	**n**	**%**
Mean (2.9 visits)	10/24	45.5%	12/24	54.5%
1 SD above Mean	4/24	36.4%	7/24	63.6%
1 SD below Mean	10/24	58.8%	7/24	41.2%
Total (n=50)	24/50	48.0%	26/50	52.0%

A Subacute Care Intervention for Short-Stay Breast Cancer Surgery

Appendices for Year Two Annual Report
September 15, 1997 to September 14, 1998

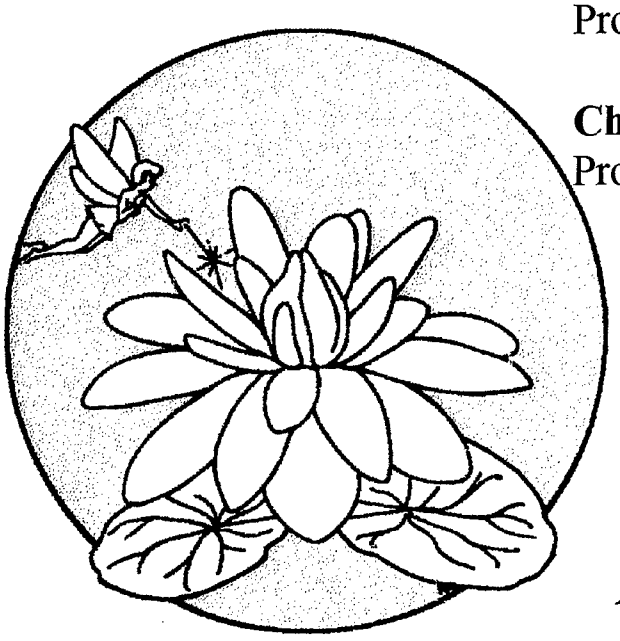
Funded by: **U.S. Army Medical Research**
Materiel Command
Department of Defense
Grant # DAMD17-96-1-6325

Principal Investigator:
Gwen Karilyn Wyatt, PhD, RN
Associate Professor, College of Nursing

Co-principal Investigators:
Barbara Given, PhD, RN, FAAN
Professor, College of Nursing

Charles Given, PhD
Professor, College of Human Medicine

Michigan State University
East Lansing, Michigan 48824



A New Beginning

A Subacute Care Intervention for Short-Stay Breast Cancer Surgery

APPENDICES

Grant Productivity Report ..... Appendix A

1997-1998 Published Journal Articles ..... Appendix B

Limited Distribution Materials - Submitted Abstracts and Manuscripts ..... Appendix C

Nurse Charting Form (Revised) ..... Appendix D

Chart Audit Protocol ..... Appendix E

Quality Assurance Protocol ..... Appendix F

Curriculum Vitae ..... Appendix G

Study Design (Revised) ..... Appendix H

Participant Resource Lists ..... Appendix I

Study Web Site ..... Appendix J

1997-1998 Grant Abstracts ..... Appendix K

Continuing Education Participation by Grant Personnel ..... Appendix L

A Subacute Care Intervention for Short-Stay Breast Cancer Surgery

GRANT PRODUCTIVITY REPORT
Appendix A

Productivity Report - September 15, 1996 to September 14, 1998

A Subacute Care Intervention

for

Short-Stay Breast Cancer Surgery

September 15, 1996 to September 14, 2000

Productivity Report

Funded by:
U. S. Army Medical Research
Materiel Command
Department of Defense

Principal Investigator:
Gwen Wyatt, RN, PhD
Associate Professor
College of Nursing

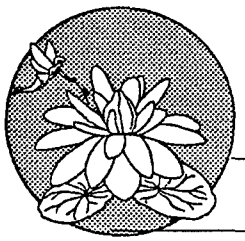
Co-Principal Investigators:

Barbara Given, PhD, RN, FAAN
Professor, College of Nursing
Director of Research,
Institute of Managed Care
Associate Director, Cancer Prevention
and Control, MSU Cancer Center

Charles Given, PhD
Professor, College of Human Medicine
Associate Chair for Research
Family Practice

Michigan State University
East Lansing, Michigan 48824

A New Beginning



Nursing Care for Breast Cancer Staff Productivity Report

Fall 1996 through Summer 1998

PUBLICATIONS

Wyatt, G., Friedman, L.L., Given, C.W., & Given, B.A. (in press). A profile of bereaved caregivers following provision of terminal care. Journal of Palliative Care.

Wyatt, G. & Friedman, L.L., (1998). Physical and psychosocial outcomes of midlife and older women following surgery and adjuvant therapy for breast cancer. Oncology Nursing Forum, 25(4), 761-768.

Wyatt, G., Kurtz, M. E., Friedman, L. L., Given, B.A., & Given, C. W. (1997). Preliminary testing of the Long-Term Quality of Life (LTQL) Instrument for female cancer survivors. Journal of Nursing Measurement, 4(2), 153-170.

Wyatt, G. & Friedman, L.L. (1996). Quality of life in long-term female cancer survivors: A descriptive conceptual model. Quality of Life Research, 5, 387-394.

Wyatt, G. & Friedman, L.L. (1996). Long-Term female cancer survivors: Quality of life issues and clinical implications. Cancer Nursing, 19(1), 1-7.

MANUSCRIPTS SUBMITTED

Wyatt, G., Friedman, L.L., Given, C.W., Given, B.A., & Beckrow, K.C. (1998, July). Complementary therapy use among older cancer patients. Cancer Practice.

Wyatt, G., Ogle, K. & Given B. (1997, November). Recommendations for pro-active hospice education: A perspective from the bereaved. Cancer Education.

PRESENTATIONS

Wyatt, G., Beckrow, K.C., & Bloomfield, M. (1998, June 16). Breast Cancer Awareness. Presentation for Nursing Continuing Education Summer Tuesday Evening Series: Women's Health Issues. Michigan State University, East Lansing, MI.

Wyatt, G., Given, B., & Given, C. (1998, May 7-10). Bridging the Gap between Nursing Outcomes and the Research Process: One-Step Computerized Documentation and Direct Data Entry. Poster presentation for the Oncology Nursing Society 23rd Annual Congress — On Track to a Changing World, San Francisco, CA.

Bloomfield, M. & Wyatt, G. (1998, April 30). Post-Operative Seroma Formation Following Breast Cancer Surgery. Presentation for the 21st Annual Michigan Family Practice Research Day Conference, Michigan State University, East Lansing, MI.

Beckrow, K.C. & Wyatt, G. (1998, April 30). The Impact of an In-Home Nursing Intervention for Women Following Short-Stay Surgery for Breast Cancer. Presentation for the 21st Annual Michigan Family Practice Research Day Conference, Michigan State University, East Lansing, MI.

Bloomfield, M. & Wyatt, G. (1998, April 29). Post-Operative Seroma Formation Following Breast Cancer Surgery. Poster presentation for the Nursing Research Day, sponsored by The Greater Lansing Nursing Research Consortium, Lansing, MI.

Sprague, J. & Wyatt, G. (1998, April 27). Bridging the Gap Between Nursing Outcomes and the Research Process. Poster presentation for the Undergraduate Research Opportunity Program (UROP) 1997-98 Closing Banquet, Michigan State University, East Lansing, MI.

Bloomfield, M. & Wyatt, G. (1998, April 3-4). Post-Operative Seroma Formation Following Breast Cancer Surgery. Poster presentation for the Research Recognition Day sponsored by the Graduate School and Council of Graduate Students (COGS), East Lansing, MI.

Wyatt, G., Given, B.A., & Given, C.W. (1997, October 31-November 4). A Subacute Care Intervention for Short-Stay Breast Cancer Surgery. Poster presentation at the Department of Defense Breast Cancer Research Program Conference — Era of Hope: A Multidisciplinary Report of DoD Progress, Washington, D.C.

Wyatt, G. (1997, October 21). Breast Cancer: Post-Surgical Care. Invited speaker for the 30th Anniversary Great Lakes Cancer Nursing Conference, sponsored by the American Cancer Society, Novi, MI.

Wyatt, G., Bloomfield, M. & Beckrow, K.C. (1997, June and July). Organizers for 1997 Summer Research Series, with presentations by Given, B., Pathak, D., Neumark, D., and Siegl, E.J., Michigan State University, East Lansing, MI.

Wyatt, G. (1997, May 3). Preliminary Testing of a Long-Term Quality of Life Instrument. Poster presentation for Oncology Nursing Society Congress, New Orleans, LA.

Wyatt, G. (1997, January). Physical and Psychosocial Needs of Midlife and Older Women Following Surgery and Adjuvant Therapy for Breast Cancer. Fourth National Conference on Cancer Nursing Research, Panama City, FL.

Wyatt, G. (1996, November). New DOD Funding for Breast Cancer Transition Care Research. College of Nursing, Research Center Seminar Series, East Lansing, MI.

ABSTRACTS SUBMITTED

Wyatt, G., Friedman, L., Given, C., & Given, B. (1998, October). A profile of bereaved caregivers following provision of terminal care. Submitted for presentation at the 11th MASCC International Symposium "Supportive Care in Cancer" to be held in Nice, France, February 18-20, 1999.

Beckrow, K.C., Wyatt, G., Friedman, L., Given, C., & Given, B. (1998, October). Complementary therapy use among older cancer patients. Submitted for presentation at the 11th MASCC International Symposium "Supportive Care in Cancer" to be held in Nice, France, February 18-20, 1999.

Wyatt, G. (1998, July). The "drive through mastectomy" and how nursing is keeping pace. Submitted for presentation at the 24th Annual Congress of the Oncology Nursing Society to be held in Atlanta, GA, April 28-May 1, 1999.

Wyatt, G. & Given, B. (1998, July). Recommendations for pro-active hospice education: A perspective from the bereaved. Submitted for presentation at the 5th National Conference on Cancer Nursing Research sponsored by the Oncology Nursing Society, the American Cancer Society, and the Association of Pediatric Oncology Nurses. To be held in Newport Beach, CA, February 13-11, 1999.

ABSTRACTS ACCEPTED

Bloomfield, M. & Wyatt, G. (1998, February). Post-Operative Seroma Formation Following Breast Cancer Surgery. Accepted for poster presentation at Nursing Research Day sponsored by the Greater Lansing Nursing Research Consortium, held April 29, 1998, Sparrow Hospital, Lansing, MI.

Bloomfield, M. & Wyatt, G. (1998, February). Post-Operative Seroma Formation Following Breast Cancer Surgery. Accepted for poster presentation at Research Recognition Day sponsored by the MSU Graduate School and Council of Graduate Students (COGS), held April 3-4, 1998, East Lansing, MI.

ABSTRACTS PUBLISHED

Wyatt, G., Given, B., & Given, C. (1998, May). Bridging the Gap Between Nursing Outcomes and the Research Process: One-Step Computerized Documentation and Direct Data Entry. Oncology Nursing Forum, 25(2), 347.

Beckrow, K.C. & Wyatt, G. (1998, April). The Impact of an In-Home Nursing Intervention for Women Following Short-Stay Surgery for Breast Cancer. Michigan Family Practice Research Day. Published in Proceedings Book, p. 23.

Bloomfield, M. & Wyatt, G. (1998, April). Post-Operative Seroma Formation Following Breast Cancer Surgery. Michigan Family Practice Research Day. Published in Proceedings Book, p. 23.

Wyatt, G.K. (1997). Preliminary Testing of the Long-Term Quality of Life (LTQL) Instrument for Female Cancer Survivors. Oncology Nursing Forum, 24(2), 311.

Wyatt, G. (1997). A Subacute Care Intervention for Short-Stay Breast Cancer Surgery. Department of Defense Breast Cancer Research Program Conference — Era of Hope: A Multidisciplinary Reporting of DOD Progress. Published in Proceedings Book, 3, p. 1033.

Wyatt, G. (1997). Breast Cancer: Post-Surgical Care. 30th Anniversary Great Lakes Cancer Nursing Conference. Presentation outline published in Proceedings Book, p. 22.

Wyatt, G. (1997). Physical and Psychosocial Needs of Midlife and Older Women Following Surgery and Adjuvant Therapy for Breast Cancer. Fourth National Conference on Cancer Nursing Research sponsored by the American Cancer Society. Published in Abstract Book, p. 90.

GRANT PROPOSAL IN PROGRESS

Wyatt, G., Given, B., & Given, C. (1998). Enhancing Quality of Life for Women With Recurrent Breast Cancer Utilizing Complementary Therapies. To be submitted to the Office of Alternative Medicine (OAM) and the National Cancer Institute (NCI). Anticipated submission date: February 1, 1999.

GRANT FUNDING

Given, C., Wyatt, G., & Given, B. (8/1/98-6/1/00). Utilizing Complementary Therapies to Enhance Quality of Life Among Cancer Patients. Collaborative partnership between West Michigan Cancer Center, Michigan State University, and the Mary Margaret Walther Program (2 year budget $297,293). Funded 6/98

Wyatt, G. National Institutes of Health (NIH) Proposal Development and Manuscript Support. Funded 1/1/98 by the Office of the Provost, Michigan State University (1 year budget $2,100).

Wyatt, G. (Principal Investigator), Given, C., &. Given, B. (Co-principal Investigators). (Submitted 9/13/95). A Subacute Care Intervention for Short-Stay Breast Cancer Surgery. Funded 9/15/96 by the Department of Defense, grant #DAMD17-96-1-6325 (4 year budget $799,558).

REPORTS

Wyatt, G., Given, B.A., & Given, C.W. (1997, August). Report of 1st year progress on the study "A Subacute Care Intervention for Short-Stay Breast Cancer Surgery". Submitted to the U.S. Army Medical Research and Materiel Command, Department of Defense.

PROFESSIONAL PRESENTATIONS ATTENDED BY STAFF

Manfred Stommel, PhD, Michigan State University, College of Nursing. (1998, June 15). Data Management. Patenge Room, East Fee Hall, Michigan State University, East Lansing, MI.

Rachel Remen, MD, University of California - San Francisco, School of Medicine. (1998, April 21). In the Service of life: Finding meaning and mystery in the practice of health care. Kellogg Center, Michigan State University, East Lansing, MI.

Steven Keller, PhD, University of New Jersey, School of Medicine. The immune system: Minding the body and embodying the mind. Marriott, East Lansing, MI.

STAFF AWARDS

Bloomfield, M. (1998, Spring). Awarded the Janice and Alton Granger Endowed Student Scholarship to use toward graduate studies at Michigan State University, College of Nursing, East Lansing, MI 48824.

MEDIA COVERAGE AND PRESS RELEASES

Wyatt, G. (1998, August). Short-Stay Mastectomy Patients Don't Go Home Alone. Article in Michigan State University newsletter "Research News", East Lansing, MI.

Wyatt, G. & Sprague, J. (1998, June). McNair/SROP Scholars. Publication highlighting the experiences of the Undergraduate and Scholars Research Programs. Offered through the Office of Supportive Services, Michigan State University, East Lansing, MI.

Wyatt, G., Given, B.A., Given, C.W., & Pathak, D. (1998, June). Hospital to Home. Nursing Care for Breast Cancer Study featured on the Science Coalition Web site, "MSU Research: Discovering a World of Promise," Michigan State University, East Lansing, MI.

Wyatt, G. (1998, May). In Support of Therapeutic Touch (T.T.): A Rebuttal to the Article in the Journal of the American Medical Association (JAMA) that denounced T.T. Radio interview with Dennis Krolick for MSU News Hotline (Audio news feed-line/sound bites for 24 hour radio service. Available for broadcast by any radio station in U.S. or Canada). Contact number: 1-800-321-6397.

Wyatt, G. (1998, Spring). Short-Stay Mastectomy Patients Don't Go Home Alone. Article in Michigan State University newsletter "MSU Nursing", East Lansing, MI.

Wyatt, G. (1997, December 10). Short-Stay Mastectomy Patients Don't Go Home Alone. Press interview for news release through Michigan State University, Office of the Vice President for Research and Graduate Studies.

Wyatt, G. (1997, November). Breast Cancer Source Guide. Contributor to media release. Contact person: Tom Oswald, Media Communications Department, Michigan State University, East Lansing, MI.

Wyatt, G. (1997, October 28). Breast Cancer Awareness. Television interview with Elizabeth Wooly on "Meridian Magazine", Channel 21, HOM-TV, Okemos Cable Television, (aired November 24 - December 7, 1997).

Wyatt, G. (1997, October 1). MSU Tip Sheet. Contributor to media release. Contact person: Russ White, Media Communication Department, Michigan State University, East Lansing, MI.

Wyatt, G. (1997, July 17). Nursing Care Following Short-Stay Breast Cancer Surgery. Radio interview with D. Krolick, Broadcast/ Photo Division of University Relations, Michigan State University, for National 24 Hour Radio Information Hotline.

Wyatt, G. & Bloomfield, M. (1997, April 11). Television interview for WELG Channel 22 Cable Television. (Aired twice a day April 14 through April 20, 1997).

Wyatt, G. (1997, Spring/Summer). Recent publications (4) cited in the Cancer Center at Michigan State University (CCMSU) Newsletter, Michigan State University, East Lansing, MI.

Wyatt, G. (1997, March 25). Mammograms Urged at Age 40. Press interview for news release through Michigan State University, Division of University Relations.

Wyatt, G. (1997, March 10). Michigan State University Study to Help Women Diagnosed with Breast Cancer. Press interview for news release through Michigan State University, Division of University Relations.

Wyatt, G. (1997, February 18). Longer Hospital Stays Not Always the Answer. Press interview for news release through Michigan State University, Division of University Relations.

Wyatt, G. (1996, Fall). Investigator Focus. Feature article in CCMSU Newsletter, Michigan State University, East Lansing, MI.

POLICY CONTACTS AND INVOLVEMENT

Wyatt, G., Beckrow, K.C., & Bloomfield, M. (1998, February). Advanced Practice Nurse (APN) Prescriptive Authority and Senate Bill 104. Letter submitted to Senator Dianne Byrum asking for her support of SB 104, East Lansing, MI.

LAY PRESENTATIONS AND ARTICLES

Wyatt, G. (1998, April 27). UROP Mentor Experience. Invited speaker for the Undergraduate Research Opportunity Program (UROP) 1997-98 Closing Banquet, Michigan State University, East Lansing, MI.

Lay Presentations and Articles

Wyatt, G., Beckrow, K.C., & Rovoll, M. (1998, February). Breast Cancer Research. Study staff provided information about breast cancer and the Nursing Care for Breast Cancer Study to nursing students from the Florence Nightingale School of Nursing located in London, England. Presentation held at Nursing Care for Breast Cancer Study office, B422 West Fee Hall, Michigan State University, East Lansing, MI.

Wyatt, G., Bloomfield, M., & Rovoll, M. (1998, January 8). Health Professions Experience. Study staff provided a required experience for East Lansing High School chemistry class students in a health profession environment. Students spent an afternoon learning about the profession of nursing, breast cancer, and the goals of the Nursing Care for Breast Cancer study.

Wyatt, G. (1996, November 19). The Breast Cancer Experience. Presentation for the Unitarian Universalist Church Women's Group, East Lansing, MI.

Wyatt, G. (1996, October). Sigma Theta Tau Alpha Psi Chapter Anniversary. Poster for the College of Nursing Homecoming Celebration, East Lansing, MI.

M.S.U. STUDENT SPONSORSHIP

Wyatt, G. (1997-1998). Sponsored freshman student, Jill Sprague, from the Undergraduate Research Opportunity Program (UROP). The objective of the experience was to help the student develop a basic understanding and appreciation for research.

WEB SITE DEVELOPMENT

Wyatt, G., Beckrow, K.C., & Wyatt, C. (1998, May). Nursing Care for Breast Cancer Web Site Development. Site gives an overview of study including purpose and aims, study design, nursing protocol, instruments used, funding source, study members, participating surgeons, bibliography of study related articles, and breast cancer resources.
URL: http://www.msu.edu/~nurse/bc

DISSERTATION AND THESIS

Bloomfield, M. (1997). The effects of early versus delayed exercise on seroma formation and range of motion recovery in short-stay breast cancer surgery patients. Thesis in progress.

INTERNAL PUBLICATIONS

Quality Assurance Manual	July 1997
Nursing Guide to Paradox Computer Program	June 1997
Patient Charting Forms	June 1997
Recruiter Manual, Pontiac site	May 1997
Interview Manual	March 1997
Nurse Intervenor Manual	February 1997
Recruiter Manual, Lansing site	January 1997

A Subacute Care Intervention for Short-Stay Breast Cancer Surgery

1997-1998 PUBLISHED JOURNAL ARTICLES
Appendix B

Wyatt, G.K., & Friedman, L.L. (1998). Physical and psychosocial outcomes of midlife and older women following surgery and adjuvant therapy for breast cancer. Oncology Nursing Forum, 25(4), 761-768.

Wyatt, G.K., Friedman, L.L., Given, C.W., & Given, B.A. (in press). A profile of bereaved caregivers following provision of terminal care. Journal of Palliative Care.

Physical and Psychosocial Outcomes of Midlife and Older Women Following Surgery and Adjuvant Therapy for Breast Cancer

Gwen K. Wyatt and Laurie L. Friedman

Purpose/Objectives: To investigate the patterns of functioning and psychosocial adjustment of midlife and older women following surgery for breast cancer. Differences between those who received follow-up adjuvant therapy and those who did not also were compared.

Design: 2 x 3 mixed design with one between-groups factor (type of treatment) and one within-subjects factor (time).

Setting: Four midwestern hospitals.

Sample: 46 patients with breast cancer who are age 55 or older.

Methods: Baseline data about presurgical functional status and other variables were obtained during the first week after surgery. Follow-up data were obtained at six weeks, three months, and six months postsurgery. Data were collected via telephone interviews and mailed questionnaires.

Main Research Variables: Functional status, patient symptomatology, quality of life (QOL), demands of illness, and type of treatment (surgery only versus surgery plus adjuvant therapy).

Findings: No differences existed between the two treatment groups at baseline, with the exception of lower functional status reported by the surgery-only group. In the surgery-only group, functional status improved significantly from six weeks to three months postsurgery. The most frequently reported symptoms of both groups included fatigue and pain.

Conclusions: These results suggest that both groups did equally well, regardless of whether they received adjuvant therapy (radiation or chemotherapy). Neither QOL nor demands of illness differed between the two groups, nor did these scores change significantly over time following surgery.

Implications for Nursing Practice: These findings suggest that women undergoing surgery for breast cancer, whether they receive adjuvant therapy or not, may have functional and psychosocial needs that could be effectively addressed by nursing interventions pre- and postsurgery.

Nationwide, the leading cause of death for women age 55 to 74 is cancer, and breast cancer is second only to lung cancer in its resulting mortality (Landis, Murray, Bolden, & Wingo, 1998). Incidence rates for breast cancer increase precipitously as women age. This risk increases to a one in eight chance as women reach age 85 (National Cancer Institute, 1996). Furthermore, little evidence exists of a decrease in death rates from breast cancer in the last decade (American Cancer Society [ACS], 1997). Incidence rates continue to increase with age, while survival rates remain unchanged.

Compounding these well-known statistics is the fact that surgery remains the first course of therapy for the vast majority of cases, and hospital discharges are down to fewer than 24 hours in many parts of the country. Millman and Robertson, the nation's leading consulting actuaries in health care, report that reduced breast cancer surgical hospital stays are the trend of the future and that many of the surgical stays that now are considered standard will be shortened or moved to outpatient services (Doyle, 1995). Although many women may be eager to get home, few realize until they are home what their postsurgical needs will be. Furthermore, older women, who were the focus of this study, may be more likely to expect an inpatient hospital stay following surgery and may have fewer resources and supports at home. As changes in discharge standards continue to evolve, nurses must assess the physical and psychological needs of all women undergoing breast cancer surgery and treatment. This study investigated the patterns of functioning and psychosocial adjustment of midlife and older women (age 55 and older) following surgery for breast cancer. Differences between those who received follow-up adjuvant therapy (chemotherapy or radiation) and those who did not also were compared. The intent was to gain a better understanding of the effects of cancer treatment and to learn how to best promote active functioning and overall quality of life (QOL) while reducing the level and duration of limitations following treatment for breast cancer.

A dearth of literature exists addressing the comparison between women who have surgery only and those who have surgery plus adjuvant therapy. The following review focuses on what is known about midlife and older women (age 55 and older) during the six-month period following surgery for breast cancer.

Gwen K. Wyatt, RN, PhD, is an associate professor at the Michigan State University College of Nursing in East Lansing. Laurie L. Friedman, PhD, is an instructor at The Johns Hopkins University School of Medicine in Baltimore, MD. *This research was funded by the American Cancer Society (grant #ACS IRG 188). (Submitted June 1996. Accepted for publication November 3, 1997.)*

Literature Review

Although the largest population affected by breast cancer remains midlife and older women, an inverse relationship between age and the aggressiveness of treatment for breast cancer exists (Clark, 1992). Morrow (1994) found that failure to use adjuvant therapy (radiation or chemotherapy) when indicated is one of the most frequently identified problems in the management of older women with breast cancer. This finding was supported by Fleming and Fleming (1994), who reported that older women frequently are treated with less-than-standard therapy and often are excluded from clinical trials. However, studies have shown that older women tolerate adjuvant therapy as well as younger women (Fleming & Fleming; Morrow; Solin, Schultz, & Fowble, 1995). Solin et al. concluded from evaluations of clinical trials that little empirical evidence exists warranting reduction or elimination of adjuvant therapy among women age 65 and older with breast cancer.

Although the medical research is clear on the efficacy and tolerance of surgery and adjuvant therapy in midlife and older women, investigators have not assessed the differences in functional status and QOL between women who receive adjuvant therapy and those who do not. The only body of literature that compares treatment differences addresses the use of surgery versus tamoxifen alone (Fallowfield, 1994; Maher et al., 1995). Although healthcare professionals have assumed that women who receive adjuvant treatment will have more functional problems and symptoms and lower QOL, this assumption has not been substantiated by research (Solin et al., 1995). Investigators have only begun to assess changes in functional status and QOL during the postoperative period that may inhibit women from returning to their presurgical health status.

Postsurgical-care issues related to functioning and QOL remain an underinvestigated area of concern for women with breast cancer. According to the Institute of Medicine (1993), after initial treatment, many women simply disappear from the healthcare system and do not receive continuing care that could help them cope with issues of survivorship or recurrence. Furthermore, many questions remain about the optimal methods of delivering follow-up care.

In a discussion of issues in cancer rehabilitation, Ganz (1990) suggested that key components of a cancer transition program include an initial needs assessment with periodic reassessments, direct provision of specific services, and referrals to community resources. From the limited literature available, it appears that multiple postsurgical needs exist for midlife and older woman, including physical care needs, psychological concerns, sexual function assessment, diet and nutrition questions, pain management, and assistance with vocational and economic problems. Finally, women in this age group tolerate adjuvant medical management of breast cancer far better than anticipated.

Purpose

The specific aim of this project was to assess changes over time in functional status, symptomatology, QOL, and demands of illness in women receiving only surgery for breast cancer versus those receiving both surgery and adjuvant therapy. Based on the medical outcomes literature related to older women and adjuvant therapy (Fleming & Fleming, 1994; Morrow, 1994), it was expected that women would report no differences in psychosocial outcomes following surgery, regardless of whether they had received adjuvant therapy.

Methods

Sample

All participants (N = 46) were female, 55 years of age or older, scheduled to receive surgical intervention for a diagnosis of breast cancer, and had no diagnosis of a psychiatric or neurologic disorder noted in their medical record. The sample consisted of two groups of women: one group received no further treatment following surgery (other than possibly tamoxifen), and a second group received adjuvant treatment (chemotherapy or radiation therapy). Ultimately, 30 women were included in the surgery plus treatment group and 16 were included in the surgery-only group. Data were collected from six additional women in an attempt to balance the groups. Although data were collected on specific combinations of postsurgery treatment (e.g., chemotherapy, radiation, chemotherapy and radiation, tamoxifen only, none), because of the small sample size, these treatment groups were combined to conduct statistical analyses.

Procedures

A nurse recruiter in each of the four midwestern hospital sites recruited participants. The nurse recruiter reviewed the surgical log and identified those women scheduled for breast surgery who met the study's criteria. The nurse then contacted the women the morning after surgery (while they were still in the hospital), informed them about the study, requested their participation, and asked them to sign the consent form. The nurse recruiters mailed the signed consent forms to the investigator. All procedures were approved by the participating institutional review boards.

Baseline data were intended to be collected by the nurse recruiter while the women were in the hospital; however, because the hospital stays were very short, often women were willing to participate but asked to be contacted at home for the baseline data. Therefore, all baseline data were collected during the first week following discharge. In these initial 10-minute telephone interviews, women were asked to recall their functional status three months prior to surgery. Additional data were collected by telephone interviews at six weeks, three months, and six months postsurgery, with the exception of one instrument that was administered by mail at six months postsurgery. These last three interviews averaged 45 minutes in length. Interviewers were graduate students in nursing or psychology who received 10 hours of training and practice to standardize the interviewing procedures.

Data-collection points: Data-collection points were based on medical practice protocol for follow-up breast cancer therapy. Adjuvant therapy typically did not begin until six weeks postsurgery. Therefore, women were interviewed (time 2) well into their surgical healing process but prior to adjuvant therapy. The third interview point was

02/12/99 FRI 16:26 FAX 517 3538612 MSU Nursing Grant Office 004

timed to occur during adjuvant therapy and the fourth data point to follow adjuvant therapy.

Incentives

An incentive payment was offered to each woman to demonstrate the value of her time in responding to the questionnaires and interviews. After all four telephone interviews were completed, incentive checks for $25 were mailed to each woman.

Instruments

In addition to original items assessing demographic information (e.g., age, race, income, marital status), four established instruments were used in this study—two to assess physical outcomes and two to address psychosocial outcomes.

Functional status: Functional status was measured by an adapted version of the instrument from the Rand Health Insurance Experiment and Medical Outcomes Research (Ware et al., 1980). This 28-item instrument measured three dimensions of functioning: (a) vigorous physical activities (9 items) (e.g., walking several blocks, climbing flights of stairs, bending, lifting, stooping); (b) balance and dexterity (9 items) (e.g., standing in place for 15 minutes, writing, handling small objects); and (c) upper body self-care activities (10 items) (e.g., combing hair, washing upper back, fastening a bra). This instrument was scored on a 0 to 2 scale, in which the 0 anchor equaled "not limited" and the 2 anchor equaled "limited a lot." The original measure of functional status had been tested for validity and reliability with reported alpha coefficients exceeding 0.90 (Jette et al., 1986; Stewart, Ware, & Barook, 1981; Ware & Sherbourne, 1992). Respondents were asked via telephone interview to consider their functional status at four different time intervals (e.g., during the first week postsurgery by recalling their functional status three months prior to surgery, and then at three additional times postsurgically [six weeks, three months, and six months]) to measure their current functional status. Reliabilities (alpha coefficients) of the adapted instrument ranged from 0.85–0.94 across four times.

Symptomatology: The symptom measure, developed by Given et al. (1993), encompasses a two-component symptom experience index—the presence and severity of each symptom. Women were asked to report their symptom experience at the three postsurgical time intervals (six weeks, three months, and six months). Respondents reported the presence or absence of 23 symptoms and rated the severity of each. If a symptom was present, the participant then rated that symptom as 0 (mild), 1 (moderate), or 2 (severe). In previous research, each subscale had item-total correlations and coefficient alphas of greater than 0.90 (Given et al.). In the current study, alphas on the presence/absence subscale ranged from 0.73–0.75 across three times. Too few cases were available to analyze the reliability of the symptom severity subscale.

QOL: The Cancer Rehabilitation Evaluation System (CaRES-SF) (Schag & Heinrich, 1988), a reliable and valid instrument, was used to assess QOL. The CaRES-SF is a comprehensive list of 59 problems encountered by patients with cancer on a daily basis and consists of five subscales: (a) physical functioning, (b) sexual functioning, (c) psychosocial functioning, (d) medical interactions, and (e) partnership interactions. Each item is scored according to its concern to the participant on five-point Likert scales ranging from 0 (not at all) to 5 (very much) (Schag & Heinrich, 1990). In previous research, alpha coefficients for the subscales ranged from 0.67–0.85 (Schag & Heinrich, 1988).

In the current study, respondents were asked about their QOL at two times—six weeks and six months postsurgery. The CaRES-SF was not used at the time 3 interview because of reported participant fatigue. However, it was mailed to participants at time 4. Alphas were 0.98 and 0.94 for the full scale at times 2 and 4, respectively.

Demands of illness: One subscale of the Haberman Demands of Illness Inventory (DOII) (Haberman, Woods, & Packard, 1990), a 125-item instrument with six subscales, was used to assess patient care and reactions to treatment. The 16-item subscale used in this study was titled "treatment issues." Specific items in this subscale addressed (a) relationships (healthcare providers have been insensitive, made decisions without my best interests in mind, not shown compassion for me as a person), (b) information exchange (wanted more information, felt rushed to make a decision, had questions to ask but could not), and (c) evaluation (been dissatisfied with treatment, worried that treatment may be wrong). All scales of the DOII have reported coefficient alphas of 0.70 or greater, with an alpha of 0.98 for the "treatment issues" subscale (Haberman et al.). Although this instrument has been tested primarily in populations with chronic conditions, it also has been used with women recently diagnosed with breast cancer (Haberman et al.).

Respondents were asked to report on their perceived demands of illness at all three postsurgical times. Alphas ranged from 0.79–0.92 across the three times.

Results

The original hypothesis was supported by the data in that the two groups of women reported similar psychosocial and physical outcomes postsurgically, regardless of whether they had received adjuvant treatment. Data from the two groups of women were compared at each time, and the only significant difference found was in baseline functional status (three months before surgery). Therefore, results from the two groups are reported separately only when findings were significant or unique to one group. Statistical analyses were performed using SPSS for Windows®.

One-way analyses of variance (ANOVA) by treatment group were performed for each continuous demographic variable (see Table 1).

Demographically, no significant differences existed between the two groups, other than age ($F[1,44] = 6.71$, $p < 0.01$, $n = 45$). The surgery plus treatment group ranged in age from 57–81, with a mean age of 69 years. The surgery-only group ranged in age from 55–89, with a mean of 75 years. Half of the women in the surgery-only group received tamoxifen, and the majority of women in the surgery plus treatment group received radiation therapy.

Of the total sample, the majority of the women were Caucasian (97%), married, retired, and had a high school

Characteristic	n	%
Ethnicity		
Caucasian	45	2
African American	1	98
Marital status		
Single	2	4
Married	23	50
Widowed	18	39
Divorced	3	7
Employment Status		
Work outside home	8	17
Unemployed	24	83
Did not respond	14	30
Education		
Grade school	1	2
Some high school	3	7
High school graduate	20	44
Some college	13	28
College graduate	3	7
Graduate/Professional	6	13
Treatment		
Chemotherapy	6	13
Radiation	22	48
Chemotherapy plus radiation	2	4
Tamoxifen only	8	17
No postsurgery treatment	8	17

education. Approximately half of the women had an annual household income of less than $22,000; the other half reported annual incomes equal to or greater than $22,000. To assess possible effects of income, repeated measures ANOVA by income group were performed for each outcome variable. With baseline functional status held constant (as a covariant), women with higher annual incomes ($22,000 and above) reported higher QOL at both six weeks and six months postsurgery than did lower income women ($F[1,27] = 4.08$, $p < 0.05$, $n = 28$). In addition, women with higher incomes reported significantly higher functional status across all four times ($F[1,28] = 7.13$, $p < 0.01$, $n = 29$).

The 28 functional status items were measured at all four points of assessment. A repeated measures ANOVA was performed for functional status by treatment group. Table 2 shows mean functional status scores by group over time. A significant between-group difference existed at baseline in that the surgery plus treatment group reported higher functional status than the surgery-only group ($F[1,42] = 3.96$, $p < 0.05$, $n = 43$). Because a significant difference existed between the two groups in baseline functional status, changes over time in functional status were examined by repeated measures ANOVA for each group separately. In the surgery plus treatment group, functional status decreased significantly from before surgery to six weeks postsurgery ($F[1,27] = 8.35$, $p < 0.01$, $n = 28$). This decrease in functioning was still in evidence at both three months and six months postsurgery. In other words, the women who received further treatment did not regain their presurgical functioning by six months after surgery ($F[1,27] = 6.35$, $p < 0.05$, $n = 28$); they never returned to their presurgery functional level. For the surgery-only group, no significant changes were seen in functional status over time from baseline to six months.

However, when baseline functional status was held constant, functional status for the surgery-only group improved significantly from six weeks to three months postsurgery ($F[1, 9] = 6.82$, $p < 0.05$, $n = 10$). The areas in which women reported the greatest improvement were pushing heavy objects, lifting and carrying groceries, and lifting more than 10 pounds.

A repeated-measures ANOVA also was performed for functional status on the entire sample. A significant time effect was seen for functional status from baseline to six weeks postsurgery: Both groups of women reported significantly yet comparably decreased functioning at six weeks after surgery ($F[1,36] = 7.95$, $p < 0.01$, $n = 37$). At six weeks postsurgery, all women reported the greatest limitations in vigorous activity, walking more than one mile, pushing heavy objects, lifting more than 10 pounds, carrying groceries, and climbing flights of stairs. Furthermore, when looking at the sample as a whole, a significant difference existed between baseline functional status and functioning six months postsurgery ($F[1,40] = 4.23$, $p = 0.05$, $n = 42$), suggesting that the women did not return to their presurgery level of functioning by six months after surgery.

Table 2. Mean Functional Status by Group Over Time

Time	Three Months Before Surgury		Six Weeks After Surgury		Three Months After Surgury		Six Months After Surgury	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Group								
1 (surgery and treatment; n = 30)	0.18*, **	0.20	0.33**	0.37	0.33	0.41	0.33	0.42
2 (surgery only; n = 16)	0.35*	0.35	0.52[a]	0.46	0.32[a]	0.42	0.41	0.43

Range = 0–2

* Significant between group difference at $p < 0.05$

* Significant within group over time difference at $p < 0.05$

[a] Significant within group over time difference with baseline held constant at < 0.05

Symptomatology

Symptoms were measured at three time intervals—six weeks, three months, and six months postsurgery. Of the 23 symptoms assessed, those reported most frequently by the total sample were cancer-related pain, trouble sleeping, fatigue, difficulty breathing, dry mouth, urinary frequency, weakness, and loss of feeling. Each symptom was further defined by the perceived degree of severity (e.g., mild, moderate, severe).

Symptoms were analyzed separately for each participant group to capture any possible differences related to adjuvant therapy (see Table 3). In the surgery plus treatment group, pain and fatigue were the most frequently reported symptoms at all three times. At six weeks after surgery, pain was most frequently reported as mild ($\bar{X} = 0.69$, range = 0–2); at three months, pain was primarily moderate ($\bar{X} = 0.88$), and at six months, pain was mainly mild again ($\bar{X} = 0.56$), with only 7%–10% of the women reporting severe pain at any given time. Fatigue was reported by the majority of women at all three assessment points. Fatigue was perceived as mild to moderate (means ranged from 0.62–0.88), with 10%–17% of the women reporting severe fatigue over the three postsurgical points in time. Although women reported relatively low levels of severity on pain and fatigue, these symptoms did not improve over time. Differences between the two groups were not analyzed because of small cell sizes.

In the surgery-only group, pain and fatigue were also the most frequently reported symptoms at all three postsurgical points in time. Mean pain scores were 0.67, 0.75, and 0.33 at each time, respectively. Mean fatigue scores were 0.29, 0.80, and 0.67 at each postsurgical assessment. However, neither of these symptoms was reported by the majority of this group. The highest percentage of women reported pain as a mild to moderate concern, with only 6% reporting pain to be a severe symptom. With regard to fatigue, the highest percentage of women reported fatigue as a mild to moderate concern, with only 6% classifying it as a severe symptom at any assessment point.

Quality of Life

QOL was measured at two time points—six weeks and six months postsurgery. A repeated-measures ANOVA by treatment group was performed. With baseline functional status held constant, no significant differences existed between groups at either time ($F[1,32] = 0.38$, $p = 0.55$, $n = 33$), and no significant change over time ($F[1,33] = 1.88$, $p = 0.18$, $n = 34$). The nonsignificant trend for both groups was toward a decline in QOL from six weeks to six months following surgery; however, mean scores on the CaRES-SF ranged from 0 (not at all a concern) to 2 (a moderate concern) on a 0–4 scale. The women as a total sample reported the lowest QOL on the sexuality subscale, which included items related to sexual interest and dysfunction (see Table 4).

Demands of Illness

Demands of illness were assessed at the three postsurgical points in time. A repeated-measures ANOVA by group was performed. With baseline functional status held constant, no significant main effects of group or time for demands of illness existed. As a total sample, the women reported a nonsignificant but continual decrease in their demands of illness over the three times. However, mean scores on the DOII items ranged from 0 (not a problem at all) to 2 (a moderate problem) on a 0–4 point scale. The two most frequently reported areas at all assessment times were also the most problematic for the women: wanting more information than was provided by healthcare professionals and wanting to know why various treatments were being performed. Among women who expressed these concerns, the highest percentage reported "extreme" concern about these two areas (see Table 5).

Correlational Analyses

Correlational analyses were performed to examine relationships among composite scores of outcome variables in the sample as a whole. At six weeks postsurgery, QOL was positively associated with functional status ($r = 0.66$, $p < 0.001$) and negatively correlated with demands of illness ($r = -0.51$, $p < 0.001$). At six months postsurgery, functional status was positively correlated with QOL ($r = 0.40$, $p < 0.05$) and negatively correlated with demands of illness ($r = -0.38$, $p < 0.01$). Demands of illness also were correlated negatively with QOL ($r = -0.54$, $p < 0.001$) at six months postsurgery.

Discussion and Implications

Overall, the most noteworthy findings were the frequent reporting of specific symptoms (pain and fatigue), the significant difference between groups in baseline functional status, and a significant decline in functional status after

Table 3. Percentage of Women Reporting Pain and Fatigue Across Time

	Group 1 (Surgery Plus Treatment)[a]			Group 2 (Surgury Only)[b]		
	Six Weeks	Three Months	Six Months	Six Weeks	Three Months	Six Months
Pain (total)	43	57	54	19	25	38
Mild	23	17	30	13	13	25
Moderate	10	30	17	6	6	13
Severe	10	10	7	–	6	–
Fatigue (total)	70	53	56	44	32	38
Mild	37	23	23	31	13	19
Moderate	23	13	23	13	13	13
Severe	10	17	10	–	6	6

[a]n = 30; [b]n = 16

Table 4. Quality-of-Life (QOL) Subscale and Total Means for Total Sample

Aspect of QOL	Six Weeks After Surgery[a]			Six Months After Surgery[b]		
	$\bar{X}$	SD	Range	$\bar{X}$	SD	Range
Medical	0.19	0.58	0–3.5	0.28	0.70	0–3.75
Marital	0.26	0.42	0–1.7	0.35	0.36	0–1.33
Psychosocial	0.45	0.49	0–2.4	0.60	0.64	0–2.71
Physical	0.55	0.58	0–2.4	0.63	0.73	0–3.12
Sexual	1.03	1.23	0–4.0	1.11	1.31	0–4.00
Total	0.47	0.44	0–2.39	0.58	0.61	0–3.12

[a]n = 39; [b]n = 42
Possible score range = 0–4

surgery that was never fully regained by the group as a whole. Although QOL was relatively high and demands of illness were relatively low at all time intervals measured, the decline in both over time was an interesting trend. In addition, income was significantly related to QOL and better functioning across all times.

In exploratory work such as this, evaluating specific items as well as overall scales or subscales often is useful. The specific items provide information to guide the practitioner in actually determining which interventions are most needed for a population (Ferrell, 1996). Therefore, this report has made a point to consider individual items of clinical interest as well as composite scores on scales and subscales.

Because three of the functional limitations reported (pushing heavy objects, lifting more than10 pounds, and carrying groceries) may be related to upper-body strength, preoperative teaching could be done to teach the range-of-motion arm and shoulder exercises traditionally recommended after breast surgery (ACS, 1996). Such exercises could help strengthen the muscle groups prior to surgery while also helping women establish a pattern of exercise before surgery. Presurgical strengthening may help women feel that they are participating in their own health promotion during a time when they often feel helpless and anxious (Northouse, 1992). The exercises could help dissipate their anxiety while building muscle groups that need to be maintained after surgery. Moreover, the pattern of exercise would be in place and be easier to reinforce, rather than teach, after surgery.

Across both groups of women, the remaining three functional limitations (vigorous activity, walking more than one mile, and climbing flights of stairs) were related to endurance. The creation of exercise programs, such as those targeting walking, could help women build endurance after surgery (Mock et al., 1994). Also, women who participate in exercise programs often report a more positive outlook after breast cancer surgery (Young-McCaughan & Sexton, 1991). In addition, exercise programs may prevent the trend observed in this study toward a further decline in functional status six months after surgery. Rather than encouraging breast cancer survivors to "take it easy," perhaps nurses should recommend moderate exercise to improve endurance and a sense of well-being (Winningham, MacVicar, Bondoc, Anderson, & Minton, 1989).

Because pain and fatigue were the two most frequently reported symptoms, nurses need to know more about these symptoms in women with cancer postsurgery. A thorough assessment is necessary to determine the location of the pain, factors that alleviate or aggravate pain, and the actual quality of the pain. Along with physical factors, nurses need to assess related emotional factors, such as fear of recurrence, changes in interpersonal relationships since surgery, and anxiety about adjuvant therapy. Nurses must remember that pain is more than a physical response and that for women with breast cancer, pain is certain to be multifaceted (Ferrell, 1991).

Assessing which other symptoms are associated with fatigue also may be helpful. Perhaps sleep pattern disruption, pain, upper-body weakness, or changes in family roles are

Table 5. Percent of the Two Most Frequently Reported Demands of Illness by Severity for Total Sample

Demand of Illness Items	Assessment Times After Surgery		
	Six Weeks	Three Months	Six Months
Wanted more facts (total)	31	24	31
A little	9	2	7
Moderate	7	11	7
Quite a bit	2	4	4
Extremely	13	7	13
Wanted reason why (total)	42	38	37
A little	–	2	4
Moderate	7	9	11
Quite a bit	13	7	2
Extremely	22	20	20

related to fatigue and need to be treated first or in conjunction with fatigue (Winningham et al., 1994). Furthermore, determining whether various psychological states or other factors (e.g., depression, unemployemnt, other concerns) are related to fatigue would be interesting. If such patterns in symptoms emerged, it would be reasonable to expect an intervention such as exercise to not only improve endurance and upper body strength but also to help elevate a depressed mood or provide the physical activity needed to get a restful night's sleep (Mock et al., 1994). For the small but important percentage of women who reported severe fatigue, perhaps sitting outdoors would be the first step toward exercise and could serve as an activity that may prove emotionally refreshing (Nail, 1996).

The two most prominent demands of illness for this sample were related to information. In response to this identified need, nurses can become more creative in how they provide information and in how to provide it in a shortened time frame because same-day surgery is becoming the norm. The fact that demands of illness decreased (albeit nonsignificantly) over time suggests that women's need for more information is greatest immediately following surgery. Telephone hot lines staffed by nurses to answer postsurgical questions could be implemented as a mechanism for patients to stay connected with healthcare resources after discharge (Love, Wolter, & Hoopes, 1985). Women may feel rushed out of the medical system and unprepared to care for their own physical needs and emotions. Furthermore, support groups can provide an excellent informal information network (Wyatt & Friedman, 1996). Perhaps more personalized invitations to attend would increase attendance, along with focused discussions to address the issues of the women newest to the breast cancer experience (Samarel & Fawcett, 1992).

Because sexual concerns were reported highest among concerns affecting QOL, nurses could assess whether couples classes or group discussions may be beneficial. A safe environment could be created for both members of the dyad to discuss their issues and feelings. Although untested to date, classes could integrate both heterosexual and lesbian couples, or groups could be separated into same-sex and heterosexual couples. Classes could incorporate homework exercises, such as viewing the surgical area together, touching the area, or engaging in open discussions about how their sexuality has been affected by the cancer (Sabo, Brown, & Smith, 1986). Also, introducing some of the complementary therapies, such as massage or therapeutic touch, to help partners reconnect in a nonthreatening and nurturing way often is beneficial (Carrathers, 1992). Ideally, the couples groups could begin prior to surgery, when the anxiety level is often high for both members of the couple (Northouse, 1992). This way, couples who had gotten through the presurgical time could help support the newly-diagnosed couples. Reframing the support group concept by calling it a seminar or another alternative term that might sound more appealing to men also might be useful (Northouse & Peters-Golden, 1993). Men may also respond positively to a discussion about "team-building" between the two members of the couple, a concept used commonly in business settings.

The descriptive findings that higher income was significantly related to QOL and higher functional status are worth noting. These results suggest that a woman's presurgery resources may determine how well she recovers from breast cancer surgery and treatment. Higher-income women may be better able to pay for services to hasten their recovery and improve their QOL. These findings also support the importance of especially targeting lower-income women for the interventions suggested herein.

Limitations

Finally, several limitations in research methodology should be acknowledged. Clearly, the sample of 46 women is relatively small and homogeneous, and one cannot generalize these results to the larger population of patients with breast cancer. Participants were not randomly selected or randomly assigned to treatment groups, which further decreases generalizability. The sample may be less than normal in terms of distribution, which may be responsible for the high variability in scores on the QOL measure. This high variability may explain why no significant differences between groups were detected. Also, combining participants receiving various treatments to obtain large enough groupings for analysis was necessary. Ideally, women who received only radiation or chemotherapy would be analyzed separately to distinguish differential effects of each intervention. Similarly, it would be preferable not to combine women taking tamoxifen, who may have experienced some drug side effects, with women who did not have any further treatment after surgery. In addition, type of surgery and choice regarding treatment were not evaluated as variables. Perhaps women who were given a choice as to type of surgery and treatment they received responded differently. Further, while the surgery-only group more fully regained its presurgical functional status, it was significantly older than the surgery plus treatment group, so age may have been a factor accounting for the difference in baseline functional status. With regard to instrumentation, the psychosocial measures used included a three-month recall for baseline data on functional status, which may have affected the accuracy of the data. In addition, all data were obtained from self-reported measures that may be influenced by demand characteristics (e.g., responding to "please" the investigator) or social desirability pressures.

Further research is needed to assess the needs of, and outcomes for, larger numbers of patients undergoing breast cancer surgery. Future research also would benefit from prospective data collection prior to surgery and from the use of various data-collection techniques, including functional or fitness testing, to allow multimethod validation of the results. That is, outcome measures could be assessed more diversely (via interview, various questionnaires, functional testing) to cross-validate the results with data from a variety of sources.

Although interventions address specific postsurgical needs of patients with breast cancer, these interventions likely benefit multiple areas of concern. For example, exercise programs, support groups, and information hot lines may act together or additively to help allay possible fatigue, pain, lack of medical information, and concerns about sexuality. These intervention components could be made available to women either independently or as an integrated postsurgical package of follow-up services. Further clinical outcomes research will be necessary to evaluate the effects and effectiveness of interventions such as these.

References

American Cancer Society. (1996). *Exercises after breast surgery.* Atlanta: Author.

American Cancer Society. (1997). *Cancer facts & figures.* Atlanta: Author.

Carrathers, A.M. (1992). A force to promote bonding and well being—Therapeutic touch and massage. *Professional Nurse, 2,* 297–300.

Clark, G.M. (1992). The biology of breast cancer in older women. *Journal of Gerontology, 47,* 19–23.

Doyle, R.L. (1995). *Healthcare management guidelines. Vol. 1: Inpatient and surgical care.* Seattle: Millman & Robertson.

Fallowfield, L. (1994). Quality of life in the elderly women with breast cancer treated with tamoxifen and surgery or tamoxifen alone. *Journal of Women's Health, 3*(1), 17–20.

Ferrell, B.R. (1996). The quality of lives: 1,525 voices of cancer. *Oncology Nursing Forum, 23,* 907–916.

Ferrell, B.R. (1991). Pain management as a quality of care outcome. *Journal of Nursing Quality Assurance, 5*(2), 50–58.

Fleming, I.D., & Fleming, M.D. (1994). Breast cancer in elderly women. *Cancer, 74,* 2160–2164.

Ganz, P.A. (1990). Current issues in cancer rehabilitation. *Cancer, 65,* 742–751.

Given, C.W., Stommel, M., Given, B., Osuch, J., Kurtz, M.E., & Kurtz, J.C. (1993). The influence of cancer patients' symptoms and functional status on patients' depression and family caregivers' reaction and depression. *Health Psychology, 12,* 277–285.

Haberman, M.R., Woods, N.F., & Packard, N.J. (1990). Demands of chronic illness: Reliability and validity assessment of a demands-of-illness inventory. *Holistic Nursing Practice, 5,* 25–35.

Institute of Medicine. (1993). *Strategies for managing the breast cancer research program: A report to the U.S. Army Medical Research and Development Command.* Washington, DC: National Academy Press.

Jette, A.M., Davies, A.R., Cleary, P.D., Calkins, D.R., Rubenstein, L.V., Fink, A., Kosecoff, J., Young, R.T., Brook, R.H., & Delbanco, T.L. (1986). The functional status questionnaire: Reliability and validity when used in primary care. *Journal of General Internal Medicine, 1,* 143–149.

Landis, S., Murray, T., Bolden, S., & Wingo, P. (1998). Cancer statistics, 1998. *CA: A Cancer Journal for Clinicians, 48,* 6–29.

Love, R.R., Wolter, R.L., & Hoopes P.A. (1985). Breast cancer related inquiries by patients to a telephone information service. *Cancer, 56,* 2733–2735.

Maher, M., Dreyfus, H., Campana, F., Schlienger, P., Vilcoq, J.V., & Fourquet, A. (1995). Management of breast cancer in the elderly. *European Journal of Cancer Care in English, 4*(2), 75–79.

Mock, V., Burke, M.B., Sheehan, P., Creaton, E.M., Winningham, M., McKenney-Tedder, S., Schwager, L., & Liebman, M. (1994). A nursing rehabilitation program for women with breast cancer receiving adjuvant chemotherapy. *Oncology Nursing Forum, 21,* 899–907

Morrow, M. (1994). Breast disease in elderly women. *Surgical Clinics of North America, 74,* 145–161.

Nail, L. (1996, May). Fatigue from the inside out. In L. Nail (Chair), *Taking control of fatigue: Communications and interventions.* Symposium conducted at the Oncology Nursing Society Congress, Philadelphia, PA.

National Cancer Institute. (1996). *National Cancer Institute surveillance, epidemiology, and end results program, 1996.* Washington, DC: Public Health Service.

Northouse, L., & Peters-Golden, H. (1993). Cancer and the family: Strategies to assist spouses. *Seminars in Oncology Nursing, 9,* 74–82.

Northouse, L.L. (1992). Psychological impact of the diagnosis of breast cancer on the patient and her family. *Journal of the American Medical Women's Association, 47,* 161–164.

Sabo, D., Brown, J., & Smith, C. (1986). The male role and mastectomy: Support groups and men's adjustment. *Journal of Psychosocial Oncology, 19*(4), 19–31.

Samarel, N., & Fawcett, J. (1992). Enhancing adaptation to breast cancer: The addition of coaching to support groups. *Oncology Nursing Forum, 19,* 591–596.

Schag, C., & Heinrich, R. (1988). *Cancer rehabilitation evaluation system manual: Part IV. CARES-SF: The short form.* Los Angeles: CARES Consultants.

Schag, C., & Heinrich, R. (1990). Development of a comprehensive quality of life measurement tool: CARES. *Oncology, 4,* 135–138.

Solin, L.J., Schultz, D.J., & Fowble, B.L. (1995). Ten-year results of the treatment of early-stage breast carcinoma in elderly women using breast-conserving surgery and definitive breast irradiation. *International Journal of Radiation Oncology and Biological Physics, 33,* 45–51.

Stewart, A.L., Ware, J.E., & Barook, R.H. (1981). Advances in the measurement of functional status: Construction of aggregate indexes. *Medical Care, 19,* 473–488.

Ware, J., Brook, R., Davies-Avery, A., Williams, K., Stewart, A., Rogers, R., Donald, C., & Johnston, S. (1980). Conceptutilization and measurement of health for adults in the Health Insurance Study: Vol 1. Model of health and methodology (Publication No. R-1987/1-HEW). Santa Monica, CA: RAND Corporation.

Ware, J.E., & Sherbourne, C.D. (1992). A 36-item short form health survey (S-36). *Medical Care, 30,* 473–483.

Winningham, M., MacVicar, M., Bondoc, M., Anderson, J., & Minton, J. (1989). Effect of aerobic exercise on body weight and composition in patients with breast cancer on adjuvant chemotherapy. *Oncology Nursing Forum, 16,* 683–689.

Winningham, M.L., Nail, L.M., Burke, M.B., Brophy, L., Cimprich, B., Jones, L.S., Pickard-Holley, S., Rhodes, V., St. Pierre, B., Beck, S., Glass, E.C., Mock, V., Mooney, K.H., & Piper, B.F. (1994). Fatigue and the cancer experience: The state of the knowledge. *Oncology Nursing Forum, 21,* 23–35

Wyatt, G., & Friedman, L. (1996). Long-term female cancer survivors: Quality of life issues and clinical implications. *Cancer Nursing, 19,* 1–7.

Young-McCaughan, S.Y., & Sexton, D. (1991). A retrospective investigation of the relationship between aerobic exercise and quality of life in women with breast cancer. *Oncology Nursing Forum, 18,* 751–757.

For more information on this topic, visit these Web sites:

Questions and Answers About Adjuvant Therapy for Breast Cancer—Cancer Facts
http://cancernet.nci.nih.gov/clinpdq/therapy/Questions_an...

Sixth International Conference: Adjuvant Therapy of Primary Breast Cancer
http://www.pslgroup.com/dg/478e.htm

National Cancer Institute CancerLit News: Clinical Announcement: Adjuvant Therapy of Breast Cancer
http://cancer.med.upenn.edu/pdq_html/4/engl/400122.html

These Web sites are provided for information only. Hosts are responsible for their own content and availability. Links can be found at www.ons.org.

Journal of
Palliative Care

Center for Bioethics
Clinical Research Institute of Montreal
110 Pine Avenue West
Montreal, QC, Canada H2W 1R7
Tel: (514) 987-5617, Fax: (514) 987-5695
E-mail: stamous@ircm.umontreal.ca

September 3, 1998

Dr. Gwen K. Wyatt
Associate Professor
College of Nursing
Michigan State University
East Lansing Michigan
USA 48824

RE: Manuscript No. 98-06
A Profile of Bereaved Caregivers Following Provision of Terminal Care (Version B)

Dear Dr. Wyatt:

Please consider this letter as a formal acceptance of the above mentioned manuscript for publication in the Journal of Palliative Care. You will be advised of the exact publication date as soon as it is determined.

Thank you for this opportunity to work with you.

Yours sincerely,

David J. Roy
Editor-in-Chief

DJR/sa

Editor-in-Chief
David J. Roy, STL PhL, Dr Theol
Director, Center for Bioethics
Clinical Research Institute
of Montreal

Associate Editor
Balfour Mount, MD FRCS(C)
Royal Victoria Hospital
McGill University
Montreal

Associate Editor
Neil MacDonald, CM, MD FRCP(C) FRCP(Edin)
Center for Bioethics
Clinical Research Institute
of Montreal
McGill University
Montreal

Associate Editor
Eduardo Bruera, MD
University of Alberta
Grey Nuns Community
Health Centre
Edmonton

Assistant Editor
Electa Baril
Center for Bioethics
Clinical Research Institute
of Montreal

A Subacute Care Intervention for Short-Stay Breast Cancer Surgery

LIMITED DISTRIBUTION MATERIALS
(Submitted Abstracts and Manuscripts)
Appendix C

Abstracts

Wyatt, G. (1998, July). The "drive through mastectomy" and how nursing is keeping pace. Submitted for presentation at the 24th Annual Congress of the Oncology Nursing Society to be held in Atlanta, GA, April 28-May 1, 1999.

Wyatt, G. & Given, B. (1998, July). Recommendations for pro-active hospice education: A perspective from the bereaved. Submitted for presentation at the 5th National Conference on Cancer Nursing Research sponsored by the Oncology Nursing Society, the American Cancer Society, and the Association of Pediatric Oncology Nurses. To be held in Newport Beach, CA, February 13-11, 1999.

Wyatt, G., Friedman, L., Given, C., & Given, B. (1998, September). A profile of bereaved caregivers following provision of terminal care. Submitted for presentation at the 11th MASCC International Symposium "Supportive Care in Cancer" to be held in Nice, France, February 18-20, 1999.

Beckrow, K.C., Wyatt, G., Friedman, L., Given, C., & Given, B. (1998, September). Complementary therapy use among older cancer patients. Submitted for presentation at the 11th MASCC International Symposium "Supportive Care in Cancer" to be held in Nice, France, February 18-20, 1999.

Manuscripts

Wyatt, G., Friedman, L.L., Given, C.W., Given, B.A., & Beckrow, K.C. (1998, July). Complementary therapy use among older cancer patients. Submitted to Cancer Practice.

Wyatt, G., Ogle, K., & Given, B.A. (1997, November). Recommendations for pro-active hospice education: A perspective from the bereaved. Submitted to Cancer Education.

THE "DRIVE THROUGH MASTECTOMY" AND HOW NURSING IS KEEPING PACE.

Gwen K. Wyatt, RN, PhD, College of Nursing, Michigan State University, East Lansing, MI 48824

With the advent of short-stay and outpatient breast cancer surgery many women are experiencing a gap in both physical and emotional care. Prior to surgery, women are faced with the diagnosis of cancer, selecting the type of surgery which is best for them, and deciding on whether or not to have immediate reconstructive surgery. Following surgery, many are sent home to care for themselves or depend on family members to provide support. This can lead to feelings of anxiety, and the potential emergence of multiple psychosocial and post-operative complications. The purpose of this paper is to share a program of post-surgical nursing care from our four year "Nursing Care for Breast Cancer Study," funded by the Department of Defense #DAMD17-96-1-6325. Over the four years of the study, 200+ women who have had short-stay (48 hours or less) breast cancer surgery will be enrolled in this randomized clinical trial. Women in the intervention arm will receive phone contacts and care in the home by a registered nurse during the first two weeks following surgery. The protocol of care includes physical assessment, symptom management, incision self-care, drainage management, teaching/learning on breast self exam, lymphedema prevention, and range-of-motion of the affected arm. The framework guiding the protocol is one of self-care and empowerment so the woman can become pro-active on her own behalf. With the nurse-patient interaction, problems are identified and addressed as they arise, rather than developing into serious complications during the early post-operative days when the patient is between phases-of-care in the formal health care system, i.e., surgery and follow-up treatment. Based on preliminary trends during the first year of our study, there are many physical, emotional, and educational gaps that clearly call for nursing diagnoses and interventions. We are interested in documenting the appropriate dose and protocol-of-care needed for a timely, cost effective, and patient-satisfying recovery from breast cancer surgery.

RECOMMENDATIONS FOR PRO-ACTIVE HOSPICE EDUCATION: A PERSPECTIVE FROM THE BEREAVED

Gwen Wyatt, RN, PhD & Barbara Given, RN, PhD, FAAN
College of Nursing, Michigan State University, East Lansing, MI

Access to hospice care continues to be an enigma. Hospice has been available for the past two decades in the United States, but the services continue to be underutilized. In an effort to better understand access barriers, a qualitative study was conducted which consisted of a series of focus groups held with recently bereaved (M = 9.9 months) caregivers. Ten participants had been the primary caregiver and two had been a secondary caregiver. Their relationships to the patients included wives (4), daughters (3), conjugal female friends of male partners (2), husbands (2), and a niece (1). Caregivers ranged in age from 20-80 years, with half being over 65 years old. The education level of caregivers was relatively high, with the majority of caregivers having at least some college course work. During the process of the focus group discussions, participants relived their experience with hospice. Although the purpose of this research was to generate recommendations to improve access, participants integrated their access comments into the overall richness of their hospice experience. The 12 participants (10 women and 2 men) were divided into two groups, and each group met for two 2 ½ hour sessions during June, 1996. The sessions were co-facilitated by an oncology clinical nurse specialist and a doctoral student. From the focus group discussions, six themes emerged: societal and health care system issues related to delayed access to hospice, education and practice needs of health professionals, improved quality of life for patients, benefits of hospice for caregivers, caregiver burden, and unpredictable experiences during hospice care. Recommendations to improve access to hospice are included for each theme area.

A PROFILE OF BEREAVED CAREGIVERS FOLLOWING PROVISION OF TERMINAL CANCER CARE

G. WYATT, C. GIVEN, B. GIVEN, MICHIGAN STATE UNIVERSITY, EAST LANSING, MICHIGAN, USA
L. FRIEDMAN, JOHNS HOPKINS UNIVERSITY, BALTIMORE, MARYLAND, USA

Purpose: Caregivers are often overwhelmed by the strain of terminal caregiving. The purpose of this report is to provide a profile of 124 recently bereaved caregivers in an effort to better understand the needs of this group, and to provide a basis for tailoring interventions for caregivers during both caregiving and early bereavement.

Methods: Participants were identified as caregivers of adult patients who were undergoing initial treatment beyond palliation for a new diagnosis of cancer at one of three community cancer centers in Michigan, U.S.A. Data collection occurred via telephone interviews, self-administered questionnaires, and patient medical chart audits at six points: the time of recruitment as well as 6, 12, 24, 52 weeks after participation commenced, for as long as the patient lived, and 3 months after the patient's death with the caregiver. This report is based on the bereavement interview with the caregiver three months after the patient's death. Four major areas were assessed: psycho-spiritual, personal-social, health status, and financial status.

Results: Three-quarters of this sample of caregivers were female and married to the patient. Caregivers reported higher-than-average depressive symptomatology (mean on CES-D=17.6), moderate levels of positive outlook, low negative reactions to caring, and relatively high levels of spirituality. Caregivers were highly involved in their patient's activities of daily living, providing an average of 10.8 hours/day of direct care and 8.9 hours/day of companionship. Caregivers reported low utilization of health services (average of 1.8 services during the first 3 months of bereavement) and relatively high personal health status. Financially, 45% of the sample reported a decrease in income since the patient's death, and 44% reported out-of-pocket expenses not covered by insurance.

Conclusion: Suggestions for interventions targeting emotional, physical, and financial concerns will be discussed in light of this profile of the bereaved caregiver.

COMPLEMENTARY THERAPY USE AMONG OLDER CANCER PATIENTS

K. BECKROW, G. WYATT, C. GIVEN, B. GIVEN, MICHIGAN STATE UNIVERSITY, EAST LANSING, MICHIGAN, USA
L. FRIEDMAN, JOHNS HOPKINS UNIVERSITY, BALTIMORE, MARYLAND, USA

Purpose: Complementary therapies are becoming more commonly used worldwide. The purpose of this study was threefold: a) to assess the use of complementary therapies among older cancer patients; b) to report upon patterns of use; and c) to understand who is more likely to utilize complementary therapies.

Methods: A survey was conducted of approximately 1000 older cancer patients undergoing active cancer treatment. Data were collected at 2 to 4 weeks into treatment. All participants were 64 years of age or older, had been diagnosed with breast, colorectal, prostate, or lung cancer, and were recruited from community cancer treatment centers throughout Michigan, U.S.A. Measures of interest included experience with physical symptoms, depressive symptomatology, optimism, spirituality, and use of conventional and complementary health services.

Results: Up to 29% of older cancer patients reported utilizing complementary therapies as part of their health care. Of this sample, complementary therapy users were more likely to be women, breast cancer patients, and college educated. The three most frequently used therapies were exercise, 17% (n=118), herbal therapy/vitamins, 13% (n=89), and spiritual healing, 7% (n=47). Complementary therapy users were significantly more optimistic than non-users ($p<.05$). Further, there were significant differences between the users and non-users on types of physical symptoms experienced, but no differences on reported depressive symptomatology or spirituality.

Conclusion: Oncology providers need to be aware that over one quarter of their older patients are likely to supplement conventional care with complementary therapies. Therefore, providers should be knowledgeable about the safety and efficacy, in particular, of various exercise programs, herbal and vitamin therapies, and spiritual healing practices. It would be beneficial to develop a system within cancer centers by which patients could easily report on their use of complementary therapies, in order to allow providers to work in partnership with their patients to integrate complementary therapies into a comprehensive therapeutic cancer treatment plan.

Running Head: COMPLEMENTARY THERAPY USE

Complementary Therapy Use Among Older Cancer Patients

Gwen K. Wyatt, R.N., Ph.D.
Associate Professor, College of Nursing
Michigan State University, East Lansing, Michigan 48824
517-432-5511 (phone) 517-353-8612 (fax)

Laurie L. Friedman, Ph.D.
Instructor, School of Medicine
Johns Hopkins University, Baltimore, Maryland

Charles W. Given, Ph.D.
Professor, Department of Family Practice, College of Human Medicine
Associate Chairperson for Research, Department of Family Practice
Michigan State University, East Lansing, Michigan

Barbara A. Given, Ph.D., R.N., F.A.A.N.
Professor, College of Nursing
Director of Research, Institute of Managed Care
Associate Director, Cancer Prevention and Control, Cancer Center
Michigan State University, East Lansing, Michigan

Kathryn Christensen Beckrow, R.N., B.S.N.
Research Associate, College of Nursing
Michigan State University, East Lansing, Michigan

Research Funded by the National Institute for Nursing Research and the National Cancer Institute
Grant # 2 RO1 NR/CA1915-03A3

ABSTRACT

Purpose.--Complementary therapies are becoming more commonly used worldwide. The purpose of this study was threefold: a) to assess the use of complementary therapies among older cancer patients; b) to report upon patterns of use; and c) to understand who is more likely to utilize complementary therapies.

Description of study.--A survey was conducted of approximately 1000 older cancer patients undergoing active treatment. Data were collected at 2 to 4 weeks into treatment. All participants were 64 years of age or older, had been diagnosed with breast, colorectal, prostate, or lung cancer, and were recruited from community cancer treatment centers throughout Michigan. Measures of interest included experience with physical symptoms, depressive symptomatology, optimism, spirituality, and use of conventional and complementary health services.

Results.--Up to 29% of older cancer patients reported utilizing complementary therapies as part of their health care. Of this sample, complementary therapy users were more likely to be women, breast cancer patients, and college educated. The three most frequently used therapies were exercise, 17% (n=118), herbal therapy/vitamins, 13% (n=89), and spiritual healing, 7% (n=47). Complementary therapy users were significantly more optimistic than non-users ($p<.05$). Further, there were significant differences between the users and non-users on types of physical symptoms experienced, but no differences on reported depressive symptomatology or spirituality.

Clinical Implications.--Oncology providers need to be aware that over one quarter of their older patients are likely to supplement conventional care with complementary therapies. Therefore, providers should be knowledgeable about the safety and efficacy, in particular, of various exercise programs, herbal and vitamin therapies, and spiritual healing. It would be beneficial to develop a system within cancer centers by which patients could easily report on their use of complementary therapies, in order to allow providers to work in partnership with their patients to integrate complementary therapies into a comprehensive therapeutic cancer treatment plan.

Key Terms.--Cancer, complementary therapy, depression, optimism, physical symptoms, spirituality, conventional health services

Complementary Therapy Use Among Older Cancer Patients

As the formal healthcare system in the United States endures reorganization and restructuring, patients are having less contact with providers and experiencing wavering confidence in the healthcare system. As a result, many people are turning to complementary therapies (CTs) as a way to supplement their healthcare needs[1]. The Office of Alternative Medicine (OAM) Panel on Definition and Description defines "complementary therapies" as a broad domain of healing resources that encompasses all health systems, modalities, practices, and their accompanying theories and beliefs, other than those intrinsic to the politically dominant health system[5]. Examples of CTs include broad domains of care that may involve the ingestion of herbs, vitamins, or special foods; physical or energy manipulation such as massage, acupuncture, or spiritual healing; and mental activities such as meditation, imagery, and hypnosis. In addition to the use of CTs as preventative measures, increasing numbers of patients with acute or chronic illnesses are exploring the potential benefits of these therapies[2-3]. For example, CTs may help alleviate symptoms associated with cancer treatment, in addition to providing much needed psychosocial support and improving overall quality of life in cancer patients[4].

In the literature, several researchers have focused on cancer patients as a general category of those who may use CTs[6], but now it may be insightful to focus on specific types of cancers. It is well-documented that middle-aged, well-educated, financially secure individuals are most likely to use CTs[2-3]. However, because the vast majority of cancer patients are beyond middle age, it would be interesting to assess their use of CTs and compare psychosocial and physical health variables of those who do use the therapies with those who do not.

The purpose of this paper is to report the patterns and extent of CT use by breast, lung, colorectal, and prostate cancer patients 64 years and older. Specifically, what types of therapies are used and what is the frequency of use? We also examined the differences between those who used therapies and those who did not. The variables of interest were physical symptoms, depressive symptomatology, optimism, and spirituality. With the increased interest and exploration of CTs by the public, health care providers must be well-informed and educated on the use of these therapies in order to assist patients in making safe and useful choices. Descriptive data from this study may help physicians and other healthcare providers more effectively assist patients in their selection and use of CTs.

LITERATURE REVIEW

Current literature on CT use related to physical symptom management and a variety of psychosocial variables (i.e., depressive symptomatology, optimism, and spirituality) will be reviewed. Most of these variables have not been studied in relation to how or if CTs may impact such outcomes. A landmark outcome study conducted by Spiegel[7] utilized CTs with metastatic breast cancer patients. This study incorporated a variety of psychological interventions along with the CTs of imagery and self-hypnosis. The study included 86 participants, with 50 randomly assigned to the intervention group and 36 to the control group. The most significant outcome finding was survival time, with a mean of 36.6 months for intervention participants and 18.9 months for controls. Spiegel speculated that the possible mechanisms of action, as a result of the intervention, included changes in diet and exercise, better use and provision of health care, and positive effects on the sensitivity of the endocrine and immune system. Such dramatic survival outcomes warrant further investigation into supportive CTs.

Complementary Therapy Use and Psychosocial Outcomes

Bindemann, Soukop, and Kaye[8] conducted a randomized controlled study on relaxation training and ego-strengthening hypnosis as a coping resource for 80 male and female cancer patients. Measures of depression, anxiety, and psychiatric morbidity were obtained at baseline, 6, and 12 weeks. Although intervention and control group scores were similar at baseline, male intervention participants reported significantly lower anxiety than those in the control group at 6 and 12 weeks. Female intervention participants had significantly lower scores than their control counterparts on all psychological measures at 6 and 12 weeks.

Fredette[9] conducted a descriptive study that investigated concerns and coping skills of 14 women who had survived breast cancer for a minimum of five years. The majority reported that the cancer experience had made them more aware of their vulnerability and had changed their views on life. Most had developed a "survivor personality" by using a variety of coping strategies, including visualization, spirituality, and diet to help them become successful survivors.

Halstead and Fernsler[10] studied 128 long-term cancer survivors. Forty-eight percent reported adjustments in coping styles since their diagnosis. These new coping styles included complementary strategies such as relaxation techniques, positive affirmations, and spirituality.

Complementary Therapy Use and Physical Outcomes

The research investigating physical outcomes is often combined with psychosocial outcomes. This section will discuss research that includes at least one physical outcome variable. Redmond[11], in a review paper, reported on the symptom experience of cancer patients undergoing treatment and the availability of supportive care, such as CTs. Conventional cancer treatments, e.g., chemotherapy, may cause many distressing symptoms and side effects, the most common

being fatigue, nausea, and vomiting. Although advances have been made in pharmacological remedies, patients are finding that CTs can also provide much needed relief from these symptoms. In working with chemotherapy outpatients, Post-White[12] randomly assigned participants to an experimental or control group. The experimental group (n=22) met monthly for 4 months and was taught a CT (mental imagery). The intervention group demonstrated a significant improvement in perceived quality of life, emotional state, and disease state, as well as an improved immune function measure (Lymphokine Activated Killer cells). Similarly, Fawzy et al.[13] found that the CT of support groups reduced mood disturbance in patients with malignant melanoma while also improving immune function.

Downer and colleagues[14] utilized mailed questionnaires and semi-structured interviews to assess 600 cancer patients for their use of CTs in addition to conventional treatments. Eighty-two percent of those using CTs reported high levels of satisfaction with their choices. Reported physical benefits included less difficulty in breathing, increased energy, and reduced feelings of nausea. Reported psychological benefits included feeling emotionally stronger, being more able to cope with the demands of their illness, and feeling more optimistic and hopeful about the future.

These studies represent a beginning to the exploration of CTs and their use and efficiency on various physical and psychosocial outcomes among cancer patients. Our study expands one element of the present literature by providing specific information on four types of cancer and the relationship of CT use to treatment-induced symptoms and psychosocial measures.

METHODS

Design

This non-experimental, descriptive study was conducted with cancer patients from three community cancer centers in Michigan who were receiving conventional medical treatment for prostate, breast, lung, or colorectal cancer. Although the parent study for this project[15] collected data during four waves, this paper will report data from Wave 1, when CT data were collected. This schedule for collection of data on CTs was based on the assumption that patients may be more likely to consider a CT during the first month after diagnosis. Informed consent was obtained at intake into the study, in accordance with the institutional review boards where participants were recruited.

Sample

The sample of this study consisted of 1000 cancer patients, 64 years of age and older, who had an initial diagnosis of cancer. Please see Table 1 for demographic information comparing CT users and non-users. All participants were undergoing active cancer treatment during Wave 1 of the study.

Procedure

Data were gathered through self-administered questionnaires, telephone interviews, and chart audits. Intake occurred at the first clinic visit following a positive diagnosis for cancer, and demographic data were obtained from consenting participants. The first wave of data collection was at 4 weeks following surgery or within two weeks of initiating adjuvant therapy (chemotherapy or radiation) via telephone interviews (45-60 minutes in length). Follow-up interviews were conducted at 8 weeks (Wave 2), 24 weeks (Wave 3), and 52 weeks (Wave 4)- -

as long as the patient lived. The physical symptom and conventional health service data were obtained through telephone interviews at Wave 1. Interviewers were nurses or medical students with interview training that included mock interviews, taped interviews, and quality assurance assessments on 10% of each interviewer's cases. Participants mailed back a packet of self-administered instruments that assessed CT use, depressive symptomatology, optimism, and spirituality. Medical information, such as primary site and stage of cancer, was obtained through chart audits.

MEASURES

Five instruments were utilized in this study, in addition to items assessing basic demographic information (see Table 2 for details about each instrument). The CT instrument was developed by Wyatt[16]. This instrument asked participants to report which of 17 CTs they had used and their frequency of use. Given and Given[17] developed the conventional health service instrument. This instrument asked participants about their use and frequency of various conventional healthcare services including *Visiting Nurses*, *Nutritionists*, *Social Workers*, *Occupational Therapists*, *Counselor/Psychologists*, and *Doctors*. The spirituality scale is an 10-item subscale of the Long-Term Quality of Life Instrument developed by Wyatt, Kurtz, Friedman, Given, and Given[18] and measures existential and philosophical views on life. Given et al.[19] developed the symptom instrument, which asks participants to report on how they have been "feeling during the last two weeks" in reference to a list of 37 symptoms. Scheier and Carver[20] developed the optimism measure, which contains eight items (with four positively worded and four negatively worded) to assess overall optimism. The depression instrument used was the Center for Epidemiologic Studies Depression Scale (CES-D) by Radloff and Locke[21]. This

instrument includes 20 items that assess affective, behavioral, and cognitive features of an individual's depressive symptomatology. The CES-D is not, however, a diagnostic instrument for depression.

RESULTS

Demographics

The majority of participants were Caucasian, with a mean age of 72 years. Prostate cancer was the most prevalent diagnosis, and overall, most participants had stage one or stage two cancer (see Table 1). Of the total sample, 29% of women and 20% of men used one or more CTs. With 42% of the breast cancer patients using a CT, these participants were significantly more likely to use CTs than patients with the other three types of cancer (χ^2=12.02 (df=5), $p<.05$).

Among those who used CTs, there was a significant gender difference in use, in that the majority of CT users (55.4%) were women, (χ^2= 12.29 (df=1), $p<.001$). Further, users of CTs were significantly more likely to have completed an undergraduate or graduate school degree than the non-users (χ^2=11.06 (df=1), $p<.001$). The mean age of the users was 72.17 years (not significantly different from non-users), with a mean frequency of CT use of 9.7 CTs.

Health Services

Complementary therapy use. Descriptive analyses revealed that the three therapies used by the largest number of participants were *exercise* (n=118), *herbal therapy/vitamins* (n=89), and *spiritual healing* (n=47). The therapies with the most frequent number of treatments reported were *relaxation/imagery/yoga* (M=14.14) *exercise* (M=12.63), *herbal therapy/vitamins* (M=5.33, range = 0-99), and *other cancer therapies* (M=7.20) (see Table 3).

Conventional health services. The three most frequently used services included *Visiting Nurse* (n=151), *Nutritionist* (n=38), and *Social Worker* (n=37). The highest number of treatments by service were *Visiting Nurse* (M=10.93), *Counselor/Psychologist* (M=8.60), and *Occupational Therapist* (M=7.24). (See Table 4 for frequency of use and mean number of visits.)

Of the total sample, 25.4% used conventional health services and 33.3% used CTs. A significantly higher proportion of the CT users reported also having used conventional health services (χ^2=5.01 (df=1), p<.05), as compared to the non-users.

Physical Symptom Experience

The most frequently reported symptoms included *up at night to urinate* (n=585), *fatigue* (n=563), *pain* (n=415), *dry mouth* (n=347), and *frequent urination* (n=329). The mean number of symptoms reported was 8.17. The symptoms most frequently reported by the users of CTs were *pain* (48.9%), *up at night to urinate* (64.4%), and *fatigue* (66.6%) (see Table 5).

When comparing users and non-users of CTs, three symptoms were reported by a significantly higher proportion of the users of CTs--*numbness, tingling, and loss of feeling* (χ^2=8.01 (df=1), p<.005), *mood changes* (χ^2=13.29 (df=1), p<.001), and *limitation in arm movement* (χ^2=4.98 (df=1), p<.05).

Psychosocial Outcomes

Depressive symptomatology. Participants (n=802) reported depressive symptomatology within the normal range for the general public (M=10.98, sd=7.69, possible range of 0-60). There was no significant difference in depressive symptomatology between CT users and non-users.

Optimism. This sample expressed equal and relatively high optimism, with a mean of 3.01 (sd = .41, possible range of 1-4, n = 733). However, when comparing the users of CTs to non-users, users were significantly more optimistic (M=3.06 versus 2.99, respectively) (F (1, 689) = 4.82, p<.05).

Spirituality. For the total group, participants reported relatively high spirituality with a mean of 2.99 (sd = .54, possible range 1-4, n = 727). There were no significant differences in spirituality scores between users and non-users. (See Table 6 for descriptive data on each scale.)

Regression Analysis

A logistic regression analysis was performed to determine if CT use could be predicted from the other data collected. Included in the analysis were the demographic variables (gender, age, education, ethnicity, cancer site, and cancer stage), depressive symptomatology, spirituality, optimism, physical symptoms, and conventional health service use. Given statistically significant differences between users and non-users in gender, education, type of cancer, optimism, and conventional service use, it was expected that these variables might constitute a model to predict CT use. However, the regression analysis found that only patient education level and conventional service use were predictive, with higher educational status and use of conventional health services predicting CT use (model χ^2 (df = 7) = 31.88, p<.001).

Correlational Analyses

Most of the variables measured had significant inter-correlations. (See Table 7 for the correlation matrix.) Significant correlations included: Depressive symptomatology was positively correlated with conventional health services and negatively correlated with optimism and spirituality. Optimism was positively correlated with spirituality and negatively correlated with

symptoms. The presence of physical symptoms was positively correlated with conventional health services and CT use. Conventional health service use was positively correlated with CT use.

DISCUSSION

Demographics

In this sample of older cancer patients, there was no significant difference in age between users and non-users. The CT users were significantly better educated than the non-users, which is consistent with recent surveys[2-3,6]. Significantly more women were represented among the users of CTs, and breast cancer participants were the highest CT users among the four types of cancer patients surveyed. Because all breast cancer patients were women, the higher frequency of CT use among breast cancer patients may be solely a reflection of the patients' gender. It is not surprising that women were more likely to seek assistance with CTs, given the higher social acceptability for women than men to seek help. In addition, women and better educated individuals may be more open to non-traditional treatments. However, of the demographic variables, only education was actually predictive of CT use in this sample.

Health Services

Complementary therapies. The most commonly utilized CTs were exercise, herbs and vitamins, and spiritual healing. In addition, a fairly high number of participants reported use in the general category entitled *other cancer therapies*. This finding suggests there is still a "black box phenomena" that needs to be explored. Either participants used CTs that were not part of the forced-choice list or they did not wish to disclose the specific therapy they used. These possibilities raise the issue of how health providers can more openly assess the use of CTs and therefore participate in planning safe, effective selections that truly complement conventional care.

Conventional health services. The most frequently utilized conventional service, both in number of participants using the service and frequency of use, was visiting nurse care. This finding may represent providers' current mind-set that physical care, which is the primary service of visiting nurses, is the most beneficial or needed service for cancer patients. The service with the second highest mean number of visits was that of a counselor or psychologist, and social work services reflected the third highest mean number of visits. Both the frequent use of counseling and the high number of participants seeing a social worker point to a prominent use of psychological services. It would be interesting to know whether utilization of these emotionally supportive services were based upon self-referrals or provider referrals.

In general, the number of participants using CTs and conventional health services was comparable. It appears that, although conventional health services were nearly free to participants due to medical insurance, many were still willing to pay out-of-pocket for CTs. In addition, CT users were more likely to also report use of conventional services, suggesting that use of CTs and conventional services may reflect help-seeking behavior, or a willingness to seek assistance in coping with cancer.

Physical Health

Physical symptom experience. Many of the symptoms reported by significantly more of the CT users can be attributed to breast cancer, e.g., limitation in arm movement and arm swelling. This finding is consistent with the fact that breast cancer patients were more likely to use CTs than other patients. It is more difficult to conclude a relationship between the most frequently used CTs and conventional services and the most frequently reported physical symptoms. It is feasible that breast cancer patients could use exercise, herbs/vitamins, and

spiritual healing to address physical symptoms. However, physical symptoms were positively correlated with both conventional services and CTs, suggesting that use of these services might have reflected a need for symptom relief.

Psychosocial Profile

In general, the users of CTs reported equal and subclinical depressive symptomatology and comparable degrees of spirituality when compared to the non-users of CTs. The CT users were significantly more optimistic than participants who did not use CTs, although optimism did not actually predict CT use. It may be that respondents who were more optimistic about the future were also more likely to actively participate in their own health care by utilizing CTs. The greater optimism may provide the emotional energy needed to explore additional resources such as CTs, when confronted with a diagnosis as serious as cancer. Participants' incorporation of CTs may also represent different coping styles or levels of coping, as compared to their less optimistic counterparts who did not use CTs.

Limitations and Future Research

Although the total sample was large, there were often inadequate numbers of participants responding to the items on the CT measure to conduct statistical analyses beyond descriptive patterns. This low response rate may be related to the age of the sample, which was considerably older than the mean age reported by other surveys[2-3,6]. It may be that a self-report instrument was not the best method for obtaining this type of information from this more mature sample. Open-ended face-to-face or telephone interviews may have improved the response rates by allowing for

the exploration of cost data[1], satisfaction with CTs, and the reasons for using various CTs, e.g., for specific symptom management. The addition of other psychosocial factors, such as anxiety or personality variables, including coping styles, would also be interesting to relate to CT use. In future research, the CT survey tool can be refined to uncomplicate and separate some of the categories. Perhaps a glossary of terms for CTs could help participants be certain they were understanding the definitions of each therapy. Further, there needs to be a better understanding of what people are including in the "other therapies" category. Conducting focus groups with patients could help reveal what additional categories should be added to better assess the range of therapies likely to be used.

In addition, a controlled, clinical trial could assess the actual effects of CT use on symptoms and psychosocial outcomes and compare them to outcomes from conventional services. Finally, this research could be expanded to study CT use and its effects in other patient or community samples.

Clinical Implications

Oncology providers can benefit from being aware that up to 29% of their older patients may be using CTs to supplement their cancer treatment. Further, this sample reported that patients are most likely to utilize exercise, herbs/vitamins, and spiritual healing. This information can alert providers to community resources, and may encourage a thorough assessment of the safety and efficacy of the locally provided therapies and practitioners[22-24]. A directory of screened providers could be available in office waiting rooms. It will be important for providers to begin to

[1]Cost data were assessed in this study by the CT instrument but are not reported because the data were invalid. It seems respondents had a difficult time answering the item, "How much money was spent per treatment? (Write in)" for each CT. Interviews, rather than self-report, would likely improve the validity and accuracy of such data.

include an assessment of each patient's use of CTs so their use can be integrated with conventional care. This way, the oncology provider can help guide and monitor the benefits and contraindications of various CTs[25]. Eventually, oncology centers may wish to develop their own amenities menu of CTs provided within the clinic. This could help assure the quality of the CTs and provide increased revenue, as patients are clearly willing to spend out-of-pocket for CTs.

REFERENCES

1. Cass R, McGrath P, Caggiano V. Alternative care patient choices for adjunct therapies within a cancer center. *Cancer Practice*. 1998;6(3):176-181.
2. Eisenberg DM, Kessler RC, Foster C, Norlock FE, Calkins DR, Delbanco TL. Unconventional medicine in the United States: Prevalence, costs, and patterns of use. *The New England J Med*. 1992;328(4):246-252.
3. Millar WJ. Use of alternative health care practitioners by Canadians. *Can J Public Health*. 1996;88(3):154-162.
4. Doan B. Alternative and complementary therapies. In: Holland JC, ed. *Psycho-Oncology*. New York: Oxford University Press; 1998:817-827.
5. Panel on Definition and Description, CAM Research Methodology Conference, April 1995. Defining and describing complementary and alternative medicine. *Alternative Therapies* 1997;3(2):49-57.
6. Landmark Healthcare. Nationwide study offers new views on alternative health care: The Landmark Report confirms America's growing acceptance. *Landmark Healthcare Report*. 1998.
7. Spiegel D. Effects of psychosocial support on patients with metastatic breast cancer. *J Psychosoc Oncol*. 1992;10(2):113-120.
8. Bindemann S, Soukop M, Kaye SB. Randomized controlled study of relaxation training. *Eur J Cancer*. 1991;27(2):170-174.
9. Fredette SL. Breast cancer survivors: Concerns and coping. *Cancer Nurs*. 1995;18(1):35-46.

10. Halstead MT, Fernsler JI. Coping strategies of long-term cancer survivors. *Cancer Nurs.* 1994;17(2):94-100.

11. Redmond K. Advances in supportive care. *Eur J Cancer Care.* 1996;5(2):1-7.

12. Post-White J. The effects of mental imagery on emotions, immune function, and cancer outcomes. [Dissertation]. *Dissertation Abstracts International.* University of Minnesota. 1991.

13. Fawzy F, Kemeny M, Fawzy N. A structured psychiatric intervention for cancer patients: Changes over time in immunological measures. *Arch Gen Psychiatry.* 1990;47:729-735.

14. Downer S, Cody M, McCluskey P. Pursuit and practice of complementary therapies by cancer patients receiving conventional treatment. *Br Med J.* 1994;309(6947):86-89.

15. Given C, Given BA. Family home care for cancer - A community based model. Grant jointly funded by National Institute Nursing Research(NINR) and National Cancer Institute(NCI), # 2 R01 NR/CA 1195-03A3. 1993.

16. Wyatt G. Complementary therapy use and cost survey. Unpublished instrument. 1993.

17. Given B, Given CW. Conventional health service use. Unpublished instrument. 1993.

18. Wyatt G, Kurtz ME, Friedman LL, Given B, Given CW. Preliminary testing of the Long-Term Quality of Life (LTQL) instrument for female cancer survivors. *J Nurs Meas.* 1997;4(2):153-170.

19. Given CW, Stommel M, Given B, Osuch J, Kurtz ME, Kurtz JC. The influence of cancer patients' symptoms and functional status on patients' depression and family caregivers' reaction and depression. *Health Psychol.* 1993;12(4):277-285.

20. Scheier MF, Carver CS. Dispositional optimism and physical well-being: The influence of generalized outcome expectancies on health. *J Pers.* 1987;55(2):169-210.

21. Radloff LS, Locke BZ. The community mental health assessment survey and the CES-D scale. In: Weissman MM, Myers JK, Ross CE, eds. *Community Surveys of Psychiatric Disorders*. New Brunswick, NJ: Rutgers University Press; 1986:177-189.

22. Balmer J. Alternative cancer therapy resources on the internet. *Highlights in Oncology Practice*. 1998;15(4):110-113.

23. Balmer C. Alternative therapies in cancer patient care. *Highlights in Oncology Practice*. 1998;15(4):83-84.

24. Kastner M, Burroughs H. *Alternative Healing*. New York, NY: Henry Holt and Company. 1996.

25. Eisenberg DM. Advising patients who seek alternative medical therapies. *Ann Intern Med.* 1997;127:61-69.

Table 1

PATIENT DEMOGRAPHICS

	CT Users		Non-CT Users		Total	
Gender	**n**	**%**	**n**	**%**	**n**	**%**
Male	103	45.0%	263	56.7%	542	54.6%
Female	126	55.0%	201	43.3%	450	45.4%
Ethnicity	**n**	**%**	**n**	**%**	**n**	**%**
Caucasian	157	93.5%	343	92.0%	892	92.5%
African American	10	6.0%	21	5.6%	60	6.2%
Hispanic	1	0.6%	1	0.3%	3	0.3%
Native American	0	0.0%	3	0.8%	4	0.3%
Other	0	0.0%	5	1.4%	5	0.4%
Education	**n**	**%**	**n**	**%**	**n**	**%**
No Formal Education	1	0.5%	1	0.2%	3	0.3%
Completed Grade School	11	5.2%	34	7.6%	68	7.9%
Completed Some High School	26	12.3%	92	20.6%	184	21.4%
Completed High School	73	34.6%	143	32.0%	274	31.9%
Completed Some College	48	22.7%	114	25.5%	196	22.8%
Completed College	26	12.3%	39	8.7%	81	9.4%
Completed Graduate College	26	12.3%	24	5.4%	54	6.3%
Type of Cancer	**n**	**%**	**n**	**%**	**n**	**%**
Prostate	65	28.4%	141	31.1%	299	28.6%
Lung	42	18.3%	110	24.2%	281	26.8%
Breast	83	36.2%	115	25.3%	273	26.1%
Colon	38	16.6%	87	19.2%	192	18.3%
Breast and Lung	0	0.0%	1	0.2%	1	0.1%
Lung and Prostate	1	0.4%	0	0.0%	1	0.1%
Cancer Stage	**n**	**%**	**n**	**%**	**n**	**%**
Stage 0	16	12.8%	23	8.8%	44	8.2%
Stage I	48	38.4%	74	28.5%	160	29.8%
Stage II	40	32.0%	90	34.6%	182	34.0%
Stage III	12	9.6%	49	18.8%	98	18.3%
Stage IV	9	7.2%	24	9.2%	52	9.7%

Age in Years	**M**	**SD**	**MIN/MAX**
CT Users	72.17	5.40	65-93
Non-CT Users	72.73	4.86	64-98
Total	72.67	5.33	64-98

Table 2

STUDY INSTRUMENTS

Instrument Name	# of Items	Sample Item	Scale Range	Established Alpha*	Sample Alpha
Complementary Therapies	17	Do you use herbal therapy or vitamins?	1 (yes), 2 (no)	N/A	.39
a. Number of Treatments	17	How many treatments have you had?	N/A	N/A	N/A
b. Cost of Treatments	17	How much money was spent per treatment?	N/A	N/A	N/A
Conventional Health Services	6	Have you used visiting nurses since you were diagnosed with cancer?	1 (yes), 2 (no)	N/A	.29
a. Number of Visits	6	How often have you used this service?	N/A	N/A	N/A
b. Cost of Visits	6	How much was spent?	N/A	N/A	N/A
Physical Symptoms	37	Did you experience fatigue in the past two weeks?	1 (yes), 2 (no)	.90	.77
Depressive Symptomatology	20	Have you felt tearful?	0 (rarely or none of the time) to 3 (almost all of the time)	.92	.87
Optimism	8	I always look on the bright side of things.	0 (strongly disagree) to 5 (strongly agree)	.76	.82
Spirituality	10	I feel an inner direction that helps me make wise decisions.	0 (not at all) to 4 (very much)	.87	.78

*Alphas established in previous research are reported when available.

Table 3

COMPLEMENTARY THERAPY USE

Type of Therapy	Therapy Use			Number of Treatments		
	n	Total N	%	M	sd	MIN/MAX
Exercise Program	118	695	17.0%	12.63	30.36	0-100
Herbal Therapy/Vitamins	89	699	12.7%	5.33	17.45	0-099
Spiritual Healing	47	704	6.7%	3.77	8.28	0-033
Massage	20	698	2.9%	3.00	3.93	0-011
Other Cancer Therapy	18	615	2.9%	7.20	9.78	0-025
Chiropractic Manipulation	17	696	2.4%	6.75	7.50	0-020
Lifestyle Diet	15	693	2.2%	1.50	3.21	0-009
Relaxation/Imagery/Yoga	13	699	1.9%	14.14	37.42	0-099
Audio or Video Tapes	10	698	1.4%	0.50	1.07	0-003
Homeopathic Practitioner	3	691	0.4%	0.00	0.00	0
Acupuncture	1	696	0.1%	0.00	0.00	0
Osteopathic Manipulation	1	694	0.1%	0.00	0.00	0
Energy Balancing	1	694	0.1%	0.00	0.00	0
Therapeutic Spa/Retreat	0	698	0.0%	0.00	0.00	0
Hypnosis	0	695	0.0%	0.00	0.00	0
International Medications	0	698	0.0%	0.00	0.00	0
Wrap Massage/Liquid Med.	0	698	0.0%	0.00	0.00	0

Table 4

CONVENTIONAL HEALTH SERVICE USE

Number Who Used Service

	n	Total N	%
Visiting Nurse	151	803	18.8%
Nutritionist	38	802	4.7%
Social Worker	37	798	4.6%
Occupational Therapist	17	802	2.1%
Counselor/Psychologist	15	801	1.9%
Doctor	0	802	0.0%

Number of Visits

	M	sd	MIN/MAX
Visiting Nurse	10.93	11.98	1-99
Counselor/Psychologist	8.60	5.34	1-15
Occupational Therapist	7.24	7.33	1-30
Social Worker	1.87	1.48	1-8
Nutritionist	1.63	2.77	1-18
Doctor	0.00	0.00	0-00

Table 5

PHYSICAL SYMPTOMS

Type of Symptom	n	Total N	%
Up at Night to Urinate	585	868	67.4%
Fatigue	563	868	64.9%
Pain	415	868	47.8%
Dry Mouth	347	868	40.0%
Frequent Urination	329	868	37.9%
Weakness	322	868	37.1%
Trouble Sleeping	318	868	36.6%
Weight Loss	273	868	31.5%
Urgent Need to Urinate	268	868	30.9%
Cough	261	868	30.1%
Lack of Sexual Interest	251	868	28.9%
Poor Appetite	243	868	28.0%
Difficulty Breathing	204	868	23.5%
Itching	201	868	23.2%
Breast Tenderness	197	868	22.7%
Diarrhea	196	868	22.6%
Constipation	190	868	21.9%
Numb/Tingling/Loss Feeling	190	868	21.9%
Mood Changes	183	868	21.1%
Nausea	178	868	20.5%
Leaking Urine	176	868	20.3%
Altered Taste	168	868	19.4%
Sweats or Night Sweats	155	868	17.9%
Limitation Arm Movement	114	677	16.8%
Difficulty Concentrating	134	868	15.4%
Hot Flashes	128	868	14.7%
Dizziness	118	868	13.6%
Leg Swelling	78	676	11.5%
Bleeding or Bruising	96	868	11.1%
Difficulty Swallowing	88	868	10.1%
Coordination Problems	83	868	9.6%
Fever	61	868	7.0%
Vomiting	59	868	6.8%
Vaginal Dryness	26	409	6.4%
Arm Swelling	37	677	5.5%
Mouth Sores	46	868	5.3%
Dehydration	31	868	3.6%

Table 6

DESCRIPTIVE DATA OF SCALED INSTRUMENTS

	n	M	sd	Min/Max
Depressive Symptomology[1]	802	10.98	7.69	0.00 - 42.00
Optimism[2]	733	3.01	.41	1.75 - 4.00
Spirtuality[2]	727	2.99	.54	1.10 - 4.00
Physical Symptoms[1]	868	8.42	4.72	0.00 - 27.00
Conventional Health Services[1]	803	.32	.61	0.00 - 4.00
Complementary Therapies[1]	699	.50	.86	0.00 - 5.00

[1] Summed score.
[2] Mean score.

Table 7

CORRELATIONS

	Depressive Symptomatology	Optimism	Spirituality	Physical Symptoms	Conventional Services
Optimism	-.457**	N/A	N/A	N/A	N/A
Spirituality	-.148**	.273**	N/A	N/A	N/A
Physical Symptoms	.492**	-.211**	-.030	N/A	N/A
Conventional Services	.100**	-.055	.017	.123**	N/A
Complementary Therapies	.036	.057	.071	.098*	.084*

**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).

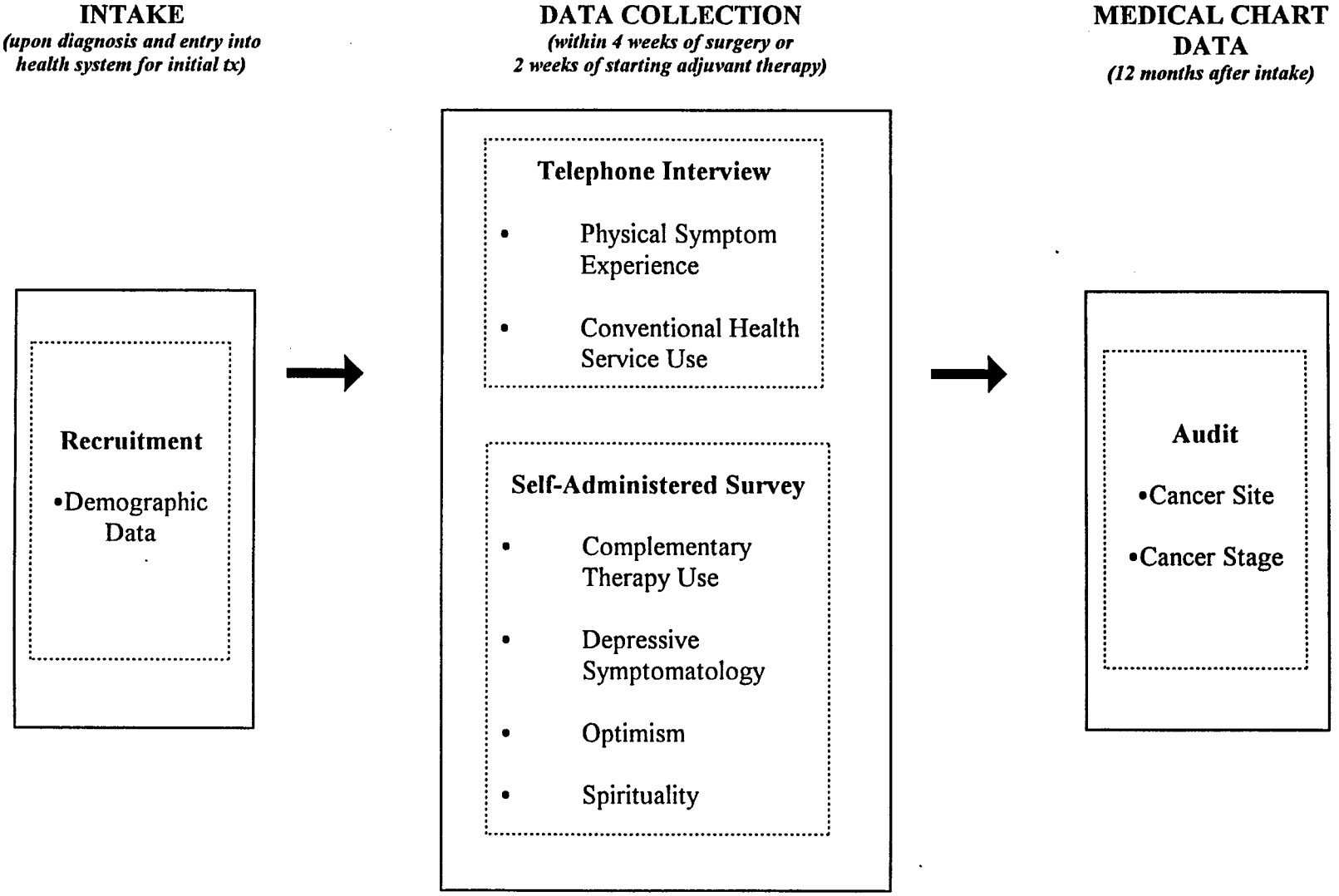


Figure 1. Design for recruitment and data collection.

Running Title: RECOMMENDATIONS FOR HOSPICE EDUCATION

Recommendations for Pro-Active Hospice Education: A Perspective from the Bereaved

by:

Gwen K. Wyatt, R.N., Ph.D.
Associate Professor, College of Nursing
A230 Life Science Building
Michigan State University, East Lansing, Michigan 48824
517-432-5511 (phone) 517-353-9553 (Fax)

Karen Sue Ogle, M.D.
Professor, Department of Family Practice
College of Human Medicine
Director, Palliative Care Education and Research Program, Cancer Center
Michigan State University, East Lansing, Michigan

Barbara A. Given, R.N., Ph.D., F.A.A.N.
Professor, College of Nursing
Director of Research, Institute of Managed Care
Associate Director, Cancer Prevention and Control, Cancer Center
Michigan State University, East Lansing, Michigan

Research Funded in part by
The Office of the Vice Provost for Outreach
Michigan State University, East Lansing, Michigan

Abstract

Access to hospice care continues to be an enigma. Hospice has been available for the past two decades in the United States, but the services continue to be underutilized. In an effort to better understand access barriers, a series of focus groups were held with recently bereaved (mean = 9.9 months) caregivers. During the process of the focus group discussions, participants relived their experience with hospice. Although the purpose of this research was to uncover access recommendations, participants integrated their access comments into the overall richness of their hospice experience. The 12 participants were divided into two groups, and each group met twice during June, 1996. From the focus group discussions, six themes emerged, including recommendations to improve access to hospice.

Recommendations for Pro-Active Hospice Education:

A Perspective From the Bereaved

Since the concept of hospice was first brought to public attention in 1967 by St. Christopher's Hospice in England, there has been worldwide support for the movement [(1)]. Such care, with a focus on comfort and the total person, has made the final period of life more emotionally and physically comfortable for many patients and their families. However, many continue to go without hospice care during the terminal phase of life. Most people hold to the silent hope that they will never need hospice services.

The majority of patients in hospice care are cancer patients, yet only one out of every three people who die from cancer is enrolled in hospice. Often, the acceptance of hospice support is seen by the patient and family as the last step in a health crisis, and for many, this signifies a giving up of hope. For this and other reasons, access to hospice care has received inadequate attention to date. Hospice service has been assumed to be available to the general public, and merely needed to be requested. However, the majority of patients and family caregivers who qualify for hospice do not receive care, or receive only limited days or weeks of support--far less than the six months that is available. Only 14.7% of all deaths in the United States from all causes are tended to by a hospice program [(2)].

Literature Review

Much anecdotal literature has focused on the lack of early referral, identifying both negative attitudes and a lack of knowledge by physicians as the primary causes for late referral [(3-4)]. To date, very little attention has been placed upon initial access to hospice care, with the few exceptions of issues surrounding minority groups [(5-6)].

Access to hospice is often hindered by a lack of knowledge on the part of the health provider related to how hospice regulations function and the goals and benefits of care. Poor patient education regarding hospice, and professional disagreement over admission criteria, limit hospice access to very specific disease conditions and tie the physician's hand regarding prognostication. Some physicians believe that by not treating every patient aggressively, they are abdicating their responsibility as a medical professional. Physicians continue to avoid discussing death with their patients when it might be reasonable to discontinue aggressive treatment, due in part to the fact that patients are sometimes unwilling to accept the fact that their disease is incurable [3]. In an editorial, Lo [7] raises many questions regarding end of life care. He stresses that more attention needs to be placed upon: (a) discussions between physicians and patients; (b) physicians' and patients' estimate of prognosis; (c) respect for patients' informed refusal of interventions; and (d) physicians' appreciation of patients' pain.

In addition to physician attitude and knowledge as access issues, minorities are often disadvantaged due to their cultural beliefs on issues related to death and dying, which may not be understood or accepted by hospices staffed predominantly by members of the white middle-class [6]. Limitations to hospice access affect disadvantaged socio-economic groups because of restraints within the Medicare regulations or patterns of healthcare utilization that differ from the mainstream American population. Gordon [5] reported a built-in bias against minorities related to medicare regulations, such as the requirement of continuity of care entailing the availability of a primary caregiver. These limitations disproportionately affect blacks and Hispanics. Both groups are wary of hospice and the American healthcare system based upon past experiences [8]. Hispanics are especially critical of the lack of bilingual services [5]. Some of the barriers to

minorities seeking hospice care are the lack of financial resources and adequate education, and the lack of targeted information for consumers and healthcare providers about hospice care in the non-white communities [6]. Reasons such as cost and quality of care are often used to justify the dismissal of hospice as a personal method of terminal care [9]. Finally, some hospice agencies require a primary caregiver in the home. For the person who lives alone, this may be a barrier. However, more hospice services are now able to make special arrangements for the dying person who lives alone [10].

On the other hand, there are many benefits to hospice care that, if better known, could facilitate access, thereby decreasing the burden placed upon the primary caregiver, health care professionals, and the family. Some of these potential benefits of hospice could make hospice use more widely accepted. Access to hospice care often involves significant cost savings to insurers over hospital care. Expenditures in the final month of life are 25% - 40% lower for patients in hospice care compared to conventional hospital care, although cost savings may not be as high for long-term hospice services [11]. Hospice can also provide better relief of pain and physical symptoms, as well as taking an interdisciplinary approach to the broader suffering that dying patients often experience [3 & 10]. Finally, hospice offers patients greater autonomy over end-of-life decisions [11].

The small body of access-related literature begins to touch upon issues related to diverse populations, professional dilemmas, and the general lack of accurate information among all involved -- patient, family, and health professionals. However, to date, the bereaved "significant other" has not been involved in formally analyzing the issue of access to hospice. Therefore, the

purpose of this study was to focus upon the perceptions of bereaved "significant others" who had used hospice care, with special emphasis on their impressions of initial access to care.

Twelve bereaved "significant others," met and discussed the issues surrounding access to hospice care. This qualitative study analyzed the perceptions of close friends and family members of hospice patients, who reflected upon the hospice experience after the death of their friend or family member.

Methods

Design

The study design was qualitative, using focus group discussions. The discussions addressed issues surrounding access to hospice services experienced by "significant others" who were recently bereaved (mean = 9.9 months). As an introduction to the group process, participants were asked to briefly reflect upon the time beginning when they first encountered the suggestion of hospice services for their loved one, through to the death. Based upon prior discussions with hospice staff, including administrators, nurses, social workers, and bereavement coordinators, four broad open-ended questions regarding access issues were planned for the focus groups. In addition, a subset of more specific queries from each of the major questions were prepared to facilitate discussion. The four major questions were as follows:

1. Availability of Services--Describe any problems or difficulties you experienced in relation to the availability of hospice services, and your recommendations for change.
2. Personal Issues--Describe any personal issues that hindered or delayed your access to hospice care for your family member or friend, and your recommendations for change.

3. Financial Issues--Describe any financial concerns that kept you from using hospice sooner than you did, and your recommendations for change.

4. Provider Issues--Describe any issues related to your doctors and/or nurses that might have kept you from using hospice services earlier, and your recommendations for change.

Sample

Invitations to participate in the focus group discussions were mailed to a convenience sample of 40 recently bereaved (mean = 9.9 months) individuals. Two hospice agencies in mid-Michigan participated in identifying 20 "significant others" who had used hospice services during their family member or friend's terminal illness. Of the 40 individuals identified, 22 responded to the invitation. Of those who responded, 12 were available at the time of the focus group sessions and consented to participate. Of those who responded but did not participate, several were on vacation during the June dates of the focus group sessions, and two had moved out-of-state.

The sample was composed of 10 women and 2 men, ranging in age from 20 to over 80 years of age. Half of the sample was over 65 years of age. All participants had lost a family member or friend recently (4 to 19 months ago, mean = 9.9 months). Ten of the participants had been the primary caregiver, and two had been a secondary caregiver. Relationships to the patient included wives (4), daughters (3), conjugal female friends of male partners (2), husbands (2), and a niece (1).

The participants were divided into two groups according to their availability. Each group consisted of six members, including one man in each group. Educational levels varied among participants but were relatively high: four had a high school diploma, two had some college or trade school education, five had a bachelors degree, and one held a master's degree. One group

was held at a local university, and the other group met at one of the participating hospice agencies. Each group met twice with a two-week interval between the two sessions.

Participants had utilized hospice services for their "significant other" for very short periods of time ranging from less than one week to two months - - far less than the potential six months. One patient received hospice care within a nursing home setting, and therefore her primary caregiver was the nursing staff and her daughter was the secondary caregiver. For the other patients, the caregiving was in the home and provided by a female conjugal friend in three cases, the wife in four cases, a niece in one case, and the husband in three cases (the daughter was the secondary caregiver in one of these cases). It was interesting to note that the two husband participants who identified themselves as the primary caregiver frequently spoke of the help they received from their daughter and/or daughter-in-law. On the other hand, one of the participants who was a daughter to the patient identified her father as the primary caregiver, even though she gave many examples of the routine care she herself provided.

Procedures

Both sets of focus groups met for two 2 ½ hour sessions. All sessions were co-facilitated. One of the co-facilitators was a clinical nurse specialist with 15 years practice in all phases of oncology patient care and extensive group facilitation experience. The other facilitator was a psychology doctoral student who had counseled women through a women's resources center for several years. In addition to the two facilitators, two nurse research assistants greeted the participants as they arrived. The research assistants also managed the tape recordings of the sessions. All sessions were recorded.

The sessions began with group-forming activities that included reviewing the informed consent that participants had signed and offering self-introductions. Participants were also assured that any information provided would not be shared with the participating hospice agencies as individual comments, but only as group comments, if a report were requested.

The first focus group began with a discussion of the question related to availability of hospice services, including barriers to access. From past experience with groups, the nurse facilitator decided that the participants would be least inhibited beginning with this area in a newly formed focus group. The second area of questioning during session one was related to personal issues surrounding the use of hospice. This area included probes about family and social support around the barriers to access and their ultimate choice to use hospice. Two weeks later, the second session focused on the potentially more sensitive areas, including financial issues and access barriers related to health providers.

Although participants were asked to make specific access recommendations for each of the major topic areas, they provided far more than access data. It was initially difficult for the participants to suggest recommendations as they had had such positive experiences with hospice. However, through discussion, they did generate a substantial collection of ideas to help others become familiar with attaining access to hospice. The last session was ended by asking for any further recommendations not already included under the four specific questions.

Analysis

Immediately after the sessions, the facilitators individually recorded observational notes, including preliminary themes that emerged during the group discussions. The facilitators then met to discuss these preliminary themes prior to the second sessions. Following the second sessions, the facilitators again met to briefly summarize their perception of potential themes.

Tape recordings of all four sessions were transcribed verbatim by a confidential transcription service and reviewed for accuracy by one of the facilitators. The second facilitator extracted sample sections from the transcriptions to spot check throughout in order to further substantiate the accuracy of the transcriptions.

Transcribed data were entered into the Ethnograph computer program. The co-facilitators initially worked independently with both the Ethnograph transcriptions and session notes to begin uncovering potential coding categories. In developing the codes, frequency of responses was taken into consideration. The facilitators then met and shared their independently-derived codes. Through comparing codes and discussing the content of each, consensus was reached on 21 coding categories.

The facilitators then followed procedures suggested by Krueger [12] to identify themes from the 21 coding categories. Each facilitator analyzed the coding categories independently in search of the underlying themes. They then met to reconcile discrepancies. This often meant returning to samples of actual quotes to explain rationale for potential themes. Using an open verbal format, the facilitators were able to hear each other's comments and take notes, and eventually consolidate themes. Initially, 10 themes were isolated. Then, through further discussion of overlaps, six major themes were captured.

Themes

1. Societal and health system issues related to delayed access to hospice.
2. Education and practice needs of health professionals and social service workers, that affect hospice access.
3. Improved quality of life for patients with hospice support.
4. Benefits of hospice involvement for the caregivers.
5. Caregiver burden related to the dying process.
6. Unexpected experiences for caregivers during hospice care.

Results

Theme 1: Societal and health care system issues related to delayed access to hospice.

The categories that comprise theme one are as follows:

a. Bureaucratic/societal barriers to accessing hospice.

b. Public equating hospice with loss of hope and certain death.

c. Caregivers' experiences with the transition from curative care to hospice care.

d. Recommendations to facilitate hospice access.

Theme one included comments concerning misconceptions about hospice, including payment and coordination of services; issues related to physicians serving as gatekeepers to hospice services; the American youth-oriented culture, which has difficulty confronting death, i.e., hospice care; and the caregiver's experiences in shifting from a life-saving mode to "comfort care" with hospice. Several of the participants' comments exemplify this theme as follows:

> I think it is very difficult for doctors to recommend hospice; they don't like to make that decision for you that your loved one is only going to live another six

months. They don't care to make decisions that may be wrong. You know, with lawsuits now days and doctors don't dare make mistakes now.

I don't know. I don't really see how you can dress it up and make it look any different. I mean, it is a terminal business really. And, terminal means the end.

Well if they could get more visiting nurses to go along with hospice to make a smoother transition like I had, instead of some visiting nurses setting themselves up against hospice for reimbursement reasons. It would be better if they all worked together to make it easier to move from one kind of care to another when it was time.

Recommendations to facilitate access:

1. Clarify that hospice does not give up hope — currently signifies terminal to all. Create a health system in which home care could transition to hospice care with more of a gray area, where it is still acceptable for the patient to improve, or to receive hospice care if the prognosis deteriorated.
2. Health professionals taking more responsibility for mentioning hospice services as part of the routine continuum of care.
3. Health professionals practicing less heroic medical care and less denial of death, with more focus on the reality of the prognosis.
4. Health care agencies overcoming the stigma of associating with the dying process by openly advertising hospice services as a component of the continuum of care.
5. Clarification for the public of the role of insurance carriers in relation to patients' ability to receive hospice care.

Theme 2: Education and practice needs of health professionals and social service workers, which affect hospice access.

The categories comprising this theme were:

a. Health professionals being too far removed from the death experience.

b. Health professionals having difficulty letting go of the life process.

c. Recommendations to facilitate hospice access.

The categories for this theme consisted of issues surrounding the various health care professionals. Many participants believed that health professionals lacked knowledge or experience with the changes in a patient's status that indicate a serious decline in health, or perhaps they insulated themselves from acknowledging when it was time to shift away from their curative training. Along this same vein, there was a sense that health providers were out of touch with what was actually going on in the home, related to the needs of care. Finally, there was a line of dialogue that questioned health providers' comfort level with discussing death and taking responsibility for determining when it was time to recommend hospice services. A sample of the comments contributing to this theme are as follows:

> I mean, they [health providers] weren't close enough to a patient to see what they were really seeing when he [patient] came into the office. It [the office visit] is just so far removed from home care in that 15 minutes that they are allowed to see a patient.

> At one point a young doctor suggested that, 'I hope you have religion.' That's an interesting way to put the prognosis. I think they are young and haven't been around like old family doctors have been.

> They are there to cure and they just can't do the concept the other way around, so I don't think they can say, 'I failed,' you know.

> There is a difference in doctors, and some doctors find themselves comfortable in talking to you and others don't. So if they don't play their part, there is a missing cog.

Recommendations to facilitate access:

1. Include more hospice education in medical and nursing programs. Doctors and nurses need to be better educated in knowing when and how to introduce hospice to patient and caregiver, e.g., "feeling comfortable earlier giving information."
2. Include brochures and wall posters in providers' offices and waiting rooms. These should be very visible and direct about hospice care.
3. Provide TV programs in providers' waiting room areas regarding hospice services.
4. Have doctors sit in on hospice staff meetings.
5. Educate health professionals in how to assist families in talking about dying with patients, i.e., making funeral arrangements, when to forgo heroic measures, discussion of the meaning of their life, spiritual issues, and unfinished business.
6. Provide patients with information regarding previous hospice caregivers' evaluation of various hospices so that referrals are based on real experiences.

Theme 3: Improved quality of life for patients with hospice support.

This theme was composed of data coded into the categories of:

a. Managing patients' physically distressing symptoms.

b. Advantages of home death with hospice support for the patient.

c. Recommendations to facilitate hospice access.

These categories centered around the perceived benefits to the patient due to hospice care. The participants expressed the ability to immediately address the distressing symptoms for the

patient, and to maintain personalized care in familiar surroundings. Participants believed that the patient was able to maintain closer attachment to the caregiver and preserve the patient's privacy, dignity, and pride. Examples of these quality of life issues for the patient include:

> I could face the facts when I had the opportunity of being there with him and him knowing that he was loved when he died, and not being in a cold impersonal atmosphere away from home.

> In your own home, with our own porta potty to help him right away, and your people and your books and everybody around you, it seemed much better for him [patient], sleeping right there next to him in the night, you know, your own room and all.

Recommendations to facilitate access:

1. Provide information on the benefits of home death for the patient — death with dignity, peaceful death, familiar surroundings, symptom management.
2. Shared hospice experience by bereaved in newspaper articles.
3. Have bereaved recipients of hospice mention hospice within their circle of friends.
4. Publish a (coffee table/ artistic) book for the general public with inspirational stories about people who have benefitted from hospice care.

Theme 4: Benefits of hospice involvement for the caregivers.

The fourth theme was composed of the following categories of data:

a. Hospice responsiveness (service and supplies).

b. Advantages to the caregiver of a home death with hospice.

c. Hospice support for family and caregiver after death.

d. Recommendations to facilitate hospice access.

These categories clustered around the support that hospice provided to the caregivers and other family members. The areas mentioned related to the immediacy of hospice involvement once

they were notified, in terms of providing services and supplies in the home; the continuity and control around care issues felt by the family; the cooperation and education hospice provided; and finally, the hospice support experienced after the home death. Examples of these benefits of hospice for the caregiver include:

> Well, I was impressed, hospice set it up for us and I had no knowledge of hospice ahead of that, but boy they had it [hospital bed, supplies, etc] set up in about two hours time. We were all in business.
>
> Hospice was there at the time [once contacted] and then they came every day to bathe him and just see if there was anything I needed and with the idea of staying with him if I wanted to go in to [town] get groceries or something.
>
> They let me take care of things my way and without interference, and yet they were always there for me.
>
> Well, one advantage of having hospice involved is that by calling them you can go around a couple of things. Because if you are not involved with them, and the death occurs, then law enforcement has to come to the scene to file a report. So you have police at your home at a difficult time.
>
> She [hospice nurse] came to the funeral home; she was like one of the first ones that came to the funeral home. She has called and sent a couple of notes since then too. Very nice.

Recommendations to facilitate access:

1. Provide information on hospice before it is needed — not just at the end of life.
2. Provide information on the benefits of home death with hospice for the caregiver--greater control over care, availability, cooperation, education, support for caregiver and family to meet the burdens of care, and fostering family cohesion.
3. Inform the public that hospice care is as much for the caregiver as for the patient.
4. Provide information on after death support--newsletters, bereavement groups, one-on-one talks, sharing meals.

5. Provide information that the family can avoid law enforcement coming to the home at the time of death--just call hospice.

Theme 5: Caregiver burden related to the dying process.

Theme five consisted of the following categories:

a. Patient symptoms contributing to caregiver burden.

b. Caregiver realization of imminent death.

c. Deterioration of caregiver's physical and emotional well-being prior to hospice services.

d. Recommendations to facilitate hospice access.

The fifth theme focused upon the difficulties experienced by the caregiver during the final days of the patient's life. The categories surrounding this theme consisted of issues such as dealing with the patient's physical symptoms and diminishing mental capacity; as the patient's death drew nearer, the caregiver's inability to deny the imminence of the approaching death; and the caregiver feeling overwhelmed by the care requirements and fearing for his/her own physical and emotional health (generally prior to hospice intervention). The following examples highlight this theme:

> Hospice made my life liveable during that time; I was worn out in every way. They came in like saviors at that point.

> I bought a commercial back brace, because when he got to be a dead weight, you know, I'm not a very big person, and of course, he'd lost pretty near 100 pounds, but he wanted me to do most things for him. He had lost his hair; he was a proud man and I know how he felt. And, not always knowing what was happening, especially at night he would get confused, so I had to stay near.

> It is hard to watch them lay there and die. It takes a lot out of you. It's hardest to finally realize there is no getting better.

Well, it was just probably a week before he passed away. I had to go do this [make funeral arrangements]. Of course, he couldn't go with me. I took my Mom with me. But that was the hardest thing I had to do. I've told people; I say, talk about stuff like this with your husband, and do it together, don't wait like I did.

Hospice gave me a book. It tells what to look for so you know the body is shutting down gradually. I could visibly tell he was going down.

Recommendations to facilitate access:

1. Advertise: TV advertising during prime time such as a series of linked ads describing how hospice can help with the burdens of caregiving, e.g., financial arrangements, caregiver support, respite care, and counseling.
2. Help caregivers understand the six month prognosis -- that it can be extended or the contract can be broken if the patient improves.
3. Provide caregivers with education about signs and symptoms of impending death.

Theme 6: Unexpected experiences for caregivers during hospice care.

The following two categories made up theme six:

a. Caregiver social support from hospice in addition to patient care.

b. Caregiver perception of subtle supportive services provided by hospice.

c. Recommendations to facilitate hospice access.

This theme was unanticipated by the investigator, but seemed to be a recurring topic. The caregivers thought they had been supported in ways that went beyond the official services of hospice, and this "extra" was part of what added meaning to their experience of a home death.

The content mentioned in this theme addressed the personal and family growth experiences that developed as a result of utilizing hospice services. The following comments highlight this theme:

> I think the nicest thing was that I had just been in to talk to him and he tried to talk and he said, 'love you,' and a tear went down his cheek. The nurse mentioned that he might not go [die] until I let him go. And I said, ' it is okay, honey, it is okay.' I walked out to the kitchen and when I came back in, he was gone.
>
> It [hospice] was just like a magical experience; that's the only way to put it; emotional, caring, refreshing, everything...everything.
>
> Once we had hospice, then my grandson helped. They showed him how to help grandpa. I really didn't think he could face up to it, but he didn't hesitate one bit. I was so proud of him. I was surprised. I think that's the nicest thing, when a family realizes that, golly, we can do this with a little outside help, you know, for Dad and we didn't think we could. It gives the family a closeness.
>
> We were pleasantly surprised - - the hospice nurse was like a friend visiting. We always looked forward to her visits. She was so natural with us; uplifting and bright.

Recommendations to facilitate access:

1. Former caregivers can volunteer for hospice and share their positive experiences by talking to community groups.
2. Encourage people to mention their favorable experiences with hospice in obituaries.
3. Encourage people to express their appreciation through donations to hospice.
4. Caregivers encouraging their churches to include resource information on hospice through women's or men's groups, such as Knights of Columbus.
5. Male and female bereaved caregivers speaking to both women's and men's groups on the benefits of hospice through community organizations such as Farm Bureau and Rotary.

Additional general recommendations:

1. Encourage insurance companies to advertise hospice--that it is less expensive than hospital care.
2. Mailings (HMOs, hospitals, hospice); newsletters from hospice, including hospice purpose, goals, and profiles on providers of hospice care.
3. Make available to the general public appealing CD ROMs with hospice information that could be utilized in people's homes.
4. Provide home pages on the Internet on hospice services and local agency contacts. Provide past caregiver addresses to contact for one-on-one information.

Discussion

Although the major probes of this study were designed to address access issues, the resulting six themes depicted the key experiences of bereaved loved ones, which included both access issues and the personal experience of participating in hospice care. The hospice experience was clearly much more than access to these participants.

These results suggest that it is nearly impossible for people to go through the hospice experience and then to focus on just one aspect, such as initial access. It is a total and engulfing period of time, in which the objective, such as access, and the subjective, such as feelings and personal growth, are integrated and occur in unison. It is like a story that not only has a beginning (access), but also has both a middle and an end. In a focus group format, such as was used in this study, it was not possible to ask participants to tell only the beginning of their story. They did acknowledge that they were the lucky ones who had utilized hospice. They had hospice help through to the end, and, in most cases, beyond to bereavement care.

This was a small, self-selected sample, which may introduce bias into the study. Self-selected samples may contribute to a pool of participants with a positive hospice experience, while eliminating those with a negative experience. Qualitative research such as this cannot be generalized to a larger population; rather, it can suggest trends. These trends can then later be tested for generalizability through larger projects.

Despite the small sample size and limits to generalizability, this study had a number of strengths. The sequencing of questions worked well for the focus groups. Participants were comfortable with each other by the second meeting and willing to talk more about personal or private issues, which might not have occurred with just one meeting. Participants commented on feeling emotionally supported by this group experience. Although this was not a planned effect of the study, it did make the experience rewarding to the participants. Focus groups have been a natural format in various clinical settings when there is a need to elicit information in a non-threatening, supportive environment. The open-ended and non-leading questions sought responses directly from participants. Further, the descriptive qualitative methodology used was appropriate as there is a paucity in the published literature related to access issues surrounding hospice.

Finally, the categories and themes that emerged may prove useful for the development of continuing education for health providers and agency administrators. For example, further knowledge and insight is warranted related to access barriers and how to help families transition from curative to palliative care. Also, a better understanding of the positive aspects of home death, including bereavement services, could be a more standard element in medical and nursing education. The concepts gleaned from these first-hand reports of bereaved caregivers can help

direct health care providers toward the most effective interventions for both the family and the patient, prior to and during the dying process.

> Hospice care comes out of a very deep commitment to serve life at the very time life is ending... It is about the re-definition of hope and helping people through a very difficult time of their life [13].

References

1. Lair GS. Counseling the terminally ill: Sharing the journey. Washington D.C.: Taylor & Francis, 1996.
2. Hospice Fact Sheet. National Hospice Organization. Arlington, VA, 1996
3. Jones TL. When less is more. Tex Med 1996; 92(1):42-46.
4. Appleton M. Hospice medicine: A different perspective. Am J Hospice Palliat Care 1996; 13(1):7-9 & 49.
5. Gordon AK. Deterrents to access and service for Blacks and Hispanics: The Medicare hospice benefit, health care utilization, and cultural barriers. Hospice J 1995; 10(2):65-83.
6. Harper BC. Report from the National Task Force on access to hospice care by minority groups. Hospice J 1995; 10(2):1-9.
7. Lo B. Improving care near the end of life: Why is it so hard? JAMA 1995; 274(20):1634-1636.
8. Kalish R, Reynolds D. Death and Ethnicity: A Psychocultural Study. Farmingdale, New York: Baywood Publishing, 1976.
9. Mor V, Greer DS, Kastenbaum R. The Hospice Experiment: An Alternative in Terminal Care. In Mor V, Greer DS, Kastenbaum R, eds. The Hospice Experiment. MD: The John Hopkins University Press, 1988.
10. Hospice Care: A Physician's Guide. Michigan Hospice Organization. Lansing, MI, 1996.
11. Emanuel EJ. Cost savings at the end of life. JAMA, 1996; 275(24):1907-14.

12. Krueger. Focus Groups: A practical guide for applied research. Newbury Park, London, New Delhi: Sage Publications, 1988.

13. Hospice care is a point of view, not a place. Oncology News International, 1997;6(6):38.

A Subacute Care Intervention for Short-Stay Breast Cancer Surgery

NURSE CHARTING FORM (REVISED)
Appendix D

Nurse Charting Form - Revised 1998

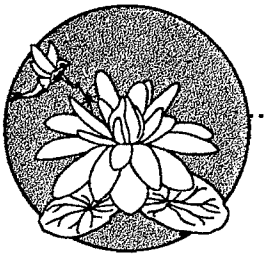
Nursing Care for Breast Cancer
Nurse Charting Form

Topic	Page
Charting diagram	A
Essential Problems & Interventions	1,2
List of visits (Encounter Log)	3-6
Cancer history, meds, comorbids	7
New/Ongoing Patient Problems	
Encounters 2 & 3	8
Encounter 4	9
Symptom Status	10
Assesment and Interventions	
Pain	11-14
Fatigue	15-18
Constipation	19-22
Assessment	
General Status/ Dressing & Wound Exam	23-25
Intervention	
Skin Intergrity/surgery	26-27
Know. Deficit-Dressing Change	28
Know. Deficit-Milk Drain	29
Know. Deficit-Empty Drain	30
Know. Deficit-Record Drainage	31
Assessment/Interventions	
QOL/Review Status	32-33
ROM	34-35
Lymphedema/BSE	36-37
Anxiety	38-41
Consultation	42
Referrals	43

Client_____

ID#_____

Nurse_____



....A New Beginning

Revised 7/98

Nurse Intervener Charting

LOG ENCOUNTER

List of Visits by Patients

CLINICAL

Cancer History, Medications, Comorbids
(finish gathering information)

1. Allergies
2. Medications
3. Comorbids

Symptoms

1. Pain*
2. Nausea
3. Fatigue*
4. Fever
5. Insomnia
6. Diarrhea
7. Constipation*
8. Other

Assessment

1. General Status (Physical)*
2. DRG and Wound Exam*
3. BSE and Lymphedema*
4. Sensation and Fine Motor*
5. Quality of Life*
6. Anxiety*
7. Depression

New/Ongoing Patient Problems

1. ICD Problem Lists

Intervention and Problem Status

1. Problem and Status
2. Interventions

Encounter Screen

1. CPT (primary) Level of Care
2. Time per Visit and Recording

Referrals

1. Patient Service Referrals
2. Nurse's name

*Included in Essential Nursing Protocol- Must be Charted

Essential Nursing Problems and Interventions

VISIT 1 (Intervention Step 2.0)

Problem	*Problem Code*	*ICD*	*Intervention*
Pain			
Pain, acute	2380	611.71	Pain control. . . . . ASSES _3140 Medication. . . . . TEACH 2850 OTC Meds. . . . . PRESC_3120
Fatigue			
Activity intolerance (physical)	1020	780.7	Fatigue . . . . . ASSES _2000 Sleep/rest hygiene . . . . . TEACH _3638
Constipation			
Constipation	1580	564.0	Constipation. . . . . .ASSES _1460 Medications. . . . . TEACH _2850
Incision			
Skin integrity/surgery	2675	879.0	Assess - wound . . . . ASSES _3630 Skin care - wound. . TEACH _3580 Give ed. materials . . TEACH _2220 Infection control. . . . TEACH _2540
Knowledge def., drsg. change	2164	V62.3	Dressing change. . . . . .SKILL _1760 Dressing change - pt . TEACH _3211 Dressing change . . . . .EVAL _1745
Knowledge deficit, milking drain	2144 2144	V62.3 V62.3	Milking drainage tube - patient TEACH _3214 Milk drainage tube. . . . . .EVAL _1735
Knowledge deficit, empty drain	2162 2162	V62.3 V62.3	Empty drain - patient TEACH _3213 Emptying drain. . . . . EVAL _1733
Knowledge deficit, recording drainage	2185 2185	V62.3 V62.3	Recording drainage - patient TEACH _3216 Recording drainage. . . .EVAL _1738 OTC medications. . . . . PRESC _3120
Quality of life			
Alter. QOL	2479	V62.89	Quality of life . . . . . ASSES _3381 Support re individ. . . . . COUNS _3694 Give ed. materials . . . . . TEACH _2220
Anxiety			
Anxiety	1080	309.24	Anxiety . . . . . ASSES _1090 Anxiety management . . . TEACH _1115
Consultation			
Consultation, rept. to dr.	1585	V65.8	Week 1 care report-surgeon Report 8050

Essential Nursing Problems and Interventions, continued

VISIT 2 (Intervention Step 4)

Problem	*Problem Code*	*ICD*	*Intervention*
Pain			
Pain, acute	2380	611.71	Pain control.. . . . . EVAL _3150
Fatigue			
Activity intolerance	1020	780.7	Fatigue. . . . . ..EVAL _2010
Constipation			
Constipation	1580	564.0	Constipation. . . . . EVAL _1470
Incision			
Skin integrity/surgery	2675	879.0	Incision care. . . . . EVAL _2490
Quality of life			
Alter. in QOL	2479	V62.89	Quality of life. . . . . .EVAL _3382 Support group. . . . . REFER _5355
Education (open as new problems)			
Knowledge def., lymphedema	2224	V62.3	Lymphedema prev.. . . TEACH _2725 Give education mat.. . .TEACH _2220 Lymphedema know. . . . EVAL _2727
Knowledge def., BSE	2155	V62.3	Self breast exam . . . . .TEACH _1207 Give ed. Materials . . . TEACH _2220 Self breast exam . . . . . .EVAL _1204
Knowledge def., ROM - effected arm	2146	V62.3	ROM arm . . . . . DEMO _9020 Exercise/ROM . . . . . .TEACH _1840
Give ed materials . . . . TEACH _2220			Exercise/ROM . . . . . EVAL _1870 Functional level (arm) . EVAL _2190
Anxiety			
Anxiety	1080	309.24	Anxiety. . . . . EVAL _1110
Consultation			
Consultation, report to doctor		1585	V65.8
Final care report to surgeon			REPORT _8000

CLIENT ENCOUNTER LOG

Date ____/____/____
Encounter timing: ☐ Phone 1 ☐ Phone 2 ☐ Visit 1 ☐ Visit 2
☐ Between intervention phone ☐ Between intervention visit
☐ Post intervention phone ☐ Post intervention visit
Encounter type: ☐ Client phoned ☐ Nurse phoned ☐ Nurse visited client at home
☐ Nurse spoke to MD ☐ Nurse spoke with other ☐ Family phoned nurse
Interven. Step #: _____ (1, 2, 3, 4 - Use no. with decimal point for between intervention contacts)
Encounter purpose: ☐ Scheduled part of interven. ☐ Follow-up with pt ☐ Planning for pt on pt behalf
☐ Referral ☐ Reschedule appt. ☐ Unschedule appt. ☐ Coordination of services
Who was Involved: ☐ Patient ☐ Caregiver ☐ Patient and Caregiver ☐ Neither
Memo: _____

ENCOUNTER SCREEN and TIME KEEPING

NEXT SCHEDULED ENCOUNTER DATE: _____ as a ☐ Home visit ☐ Phone Call
Current encounter - Site: ☐ Home ☐ Phone
Is Patient: ☐ New ☐ Established **Problem Severity:** (home visit =2, phone call= 1) ____

TIME KEEPING
Direct care (time in minutes) _____ **Record Keeping:** (time in minutes)_____
Coordination of Care: consultations, referrals,(time in minutes)_____
Note: (fill in comments as needed - Example: Record Keeping time reflects time to learn program)

CLIENT ENCOUNTER LOG

Date ____/____/____
Encounter timing: ☐ Phone 1 ☐ Phone 2 ☐ Visit 1 ☐ Visit 2
☐ Between intervention phone ☐ Between intervention visit
☐ Post intervention phone ☐ Post intervention visit
Encounter type: ☐ Client phoned ☐ Nurse phoned ☐ Nurse visited client at home
☐ Nurse spoke to MD ☐ Nurse spoke with other ☐ Family phoned nurse
Interven. Step #: _____ (1, 2, 3, 4 - Use no. with decimal point for between intervention contacts)
Encounter purpose: ☐ Scheduled part of interven. ☐ Follow-up with pt ☐ Planning for pt on pt behalf
☐ Referral ☐ Reschedule appt. ☐ Unschedule appt. ☐ Coordination of services
Who was Involved: ☐ Patient ☐ Caregiver ☐ Patient and Caregiver ☐ Neither
Memo: _____

ENCOUNTER SCREEN and TIME KEEPING

NEXT SCHEDULED ENCOUNTER DATE: _____ as a ☐ Home visit ☐ Phone Call
Current encoun. - Site: ☐ Home ☐ Phone
Is Patient: ☐ New ☐ Established **Problem Severity:** (home visit =2, phone call= 1) ____

TIME KEEPING
Direct care (time in minutes) _____ **Record Keeping**: (time in minutes)_____
Coordination of Care: consultations, referrals,(time in minutes)_____
Note: (fill in comments as needed - Example: Record Keeping time reflects time to learn program)

CLIENT ENCOUNTER LOG

Date ____/____/____
Encounter timing: ☐ Phone 1 ☐ Phone 2 ☐ Visit 1 ☐ Visit 2
☐ Between intervention phone ☐ Between intervention visit
☐ Post intervention phone ☐ Post intervention visit
Encounter type: ☐ Client phoned ☐ Nurse phoned ☐ Nurse visited client at home
☐ Nurse spoke to MD ☐ Nurse spoke with other ☐ Family phoned nurse
Interven. Step #: _____ (1, 2, 3, 4 - Use no. with decimal point for between intervention contacts)
Encounter purpose: ☐ Scheduled part of interven. ☐ Follow-up with pt ☐ Planning for pt on pt behalf
☐ Referral ☐ Reschedule appt. ☐ Unschedule appt. ☐ Coordination of services
Who was Involved: ☐ Patient ☐ Caregiver ☐ Patient and Caregiver ☐ Neither
Memo: _____

ENCOUNTER SCREEN and TIME KEEPING

NEXT SCHEDULED ENCOUNTER DATE: _____ as a ☐ Home visit ☐ Phone Call
Current encounter - Site: ☐ Home ☐ Phone
Is Patient: ☐ New ☐ Established **Problem Severity:** (home visit =2, phone call= 1) ____

TIME KEEPING
Direct care (time in minutes) _____**Record Keeping**: (time in minutes)_____
Coordination of Care: consultations, referrals,(time in minutes)_____
Note: (fill in comments as needed - Example: Record Keeping time reflects time to learn program)

CLIENT ENCOUNTER LOG

Date ____/____/____
Encounter timing: ☐ Phone 1 ☐ Phone 2 ☐ Visit 1 ☐ Visit 2
☐ Between intervention phone ☐ Between intervention visit
☐ Post intervention phone ☐ Post intervention visit
Encounter type: ☐ Client phoned ☐ Nurse phoned ☐ Nurse visited client at home
☐ Nurse spoke to MD ☐ Nurse spoke with other ☐ Family phoned nurse
I Interven. Step #: _____ (1, 2, 3, 4 - Use no. with decimal point for between intervention contacts)
Encounter purpose: ☐ Scheduled part of interven. ☐ Follow-up with pt ☐ Planning for pt on pt behalf
☐ Referral ☐ Reschedule appt. ☐ Unschedule appt. ☐ Coordination of services
Who was Involved: ☐ Patient ☐ Caregiver ☐ Patient and Caregiver ☐ Neither
Memo: _____

ENCOUNTER SCREEN and TIME KEEPING

NEXT SCHEDULED ENCOUNTER DATE: _____ as a ☐ Home visit ☐ Phone Call
Current encoun. - Site: ☐ Home ☐ Phone
Is Patient: ☐ New ☐ Established **Problem Severity:** (home visit =2, phone call= 1) ____

TIME KEEPING
Direct care (time in minutes) _____**Record Keeping**: (time in minutes)_____
Coordination of Care: consultations, referrals,(time in minutes)_____
Note: (fill in comments as needed - Example: Record Keeping time reflects time to learn program)

CLIENT ENCOUNTER LOG

Date ____/____/____
Encounter timing: ☐ Phone 1 ☐ Phone 2 ☐ Visit 1 ☐ Visit 2
☐ Between intervention phone ☐ Between intervention visit
☐ Post intervention phone ☐ Post intervention visit
Encounter type: ☐ Client phoned ☐ Nurse phoned ☐ Nurse visited client at home
☐ Nurse spoke to MD ☐ Nurse spoke with other ☐ Family phoned nurse
Interven. Step #: _____ (1, 2, 3, 4 - Use no. with decimal point for between intervention contacts)
Encounter purpose: ☐ Scheduled part of interven. ☐ Follow-up with pt ☐ Planning for pt on pt behalf
☐ Referral ☐ Reschedule appt. ☐ Unschedule appt. ☐ Coordination of services
Who was Involved: ☐ Patient ☐ Caregiver ☐ Patient and Caregiver ☐ Neither
Memo: _____

ENCOUNTER SCREEN and TIME KEEPING

NEXT SCHEDULED ENCOUNTER DATE: _____ as a ☐ Home visit ☐ Phone Call
Current encounter - Site: ☐ Home ☐ Phone
Is Patient: ☐ New ☐ Established **Problem Severity:** (home visit =2, phone call= 1) ____

TIME KEEPING
Direct care (time in minutes) _____ **Record Keeping**: (time in minutes)_____
Coordination of Care: consultations, referrals,(time in minutes)_____
Note: (fill in comments as needed - Example: Record Keeping time reflects time to learn program)

CLIENT ENCOUNTER LOG

Date ____/____/____
Encounter timing: ☐ Phone 1 ☐ Phone 2 ☐ Visit 1 ☐ Visit 2
☐ Between intervention phone ☐ Between intervention visit
☐ Post intervention phone ☐ Post intervention visit
Encounter type: ☐ Client phoned ☐ Nurse phoned ☐ Nurse visited client at home
☐ Nurse spoke to MD ☐ Nurse spoke with other ☐ Family phoned nurse
I Interven. Step #: ____ (1, 2, 3, 4 - Use no. with decimal point for between intervention contacts)
Encounter purpose: ☐ Scheduled part of interven. ☐ Follow-up with pt ☐ Planning for pt on pt behalf
☐ Referral ☐ Reschedule appt. ☐ Unschedule appt. ☐ Coordination of services
Who was Involved: ☐ Patient ☐ Caregiver ☐ Patient and Caregiver ☐ Neither
Memo: _____

ENCOUNTER SCREEN and TIME KEEPING

NEXT SCHEDULED ENCOUNTER DATE: _____ as a ☐ Home visit ☐ Phone Call
Current encoun. - Site: ☐ Home ☐ Phone
Is Patient: ☐ New ☐ Established **Problem Severity:** (home visit =2, phone call= 1) ____

TIME KEEPING
Direct care (time in minutes) _____ **Record Keeping**: (time in minutes)_____
Coordination of Care: consultations, referrals,(time in minutes)_____
Note: (fill in comments as needed - Example: Record Keeping time reflects time to learn program)

CLIENT ENCOUNTER LOG

Date ____/____/____
Encounter timing: ☐ Phone 1 ☐ Phone 2 ☐ Visit 1 ☐ Visit 2
☐ Between intervention phone ☐ Between intervention visit
☐ Post intervention phone ☐ Post intervention visit
Encounter type: ☐ Client phoned ☐ Nurse phoned ☐ Nurse visited client at home
☐ Nurse spoke to MD ☐ Nurse spoke with other ☐ Family phoned nurse
Interven. Step #: _____ (1, 2, 3, 4 - Use no. with decimal point for between intervention contacts)
Encounter purpose: ☐ Scheduled part of interven. ☐ Follow-up with pt ☐ Planning for pt on pt behalf
☐ Referral ☐ Reschedule appt. ☐ Unschedule appt. ☐ Coordination of services
Who was Involved: ☐ Patient ☐ Caregiver ☐ Patient and Caregiver ☐ Neither
Memo: _____

ENCOUNTER SCREEN and TIME KEEPING

NEXT SCHEDULED ENCOUNTER DATE: _____ as a ☐ Home visit ☐ Phone Call
Current encounter - Site: ☐ Home ☐ Phone
Is Patient: ☐ New ☐ Established **Problem Severity:** (home visit =2, phone call= 1) ____

TIME KEEPING
Direct care (time in minutes) _____ **Record Keeping**: (time in minutes)_____
Coordination of Care: consultations, referrals,(time in minutes)_____
Note: (fill in comments as needed - Example: Record Keeping time reflects time to learn program)

CLIENT ENCOUNTER LOG

Date ____/____/____
Encounter timing: ☐ Phone 1 ☐ Phone 2 ☐ Visit 1 ☐ Visit 2
☐ Between intervention phone ☐ Between intervention visit
☐ Post intervention phone ☐ Post intervention visit
Encounter type: ☐ Client phoned ☐ Nurse phoned ☐ Nurse visited client at home
☐ Nurse spoke to MD ☐ Nurse spoke with other ☐ Family phoned nurse
I Interven. Step #: ____ (1, 2, 3, 4 - Use no. with decimal point for between intervention contacts)
Encounter purpose: ☐ Scheduled part of interven. ☐ Follow-up with pt ☐ Planning for pt on pt behalf
☐ Referral ☐ Reschedule appt. ☐ Unschedule appt. ☐ Coordination of services
Who was Involved: ☐ Patient ☐ Caregiver ☐ Patient and Caregiver ☐ Neither
Memo: _____

ENCOUNTER SCREEN and TIME KEEPING

NEXT SCHEDULED ENCOUNTER DATE: _____ as a ☐ Home visit ☐ Phone Call
Current encoun. - Site: ☐ Home ☐ Phone
Is Patient: ☐ New ☐ Established **Problem Severity:** (home visit =2, phone call= 1) ____

TIME KEEPING
Direct care (time in minutes) _____ **Record Keeping**: (time in minutes)_____
Coordination of Care: consultations, referrals,(time in minutes)_____
Note: (fill in comments as needed - Example: Record Keeping time reflects time to learn program)

CANCER HISTORY, MEDICATIONS, COMORBIDS

Encounter # 2 Date ___/___/___

Hormone Replacement Therapy: ☐ YES (Note on final surgeon report – "RE-EVALUATE") ☐ NO
Allergies: _____

MEDICATIONS	
1.	6.
2.	7.
3.	8.
4.	9.
5.	10.

COMORBIDS (please match medications, by number, with their corresponding comorbids)		
Comorbids	Date Began	Limiting (1 to 5 scale)
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Limiting Scale:
1= no extent at all
2= a small extent
3= some extent
4= a great extent
5= very great extent

NEW/ONGOING PATIENT PROBLEMS

Encounter # 2 Date __/__/__
The following problems must be addressed on Encounter 2, enter any additional problems below.

1. Pain	Problem Code:	2380	ICD Code	611.71
2. Fatigue	Problem Code:	1020	ICD Code:	780.7
3. Constipation	Problem Code:	1580	ICD Code:	564.0
4. Skin Integrity	Problem Code:	2675	ICD Code:	879.0
5 Knowledge deficit, dressing change	Problem Code:	2164	ICD Code:	V62.3.
6. Knowledge deficit, milking drain	Problem Code:	2144	ICD Code:	V62.3
7. Knowledge deficit, empty drain	Problem Code:	2162	ICD Code:	V62.3
8. Knowledge deficit, record drainage	Problem Code:	2185	ICD Code:	V62.3
9. Quality of life	Problem Code:	2479	ICD Code:	V62.89
10. Anxiety	Problem Code:	1080	ICDCode:	309.24
11. Consultation - report to doctor	Problem Code:	1585	ICD Code:	V65.8
12	Problem Code:		ICD Code	
13.	Problem Code:		ICD Code	
14.	Problem Code:		ICD Code	
15.	Problem Code:		ICD Code	

Encounter #___ Date __/__/__
Enter additional problems addressed on this encounter.

1.	Problem Code:	ICD Code:
2.	Problem Code:	ICD Code:
3.	Problem Code:	ICD Code:
4.	Problem Code:	ICD Code:

Encounter #___ Date __/__/__
Enter additional problems addressed on this encounter.

1.	Problem Code:	ICD Code:
2.	Problem Code:	ICD Code:
3.	Problem Code:	ICD Code:
4.	Problem Code:	ICD Code:

NEW/ONGOING PATIENT PROBLEMS

Encounter # 4 Date___/___/___
The following problems must be addressed on Encounter 4, enter any additional problems below.

1.	Pain	Problem Code: 2380	ICD Code	611.71
2.	Fatigue	Problem Code: 1020	ICD Code:	780.7
3.	Constipation	Problem Code: 1580	ICD Code:	564.0
4.	Skin Integrity	Problem Code: 2675	ICD Code:	879.0
5	Knowledge deficit, dressing change	Problem Code: 2164	ICD Code:	V62.3.
6.	Knowledge deficit, milking drain	Problem Code: 2144	ICD Code:	V62.3
7.	Knowledge deficit, empty drain	Problem Code: 2162	ICD Code:	V62.3
8.	Knowledge deficit, record drainage	Problem Code: 2185	ICD Code:	V62.3
9	Quality of life	Problem Code: 2479	ICD Code:	V62.89
10.	Anxiety	Problem Code: 1080	ICDCode:	309.24
11.	Consultation - report to doctor	Problem Code: 1585	ICD Code:	V65.8
12	Education - ROM	Problem Code: 2146	ICD Code	V62.3
13.	Education - BSE	Problem Code: 2155	ICD Code	V62.3
14.	Education - Lymphedema	Problem Code: 2224	ICD Code	V62.3
15.		Problem Code:	ICD Code	
16.		Problem Code:	ICD Code	

Encounter #___ Date ___/___/___
Enter additional problems addressed on this encounter.

1.	Problem Code:	ICD Code:
2.	Problem Code:	ICD Code:
3.	Problem Code:	ICD Code:
4.	Problem Code:	ICD Code:

SYMPTOM STATUS FOR THIS ENCOUNTER

Encounter #2 Date ___/___/___

Choices are: FILL IN (F) - Symptom in nursing protocol, new or changed - fill in the screen
NO PROB (N) - No data to report - Symptom is NOT present
AS LAST (A) - Symptom(s) status is EXACTLY as last assessed

Complete all entries then enter the appropriate symptom panels

Pain F Nausea _____ Fatigue F Fever _____
Insomnia _____ Diarrhea _____ Constipation F Other _____

Depression and Anxiety are entered under the menu option for Assessments

Depression _____ Anxiety F

Encounter #___ Date ___/___/___

Choices are: FILL IN (F) - Symptom in nursing protocol, new or changed - fill in the screen
NO PROB (N) - No data to report - Symptom is NOT present
AS LAST (A) - Symptom(s) status is EXACTLY as last assessed

Complete all entries then enter the appropriate symptom panels

Pain _____ Nausea _____ Fatigue _____ Fever _____
Insomnia _____ Diarrhea _____ Constipation _____ Other _____

Depression and Anxiety are entered under the menu option for Assessments

Depression _____ Anxiety _____

Encounter #___ Date___/___/___

Choices are: **FILL IN (F)** - Symptom in nursing protocol, new or changed - fill in the screen
NO PROB (N) - No data to report - Symptom is NOT present
AS LAST (A) - Symptom(s) status is EXACTLY as last assessed

Complete all entries then enter the appropriate symptom panels

Pain _____ Nausea _____ Fatigue _____ Fever _____
Insomnia _____ Diarrhea _____ Constipation _____ Other _____

Depression and Anxiety are entered under the menu option for Assessments

Depression _____ Anxiety _____

Encounter #___ Date ___/___/___

Choices are: FILL IN (F) - Symptom in nursing protocol, new or changed - fill in the screen
NO PROB (N) - No data to report - Symptom is NOT present
AS LAST (A) - Symptom(s) status is EXACTLY as last assessed

Complete all entries then enter the appropriate symptom panels

Pain _____ Nausea _____ Fatigue _____ Fever _____
Insomnia _____ Diarrhea _____ Constipation _____ Other _____

Depression and Anxiety are entered under the menu option for Assessments

Depression _____ Anxiety _____

Encounter # 4 Date ___/___/___

Choices are: FILL IN (F) - Symptom in nursing protocol, new or changed - fill in the screen
NO PROB (N) - No data to report - Symptom is NOT present
AS LAST (A) - Symptom(s) status is EXACTLY as last assessed

Complete all entries then enter the appropriate symptom panels

Pain F Nausea _____ Fatigue F Fever _____
Insomnia _____ Diarrhea _____ Constipation F Other _____

Depression and Anxiety are entered under the menu option for Assessments

Depression ____ Anxiety F

SYMPTOMS

Encounter # 2 **Date** ___/___/___

Pain: **Date Began** ____/____/____ **Location:**_____ **Radiated to:** _____

Frequency (choose only 1): ☐ intermittent ☐ continuous ☐ unrelenting ☐ patterned

Quality (choose only 1): ☐ WNL ☐ cramping ☐ dull ☐ sharp-stab ☐ burning ☐ aching ☐ throbbing ☐ tender ☐ breakthrough pain

Intensity (1-10 scale) : _____ Max in last 7 days:_____ Tolerable level:_____

Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility___ emotions___ relationships___ usual daily activity___ ability to concentrate___ QOL___

Prescriptive relief: **Non-Prescriptive relief:**

Cause: ☐ activity ☐ disease process ☐ surgery ☐ meds ☐ unknown

Associated symptoms: ☐ agitation ☐ altered cognition ☐ anxiety ☐ constipation ☐ diaphoresis ☐ dizziness ☐ dyspnea ☐ fatigue ☐ insomnia ☐ irritability ☐ loss of concentration ☐ muscle tension ☐ nausea ☐ palpitation ☐ sex disturbance

Response (choose only 1): ☐ resolved ☐ improved ☐ acceptable ☐ unacceptable ☐ worsened

Date ended: _____ **Note:** _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Problem/DX: **Pain** **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 14 days

Goal: Pain will diminish to acceptable level without pain medication. **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable ☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: **Pain control** **ASSES _3140**

1st Evaluation _____ On _____ StopEvaluation _____ On_____
Current visit date Date eval ended

Intervention: **Medication** **TEACH _2850**

1st Evaluation _____ On _____ Stop Evaluation _____ On_____
Current visit date Date eval ended

Intervention: **Meds, OTC** **PRESC_3120**

1st Evaluation _____ On _____ Stop Evaluation _____ On_____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On_____
Current visit date Date eval ended

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

SYMPTOMS

Encounter #___ Date ___/___/___

Pain: Date Began ___/___/___ **Location:**_____ **Radiated to:** _____

Frequency (choose only 1): ☐ intermittent ☐ continuous ☐ unrelenting ☐ patterned

Quality (choose only 1): ☐ WNL ☐ cramping ☐ dull ☐ sharp-stab ☐ burning ☐ aching ☐ throbbing ☐ tender ☐ breakthrough pain

Intensity (1-10 scale) : _____ Max in last 7 days:_____ Tolerable level:_____

Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility___ emotions___ relationships___ usual daily activity___ ability to concentrate___ QOL___

Prescriptive relief: **Non-Prescriptive relief:**

Cause: ☐ activity ☐ disease process ☐ surgery ☐ meds ☐ unknown

Associated symptoms: ☐ agitation ☐ altered cognition ☐ anxiety ☐ constipation ☐ diaphoresis ☐ dizziness ☐ dyspnea ☐ fatigue ☐ insomnia ☐ irritability ☐ loss of concentration ☐ muscle tension ☐ nausea ☐ palpitation ☐ sex disturbance

Response (choose only 1): ☐ resolved ☐ improved ☐ acceptable ☐ unacceptable ☐ worsened

Date ended: _____ **Note:**_____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Problem/DX: Pain **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 14 days

Goal: AS ABOVE **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable ☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: (see guide) _____#_____

1st Evaluation _____ On _____ Stop Evaluation _____ On_____
Current visit date Date eval ended

Intervention: (see guide) _____#_____

1st Evaluation _____ On _____ Stop Evaluation _____ On_____
Current visit date Date eval ended

Intervention: (see guide) _____#_____

1st Evaluation _____ On _____ Stop Evaluation _____ On_____
Current visit date Date eval ended

1st Evaluation

6. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

SYMPTOMS

Encounter # 4 **Date of visit** ___/___/___

Pain: Date Began ___/___/___ **Location:**_____ **Radiated to:** _____

Frequency (choose only 1): ☐ intermittent ☐ continuous ☐ unrelenting ☐ patterned

Quality (choose only 1): ☐ WNL ☐ cramping ☐ dull ☐ sharp-stab ☐ burning ☐ aching ☐ throbbing ☐ tender ☐ breakthrough pain

Intensity (1-10 scale) : _____ Max in last 7 days:_____ Tolerable level:_____

Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility___ emotions___ relationships___ usual daily activity___ ability to concentrate___ QOL___

Prescriptive relief: **Non-Prescriptive relief:**

Cause: ☐ activity ☐ disease process ☐ surgery ☐ meds ☐ unknown

Associated symptoms: ☐ agitation ☐ altered cognition ☐ anxiety ☐ constipation ☐ diaphoresis ☐ dizziness ☐ dyspnea ☐ fatigue ☐ insomnia ☐ irritability ☐ loss of concentration ☐ muscle tension ☐ nausea ☐ palpitation ☐ sex disturbance

Response (choose only 1): ☐ resolved ☐ improved ☐ acceptable ☐ unacceptable ☐ worsened

Date ended: _____**Note:** _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Problem/DX: Pain **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 14 days

Goal: AS ABOVE **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable ☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: **Pain control** **EVAL _3150**

1st Evaluation _____ On _____ Stop Evaluation _____ On_____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

SYMPTOMS

Encounter # ___ **Date** ___/___/___

Pain: Date Began ___/___/___ **Location:**_____ **Radiated to:** _____

Frequency (choose only 1): ☐ intermittent ☐ continuous ☐ unrelenting ☐ patterned

Quality (choose only 1): ☐ WNL ☐ cramping ☐ dull ☐ sharp-stab ☐ burning ☐ aching ☐ throbbing ☐ tender ☐ breakthrough pain

Intensity (1-10 scale) : _____ Max in last 7 days:_____ Tolerable level:_____

Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility___ emotions___ relationships___ usual daily activity___ ability to concentrate___ QOL___

Prescriptive relief: **Non-Prescriptive relief:**

Cause: ☐ activity ☐ disease process ☐ surgery ☐ meds ☐ unknown

Associated symptoms: ☐ agitation ☐ altered cognition ☐ anxiety ☐ constipation ☐ diaphoresis ☐ dizziness ☐ dyspnea ☐ fatigue ☐ insomnia ☐ irritability ☐ loss of concentration ☐ muscle tension ☐ nausea ☐ palpitation ☐ sex disturbance

Response (choose only 1): ☐ resolved ☐ improved ☐ acceptable ☐ unacceptable ☐ worsened

Date ended: _____ **Note:** _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Encounter # ___ **Date** ___/___/___

Problem/DX: Pain **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 14 days

Goal: AS ABOVE **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable ☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ #_____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

SYMPTOMS

Encounter # 2 Date___/___/___

Fatigue: Date Began: ___/___/___

Frequency (choose only 1): ☐ intermittent ☐ continuous ☐ unrelenting ☐ patterned ☐ subsided

Intensity (1-10 scale):_____ Max in last 7 days:_____ Tolerable level:___

Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility__ emotions__ relationships___ usual daily activity___ ability to concentrate___ QOL___

Prescriptive relief: **Non-Prescriptive relief:**

Cause (choose only 2): ☐ activity ☐ anemia ☐ anxiety ☐ depression ☐ diarrhea ☐ disease process ☐ infection ☐ insomnia ☐ meds ☐ nausea ☐ nutrition deficiency ☐ pain ☐ emotions ☐ stress ☐ surgery ☐ treatment ☐ unknown

Associated Symptoms (choose only 2): ☐ activity intolerance ☐ anemia ☐ anorexia ☐ anxiety ☐ depression ☐ diarrhea ☐ dizziness ☐ dyspnea ☐ irritability ☐ loss of concentration ☐ nausea/vomiting ☐ pain ☐ palpitation ☐ sweating ☐ unknown ☐ weight change

Response (choose only 1): ☐ resolved ☐ improved ☐ acceptable ☐ unacceptable ☐ worsened

Date ended:_____ **Note:** _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Problem/DX: Fatigue **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 14 days

Goal: Fatigue will diminish to acceptable level. **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable ☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: **Fatigue** **ASSES _2000**

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: **Sleep/rest hygiene** **TEACH _3638**

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

1st Evaluation
1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals
1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

SYMPTOMS

Encounter #____ Date___/___/___

Fatigue: Date Began: ____/____/____

Frequency (choose only 1): ☐ intermittent ☐ continuous ☐ unrelenting ☐ patterned ☐ subsided

Intensity (1-10 scale):_____ Max in last 7 days:_____ Tolerable level:____

Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility__ emotions___ relationships___ usual daily activity___ ability to concentrate___ QOL___

Prescriptive relief: **Non-Prescriptive relief:**

Cause (choose only 2): ☐ activity ☐ anemia ☐ anxiety ☐ depression ☐ diarrhea ☐ disease process ☐ infection ☐ insomnia ☐ meds ☐ nausea ☐ nutrition deficiency ☐ pain ☐ emotions ☐ stress ☐ surgery ☐ treatment ☐ unknown

Associated Symptoms (choose only 2): ☐ activity intolerance ☐ anemia ☐ anorexia ☐ anxiety ☐ depression ☐ diarrhea ☐ dizziness ☐ dyspnea ☐ irritability ☐ loss of concentration ☐ nausea/vomiting ☐ pain ☐ palpitation ☐ sweating ☐ unknown ☐ weight change

Response (choose only 1): ☐ resolved ☐ improved ☐ acceptable ☐ unacceptable ☐ worsened

Date ended:_____**Note:** _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Problem/DX: **Fatigue** **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 14 days

Goal: AS ABOVE **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable ☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

SYMPTOMS

Encounter # 4 Date ___/___/___

Fatigue: Date Began: ___/___/___

Frequency (choose only 1): ☐ intermittent ☐ continuous ☐ unrelenting ☐ patterned ☐ subsided

Intensity (1-10 scale):_____ Max in last 7 days:_____ Tolerable level:____

Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility__
emotions___ relationships___ usual daily activity___ ability to concentrate___ QOL___

Prescriptive relief: **Non-Prescriptive relief:**

Cause (choose only 2): ☐ activity ☐ anemia ☐ anxiety ☐ depression ☐ diarrhea
☐ disease process ☐ infection ☐ insomnia ☐ meds ☐ nausea ☐ nutrition deficiency
☐ pain ☐ emotions ☐ stress ☐ surgery ☐ treatment ☐ unknown

Associated Symptoms (choose only 2): ☐ activity intolerance ☐ anemia ☐ anorexia ☐ anxiety
☐ depression ☐ diarrhea ☐ dizziness ☐ dyspnea ☐ irritability ☐ loss of concentration
☐ nausea/vomiting ☐ pain ☐ palpitation ☐ sweating ☐ unknown ☐ weight change

Response (choose only 1): ☐ resolved ☐ improved ☐ acceptable ☐ unacceptable ☐ worsened

Date ended:_____**Note:** _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Problem/DX: Fatigue **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 14 days

Goal: AS ABOVE **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable
☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: **Fatigue** **EVAL _2010**

1st Evaluation _____ On _____ Stop Evaluation _____ On_____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On_____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On_____
Current visit date Date eval ended

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

SYMPTOMS

Encounter # ___ Date___/___/___

Fatigue: Date Began: ___/___/___

Frequency (choose only 1): ☐ intermittent ☐ continuous ☐ unrelenting ☐ patterned ☐ subsided

Intensity (1-10 scale):_____ Max in last 7 days:_____ Tolerable level:____

Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility__
emotions___ relationships___ usual daily activity___ ability to concentrate___ QOL___

Prescriptive relief: **Non-Prescriptive relief:**

Cause (choose only 2): ☐ activity ☐ anemia ☐ anxiety ☐ depression ☐ diarrhea
☐ disease process ☐ infection ☐ insomnia ☐ meds ☐ nausea ☐ nutrition deficiency
☐ pain ☐ emotions ☐ stress ☐ surgery ☐ treatment ☐ unknown

Associated Symptoms (choose only 2): ☐ activity intolerance ☐ anemia ☐ anorexia ☐ anxiety
☐ depression ☐ diarrhea ☐ dizziness ☐ dyspnea ☐ irritability ☐ loss of concentration
☐ nausea/vomiting ☐ pain ☐ palpitation ☐ sweating ☐ unknown ☐ weight change

Response (choose only 1): ☐ resolved ☐ improved ☐ acceptable ☐ unacceptable ☐ worsened

Date ended:_____**Note:** _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Problem/DX: Fatigue **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date**: 14 days

Goal: AS ABOVE **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable
☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On_____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On_____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On_____
Current visit date Date eval ended

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

SYMPTOMS

Encounter # 2 Date ___/___/____

Constipation : Date Began ___/___/____

Frequency (choose only 1): ☐ no change ☐ mild ☐ moderate ☐ severe ☐ Ileus (>96 hours)
 # Bowel Movements in last week: _____
Pattern (choose only 1): ☐ intermittent ☐ continuous ☐ unrelenting ☐ patterned
Character (choose only 1):☐WNL ☐Hard-Dry ☐Loose ☐Soft ☐Liquid ☐Intermittent Diarrhea/Constip
Color (choose only 1): ☐ WNL ☐ tarry ☐ pale ☐ yellow ☐ green ☐ black ☐ frank blood
Intensity (1-10 scale):_____ Max in last 7 days:_____ Tolerable level:____
Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility___
emotions___ usual daily activity___ QOL___
Prescriptive relief: **Non-Prescriptive relief:**
Cause:☐ change in diet ☐ decreased mobility ☐ dehydration ☐ opiate use ☐ other med ☐ unknown
Associated Symptoms:☐ abdom. distention ☐ abdom. pain ☐ anorexia ☐ cramping ☐ depression
☐ emesis ☐ nausea ☐ pain ☐ rect. fullness ☐ unknown
Response (choose only 1): ☐ resolved ☐ improved ☐ acceptable ☐ unacceptable ☐ worsened
Date ended:_____ Note _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Problem/DX: Constipation **Ca Related?** ☐ Yes ☐ No
Entry Date: (Date problem first noted) _____ **Goal Target Date:** 4 days
Goal: Patient will resume normal bowel habits. **Was goal met?** ☐ Yes ☐ No
Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable
☐ Symptom stable/unacceptable ☐ Worsened
Status Date: (visit date): _____
Evaluation: (see guide) _____
ALL INTERVENTIONS FOR THIS PROBLEM
Intervention: **Constipation** **ASSES _1460**

1st Evaluation _____ On _____ Stop Evaluation _____ On_____
Current visit date Date eval ended

Intervention: **Medication** **TEACH _2850**

1st Evaluation _____ On _____ Stop Evaluation _____ On_____
Current visit date Date eval ended

Intervention: **OTC medications** **PRESC_3120**

1st Evaluation _____ On _____ Stop Evaluation _____ On_____
Current visit date Date eval ended

1st Evaluation
1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals
1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

SYMPTOMS

Encounter # ___ Date___/___/___

Constipation: Date Began ___/___/_____

Frequency (choose only 1): ☐ no change ☐ mild ☐ moderate ☐ severe ☐ Ileus (>96 hours)

 # Bowel Movements in last week: _____

Pattern (choose only 1): ☐ intermittent ☐ continuous ☐ unrelenting ☐ patterned

Character (choose only 1):☐WNL ☐Hard-Dry ☐Loose ☐Soft ☐Liquid ☐Intermittent Diarrhea/Constip

Color (choose only 1): ☐ WNL ☐ tarry ☐ pale ☐ yellow ☐ green ☐ black ☐ frank blood

Intensity (1-10 scale):_____ Max in last 7 days:_____ Tolerable level:____

Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility___ emotions___ usual daily activity___ QOL___

Prescriptive relief: **Non-Prescriptive relief:**

Cause:☐ change in diet ☐ decreased mobility ☐ dehydration ☐ opiate use ☐ other med ☐ unknown

Associated Symptoms:☐ abdom. distention ☐ abdom. pain ☐ anorexia ☐ cramping ☐ depression ☐ emesis ☐ nausea ☐ pain ☐ rect. fullness ☐ unknown

Response (choose only 1): ☐ resolved ☐ improved ☐ acceptable ☐ unacceptable ☐ worsened

Date ended:_____ Note _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Problem/DX: Constipation **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 4 days

Goal: AS ABOVE **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable ☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

SYMPTOMS

Encounter # 4 Date ___/___/___

Constipation: Date Began ____/____/_____

Frequency (choose only 1): ☐ no change ☐ mild ☐ moderate ☐ severe ☐ Ileus (>96 hours)

 # Bowel Movements in last week: _____

Pattern (choose only 1): ☐ intermittent ☐ continuous ☐ unrelenting ☐ patterned

Character (choose only 1): ☐WNL ☐Hard-Dry ☐Loose ☐Soft ☐Liquid ☐Intermittent Diarrhea/Constip

Color (choose only 1): ☐ WNL ☐ tarry ☐ pale ☐ yellow ☐ green ☐ black ☐ frank blood

Intensity (1-10 scale):_____ Max in last 7 days:_____ Tolerable level:____

Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility___

emotions___ usual daily activity___ QOL___

Prescriptive relief: **Non-Prescriptive relief:**

Cause: ☐ change in diet ☐ decreased mobility ☐ dehydration ☐ opiate use ☐ other med ☐ unknown

Associated Symptoms: ☐ abdom. distention ☐ abdom. pain ☐ anorexia ☐ cramping ☐ depression ☐ emesis ☐ nausea ☐ pain ☐ rect. fullness ☐ unknown

Response (choose only 1): ☐ resolved ☐ improved ☐ acceptable ☐ unacceptable ☐ worsened

Date ended:_____ **Note** _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Problem/DX: Constipation **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 4 days

Goal: AS ABOVE **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable ☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: **Constipation** **EVAL _1470**

1st Evaluation _____ On _____ Stop Evaluation _____ On_____

Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On_____

Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On_____

Current visit date Date eval ended

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

SYMPTOMS

Encounter # ___ Date ___/___/___

Constipation: Date Began ____/____/_____

Frequency (choose only 1): ☐ no change ☐ mild ☐ moderate ☐ severe ☐ Ileus (>96 hours)

 # Bowel Movements in last week: _____

Pattern (choose only 1): ☐ intermittent ☐ continuous ☐ unrelenting ☐ patterned

Character (choose only 1):☐WNL ☐Hard-Dry ☐Loose ☐Soft ☐Liquid ☐Intermittent Diarrhea/Constip

Color (choose only 1): ☐ WNL ☐ tarry ☐ pale ☐ yellow ☐ green ☐ black ☐ frank blood

Intensity (1-10 scale):_____ Max in last 7 days:_____ Tolerable level:____

Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility___
emotions___ usual daily activity___ QOL___

Prescriptive relief: **Non-Prescriptive relief:**

Cause:☐ change in diet ☐ decreased mobility ☐ dehydration ☐ opiate use ☐ other med ☐ unknown

Associated Symptoms:☐ abdom. distention ☐ abdom. pain ☐ anorexia ☐ cramping ☐ depression
☐ emesis ☐ nausea ☐ pain ☐ rect. fullness ☐ unknown

Response (choose only 1): ☐ resolved ☐ improved ☐ acceptable ☐ unacceptable ☐ worsened

Date ended:_____ Note _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Problem/DX: Constipation **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 4 days

Goal: AS ABOVE **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable
☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On_____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On_____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On_____
Current visit date Date eval ended

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

ASSESSMENT

GENERAL STATUS (PHYSICAL) Encounter #2 Date ___/___/___

Weight:_____ **Usual Weight:**_____ **Height:**_____
Systolic:_____ **Diastolic:**_____ **Temp:**_____ **Respiration:**_____ **Pulse:**____
Orthostasis ☐ Yes ☐ No
Hearing (choose only 1): ☐ WNL ☐ HOH ☐ Aid ☐ Deaf ☐ Recent Change
Vision (choose only 1): ☐ WNL ☐ No Recent Chang ☐ Glasses
☐ Blind Rt ☐ Blind Lt ☐Blind both
Intake (choose only 1): ☐ WNL ☐ Calorie Deficient ☐ Fluid Deficient
Skin (choose only1): ☐ WNL ☐ Pale ☐ White ☐ Brown
☐ Reddened ☐ Cyanotic ☐ Jaundiced

DRESSING & WOUND EXAM

Are supplies available? ☐ Y ☐ N
Can pt change dressing? (choose only 1): ☐ Y ☐ N ☐ Needs help
Can pt drain tubes? (choose only 1): ☐ Y ☐ N ☐ Needs help
Can pt strip tubing? (check one 1): ☐ Y ☐ N ☐ Needs help
Incision area (draw incision on paper form) Side: ☐ Left ☐ Right ☐ Both ___
Edges (choose only 1): Well approx.__ Gaping__ Dehiscence__ Size ____cm
Dressing changed within: ☐ last hour ☐ last 3 hrs ☐ last 6 hrs ☐ last 12 hrs ☐ last 24 hrs
Drainage appearance: ☐ Serous ☐ Sero-Sang ☐ Sanguineous ☐ Purulent ☐ Clear ☐ None
Secretion consistency: ☐ thin & flowing ☐ thin with tissue/coag ☐ thick & pasty ☐None
Stain size_____cm
Is the incision area <u>extremely</u>: ☐ warm ☐ red ☐ swollen ☐ tender
Hematoma: ☐ None ☐ less than 1 cm ☐ less than 2 cm ☐ less than 4 cm ☐ over 4cm__
Seroma (elevation): ☐ None ☐ minimal (≥.05cm) ☐ mild (≥1cm) ☐ moderate (≥1.5cm)
☐ marked (>1.5cm) ☐ Diameter in cm _____
Closed Drainage
Amount: ☐ unknown ☐ none ☐ < 30 cc ☐ 30-59 cc ☐ 60-99 cc ☐ > 100 cc ☐ >> 100 cc
Appearance: ☐ Serous ☐ Sero-Sang ☐ Sanguineous ☐ Purulent ☐ Clear ☐ None ☐ Drain out
Consistency: ☐ thin & flowing ☐ thin with tissue/coag ☐ thick & pasty ☐ none
Tube clog? ☐ Yes ☐ No

HANDOUTS FIRST VISIT: Drainage Chart, Resource List, ROM booklet

ASSESSMENT

GENERAL STATUS (PHYSICAL) Encounter #___ Date __/__/__

Systolic:_____ **Diastolic:**_____ **Temp:**_____ **Respiration:**_____ **Pulse:**____

DRESSING & WOUND EXAM

Are supplies available? ☐ Y ☐ N
Can pt change dressing? (choose only 1): ☐ Y ☐ N ☐ Needs help
Can pt drain tubes? (choose only 1): ☐ Y ☐ N ☐ Needs help
Can pt strip tubing? (check one 1): ☐ Y ☐ N ☐ Needs help
Incision area (draw incision on paper form) Side: ☐ Left ☐ Right ☐ Both ___
Edges (choose only 1): Well approx.__ Gaping__ Dehiscence__ Size ____cm
Dressing changed within ☐ last hour ☐ last 3 hrs ☐ last 6 hrs ☐ last 12 hrs ☐ last 24 hrs
Drainage appearance: ☐ Serous ☐ Sero-Sang ☐ Sanguineous ☐ Purulent ☐ Clear ☐ None
Secretion consistency: ☐ thin & flowing ☐ thin with tissue/coag ☐ thick & pasty ☐None
Stain size_____cm
Is the incision area <u>extremely</u>: ☐ warm ☐ red ☐ swollen ☐ tender
Hematoma: ☐ None ☐ less than 1 cm ☐ less than 2 cm ☐ less than 4 cm ☐ over 4cm__
Seroma (elevation): ☐ None ☐ minimal (≥.05cm) ☐ mild (≥1cm) ☐ moderate (≥1.5cm)
☐ marked (>1.5cm) ☐ Diameter in cm _____
Closed Drainage
Amount: ☐ unknown ☐ none ☐ < 30 cc ☐ 30-59 cc ☐ 60-99 cc ☐ > 100 cc ☐ >> 100 cc
Appearance: ☐ Serous ☐ Sero-Sang ☐ Sanguineous ☐ Purulent ☐ Clear ☐ None ☐ Drain out
Consistency: ☐ thin & flowing ☐ thin with tissue/coag ☐ thick & pasty ☐ none
Tube clog? ☐ Yes ☐ No

ASSESSMENT

GENERAL STATUS (PHYSICAL) Encounter #___ Date __/__/__

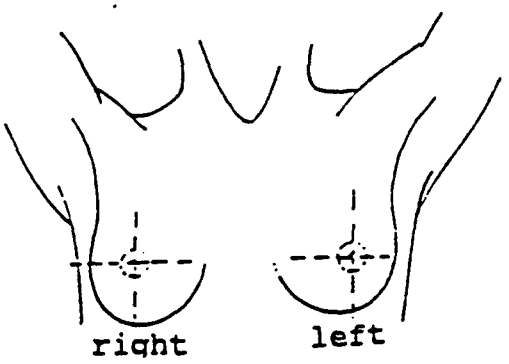
Systolic:_____ **Diastolic:**_____ **Temp:**_____ **Respiration:**_____ **Pulse:**____

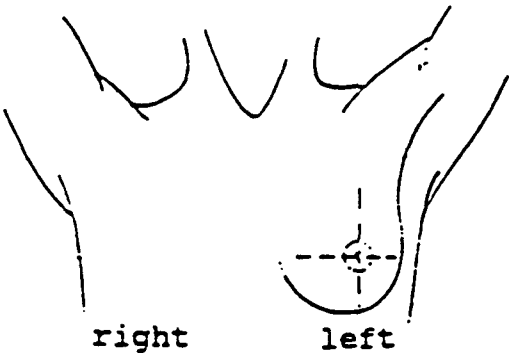
DRESSING & WOUND EXAM

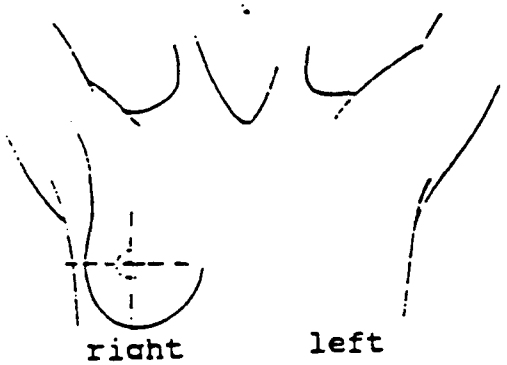
Are supplies available? ☐ Y ☐ N
Can pt change dressing? (choose only 1): ☐ Y ☐ N ☐ Needs help
Can pt drain tube? (choose only 1): ☐ Y ☐ N ☐ Needs help
Can pt strip tubing? (check one 1): ☐ Y ☐ N ☐ Needs help
Incision area (draw incision on paper form) Side: ☐ Left ☐ Right ☐ Both ___
Edges (choose only 1): Well approx.__ Gaping__ Dehiscence__ Size ____cm
Dressing changed within ☐ last hour ☐ last 3 hrs ☐ last 6 hrs ☐ last 12 hrs ☐ last 24 hrs
Drainage appearance: ☐ Serous ☐ Sero-Sang ☐ Sanguineous ☐ Purulent ☐ Clear ☐ None
Secretion consistency: ☐ thin & flowing ☐ thin with tissue/coag ☐ thick & pasty ☐None
Stain size_____cm
Is the incision area extremely: ☐ warm ☐ red ☐ swollen ☐ tender
Hematoma: ☐ None ☐ less than 1 cm ☐ less than 2 cm ☐ less than 4 cm ☐ over 4cm__
Seroma (elevation): ☐ None ☐ minimal (≥.05cm) ☐ mild (≥1cm) ☐ moderate (≥1.5cm)
☐ marked (>1.5cm) ☐ Diameter in cm _____
Closed Drainage
Amount: ☐ unknown ☐ none ☐ < 30 cc ☐ 30-59 cc ☐ 60-99 cc ☐ > 100 cc ☐ >> 100 cc
Appearance: ☐ Serous ☐ Sero-Sang ☐ Sanguineous ☐ Purulent ☐ Clear ☐ None ☐ Drain out
Consistency: ☐ thin & flowing ☐ thin with tissue/coag ☐ thick & pasty ☐ none
Tube clog? ☐ Yes ☐ No

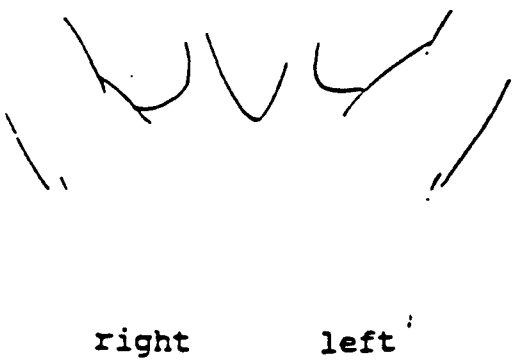
SURGICAL SITES CHART

Name _____ ID# _____ Date ___/___/___ Log # _____ Encounter # _____









DATE	TOTAL DRAINAGE IN 24 HRS

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Encounter #2

Problem/DX: Skin integrity **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 4 days

Goal: Incision well approximated; no signs or symptoms of infection. **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable ☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: **Skin care - wound** **ASSES _3630**

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: **Skin care - wound** **TEACH _3580**

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: **Infection control** **TEACH _2540**

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: **Give ed. materials** **TEACH _2220**

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Encounter # 4

Problem/DX: Skin Integrity **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 4 days

Goal: AS ABOVE **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable
☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: **Incision Care** **EVAL _2490**

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Encounter #2

Problem/DX: Knowledge deficit, dressing change **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 4 days

Goal: Patient or Caregiver will independently change dressing. **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable
☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: **Dressing change** **SKILL _1760**

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: **Dressing change - pt** **TEACH -3211**

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: **EVAL _1745**

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Encounter # 4

Problem/DX: Knowledge Deficit, Dressing Change **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 4 days

Goal: AS ABOVE **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable
☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

1st Evaluation
1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals
1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Encounter #2

Problem/DX: Knowledge deficit - milk drain **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 4 days

Goal: Patient or caregiver will independently milk drain. **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable ☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: **Milk drainage tube - pt** **TEACH _3214**

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Intervention: **Milk drain** **EVAL _1735**

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Encounter # 4

Problem/DX: Knowledge deficit - milk drain **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 4 days

Goal: AS ABOVE **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable ☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Encounter #2

Problem/DX: Knowledge deficit - empty drain **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 4 days

Goal: Patient or caregiver will independently empty drain. **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable
☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: **Empty drain - pt** **TEACH _3213**

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: **Empty drain** **EVAL _1733**

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Encounter #4

Problem/DX: Knowledge deficit - empty drain **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 4 days

Goal: AS ABOVE **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable
☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

1st Evaluation
1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals
1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Encounter #2

Problem/DX: Knowledge deficit - record drainage **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 4 days

Goal: Patient or caregiver will accurately record drainage. **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable
☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: **Recording drainage - pt** **TEACH _3216**

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: **Record drainage** **EVAL _1738**

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Encounter # 4

Problem/DX: Knowledge deficit - record drainage **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 4 days

Goal: AS ABOVE **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable
☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

1st Evaluation
1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals
1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

ASSESSMENT

QUALITY OF LIFE/ REVIEW STATUS

Encounter #2 **Date** __/__/__

Was patient's overall physical well-being reviewed? ☐Yes ☐ No

Did you review patient's social/family well-being, e.g. communication with partner, family adjustments? ☐ Yes ☐ No

Reviewed relationships and access to Mds/Health professionals? ☐ Yes ☐ No

Reviewed overall emotional coping status & skills? ☐ Yes ☐ No

Reviewed functional status - work, life enjoyment? ☐ Yes ☐ No

Reviewed self-perception, body image, coping with stressors? ☐ Yes ☐ No

Note:

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Encounter #2

Problem/DX: Quality of life **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 14 days

Goal: QOL will progress toward pre-surgical level. **Was goal met?** ☐ Yes ☐ No

Problem Status ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable ☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: Quality of life **ASSES _3381**

1st Evaluation _____ On _____ Stop Evaluation _____ On _____

Current visit date Date eval ended

Intervention: Give educational materials **TEACH _2220**

1st Evaluation _____ On _____ Stop Evaluation _____ On _____

Current visit date Date eval ended

Intervention: Support re individual **COUNS _3694**

1st Evaluation _____ On _____ Stop Evaluation _____ On _____

Current visit date Date eval ended

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-complia compliant

QUALITY OF LIFE/ REVIEW STATUS

Encounter # 4 Date __/__/__

Was patient's overall physical well-being reviewed? ☐Yes ☐ No

Did you review patient's social/family well-being, e.g. communication with partner, family adjustments? ☐ Yes ☐ No

Reviewed relationships and access to Mds/Health professionals? ☐ Yes ☐ No

Reviewed overall emotional coping status & skills? ☐ Yes ☐ No

Reviewed functional status - work, life enjoyment? ☐ Yes ☐ No

Reviewed self-perception, body image, coping with stressors? ☐ Yes ☐ No

Note:

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Encounter # 4

Problem/DX: Quality of life **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 14 days

Goal: AS ABOVE **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable ☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: Quality of life **EVAL _3382**

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Intervention: **Support group** **REFER _5355**

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

RANGE OF MOTION

Encounter #4 **Date** __/__/__

Surgical Side: ☐ Left ☐ Right ☐ Both

Can patient lift affected arm:

Extent patient can lift affected arm	Right	Left
1. Not at all		
2. Very little		
3. About half		
4. Near fully		
5. Fully		

Pins and needles sensation in arm: ☐always ☐ most of the time ☐ some time ☐ never

Return of Pre-surgery sensation in arm: ☐ completely ☐ mostly ☐ partially ☐ not at all

Tightness of chest wall: ☐ always ☐ most of the time ☐ sometime ☐ never

Using the hand on the surgical side, is patient <u>now able</u> to:

Pick up a nickel? ☐ always able ☐ usually ☐ sometimes ☐ rarely ☐ unable

Touch thumb to each finger? ☐ always able ☐ usually ☐ sometimes ☐ rarely ☐ unable

Pre-surgery, with the hand on the surgical side, was patient able to:

Pick up a nickel? ☐ always able ☐ usually ☐ sometimes ☐ rarely ☐ unable

Touch thumb to each finger? ☐ always able ☐ usually ☐ sometimes ☐ rarely ☐ unable

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Encounter #4

Problem/DX: Knowledge deficit - Range of motion

Ca Related? ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date**: (see guidelines) 14 days

Goal: Patient will demonstrate ROM exercises; ROM will progress toward pre-surgical level.

Was goal met? ☐ Yes☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable ☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: **Range of motion, arm** **DEMO _9020**

1st Evaluation_____ On _____ Stop Evaluation _____On_____

Current visit date Date eval ended

Intervention: **EX/Range of motion** **TEACH _1870**

1st Evaluation _____ On _____ Stop Evaluation _____ On _____

Current visit date Date eval ended

Intervention: **Functional level, arm** **EVAL _2190**

1st Evaluation _____ On _____ Stop Evaluation _____On _____

Current visit date Date eval ended

Intervention: **Give ed. materials** **TEACH _2220**

1st Evaluation _____ On _____ Stop Evaluation _____On _____

Current visit date Date eval ended

Intervention: **Exercise/ROM** **EVAL _1840**

1st Evaluation _____ On _____ Stop Evaluation _____ On _____

Current visit date Date eval ended

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

ASSESSMENT

BREAST SELF-EXAM

Encounter # 4 Date ___/___/___

Can patient verbalize/demonstrate:

Flat finger technique:	☐ Yes	☐ No	☐ Needs Help
Circle method to cover breast:	☐ Yes	☐ No	☐ Needs Help
Correct hand to use:	☐ Yes	☐ No	☐ Needs Help
Correct time for self-exam:	☐ Yes	☐ No	☐ Needs Help
Need to check for lumps/knots:	☐ Yes	☐ No	☐ Needs Help
Method of expressing fluid:	☐ Yes	☐ No	☐ Needs Help

LYMPHEDEMA PREVENTION

Node removal effects:	☐ Yes	☐ No	☐ Needs Help
Arm elevation/fist squeezing technique:	☐ Yes	☐ No	☐ Needs Help
Strategies to prevent skin breaks:	☐ Yes	☐ No	☐ Needs Help
Ways to avoid squeezing pressure on arm:	☐ Yes	☐ No	☐ Needs Help

Is Phantom Breast sensation present: ☐ Always ☐ Most of the time ☐ Sometimes ☐ Never

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Encounter #4

Problem/DX: Knowledge deficit - Breast self exam **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 14 days

Goal: Patient will demonstrate or verbalize BSE technique. **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable
☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: **Self breast exam** **TEACH _1207**

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: **Give ed. Materials** **TEACH _2220**

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: **Self breast exam** **EVAL _1204**

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

Encounter #4

Problem/DX: Knowledge deficit - lymphedema **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 14 days

Goal: Client will verbalize understanding of lymphedema prevention and effects. **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable ☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: **Lymphedema prevention** **TEACH _2725**

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: **Give educational material** **TEACH _2220**

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: **Lymphedema knowledge** **EVAL _2727**

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

ASSESSMENT

Encounter # 2

Anxiety **Date Began:** ____/____/____ **On anti-anxiety medication now:** ☐ Yes ☐ No
Frequency (choose only 1): ☐ Intermittent ☐ continuous ☐ unrelenting ☐ patterned ☐ subsided
Intensity: Now: ☐ None ☐ Mild ☐ Moderate ☐ Severe
Max in last 7 days: ☐ None ☐ Mild ☐ Moderate ☐ Severe
Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility___
emotions ___relationships___ usual daily activity___ ability to concentrate___ QOL___
Prescriptive relief: ☐ yes ☐ no **Non-prescriptive relief:** ☐ yes ☐ no
Cause: (choose only 1)☐ cancer diagnosis ☐ anticipation of future cancer tx (surgery, RT, chemo)
☐ disease process ☐ node status ☐ fear ☐ hyperthyroid ☐ lifestyle ☐ impact on self/family
☐ changing relationship ☐ ineffective coping ☐ role changes
Clinical markers: Motor: ☐ tension ☐ trembling ☐ shakiness ☐ restlessness
☐ sighing ☐ respiration ☐ unable to relax ☐ pressured speech
Autonomic: (choose only 1)☐sweating ☐ tachycardia ☐ tachypnea ☐ cold clammy hand
☐ dry mouth ☐hot/cold spells ☐ dizziness ☐ parenthesis ☐ GI distress
Mood: ☐ irritable ☐ apprehensive ☐ anticipating doom ☐ general fearfulness
Hyperactivity: ☐Diff. concentrating ☐ trouble sleeping ☐ interim sleep
☐ unrestful sleep ☐fatigue on waking
Date ended: _____ **Note** _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Encounter # 2

Problem/DX: **Anxiety** **Ca Related?** ☐ Yes ☐ No
Entry Date: (Date problem first noted) _____ **Goal Target Date:** 14 days
Goal: Anxiety will diminish to acceptable level. **Was goal met?** ☐ Yes ☐ No
Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable
☐ Symptom stable/unacceptable ☐ Worsened
Status Date: (visit date): _____
Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: **Anxiety** **ASSES _1090**

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Intervention: **Anxiety Management** **TEACH _1115**

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

1st Evaluation
1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals
1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

ASSESSMENT

Encounter # ___

Anxiety **Date Began:** ___/___/___ **On anti-anxiety medication now:** ☐ Yes ☐ No

Frequency (choose only 1): ☐ Intermittent ☐ continuous ☐ unrelenting ☐ patterned ☐ Subsided

Intensity: Now: ☐ None ☐ Mild ☐ Moderate ☐ Severe

Max in last 7 days: ☐ None ☐ Mild ☐ Moderate ☐ Severe

Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility___ emotions___ relationships___ usual daily activity___ ability to concentrate___ QOL___

Prescriptive relief: ☐ yes ☐ no **Non-prescriptive relief:** ☐ yes ☐ no

Cause: (choose only 1)☐ cancer diagnosis ☐ anticipation of future cancer tx (surgery, RT, chemo) ☐ disease process ☐ node status ☐ fear ☐ hyperthyroid ☐ lifestyle ☐ impact on self/family ☐ changing relationship ☐ ineffective coping ☐ role changes

Clinical markers: Motor: ☐ tension ☐ trembling ☐ shakiness ☐ restlessness ☐ sighing ☐ respiration ☐ unable to relax ☐ pressured speech

Autonomic: (choose only 1)☐sweating ☐ tachycardia ☐ tachypnea ☐ cold clammy hand ☐ dry mouth ☐hot/cold spells ☐ dizziness ☐ parenthesis ☐ GI distress

Mood: ☐ irritable ☐ apprehensive ☐ anticipating doom ☐ general fearfulness

Hyperactivity: ☐Diff. concentrating ☐ trouble sleeping ☐ interim sleep ☐ unrestful sleep ☐fatigue on waking

Date ended: _____ **Note** _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Problem/DX: **Anxiety** **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 14 days

Goal: As Above. **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable ☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: (see guide)_____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Intervention: (see guide)_____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Intervention: (see guide)_____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

ASSESSMENT

Encounter #4

Anxiety **Date Began:** ____/____/____ **On anti-anxiety medication now:** ☐ Yes ☐ No

Frequency (choose only 1): ☐ Intermittent ☐ continuous ☐ unrelenting ☐ patterned ☐ Subsided

Intensity: Now: ☐ None ☐ Mild ☐ Moderate ☐ Severe

Max in last 7 days: ☐ None ☐ Mild ☐ Moderate ☐ Severe

Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility___ emotions___ relationships___ usual daily activity___ ability to concentrate___ QOL___

Prescriptive relief: ☐ yes ☐ no **Non-prescriptive relief:** ☐ yes ☐ no

Cause: (choose only 1) ☐ cancer diagnosis ☐ anticipation of future cancer tx (surgery, RT, chemo) ☐ disease process ☐ node status ☐ fear ☐ hyperthyroid ☐ lifestyle ☐ impact on self/family ☐ changing relationship ☐ ineffective coping ☐ role changes

Clinical markers: Motor: ☐ tension ☐ trembling ☐ shakiness ☐ restlessness ☐ sighing ☐ respiration ☐ unable to relax ☐ pressured speech

Autonomic: (choose only 1) ☐sweating ☐ tachycardia ☐ tachypnea ☐ cold clammy hand ☐ dry mouth ☐hot/cold spells ☐ dizziness ☐ parenthesis ☐ GI distress

Mood: ☐ irritable ☐ apprehensive ☐ anticipating doom ☐ general fearfulness

Hyperactivity: ☐Diff. concentrating ☐ trouble sleeping ☐ interim sleep ☐ unrestful sleep ☐fatigue on waking

Date ended: _____ **Note** _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Problem/DX: Anxiety Ca Related? ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ Goal Target Date: 14 days

Goal: As Above **Goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable ☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: **Anxiety** **Eval_1110**

1st Evaluation _____ On _____ Stop Evaluation _____ On _____

Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____

Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____

Current visit date Date eval ended

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

ASSESSMENT

Encounter # ___

Anxiety **Date Began:** ___/___/___ **On anti-anxiety medication now:** ☐ Yes ☐ No

Frequency (choose only 1): ☐ Intermittent ☐ continuous ☐ unrelenting ☐ patterned ☐ Subsided

Intensity: Now: ☐ None ☐ Mild ☐ Moderate ☐ Severe

Max in last 7 days: ☐ None ☐ Mild ☐ Moderate ☐ Severe

Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility___ emotions___ relationships___ usual daily activity___ ability to concentrate___ QOL___

Prescriptive relief: ☐ yes ☐ no **Non-prescriptive relief:** ☐ yes ☐ no

Cause: (choose only 1)☐ cancer diagnosis ☐ anticipation of future cancer tx (surgery, RT, chemo) ☐ disease process ☐ node status ☐ fear ☐ hyperthyroid ☐ lifestyle ☐ impact on self/family ☐ changing relationship ☐ ineffective coping ☐ role changes

Clinical markers: Motor: ☐ tension ☐ trembling ☐ shakiness ☐ restlessness ☐ sighing ☐ respiration ☐ unable to relax ☐ pressured speech

Autonomic: (choose only 1)☐sweating ☐ tachycardia ☐ tachypnea ☐ cold clammy hand ☐ dry mouth ☐hot/cold spells ☐ dizziness ☐ parenthesis ☐ GI distress

Mood: ☐ irritable ☐ apprehensive ☐ anticipating doom ☐ general fearfulness

Hyperactivity: ☐Diff. concentrating ☐ trouble sleeping ☐ interim sleep ☐ unrestful sleep ☐fatigue on waking

Date ended: _____ **Note** _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Problem/DX: **Anxiety** **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 14 days

Goal: As Above. **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable ☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: (see guide)_____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Intervention: (see guide)_____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Intervention: (see guide)_____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Encounter # 2

Problem/DX: Consultation - report to doctor **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 7 days

Goal: Send week one report to surgeon. **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable
☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: **Week 1 care report to surgeon REPORT _8050**

1st Evaluation _____ On _____ Stop Evaluation _____ On _____

Current visit date Date eval ended

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Encounter #4

Problem/DX: Consultation - report to doctor **Ca Related?** ☐ Yes ☐ No

ICD Code: (automatic fill in)

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 14 days

Goal: Send final care report to surgeon. **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable
☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: **Final care report to surgeon REPORT _8000**

1st Evaluation _____ On _____ Stop Evaluation _____ On _____

Current visit date Date eval ended

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx resolved
4. After initial use, patient non-compliant

REFERRALS

Encounter # 4 Date ___/___/___

1. _____ Phone_____

2. _____ Phone_____

3. _____ Phone_____

Type of referral: ☐ Community (free) ☐ Service (professional)

Problem:

Reason for referral: (Example: Support Group)

Nurse Intervenor:

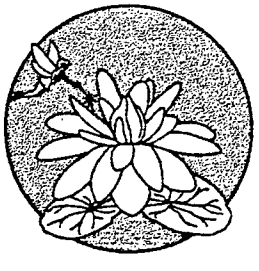
Nurse Charting Form, revised 7/8/98

Nursing Care for Breast Cancer
Nurse Charting Form
Addendum

Topic

Symptoms and Interventions

Nausea
Fever
Insomnia
Diarrhea
Other
Depression



. . . .A New Beginning

Revised 7/98

Name _____ ID# _____ Date ___/___/___ Encounter # _____

SYMPTOMS

NAUSEA: Date began: ___/___/___ **#Emesis/Day**___ **Can't retain** (check one) Liquids___ Solids___
Intensity (1-10 scale):_____ Max in last 7 days:_____ Tolerable level:____
Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility___
emotions___ relationships___ usual daily activity___ ability to concentrate___ QOL___
Prescriptive relief:: **Non-Prescriptive relief:**
Cause: ☐ activity ☐disease process ☐ eating ☐ odor ☐ pain
☐ emotions ☐ surgery ☐ treatment/meds ☐ unknown__
Associated Symptoms: ☐ sweating ☐ palpitation ☐ dyspnea ☐ pain ☐ vomiting
☐ dizziness ☐ irritability ☐ depression ☐ anxiety ☐ fatigue
Response (choose only 1): ☐ resolved ☐ improved ☐ acceptable ☐ unacceptable ☐ worsened
Date ended:_____ **Note** _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Problem/DX: Nausea **Ca Related?** ☐ Yes ☐ No
Entry Date: (Date problem first noted) _____ **Goal Target Date:** 2 days
Goal: Nausea will subside within 2 days. **Was goal met?** ☐ Yes ☐ No
Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable
☐ Symptom stable/unacceptable ☐ Worsened
Status Date: (visit date): _____
Evaluation: (see guide) _____
ALL INTERVENTIONS FOR THIS PROBLEM
Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

1st Evaluation
1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals
1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx.
4. After initial use, patient non-compliant

Name _____ ID# _____ Date ___/___/___ Encounter # ___

SYMPTOMS

FEVER **Date Began** ___/___/___

Frequency (choose only 1): ☐ intermittent ☐ continuous ☐ unrelenting ☐ patterned

Intensity: Now: ☐ none ☐ mild ☐ moderate ☐ severe Max in last 7 days: ☐ none ☐ mild ☐ moderate ☐ severe
Tolerable level: ☐ none ☐ mild ☐ moderate ☐ severe

Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility___ emotions___

Prescriptive relief: **Non-Prescriptive relief:**

Cause: ☐ allergies ☐ antibiotic ☐ disease process ☐ infection
☐ meds ☐ surgery ☐ unknown

Associated Symptoms: ☐ aches ☐ anorexia ☐ arthralgia ☐ chills ☐ confusion ☐ cough
☐ diaphoresis ☐ diarrhea ☐ dizziness ☐ dyspnea ☐ fatigue
☐ headache ☐ nasal congestion ☐ nausea ☐ rash ☐ unknown

Response (choose only 1): ☐ resolved ☐ improved ☐ acceptable ☐ unacceptable ☐ worsened

Date ended:_____ **Note:** _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Problem/DX: **Fever** **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 3 days

Goal: Temperature will be less than 101 within 3 days **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable
☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx.
4. After initial use, patient non-compliant

Name _____ ID# _____ Date ___/___/___ Encounter # ___

SYMPTOMS

INSOMNIA **Date Began:**____/____/____

Frequency (choose only 1): ☐ intermittent ☐ continuous ☐ unrelenting ☐ patterned

Pattern (choose only 1): ☐ WNL ☐ Night-Waking ☐ Increased ☐ Nightmares ☐ Early Waking ☐ Narcolepsy/sleep disorder ☐ Can't fall asleep ☐ Intermittent insomnia

Intensity (1-10 scale):_____ Max in last 7 days:_____ Tolerable level:____

Extent symptom interferes with (1-10 scale): appetite___ mobility___ emotions___ relationships___ usual daily activity___ ability to concentrate___ QOL___

Prescriptive relief: ☐ none ☐ anti-anxiety ☐ anti-depressant ☐ anti-pruritic ☐ pain meds ☐ sedatives ☐ unknown

Non-Prescriptive relief: ☐ none ☐ avoid caffeine ☐ avoid nicotine ☐ counseling ☐ est. pattern ☐ hs snack ☐ loose clothing ☐ massage ☐ music ☐ positioning ☐ tepid bath ☐ warm liquids ☐ unknown

Cause (choose only 2): ☐ anxiety ☐ depression ☐ disease process ☐ environ. factors ☐pain ☐ GI disturbance ☐ meds ☐ N/V ☐ emotion ☐ stress ☐ surgery ☐ unknown ☐ urinary freq.

Associated Symptoms (choose only 2): ☐ anxiety ☐ depression ☐ dizziness ☐ fatigue ☐ irritability ☐ nausea ☐ pain ☐ palpitation ☐ sweating ☐ unknown ☐ vomiting

Response (choose only 1): ☐ resolved ☐ improved ☐ acceptable ☐ unacceptable ☐ worsened

Date ended:_____ **Note** _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Problem/DX: Insomnia **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 7 days

Goal: Insomnia will improve to a satisfactory level. (3) **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable ☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx.
4. After initial use, patient non-compliant

Name _____ ID# _____ Date ___/___/___ Log # _____ Encounter # ___

SYMPTOMS

DIARRHEA: **Date Began:** ___/___/___

Frequency (choose only 1): ☐ 2-3 stools/day ☐ 4-6 stools/day ☐ 7-10 stools/day___

Pattern (choose only 1): ☐ intermittent ☐ continuous ☐ unrelenting ☐ patterned

Character (choose only 1): ☐ loose ☐ soft ☐ liquid ☐ diarrhea/constipation

Color (choose only 1): ☐ WNL ☐ tarry ☐ pale ☐ yellow ☐ green ☐ black ☐ frank blood

Intensity (1-10 scale):_____ Max in last 7 days:_____ Tolerable level:____

Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility___
emotions___ relationships___ usual daily activity___ ability to concentrate___ QOL___

Prescriptive relief: **Non-Prescriptive relief:**

Cause: ☐ altered nutrition ☐ disease process ☐ impaction ☐ infection
☐ meds ☐ stress/anxiety ☐ surgery ☐ unknown ☐ virus

Associated Symptoms: ☐ activity intolerance ☐ anorexia ☐ anxiety ☐ bleeding ☐ cramping
☐ depression ☐ distended abd. ☐ dizzy/weak ☐ fatigue ☐ nausea ☐ pain ☐ unknown

Response (choose only 1): ☐ resolved ☐ improved ☐ acceptable ☐ unacceptable ☐ worsened

Date ended:_____ **Note** _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Problem/DX: **Diarrhea** **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:** 3 days

Goal: Diarrhea will subside within 3 days. **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable
☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx.
4. After initial use, patient non-compliant

Name _____ ID# _____ Date ___/___/___ Encounter #_____

SYMPTOMS

OTHER Date Began: ___/___/___ **Symptom:**_____
Frequency (choose only 1): ☐ Intermittent ☐ continuous ☐ unrelenting ☐ patterned
Intensity (1-10 scale):_____ Max in last 7 days:_____ Tolerable level:____
Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility___ emotions___
relationships___ usual daily activity___ ability to concentrate___ QOL___
Prescriptive relief: **Non-Prescriptive relief:**
Cause:
Associated Symptoms:
Response (choose only 1) :☐ resolved ☐ improved ☐ acceptable ☐ unacceptable ☐ worsened
Date ended: ___/___/___ **Note:** _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Problem/DX: _____ **Ca Related?** ☐ Yes ☐ No
Entry Date: (Date problem first noted) _____ **Goal Target Date:**____days
Goal: (see guidelines)_____ **Was goal met?** ☐ Yes ☐ No
Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable
☐ Symptom stable/unacceptable ☐ Worsened
Status Date: (visit date): _____
Evaluation: (see guide) _____
ALL INTERVENTIONS FOR THIS PROBLEM
Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ Stop Evaluation _____ On _____
Current visit date Date eval ended

1st Evaluation
1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals
1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx.
4. After initial use, patient non-compliant

Name _____ ID# _____ Date ___/___/___ Encounter # ___

NURSING ASSESSMENT

DEPRESSION

Date Began: ___/___/___ **On anti-depressant now:** ☐ Yes ☐ No

Frequency (choose only 1) ☐ Intermittent ☐ continuous ☐ unrelenting ☐ patterned

Intensity Now: ☐ None ☐ Mild ☐ Moderate ☐ Severe Max in last 7 days:☐ None ☐ Mild ☐ Moderate ☐ Severe

Extent symptom interferes with (1-10 scale): sleep___ appetite___ mobility___ emotions___ relationships___ usual daily activity___ ability to concentrate___ QOL___

Cause: (choose not more than 2) ☐ cancer dx ☐ disease process ☐ surgery ☐ chronic illness ☐ lifestyle (ETOH?) ☐ meds ☐ family problems

Previous dx of depression? ☐ yes ☐ no

Risk 1: (choose only 1) ☐ pain ☐ low energy ☐ reduced pleasure ☐ Hx of depression ☐ Hx suicide ☐ apathy ☐ irritability ☐ overt sadness ☐ sex complaints ☐ substance abuse ☐ comorbids ☐ cancer event ☐ non-ca event

Risk 2: (choose only 1) ☐ pain ☐ low energy ☐ reduced pleasure ☐ Hx of depression ☐ Hx suicide ☐ apathy ☐ irritability ☐ overt sadness ☐ sex complaints ☐ substance abuse ☐ comorbids ☐ cancer event ☐ non-ca event

Criterion Set A: ☐ depressed mood daily ☐ apathy daily ☐ both depression & apathy daily ☐neither

Criterion Set B: (choose up to 4) ☐ weight loss/gain ☐ insomnia/hypersomnia ☐ suicidal ideation ☐psychomotor(agitation/retardation) ☐ fatigue ☐ low self esteem ☐ impaired concentration

Date ended: _____ **Note** _____

INTERVENTION AND PROBLEM STATUS

Enter all patient problems and corresponding interventions - see Guidelines

Problem/DX: _____ **Ca Related?** ☐ Yes ☐ No

Entry Date: (Date problem first noted) _____ **Goal Target Date:**___days

Goal: (see guidelines)_____ **Was goal met?** ☐ Yes ☐ No

Problem Status: ☐ Complete response ☐ Partial response ☐ Symptom stable/acceptable ☐ Symptom stable/unacceptable ☐ Worsened

Status Date: (visit date): _____

Evaluation: (see guide) _____

ALL INTERVENTIONS FOR THIS PROBLEM

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

Intervention: (see guide) _____ # _____

1st Evaluation _____ On _____ (Current visit date) Stop Evaluation _____ On _____ (Date eval ended)

1st Evaluation

1. Intervention appears effective & continues
2. Intervention ineffective and ended
3. Single time intervention, eg., teaching, literature, demo
4. Non-compliant
5. 1st use and will evaluate next visit

Stop Evals

1. Ineffective and ended
2. Effective and completed
3. Intervention effective, Dx.
4. After initial use, patient non-compliant

A Subacute Care Intervention for Short-Stay Breast Cancer Surgery

CHART AUDIT PROTOCOL
Appendix E

Chart Audit Protocol and Form for Medical Chart Audit

Chart Audit Policies and Procedures for Post-Operative Complications

PROCEDURES

1. Identify in study office which subjects need audit data collected. Obtain adequate chart audit forms from the study office for the number of charts you will be auditing.

2. Determine in the study office which physician was the surgeon for each woman, and where that surgeon's charts are housed, i.e., Clinical Center or one of the community offices.

3. Organize chart audits so you are obtaining data on several women at one location each time you make a visit.

4. If you are also a recruiter, organize audits so that they can be conducted at the same time you are at the various locations doing recruitment activities.

5. Once you reach a site, obtain charts in the same manner used for recruiting. This will vary with locations. In some locations you will obtain charts and in other locations the office staff will get the charts you need.

6. Look through each chart for the post-surgical notes and lab reports. These two areas should provide the information called for on the chart audit form.

7. Complete the chart audit form as thoroughly as possible. Make notes as to information that is not in the chart yet, and approximate (date) when to complete this audit.

8. Once data is collected, return audit forms to the study office.

9. The chart audit forms will be stored in the subject's file in the study office.

10. This data must also be entered into the Ci3 program. Either enter the data yourself if this is part of your work assignment, or inform the person assigned to enter data that there is data to enter, and provide a list of subjects whose data needs to be entered.

POLICIES

1. Data must be entered within one week of obtaining it from the patient chart.

2. Always interact in a pleasant manner with the staff in the community locations. If they ask questions about the study that you do not have answers for, make a list of questions and obtain the person's name who asked the question/s. Once you return to the study office, ask the appropriate study staff person to contact the site office with answers.

3. Keep track of mileage to and from site offices and submit on your monthly mileage form. Consolidate visits as much as possible. Do not go to a location for one chart audit when no other study activity is needed at that site.

Nursing Care for Breast Cancer
Post-Operative Chart Data--Complications *(4 Months After Surgery)*

Name:_____ **ID#:**_____ **MRN#:**_____

Group Status: □ *Intervention* □ *Control* **Cancer Stage (choose 1):** I II III IV

Surgeon: □*Apelgren* □*Dean* □*de los Santos* □*Harkema* □*Kareti* □*Kisala* □*Lindsey* □*Morris* □*Osuch* □*Slomski* □*VanderMolen* □*Other*_____ **City:** □*Lansing* □*Detroit Area* □*Charlotte* □*Other*_____

Date of Surgery:___/___/___ **Date of Birth:**___/___/____ **Pre-Surg. Height:** _____cm

Surgery Side: □*Right* □*Left* □*Both* **Pre-Surg. Weight:** _____kg

Surgery Type (Choose all that apply): □*Axillary nodes* □*Wide Excision* □*Lumpectomy* □*Mastectomy* □*Double Mastectomy* □*Prophylactic Mastectomy* □*Other*_____

Year: _____

	Dates										
Post-Operative Surgeon Visits											
Routine											
Unclog Drain											
Monitor Seroma/Hematoma											
Aspirate Seroma/Hematoma	__ cc	__ cc	__ cc	__ cc	__ cc	__ cc	__ cc	__ cc	__ cc	__ cc	__ cc
Lance Seroma/Hematoma	__ cc	__ cc	__ cc	__ cc	__ cc	__ cc	__ cc	__ cc	__ cc	__ cc	__ cc
Tube Reinsertion											
Dehiscence											
Infection (surgical site)											
Other:_____											
Emergency Room Visits											
Re-Hospitalizations											

Further Surgery (choose all that apply)	*Right Side*			*Left Side*			*Both Sides*		
Axillary Node Diss.									
Wide Excision									
Lumpectomy									
Mastectomy									
Double Mastectomy									
Prophylactic Mast.									
Other:_____									

Hormone Therapy: □Estrogen □Progesterone □Tamoxifen □Thyroid □Other:_____

A Subacute Care Intervention for Short-Stay Breast Cancer Surgery

QUALITY ASSURANCE PROTOCOL
Appendix F

Quality Assurance Protocols and Forms

Quality Assurance Procedures

1. Quality assurance audits are done once each month during the third week of the month. All patient recruitment, intervention and interviews which were closed in the previous month will be eligible for possible audit. Approximately 20% of all cases will be audited.

2. The Quality Assurance Coordinator will obtain the list of completed interventions/ interviews from the flow chart displayed in the study office and will audit records and procedures from initial recruitment through the post-operative interview. Specific audit concerns can be found on the Quality Assurance Evaluation forms on pages 9 through 12 of this manual.

4. Recruitment quality assurance will be conducted by reviewing the records submitted by the Recruiter and through periodic checks of the master tracking form on the wall in the study office. Any discrepancies in records will be noted on the General Quality Assurance Audit Report form.

5. Audits of patient charts in physician's offices will be completed by an RN associated with the study.

6. Audits of the Nurse Intervenor records will be conducted by the Quality Assurance Coordinator or a Registered Nurse (other than the Home Care Nurse who provided the intervention being audited) associated with the study. Irregularities will be referred to the Principal Investigator for further review.

7. The interviewer will provide the Quality Assurance Coordinator with a tape of every tenth interview completed, along with the *Interviewer Self-evaluation Form.* To determine if interviews were completed on time, the following protocol will be utilized:

   > All interviews must be completed within one week prior to or one week following four weeks from the date of surgery and prior to chemotherapy, radiation or additional surgery. If the patient has a second surgery, an additional interview will be conducted four weeks after the additional surgery. Interviews which are not conducted within the set time frame will be noted on the quality assurance report.

8. Quality assurance reports will be prepared by the end of the first week of the month following the quality assurance audits. A copy of the reports will be filed under "Quality Assurance Records" by month and year reports are completed.

9. Quality assurance reports on recruitment, nursing intervention, interviews and record keeping will be submitted to Dr. Gwen Wyatt with a copy to Mary Bloomfield. Any irregularities will be discussed at weekly staff meetings.

10. Daily tasks will be checked by the Quality Assurance Evaluator and calls made to the responsible staff person if deadlines are not met and recorded.

GENERAL QUALITY ASSURANCE AUDIT - NURSING CARE FOR BREAST CANCER STUDY

☐ Control group or ☐ Intervention group Patient ID:_____

Audited by: _____ Audit date: ____/____/____

Medical records audited by: _____ Audit date: ____/____/____

Signed consent form in patient file: ..... ☐ Yes ☐ No
All pages of consent form initialed ..... ☐ Yes ☐ No
All information completed and form witnessed ..... ☐ Yes ☐ No

IMPORTANT: If consent form is not in file, refer to Principal Investigator for follow-up.

Confirmation of letters/forms/documents in file:

Document	Yes	No	Document	Yes	No
Consent form	☐	☐	Surgeon notification	☐	☐
BSE/ROM	☐	☐	Physician notification	☐	☐
Quality of Life	☐	☐	Field notes	☐	☐
State/trait	☐	☐	Thank you letter	☐	☐
Enrollment form	☐	☐	Follow-up intervention form	☐	☐

☐ Care complete letter sent (intervention group only) on ___/___/___

☐ Control group gift & thank you sent ___/___/___ ☐ Intervention group thank you sent ___/___/___

☐ All information complete on master tracking form

Recruiter name: _____ ☐ Study recruiter ☐ Office recruiter

Nurse Intervenor name: _____

Interviewer name: _____ ☐ Ci3 ☐ paper

AUDITOR'S COMMENTS _____

☐ Copy of this report given to Gwen Wyatt

Quality Assurance Instructions for Recruiters

The recruiter is responsible for getting the consent form signed by the patient and placing it in the patient's file in the study office. The recruiter must complete all appropriate sections of the enrollment form and submit a weekly report to the study office. To enable the study to determine why potential patients were not accepted, the recruiter is responsible for tracking all possible patients. This tracking is recorded on the recruiter's weekly report form.

The recruiter is also responsible for getting the pre-surgical instruments to the patient prior to surgery and assuring that they are completed and returned to the study office prior to surgery.

For patients recruited into the intervention arm of the study, the recruiter must do the following:

- Send a letter to patient (or call) indicating which group patient is in
- Label patient chart in Doctor's office
- Send surgeon notification form
- Send primary care physician notification
- Contact study nurse
- Notify discharge planner

All correspondence to patients must be completed in a timely fashion.

The recruiter is responsible for entering enrollment data on the Paradox system.

Unless otherwise specified, the recruiter is responsible for giving the pre-surgical instruments to the interview coordinator for entry on the Ci3 program.

Quality Assurance for Recruitment

Patient ID _____ **Date QA review completed** _____

Consent form is in patient's file ..... ☐ Yes ☐ No
If no, refer to Principal Investigator for follow-up.

Enrollment form complete ..... ☐ Yes ☐ No
If no, what is missing? _____

Pre-surgical instruments complete and entered on Ci3 ..... ☐ Yes ☐ No

Correspondence with patient was completed in a timely fashion : ..... ☐ Yes ☐ No
If no, did any problems occur as a result? Indicate problem below.

Recruiter's reports to office were received in a timely fashion: ..... ☐ Yes ☐ No
If no, did any problems occur as a result? Indicate problem below.

Information in reports and forms appears to be accurate: ..... ☐ Yes ☐ No
If no, did any problems occur as a result? Indicate problem below.

Potential patients were tracked: ..... ☐ Yes ☐ No
If no, explain. _____

Quality Assurance Instructions for Home Care Nurse

Because of the short time period which often occurs between the recruitment of the patient and the patient's surgery, once the nurse has been notified of assignment to a patient, she must be prompt in contacting the patient to set up the first home visit.

Study protocol must be followed at all times, and followed consistently with each patient.

Completion of the charting information is extremely important. Nurses must clearly and accurately enter the requested information and submit the notes to the study office in a timely fashion.

As phone calls and visits are completed, the nurse must call the study office so that the information on the wall tracking chart will be current. Nurses are expected to call to update the tracking chart at least once each week.

Quality Assurance for Nurse Intervention

Patient ID _____ **Date QA review completed** _____

Patient was contacted in a timely fashion after nurse notified of new patient in study. . . . . ☐ Yes ☐ No

If no, explain: _____

Study protocol was followed when conducting nursing care visits. . . . . ☐ Yes ☐ No

If no, indicate where/why protocol was not followed. _____

Documentation of visits complete . . . . . ☐ Yes ☐ No

If no, indicate discrepancies or omissions. _____

Required reports from nurse intervenor were sent/received in a timely fashion. . . . . ☐ Yes ☐ No

If no, did any problems occur as a result? Indicate problems. _____

Information in reports and forms appears to be accurate: . . . . . ☐ Yes ☐ No

If no, did any problems occur as a result? Indicate problems below. _____

Quality Assurance Guidelines for Paradox Data Entry

All steps of the nursing protocol and any additional nursing diagnoses (patient problems) and nursing interventions will be recorded in the computerized record. This will be considered the patient's legal document of the nursing protocol. The paper chart and computerized version should be identical, any discrepancies between the two should be corrected.
Essential steps for quality assurance regarding Paradox data entry are as follows:

1. **Encounter Log**
   - __ Correct patient name
   - __ Correct day
   - __ Log numbers, dates and intervention step numbers appear in chronological order.
   - __ Between intervention steps are indicated with decimal points- 2.1, 2.2, etc.

2. **Cancer History, Medications, Comorbids**

   - __ Medication & Comorbid information should be entered completely.

3. **Symptoms**

   The following are always assessed on interventions as indicated below. Necessary fields to complete for symptom screens: Date Began, Location, Frequency, Quality, Intensity, Prescriptive Relief, Non-Prescriptive Relief, and Causes.

   Visit 1 (Step 2.0) Circle if data incomplete or inaccurate.
   - __ Pain, Constipation, and Activity Intolerance (fatigue)

   Visit 2 (Step 4.0) Circle if data incomplete or inaccurate.
   - __ Pain, Constipation, and Activity Intolera17nce (fatigue)

4. **Assessments**

   Visit 1 (Step 2.0)
   - __ General Status (Physical)- all fields should be filled for first visit, for subsequent Steps, fill in only HR, Systolic, Diastolic, Temp., and Respiration.
   - __ Anxiety Fields that must be completed are: Date Began, Frequency, On Anti-anxiety (med) Now, Intensity, and Causes.
   - __ QOL (Review Status)
   - __ Dressing and Wound Exam.

   Visit 2 (Step 4.0)
   - __ ROM (Recovery)
   - __ QOL (Review Status)
   - __ Education: BSE and Lymphedema
   - __ Anxiety Fields that must be completed are: Date Began, Frequency, On Anti-anxiety (med) Now, Intensity, and Causes.
   - __ Dressing and Wound Exam

5. **New/ Ongoing Patient Problems**

****Enter following problems into computer only for the step they are in bold below. However, all of the following should be in the paper chart for the steps as listed. Circle those which do not appear or are inaccurate.** Other problems may appear, but should only be entered into the computer for one date.

Visit 1 (Step 2.0)

__ **Constipation, Pain, Activity Intolerance, Anxiety, Quality of Life, Incision- Skin Integrity/ Surgery, Knowledge deficits related to dressing change, milking drain, emptying drain, & recording drainage, and Consultation**

__ ICD codes appear for each problem

Visit 2 (Step 4.0).

__ Constipation, Pain, Activity Intolerance, Anxiety, Quality of Life, Incision-Skin integrity/ surgery, Knowledge deficits related to dressing change, milking drain, emptying drain, and recording drainage, **Education (give educational materials, knowledge deficits related to Lymphedema, BSE, & ROM)**, and Consultation

__ ICD codes appear for each problem

5. **Interventions and Problem Status**

****All data for each problem is entered under the first screen in which the problem appears. Circle problem below if it does not appear this way on computer.**

__ **Goal** matches Paradox Coding Guidelines and is entered on the first evaluation, subsequent visits can be charted AS ABOVE for goal.

Goal target for each problem are as follows:1818

__ Pain: 1-14 days
__ Fatigue: 1-14 days
__ Constipation: 3-4 days
__ Skin Integrity: 1-4 days
__ Dressing Change:
__ Milk Drain:
__ Empty Drain:
__ Record Drainage:
__ Quality of Life: 1-14 days
__ ROM: 1-14 days
__ BSE: 1-14 days
__ Lymphedema: 1-14 days
__ Anxiety: 1-14 days
__ Consultation Report 1: 7 days
__ Consultation Report 2: 14 days

__ **Was Goal Met?** (filled in every time)
__ **Problem Status** (filled in every time)
__ **Status Date** is the date of the visit.
__ Each intervention is evaluated (with appropriate eval number) and the visit date entered, and a stop evaluation is the date the intervention was complete.

Correct interventions are entered for corresponding problems

- __ **Pain:** ASSES_3140, TEACH_2850, PRESC_3120, EVAL _3150
- __ **Fatigue:** ASSES _2000, TEACH_3638, EVAL _2010
- __ **Constipation:** ASSES _1460, TEACH_2850, PRESC_3120, EVAL _1470
- __ **Skin Integrity:** ASSES _3630, TEACH_3580, TEACH_2220, TEACH_2540, EVAL _2490
- __ **Dressing Change:** SKILL _1760, TEACH _3211, EVAL _1745
- __ **Milk Drain:** TEACH_3214, EVAL _1735
- __ **Empty Drain:** TEACH_3213, EVAL _1733
- __ **Record Drainage:** TEACH_3216, EVAL _1738
- __ **Quality of Life:** ASSES _3381, COUNS_3694, TEACH_2220, REFER_5355, EVAL _3382
- __ **ROM:** DEMO _9020, TEACH_1840, TEACH_2220, EVAL _1870, EVAL _2190
- __ **BSE:** TEACH_1207, TEACH_2220, EVAL _1204
- __ **Lymphedema:** TEACH_2725, TEACH_2220, EVAL _2727
- __ **Anxiety:** ASSES _1090, TEACH_1115, EVAL _1110
- __ **Consultation:** REPORT_8050, REPORT_8000

7. **Encounter Summaries**
   - __ Are filled in for every phone call and visit with length of time
   - __ Home visits are coded under Decision Making as Moderate, and phone calls should be coded as StrFor/ low.
   - __ Patients are considered new only for Intervention 1 (Phone call 1), each intervention after the initial phone call 1, they should be entered as established.
   - __ Nursing intervention time is charted for direct care, record keeping and coordination of care.

8. **Referrals**
   - __ Fill in page 1 only
   - __ Refer To should include organization name and phone number.
   - __ Problems refer to Patient Problems (nursing diagnoses)
   - __ Nurse's name entered

For more specific information and codes see *Nursing Guide to Patient Chart.

Quality Assurance Instructions for Interviewers

Because interviews must be completed within a certain time frame, scheduling the interview is an important part of the interviewer's job. The interviewer is expected to make calls during the morning, afternoon and evening in attempting to contact the patient.

Telephone interviews will be done at designated time intervals. Interviewers will be responsible for taping every tenth interview for evaluation. Each tape will be reviewed and evaluated by the interviewer and the Quality Assurance Coordinator.

Before taping this interview the interviewer must get verbal permission from the subject to tape the interview. Tell the participant that the information they provide will be kept confidential and that only authorized research staff will be listening to the tape. The tapes will be disposed of after they are reviewed by the authorized personnel.

Once the tape is submitted it will be reviewed by the Quality Assurance Coordinator and evaluated using the evaluation sheet in the back of this section. Comments are made and returned to the interviewer. The Principal Investigator, Dr. Gwen Wyatt, may conduct an inspection of the data at her convenience. Therefore, case files and interviews must be accessible at all times. Failure to comply with this is unacceptable.

Interviewers are responsible for giving **weekly** updates to the Principal Investigator in the form of a weekly written report (see form in Appendix B) and E-mail. The weekly report should include productivity information such as dates interviews were completed, any special situation letters sent or any general problems with the interview. Be sure to use case identification numbers rather than patient names to assure confidentiality.

Quality Assurance will be performed on a regular basis. During this time the QA Coordinator determines the accuracy of the interviewers' case files, making sure interviews were done on time and that appropriate letters were sent. As part of the Quality Assurance process you may be asked to assist the Quality Assurance Coordinator in understanding a particular case or situation. You are also responsible for pointing out discrepancies in any dates, missed interviews, or any questionnaire concerns as you find them.

The interviewer is required to carefully read the **information regarding confidentiality** on pages 14 and 17 of the Interviewer Manual. It is imperative that each interviewer realize how important confidentiality is to the integrity of the data for this grant.

The interviewers are responsible for reading and understanding the following excerpt from the statement by the Office of the Vice President for Research and Graduate Studies.

Quality Assurance for Scheduling and Conducting Interviews

Patient ID _____ **Date QA review completed** _____

If necessary, calls to patient to schedule interview were made mornings, afternoons and evenings.
☐ Yes ☐ No

If no, please explain: _____

Call to schedule interview session was completed within one week of completion of patient care or during third week following surgery for control group ..... ☐ Yes ☐ No

Patient was contacted within 4 days (at least ten calls made) of assignment ..... ☐ Yes ☐ No

If no, ☐ *Schedule Time* letter sent ..... ☐ Yes ☐ No
If no, explain: _____

☐ *Schedule Time* letter followed up in four days with phone call ..... ☐Yes ☐ No
If no, explain: _____

Interview completed in one session ..... ☐ Yes ☐ No

If no, ☐ Second session scheduled within five days ..... ☐ Yes ☐ No
☐ Interview completed in second session ..... ☐ Yes ☐ No

If this interview was taped, was permission granted by patient to tape interview? ..... ☐ Yes ☐ No
If no, explain why: _____

Field notes complete ..... ☐ Yes ☐ No
If no, please explain: _____

Correspondence letters completed and sent in timely manner (copy in file) ..... ☐ Yes ☐ No
If no, explain: _____

NURSING CARE FOR BREAST CANCER

Interviewer Quality Assurance Evaluation

Interviewer Name:_____ Number: _____

Date:_____

(1) Did the tape work? ___ Yes ___No

(2) Did interviewer remember to ask permission to tape? ___ Yes ___ No

(3) Number of incorrect skip patterns? _____

Examples: _____

_____

(4) Suggestions of what to do differently next time to avoid the incorrect skip pattern:

_____

_____

(5) Evaluating pace: Was it appropriate for the participant? ___ Yes ___ No

If no, why?_____

_____

Suggestions: _____

_____

(6) Evaluating articulation: Was it appropriate for the participant? ___ Yes ___ No

If no, why? _____

_____

Suggestions:_____

_____

(7) Number of incorrect probes? _____

Examples: _____

_____

Suggestions:_____

_____

(8) Number of inappropriate feedback responses? _____

Examples: _____

_____

Suggestions: _____

_____

(9) Clarification techniques: Were they appropriate? ___ Yes ___ No

Explain: _____

_____

Suggestions: _____

_____

(10) Description of problems during the interview.

Examples: _____

_____

Suggestions: _____

_____

(11) Was interviewer attentive to the comfort level of the participant during the interview?

___ Yes ___ No

(12) Overall evaluation: ___ Satisfactory ___ Unsatisfactory

Comments: _____

_____

_____

Quality Assurance Instructions for Chart Audit

A "Post-Operative Chart Data -- Complications" form should be completed for each control and intervention group participant. Time frames for completing this form are approximately six weeks after surgery for control group participants and four weeks after care completed for intervention group participants.

Surgery date and date of chart audit should be noted at top of QA form. When evaluating the "Post-Operative Chart Data -- Complications" form, one should assess that the following data is completed:

- patient name
- patient birthdate
- social security number
- patient ID
- medical records number
- surgeon name
- surgery type
- group status
- city
- year
- complications OR complications not applicable
- stage of cancer

Quality assurance for chart audits should be completed by the end of the first week of each month. One copy should be kept on file and another submitted to the Principal Investigator.

Quality Assurance for Chart Audit

Surgery date: ____/____/____

Audit date: ____/____/____

	YES	NO
Is audit conducted 4 to 8 weeks post-surgery?	☐	☐
1. Is patient name included?	☐	☐
2. Is patient social security number included?	☐	☐
3. Is surgeon noted?	☐	☐
4. Is birthdate noted?	☐	☐
5. Is medical records number noted?	☐	☐
6. Is patient ID noted?	☐	☐
7. Is surgery type noted?	☐	☐
8. Is group status (intervention or control) noted?	☐	☐
9. Is city noted?	☐	☐
10. Is year noted?	☐	☐
11. Complications noted?	☐	☐
12. Complications not applicable?	☐	☐
13. Stage noted?	☐	☐

Chart auditor name: _____

A Subacute Care Intervention for Short-Stay Breast Cancer Surgery

CURRICULUM VITAE
Appendix G

Co-Investigator

Wenjiang Fu, PhD
Assistant Professor, College of Human Medicine, Department of Epidemiology

Curriculum Vitae

Name: WENJIANG J. FU, Ph.D.

Country of Citizenship: Canada

Title: Assistant Professor
Michigan State University
Department of Epidemiology
4660 S. Hagadorn Rd. Suite 600
East Lansing, MI 48823
Email: fuw@pilot.msu.edu
Tel: (517) 353-8623
Fax: (517) 432-1130

Education:

1998 Ph.D. Biostatistics, University of Toronto.
1992 M.Sc. Statistics, University of Toronto.
1987 M.Sc. Mathematics, Tsinghua University.
1985 B.Sc. Mathematics, Peking University.

Working and Research Experience

1998.4 -present Assistant Professor, Michigan State University
1995.10-1998.3 Statistician, Pharmacia and Upjohn Inc. Canada
1994.1 -1996.3 Biostatistician, The Toronto Hospital General Division
1993.9 -1996.8 Statistician/Programmer, National Cancer Institute of Canada
1991.9 -1996.8 Teaching/Research Assistant, University of Toronto
1987.7 -1991.8 Lecturer/Research Leader/Supervisor, Tsinghua University

Awards

1997 Student Paper Competition Award, Statistical Computing Section, American Statistical Association.
1997 Life Sciences Committee Award, University of Toronto.
1994-1997 Ontario Graduate Scholarship.
1995 Dr. Seller's Award, Ontario Cancer Treatment and Research Foundation.
1993-1994 Whitehall-Robin Scholarship.
1991-1992 Open Fellowship, University of Toronto.
1988-1990 Research Grant for Young Researchers, Tsinghua University.
1986-1987 Award for Excellent Students, Tsinghua University.

Additional Experience

1996 Session Chair - Conference of American Statistical Association, Chicago.
1989 Secretary - Organizing Committee of International Symposium on Applied Mathematics, Tsinghua University.

Publications

Rohan TE, Fu W, Hill JE. Physical activities and survival from breast cancer. Eur. J. Canc. Prev., 1995,4:419-424.

Fu WJ. Penalized regressions: the bridge versus the lasso. J. Comp. Grap. Statist., 1998,7,3:1-20.

Fu WJ. Estimating the effective trends in age-period-cohort studies. 1998, submitted.

Presentations

Fu WJ. Penalized regressions: the bridge versus the lasso. Joint Statistical Meetings of ASA, IMS, ENAR, WNAR and SSC, Anaheim, CA, 1997.

Fu WJ. Penalized GEE and quasi-GCV. Annual Meeting of SSC, Fredericton, NB, 1997.

Fu WJ. Penalized regressions and penalized score equations. Joint Statistical Meetings of ASA, IMS, ENAR, WNAR and SSC, Chicago, IL, 1996.

Fu WJ. Penalized regressions: the bridge versus the lasso. Annual Meeting of SSC, Waterloo, ON, 1996.

Fu WJ. Survival from breast cancer. First Seattle Symposium of Biostatistics: Survival Analysis. Seattle, WA, 1995.

Fu WJ, Hansell RI. Approximation to random processes by quadratic maps. International Conference on Measurements of Complexity and Chaos, Bryne Mawl, PA, 1992.

Fu WJ, Zhang J, Pu F. On singular perturbation of the solitary wave solutions of the Burger's K-dV equation. International Conference on Nonlinear Physics, Shanghai, 1989.

A Subacute Care Intervention for Short-Stay Breast Cancer Surgery

STUDY DESIGN (REVISED)
Appendix H

Study Design - Revised 1998

STUDY DESIGN - A Subacute Care Intervention for Short-Stay Breast Cancer Surgery

Pre-test
Self-administered instruments at pre-surgical recruitment

Demographics
- Age
- Weight
- Height
- Race
- Co-morbids
- Allergies

Physical
- Functional status
  - Activity level
  - ADLs
  - ROM

Psychological
- Anxiety
  - State
  - Trait

Quality of Life
- Fact-B subscales
  - Physical well-being
  - Social/family well-being
  - Relationship with doctor
  - Emotional well-being
  - Functional well-being
  - Additional concerns

Post-Operative
Weeks 1 and 2

Intervention

Experimental Group
- Nurse phone contact 1
- Nurse in-home visit 1
- Nurse phone contact 2
- Nurse in-home visit 2
- Conventional care

Non-Intervention

Control Group
- Conventional care

Post-test
Telephone interview at 4 weeks post-surgery

Physical
- Functional status
  - Activity level
  - ADLs
  - ROM
- Post-surgical self-care
- Preventive self-care education
- Sensation in surgical area
- Surgical Drain

Psychological
- Anxiety
  - State
  - Trait

Quality of Life
- Fact-B subscales
  - Physical well-being
  - Social/family well-being
  - Relationship with doctor
  - Emotional well-being
  - Functional well-being
  - Additional concerns

Costs
- Complementary therapies
- Out-of-pocket for care
- Patient initiated health services
- Employment/financial changes

Chart Audit
4 month follow-up

Post-Protocol Events
- Seroma Formation
- Further Surgeries
  - Axillary node dissection
  - Lumpectomy
  - Wide excision
  - Mastectomy
  - Double Mastectomy
  - Prophylactic Mastectomy
  - Other

Follow-up Data
- Cancer Stage
- Body Mass Index

A Subacute Care Intervention for Short-Stay Breast Cancer Surgery

PARTICIPANT RESOURCE LISTS
Appendix I

Popular Books and CDs Related to Breast Cancer

Greater Lansing Area Resource List

Popular Books and CD's Related to Breast Cancer

BOOKS

The Breast Cancer Companion: From Diagnosis, Through Treatment, to Recovery, Every Thing You Need to Know for Every Step Along the Way. *Kathy LaTour*

Breast Cancer: A Family Survival Guide. *Lucille M. Pederson*

Chicken Soup for the Surviving Soul: 101 Inspiring Stories to Comfort Cancer Patients & Their Loved Ones. *Jack Canfield*

Climb of My Life: A Miraculous Journey from the Edge of Death to the Victory of a Lifetime. *Laura Evans*

Coping With Lymphedema. *Joan Swirsky and Diane Sackett Nannery.*

Dr. Susan Love's Breast Book. *Dr. Susan M. Love*

Dr. Susan Love's Hormone Book: Making Informed Choices About Menopause. *Dr. Susan M. Love*

Facing Fear, Finding Courage: Your Path to Peace of Mind. *Sarah Quigley*

Fine Black Lines: Reflections on Facing Cancer, Fear & Loneliness. *Lois T. Hjelmstad*

Inner Simplicity: 100 Ways to Regain Peace & Nourish Your Soul. *Elaine St. James*

Kitchen Table Wisdom: Stories That Heal. *Naomi R. Remen, MD*

Living With Breast Cancer: Thirty-Nine Women and One Man Speak Candidly About Surviving Breast Cancer. *Perry Colmore*

Not Now...I'm Having a No Hair Day: Humor & Healing for People with Cancer. *Christine Clifford*

Simplify Your Life: 100 Ways to Slow Down & Enjoy the Things That Really Matter. *Elaine St. James*

Spinning Straw Into Gold: Your Emotional Recovery from Breast Cancer. *Ronnie Kaye*

Straight Talk about Breast Cancer: From Diagnosis to Recovery. *Suzanne Braddock*

Tribe of Warrior Women: Breast Cancer Survivors. *Melissa Springer*

The Wellness Community Guide to Fighting for Recovery from Cancer. *Harold H. Benjamin, foreward by Dr. Susan M. Love*

What to Do If You Get Breast Cancer: Two Breast Cancer Specialists Help You Take Charge & Make Informed Choices. *Lydia Komarnicky, Anne Rosenberg, and Marian Betancourt*

Woman's Comfort Book: A Self-Nurturing Guide for Restoring Balance in Your Life. *Jennifer Louden.*

CD's

Women for Women

Women for Women 2

Music by Amy Grant, Cheryl Crow, Carly Simon, Tina Turner, Oleta Adams, Melissa Etheridge and others.

Compliments of DOD Grant #DAMD17-96-1-6325

GREATER LANSING AREA RESOURCES FOR BREAST CANCER PATIENTS

Information Sessions, Support Groups, Recovery Assistance

Breast Cancer Support Group
Meets the second Monday of the month from 7:00-9:00 p.m. in room 208 at Sparrow Hospital. For information call (517) 483-2135.

Breast Self-exam Class
Participants talk with a registered nurse, watch a video, and use breast models to learn proper breast self-exam technique. Call Sparrow Community Health Education Center at (517) 483-2135 for more details.

Challenging Cancer
Meets every Monday from 7:00-8:30 p.m. in Suite 30 of the professional building at Ingham Regional Medical Center (405 W. Greenlawn). No registration is required. Call (517) 334-2717 for more information.

Coping with Cancer
Designed to help cancer patients and their families develop their strengths with cancer.

Sparrow Hospital location: Meets the first and third Wednesday of the month from 2:00-3:00 p.m. in room 208 at Sparrow Hospital. No registration is required. For information call (517) 483-2135.

Hayes Green Beach Memorial Hospital (HGB) location: Meets the third Sunday of the month at 7:00 p.m. in the HGB portable classroom, 321 E. Harris Street, Charlotte. For more information contact the HGB Community Education Department, (517) 543-1050 ext. 200.

St. Johns location: The group often hosts guest speakers. Meets the first Monday of the month at 7:00 p.m., First United Methodist Church, St. Johns. No registration required. Call (517) 224-6730 for information.

Healing Moments- Awakening the Healing Process
Designed to help women get in touch with their own emotions and feelings regarding their illness. Sponsored by Sparrow Regional Cancer Center and conducted by a physician and a doctoral student in psychology who is a yoga master. To inquire about dates and times call (517) 483-2688.

Neither MSU, the College of Nursing, the Nursing Care for Breast Cancer Study nor participating doctors have done independent reviews or evaluations of providers and therefore encourage users to assess the quality of care each service provides.

Look Good, Feel Better
One-on-one appointment with a cosmetologist at Sparrow Regional Cancer Center. Learn techniques for attractive stying of hair or wig, receive color analysis and make-up suggestions to complement possible new skin tones as a result of medication. For an appointment call Sparrow Community Health Education Department at (517) 483-2135.

Michigan Lymphedema Clinic
The clinic uses a multi-disciplinary team approach which includes the expertise of a surgeon, oncologist, nurse, radiologist, and physical therapist to help patients with lymphedema. Teaching is done on the cause of lymphedema and ways to keep from aggravating the condition. A final treatment plan is also suggested. The clinic is located in the Physical Medicine and Rehabilitation Department of St. Lawrence Hospital, Lansing. Call (517) 372-3610 for more information.

MSU Breast Cancer Support and Information Network
Designed to serve the needs of women who have been affected by breast cancer either personally or through a family member. Sponsored by the Cancer Center at Michigan State University. Meets on the third Wednesday of the month at 12:00 p.m., A131 East Fee Hall, on the campus of MSU. Lunch is provided and parking tokens are given for the visitors' parking lot. It is open to all women who have been affected by breast cancer. For information call (517) 353-8828.

MSU Student Cancer Support Network
A support network for students with a personal history of cancer or who are providing support for a family member or friend with cancer. Facilitated meetings are held twice per month. Informal social gatherings take place at least once a month. For meetings times and locations call Olin Health Center at (517) 353-0718 or the MSU Cancer Center at (517) 353-8828.

Multidisciplinary Breast Cancer Center
The Breast Cancer Center at Sparrow Hospital is a place to learn about breast cancer and different treatment options. Patients will meet with a nurse specialist, breast cancer surgeon, medical oncologist, radiation oncologist, and a breast cancer support group volunteer. The team will recommend a treatment to the woman and her family the same day. The clinic is open Thursday mornings from 9:30 a.m. to 1:00 p.m. Call (517) 483-3958 to make an appointment.

Neither MSU, the College of Nursing, the Nursing Care for Breast Cancer Study nor participating doctors have done independent reviews or evaluations of providers and therefore encourage users to assess the quality of care each service provides.

Information Sessions, Support Groups, Recovery Assistance, continued

Reach to Recovery
Carefully selected and trained volunteers who have experienced breast cancer visit other breast cancer patients one-on-one in an effort to help them meet the physical, emotional and cosmetic needs related to their disease and/or its treatment. Provides information and support to loved ones and friends. Sponsored by the Ingham County Unit of the American Cancer Society. Call Laurie at (517) 351-0430 for information.

Women's Information Network and Support (WINS)
Anyone who has been affected by breast cancer is welcome. Meets the second Monday of the month in room 208 at Sparrow Hospital. Sponsored by the Sparrow Regional Cancer Center. Sign up through Sparrow Community Health Education Department, (517) 483-2135. For specific information, call the facilitator at (517) 483-2689.

Psychological Counseling and Counseling Agencies

Anne Meermans, PhD
425 West Grand River Avenue
East Lansing, MI 48823. . . (517) 332-8900

Bonnie Fons Wilson, PhD, RN
414 West Grand River
East Lansing, MI 48823. . .(517) 336-8005

Wm. Robert Meermans, Jr., PhD
2720 East Lansing Dr.
East Lansing, MI 48823. . .(517) 337-2900

Catholic Social Service Family Mental Health Clinic
300 N. Washington, Suite 301
Lansing, MI 48933. . . (517) 372-4020

Cristo Rey Counseling Services
1717 N. High Street
Lansing, MI 48906. . . . . .(517) 372-4700

Gateway Community Services
910 Abbot Road, Suite 100
East Lansing, MI 48823. . .(517) 351-4000

MSU Psychological Clinic
4 Olds Hall
Michigan State University
East Lansing, MI 48824. . .(517)355-9564

Ingham Community Mental Health Center
407 W. Greenlawn
Lansing, MI 48910
M-Th 8-8, F 8-5. . . (517) 374-8000
All other times . . . . (517) 346-8460

Neither MSU, the College of Nursing, the Nursing Care for Breast Cancer Study nor participating doctors have done independent reviews or evaluations of providers and therefore encourage users to assess the quality of care each service provides.

Resources for Supplies and Prosthesis

American Cancer Society/ T.L.C.
(Tender Loving Care)
Hanover, PA 17333-0080
(800) 850-9445

The Apothecary Shop
737 North Grand
Lansing, MI 48915
(517) 482-0882
Ask for Linda Fell

Curtis Home Health Care
1717 East Michigan Avenue
Lansing, MI 48912
(517) 484-6690

Front Room Underfashions, Inc.
Cedar Park Shopping Center
Holt, MI 48912
(517) 694-6660 (will sew pockets in bras)

Home Medical Equipment Pharmacy
3600 North East Street
Lansing, MI 48906
(517) 482-9216
(In-home fittings on request, sews pockets in bras)

Jacobson's
333 East Grand River Avenue
East Lansing, MI 48823
(517) 351-2550, Ext.260

Sparrow Health Care Supply
915 East Michigan Avenue
Lansing, MI 48912
(517) 371-2115 or (800) SPARROW
(Ask for Beth) (will bill insurance company)

Wright & Filippis
1438 East Michigan Avenue
Lansing, MI 48912
(517) 484-2624

Miscellaneous Resources

Turbans Contact Linda Harrison at the Sparrow Cancer Center, (517) 483-2688

Wigs **Elegante Wigs & Cosmetics, Jere (Jerry) Watson, Manager**
3030 Vine Street
Lansing, MI 48912 . . . . . .(517) 337-1212
Can be referred, but not necessary
Specializes in wigs and skin care products. Has a wig bank for cancer patients to borrow wigs if they need them.

Neither MSU, the College of Nursing, the Nursing Care for Breast Cancer Study nor participating doctors have done independent reviews or evaluations of providers and therefore encourage users to assess the quality of care each service provides.

Miscellaneous Resources, continued

My Brothers Hair Loss Center, Another Look
1020 East Saginaw Street (corner of Pennsylvania)
Lansing, MI 48912 . . . . . .(517) 484-5062
8:30-5:30 Monday through Friday
Has wig bank of donated wigs, by appointment only.

Y-ME's Wig and Prosthesis Bank
For women with financial need
(800) 986-9505

Brochures, Pamphlets, Information Sheets*

Title	ID Number	Source
Exercises After Breast Surgery Illustrations and text to help women regain range of motion through exercise.	4668-PS	ACS
Hand and Arm Care Describes how women should care for themselves to avoid lymphedema	Pamphlet	SLH
How To Do BSE Illustrated guide to performing BSE	2099 (English) 2674 (Spanish)	ACS
ACS Shower Card	2028-BCN	ACS

How to access these resources:

ACS = American Cancer Society, Ingham County Service Center. . . . . .(517) 351-0430
*Individual may receive single copies without charge from their local Service Center

NCI = National Cancer Institute. . . . . .(800) 422-6237
*Individuals may receive up to 20 copies without charge each month.

SLH = St. Lawrence Hospital Physical Medicine & Rehabilitation. . . . . (517) 377-0413

Nursing Care for Breast Cancer Study Office. . . . . (517) 432-5511
Toll-Free: (888) 432-5511

Neither MSU, the College of Nursing, the Nursing Care for Breast Cancer Study nor participating doctors have done independent reviews or evaluations of providers and therefore encourage users to assess the quality of care each service provides.

National Resources

National Alliance of Breast Cancer Organizations' (NABCO's)
The Web site can help you locate clinical trials and can link you to the Web sites of various organizations which offer breast cancer information. http://www.nabco.org

National Coalition for Cancer Survivorship
Provides a network of resources, regional and national meetings, public analysis and advocacy.
Phone: (301) 650-8868

National Cancer Institute
Call the Cancer Information Service of the NCI for referrals to clinical trials, medical centers, and information about all aspects of cancer at (800) 4-CANCER.

National Lymphedema Network
Provides up-to-date medical treatment information, quarterly newsletter, referral, educational information, support group referrals, and a nation-wide hotline. Also, offers a stainless steel medical alert bracelet intended for women after breast cancer surgery which carries the following message: *Lymphedema Alert: No Blood Pressure- No Needles in this Arm.* For more information on these services contact the National Lymphedema Network through one of the following:
2211 Post Street, Suite 404
San Fransisco, CA 94115-3427
Phone: (415) 921-1306
Toll-Free: (800)541-3259
E-Mail: lymphnet@hooked.net
Internet: www.hooked.net/~lymphnet.

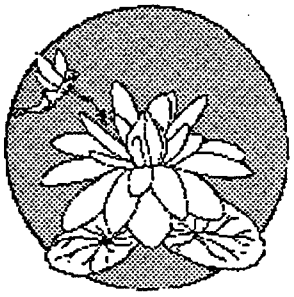
Y-ME National Breast Cancer Organization
Offers information, support, and referrals. Trained breast cancer survivors are matched to callers by background and experience whenever possible. Call (800) 221-2141.

Neither MSU, the College of Nursing, the Nursing Care for Breast Cancer Study nor participating doctors have done independent reviews or evaluations of providers and therefore encourage users to assess the quality of care each service provides.

A Subacute Care Intervention for Short-Stay Breast Cancer Surgery

STUDY WEB SITE
Appendix J

Web Site Address: "www.msu.edu/~nurse/bc"



A NEW BEGINNING

A Subacute Care Intervention for Short-Stay Breast Cancer Surgery

Principal Investigator
Gwen Wyatt, PhD, RN

Overview:
A brief overview of the study.

General Information About the Breast Cancer Study:
Purpose and aims of the study.

Study Design:
Study design with brief explanations.

Study Members:
A list of investigators and staff members, and how to reach them.

Protocols Used in the Study:
A brief overview of the nursing protocol used in the study.

Instruments Used in the Study:
Descriptions of the study data collection instruments.

Funding Source and Budget:
How the study is funded.

Bibliography of Study Related Articles:

Articles and abstracts related to the study.

Participating Surgeons:
A list of surgeons participating in the study.

Logo:
The logo, what it is and why it was chosen.

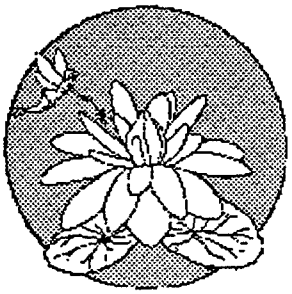
Breast Cancer Resources:
A list of resources for more information on breast cancer.

Support Breast Cancer Research.

There have been 163 visitors since May 15, 1998

Sign Our Guestbook View Our Guestbook

WebMaster: ChrisWyatt



A NEW BEGINNING

NURSING CARE FOR BREAST CANCER
OVERVIEW ABOUT BREAST CANCER AND OUR STUDY

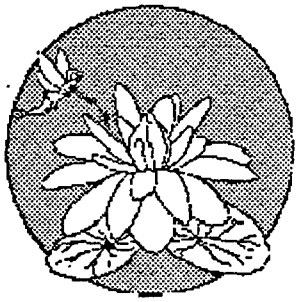
Do women recovering from breast cancer surgery fare better at home than in the hospital? To test this theory, researchers at Michigan State University's College of Nursing are undertaking a study that will determine how much and what kind of nursing care women need after breast cancer surgery.

Women who have had a mastectomy or lumpectomy face many physical and emotional adjustments. Until recent years, these women received up to 10 days of post-surgical hospital care. Today, women are discharged as soon as six hours after surgery, and must rely upon themselves or family members to manage one or more surgical drains and monitor other aspects of their recovery at home. Breast surgeries done on this out-patient basis give nursing staff very little time to teach women what they need to know in order to avoid post-surgical complications.

The scope of this study is to test the impact of a short term, subacute care intervention for women who have undergone short-stay surgery for breast cancer. When compared to conventional short-stay surgical care, the subacute care in-home intervention is targeted to help women attain optimal recovery during their immediate post-surgical phase and assist them in regaining their pre-surgical health status prior to initiating adjuvant therapy. The broader impact of this study may include contributions to policy on length of stay for breast cancer surgery, post-surgical nursing care needs, and standardizing customary costs for care.

Over the four years of this study, women will be offered comprehensive follow-up care in their homes after breast cancer surgery in order to improve their recovery. The care will be provided in the form of home visits and telephone contacts by a registered nurse during the first two weeks after surgery. To participate in the study, a woman must be 21 years of age or older, be scheduled for breast cancer surgery and, discharged from the hospital within 48 hours.

Forward



A NEW BEGINNING

NURSING CARE FOR BREAST CANCER
ABSTRACT

The purpose of this study is to test the effects of an immediate post-operative intervention designed to facilitate quality of life, physical and psychological well-being after diagnosis and surgery for breast cancer. A low-cost subacute care intervention that facilitates a quick return to pre-operative functioning will allow women to regain a higher quality of life and should result in lower out-of-pocket health costs.

A 2-group randomized controlled clinical trial with repeated measures will examine the effects of the intervention. The control group (n=100) receives standard medical care. The intervention group (n=100) receives individual physical and psychological support in the home through a minimum of 2 telephone calls and 2 in-home visits from a nurse within the first 14 post-operative days.

Data collection occurs at recruitment prior to surgery, and again at 4 weeks post-surgery when the intervention is complete and before beginning adjuvant therapy.

Between group comparisons of quality of life, physical, and psychological well-being will be made. We hypothesize that, compared to the control group, recipients of the intervention will report:

1. A higher quality of life

2. Fewer wound complications

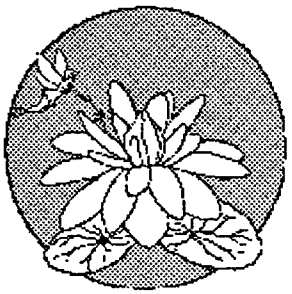
3. A higher physical functional status

4. Lower anxiety levels

5. Fewer symptoms

6. Lower out-of-pocket expenses associated with health care during the intervention period

Forward Back



A New Beginning

NURSING CARE FOR BREAST CANCER

Investigators

Gwen Wyatt, RN, PhD-Principal Investigator
Michigan State University
Associate Professor, College of Nursing

Barbara Given, RN, PhD, FAAN-Co-Principal Investigator
Michigan State University
Professor, College of Nursing

Charles Given, PhD-Co-Principal Investigator
Michigan State University
Professor, College of Human Medicine,
Department of Family Practice

Dorothy Pathak, PhD-Co-Investigator
Michigan State University
Associate Professor, College of Human Medicine, Department of Family Practice

Staff Members

Kate Christensen Beckrow, RN, BSN
Project Manager
Primary Resposibilities: Management of all grant activities & conducts patient interviews.

Mary Bloomfield, RN, BSN
Graduate Nursing Student/Research Assistant
Primary Responsibilities: Recruitment of eligible participants & nursing care visits.

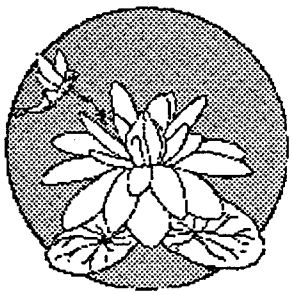
Kathy Ives
Epidemiology Student

Melissa Rovoll
Senior Nursing Student

Chris Wyatt
Junior Pre-Med/Business Student

Job responsibilities include:
Data management, web page development and maintenance,
literature searches, office duties, etc.

Study Office:
Nursing Care for Breast Cancer
B422 West Fee Hall



A New Beginning

NURSING CARE FOR BREAST CANCER
NURSING PROTOCOL

The first contact is a telephone call that occurs within the first 24 hours after surgery. The purpose of this call is to schedule the first nursing visit, assess for any emergent complications, and answer any questions the patient may have.

The second contact is an in-home visit. This is done within 1 to 3 days post-operatively. The purpose of this visit is to:

- assess vital signs
- assess drain, dressing, and surgical site
- assess pain management
- assess quality of life
- teach post-surgical care
- provide emotional support

The third contact is a telephone call and takes place 4 to 7 days post-operatively.
The purpose is to arrange a second in-home visit and to assess for any emergent complications.

The fourth contact is an in-home visit by the nurse
and occurs 8 to 14 days post-operatively. The purpose of this visit is to:

- assess vital signs
- assess drain, dressing, surgical site
- evaluate pain management
- evaluate quality of life each BSE, ROM, and lymphedema prevention
- provide emotional support
- provide community resources

While the protocol consists of a minimum of two telephone calls and two in-home visits for each woman in the intervention arm of the study, some women may receive additional care if assessed as necessary by the home care nurse. All protocol steps are covered by the nurse in the first fourteen post-operative days in the participant's home.

Forward Back

A New Beginning

NURSING CARE FOR BREAST CANCER
INSTRUMENTS

PRE-SURGICAL QUESTIONNAIRE

The pre-surgical questionnaire is filled out by the study participants prior to surgery. It includes questions about self breast exam, arm range of motion, anxiety level, and quality of life.

INSTRUMENTS USED

Spielberger State-Trait Anxiety Inventory. This instrument is comprised of 2 scales. The first measures state anxiety and the second measures trait anxiety. The STATE anxiety scale consists of 20 statements that evaluate how respondents feel "right now, at this very moment." The TRAIT anxiety scale consists of 20 statements that assess how people "generally feel." Feelings of apprehension, tension, nervousness, and worry are evaluated on both scales.

Quality of Life (FACT-B). This instrument consists of 6 subscales that measure: 1) physical well-being, 2) social and family well-being, 3) relationship with doctor, 4) emotional well-being, 5) functional well-being, and 6) additional concerns. Items are rated on a 5-point scale, where "0" equals not at all, and "4" equals very much. Respondents are asked to consider the previous 7 days when completing the instrument.

POST-SURGICAL INTERVIEW

The post-surgical interview is conducted by telephone and takes place 4 weeks after surgery. It evaluates symptom experience, physical functional status, healing since surgery, arm range of motion, self breast exam knowledge, anxiety level, quality of life, and out-of-pocket costs for health service utilization.

INSTRUMENTS USED

Modified Short-Form Health Survey (SF 36). Indicators of physical functioning come from the Rand Health Insurance Experiments and Medical Outcomes research instrument. It evaluates functional status before and after surgery for such activities as walking 1 mile, reaching into a cupboard overhead with the surgical side hand, and lifting an object over 10 pounds. Recall is used for pre-surgery data.

Symptom Experience (modified). The symptom measure was developed by Dr. Barbara A. Given and Dr. Charles W. Given. It encompasses a two-component symptom experience index. Respondents are asked to report the presence or absence of 17 symptoms, rate the symptom on a scale of "mild", "moderate", or "severe", and report the extent to which the symptom limits their daily functioning on a scale of "not at all", "limited a little", or "limited a lot."

Healing Process. The healing process is assessed using a newly constituted 5-part response checklist which includes wound appearance, drain care, sensory changes near the wound area, and fine motor coordination with the hand on the surgical side of the body.

Spielberger State-Trait Anxiety Inventory. See the description in the Pre-Surgical Questionnaire section.

Quality of Life (FACT-B). See the description in the Pre-Surgical Questionnaire section.

Health Costs. This instrument assesses post-surgical costs including: 1) visits to the surgeon 2) laboratory tests 3) primary care physician visits 4) emergency room visits, and 5) staying in a nursing home for recovery. Utilization of social work services, home care nurse agencies, transportation services and other costs including the purchase of medications and various supplies are also assessed.

Forward Back

A New Beginning

NURSING CARE FOR BREAST CANCER
FUNDING

U.S. Army Medical Research
Materiel Command
Department of Defense
Grant # DAMD17-96-1-6325

In September, 1996, Dr. Gwen Wyatt was awarded an $800,000 grant by the U.S. Army Medical Research and Materiel Command to provide an in-home nursing intervention for women following short-stay surgery for breast cancer. The Study is currently funded through September of 2000.

Forward Back

A New Beginning

NURSING CARE FOR BREAST CANCER
STUDY-RELATED PUBLICATIONS

Publications

Wyatt, G. & Friedman, L.L. (1998). Physical and psychosocial outcomes of midlife and older women following surgery and adjuvant therapy for breast cancer. Oncology Nursing Forum, 25 (4), 761-768.

Wyatt, G., Kurtz, M. E., Friedman, L. L., Given, B., & Given, C. W. (1997). Preliminary testing of the Long-Term Quality of Life (LTQL) Instrument for female cancer survivors. Journal of Nursing Measurement, 4(2), 153-170.

Wyatt, G. & Friedman, L.L. (1996). Quality of life in long-term female cancer survivors: A descriptive conceptual model. Quality of Life Research, 5, 387-394.

Wyatt, G. & Friedman, L.L. (1996). Long-Term female cancer survivors: Quality of life issues and clinical implications. Cancer Nursing, 19(1), 1-7.

Manuscripts Submitted

Wyatt, G., Friedman, L.L., Given, C.W., Given, B.A., & Beckrow, K.C. (1998, April). Complementary therapy use among older cancer patients. Cancer Practice.

Wyatt, G., Friedman, L.L., Given, C.W., & Given, B.A. (1997, December). A profile of bereaved caregivers following provision of terminal care. Journal of Palliative Care.

Wyatt, G. & Ogle, K. (1997, November). Recommendations for Pro-Active Hospice Education: A perspective from the Bereaved. Cancer Education.

Abstracts Published

Wyatt, G., Given, B., & Given, C. W., (1998, May). Bridging the Gap Between Nursing Outcomes and the Research Process: One-Step Computerized Documentation and Direct Data Entry. Oncology Nursing Forum, 25 (2), 247.

Bloomfield, M. & Wyatt, G. (1998, April). Post-Operative Seroma Formation Following Breast Cancer Surgery. Abstract submitted for presentation at the 21st Annual Family Practice Research Day Conference, to be held April 30, 1998 at the University Club of M.S.U., East Lansing, MI.

Beckrow, K.C. & Wyatt, G. (1998, April). The Impact of an In-Home Nursing Intervention for Women Following Short-Stay Surgery for Breast Cancer. Submitted for presentation at the 21st Annual Family Practice Research Day Conference, to be held April 30, 1998 at the University Club of M.S.U., East Lansing, MI.

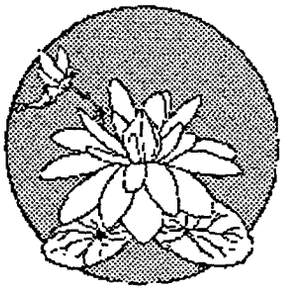
Wyatt, G. (1997). A Subacute Care Intervention for Short-Stay Breast Cancer Surgery. Accepted for poster presentation at the Department of Defense Breast Cancer Research Program Conference -- Era of Hope: A Multidisciplinary Reporting of DOD Progress, held October 31 - November 4, 1997, Washington, D. C. Published in Proceedings Book, Volume 3, p. 1033.

Wyatt, G. (1997). Physical and Psychosocial Needs of Midlife and Older Women Following Surgery and Adjuvant Therapy for Breast Cancer. Fourth National Conference on Cancer Nursing Research sponsored by the American Cancer Society. Published in Abstract Book, p. 90.

Grant Funding

Given, C., Wyatt, G., & Given, B. (1998, February). Utilizing Complementary Therapies to Enhance Quality of Life Among Cancer Patients. Collaborative partnership between West Michigan Cancer Center, Michigan State University, and the Mary Margaret Walther Program. 2 Year Budget: $297,293.

Forward Back

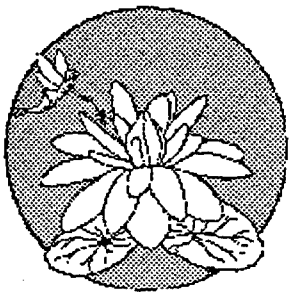


A New Beginning

NURSING CARE FOR BREAST CANCER
LOGO

The logo for our study begins with a circle which represents the circle of life. Inside the circle is a lotus blossom which represents the fragile beauty of life. The fairy magically dusting the flower represents the body's amazing ability to renew and heal. The blue of the background represents the peace and serenity which encompasses our bodies.

Forward Back Home



A New Beginning

NURSING CARE FOR BREAST CANCER
BREAST CANCER RESOURCES

GREATER LANSING AREA RESOURCES

Breast Cancer Support Group - *Sparrow Hospital*
meets the 2nd Monday of the month from 7:00 to 9:00 p.m. in room 208, at Sparrow Hospital.
For information call (517) 483-2135.

Challenging Cancer - *Ingham Regional Medical Center*
Meets every Monday evening from 7:00 to 8:00 p.m. in Suite 30 of the Professional Bldg.
Facilitator: John Burow, Chaplain (517) 334-2717.

Coping with Cancer - *Sparrow Hospital*
Meets 1st and 3rd Wednesday of the month from 2:00 to 3:00 p.m. in room 208 at Sparrow Hospital.
Facilitator: Linda Harrison (517) 483-2135.

Coping with Cancer - *Hayes Green Beach Memorial Hospital*
Meets the 3rd Thursday of each month at 7:00 p.m. in the portable classroom behind the hospital.
Facilitator: Mary Sue Hillibrand, R.N. and Peg Maguire, R.N. Barry-Eaton Health Department (517) 543-1050.

Coping with Cancer - *St. Johns*
Meets the 1st Monday of each month at 7:00 p.m. at the United Methodist Church in St. Johns.
Facilitator: Tanya Belbeck and Kim Hansen (517) 224-6730.

MSU Breast Cancer Support and Information Network - *Michigan State University*
Meets the 3rd Wednesday of every month at 12:00 p.m. in A131 East Fee Hall.
Open to all women who have been affected by breast cancer.
Call (517) 353-8828 extension 7

MSU Student Cancer Support Network - *Michigan State University*
A support network for students with a personal history of cancer or who are providing support for a family member or friend with cancer. Facilitated meetings are held twice a month. Informal social gatherings take place at least once a month. For meeting times and locations contact: Olin Health Center (517) 353-0718 or the Cancer Center at MSU (517) 353-8828.

GREATER DETROIT AREA RESOURCES

Breast Cancer Discussion and Support Group - *Sinai Women's Center*
A twelve week program held at Sinai Women's Center, 6014 Maple in West Bloomfield. Held 7:00 p.m. to 8:30 p.m. Discussion and support group only. For women only who have daignosis of stage I or II breast cancer.

Breast Cancer Support Group - *Calvary Lutheran Church*
Meets on the 1st Tuesday of every month (except July and August). Meets at Calvary Lutheran Church, 6805 Bluegrass in Clarkston from 7:00 p.m. to 9:00 p.m. Call Josephine Vaara to register at (810) 625-3841.

Breast Cancer Support Group - *Karmanos Cancer Institute*
For patients only. Meets the first Tuesday of every month at 2:00 p.m. at Mercy Memorial Convalescent Center in Monroe. For information call (313) 242-4888.

Caring Partners - *Karmanos Cancer Institute*
Monthly meetings for husbands and male significant others of breast cancer patients. Meets the 4th Wednesday of every month, from 6:00 p.m. to 7:30 p.m. Call (313) 745-2183 to register.

Just Between Us - *Beaumont Breast Cancer Center Support Groups*
Informal self-help for women who have just had breast cancer surgery. Meets the 1st Tuesday of each month at 7:00 p.m. at the Rose Cancer Center, Royal Oak Beaumont Hospital.

Living With Breast Cancer - *Beaumont Breast Cancer Center Support Groups*
Meets on the 2nd and 4th Wednesdays of each month, from 9:30 a.m. to 11:00 a.m. Meets at the Rose cancer Center at Royal Oak Beaumont Hospital. Phone Mary Seniak, R.N. at (810) 551-0600.

On-Going Support Group - *Providence Hospital on Grand River in Novi*
Meets the second Saturday of each month from 10:00 a.m. to 12:00pm at Providence Hospital. Phone (313) 462-3788 for further information.

On-Going Support Group - *St. John Hospital and Medical Center*
Meets the 1st Wednesday of the month at St. John Surgery Center, 21000 12 Mile Road in St. Clair Shores. Contact Laura Dowty at (313) 343-3684 to register.

Unique Breast Cancer Support Group - *Karmanos Cancer Institute*
Meets from 6:00 to 7:30 p.m. the 2nd Monday of every month at the Unique Boutique located in Rockwood, in the Downriver area. Phone Sharon Cure or Carol Kudron at (313) 966-0761

YWCA Encore Programs - *Redford*
Meets Thursdays from 1:00 p.m. to 3:00 p.m.
Program coordinator: Lois Bieren (313) 537-8500.

YWCA Encore Programs - *Westland*
Meets Thursdays from 9:30 a.m. to 11:30 a.m. at the Forum Health Spa, 34250 Ford Road at Wildwood, Westland. Program coordinator: Abena Mahluli (313) 561-4110.

YWCA Encore Programs - *Clawson*
Meets Tuesdays from 10:00 a.m. to 12:00pm
Program coordinator: Leah Sauger (810) 759-5947.

NATIONAL RESOURCES

American Cancer Society
1-800-227-2345

I'm Aware Koman Alliance
Telephone support and information sponsored by Susan D. Koman Breast Cancer Foundation.
Phone: 1-800-462-9273.

National Cancer Institute
1-800-422-6237

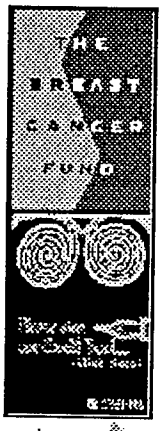
National Coalition for Cancer Survivorship
Provides a network of resources, regional and national meetings, public analysis and advocacy.
Phone (301)-650-8868.

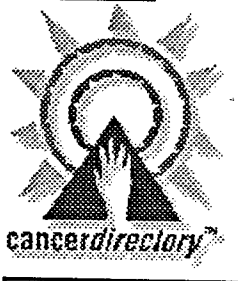
National Lymphedema Network
Provides up-to-date medical treatment information, quarterly newsletter referral, educational information, support group referrals, nation wide hotline (1-800-541-3259). Phone: (415)-921-1306. E-mail: lymphnet@hooked.net. Address: 2211 Post Street, Suite 404, SanFrancisco, CA 94115-3427.

Y-ME National Breast Cancer Organization
24 hour hotline for women. All counselors are breast cancer survivors. Provides support, information, and literature.
Spouses and significant others of breast cancer patients are paired up with men who have been through similar circumstances. Call: 1-800-221-2141.

INTERNET RESOURCES:

Breast Cancer Awareness
32


THE
BREAST
CANCER
FUND


cancerdirectory

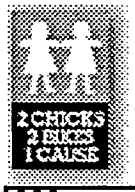
ONS
Oncology Nursing Society

BREAST
CANCER
NETWORK

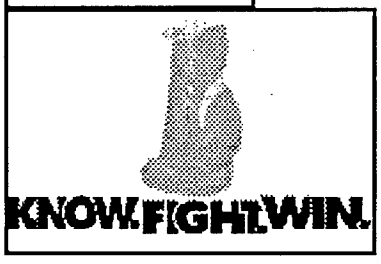
NATIONAL
CANCER
INSTITUTE

NBCC

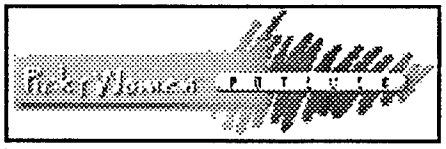
AVON


2 CHICKS
2 BLOCKS
1 CAUSE

SHN
SAPIENT HEALTH NETWORK

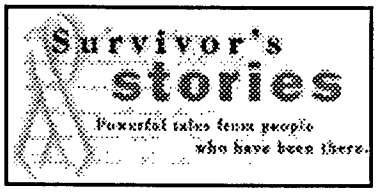

KNOW.FIGHT.WIN.

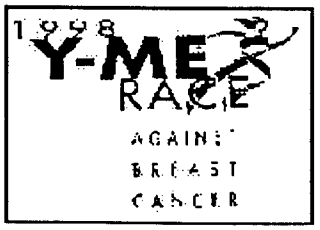
U.S. HOUSE OF REPRESENTATIVES



Breast health
Facts you need now.

Talk Back
Friends and family helping
others through difficult times.


Survivor's
stories
Powerful tales from people
who have been there.

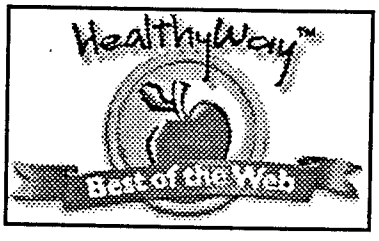

1998
Y-ME
RACE
AGAINST
BREAST
CANCER

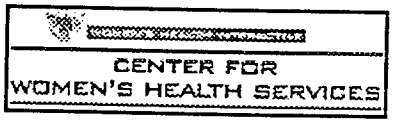
amazon.com

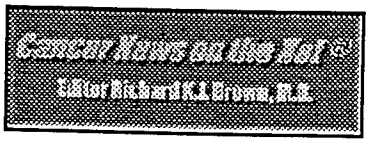
NLN
NATIONAL LYMPHEDEMA NETWORK

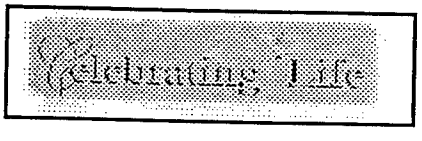
AMWA

MedExplorer
HealthMedical Search Engine
www.medexplorer.com

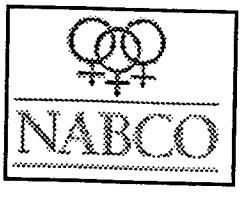

HealthyWay™
Best of the Web


CENTER FOR
WOMEN'S HEALTH SERVICES




Celebrating Life

UPHS
Health


NABCO

Women's Cancer Center

The Susan G. Komen Breast Cancer Foundation
RACE FOR THE CURE

Breast Cancer Answers

National Women's Health Resource Center
Your Source for Health

NATIONAL LIBRARY OF MEDICINE

BCN

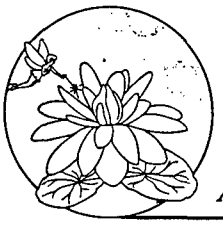
Back

1997-1998 GRANT ABSTRACTS
Appendix K

Wyatt, G., Given, B., & Given, C. (1998). Bridging the Gap Between Nursing Outcomes and the Research Process: One-Step Computerized Documentation and Direct Data Entry. Oncology Nursing Forum, 25(2), 347.

Beckrow, K.C. & Wyatt, G. (1998, April). The Impact of an In-Home Nursing Intervention for Women Following Short-Stay Surgery for Breast Cancer. Michigan Family Practice Research Day. Published in Proceedings Book, p. 23.

Bloomfield, M. & Wyatt, G. (1998, April). Post-Operative Seroma Formation Following Breast Cancer Surgery. Michigan Family Practice Research Day. Published in Proceedings Book, p. 23.



A New Beginning

Nursing Care for Breast Cancer
B422 West Fee Hall
Michigan State University
East Lansing MI 48824-1313
Phone (517) 432-5511, Fax (517) 353-8612

BRIDGING THE GAP BETWEEN NURSING OUTCOMES AND THE RESEARCH PROCESS: ONE-STEP COMPUTERIZED DOCUMENTATION AND DIRECT DATA ENTRY.

Gwen K. Wyatt, RN, PhD, College of Nursing, Michigan State University, East Lansing, MI 48824.

Computers and software are now an essential aspect of research. Data analysis is the established association that researchers have with computers. However, as computers become more a part of everyday life and software improves, computers are being included in many aspects of the research process. The purpose of this paper is to share our computerized documentation system for nursing care, using preliminary data from our four year "Nursing Care for Breast Cancer Study," funded by the Department of Defense #DAMD17-06-1-6325. Over the four years of the study, 200+ women who have had short-stay (48 hours or less) breast cancer surgery will be enrolled in a randomized clinical trial. Women in the intervention arm receive nursing care in their home and phone contacts during the first two weeks following surgery. The computerized patient documentation program also serves as the research data entry program. Nurses omit the traditional step of creating a paper chart. Within the software program, study nurses can chart data on physical assessment, symptom experience, incision self-care, drainage management, teaching/learning on BSE, lymphedema prevention, ROM of the affected arm, and nursing diagnosis and interventions. This program further allows data analysis and summary at any time to assess factors, such as the most commonly used nursing diagnoses and interventions, which establishes a direct linkage between the nursing process and intervention outcomes. Along with the clear advantages of combining steps in the overall research process, there are also challenges in terms of the "learning curve" for nurses who have varying degrees of computer literacy and are accustomed to paper charts. It is expected that the trend toward increased use of computers in research will ultimately streamline the overall process, but several implementation issues will need to be addressed as well.

MSU is an Affirmative Action/Equal Opportunity Institution

THE IMPACT OF AN IN-HOME NURSING INTERVENTION FOR WOMEN FOLLOWING SHORT-STAY SURGERY FOR BREAST CANCER

Kathryn Christensen Beckrow, RN, BSN
Gwen Wyatt, RN, PhD

With the current early discharge trend for short-stay breast cancer surgery, women are often sent home within hours rather than days. Many are left to care for themselves or depend on family members to provide support, while most have no prior experience with this type of post-surgical care. This lack of knowledge and experience often leads to feelings of anxiety, the development of physical complications, and greater out-of-pocket costs due to unscheduled health provider visits.

The purpose of this report is to examine the impact of a subacute in-home nursing intervention on emotional well-being, physical recovery, and out-of-pocket costs incurred by women following short-stay breast cancer surgery. Analysis will consist of t-tests and frequencies to assess for differences between control and intervention participants. Data are based on telephone interviews conducted three to five weeks after surgery with 60 participants from the randomized clinical trial "A Subacute Care Intervention for Short-Stay Breast Cancer Surgery" (DAMD17-96-1-6325). The participants were women 21 years of age or older who have undergone short-stay surgery (less than 48 hours) for breast cancer. Data from this study will help define the physical and emotional nursing care needs of women following short-stay breast cancer surgery and cost savings associated with receiving a nursing intervention.

POST-OPERATIVE SEROMA FORMATION FOLLOWING BREAST CANCER SURGERY

Mary Bloomfield, RN, BSN
Gwen Wyatt, RN, PhD

This preliminary descriptive study analyzes a subset of 50 participants from the federal grant, *A Subacute Care Nursing Intervention for Short-Stay Breast Cancer Surgery* (DAMD17-96-1-6325). The purpose is to examine seroma formation, a common post-operative complication resulting from the accumulation of lymphatic drainage into the surgical area, and to ascertain whether an association exists between seroma formation and the following variables: 1) type of post-operative care; 2) type of surgery; 3) duration of closed-suction drainage; 4) initiation of range of motion (ROM) exercise; 5) age; and 6) body mass index (BMI). Data are based on chart audits conducted four months after surgery.

A significant association between seroma and two of the variables was found: type of surgery and age. Older patients recovering from mastectomy with node dissection were most likely to develop a seroma. In light of these preliminary findings, recommendations for patient education are to emphasize signs, symptoms, and typical onset of seroma, and to notify the surgeon promptly if seroma formation is suspected.

A Subacute Care Intervention for Short-Stay Breast Cancer Surgery

CONTINUING EDUCATION PARTICIPATION BY GRANT PERSONNEL
Appendix L

1998 Summer Research Presentation Series
B423 West Fee Hall, Michigan State University
July 7, July 14, and July 21, 1998

Breast Cancer Awareness
Nursing Continuing Education at Michigan State University
Summer 1998 Tuesday Evening Series - Women's Health Issues
A133 Life Sciences Building, Michigan State University
June 16, 1998

Supported by grant DAMD17-96-1-6325
U.S. Army
Medical Research & Materiel Command
Department of Defense

Sponsors

Gwen K. Wyatt, PhD, RN

Barbara A. Given, PhD, RN, FAAN

Charles W. Given, PhD

MICHIGAN STATE UNIVERSITY

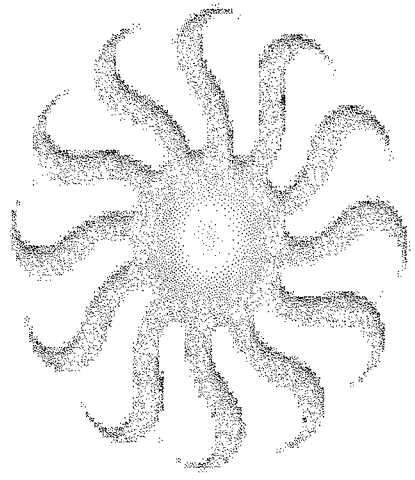
For more information contact:

Kate Beckrow or Mary Bloomfield
Nursing Care for Breast Cancer Study
B422 West Fee Hall
Michigan State University
East Lansing, MI 48824-1313
Phone: (517) 432-5511
Email: shrtstay@pilot.msu.edu

Nursing Care for Breast Cancer
B422 West Fee Hall
Michigan State University
East Lansing, MI 48824-1313

Place Postage Here

1998 Summer Research Presentation Series



Purpose

To provide a collaborative and intellectually enriching environment for the staff members of the Nursing Care for Beast Cancer Study and the Family Care Studies.

Objectives

At the completion of this series participants will be able to:

1. List key cost factors in proposal preparation.
2. Describe findings in music therapy research conducted with breast cancer patients.
3. Compare cognition changes as related to stage of cancer.

Dates

July 7, 1998
Cathy Bradley, PhD, MPA
College of Human Medicine
Department of Family Practice

July 14, 1998
Frederick Tims, PhD, RMT-BC
College of Arts & Letters
School of Music

July 21, 1998
Daniel Murman, MD, MS
College of Osteopathic Medicine
Department of Clinical Neuroscience
& Opthalmology

All meetings will be held in the
Institute for Managed Care
Conference Room
D133 West Fee Hall
12:00pm to 1:00pm

Topics

Estimating Resource Utilization and Costs in Studies of Treatment Effectiveness
(July 7th)

Music and Healing for Women with Breast Cancer
(July 14th)

Impaired Cognition in Cancer Patients
(July 21st)

Summer will soon be here and we are again offering a series of two-hour continuing education programs. Convenient parking, air-conditioning and high quality speakers — spend a summer evening with us and earn continuing education credit, too!

Due to the low registration fee, no cash refunds can be made. A certificate for a future nce@msu program will be issued upon notice of cancellation to the College of Nursing, Office of Outreach (phone 517-355-6525; fax 353-9553) up to seven (7) calendar days prior to the program date. Registrants may send an alternate. Walk-in admissions will be accepted on a space-available basis.

Certificate of Completion

This summer's evening series is being offered as a Women's Health Issues Certificate Program. Michigan State University College of Nursing will provide a special certificate of completion to those participants who attend the entire four-session series.

For more information on other continuing education opportunities, call 517-355-6525 or check our web site:
http://www.msu.edu/unit/nurse/

MSU is an affirmative-action, equal opportunity institution.

Non-profit Org.
U.S. Postage
PAID
East Lansing, MI
Permit #21

Michigan State University
College of Nursing
Office of Outreach
A214 Life Sciences Building
East Lansing, MI 48824-1317

nce@msu
Nursing Continuing Education at Michigan State University

nce@msu
Nursing Continuing Education at Michigan State University

Summer 1998
Tuesday Evening Series

Women's Health Issues

6:45 p.m. - 9:00 p.m.
Life Sciences Building
Auditorium--Room A133
MSU Campus

Earn two continuing education contact hours per session

Brought to you by the MSU College of Nursing

MICHIGAN STATE UNIVERSITY

May 19, 1998
Women, Weight & Culture

Jonathan Robinson, PhD, MS
Michigan Center for Preventive Medicine

Our culture's unrelenting obsession with thinness causes tremendous suffering and social isolation for individuals of size. This program will debunk traditionally held myths about the relationship between weight and health, and suggest an alternative paradigm that can empower individuals to lead healthier, more fulfilled lives.

June 16, 1998
Breast Cancer Awareness

Gwen Wyatt, RN, PhD
Associate Professor
MSU College of Nursing

This session will discuss early detection through screening, and the latest on the new prevention drugs. We will review the various surgical treatment options, and follow-up care needed for the short-stay surgeries often referred to as the "drive through mastectomy". Lifestyle issues such as diet and weight management will be covered as they relate to trends in breast cancer care.

July 21, 1998
Mid-life Transitions

Kathy Dontje, MSN, RN, CS
Assistant Professor, Clinical Track
MSU College of Nursing

Menopause is a time of change and transition in women's lives. This session will provide information about hormonal changes and treatment options both traditional and alternatives available to women.

August 18, 1998
Depression and Stress

Celia E. Wills, PhD, RN
Assistant Professor
MSU College of Nursing

Depression and adverse effects of stress are important contemporary health concerns. This class will provide current information about depression and stress, and clinical practice approaches for assessment and intervention.

Continuing Education Credits

Participants who attend the entire session and complete an evaluation form will receive a certificate for 2.0 contact hours. Michigan State University College of Nursing is approved as a provider of continuing education in nursing by the Michigan Nurses Association which is accredited as an approver of continuing education in nursing by the American Nurses Credentialing Center Commission on Accreditation.

***Please note:** this session **only** will be held in A219 Clinical Center due to construction in the Life Sciences Building.*

---

nce@msu REGISTRATION FORM--please clearly PRINT all information

Name _____ S.S. # _____
Home
Address _____ City _____ State _____ Zip _____
Day Evening
Phone (____) _____ Phone (____) _____ Fax (____) _____

Employer _____ Position _____ e-mail _____

Registration Fees	*One Session*	*4-Session Package*
MSU Nursing Student	free	free*
MSU Nursing Faculty	$ 15	$ 55
CONAA** Members	$ 15	$ 55
All Others (in advance)	$ 20	$ 75
At the door	$ 25	-----
TOTAL ENCLOSED	_____	

Please register me for the following:
- ❑ May 19 Positive Eating
- ❑ June 16 Breast Cancer
- ❑ July 21 Midlife Transitions
- ❑ Aug 18 Depression & Stress

*students are asked to pre-register; student ID required for admission
**College of Nursing Alumni Assoc. Member

Return registration with check payable to Michigan State University to: Office of Outreach, MSU College of Nursing, A214 Life Sciences Bldg, East Lansing, MI 48824-1317; or FAX your charge registration to (517) 353-9553.
Charge my ❑ VISA ❑ Master Card

Card # _____ Exp. Date _____

Signature _____

DEPARTMENT OF THE ARMY
US ARMY MEDICAL RESEARCH AND MATERIEL COMMAND
504 SCOTT STREET
FORT DETRICK, MARYLAND 21702-5012

REPLY TO
ATTENTION OF:

MCMR-RMI-S (70-1y) 8 Jan 2003

MEMORANDUM FOR Administrator, Defense Technical Information Center (DTIC-OCA), 8725 John J. Kingman Road, Fort Belvoir, VA 22060-6218

SUBJECT: Request Change in Distribution Statement

1. The U.S. Army Medical Research and Materiel Command has reexamined the need for the limitation assigned to the enclosed. Request the limited distribution statement for the enclosed be changed to "Approved for public release; distribution unlimited." These reports should be released to the National Technical Information Service.

2. Point of contact for this request is Ms. Judy Pawlus at DSN 343-7322 or by e-mail at judy.pawlus@det.amedd.army.mil.

FOR THE COMMANDER:

PHYLIS M. RINEHART
Deputy Chief of Staff for
Information Management

Encl

ADB265840
ADB279138
ADB264578
ADB281679
ADB281645
ADB261128
ADB261339
ADB273096
ADB281681
ADB259637
ADB256645
ADB262441
ADB281674
ADB281771
ADB281612
ADB266633
ADB251763
ADB281601
ADB258874
ADB281773
ADB281660
ADB259064
ADB266141
ADB281664
ADB258830
ADB266029
ADB281668
ADB259834
ADB266075
ADB281661
ADB282069
ADB265386
ADB282057
ADB258251
ADB264541
ADB241630
ADB281924
ADB281663
ADB281659