Telephone contact intervention in women undergoing treatment for breast cancer

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Abstract

The chemotherapy received by breast cancer patients is complicated by many side effects. At our centre, a health care professional is accessible at all times, yet we hypothesize that most breast cancer patients suffer in silence rather than phone for assistance. This study sought to assess the value of and perceived need for a telephone call to breast cancer patients following the initiation of chemotherapy. The women's side effects were also documented, and the level to which they were educated about symptoms to expect and available assistance was evaluated.

Overall, the weekend calls were well received because they provided information and support to the patients. It was determined that further research is required to determine if and how such a call should be best implemented at our cancer centre.

In 2008, an estimated 22,600 women were diagnosed with breast cancer in Canada alone (CCS/NCIC, 2008). While local and systemic treatments for breast cancer vary from patient to patient, they most often involve a combination of surgery, chemotherapy and radiation therapy. At our centre, the majority of breast cancer patients receive an anthracycline-based chemotherapy regimen, with or without a taxane. As is the case with other chemotherapeutic agents, anthracycline and taxane use is accompanied by many side effects (Shapiro & Recht, 2001; Tang, 2009).

In cancer centres around the world, it has become increasingly the norm to provide chemotherapy treatment as an outpatient service (Anastasia, 2002; Groves, 2005). Consequently, telephone triage has been extensively adopted as a way to manage and support the large number of patients experiencing chemotherapy side effects at home (Anastasia, 2002; Groves, 2005). It is important to remember, however, that telephone triage can only be of assistance to those patients who call for help. As Bostrom et al. (1996) have

demonstrated, although patients may have questions and concerns about their health, they are unlikely to initiate a call to a hospital-based, nurse-led telephone service in order to address their needs. It has been suggested that this reluctance to seek help can be attributed to lack of patient knowledge as to which side effects warrant a call, as well as an unwillingness to inconvenience their care provider (Mooney, Beck, Friedman & Farzanfar, 2002).

If patients being treated in an ambulatory-care setting are reluctant to use the telephone services that currently exist, new solutions must be found to meet their information and symptom-management needs. The use of educational audiotapes has been demonstrated to be a useful tool for providing breast cancer patients receiving chemotherapy with the skills and knowledge needed to treat their side effects and decrease their anxiety levels (Williams & Schreier, 2004, 2005). Computer technology, in the form of computerized treatment protocols and documentation programs (Rawl et al., 2002), as well as computerized telecommunication systems (Mooney et al., 2002), has also been studied as a way to manage cancer patients' psychological health and symptomatology.

However, Lock and Willson (2002) have shown that cancer patients prefer to receive information about their chemotherapy treatment through private conversations with health care providers. Nurse-initiated telephone calls to patients may, therefore, be a preferable option. This type of intervention has been evaluated in oncology patients following radiotherapy (Rose, Shrader-Bogen, Korlath, Priem & Larson, 1996), chemotherapy (Kelly, Faught & Holmes, 1999), day surgery (Allard, 2007), and ovarian cancer

Intervention téléphonique destinée aux femmes subissant un traitement pour leur cancer du sein

Abrégé

La chimiothérapie reçue par les patientes atteintes de cancer du sein se complique de nombreux effets secondaires. Dans notre centre, un professionnel de la santé est disponible en tout temps, mais nous émettons l'hypothèse que la plupart des patientes atteintes de cancer du sein souffrent en silence plutôt que de téléphoner pour demander de l'aide. Cette étude cherchait à évaluer la valeur d'un appel téléphonique aux patientes atteintes de cancer du sein après le démarrage de leur traitement de chimiothérapie et d'évaluer la nécessité d'un tel appel aux yeux de cette population. De plus, on a documenté les effets secondaires éprouvés par les femmes et évalué la mesure dans laquelle elles avaient été sensibilisées aux symptômes éventuels et à l'aide mise à leur disposition.

Dans l'ensemble, l'appel de fin de semaine était bien reçu parce qu'il fournissait de l'information et du soutien aux patientes. On a conclu qu'il fallait mener d'autres recherches afin de déterminer si et comment un tel appel devrait être mis en œuvre dans notre centre de cancérologie.

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treatment (Cox et al., 2008), yielding the promising results that information and support can be provided over the phone, and symptoms can be successfully monitored and managed.

At our cancer centre, patients receive chemotherapy Monday through Friday, during regular office hours. When patients turn to the cancer centre for assistance managing side effects caused by chemotherapy, their options depend significantly on the time of day and the day of the week. Their primary nurse or the oncology triage nurse is only available for management advice and intervention on weekdays during office hours. The general practitioner in oncology (GPO) or medical oncologist on-call is the only health care professional at the cancer clinic available to address chemotherapy patients' questions and concerns after hours and on the weekend. While a health care provider can be reached at all times to help with symptom management, we hypothesized that most breast cancer patients suffer in silence on the weekend rather than call for assistance with their side effects.

The objective of this study was to assess the value of, and perceived need for a telephone call to a sample of breast cancer chemotherapy patients on the weekend following the initiation of chemotherapy. The side effects experienced by these breast cancer patients during this first weekend of chemotherapy were also documented. As well, the level to which the women were educated about which side effects to expect and who to call for assistance was evaluated.

Materials and methods

This pilot program evaluation used a descriptive one-group post-test design. Following ethics approval from the University of Western Ontario's Research Ethics Board in October 2006, the clinical research unit at the London Regional Cancer Program (LRCP) was enlisted to assist with the recruitment of patients. Participation in the study was limited to women older than 18 years of age who were

diagnosed with stage I, II, or III breast carcinoma and scheduled to begin adjuvant chemotherapy. In order to participate, these women had to be able to hear and speak English. The ability to provide informed written consent and access to a telephone were also components of the inclusion criteria. Participants were excluded if they had had chemotherapy treatment for a previous or concurrent malignancy.

Over a period of five months, from February until July 2007, eligible breast cancer patients were approached at pre-chemotherapy initiation clinic visits by a member of their care team. Once the purpose of the study had been explained, interested patients were invited to participate in the research. After signing the information and consent documentation, participants were informed that they would receive a phone call on the weekend following their first round of chemotherapy to determine if they had any side effects or concerns that needed to be addressed. At this initial meeting, participants were also given a brief demographic questionnaire to complete (Appendix One). The participant's hospital chart was then reviewed in order to collect relevant patient and chemotherapy information.

Focus group research with patients from the clinic and a review of the relevant literature were used to develop a telephone questionnaire (Appendix Two) to elicit various side effects and concerns of women beginning the first round of chemotherapy for breast cancer treatment. Checklists have been shown to be the most effective tool with which to question patients about their side effects (Bent, Padula & Avins, 2006). It was thus decided that a comprehensive list of possible side effects, as catalogued by the **Compendium of Pharmaceuticals and Specialties** (CPhA, 2004) and divided according to body systems, would be included in the questionnaire. The work of Anastasia (2002) and Cancer Care Ontario's Nursing Professional Advisory Committee (2004) was used to develop questions to collect more detailed information on a subset of common side effects (fever, fatigue, pain, palmar-plantar erythrodysesthesia, peripheral neuropathy, nausea, vomiting, diarrhea, and constipation) in order to better determine the severity of these symptoms. In addition to documenting side effects, the questionnaire also addressed the level of information received by patients from oncology nurses and doctors pertaining to expected chemotherapy side effects and how to best manage them.

The telephone surveys were initiated by a member of the research team on the Saturday following the first cycle of chemotherapy, beginning at approximately 11 a.m. If there was no answer, the patient was called back, to a maximum of six tries over the entire weekend.

Finally, a brief written questionnaire was developed and distributed to the GPOs and medical oncologists who take call for the cancer clinic (Appendix Three). The purpose of this questionnaire was to gather information on the number of calls received from breast cancer patients by the physicians on-call, as well as the most common interventions required. The physicians were also questioned regarding their views on the need for telephone contact with breast cancer patients on the weekend following the initiation of chemotherapy.

The data from all three of the questionnaires (demographic information, telephone survey, and GPO/medical oncologist survey) were tabulated and analyzed using Microsoft Excel.

Results

All 20 of the breast cancer patients who met the inclusion criteria and were approached about participating in the study agreed to do so. All but one of these patients completed the demographic information survey. The respondents ranged in age from 44 to 72 years and had a mean age of 54 years (SD = 8.2) (Table One). All of the women were Caucasian and 58% were married or in common-law relationships. Not including the 22% of patients who were retired, 71% were still working, and of those working, 70% were doing so full-time. Ninety-four per cent of respondents had at least completed high school, with 53% of these women being graduates of trade or business school.

Table One. Sample Description (N = 19)

Variable		n	%
Age	Mean: 54 years, SD: 8.2 years Range: 44 to 72 years		
Ethnicity	Caucasian	19	100
Marital status	Married	10	53
	Separated	3	16
	Single	3	16
	Common-law	1	5
	Divorced	1	5
	Widowed	1	5
Work	Full time	7	39
	Retired	4	22
	Medical leave (full time)	3	17
	Part time	3	17
	Disability	1	5
Income	< \$10,000	2	10
	\$10,000–30,000	3	16
	\$30,000–50,000	0	0
	> \$50,000	11	58
	No response	3	16
Education	Some high school	1	5
	High school graduate	3	16
	Trade/business school graduate	8	42
	University graduate	3	16
	Graduate degree	1	5
	No response	3	16

The 20 breast cancer patients who participated in the study were all on an anthracycline-based chemotherapy regimen. Sixty per cent of the women received the common chemotherapy combination known as FEC-100, which contains the drugs 5-fluorouracil, epirubicin and cyclophosphamide. Thirty per cent of the patients were given doxorubicin and cyclophosphamide, otherwise known as the AC regimen, as well as a taxane, either paclitaxel or docetaxel. The final 10% of the women interviewed were on the AC regimen without the added taxane.

While the calls ranged from one to five days following initiation of chemotherapy, participants were, on average, contacted three days after receiving their first treatment. Seventy-five per cent of the initial telephone calls were completed on the Saturday following the initiation of chemotherapy for the patient being contacted. Of the four questionnaires that were completed on the Sunday of that first weekend, two had been deferred because the patient was not feeling well enough to participate on the Saturday, and the other two patients could not be reached on the first day. Only one patient could not be reached at all over the course of the first weekend following her chemotherapy start date. Six unsuccessful attempts were made to contact this individual, three on Saturday and three on Sunday. On average, it took two calls to contact patients. Forty-five per cent of participants were reached with the first call, while it took more than three calls to get in touch with one-quarter of the women. The initial telephone conversations averaged 19 minutes in duration, with calls ranging from seven minutes to 63 minutes (SD = 13). The questionnaire itself did not take more time to complete for those calls that were longer than average. Rather, certain women were very eager to discuss their cancer experience once the questions for the study had been answered, which resulted in longer conversations.

Barring those telephone calls that were longer due to extra discussion, the majority of the call was spent working through the checklist of possible chemotherapy side effects. The number of self-reported side effects ranged from zero to 16, out of a possible maximum of 40. Overall, the average number of side effects reported per patient was 7.3. More than half of the breast cancer patients who

received the telephone intervention on the weekend following the initiation of chemotherapy reported fatigue (74%), headache (68%), nausea (58%) and insomnia (53%); anorexia and abdominal pain were each reported by 42% of the respondents (Figure One). Although less common, many other side effects were also reported by these individuals. In order of decreasing frequency, participants mentioned dehydration (37%), dizziness (37%), depression (37%), taste/smell changes (32%), vomiting (26%), dyspepsia (26%), pain (21%), myalgia (21%), increased lacrimation (21%), diarrhea (21%), constipation (21%), asthenia (16%), photosensitivity (16%), dermatitis (16%), shortness of breath (10%), cough (10%), sore throat (10%), peripheral neuropathy (5%), impaired memory/concentration (5%), oral stomatitis/mucositis (5%), and hot flashes (5%) (Figure One). None of the participants reported any of the following chemotherapy side effects during the call: fever, alopecia, palmar-plantar erythrodysesthesia, hyperpigmentation of the nails, onycholysis, arthralgia, conjunctivitis, keratitis, heart problems, edema, epistaxis, jaundice, hemorrhage, and amenorrhea.

During the telephone calls on the first weekend post-chemotherapy, additional details were collected on a subset of side effects, including fatigue, nausea, vomiting, diarrhea and constipation. Fatigue, the most common side effect experienced by the women interviewed, had an average onset of two days following the initiation of chemotherapy, although the timing ranged from several hours to five days post-treatment. The average score attributed to fatigue was 5.5 out of a maximum of 10 (SD = 2.1), which was classified as moderate fatigue. While the scores ranged from three to nine, 36% of the patients who answered "yes" to fatigue classified it as severe. With regards to nausea, the average onset was 35 hours post-treatment, although 54% of the patients were affected within hours of receiving the chemotherapy drugs. Vomiting, while a much less common side effect than nausea, also occurred shortly after the first administration of chemotherapy drugs in the majority of cases. Finally, diarrhea and constipation, which were each a problem for 21% of the participants, had an average onset of 2.25 and 1.25 days post-chemotherapy, respectively.

When asked on the questionnaire if they felt well-informed by the chemotherapy nurses and medical oncologists about what types of chemotherapy side effects to expect, 89% of the respondents answered affirmatively. One of the two patients who did not feel adequately informed provided the following criticism: "I was just given a book to read." While the majority of patients felt appropriately informed about possible side effects, 21% of the women questioned reported that they were experiencing side effects about which they had not been warned. For the most part, these "unexpected" side effects were actually unexpectedly severe forms of those that had been mentioned, namely insomnia, fatigue and nausea. For example, one respondent commented that she had not been told "how bad my nausea would actually be" while another "wasn't told that she wouldn't even be able to get out of bed". One woman did, however, describe "a remarkably red face," about which there had been no mention at all during her pre-treatment discussions with her medical oncologist and the oncology nurses.

All of the women contacted stated that they had been provided with at least one phone number to call if they needed help managing any of their chemotherapy side effects. However, the contact information the patients were given by their chemotherapy nurses, medical oncologists, and/or the literature provided by the cancer centre varied tremendously. Fifty-three per cent of the study participants said they had been told to phone the primary nurse if they had any questions during office hours. Twenty-six per cent of the women stated that they would call the triage nurse for assistance, but again only during office hours. For help after hours, only five of the 19 patients questioned knew to contact the medical oncologist on-call.

Every woman contacted as part of this study indicated that she appreciated receiving the telephone call. As one patient commented, "Cancer is new to me and very scary. It is nice to have someone answer my questions and take the time to talk to me about my concerns." Many of the other participants echoed her feelings. For instance, one noted that she "didn't know what to expect" and that it was "lovely to have some support". Another patient said: "It is wonderful to have someone to talk to, share my fears, someone to listen to me." Again and again, the women noted how appreciative they were that someone called to "check in" with them. Others were most grateful for the information regarding who to contact for assistance after hours: "I didn't know that there was a number I could call for emergencies on the weekend!"

Not only did all of the participants express appreciation for the contact intervention, they all also answered affirmatively to the question "Is there a need for such a call?" (on the weekend following the initiation of chemotherapy). When asked to rate the utility of the telephone call on a scale from zero (useless) to 10 (absolutely necessary), the average rating was 9.2 (SD = 1.3), with 53% of respondents rating it at 10. Overall, patients thought that the call was useful because it reiterated important information about possible side effects and emergency contacts that they may have missed during their pre-treatment appointments. As one participant mentioned, "It is easier to hear information than to just read it in a booklet". Another woman observed that "side effects do not occur on a nine-to-five schedule, Monday to Friday," and she was thankful that research was being performed to better help breast cancer patients manage their side effects in the outpatient setting.

Conversely, when the GPOs and medical oncologists who take call for the cancer centre were polled regarding their thoughts on the intervention, the vast majority felt that there was no need to implement such a contact on the weekend following the initiation of chemotherapy. Indeed, a physician commented that the call "may be superfluous". On the other hand, one medical oncologist disagreed: "I do think this [call] would be helpful, because many patients having acute nausea and vomiting do not call in even when we tell them they should."

Discussion

The results of this research highlight that breast cancer patients can begin to experience side effects from their chemotherapy treatment as early as the very day of the first administration of drugs. As was demonstrated by this study and discussed by others in the literature, patients dealing with a life-threatening diagnosis such as cancer may only retain a fraction of the information covered in their pre-treatment encounters with health care providers (Anastasia, 2002; Anastasia & Blevins, 1997; McPherson, Higginson & Hearn, 2001; Williams & Schreier, 2004, 2005). Unfortunately, because of the possibly rapid onset of side effects, there may not be many opportunities to repeat the important information about who to contact for assistance in time for it to be of any use to breast cancer chemotherapy patients. It is, therefore, important to note that those women contacted as part of this study clearly indicated that a telephone call shortly after the initiation of treatment can be beneficial in terms of teaching and/or reminding them about whom to call for help.

Additionally, the study participants' comments about why they appreciated the telephone call suggest that merely having someone initiate contact and take the time to be attentive was a desired and welcome component of their care. The women felt supported and well-cared for during the call even though their side effects were being catalogued rather than managed. Kelly, Faught, and Holmes (1999), who initiated a telephone follow-up in a sample of ovarian cancer patients being treated with chemotherapy, similarly found that the contact had a positive effect on the patients' care experience.

While the patients' response to the telephone contact intervention was positive, further research is required to see if and how it should be best implemented at our cancer centre. The difference in view between patients and medical staff about the need for the intervention is interesting to note. Alternative strategies for administration of the telephone contact intervention include having breast cancer survivors, nurses or medical/nursing students administer the calls, since the interest on the part of the clinic staff is low and the calls themselves focus on providing non-medical information and reassurance. It would be worthwhile to interview the nursing staff to gather their views on the value of this type of intervention, as well as suggestions for how best to implement it. The benefit of introducing a second call later in the treatment period, when side effects are often more numerous and more severe, should also be explored (Boehmke, 2004; Boehmke & Dickerson, 2005).

Limitations

Firstly, this exploratory descriptive study was limited by its small sample size. The original goal for recruitment was 25 to 30 patients, based on similar studies in the literature (Kelly et al., 1999; Mooney et al., 2002). However, far fewer patients who met the inclusion criteria were identified than was anticipated. Secondly, the one-group post-test design limits generalizability. Thirdly, the sample was all Caucasian, as are the vast majority of people within the geographic area. Future study and evaluation may want to consider a more racially diverse population. Finally, the data were tabulated by the same member of the research team who administered the telephone intervention.

Conclusion

Regardless of sample size, the quantitative and qualitative data indicate that breast cancer patients at our centre could benefit from at least one telephone contact following the initiation of their chemotherapy treatment. Such a call would be valuable as a means of reiterating contact information for symptom management assistance, as well as providing support during this new, and likely stressful, period in patients' lives.

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Appendix One. Research Participant Demographic Information Questionnaire

Date: _____

Please answer the following questions to the best of your ability. Any questions that you do not wish to answer may be left blank.

1. Age: _____ 2. Ethnicity ☐ Caucasian ☐ African American ☐ South Asian ☐ Chinese ☐ Latin American ☐ Southeast Asian ☐ Other	3. Marital status ☐ Single ☐ Married ☐ Common-law ☐ Separated ☐ Divorced ☐ Widowed 4. Work ☐ Part time ☐ Full time ☐ Medical leave (part time) ☐ Medical leave (full time) ☐ Retired ☐ Other	5. Family income ☐ Less than \$10,000 ☐ \$10,000–\$30,000 ☐ \$30,000–\$50,000 ☐ \$50,000+ 6. Highest level of schooling ☐ Some high school ☐ High school graduate ☐ Some trade/business school ☐ Trade/business school graduate ☐ Some university ☐ University graduate ☐ Graduate degree

Appendix Two. Initial Telephone Questionnaire

Name: _____

Date: _____ Time: _____

Number of calls before patient available: _____

1. Patient information¹:

Chart #: _____ Phone #: _____

Oncologist: _____

2. Chemotherapy combination²:☐ CEF ☐ FEC 100 ☐ AC-T ☐ Taxol® ☐ Taxotere®

Other: _____

3. Number of days post-treatment³:

_____ days Date: _____ Time: _____

4. Possible chemotherapy side effects checklist: *I am now going to work through a checklist of possible chemotherapy side effects with you. Please let me know if you have experienced any of the following since receiving your first cycle of chemotherapy.*

a. General
☐ Fever ☐ <38°C ☐ 38°C–38.9°C ☐ >38.9°C
☐ <100.5°F ☐ 100.5°F–102°F ☐ >102°F
☐ ChillsOnset (*When did it occur?*): _____
 Duration (*How long have you had it? Does it come and go, or is it constant?*): _____
☐ FatigueOnset (*When did it occur?*): _____
 Duration (*How long have you had it? Does it come and go, or is it constant?*): _____

 On a scale 0–10, how would you score your feeling of fatigue⁴? _____

0 = no problems; 10 = total exhaustion;

1–4 = mild; 4–6 = moderate; 7–9 = severe

☐ Insomnia / trouble sleeping☐ Asthenia / muscle weakness☐ Pain⁵Location: ☐ external ☐ internal ☐ stationary ☐ radiating

Intensity (0–10): present rating of pain ____

pain at its worst ____ pain at its least ____ acceptable pain ____

Duration: ☐ secs ☐ mins ☐ hrs ☐ constant**b. Skin and subcutaneous**☐ Alopecia / hair loss
☐ Palmar-Plantar Erythrodysesthesia (PPE)⁶ / Hand-Foot Syndrome = redness of palms of hands and soles of feet; can become dry/peel/blister
Onset (*When did it occur?*): _____Location: ☐ hands ☐ fingers ☐ feet ☐ toesDuration: ☐ random ☐ constant ☐ during chemotherapy☐ Nail changes / problems☐ Discolouration / hyperpigmentation
☐ Onycholysis / separation or loosening of a fingernail or toenail from its nail bed
☐ Photosensitivity / sensitivity to light☐ Dermatitis / inflammation of the skin☐ Other skin changes:☐ rash/itch ☐ blisters ☐ cracking☐ peeling ☐ redness ☐ darkening**c. Neurological**☐ Taste and/or smell changes☐ Headache☐ Dizziness
☐ Peripheral neuropathy⁷ = burning/tingling/numbness of fingers and/or toes
Onset (*When did it occur?*): _____Location: ☐ hands ☐ fingers ☐ feet ☐ toesDuration: ☐ random ☐ constant ☐ during chemotherapyAssociated symptoms: ☐ inability to feel ground with feet
☐ decreased ability to distinguish objects in hand
☐ difficulty with fine motor movements☐ Impaired memory and concentration**d. Musculoskeletal**☐ Myalgia / muscle pain☐ Arthralgia**e. Eye**☐ Increased lacrimation / secretion of tears☐ Conjunctivitis / pink eye
☐ Keratitis / inflammation of the cornea = watery painful eyes and blurred vision
f. Cardiac☐ Heart problems☐ Edema / swelling☐ Lower limb / Peripheral**g. Respiratory**☐ Dyspnea / shortness of breath = breathlessness☐ Cough☐ Sore throat☐ Epistaxis / nosebleed**h. Metabolism**☐ Anorexia / loss of appetite⁸

Present weight _____

Weight 1 month pre-diagnosis _____

Weight change in the past week _____

Height _____

☐ Dehydration = increasing thirst, dry mouth, light-headedness (*esp. if worse on standing*), darkening of the urine, decrease in urination...
i. GI☐ Oral stomatitis / mucositis = mouth sores☐ NauseaOnset (*When did it occur?*): _____Frequency: ☐ intermittent ☐ continuous☐ VomitingOnset (*When did it occur?*): _____

Frequency: ____ times in last 24 hrs

Character/colour: _____

Quantity: _____

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☐ Use of antiemetics. If N, why not? _____

Name: _____

Dose: _____

Route: _____

Last taken: _____

Frequency: _____

☐ Diarrhea

Onset (*When did it occur?*): _____

Freq: ____ stools/day ☐ sporadic ☐ related to oral intake

Characteristics: ☐ loose ☐ formed ☐ blood

Colour: _____

☐ Constipation

Onset (*When did it occur?*): _____

Freq: ____ stools/day

Last BM: _____

Normal pattern: _____

☐ Abdominal pain

☐ Dyspepsia / indigestion

☐ Jaundice = yellow skin, yellow eyes

j. Hematologic

☐ Hemorrhage / severe bleeding

☐ internal ☐ external

k. Endocrine

☐ Amenorrhea

☐ Hot flashes

l. Mood

☐ Feel depressed / "blue"

☐ Feel anxious

m. Other concerns _____

5. Knowledge of chemotherapy side effects

- a. Do/did you feel well-informed by the chemotherapy nurses/oncologists about what types of chemotherapy side effects to expect? Y N

- b. Are you experiencing any side effects that you were not told about by the chemotherapy nurses/oncologists? Y N

If Y, which? _____

6. Where to turn for help with side effects?

- a. If you need help managing any of your chemotherapy side effects, were you told about someone to contact? For instance, were you given the number for an oncology triage nurse? Y N

Who? _____

#: _____

- b. Would you call such a number? Y N

- c. If you have called such a number, did you find it to be helpful? Y N

7. Thoughts on contact intervention

- a. Did you appreciate receiving this call? Y N
b. In your opinion, is there a need for such a call? Y N

Time: _____

Length of call: _____

¹ Section 1 to be completed before phone call

² Section 2 to be completed before phone call

³ Section 3 to be completed before phone call

⁴ Cancer Care Ontario's Nursing Professional Advisory Committee. (2004). *Telephone Nursing Practice and Symptom Management Guidelines*.

⁵ Anastasia, P.J. (2002). *Telephone Triage and Chemotherapy Symptom Management in the Ambulatory Care Setting. Oncology Supportive Care Quarterly, 1(1)*, 40–55.

⁶ Cancer Care Ontario's Nursing Professional Advisory Committee. (2004). *Telephone Nursing Practice and Symptom Management Guidelines*.

⁷ Anastasia, P.J. (2002). *Telephone Triage and Chemotherapy Symptom Management in the Ambulatory Care Setting. Oncology Supportive Care Quarterly, 1(1)*, 40–55.

⁸ Cancer Care Ontario's Nursing Professional Advisory Committee. (2004). *Telephone Nursing Practice and Symptom Management Guidelines*.

Appendix Three. Medical Oncologist / GPO Call Questionnaire

Name: _____

☐ Medical oncologist ☐ GPO ☐ Other: _____

1. What is your call frequency? _____

2. On average, how many calls do you receive during one evening on call? _____
Of these calls, approximately how many are from breast cancer patients? _____

3. On average, how many calls do you receive during one weekend on call? _____
Of these calls, approximately how many are from breast cancer patients? _____

4. How many (approx) of the breast cancer calls do you respond to? _____
What are your personal triggers for response? _____

5. How many (approx.) of the breast cancer calls require intervention? _____
What are the most common interventions? _____

6. Do you think there is a need for someone to contact (breast) cancer patients on the weekend following their first round of chemotherapy in order to document side effects and offer symptom management advice? Y N

Comments: _____

Thank you for taking the time to complete this questionnaire. Your help is very much appreciated.