TO TEST THE EFFICACY OF SUPPORTIVE CARE SCREENING TOOLS WHEN INTRODUCED AT PRE-CHEMOTHERAPY EDUCATION SESSIONS FOR PATIENTS ATTENDING DAY ONCOLOGY, CABRINI HEALTH, MALVERN.

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And
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FINAL REPORT
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Background

Supportive care is used as an umbrella term used to refer to services which may be required by those affected by cancer. It includes self-help and support, information, psychological support, symptom control, social support, rehabilitation, spiritual support, palliative care and bereavement care.¹

According to the Supportive Care Policy for Victoria, the supportive care targets are:
• By 2012 (we will) provide evidence of training of the cancer workforce in supportive care screening processes and survivorship awareness.
• (We will aim) to document supportive care screening for 50 per cent of newly diagnosed cancer patients by 2012.²

For the purpose of this study the focus is on supportive care for the patient’s psychological and nutritional needs while attending Day Oncology Unit, Malvern for chemotherapy treatment.

Research has shown that up to 35% of patients with cancer experience long term psychological distress and/or clinical significant anxiety problems, with prevalence rates for depression ranging from 20% to 35%.³ In a recent trial at St Vincents Hospital, Melbourne in 2006-2007, 97 oncology patients were screened for psychological distress using the Distress Thermometer. The study found that 48% of the participants were experiencing clinical levels of psychosocial distress.⁴

Further research states that malnutrition in oncology patients ranges from 20% to 80%, and has been associated with reduced response to treatment, survival, and quality of life.⁵ These are consistent with results from a Nutritional Department survey in Malvern Day Oncology Unit (MDOU) May-June 2009 in which it was found that 45% of oncology patients were at a moderate to high risk of malnutrition.⁶

The Southern Melbourne Integrated Cancer Service (SMICS) was established in 2004, and is a joint initiative of Alfred Health, Cabrini Health, Peninsula Health and Southern Health. With the support and guidance of SMICS, Cabrini Health has undertaken this study to test the efficacy of supportive care screening tools when first introduced at a pre-chemotherapy education session for patients attending Day Oncology, Cabrini Health, Malvern.
Introduction

The Supportive Care Policy for Victoria clearly outlines the key principles for supportive care to be a system wide and team approach, within all services and sectors, to ensure that all health care professionals have responsibility for supportive care. In addition, supportive care should be population based to identify the needs and the gaps in existing services to facilitate an informed approach to future service planning.

Regular screening is a core component of supportive care and interventions should be tailored to the identified needs of the individual. This requires routine questioning of those affected by cancer about their needs and the issues with which they require assistance to optimise their quality of life.

Many public hospitals throughout Victoria have already successfully implemented screening tools into their standard patient care, therefore identifying those in need of and giving access to supportive care services. However the challenge in private health is to provide access to supportive care services which are not routinely provided to oncology patients within the confines of the private Health Fund structure.

The Malvern Day Oncology Unit currently provides oncology care to 13,800 patients per year and as such is the largest provider of Day Oncology care within the private health system in Victoria.

The introduction of the two validated screening tools – the Distress Thermometer and the Malnutrition Screening Tool, to the pre-chemotherapy education session will help address two main areas that commonly impact upon patient cancer experience and outcome by providing timely referrals to appropriate supportive care services and meet the psychological and dietary needs of the patient.

Rationale

- To provide access to supportive care for oncology patients in the private health system.
- To reduce the potential for anxiety and depression, and malnutrition in chemotherapy naive patients prior to the commencement of treatment.
- To identify need, provide timely referral to allied health and facilitate early intervention for patients and their families.
- To provide optimal psychological and nutritional support to oncology patients.
- To facilitate patient preparedness for first day treatment.
- To provide an overall improvement in patient outcomes and cancer experience.
Key Activities

The planning phase included

- the design of the screening tool and patient information/consent form (see Appendix B)
- appropriate flowcharts for distress management and dietetic service referral
- ethics approval received through Cabrini Human Research Ethics Committee (see Appendix D)

Staff education was provided during a one hour in-service. There were two in-services; one prior to commencing data collection and one midway through data collection. In addition a staff information folder was put together and made available along with all staff education information on the Day Oncology unit.

The folder included information on:

- participant criteria
- details of what is expected of participants and the nursing staff when completing the screening tool
- how to collect and store the relevant data
- the flowcharts for distress management and dietetic service referral
- copies of the supportive care screening tool and the patient information/consent form

Data storage was to be both on hard copies and computerised.

- The supportive care screening tool was created as a PDF with a medical record number (appendix A) and filed in the patient’s medical history.
- An Encounter entry with a mandatory questionnaire was created on CHARM (chemotherapy and records management) which is the hospital administration programme used at Cabrini Day Oncology unit. CHARM is Australia’s leading supplier of specialist electronic medical record/clinical information systems in public and private health environments. The Encounter information included the Distress Thermometer score, the Malnutrition Screening Tool (MST) score and any relevant action taken.

Post study evaluation: Unfortunately a feedback survey for the patients and staff was not included in the study protocol, however, due to a large amount of missing data in the “nurse to complete” section for follow up care in the screening tool, an
application for a protocol amendment was made to CHREC. The application was approved.

Patient Follow up:
A short follow up questionnaire (see Appendix M) was send via postal mail to all participants in the study who scored greater than or equal to 4 on the Distress Thermometer. The questionnaire consisted of 4 questions. The cover letter, a sample copy of a blank ‘Supportive Care Screening Tool’ questionnaire and a reply paid envelope were included for the patient’s convenience. The cover letter explained to the patient the reason for the follow up questionnaire and advised that this was a voluntary part of the study. It was requested that the completed questionnaire be returned within two weeks.

Staff Survey:
Following completion of the data collection phase of the study, a staff survey (Appendix K) was given to regular nursing staff at Day Oncology Unit, Cabrini Health, Malvern. The questionnaire consisted of 8 short questions and allowed the nursing staff to rate their satisfaction with the ‘Supportive Care Screening Tool on a scale which ranged from strongly disagree to strongly agree.

Data analysis: Required data could be extracted from CHARM and spreadsheets used to analyse information such as type of advice given and referrals and/or recommendations made,. Additional information was accessible using the screening tool hardcopies which was stored in the patient medical records and identified as MR026A, these questionnaires included details about how effective the participant found the referral and if further intervention was required.
Methodology

In this study descriptive statistics were used to analyze data collected by 36 oncology patients attending Cabrini Day Oncology Unit for chemotherapy. The outcome measures were two supportive care screening tools. The screening tools were introduced at the pre-chemotherapy one-on-one education sessions held in the Day Oncology education room, Malvern, with one of the Cabrini Day Oncology nursing staff.

Recruitment

An invitation to take part in the study was offered to all eligible patients attending the Day Oncology Unit, Malvern, Cabrini Health.

Inclusion criteria for participants were:
- patients receiving first line chemotherapy and those who have not received chemotherapy treatment within 3 months, from any tumour stream who attend the MDOU, including those participating in a clinical trial
- aged over 18 years,
- proficient in spoken and written English,
- capable of completing a self-report questionnaire,

Exclusion criteria:
- patients who have previously received chemotherapy or biological therapy within 3 months of commencement of the study, either at Cabrini or elsewhere.
- patients attending MDOU for non oncology therapies.
- aged under 18 years
- non proficient in spoken and written English.

Participation was voluntary and no incentives were used to recruit patients.

During the recruitment phase of this study, 69 patients attended a pre-chemotherapy education session at day oncology unit, Malvern, of these patients 36 (52%) met the recruitment criteria and consented to participant in the study.
Measures
A supportive care screening questionnaire was developed for Cabrini Health with considerable input from Dietetic Services, Psycho-oncology Research Unit and the Human Research Ethics Committee. The oncology supportive care screening questionnaire focuses on identifying existing and potential psycho-social and nutritional needs.

The screening questionnaire (see Appendix A) incorporated the following elements

- Distress Thermometer and problem checklist (validated)

  The Distress Thermometer is a simple checklist assessment technique used in cancer care and other areas of physical health. It is a rapid-screening measure with a 0–10 visual analogue scale, in the form of a thermometer. The person can indicate their level of distress on the scale. Supplementary questions covering various areas of distress (eg family problems, physical problems can then be covered. The tool was developed by the National Comprehensive Cancer Network (NCCN) 9

  As a score of 4 or above represents a significant level of distress, referral for intervention is recommended for these patients. If the patients recorded such a score, the treating nurse would be expected to give the relevant information about available supportive care resources, based on an assessment of the emotional and social needs of the individual.

  The Problem Checklist forms part of the validated Distress Thermometer tool and is designed to indicate the types of problems which are causing distress to the patient. It is divided into the following categories

  Practical
  Family
  Emotional
  Spiritual
  Physical

- Malnutrition Screening Tool (validated)

  The Malnutrition screening tool consists of three simple questions about the patient's weight and is scored accordingly. The score of 0-1 indicating low risk of malnutrition, score of 2 indicating a moderate risk of malnutrition and a score of 3-5 indicating high risk of malnutrition.

  As advised by the Cabrini Health Dietetics Department, a score of 2 or greater indicated the need for dietetic assessment.
• Study-specific items about Risk factors for psychological distress (patient characteristics). These factors include:
  Younger than 55 years
  Lack of social support (e.g. single, widowed, living alone)
  Caring for children or other dependants
  Financial problems
  Previous episodes of depression, anxiety or other psychiatric illness
  History of stressful life events
  Female

These eight factors are outlined in the supportive care resource kit developed by Ristevski et al and cover “particular life circumstances, past experiences and current responsibilities which can impact on a person’s ability to cope and increase the likelihood that a person with cancer will experience a high level of emotional distress”10

• Study-specific question regarding how well the patient feels supported by family/friends. The answer options range from feeling supported ‘not at all’ to ‘all of the time’.

Procedure
After Ethics approval was obtained from CHREC, participants attending Day Oncology Malvern for treatment were given a Patient Information and Consent Form at the pre-chemotherapy education session. The information and study aims were then explained by the educating nurse. Those patients who met the criteria and were interested in participating in the study were required to sign the Patient Consent Form (see Appendix B) prior to completing the supportive care screening questionnaire.

The oncology supportive care screening questionnaire was anticipated to take approximately 5-10 minutes to complete.

At the initial screen during the individualised pre-chemotherapy education session, the nurse was required to discuss the study-specific items about Risk factors for psychological distress and document the relevant information in the ‘Nurse to complete’ section of the supportive care questionnaire.

Based on all of the information collected on the Supportive Care questionnaire, the treating nurse could then give appropriate advice and recommend referrals to services which would be beneficial to the patient’s individual needs.

Any Distress management plan and/or Nutrition management plan was to be documented in the ‘Nurse to complete’ section of the supportive care questionnaire.
The allied health professionals involved in this study created a Distress Management Flow Chart (see Appendix E) and a Malnutrition Risk Flow Chart (see Appendix F& G), which outlined when and to whom a referral is needed, based on the information evident on the supportive care screening questionnaire. These flowcharts were to be used as a guide for the nursing staff and were available in the staff information folder, at each computer workstation within the Day Oncology Unit and in the Day Oncology education room.

For the purpose of the study, participants were required to complete the questionnaire at the pre-chemotherapy education session, cycle 2 day 1 and cycle 3 day 1 of treatment.

At cycle 2 day 1 and at cycle 3 day 1, the treating nurse was required to follow up on any previous Distress management plan and/or Nutrition management plan which may have been advised by the previous treating nurse. The patient’s feedback was documented based on three direct questions; Did the patient seek intervention? Did the patient find the service helpful? Is further intervention required? The treating nurse could then refer to the Distress Management Flow Chart and Malnutrition Risk Flow Chart for guidance as to what further advice to give to the patient.

**Data Analysis**

Although a programme for data collection was created within the CHARM system, many of the screening results required were not entered into the system. As a result, the spreadsheets did not show the complete overview as originally anticipated. Therefore the hardcopies were collected from the patient’s medical records and photocopied to manually analyse the required information. All of the data required was inputted onto an excel worksheet and manipulated into categories to aid analysis.
Results

This section is divided into the following sections:

- Findings from the initial screening questionnaire data
  - Demographic profile of the study participants
  - Distress Thermometer results
  - Risk factors for psychological distress (patient characteristics)
  - Problem Checklist
  - Malnutrition Screening Tool results

- Findings from the re-screening questionnaire data

- Percentage of incomplete questionnaires

- Staff survey responses

- Patient follow up questionnaire

Demographic Profile of the Study Participants.

Of the 36 participants, females represented 58% (n=21) and males represented 42% (n=15). The average age of the participants was 58 years and range 21-82 years.

Table 1.
Demographic Profile of the Study Participants.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Number of participant</th>
<th>% of sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>21</td>
<td>58%</td>
</tr>
<tr>
<td>Female</td>
<td>15</td>
<td>42%</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>21-82</td>
<td></td>
</tr>
<tr>
<td>average</td>
<td>58</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tumour stream</th>
<th>(n)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>6</td>
<td>17%</td>
</tr>
<tr>
<td>Colorectal</td>
<td>14</td>
<td>39%</td>
</tr>
<tr>
<td>Respiratory</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td>Haematology</td>
<td>5</td>
<td>14%</td>
</tr>
<tr>
<td>Upper GI</td>
<td>1</td>
<td>3%</td>
</tr>
</tbody>
</table>
The chart in figure 1 represents the percentage of patients by tumour stream. Almost half of the participants had a diagnosis of colorectal cancer (39%) while the next largest group had a diagnosis of breast cancer (17%).

Haematological cancer — including NHL (n=2), Hodgkin’s lymphoma (n=2) and multiple myeloma (n=1), and Genital-Urinary cancer — including prostate (n=1), renal (n=3) and bladder (n=1), both accounted for 14% of cancer diagnoses.

<table>
<thead>
<tr>
<th>Diagnosis as %</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>breast</td>
<td>39</td>
<td>1.00%</td>
</tr>
<tr>
<td>colorectal</td>
<td>14</td>
<td>0.39%</td>
</tr>
<tr>
<td>respiratory</td>
<td>5</td>
<td>0.14%</td>
</tr>
<tr>
<td>haematology</td>
<td>17</td>
<td>0.48%</td>
</tr>
<tr>
<td>upper GI</td>
<td>3</td>
<td>0.08%</td>
</tr>
<tr>
<td>genito-urinary</td>
<td>14</td>
<td>0.39%</td>
</tr>
<tr>
<td>cutaneous</td>
<td>5</td>
<td>0.14%</td>
</tr>
<tr>
<td>ovarian</td>
<td>2</td>
<td>0.05%</td>
</tr>
</tbody>
</table>

**Figure 1.**
Diagnosis by Tumour Stream.

**Distress Thermometer Results**
At the pre-chemotherapy education session 55% (n=18) of participants scored equal to or greater than 4 on the Distress Thermometer, with 1 patient not recording a score.

At cycle 2 screening, 40% (n=8) of participants scored equal to or greater than 4 on the Distress Thermometer, while 16 patients did not complete the questionnaire at this time.

At cycle 3 screening, 37% (n=9) of participants scored equal to or greater than 4 on the Distress Thermometer, while 12 patients did not complete the questionnaire at this time.
The results in Figure 2 shows a decrease in the percentage of patients reporting distress levels greater than or equal to 4, from initial screen at pre-chemotherapy education session to cycle 3 of chemotherapy treatment.

**Figure 2.**
Distress Thermometer Scores of Study Participants

**Risk factors for Psychological Distress.**
Eighty eight percent (n=32) completed the ‘patient characteristic’ section of the Distress Thermometer Screening Tool. The Table 2 the results of the possible risk factors for psychological distress are described. The results provide the overall number of patients with risk factors for psychological distress (patient characteristics) in comparison to the number of patients with risk factors for psychological distress who also scored equal to or greater than 4 on the DT (n=18).

It is evident from the table that those patients scoring equal to or greater than 4 on the DT also have a significant number of risk factors. Of those scoring equal to or greater than 4 on the DT (n=18), 44% are younger than 55, and 72% are female which equates to 34% (n=11) who have both risk factors. Fifty percent of participants who scored equal to or greater than 4 on the DT (n=18) reported a history of one or more stressful life events, most commonly a previous...
cancer diagnosis or a bereavement of a family member/friend with a cancer diagnosis.

**Table 2.**
**Risk factors for Psychological Distress.**

<table>
<thead>
<tr>
<th>Risk factor/Patient characteristic</th>
<th>No. of patients (total=32)</th>
<th>No. of Patients with DT score &gt;4 (total=18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;55yr</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>single/separated/divorced/widowed</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>lives alone/marital/family problems/lack of support</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>children&gt;21years</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>financial concerns</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>previous episode of depression/psychiatric illness/mental health problems</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>history of stressful life events</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>female</td>
<td>21</td>
<td>13</td>
</tr>
</tbody>
</table>

**Problem checklist**
The Problem Checklist (see appendix B) is divided into the following categories
- Practical
- Family
- Emotional
- Spiritual
- Physical

Many participants ticked multiple concerns across one or more of the categories.

Twenty-seven percent (n=10) of patients indicated that they had issues with practical problems, with 7 reporting that their main concern was with treatment decision making.

Sixteen percent (n=6) of patients indicated concerns with family health (n=4), and 1 patient (age 21) was troubled about the ability to have children.

Seventy-two percent (n=26) of patients indicated emotional stress including depression, fear, nervousness, sadness and worry.

There was no reports of spiritual concern although one third of patients (n=12) did not complete this question.
Seventy-five percent (n=27) of patients indicated concerns regarding a multitude of physical problems, the two most common issues being sleep and fatigue.

![Physical problems reported at pre-chemotherapy education session](image)

**Figure 4.**
Physical problems reported at pre-chemotherapy education session.

**How well supported patients felt by family/friends**
The study questionnaire also included a question asking how well supported the patient felt by family and/or friends.

Eighty percent (n=29) of participants completed this section. Of this group 86% (n=25) felt supported all of the time, 10% (n=3) felt supported most of the time and 4% (n=1) felt moderately supported.
Malnutrition Screening Tool
Forty-seven percent (n=17) of patients scored equal or greater than 2. Of the 17 patients 88% (n=15) were seen by a Dietician either during cycle 1 or cycle 2 of chemotherapy treatment. Only one patient was seen on the ward, while the rest were treated in the Day Oncology Unit. One patient was seen by a dietetic assistant and one patient refused referral for intervention.
Rescreening
Patients were required to complete the supportive care screening tool at cycle 2 and cycle 3 of their chemotherapy treatment. At this data collection time point two study participants had passed away and 3 had had their treatment cancelled prior to rescreening.

At cycle 2, of a potential 31 participants 61% (n=19) completed the supportive care screening tool.

Distress Thermometer scores: 58% (n=11) of participants reported a lower level of distress since their pre-chemotherapy education session and 21% (n=4) reported a higher level of distress since this time. Furthermore 21% (n=4) of participants reported unchanged levels of distress. One participant recorded a DT score of 9 and 3 a DT score of 0.

MST score: Of the 61% of patients rescreened at cycle 2, thirteen participants had scored an MST score less than 2 and six had scored an MST score equal to or greater than 2. Eight participants were reviewed by a Cabrini Health dietician by cycle 3.

Forty-two percent (n=8) of participants reported a lower MST score since pre-chemo education session and 11% (n=2) reported a higher MST score. Furthermore 47% (n=9) of participants’ MST score was unchanged; 6 of these scores were less than 2 and 3 were equal or greater than 2.

At cycle 3, of a potential 31 participants 77% (n=24) completed the supportive care screening tool. Eight of these participants had not completed cycle 2 screening therefore the following data is a comparative to the previous screen...
which was done at either pre-chemotherapy education session or cycle 2 of treatment.

Distress Thermometer scores: Overall as a comparative to the previous completed supportive care screening tool 38% (n=9) of participants reported a lower level of distress, 29% (n=7) of participants reported a higher level of distress and 33% (n=8) of participants reported unchanged levels of distress.

Compared to the initial screen at pre-chemotherapy education session (n=8), 4 participants reported a lower level of distress, 2 participants reported a higher level of distress and 2 participants reported unchanged levels of distress.

Compared to the screening at cycle 2 (n=16), 6 participants reported a lower level of distress, 4 participants reported a higher level of distress and 6 participants reported unchanged levels of distress. Of those unchanged, one participant scored a DT score equal or greater than 4, and five participants scored a DT score less than 4.

MST score: Of the 77% of patients rescreened at cycle 3, fourteen participants had scored an MST score less than 2 and ten had scored an MST score equal to or greater than 2. Eight participants were reviewed by a Cabrini Health dietician by this stage.

Forty-two percent (n=10) of participants reported a lower MST score since previous screen and 4% (n=1) reported a higher MST score. Also 54% (n=13) of MST scores were unchanged; 9 of these scores were less than 2 and 4 were equal or greater than 2. Of those participants whose score was consistently greater than 2 (n=4), 3 had been seen by a Cabrini Health dietician and 1 (MST score=2) had not been reviewed at that stage.

Missing data
Thirty-six patients consented to participate in this study and to complete a supportive care screening tool at the pre-chemotherapy education session. Each participant was required to complete the questionnaire at cycle 2 and cycle 3 of their treatment.

Twenty-two percent (n=8) completed the questionnaire at pre-chemotherapy education session only.

Eight percent (n=3) completed the questionnaire at pre-chemotherapy education session and cycle 2.

Twenty-five percent (n=9) completed the questionnaire at pre-chemotherapy education session and cycle 3.

Forty-five percent (n=16) of participants completed all three questionnaires.

These results include the 2 patients who passed away and 3 patients who had their treatment cancelled prior to completion of the data collection phase of the study. Following the pre-chemotherapy education session, three patients
continued their treatment on the ward rather than in the Day Oncology Unit and therefore were not given the Supportive Care Screening Tool to complete.

**Figure 6.**
**Completed supportive care screening tools**

Questions 1-4 on the Supportive Care Screening Tool were to be completed by the participant. The following data are based on a total of 36 participants.

- **Section 1- Distress Thermometer:** 1 participant did not complete this section
- **Section 2- Problem Checklist:** 2 participants did not complete this section
- **Section 3- Question about how well supported the patient felt by family/friends:** 7 participants did not complete the question about how well supported the patient felt by family/friends
- **Section 4- MST:**
  Thirty-six (100%) of the participants completed this section at the pre-chemotherapy education session.

Forty-seven percent (n=17) of participants did not complete this section at cycle 2 of their treatment. Available data shows that 2 participants had passed away, 3 participants had their treatment canceled, 1 participant
had their treatment on the ward and 11 participants received the Supportive Care Screening Tool but did not complete this section.

Thirty-one percent (n=11) of participants did not complete this section at cycle 3 of their treatment, available data shows that 2 participants passed away, 3 participants had their treatment canceled, 2 participant had their treatment on ward level and 4 participants received the supportive care screening tool but did not complete this section.

Further information was to be entered by the treating nurse in a “nurse to complete section”. The following data are based on the Supportive Care Screening Tools completed at pre-chemotherapy education session, cycle 2 and cycle 3 of treatment.

- Patient characteristics: 11% (n=4) did not complete this section at any stage of data collection.

- Distress management:
  Pre-chemotherapy education session: 19% (n=7) of 36 participants who completed screening tools did not have information entered for this section.

  Cycle 2: 35% (n=7) of 20 participants who completed screening tools did not have information entered for this section.

  Cycle 3: 33% (n=8) of 24 participants who completed screening tools did not have information entered for this section.

- Nutritional management:
  Pre-chemotherapy education session: 19% (n=7) of 36 participants who completed screening tools did not have information entered for this section.

  Cycle 2: 40% (n=8) of 20 participants who completed screening tools did not have information entered for this section.

  Cycle 3: 50% (n=12) of 24 participants who completed screening tools did not have information entered for this section.

- Follow up on previous action plan:
  Pre-chemotherapy education session: 19% (n=7) of 36 participants who completed screening tools did not have information entered for this section.

  Cycle 2: 30% (n=6) of 20 participants who completed screening tools did not have information entered for this section.

  Cycle 3: 29% (n=7) of 24 participants who completed screening tools did not have information entered for this section.
Figure 7
Sections of the supportive care screening tool not completed at pre-chemotherapy education session.
Figure 8
Sections of the supportive care screening tool not completed at rescreening.

Staff Survey
A staff survey (see Appendix K) was given to 14 regular nursing staff at Day Oncology Unit, Cabrini Health, Malvern. 71% (n=10) were completed and returned.

The questionnaire consisted of 8 questions:
Questions 1 and 2 were designed to ascertain how many Day Oncology nursing staff attended the in-service and/or read the staff information folder.

Results showed that 50% (n=5) had attended one or more of the 2 in-services provided.

10% (n=1) did not know about the folder. 50% (n=5) did not read the folder and 40% (n=4) read the folder and found it helpful.

Questions 3-6 were designed to ascertain how staff felt about using the Supportive Care Screening Tool and how effective it was to assist in patient assessment.
For question 3, of the 20% (n=2) who responded ‘disagree’. One nurse had not attended an in-service and neither nurse had read the information folder.

Of the 30% (n=3) who responded ‘neutral’. One nurse had attended an in-service but did not read the folder. Two nurses had not attended an in-service but did read the information folder and found it helpful.

Of the 40% (n=4) who responded ‘agree’. Two nurses had attended an in-service but had not read the information folder. Two nurses had not attended an in-service but did read the information folder and found it helpful.

This nurse who responded ‘strongly agree’ had attended an in-service and had read the information folder.

For question 4, 1 nurse responded ‘disagree’, this respondent did not attend an in-service, did not read the information folder and did not find the screening tool easy to complete. One nurse responded ‘strongly agree’, this respondent did attend an in-service, did read the information folder and did find the screening tool easy to complete.

30% (n=3) responded ‘neutral’.
50% (n=5) responded ‘agree’

For question 5
10% (n=1) responded ‘disagree’.
50% (n=5) responded ‘neutral’.
30% (n=3) responded ‘agree’
10% (n=1) did not complete this question.

For question 6
20% (n=2) responded ‘disagree’.
20% (n=2) responded ‘neutral’.
50% (n=5) responded ‘agree’
10% (n=1) responded ‘strongly agree’

Question 7 was designed to allow the nursing staff to raise issues they found with the completion of the Supportive Care Screening Tool in Day Oncology.

70% (n=7) completed this question, the issues which were raised included:

- Feeling there was a lack of support or ‘go to person’ available.
- The screening tool was too “confusing” or “difficult” to complete.
- There was a time restriction to input data as the nursing staff were very busy.
- There was difficulty inputting the required data into the CHARM system as requested for data analysis.
For question 8, 50% (n=5) responded Yes they would like to introduce the screening tool as a routine part of the patient assessment in Day Oncology, and 40% (n=4) responded No they not. 1 nurse did not complete this question.

**Figure 9**
Staff survey answers for questions 3-6

**Patient Follow up**
A short follow up questionnaire (see Appendix M) was send via postal mail to 18 participants.
Only 22% (n=4) of the questionnaires were completed and returned after a 3 week period. The questionnaire consisted of 4 questions:

Question 1 asked did the patient find the process of completing the Oncology Supportive Care Screening Tool beneficial.

25% (n=1) responded No
25% (n=1) responded Yes
50% (n=2) responded Neutral
Question 2 asked did the patient seek help for distress, as recommended by the nursing staff, following completion of the Oncology Supportive Care Screening Tool.

Of the 75% (n=3) who responded no, 1 patient indicated that he/she had been regularly seeing a GP and a psychologist prior to completing the screening tool. 25% (n=1) responded Yes.
No. of patients who sought help for distress, as recommended by the nursing staff, following completion of the Oncology Supportive Care Screening Tool.

Question 3 listed services available which may have been recommended by nursing staff and asked the patient, if they had responded ‘Yes’ to question 2, to indicate which service they sought and if they found it helpful. One patient completed this question and indicated that he/she had seen a GP, a psychologist and called the cancer council helpline. Of these services it was indicated that the cancer council helpline was the most helpful for this individual.

Question 4 was designed to allow the patient to raise issues they found with the completion of the Supportive Care Screening Tool in Day Oncology. This section was not completed by any of the responding participants.
Limitations

When undertaking this study in a private health facility it was recognised early that there would be certain limitations regarding the management of social and emotional issues identified on the study screening tool.

The Distress Management Flowchart indicates that a score greater than or equal to 4 on the Distress Thermometer requires a referral to a psychologist/counsellor and/or a social worker, depending on the cause of distress. As Cabrini Health is a private organisation, these support services were initially unavailable onsite. Therefore, on identifying the need for ongoing support, the patient was recommended to seek external support services. Participants were advised that these external services could be sourced through:

- The patient’s General Practitioner
- Referral to a recommended private practitioner for psychological support. The referring staff member was to advise the patient to contact Medicare/Health Insurer regarding possible rebates.
- Organizations such as beyond blue, Lifeline, and national and state Cancer Councils.

These options were to be discussed with the patient and the importance of follow up care emphasised.

Due to the involvement of these external services the Day Oncology nursing staff were required to document information about services to which the patient was referred and patient’s feedback about that service. Unfortunately this information was not consistently recorded on the supportive care screening tool. This missing information restricted data analysis and as a result there is a lack of evidence to show a definite link between the use of a supportive care screening tool, appropriate referrals and improved outcomes for patients.

Although, following approval from CHREC, a patient follow up questionnaire was sent out to all participants who scored greater than or equal to 4 on the Distress Thermometer, the overall feedback from participants regarding the usefulness of the Supportive Care Screening Tool was very poor. As a result it is difficult to assess if there was a direct link between early intervention and improved patient outcome and cancer experience.

Results from the staff feedback survey suggest that the main reason for this missing data was time restrictions due to a heavy workload and difficulty/lack of knowledge when completing the screening tool and recording data in the computer system. There were two in-services held at Day Oncology Unit but these were held on the same day of the week and an hour prior to commencing the work day, as per Day Oncology requirements. Therefore these did not capture many part time staff or agency/casual staff.
Discussion

Given the small sample size and missing data, it is impossible to draw a solid evidence-based conclusion that the introduction of a Supportive Care Screening Tool would help provide timely referral to allied health and facilitate early intervention for patients within the private health organisation.

As a Cabrini Health recommended private psycho-oncologist, Ms Jane Fletcher was contacted following completion of the data collection and asked about referrals made from Day Oncology nursing staff based on patient name and initial screening date only. Ms. Fletcher advised that she had seen 6 of the patients on the list and continued to advise that it was difficult to determine if the referral made by the Distress Thermometer Screening Tool triggered them seeing her. One individual had their first session with Ms Fletcher as an inpatient 4 months after completing the initial screen which Ms. Fletcher felt was clinician driven. Another saw her two months after the screen and one patient already had an appointment with Ms. Fletcher when they completed the screen. However there is no data to indicate if patients sought an intervention from another psychologist or alternative resource as may have been recommended by the nursing staff.

Despite missing data, the graph in figure 2 shows evidence that early intervention is required and proves beneficial in reducing the potential for anxiety and depression in chemotherapy naive patients prior to the commencement of treatment. The graph shows that 8% of patients scored a 10 on the Distress Thermometer at the initial pre-chemotherapy education session while there are no scores of 10 at any subsequent screening.

Cabrini Health has a Dietetic Department with a dietician assigned up to 0.4 EFT to Day Oncology, Malvern. Therefore a direct referral for any patient scoring 2 or more on the Malnutrition Screening Tool is made through the hospitals internal referral system. As shown in the MST results section, the majority of patients received an initial dietetic assessment prior to cycle 3 of their treatment, resulting in almost half of participants having a lower MST by cycle 3. This is evidence of the benefit of early intervention in reducing the risk of malnutrition in cancer patients.

After analysis of the staff feedback survey, the results indicate that the majority of nurses are in agreement with the usefulness of an ‘Oncology Supportive Care Screening Tool’ as part of the individual patient assessment. However, some nurses seem reluctant to use screening tools routinely. It has been recognised in previous research that “the time required to administer, score and interpret existing pen to paper measures may be one of the reasons why this is not a routine practice in many oncology settings.” It is evident that ongoing education and support is required for the nursing staff to successfully utilize and understand the benefits of the screening tool.

The lack of response from the patient follow-up survey may be related to the length of time between completing the screening tool at cycle 3 and receiving the follow-up questionnaire. It is recommended that any further patient based research include a
patient follow-up plan where the questionnaire is given to the patient at the time of their last screen.

**Recommendations**

Considering the outcomes and limitations of this study, it is recommended that:

- The existing Patient Assessment form used in Day Oncology, Malvern, is revised with consideration given to implementing the Distress Thermometer and MST.

- A process is established to document advice and/or referrals to allied health services following the screening of new patients.

- A process is established to follow up all patients who have indicated some level of distress and/or risk of malnutrition following completion of a supportive care screening tool. It is suggested that a follow up phone call may be appropriate. However, the patient would have to consent to this at the initial pre-chemotherapy education session.

- Appropriate staff training is provided prior to introduction of a screening tool. This training should be at a time and place that will enable all staff to participate. Ongoing support and training be available to staff.
List of appendices

Appendix A     Oncology Supportive Care Screening Tool
Appendix B     Oncology Supportive Care Screening Tool Patient Information and Consent form
Appendix C     Chemotherapy Education Checklist
Appendix D     Ethics approval letter
Appendix E     Distress Management Flowchart
Appendix F     Referral flowchart to Dietetic Services: pre-chemotherapy appointment
Appendix G     Referral flowchart to Dietetic Services: cycle 2 and cycle 3 chemotherapy appointment
Appendix H     Information for staff: How to enter SMICS data into CHARM
Appendix I     Information for staff: New patient criteria and patient/nurse responsibilities
Appendix J     Information for staff: How to edit patient appointment notes
Appendix K     Staff feedback questionnaire
Appendix L     Application to CHREC for protocol amendment.
Appendix M     Patient follow-up questionnaire
### Appendix A

**Cabrini Health**  
**ONCOLOGY**  
**SUPPORTIVE CARE SCREENING TOOL**

<table>
<thead>
<tr>
<th>NCCN Practice Guidelines in Oncology – v.1.2008</th>
<th>Screening date: <em><strong>/</strong></em>/____</th>
</tr>
</thead>
</table>

#### Instructions
1. Please circle the number (0-1) that best describes how much distress you have been experiencing in the past week including today.

#### Psychological Distress Screening Tool (PDST)

<table>
<thead>
<tr>
<th>Extent of distress</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Extreme distress</td>
</tr>
<tr>
<td>9</td>
<td>Very severe</td>
</tr>
<tr>
<td>8</td>
<td>Severe</td>
</tr>
<tr>
<td>7</td>
<td>Moderate</td>
</tr>
<tr>
<td>6</td>
<td>Mild</td>
</tr>
<tr>
<td>5</td>
<td>Mild</td>
</tr>
<tr>
<td>4</td>
<td>Very mild</td>
</tr>
<tr>
<td>3</td>
<td>None</td>
</tr>
<tr>
<td>2</td>
<td>Very mild</td>
</tr>
<tr>
<td>1</td>
<td>None</td>
</tr>
<tr>
<td>0</td>
<td>None</td>
</tr>
</tbody>
</table>

#### Physical Health Distress Screening Tool (PHT-DST)

<table>
<thead>
<tr>
<th>Physical Problems</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Appearance</td>
<td></td>
</tr>
<tr>
<td>Bathing/dressing</td>
<td></td>
</tr>
<tr>
<td>Breathing</td>
<td></td>
</tr>
<tr>
<td>Changes in urination</td>
<td></td>
</tr>
<tr>
<td>Constipation</td>
<td></td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>Eating</td>
</tr>
<tr>
<td>Fatigue</td>
<td></td>
</tr>
<tr>
<td>Feeling swollen</td>
<td></td>
</tr>
<tr>
<td>Fevers</td>
<td></td>
</tr>
<tr>
<td>Getting around</td>
<td></td>
</tr>
<tr>
<td>Indigestion</td>
<td>Memory/concentration</td>
</tr>
<tr>
<td>Mouth sores</td>
<td></td>
</tr>
<tr>
<td>Nausea</td>
<td>Nose dry/congested</td>
</tr>
<tr>
<td>Pain</td>
<td>Skin dry/itchy</td>
</tr>
<tr>
<td>Sleep</td>
<td>Tingling in hands/feet</td>
</tr>
</tbody>
</table>

#### Other Problems:

3. How well supported do you feel by family and/or friends?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>A Little</th>
<th>Moderately</th>
<th>Mostly of the time</th>
<th>All of the time</th>
</tr>
</thead>
</table>

4. To help the dietician assess your nutritional needs, please CIRCLE your answer to the following questions.

#### Nutritional Assessment

a) Have you lost weight in the last 6 months without trying?

- **No**
- **Unsure**
- **Yes**

If yes, how much weight have you lost?

- 0-5kg
- 5-10kg
- 10-15kg
- More than 15kg

b) Have you been eating poorly because of decreased appetite?

- **No**
- **Yes**

**TOTAL SCORE**

--

| Cabrini Health | UR number ____________________________ |
| ONCOLOGY | Surname ____________________________ |
| SUPPORTIVE CARE SCREENING TOOL | Given names ____________________________ |
| | Date of birth ____________________________ |

Screening Date __/__/__

For office use only:

**Nurse to complete** on initial screen only. *Please tick the box as applicable:*

<table>
<thead>
<tr>
<th>Patient characteristics</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Younger than 55 years?</td>
<td></td>
</tr>
<tr>
<td>Single/separated/divorced/widowed?</td>
<td></td>
</tr>
<tr>
<td>Lives alone/marital/family problems/lack social support?</td>
<td></td>
</tr>
<tr>
<td>Children younger than 21 years?</td>
<td></td>
</tr>
<tr>
<td>Financial concerns/issues?</td>
<td></td>
</tr>
<tr>
<td>Previous episodes of depression/psychiatric illness/mental health problems?</td>
<td></td>
</tr>
<tr>
<td>History of stressful life events?</td>
<td></td>
</tr>
<tr>
<td>Female?</td>
<td></td>
</tr>
</tbody>
</table>

Comments:__________________________________________________________

**Nurse to complete**

Please refer to screen tool action flowchart and give details of advice given and for action taken:

**Distress Management**

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

**Nutrition Management**

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

**Nurse to complete**

Please follow up on previous action plan

Did the patient seek intervention?

________________________________________________________________________

Did the patient find the service helpful?

________________________________________________________________________

Is further intervention required?

________________________________________________________________________

Staff member: ____________________________ Signature: ____________________________

Treatment cycle: ____________________________

Information Provided: □ verbal □ written □ other ____________________________

Referred to: ____________________________ □ consent Date of referral: __/__/__
PATIENT INFORMATION AND CONSENT FORM

RESEARCH STUDY TO TEST THE EFFICACY OF SUPPORTIVE CARE SCREENING TOOLS WITHIN A PRE-CHEMOTHERAPY EDUCATION SESSION FOR PATIENTS AND THEIR CARERS ATTENDING DAY ONCOLOGY, CABRINI HEALTH, MALVERN

INFORMATION FOR PARTICIPANTS

You are invited to participate in a research study to test the efficacy of psychological and nutritional screening tools introduced at a pre-chemotherapy education session until end of cycle 3 of treatment.

The study is being conducted by:

Principal Investigator: Clare McGuiness, Nurse Director- Speciality Services; Cabrini Institute.

Associate Investigators: Robyn Munter, Nurse Unit Manager, Day Oncology Cabrini Health.
Sabrina Cornally, Registered Nurse, Day Oncology Cabrini Health.
Elizabeth Kent, Manager, Dietetic Services, Cabrini Health.
Dr. Sue Burney, Head of Cabrini-Monash psycho-oncology unit.

The study is financed by Southern Melbourne Integrated Cancer Service (SMICS) Supportive Care Research Grant 2010-11

The aim of the study is to reduce anxiety and malnutrition in chemotherapy patients before and during their treatment. We aim to identify existing and potential problems early in a patient’s treatment, and provide an overall improvement in patient care by developing pathways to appropriate follow up services.

The results of this descriptive study will be used to improve the care of future patients receiving chemotherapy at Cabrini.
What is required of participants?

Participants attending Day Oncology Malvern for treatment will be asked to complete a short questionnaire about their emotional needs and nutritional status. The questionnaire will take approximately 5 minutes to complete and will be given to each participant during their pre-chemotherapy education session and again at each treatment appointment until cycle 3.

Participation in the study is voluntary.

Patients who decline to participate in the study or chose to withdraw from the study will not be disadvantaged and will continue to receive quality standard of care.

You can withdraw from the study at any time by contacting the study coordinators – Sabrina Cornally and Robyn Munter: 9508 1821.

All aspects of this study, including results, will be confidential and only the investigators named above will have access to information on participants. A report of the study may be presented for publication, but individual participants will not be identifiable in such a report. This study has been approved by the Cabrini Human Research Ethics Committee. Should it be necessary, you can contact the representative of the Cabrini Human Research Ethics Committee – Anne Spence on 95081376 to make a complaint about the study.

Thank you for considering this invitation

RESEARCH STUDY TO TEST THE EFFICACY OF SUPPORTIVE CARE SCREENING TOOLS WITHIN A PRE-CHEMOTHERAPY INDIVIDUALISED EDUCATION SESSION FOR PATIENTS AND THEIR CARERS ATTENDING DAY ONCOLOGY, CABRINI HEALTH, MALVERN

I

_________________________________________________________________________

(NAME – PLEASE PRINT)

of_________________________________________________________________________

(ADDRESS – PLEASE PRINT)
Phone number ____________________________

have been fully informed of the purpose and requirements of this study.

All information will be confidential and no information identifying me will be divulged to any hospital staff apart from the research staff responsible for this project.

I understand that I can withdraw from this project at any time by notifying the researchers,

I hereby agree to participate in this research study.

Signature  _______________________________________________
Appendix C

Cabrini Health

CHEMOTHERAPY EDUCATION CHECKLIST

UR number
Surname
Given names
Date of birth

Date of Initial Education Session: ___/___/___

1) Enquire: about patient understanding of diagnosis and investigations attended to date
2) Education: Please provide appropriate treatment protocol and patient information sheet from eviQ website
3) Discuss: □ What is chemotherapy □ How chemotherapy works?
4) Chemotherapy Protocol: ____________________________ Number of Cycles: ____________________________
5) Chemotherapy Drugs: 1. ____________________________ 2. ____________________________
   3. ____________________________ 4. ____________________________
6) Antiemetic: □ Pre Treatment □ During Treatment □ Take Home
7) Other: eg GCSF, blood support, premedication Specify ____________________________
8) Explain: □ Personal Protective Equipment
   □ Waste Management
9) Vascular access required for protocol: Specify ____________________________
10) Blood tests: □ (How often & when)
11) Side effects that require urgent treatment
   □ Febrile Neutropenia □ Fever/Unwell □ Diarrhoea (uncontrolled)
   □ Vomiting (uncontrolled) □ Bleeding □ Other specific to drug protocol
12) Services available:
   □ Dietician
   □ Breast Care Coordinator
   □ Pastoral Care
   □ Psycho-oncology
   □ Other: ____________________________
13) Information Provided to Patient
   □ Patient Information Sheet(s)
   □ Contact Numbers
   Cancer Council/Leukaemia Foundation Booklets
   - Coping with chemotherapy □
   - Diet and Nutrition □
   - Disease specific booklet □

The nursing staff have discussed and provided verbal and written information as above

Nursing staff to complete
Print Name: ____________________________ Signature: ____________________________ Date: ____________________________
16 May 2011

Clare McGinness
Nurse Director, Speciality Services
Cabiri Health
183 Wattletree Road
MALVERN VIC 3144

Dear Clare

01-20-06-11
To test the efficacy of supportive care screening tools when introduced at pre-chemotherapy education sessions for patients attending Day Oncology, Cabiri Health, Malvern

Thank you for requesting approval to conduct this study.

This study is now approved. This project was approved under our expedited approval process for projects assessed as being of low or negligible risk.

If the study does not commence before the anniversary of approval, approval will lapse. Approval is ongoing for the life of the project, subject to satisfactory compliance and reporting.

In accordance with the NHMRC’s National Statement on Ethical Conduct in Human Research of March 2007, section 5.5 on monitoring, you are obliged to:
• provide the CHREC with annual reports on the anniversary of this approval;
• provide the CHREC with a final report on study completion;
• be available for audits/site visits/interviews as requested.

In addition, you are obliged to inform the CHREC of:
• any change to the protocol, participant information or consent form;
• any adverse events that occur during the process of this trial;
• any changes to the research team;
• study completion;
• any change in the financial arrangements regarding the study.

We wish you well with your project.

Yours sincerely

Anne Spence
Manager
Cabiri Human Research Ethics Committee
Appendix E

Distress Management Pathway

Patient to complete screening tool

Patient scores less than 4
- Identify Problems on Screening Tool
  - Provide verbal & written information to the following services and refer as appropriate
    - General Practitioners
    - Cancer Helpline
    - Pastoral Care
    - Breast Care Coordinator
    - Leukaemia Foundation

Patient scores ≥ or > 4
- Identify Problems on Screening Tool
  - Provide verbal & written information to the following services and refer as appropriate
    - Leukaemia Foundation
    - Cancer Helpline 13 11 20
    - Breast Care Coordinator

If Social issues Identified
Refer to:
- Local Council - patient needs to request referral to local council from their GP
- Cancer Helpline 13 11 20
- LifeLine 13 11 14 - 24Hrs - Free counselling available including referrals to appropriate support services
  - www.lifeline.org.au

If Emotional Problems Identified
Refer to:
- General Practitioner for referral to Psycho-oncologist.
- Dr Jane Fletcher - Cabrini Psycho oncology
- Private practitioner
- Beyond Blue 1300 224 630 - a free service that will provide counselling and referrals to psycho oncology and other services as required
  - www.beyondblue.org.au
- LifeLine 13 11 14 - 24Hrs Free counselling available including referrals to appropriate support services
  - www.lifeline.org.au

Re-Screen Next Visit
Appendix F

Referral Flow Chart to Dietetic Services: Pre-Chemotherapy appointment

Nursing Staff administer Malnutrition Screening Tool (MST) on patient at pre-chemotherapy appointment

- **MST = 0-1**
  - LOW RISK
  - Nursing Staff:
    - Provide Ca Council 'Nutrition & Exercise' booklet
    - Recommend well balanced diet
    - Record MST score & weight in CHARM
  - Diabetic Assistant:
    - See pt on day of first chemotherapy Tx
    - Advise use of Sustagen® 2xday & provide sample
    - Provide pt with 'Patient sheet for MST=2'
    - Provide relevant Dietetic Services symptom Mx brochures
    - Record intervention & follow up plan in CHARM & on chemo

- **MST = 2**
  - MEDIUM RISK
  - Nursing Staff:
    - Provide Ca Council 'Nutrition & Exercise' booklet
    - Recommend high energy, high protein diet - refer to pages 21-23 in booklet
    - Refer to side effect management section in booklet, if relevant
    - REFER TO DIETETIC ASSISTANT in PAS
    - Record MST score, weight & DA referral in CHARM

- **MST = 3 or above**
  - HIGH RISK
  - Nursing Staff:
    - Provide Ca Council 'Nutrition & Exercise' booklet
    - Recommend high energy, high protein diet - refer to pages 21-23 in booklet
    - Refer to side effect management section in booklet, if relevant
    - REFER TO DIETETIC in PAS
    - Record MST score, weight & Dietitian referral in CHARM

Nursing Staff:
- Provide Ca Council 'Nutrition & Exercise' booklet
- Recommend high energy, high protein diet - refer to pages 21-23 in booklet
- Refer to side effect management section in booklet, if relevant
- REFER TO DIETETIC ASSISTANT in PAS
- Record MST score, weight & DA referral in CHARM

Dietitian:
- See pt on day of first chemotherapy Tx
- Advise use of Sustagen® 2xday & provide sample
- Provide other relevant intervention & written information
- Record intervention & follow up plan in CHARM & on chemo
Appendix G

Referral Flow Chart to Dietetic Services: Chemotherapy cycles 2 & 3

Nursing Staff administer Malnutrition Screening Tool (MST) on patient at start of appointment for chemotherapy cycles 2 & 3

MST = 0-1
LOW RISK
- Provide Ca Council 'Nutrition & Exercise' booklet if not already
- Recommend well balanced diet
- Record MST score & weight in CHARM

MST = 2
MEDIUM RISK
- Provide Ca Council 'Nutrition & Exercise' booklet if not already
- Recommend high energy, high protein diet - refer to pages 21-23 in booklet
- Refer to side effect management section in booklet, if relevant
- REFER TO DIETETIC ASSISTANT by paging ASAP & in PAS
- Record MST score, weight, and DA referral in CHARM

MST = 3 or above
HIGH RISK
- Provide Ca Council 'Nutrition & Exercise' booklet if not already
- Recommend high energy, high protein diet - refer to pages 21-23 in booklet
- Refer to side effect management section in booklet, if relevant
- REFER TO DIETITIAN by paging ASAP & in PAS
- Record MST score, weight, & Dietitian referral in CHARM

Nursing Staff:
- Rescreen at each chemotherapy Tx
- Record MST score & weight in CHARM
- Refer to Dietitian or Dietetic Assistant as indicated by MST score

Dietetic Assistant:
- See pt on day of Tx
- Advise use of Sustagen® 2xday & provide sample
- Provide pt with 'Patient sheet for MST=2'
- Provide relevant Dietetic Services symptom Mx brochures
- Record intervention & follow up plan in CHARM & on chemo

Nursing Staff:
- Rescreen at each chemotherapy Tx
- Record MST score & weight in CHARM
- Refer to Dietitian or Dietetic Assistant as indicated by MST score

Dietitian:
- See pt on day of Tx
- Record intervention & follow up plan in CHARM & on chemo running sheet
- If Dietitian not available:
  - Dietetic Assistant to see, provide Sustagen® sample & advise 2xday.
  - Provide pt with 'Patient sheet for MST=2'.
  - Provide relevant Dietetic Services symptom Mx brochures.
  - Dietitian to phone pt within 1 working day for phone consult
  - Record intervention & follow up plan in CHARM
Advice following Nutritional Screening for Oncology Patients

The questions you have answered today about your appetite and weight changes indicate you may benefit from including a medical nutrition supplement in your diet. This will assist with your overall nutrition, and can help with weight maintenance or weight gain.

There are a number of suitable products you can purchase from the supermarket or Pharmacy (no script required) that will provide valuable energy (kilojoules/calories), protein, vitamins and minerals. These include:

- **Sustagen Hospital Formula®** - available as a powder that can be mixed into milk or water (see instructions on tin), or Sustagen® as a ready-made drink in a carton.
- **Ensure®** - available as a powder that can be mixed into milk or water (see instructions on tin), or as a ready-made drink in a tin.
- **Proform®** - available as a powder that can be mixed into milk or water (see instructions on tin).

Depending on your appetite and weight, you need to aim to consume 2-3 drinks per day.

The best time to include a supplement drink is in between mealtimes (ie morning tea, afternoon tea or supper), *in addition to your usual food at mealtimes*. The powders listed above can also be mixed into milkshakes, smoothies and some foods.

You have been provided with a copy of the Cancer Council Victoria’s booklet titled “Nutrition & Exercise”. This booklet contains advice on using supplement drinks, and also includes nourishing drink recipes you may like to try (*see pages 26-28*).

“Nutrition & Exercise” also contains valuable tips and advice on other aspects of eating, weight loss, and possible side effects you may experience with treatment. This information is also available on the Cancer Council Victoria’s website: www.cancervic.org.au.

At your next visit to the Day Oncology Unit, your Nurse will ask you how you are managing with your appetite and weight. Further advice or information will be arranged as needed, and the above supplement drinks may be altered if required.
Appendix H

**SMICS STUDY**

**HOW TO ENTER SMICS DATA INTO CHARM**

STEP 1: SELECT PATIENT

STEP 2: ENTER ENCOUNTERS AND CLICK

STEP 3: **ENCOUNTER REASON**

- PRE-CHEMO EDUCATION SCREEN: SELECT “PRE EDUCATION SMICS STUDY”
- CYCLE 2 OR 3 SCREEN: SELECT “SCREENING TOOL SMICS STUDY”

STEP 4: **CHIEF COMPLAINT**

- PRE-CHEMO EDUCATION SCREEN: TYPE “PRE ED SMICS”
- CYCLE 2 OR 3 SCREEN: TYPE “SMICS”

STEP 5: SAVE AND CLOSE
STEP 6: COMPLETE QUESTIONNAIRE.

ALL QUESTIONS ARE MANDITORY.
Appendix I

NEW PATIENTS

- If patient has never received chemotherapy or has not received chemotherapy or biotherapy within the last 3 months, please discuss the SMICS study.
- If patient is interested in participating the following forms must be completed during PRE CHEMO EDUCATION

1. **The patient** will be required to complete the screening tool and
   - Sign the ‘patient information and consent’ form
2. **The nurse** will be required to
   - A. complete the education checklist,
   - B. enter the data into CHARM,
   - C. file signed consent form into the SMICS folder,
   - D. make any required referral as per dietetic flow chart and/or distress management flowchart.
   - E. amend appointment notes for cycle 2 and 3 of patient’s treatment to include ‘SMICS’.
Appendix J

HOW TO EDIT PATIENT APPOINTMENT NOTES

• Select patient
• Go to scheduler
• Click on ‘patient appointment’ in blue column
• Hover on appointment required and click
• Click on ‘day view’ in blue column
• Right click on appointment and select ‘edit appointment’
• in ‘notes’ add SMICS
  This will prompt the reception staff to give the patient the screening tool to complete while in waiting area prior to treatment.
• Edit appointments for cycle 2 and 3 only.
Appendix K

Staff feedback on SMICS supportive care screening tool use in Day Oncology

Thank you for your cooperation during the recent SMICS study. It would be appreciated if you could take a few minutes to answer the following questions.

1. Did you attend an in-service for the SMICS study supportive care screening tool?  Y   N

2. Did you find the study information folder helpful?
   a) Did not know about it
   b) Did not read it
   c) Did not find it helpful
   d) Did find it helpful

3. Did you find the screening tool easy to complete?
   Strongly disagree    disagree    neutral    agree    strongly agree

4. Do you feel the screening tool helped you to gain more information about the patients needs?
   Strongly disagree    disagree    neutral    agree    strongly agree

5. Do you feel there were more patients referred to a psychologist as a result of the screening tool?
   Strongly disagree    disagree    neutral    agree    strongly agree

6. Do you feel there were more patients referred made to a Dietician as a result of the screening tool?
   Strongly disagree    disagree    neutral    agree    strongly agree

7. What was the biggest problem when completing the screening tool?
   …………………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………………

8. Would you like to introduce the screening tool as a routine part of our patient assessment here in Day Oncology?
   Y   N

Any other comments
   …………………………………………………………………………………………………………………………

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Appendix L

CHREC Number: 01-20-06-11

Title: To test the efficacy of supportive care screening tools when introduced at pre-chemotherapy education sessions for patients attending Day Oncology, Cabrini Health, Malvern.

Documents to be presented

Protocol Amendments

<table>
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<th>Version</th>
<th>Date</th>
<th>Change to previous edition and investigator’s comments.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version 2</td>
<td>21/11/2011</td>
<td>I would like to post a short follow-up questionnaire to all participants in this study who scored &gt;4 on the Distress Thermometer. Of the 36 participants, 18 scored &gt;4 which indicated a clinical level of distress. Once this was identified, appropriate recommendations were made to the patient to seek intervention. Unfortunately, the 3 questions that were included in &quot;Nurse to complete&quot; section of the oncology supportive care screening tool are missing a large amount of data. Therefore, it is unclear as to the percentage of these patients who actually sought help for distress and from where they sought help. I feel it would greatly enhance the utility and potential clinical applications of the results of this study if we could analyse the relationship between help seeking behaviour and changes in distress over the course of the study. The missing data that will be collected through this follow-up questionnaire would enable us to identify shortfalls in the current referral and follow-up system for</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Change to previous edition and investigator's comments.</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>patients with high levels of distress. Accordingly it is anticipated that the findings of this study will inform further research on how to improve the standard of care given at Day Oncology, Cabrini Health, Malvern.</td>
</tr>
</tbody>
</table>

Name of Principal Investigator ..........Claire McGuiness....................................................
Author..........Sabrina Cornally..........  
Signature.................................................................
Date...21/11/2011........................................
Appendix M

Dear

Thank you for your recent participation in the study “to test the efficacy of supportive care screening tools when introduced at a pre-chemotherapy individualised education session for patients and their carers attending Day Oncology, Cabrini Health, Malvern.”

As a result of the questionnaire, we have noted a significant percentage of participants reported high distress levels on the “Distress Thermometer” which rates distress 0-10.

In order to further assist us with answering some of our research questions in relation to distress levels, we would appreciate if you would take a few minutes to answer a few questions regarding follow up care you may have received after recommendations made by our staff.

If you would like to participate, please complete the enclosed short follow-up questionnaire and return to Cabrini Health using the reply paid envelope. Participation is voluntary and all replies are de-identified to protect your privacy and will only be viewed by the research team. We would appreciate if this questionnaire could be returned within 2 weeks.

If you have any queries please contact me on (03)95081821 or email scornally@cabrini.com.au

Yours sincerely,

Sabrina Cornally
Registered Nurse-Day Oncology Unit
Follow-up Questionnaire

**Question 1:** Did you find the process of completing the **Oncology Supportive Care Screening Tool** beneficial to you?

- Y  
- N  
- Neutral  
- Not sure

**Question 2.** Following completion of the **Oncology Supportive Care Screening Tool** which included the Distress Thermometer, did you seek help for distress as recommended by the nursing staff? Please circle “Y” for yes or “N” for no:

- Y  
- N

*If you answered “N” to Question 2, then you have completed this questionnaire. Please return it in the reply paid envelope.*

*If you answered “Y” to Question 2, then please complete the remainder of this questionnaire.*

**Question 3:** Please indicate which of the following services you sought in relation to your distress as identified on the Distress Thermometer.

<table>
<thead>
<tr>
<th>Source of help for distress</th>
<th>Circle “Y” if you sought help from this source. Circle “N” if you did NOT seek help from this source.</th>
<th>If you sought help from this source, was it helpful? Circle “Y” if helpful. Circle “N” if NOT helpful.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Visit to your GP to discuss your level of distress.</td>
<td>Y N</td>
<td>Y N</td>
</tr>
<tr>
<td>b. Did you get a referral from your GP to see a psychologist or counsellor?</td>
<td>Y N</td>
<td>Y N</td>
</tr>
<tr>
<td>c. Consultation with Ms Jane Fletcher (psychologist specialising in provision of psychological services for oncology patients) or another psychologist</td>
<td>Y N</td>
<td>Y N</td>
</tr>
<tr>
<td></td>
<td>Contact the Cancer Helpline</td>
<td>Y</td>
</tr>
<tr>
<td>---</td>
<td>----------------------------</td>
<td>---</td>
</tr>
<tr>
<td>d</td>
<td>Contact beyondblue</td>
<td>Y</td>
</tr>
<tr>
<td>e</td>
<td>Contact lifeline</td>
<td>Y</td>
</tr>
<tr>
<td>f</td>
<td>Contact with Cabrini Pastoral Care</td>
<td>Y</td>
</tr>
<tr>
<td>g</td>
<td>Other sources of help for distress. Please specify source:</td>
<td></td>
</tr>
<tr>
<td>h</td>
<td></td>
<td>Y</td>
</tr>
</tbody>
</table>

**Question 4:** Do you have any other comments you would like to make in relation to completion of the **Oncology Supportive Care Screening Tool**?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
References

1 http://www.supportivecancercarevictoria.org/PublicPages/SupCarIntro.html
Viewed 26 September 2011
Supportive Cancer Care Victoria Introduction

2 http://supportivecancercarevictoria.org/PDF/supportive_care_policy.pdf
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5 Kubrak, C., Jenson, L., Critical evaluation of nutrition screening tools recommended for oncology patients.
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6 Zeunert, S. Assessing the nutritional needs of the Malvern day oncology unit patients. (2009) Unpublished

Viewed 5 April 2011
Supportive Care Policy for Victoria 6.1 p8

Viewed 5/April/2011
Supportive Care Policy for Victoria 6.3 p13

9 www.psychology.wikia.com/wiki/Distress_thermometer
Viewed 5 April 2011

10 Ristevski, E., Regan., Breen, S., Jones., Monash University Department of Rural and Indigenous Health and Gippsland Regional Integrated Cancer Services,
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