National Lung Cancer Forum for Nurses

Guideline for Telephone Follow Up for Patients Undergoing Thoracic Surgery

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Background

Lung cancer affects nearly 41, 500 people per year in the UK of which 5000 (12%) will undergo major lung resection for primary lung cancer. Patients also undergo diagnostic and palliative procedures with approximately 15% of all patients having complications post operatively. Once the patient develops a post surgical pulmonary complication mortality increases from 0.5% to 12%, ITU admission rate increases from 1.5% to 26% and the length of stay increases from 5 to 14 days (National Audit Office 2010).

Providing a telephone follow up service post discharge for patients who have undergone lung surgery can be an effective intervention to detect early complications, to manage distressing side effects, to reduce rates of re-admission and to improve patients satisfaction of their care. A retrospective audit of patients who had undergone lung surgery by the National Lung Cancer Forum for Nurses in 2012 showed that the consensus opinion from patients was that a preferred interval for post-operative assessment by telephone was between two and seven days. The audit data was collected from 147 patients from across four Thoracic Surgical Centres and received 439 comments and focused specifically on post-operative care.

Scope of Guideline

This guideline was developed by the multi-professional members of the National Lung Cancer Forum for Nurse Thoracic Surgical Group in light of emerging evidence that early assessment following discharge may benefit patients in terms of detecting early complications, manage distressing side effects, to reduce rates of re-admission and to improve patients satisfaction of their care.

The working group recommended that all patients discharged following thoracic surgical procedures should receive a follow up assessment by telephone five days after discharge.

This guideline has been written to support any health professional involved in the provision of care for patients who have undergone a lung surgery and can compliment patient interventions who are on Enhanced Recovery Programmes (ERP).

The guideline aims to assist in the identification of concerns or problems that a patient may face following Thoracic Surgery.

How do the Assessment tools work?

Five days after discharge following Thoracic Surgery a telephone call is made to the patient. On discussion with the patient the potential problems that they may have encountered since going home after surgery can be assessed utilising the guideline.

The guideline includes intervention recommendations using best available evidence. Local procedures can be developed to complement the guidelines in each clinical area.

The guideline includes assessment tools and interventions relating to:

1. wound management;
2. pain;
3. breathlessness;
4. activity;
5. anxiety;
6. constipation;
7. fatigue;
8. sleep.

An example of a Telephone Follow Up Assessment Tool is provided in Appendix 1.

Reference

National Audit Office (2011). *Delivering the Cancer Reform Strategy*: DoH

1) Guideline for Wound Management

Definition of wound care

Wound care can be defined as the prevention of wound complications and promotion of wound healing. Wound infection can be a common complication in the post operative period. Patients at high risk of developing wound infections include those with poor nutritional status, long term use of corticosteroids, immune system compromised patients and those with concurrent diseases such as diabetes.

Wound infections can result in extended length of stay in hospital. Once patients are discharged from hospital following complications with wound infections it is likely that they may require increased input from community nursing teams for wound care with prescribing and administration of oral antibiotics to prevent possible readmission to hospital.

The incidence of wound infections can be reduced by good pre-operative care such as skin cleansing (according to local trust policy and guidelines) and good nutritional status. In addition, wound hygiene whilst and inpatient and on discharge can reduce the risk of wound complications.

Patients and careers should be educated to be aware of the signs and symptoms of wound infection so as to be able to identify any light changes and to seek advice.

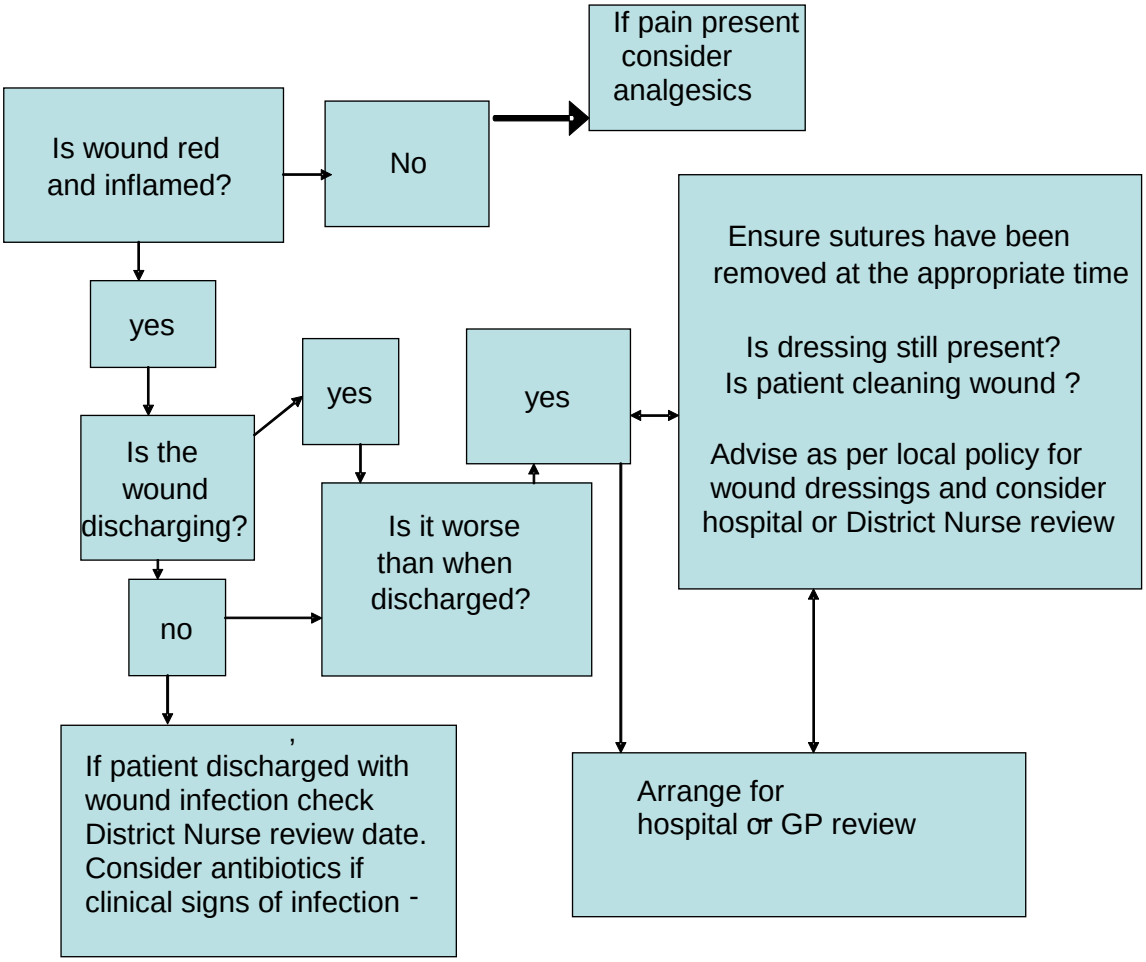
Assessment

Suggested questions

Are you concerned about the wound? If so, what are you concerned about?
What was your wound like on discharge? (If possible refer to patient hospital records).
Have there been any changes in the wound since discharge?
Were there any wound complications during the inpatient stay?
Were there any other complications during the inpatient stay that might affect wound healing such as gastrointestinal problems or chest infections?
Were you given any written and / or verbal advice about wound management and if so are there any signs of infection to be concerned about ?
Were any wound swabs taken whilst in hospital and if so what were the results?

Action

This flowchart provides guidance on any action required



References

Groetzner J, Holzer M, Stockhausen D (2009) Intrathoracic application of vacuum wound therapy following thoracic surgery. *Thoracic Cardiovascular Surgery.* 57,7,417-20.

Reid R, Simcock J W, Chisholm L et al (2002) Post discharge clean wound infections: incidence underestimated and risk factors overemphasized. *ANZ Journal of Surgery.* 72,5,339-43.

2) Guideline for the Management of Pain

Definition

An unpleasant sensation caused by noxious stimulation of the sensory nerve endings. It is a subjective feeling with an individual response to the cause. It is a total personal experience with physical, psychological, social and spiritual dimensions.

Signs and Symptoms

- local tenderness, swelling, inflammation and/or guarding of affected area
- restlessness, irritability, disturbed sleep, reduced functioning, inability to focus the mind
- calling out, crying
- reduced appetite
- reduced interaction with other people
- repression
- acute pain – signs of sympathetic over activity (such as increased blood pressure)

Interventions

- assess the:
  - nature of pain
  - location of pain
  - history of pain
  - frequency and duration of pain
  - factors which initiate the pain, exacerbate or ease the pain
- consider possible reasons for the pain, for example, wound infection, clips/sutures present, friction on wound caused by clothing, such as a bra, poor compliance or understanding of prescribed analgesics
- ensure there are realistic expectations for pain management. Has the pain increased/decreased or changed in type and intensity since discharge?
- review present analgesics and consider the analgesic ladder (below) to discuss analgesic interventions. Clarify possible drug allergies, sensitivities, and interactions with current medication
- consider the use of complimentary therapies

- provide telephone review 2 – 3 days after altering medication to review effectiveness
- Involve GP in management of pain in the community
- further investigation and physical assessment may be necessary

Reducing Medication

If patient is not experiencing pain or discomfort then it is appropriate to discuss methods of reducing analgesics slowly, together with an explanation of as required medication for any increase in pain. Ensure that the patient has reached full activity ability before considering reducing analgesics.

Analgesic Ladder

Step 1

NSAIDs

Paracetemol +/- adjuvant analgesics

Step 2

Paracetemol plus:

Codeine (e.g. Co-codamol)

Dihydrocodeine (e.g. Co-dydramol)

Dextroproproxyphene

+/- adjuvant analgesics

Step 3

Strong opioids e.g.

Morphine

Diamorphine

+/- adjuvant analgesics

The analgesic ladder progresses from a non-opioid via a weak opioid to a strong opioid. Start at the bottom of the ladder and work up as necessary. Use the drugs at the optimal dose regularly , for example, orally, by the clock, by the ladder.

Notes

- Cocodamol comes in three strengths containing either 8mg codeine and 500mg paracetemol, 15mg codeine and 500mg paracetemol or 30mg codeine and 500mg paracetemol. Generally when progressing from Step 1, the preparation with codeine 30mg will be appropriate. In elderly or frail patients a lower strength may be appropriate
- Codeine is a pro-drug of morphine. Its analgesic effect is via its conversion to morphine
- Paracetemol has a different analgesic effect from opioids and may provide additional benefit for patients taking strong opioids

Recommended Drugs

Refer to the British National Formulary (BNF) sections on “analgesia”, “Controlled Drugs” and “Prescribing in Palliative Care”. Check BNF for formulations and dose recommendations.

References

Anderson DM, Keith J, Novak PD et al (2002) *Mosby’s Medical, Nursing & Allied Health Dictionary.* 6th Edition. Missouri: Mosby, Inc.

Fordham M, Dunn V. (1994) *Alongside the person in pain*. Bailliere, London.

Melzack, R. (1975) The McGill pain questionnaire: major properties and scoring methods. *Pain*. 1, 277-299

Yorkshire Cancer Network (2004) *A Guide to Symptom Management in Palliative Care*.

3) Guideline for the Management of Breathlessness

Definition

Breathlessness can be defined as an unpleasant awareness of difficult or uncomfortable breathing that is greater than you would normally expect during exercise. Following Thoracic Surgery patients must be informed that if there is a change in breathing function then they must contact either the Thoracic Surgical Unit or their Clinical Nurse Specialist. Breathlessness can be measured utilising the MRC Dyspnoea Scale (see below).

Signs and Symptoms of Breathlessness:

- increased respiratory rate
- tachycardia
- fatigue
- peripheral cyanosis
- reduced mobility
- reduced ability to perform daily activities
- mouth breathing

Interventions

1) Assess the nature of the breathlessness from the patient (refer to the flowchart below).

Questions to ask can include:

Is the breathlessness constant?
Do you have pain when you breathe in?
What triggers the breathlessness?

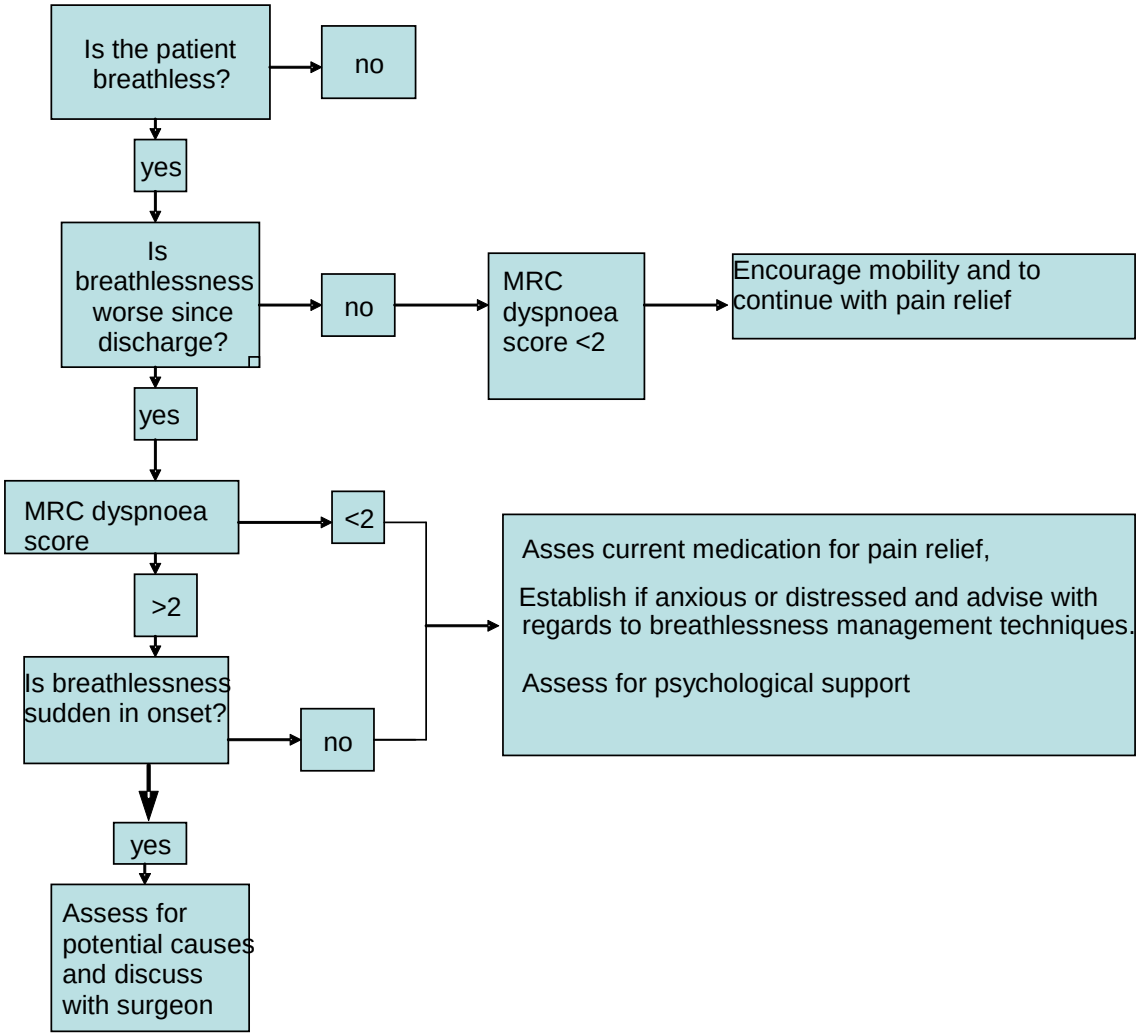
2) Review analgesic regime - reinforce regularity and compliance of medication, suggest potential changes and agree a review date.

3) Potential reasons for a sudden onset of breathlessness can include pneumothorax and pulmonary embolism. These both require urgent assessment by the Thoracic Surgical team for appropriate interventions.

4) Potential reasons for a gradual in onset of breathlessness can include chest infection (pyrexia, change in colour of sputum, rigors) or pain (medication review and compliance, reinforce regime, suggest potential changes and agree a review date - refer to Guideline for Pain Management.

5) Anaemia can be a cause for breathlessness and Full Blood Count recommended.

Flowchart for Breathlessness



Suggested Assessment Tool

MRC Dyspnoea Scale (NICE 2013)

1 Breathless only with strenuous exercise
2 Short of breath when hurrying on the level or up a slight hill
3 Slower than most people of the same age on a level surface or have to stop when walking at my own pace on the level
4 Stop for breath walking 100 meters or after a walking few minutes at my own pace on the level
5 Too breathless to leave the house

References

National Institute for Health and Care Excellence (2013) *MRC Dyspnoea Scale.* www.nice.org.uk/usingguidance/commissioningguides/pulmonaryrehabilitationserviceforpatientswithcopd/mrc_dyspnoea_scale.jsp (Last accessed: 4 June 2013)

National Lung Cancer Forum for Nurses (2013) *Breathlessness*. www.nlcfn.org.uk/breathlessness.htm (Last accessed: 4 June 2013)

4) Guideline for the Assessment and Management of Activity

Definition

Post operative activity can be measured according to the pre operative ability of the patient. It is advised to use pre-operative activity as a baseline prior to discharge. Thoracic Surgical procedures may result in an altered ability to provide self-care because of pain, fatigue and wounds which may hamper mobility.

Issues to be aware of

Post operative activity is likely to be affected by:

- pain
- breathlessness
- psychological reasons, such as depression or anxiety; and
- sleeplessness

If there is a reduction of activity levels post surgery, questions to ask the patient include:
Do you have any pain?
Do you have any breathlessness?
Are you confident in your ability to carry out daily activities?
Are you getting up and dressed each day?
Are you having a rest period at some stage during the day?
Are you able to wash or shower?
Are you able to go for a walk each day?
Are you aware when you can resume driving?

If further assessment is required refer to the appropriate guidance.

Discuss with the patient their main concerns and provide guidance for help. Consideration could be made to ask for help from family members or referral to the Social Services may be required. If there are any concerns relating to their physical condition then seeing the patient in clinic for assessment may be required. It is recommended that with any intervention a follow up telephone call is made for re-assessment. Ensure that the patient has the contact number for the Nurse Specialist and also the Thoracic Ward for continued advice.

Reference

Henderson A, Zernike W. (2001) A study of the impact of discharge information for surgical patients. *Journal of Advanced Nursing.* 35,435-441.

5) Guideline for the Management of Anxiety

Definition

Anxiety can be described as:

- an unpleasant emotion
- an associated perception of threat
- a part of “fight- flight” response
- universal
- usually adaptive
- a complex emotion

Signs and Symptoms

- an expression of being worried or concerned either verbally or non-verbally
- worry
- persistently tense and unable to relax
- sweating
- rapid pulse
- breathlessness
- chest pain
- avoidance of eye contact
- insomnia
- irritability
- panic attacks
- poor concentration
- nausea
- tremor
- cannot distract self or be distracted

Interventions

Try to identify possible cause of anxiety and offer constructive support. There may be many causes for anxiety including recovering after the operation, concerns on the success of the operation,

further treatment required or concerns about the future. Provide information that could be helpful in relieving anxiety and also consider anxiety management interventions such as relaxation therapy or massage. Consideration should be made to encouragement on coming to the local lung cancer support group.

If these interventions do not ease anxiety then referral to a Clinical Psychologist may be appropriate. Drug therapy is also an option in conjunction with psychological support: and can include:

- Temazepam 10-40mg Nocte
- Diazepam 5-10mg nocte and 2-5mg PRN
- an antidepressant if anxiety is associated with depression, for example, Citalopram
- Antipsychotics if the patient is psychotic, for example, Haloperidol

References

Maguire, P., Faulkner, A. (1993) Managing the anxious patient with advancing disease. *Palliative Medicine* 7, 239-244

Twycross, R (1997) *Symptom Management in Advanced Cancer*. Radcliffe Medical Press, Oxon.

6) Guideline for the Management of Reduced Appetite

Definition

Reduced appetite can be described as when there is no desire to eat, when food is unappealing or the feeling of feeling full quicker than usual. This can becomes an issue when it is sustained for more than two days. Having a reduced appetite can be caused by both physical and psychological problems.

Physical problems

Medication

Review medication and consider that antibiotics and analgesics may suppress appetite.

Infection

Is there infection present?
Assess wound for any signs of infection.
Is there pyrexia and if so then consider surgical review and antibiotics.

Constipation

Gastro intestinal disturbances such as constipation will reduce appetite. Review medication and consider the need for laxatives.

Oral hygiene

Is there oral candida present and if so consider anti-fungal medication such as Nystatin or Fluclonazole.
Are bad teeth inhibiting appetite or are dentures poorly fitted? If so consider referral to the patient`s dentist for assessment.
If oral hygiene is an issue then encourage more soft food using full fat products.

Social circumstances

Are there social reasons why appetite is reduced? It may be that the patient lives on their own and does not have the activity levels to be able to shop or cook. If this is the case then consider contacting local support organisations such as British Red Cross to help ease social concerns. Also encourage family members to be more involved in support if appropriate.

Psychological concerns

Some patients may feel anxious to eat as worried about nausea possible associated with medication. Anxiety may also relate to the reasons for surgery, possible cancer diagnosis and the potential for future treatments. Encourage the patient to eat what they fancy rather than what they feel they should be eating.

Malnutrition Universal Screening Tool (MUST) Score

The MUST score is a five step tool used for assessing the nutritional state of adults. It identifies those who are malnourished, at risk of malnourishment and those who are obese. It is recommended that a local Hospital nutritional assessment tool is utilised to assess MUST to identify changes post discharge (Appendix 2).

5 days post discharge may be too early to identify changes in MUST or equivalent but is useful to document for future consultations.

References

Mason JB. (2010) *Nutritional Assessment and Management of the Malnourished Patient*. In: Feldman M, Friedman LS, Brandt LJ, eds. *Sleisenger & Fordtran's Gastrointestinal and Liver Disease.* 9th ed. Chapter 4. Philadelphia. Saunders Elsevier.

British Association for Parental and Enteral Nutrition (2010) *Malnutrition Matters - Meeting Quality Standards in Nutritional Care. A toolkit for Commissioners and Providers in England*. Bapen

7) Guideline for the Management of Constipation

Definition

Constipation can be defined as having a bowel movement fewer than three times per week.

Medication

The following medications can cause constipation:

- pain medications (especially narcotics)
- antacids that contain aluminum and calcium
- blood pressure medications (calcium channel blockers)
- antiparkinson drugs
- antispasmodics
- antidepressants
- iron supplements
- diuretics
- anticonvulsants

Assess what medication the patient is taking including laxatives.

Lifestyle

Encouragement should be given to the patient to mobilise or exercise as much as possible, to eat high fibre diet and have a good fluid (with non caffeine drinks). Assess whether there are other medical conditions are present that may affect bowel movement as the intervention recommended may need to be different.

Reference

National Lung Cancer Forum for Nurses (2013) *Constipation* http://www.nlcfn.org.uk/Constipation.htm (Last Accessed: 4 June 2013).

8) Guideline for the Management of Fatigue

Definition

The persistent sensation of feeling drowsy, tired, lethargic or weak, with or without impaired cognition.

Signs and Symptoms

- drowsiness
- tiredness
- lethargy
- exhaustion
- weakness
- impaired cognition
- mood alteration / depression
- inability to carry out daily activities
- loss of appetite
- loss of libido
- altered sleep pattern
- anaemia

Interventions

- assess what are the potential causes for fatigue such as breathlessness, anaemia, medication, poor nutritional intake and intervene as necessary
- discuss coping strategies with the patient and consider planning and pacing activities
- refer to other support services if appropriate
- review after one week and if no improvement further investigation may be needed
- consider the use of complimentary therapies if patient so wishes

References

Curt, GA. (2001) Fatigue in Cancer. *British Medical Journal.* 322, 1560

The Macmillan Practice Development Unit (1998) *An exploration of the nature and impact of fatigue in patients with advanced cancer. A case study*. The Institute of Cancer Research, The Royal Marsden NHS Trust

Rubin GJ, Cleare A, Hotopf M. (2004) Psychological factors in postoperative fatigue. *Psychosomatic Medicine.* 66,6,959-64.

8) Guideline for the Management of Altered Sleep Pattern

Definition of sleep

Sleep is important to aid recovery following surgery, can help to maintain physical and psychological strength and to maintain a strong immune system. Sleeping well is important. If sleep is not maximised then this can lead to a number of potential problems including the inability to exercise fully resulting in worsening breathlessness, worsening mobility and loss of concentration which could lead to poor medication compliance.

Assessment of sleep pattern

Determine what is the patient`s usual sleep pattern as this can vary considerably from person to person.

Determine the style and location of sleep by asking the patients:

- do you usually take short naps during the day?
- do you usually have insomnia?
- do you need medication to sleep?
- do you usually sleep in a bed, chair or sofa?

If the patient is sleeping **less than normal** then determine their new sleep pattern, for example:

- able to fall asleep but wakes frequently;
- difficult to sleep but once asleep manages 4 – 5 hours; or
- any other change.

Restless sleeping may be a sign of a range of concerns including post-operative discomfort, anxiety, fatigue which may be causing the altered sleep pattern and fewer consecutive hours of sleep at night.

Action

Review medication:

- if pain is causing sleeplessness then maximize analgesia
- steroids can cause insomnia (evaluate the need for steroids and ensure that the daily dose is taken in the morning after food)
- opiates can cause hallucinations at night time

Exercise and having a routine can help to maximize physical activity during the day to which can ease sleeplessness.

If the patient is **sleeping more than normal** then determine their new sleeping pattern, for example:

- is breathlessness present as this may be an indication that there is a surgical complication and urgent surgical assessment would be recommended
- is the patient sleeping at night and cat napping during the day? If so then review medication. Some analgesics (opiates) may cause lethargy and result in patient sleeping intermittently throughout day and night
- lack of motivation may result in an increase of sleeping so encouragement of exercise would be recommended
- if the patient is sleeping for more than 10 hours per day this may also be a symptom of depression and will need appropriate intervention

Useful suggestions for patients

- encourage the patient to take rests during the day but avoid napping if possible
- avoid caffeine as this can hinder sleep and replace with warm non-caffeinated drinks before sleeping
- have a warm bath or shower if the wound has healed and there is no chest drain present
- suggest relaxation exercises

References

Macmillan (2013) Difficulty Sleeping (insomnia). http://www.macmillan.org.uk/Cancerinformation/Livingwithandaftercancer/Symptomssideeffects/Othersymptomssideeffects/Difficultysleeping.aspx (Last Accessed: 4 June 2013)

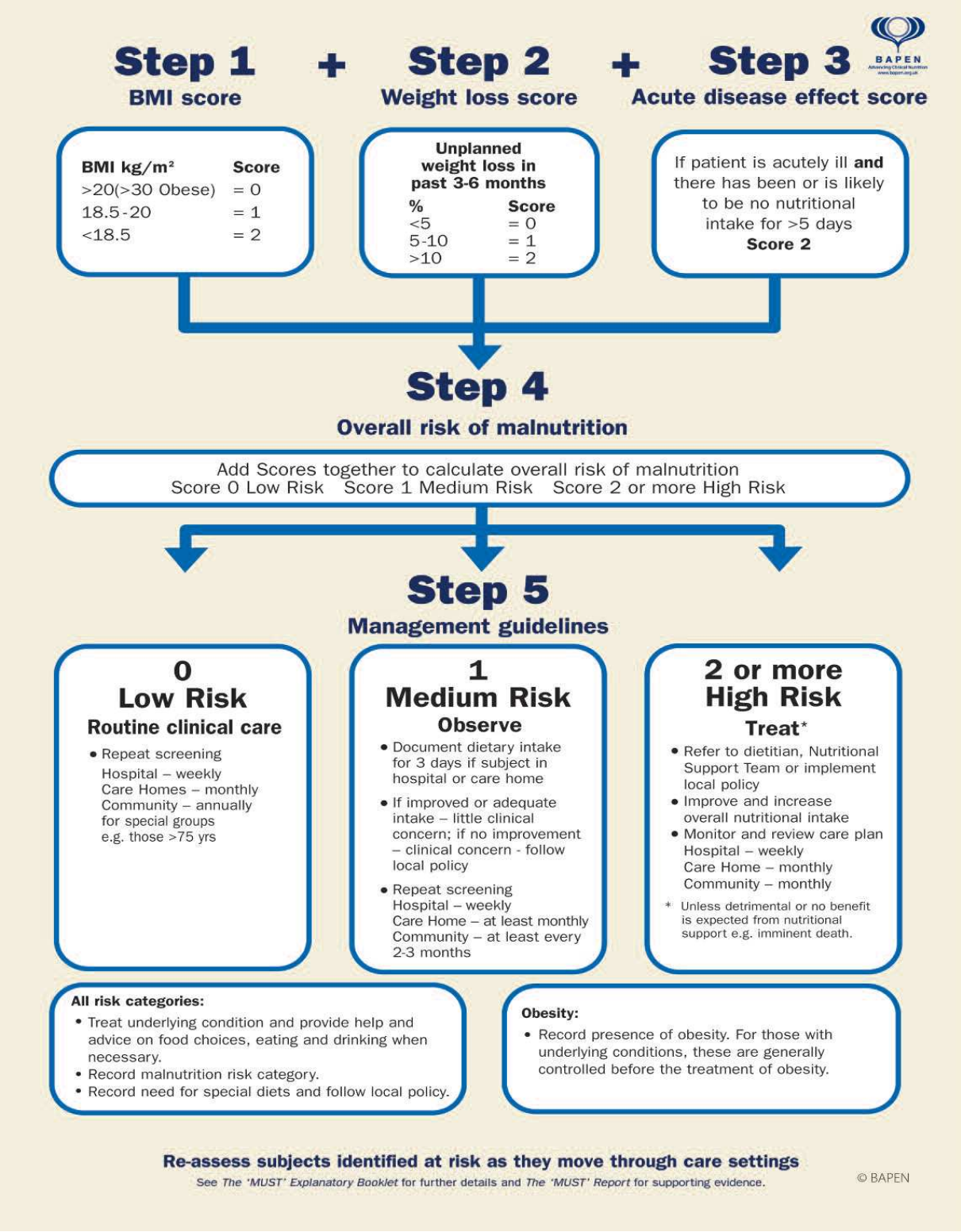
The Relation of Trouble Sleeping, Depressed Mood, Pain, and Fatigue in Patients with Cancer (2009) *Journal of Clinical Sleep Medicine*. 5, 2, 132-136.

Appendix 1 - Telephone Follow Up Assessment Tool

Patient details	
Operation and date	
Date of discharge	
Date and time of follow up call	
Date of future call if planned	
Date of Follow up appt	

	Problems	Interventions	Review date
Pain			
Wounds/ stitch removal			
Infection			
Diet/appetite			
Nausea			
Constipation			
Exercise/mobility			
Psychological issues			
Sleep			
Any other concerns			
Referral to additional health care professional			

Appendix 2 - MUST Score tool



Reference

British Association for Parental and Enteral Nutrition (2010) *Malnutrition Matters - Meeting Quality Standards in Nutritional Care. A toolkit for Commissioners and Providers in England*. Bapen