

# Symptom Assessment Acronym

(Adapted from FHA hospice palliative care program, symptom guidelines, 2006)

Nursing Assessment using the NOPQRSTUV Acronym	
Normal	<ul style="list-style-type: none"><li>• What is normal for you? (Establish baseline)</li></ul>
Onset	<ul style="list-style-type: none"><li>• When did it begin?</li><li>• How long does it last?</li><li>• How often does it occur?</li></ul>
Provoking / Palliating	<ul style="list-style-type: none"><li>• What brings it on?</li><li>• What makes it better?</li><li>• What makes it worse?</li></ul>
Quality	<ul style="list-style-type: none"><li>• What does it feel like? (Describe symptom)</li></ul>
Region / Radiation	<ul style="list-style-type: none"><li>• Where is it?</li><li>• Does it spread anywhere?</li></ul>
Severity	<ul style="list-style-type: none"><li>• How bothersome is this symptom? (Scale of 0-10)</li><li>• Are there any accompanying symptoms? (If yes, describe)</li></ul>
Treatment	<ul style="list-style-type: none"><li>• What medications or treatments are you currently using?</li><li>• How effective are these?</li><li>• Do you have any side effects from the medications?</li><li>• What medications or treatments have you used in the past?</li></ul>
Understanding / Impact on You	<ul style="list-style-type: none"><li>• What do you believe is causing this symptom?</li><li>• How is this symptom affecting you and/or your family? (Scale of 0-10)</li></ul>
Values	<ul style="list-style-type: none"><li>• What is your acceptable level for this symptom?</li><li>• Are there any other views / feelings about this symptom that is important to you / your family?</li></ul>

From BC Cancer

# Disclaimer

- These clinical pathways (CPs) are developed to assist nurses to provide appropriate cancer supportive care. They detail the assessment and management of common distressing symptoms affecting cancer patients, and are developed for use in the outpatient cancer setting.
- These CPs are developed by a multidisciplinary team of clinicians by consensus and based on the evidence available. However, the CPs do not necessarily represent the views of all clinicians at National Cancer Centre Singapore (NCCS).
- These CPs are targeted at nurses only. Patient education information for patients and caregivers is available through the NCCS website. Patients and caregivers using the patient education information in these CPs should be guided by a healthcare professional and should not rely solely on the information in these CPs as substitute for professional medical advice.
- These CPs do not constitute a textbook and therefore deliberately provide little, if any, explanation or background to the conditions and treatment outlined. They are however designed to acquaint the reader rapidly with the clinical problem and provide practical advice regarding assessment and management.
- These CPs are not intended as a sole source of guidance. Rather, they are designed to assist nurses by providing an evidence-based framework for decision-making strategies. They are not a substitute for **clinical judgement**, knowledge and expertise, or medical advice. These CPs are not prescriptive and not intended to establish an exclusive course of action. All decisions regarding the care of a patient should be made by the healthcare team, patient, and caregiver in consideration of all aspects of the patient's specific circumstances. Variation from the CPs, taking into account individual circumstances may be appropriate. Adherence to the CPs does not guarantee a successful outcome.
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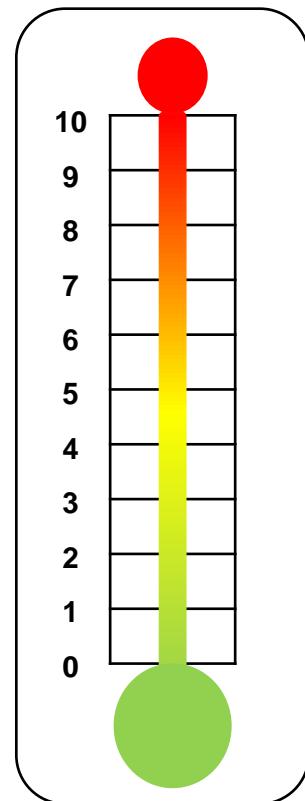
# NCCS Distress Screening

## DISTRESS THERMOMETER

Please circle below the number (0-10) that best describes how much distress\* you have been experiencing in the past 1 week, including today:

\*Distress= physical / mental strain and stress

Extreme distress



No distress

## PROBLEM LIST

*Please tick if any of the following has been a problem or concern for you in the past 1 week, including today.*

### Physical Problems

- 1. Appearance
- 2. Abnormal swelling in legs or arms
- 3. Appetite
- 4. Breathing
- 5. Constipation
- 6. Diarrhoea
- 7. Feeling tired
- 8. Fevers
- 9. Hair / Skin problems
- 10. Hot flashes (feeling excessively hot / sweaty)
- 11. Indigestion
- 12. Memory / Concentration
- 13. Mouth / Swallowing problems
- 14. Moving around
- 15. Nausea / Vomiting
- 16. Nose dry / congested
- 17. Pain
- 18. Problems in urination
- 19. Sexual problems
- 20. Sleep problems
- 21. Speech / Hearing problem
- 22. Tingling / numbness in feet / hands

### Information needs

- Specify: \_\_\_\_\_
- Other problems not listed; specify: \_\_\_\_\_

### Practical Problems

- 24. Bathing / Dressing / Toileting
- 25. Caring responsibilities (child, parents, etc)
- 26. Financial (include insurance)
- 27. Household chores
- 28. Transportation
- 29. Treatment decision
- 30. Work / School

### Family / relationship Problems

- 32. Ability to have children
- 33. Family health issues
- 34. Relationship with family / friends

### Emotional Problems

- 36. Anger / Frustration / Guilt
- 37. Hopelessness
- 38. Loneliness / Isolation
- 39. Loss of interest in usual activities
- 40. Sadness / Depression
- 41. Worry / Fear / Anxiety

### Spiritual / Religious Concerns

- 43. Loss of faith or other spiritual concerns
- 44. Loss of meaning / purpose of life
- 45. Not at peace / feeling regret about past

# Abnormal Swelling in Limbs Practice Guide

Lymphedema: A disorder characterized by excessive fluid collection in tissues that causes swelling.

## [RED FLAGS]

- Cancer recurrence
- Venous thromboembolism (VTE): Unilateral limb swelling/pain/warmth, fever, breathlessness, chest pain, cough, hypoxia, tachycardia
- Cellulitis: Pain/redness/warmth/swelling in the affected area, fever, chills
- Superior vena cava obstruction: Neck/face/arm swelling, distended/dilated neck/chest wall veins, headache, breathlessness, voice hoarseness
- Acute worsening of organ function: Heart, kidney, liver, lungs

If Yes, advise patient to go to nearest DEM & inform oncologist

## ASSESSMENT

## MANAGEMENT

### [Normal]

- Do you have any pre-existing limb swelling? If yes, where and for how long?
- If there was a previous episode,
  - What was the diagnosis? (e.g. cellulitis, VTE, chronic venous insufficiency)
  - What was the treatment given? Are you seeing any healthcare professional for the swelling?
  - Has there been progression over time or has it been resolved?

### [Consider]

#### Contributing Factors

- Determine need for further investigations
- Refer to specific management on next page

### [Onset]

- When did the limb swelling start? Was it sudden or gradual?
- Where and what is the extent of limb swelling? (Unilateral vs bilateral)

### [Patient Education]

- Self-monitoring
- Healthy lifestyle
- Good skin care
- Trigger avoidance
- Other measures

### [Provoking/Palliating]

- What brings on the swelling?
- Is there anything that makes the swelling better or worse?
- Did you have any recent prolonged travel (flying/driving), trauma, puncture wounds, burns, bites, heavy lifting, repetitive activity, exposure to extreme heat?
- Any central venous access device (e.g. PICC, port-a-cath)?
- Any previous surgery involving lymph nodes?
- Any history of heart, kidney, liver or thyroid disease?

### [Quality]

- Are there any other sensation(s) over the swollen area? (e.g. pain, tightness, aching, heaviness, numbness, burning sensation, itch)
- Has the swelling been intermittent or continuous?
- Has there been progression? What is the pattern of progression? (Proximal-distal)

### [Severity/Other Symptoms]

- On a scale of 0 to 10, how bothersome is this symptom to you?
- Have you been experiencing any other symptoms such as:
  - Chest pain, breathlessness, diaphoresis
  - Neck/face/arm swelling, obvious blood vessels in the neck/chest wall, headache, breathlessness, voice hoarseness

### [Treatment]

- Have you tried any medications/strategies/treatments (e.g. exercise, physiotherapy, limb elevation, compression sleeves)? Was it effective?

### [Value]

- What do you believe is causing the swelling?

CTCAE GRADING	Grade 1	Grade 2	Grade 3
<b>[Understanding/Impact]</b>	Trace thickening or faint discolouration	Marked discolouration; leathery skin texture; papillary formation; limiting instrumental ADL	Severe symptoms; limiting self care ADL

Plans	<input type="checkbox"/> Patient education <input type="checkbox"/> Return advice <input type="checkbox"/> Update Oncologist PRNnpase <input type="checkbox"/> Update/Refer to Occupational Therapist
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# Abnormal Swelling in Limbs Practice Guide

Contributing Factors			Patient Education	
Category	Specific factors	Discuss with Oncologist/ Specific management	Category	Specific points
Cancer-related	<ul style="list-style-type: none"> <li>Lymphatic drainage compression/obstruction</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> </ul>	<b>Self-monitoring</b>	<ul style="list-style-type: none"> <li>The risk of lymphedema is greatest within 3 years of lymph involving surgery or radiation therapy.</li> <li>Monitor signs and symptoms of infection or worsening lymphedema.</li> <li>Early intervention improves control of lymphedema, seek prompt medical attention if it occurs.</li> </ul>
Anti-cancer therapy & its side effects	<ul style="list-style-type: none"> <li>Chemotherapy e.g. Docetaxel</li> <li>Radiotherapy e.g. Regional lymph node irradiation</li> <li>Surgery/Procedures e.g. lymphadenopathy, lymphatic dissection</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Review compliance to steroids for docetaxel-induced lymphedema</li> <li>Pharmacological interventions</li> <li>Update oncologist</li> </ul>	<b>Healthy lifestyle</b>	<ul style="list-style-type: none"> <li>Maintain a healthy body weight.</li> <li>Continue daily activities (e.g. Yoga, walking) as tolerated. If the affected area is painful/sore at any point, stop immediately.</li> </ul>
Medications	<ul style="list-style-type: none"> <li>Steroids</li> <li>Calcium channel blockers</li> <li>Angiotensin converting enzyme inhibitor</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Review medications</li> <li>Update primary prescriber, consider alternative medications, if appropriate</li> </ul>	<b>Good skin care</b>	<ul style="list-style-type: none"> <li>Keep nails and skin clean, dry and moisturized to prevent infection</li> <li>Take extra care and use protective gear/gloves during activities that may cause skin injury (e.g. sewing, food preparation, gardening) to avoid cuts, burns and wounds.</li> <li>Choose an electric shaver instead of manual razor when removing hair over the affected area.</li> <li>Protect skin with sunscreen and insect repellent.</li> <li>Avoid any invasive procedures (injections, blood taking, acupuncture, tattoos, body piercings) on the affected limb if possible.</li> <li>Clean all broken skin/wounds over affected area using saline or antiseptics.</li> <li>Seek medical attention immediately if wound appears infected.</li> </ul>
Pre-existing medical conditions & metabolic issues	<ul style="list-style-type: none"> <li>Organ dysfunction e.g. heart, liver, lung, kidney</li> <li>Hypothyroidism</li> <li>Hypoalbuminemia</li> <li>Chronic venous insufficiency</li> </ul>	<ul style="list-style-type: none"> <li>Patient education including compliance to primary care follow up</li> <li>Specialist referral to optimize management of pre-existing medical condition, if necessary</li> </ul>	<b>Trigger avoidance</b>	<ul style="list-style-type: none"> <li>Avoid prolonged standing, sitting or crossing legs. Move or change position regularly. Elevate affected limb when resting, when possible.</li> <li>Avoid constricting the affected limb (e.g. carrying heavy items, blood pressure measurement, tight fitting clothing, jewelry and footwear)</li> <li>Avoid strenuous and repetitive activities over affected limb.</li> <li>Avoid exposure to extreme temperatures (e.g. hot spring, sauna, steam bath, cold). Do not apply hot oil, heat-producing products or hot/cold pack to affected limb.</li> </ul>
Others	<ul style="list-style-type: none"> <li>Pregnancy</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Optimize symptom management</li> </ul>	<b>Other measures</b>	<ul style="list-style-type: none"> <li>Wear special garments according to your therapist's recommendations.</li> <li>Consult your therapist if you are going on flights ≥4 hours or altitudes ≥1500m, as high altitudes and low air pressure may lead to lymphedema. Your therapist will be able to advise you on the use of a customized gradient compression garment to be worn at all times during the flight</li> <li>Follow Occupational Therapist (OT) recommendations regarding manual lymphatic drainage massage.</li> </ul>

# Appetite (Anorexia and Cachexia) Practice Guide

Anorexia: involuntary loss of appetite or desire to eat that results in reduced caloric intake and often weight loss  
 Cachexia: a complex metabolic syndrome associated with underlying illness and characterized by loss of muscle with or without loss of fat mass

<b>[RED FLAGS]</b> <ul style="list-style-type: none"> <li>• Signs of intestinal obstruction (no bowel output for ≥ 3 days, overflow diarrhea, nausea/vomiting, abdominal distension/pain)</li> <li>• Signs of hypercalcaemia: nausea/vomiting, constipation, excessive thirst, bone pain, confusion, irregular heart rhythm</li> <li>• [CTCAE Grade 4] No oral intake for 24 hours, signs of dehydration, sudden, severe decrease in functional or performance status</li> </ul>		If Yes, advise patient to go to nearest DEM & inform oncologist	
ASSESSMENT*		MANAGEMENT	
<b>[Normal]</b> <ul style="list-style-type: none"> <li>• How would you describe your appetite normally/ before your diagnosis?</li> <li>• How would you describe your usual oral intake?</li> <li>• What is your usual weight?</li> </ul>		<b>[Consider Contributing Factors]</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Determine need for further investigations</li> <li><input type="checkbox"/> Refer to specific management on next page.</li> </ul>	
<b>[Onset]</b> <ul style="list-style-type: none"> <li>• When did you notice a change in your appetite/ oral intake?</li> <li>• When did you notice a change in your body weight? How much weight have you lost? Are you still losing weight?</li> </ul>		<b>[Patient Education]</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> General advice</li> <li><input type="checkbox"/> Dietary advice</li> <li><input type="checkbox"/> Advice on taste changes</li> </ul>	
<b>[Provoking / Palliating]</b> <ul style="list-style-type: none"> <li>• What makes your appetite/ oral intake better or worse? (Note presence and severity of any symptoms such as diarrhea, constipation, xerostomia, taste changes, oral mucositis, dysphagia, depression, early satiety, fatigue, nausea or vomiting)</li> <li>• Are there any issues with getting food?</li> </ul>		<b>[Specialist Referrals PRN]</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Dietician</li> <li><input type="checkbox"/> Speech therapist</li> <li><input type="checkbox"/> Medical Social Worker</li> </ul>	
<b>[Quality]</b> <ul style="list-style-type: none"> <li>• How much are you eating and drinking compared to your usual intake? Describe in terms of % or share (e.g. 25% or ¼ share compared to usual)</li> <li>• How much weight have you lost? Are you still losing weight?</li> </ul>			
<b>[Severity]</b> <ul style="list-style-type: none"> <li>• On a scale of 0 to 10, how bothersome is this symptom to you?</li> </ul>			
<b>[Treatment]</b> <ul style="list-style-type: none"> <li>• What strategies/treatment (e.g. steroids, anti-emetics etc.) have you tried to improve appetite/oral intake? Was any of them effective?</li> <li>• Are you taking any nutritional supplement? If yes, what are they?</li> </ul>			
<b>[Understanding / Impact]</b> <ul style="list-style-type: none"> <li>• How has the symptom(s) affected you or your family?</li> </ul>			
<b>[Value]</b> <ul style="list-style-type: none"> <li>• What do you believe is causing your symptom(s) ?</li> <li>• What do you think is acceptable in terms of appetite/oral intake/weight?</li> </ul>			
CTCAE GRADING	Grade 1	Grade 2	Grade 3
	Loss of appetite without alteration in eating habits	Oral intake altered without significant weight loss or malnutrition; oral nutritional supplements indicated	Associated with significant weight loss or malnutrition (e.g. inadequate oral caloric and/or fluid intake); tube feedings or TPN indicated.
Plans	<input type="checkbox"/> Patient education <input type="checkbox"/> Specialist referral PRN <input type="checkbox"/> Return advice	<input type="checkbox"/> Patient education <input type="checkbox"/> Specialist referral PRN <input type="checkbox"/> Return advice <input type="checkbox"/> Update oncologist +/- pharmacological management	

# Appetite (Anorexia and Cachexia) Reference Guide

Contributing Factors			Patient Education	
Category	Specific factors	Inform Oncologist/ Discuss specific management	Category	Specific points
Pre-existing medical conditions	<ul style="list-style-type: none"> <li>Neurological conditions (Mild cognitive impairment, dementia, epilepsy, Parkinson's)</li> <li>Previous stroke</li> <li>End-stage diseases (e.g. AIDS, renal or hepatic failure)</li> <li>Underlying chronic conditions (e.g. COPD, rheumatoid arthritis)</li> <li>Pre-existing eating disorder</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Specialist referral to optimize management of pre-existing medical condition, if necessary</li> </ul>	General advice/ Patient education	<ul style="list-style-type: none"> <li>Discuss importance of adequate nutrition and minimizing weight loss in the disease process and treatment</li> <li>Discuss cancer diagnosis and treatment side effects that may alter nutritional intake</li> <li>Normalise that appetite may fluctuate depending on stage of treatment</li> <li>Ensure compliance to medications for optimal symptom control</li> <li>Advise patient/family to monitor food, fluid intake and weight regularly</li> <li>Instruct patient/family to contact physician or nurse if there are any signs of red flags</li> <li><b>NOTE:</b> Consider stage of disease and goals of care; may need to advise patient and family on disease progression to focus on patient's comfort and relieve caregiver anxiety, as pressuring intake can worsen symptom</li> </ul>
Cancer-related	<ul style="list-style-type: none"> <li>Tumours of head and neck, gastrointestinal system, lung, liver or pancreas</li> <li>Metastatic disease</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Optimize symptom control</li> </ul>	Dietary advice	<ul style="list-style-type: none"> <li>Clarify food misconceptions and eat a wide variety of food, balancing with therapeutic diet principles (e.g. diabetes) if required</li> <li>Take small, frequent meals (5-6 per day)</li> <li>Increase calories by adding sesame/olive oil or gravy to meals and applying spreads (peanut butter, jam) to bread/biscuits</li> <li>Increase protein intake by eating egg, tofu, and/or tuna</li> <li>Encourage high calorie high protein snacks (e.g. nuts, curry puff, ice cream, cakes)</li> <li>Start oral nutritional supplement early and take consistently as meal replacement top-ups if oral intake is inadequate</li> <li>Encourage nutritious fluids throughout the day and with medications (e.g. full-cream milk, soy milk, milo, smoothies, juices)</li> <li>Make mealtimes relaxing and enjoyable (e.g. watch television, listen to music, or eat with family and friends)</li> <li>Avoid fluid intake 30 minutes prior to meals and 2 hours before bedtime</li> <li>Daily light exercises e.g. short walk can help with appetite and digestion.</li> </ul>
Medications and substances	<ul style="list-style-type: none"> <li>Sedating agents e.g. anti-emetics, opioids, benzodiazepines</li> <li>Alcohol and other agents that alter cognition</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Review and consider alternative medications, if appropriate</li> </ul>	Advice on taste changes	<ul style="list-style-type: none"> <li>Use plastic/porcelain utensils to lessen metallic taste</li> <li>Practice good oral hygiene e.g. rinsing mouth before and after meals</li> <li>Have citrus drinks (e.g. orange juice, lemonade, sour plum drink) or mint/lemon drop sweets before meals to stimulate ability to taste food</li> <li>Flavor cooking with herbs and spices (e.g. ginger, chili, lemon/lime, basil) or sauces/seasonings (e.g. teriyaki sauce, balsamic vinegar)</li> <li>Try frozen fruits (e.g. rock melon, watermelon) for a different experience</li> </ul>
Metabolic issues	<ul style="list-style-type: none"> <li>Vitamin B12, iron, folic acid deficiencies</li> <li>Hypercalcaemia</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Endocrine referral</li> </ul>		
Psychological distress	<ul style="list-style-type: none"> <li>Depression, anxiety</li> <li>Family's expectation on food intake</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Consider Psychosocial Oncology referral</li> </ul>		
Others	<ul style="list-style-type: none"> <li>Socioeconomic factors (e.g. lack of social, financial supports)</li> <li>Belief(s) that eating certain foods will make cancer progress/recur</li> <li>"Heaty" and "Cooling" food</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> </ul>		

# Enteral Nutrition Supplement

Product		Type	Energy (kcal)	Protein (g)	Fibre	Flavours	Retail price
DIBEN		DM formula, 1.5kcal/ml	1500	75	Yes	Vanilla, Cappuccino	\$3.5-4/200ml
ENSURE		Standard liquid, 1kcal/ml	1064	37.2	No	Vanilla, Strawberry	~\$2.85/250ml
ENSURE PLUS		Standard high calorie liquid, 1.5 kcal/ml  	1500	62.5	No	Vanilla, Strawberry, Raspberry, Chocolate, Coffee	\$3.35/200ml
ENSURE LIFE POWDER		Standard powder	43.7/sc	1.8/sc	Yes	Vanilla, Wheat, Coffee, Chocolate, Strawberry, Almond (Plant based)	\$43.30/850g
FORTIJUICE		Fat free liquid, 1.5kcal/ml	1500	39	No	Apple, Blackcurrant	~\$3/200ml
FORTISIP		Standard high calorie liquid, 1.5 kcal/ml	1500	59	No	Vanilla, Chocolate, Strawberry	~\$3/200ml
FRESUBIN 2 kcal		Standard high calorie, high protein, liquid, 2kcal/ml	2000	100	No	Vanilla, Cappuccino	~\$3-4/200ml
GLUCERNA		Diabetes liquid, 1kcal/ml	1000	42	Yes	Vanilla	~\$4/250ml

# Enteral Nutrition Supplement

GLUCERNA PLUS 1.5kcal		Diabetes liquid, 1.5kcal/ml	1500	75	Yes	Vanilla, Chocolate, Strawberry	~\$4.10/220ml
JEVITY		Standard fibre liquid, 1kcal/ml, *isotonic	1060	44.2	Yes	Unflavored	\$3.35/237ml
MYOTEIN		Protein powder	26/sc	5/sc	No	Nil	\$17-18/215g
NUTREN DIABETES		Diabetes liquid, 1kcal/ml	1000	70	Yes	Vanilla	\$3.55/200ml
NUTREN DIABETES POWDER		Diabetes powder formula	36.1/sc	1.6g/sc	Yes	Vanilla	\$47.70/800g
PROPASS		Protein powder	30/sc	6g/sc	No	Nil	\$13-21/213g
PROSURE		For cancer cachexia, contains omega 3	1270	66.5	Yes	Vanilla	\$8.20/220ml
PROSURE POWDER		For cancer cachexia, contains omega 3	33.5/sc	1.8g/sc	Yes	Orange	~\$36/380g
RESOURCE FRUIT LIQUID		Fat free liquid, 1.5kcal/ml	1500	40	No	Apple, Orange, Raspberry blackcurrant	\$3.35/200ml
RESOURCE 2.0		Standard high calorie, high protein, liquid, 2kcal/ml	2000	90	No	Vanilla	~\$4.50/200ml

\* Values as per 1L unless stated per scoop (sc) or packet (pkt)

Cost based on online prices across different platforms

List is not comprehensive. Please refer to other resources for more updates/details/other supplements not listed here. (Updated Apr 23)

# Breathing Problem Practice Guide

Dyspnea: A disorder characterized by an uncomfortable sensation of difficulty breathing.

## [RED FLAGS: CTCAE Grade 4] Life threatening consequences; urgent intervention indicated

- Acute onset of respiratory distress and/or hypoxia ( $\text{SpO}_2 \leq 94\%$ )
- Upper airway obstruction: Stridor, drooling, cyanosis
- Acute coronary syndromes: Chest pain/discomfort, diaphoresis, dizziness
- Pneumothorax: Pleuritic chest pain, tachycardia
- Exacerbation of asthma/COPD: breathlessness/wheeze not relieved by inhalers, increased sputum production
- Venous thromboembolism (VTE): Unilateral limb swelling/pain/warmth, fever, chest pain, haemoptysis, tachycardia
- Superior vena cava obstruction: Neck/face/arm swelling, distended/dilated neck/chest wall veins, headache, voice hoarseness
- Infection in immunocompromised host or sepsis in any host: Fever  $\geq 38^\circ\text{C}$ , hemodynamic instability
- Symptomatic anaemia: chest pain, blood loss, fainting spells

If Yes, advise patient to go to nearest DEM & inform oncologist

## ASSESSMENT

## MANAGEMENT

### Consider Contributing Factors

- Review diagnosis, cancer treatment and its potential for causing breathlessness
- Determine need for further investigations
- Treat reversible causes
- Refer to specific management on next page

### Patient Education

- General /Environmental
- Energy conservation
- Positioning
- Breathing techniques and relaxation

### [Normal]

- Have you had any previous breathing problem?
- Do you have any underlying condition causing breathing problem?
- Are you currently using any oxygen therapy?

### [Onset]

- When did your breathing problem begin?
- Did it start suddenly or gradually?
- How long does it last? How often does it occur?
- Any recent travel history or contact with sick person?
- When and what is the result of your last ART?

### [Provoking/Palliating]

- What makes your breathing problem better or worse?

### [Quality]

- How would you describe your breathing problem (e.g. gasping, panting, cannot get enough air, pain while taking breaths)?

### [Severity/Other Symptoms]

On a scale of 0 to 10, how bothersome is the symptom(s) to you?

- Have you been experiencing any other signs or symptoms such as:
  - Chest tightness/ pain? Wheezing?
  - Difficulty in breathing while lying flat? (How many pillows do you need to sleep?)
  - Swelling of face, neck, arms or legs?
  - Fever, cough, phlegm (yellowish, greenish, bloody), sore throat, runny nose?
  - Fatigue? Light-headedness? Any bleeding?
  - Anxiety, worry or depressed mood?

### [Treatment]

- Have you tried any medications/strategies/treatments? Was it effective?

### [Understanding/Impact]

- How has the symptom(s) affected you, your role, function, or activities of daily living?

### [Value]

- What do you believe is causing your symptom?
- What is an acceptable level of symptom control for you?

CTCAE GRADING	Grade 1	Grade 2	Grade 3
Dyspnea	Shortness of breath with moderate exertion	Shortness of breath with minimal exertion; limiting instrumental ADL	Shortness of breath at rest; limiting self care ADL
Plans	<input type="checkbox"/> Patient education <input type="checkbox"/> Return advice <input type="checkbox"/> Refer to Polyclinic or Chemo Review Clinic, if indicated	<input type="checkbox"/> Patient education <input type="checkbox"/> Return advice <input type="checkbox"/> Refer to Polyclinic, Chemo Review Clinic, or Emergency department if indicated. <input type="checkbox"/> Update oncologist	

# Breathing Problem Reference Guide

Contributing Factors			Patient Education	
Category	Specific factors	Discuss with Oncologist/ Specific management	Category	Specific points
Anti-cancer therapy & its side effects	<ul style="list-style-type: none"> <li>Anticancer treatment-induced pneumonitis e.g. chemotherapy (Paclitaxel, Docetaxel), immunotherapy (Nivolumab, Pembrolizumab), targeted therapy (Everolimus)</li> <li>Chemotherapy-induced cardiomyopathy (Herceptin, Pertuzumab, Anthracycline)</li> <li>RT-induced pulmonary fibrosis, pneumonitis, pericardial disease</li> <li>Post-surgery: Lobectomy, pneumonectomy</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Update oncologist</li> </ul>	General / Environment	<ul style="list-style-type: none"> <li>Provide reassurance- symptom can be managed</li> <li>Take medications as prescribed by your doctor</li> <li>Maintain a calm atmosphere</li> <li>Stay in areas with cooler temperatures</li> <li>Encourage air flow directed at face (from window, fan, handheld fan)</li> <li>Avoid smoke/smoking</li> </ul>
Cancer-related	<ul style="list-style-type: none"> <li>Lung or Pleural primary or mets</li> <li>Pleural effusion</li> <li>Lymphangitis Carcinomatosis</li> <li>Mass effect from airway obstruction</li> </ul>	<ul style="list-style-type: none"> <li>Patient education and optimize symptoms management</li> </ul>	Energy conservation	<ul style="list-style-type: none"> <li>Pacing <ul style="list-style-type: none"> <li>Balance activities with rest throughout the day</li> <li>Slow and steady pace saves more energy</li> </ul> </li> <li>Planning <ul style="list-style-type: none"> <li>Organize your time and methods of execution</li> <li>Do activities you most enjoy on days when you feel best</li> <li>Have a routine for rest and activities</li> <li>Break activities or responsibilities into smaller tasks</li> <li>Put frequently used objects within reach, and place chairs around the house so that you can sit down between activities or when moving from room to room</li> </ul> </li> <li>Priority setting <ul style="list-style-type: none"> <li>Delegate responsibilities and accept help from others</li> </ul> </li> <li>Posture <ul style="list-style-type: none"> <li>Avoid bending and lifting heavy objects</li> <li>Sit upright with your back against the chair with feet apart, and lean forward with your arms on your knees</li> <li>Lean back against the wall with your feet slightly apart when standing. Keep your shoulders relaxed</li> </ul> </li> <li>Proficiency <ul style="list-style-type: none"> <li>Use assistive device (e.g. wheelchair, walking aids) or labour-saving device (elevator/lift) to decrease effort and maximize efficiency</li> </ul> </li> </ul>
Pre-existing medical conditions	<ul style="list-style-type: none"> <li>Exacerbation or progression of existing respiratory diseases e.g. COPD, asthma, bronchiectasis, idiopathic lung disease</li> <li>Neuromuscular disease e.g. multiple sclerosis, Myasthenia gravis, Guillain-Barre syndrome</li> <li>Heart failure</li> <li>Chronic kidney disease</li> </ul>	<ul style="list-style-type: none"> <li>Patient education including compliance to specialist care follow up</li> <li>Specialist referral to optimize management of pre-existing medical condition, if necessary</li> </ul>	Breathing techniques and relaxation	<ul style="list-style-type: none"> <li>Techniques such as massage, music, and meditation can help you relax and ease your breathing.</li> <li><b>Pursed lip breathing</b> helps you inhale more fresh air and calms you down so that you will feel less breathless. Inhale through your nose for 1 count and exhale through pursed lips ( purse your lips as if you are about to whistle) for 2 slow counts.</li> <li><b>Diaphragmatic breathing</b> put one hand on your upper chest, and other on your abdomen just above waist. Breathe in slowly through nose to feel your hand on abdomen move out, and breathe out slowly through pursed lips to feel your hand on abdomen move in.</li> </ul>
Anaemia	<ul style="list-style-type: none"> <li>Bone marrow suppression from anti-cancer therapy or cancer-related</li> <li>Anaemia of chronic disease</li> </ul>	<ul style="list-style-type: none"> <li>Update oncologist</li> </ul>		
Intra-abdominal pathology	<ul style="list-style-type: none"> <li>Diaphragmatic splinting from hepatomegaly or ascites</li> </ul>	<ul style="list-style-type: none"> <li>Patient education and optimize symptoms management</li> </ul>		
Others	<ul style="list-style-type: none"> <li>Fatigue</li> <li>Functional decline</li> <li>Loss of muscle mass</li> <li>Anxiety, stress, fear, panic attack</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> </ul>		

# Constipation Practice Guide

Constipation: A disorder characterized by irregular and infrequent or difficult evacuation of the bowels; A subjective experience of an unsatisfactory defecation.

## [RED FLAGS: CTCAE Grade 4] Life-threatening consequences; urgent intervention indicated

- Spinal cord compression: Back pain, limb weakness/numbness, saddle anesthesia/paralysis/loss of sensation, difficulty walking/coordinating, loss of bowel/bladder control, urinary/fecal incontinence/retention
- Bowel obstruction, ischemia, perforation or peritonitis: Acute abdominal pain/cramps/distension, nausea/vomiting, unable to tolerate any food or drinks, no bowel output/flatus, constipation preceding diarrhoea, reduced/absent bowel sounds
- Hypercalcemia: Nausea/vomiting, anorexia, constipation, excessive thirst/urination, lethargy, confusion, bone pain, muscle ache/cramp/twitch, palpitations
- Cancer recurrence/progression: More common in abdominal & pelvic cancer (e.g. gastrointestinal, gynecological cancer) & advanced disease

If Yes, advise patient to go to nearest DEM & inform oncologist

## ASSESSMENT\*

## MANAGEMENT

### [Normal]

- What is your normal bowel pattern/movement like? (Frequency & characteristic)

### Consider Contributing Factors

- Determine need for further investigations
- Refer to specific management on next page.

### [Onset]

- When did the symptoms/change in bowel habit begin? Was it sudden or gradual?
- When was your last bowel movement/did you last pass flatus?

### [Provoking / Palliating]

- Did you have any previous abdominal or pelvic surgery/procedure?
- Do you have any pre-existing gastrointestinal disease?
- Is there anything that make the constipation worse or better?
- What has your fluid intake and diet been like?
- How much time do you spent in bed/chair a day?
- Do you have access to conducive environment for toileting functions? Are there any physical, social or cultural barriers (e.g. privacy, location)?

### [Patient Education]

- Bowel function
- Dietary management
- Lifestyle management
- Laxatives & rectal measures

### [Quality]

- Can you describe your last bowel movement:
  - Amount
  - Characteristic: Loose, watery, oily/greasy, well-formed, hard, pellets, explosive. Refer to Bristol Stool Chart.
  - Colour: Black, red, brown, green; Presence of blood/mucus/pus or malodorous
  - Degree of effort required for defecation: Mild, moderate, major, unable to defecate despite maximal effort

### [Low Residue Diet Resources]

- [https://www.nifgh.com.sg/Health-Information/Documents/brochures/Low%20Residue%20Diet\\_English\\_%20NUHS.pdf](https://www.nifgh.com.sg/Health-Information/Documents/brochures/Low%20Residue%20Diet_English_%20NUHS.pdf)
- <https://www.ttsh.com.sg/Patients-and-Visitors/Documents/Low%20Fibre%20Residue%20Diet.pdf>

### [Severity/ Other symptoms]

- On a scale of 0 to 10, how bothersome is this symptom to you?
- Have you been experiencing other symptoms, such as
  - Severe abdominal pain/cramps/distension, nausea/vomiting, unable to tolerate any food or drinks, unable to pass gas, rectal leakage/diarrhoea following constipation (overflow diarrhoea)
  - Back pain, limb weakness/numbness, saddle anesthesia/paralysis/loss of sensation, difficulty walking/coordinating, loss of bowel/bladder control, urinary/fecal incontinence/retention
  - Excessive thirst/urination, lethargy, confusion, bone pain, muscle ache/cramp/twitch, palpitations
  - Skin breakdown/pain around rectum/stoma, hemorrhoids, rectal prolapse/bleeding, anal fissure/tears/abscess

### [Treatment]

- Have you been prescribed (regular) laxatives? What is your current & previous laxative use like?
- What strategies/treatments (e.g. laxatives, manual evacuation) have you tried? Was it effective?

### [Value]

- What do you believe is causing your constipation?

CTCAE GRADING	Grade 1	Grade 2	Grade 3
<b>[Understanding / Impact]</b>	Occasional or intermittent symptoms; occasional use of stool softeners, laxatives, dietary modification, or enema	Persistent symptoms with regular use of laxatives or enemas; limiting instrumental ADL	Obstipation with manual evacuation indicated; limiting self care ADL
<b>Plans</b>	<input type="checkbox"/> Patient education <input type="checkbox"/> Return advice <input type="checkbox"/> Consider laxatives <input type="checkbox"/> Update oncologist		<input type="checkbox"/> Refer to Chemo Review Clinic or Emergency department if patient is <b>on</b> immunosuppressive cancer treatment <input type="checkbox"/> Refer to Polyclinic or Emergency department if patient is <b>not on</b> any immunosuppressive cancer treatment <input type="checkbox"/> Update oncologist +/- pharmacological management

## BRISTOL STOOL CHART



# Constipation Reference Guide

Contributing Factors			Patient Education	
Category	Specific factors	Inform Oncologist/ Discuss specific management	Category	Specific points
Anti-cancer therapy & its side effects	<ul style="list-style-type: none"> <li>Chemotherapy e.g. Vinca alkaloids (vincristine, vinblastine, vinorelbine), Bortezomib, Thalidomide</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Pharmacological interventions</li> <li>Update oncologist</li> </ul>	Bowel function	<ul style="list-style-type: none"> <li>Normal bowel movements vary amongst individuals and can be affected by food intake and activity level. A daily bowel movement is not necessary.</li> </ul>
Structural abnormalities	<ul style="list-style-type: none"> <li>Tumor related (Strictures)</li> <li>Radiotherapy related (Fibrosis, scarring)</li> <li>Surgery related (Adhesions, anastomosis)</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Update oncologist</li> </ul>	Dietary Management	<ul style="list-style-type: none"> <li>Drink enough fluids as able and appropriate to prevent hard stools</li> <li>Hot beverage before usual defecation time may help stimulate bowel movement</li> <li>Incorporate natural fiber (from fruits/vegetables e.g. prune, papaya, dragonfruit) into diet as able and appropriate</li> <li>Low residue diet is recommended from patients with poor fluid intake and at high risk of bowel obstruction</li> </ul>
Medications, supplements, substances	<ul style="list-style-type: none"> <li>Opioids analgesics e.g. morphine, tramadol</li> <li>Cough suppressants e.g. procodin, dextromethorphan</li> <li>5-HT3 antagonists e.g. ondansetron, granisetron</li> <li>Anticholinergics e.g. atropine</li> <li>Calcium, iron supplements</li> <li>Aluminum containing antacids</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>All patients on opioid analgesics should be on prophylactic laxatives</li> <li>Review medications</li> <li>Update primary prescriber to consider alternative medications, if appropriate</li> </ul>	Example of low residue diet (Adapted from NTFGH Health Information Brochure)	
Pre-existing medical condition	<ul style="list-style-type: none"> <li>Bowel disorders (e.g. irritable bowel syndrome, diverticulitis, defecatory disorder, motility issues)</li> <li>Depression</li> <li>Diabetes</li> <li>Neurological/spinal cord disorders (e.g. Parkinson's disease, stroke, sacral nerve infiltration, autonomic dysfunction, spinal cord compression/injury))</li> </ul>	<ul style="list-style-type: none"> <li>Patient education including compliance to primary care follow up</li> <li>Specialist referral to optimize management of pre-existing medical condition,</li> </ul>	Rice and alternatives	<ul style="list-style-type: none"> <li>Refined white bread, buns, naan, thosai, idly, plain cereals, crackers</li> <li>White rice, basmati rice, sushi rice</li> <li>Refined pasta and noodles (e.g. rice noodles, bee hoon, egg noodles)</li> </ul>
Metabolic issues	<ul style="list-style-type: none"> <li>Electrolyte abnormalities (e.g. hypokalemia, hypercalcemia)</li> <li>Uremia</li> <li>Hypothyroidism, hyperparathyroidism</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Consider laboratory investigations &amp; correction</li> <li>Update oncologist</li> </ul>	Dairy products	<ul style="list-style-type: none"> <li>Milk, ice cream, plain yoghurt or strained fruit yoghurt</li> </ul>
Symptom burden	<ul style="list-style-type: none"> <li>Pain</li> <li>Fatigue</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Optimize symptom management</li> </ul>	Meat and alternatives	<ul style="list-style-type: none"> <li>Eggs, tofu, smooth peanut butter, beans without skin</li> <li>Well-cooked (stewed, stir-fried, steamed, baked) fish, poultry, seafood</li> </ul>
Others	<ul style="list-style-type: none"> <li>Reduced oral intake, dehydration</li> <li>Advanced age/illness, poor mobility</li> <li>Altered cognition, sedation</li> <li>Pregnancy</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Correct reversible causes</li> </ul>	Fruits	<ul style="list-style-type: none"> <li>Strained/clear fruit juices</li> <li>Ripe fruits with skin, seeds and membranes removed e.g. apple, banana</li> </ul>
			Vegetables	<ul style="list-style-type: none"> <li>Well-cooked root vegetables that are peeled e.g. potato, sweet potato, radish</li> </ul>
			Snacks and miscellaneous	<ul style="list-style-type: none"> <li>Fats, oils and dressings without seeds</li> <li>Clear jam, sugar, honey, golden syrup</li> <li>Plain jelly, custard, sorbet, pudding, soya bean milk</li> <li>Sauces (e.g. vinegar, tomato paste, soy sauce)</li> </ul>
			Lifestyle management	<ul style="list-style-type: none"> <li>Go to the bathroom at the same time each day to promote regularity.</li> <li>Try defecating 30-60 minutes after meals</li> <li>Open bowels when urge comes, avoid delays and do not ignore urge to defecate</li> <li>Have a safe, unhurried, private toileting environment. Avoid bedside commodes unless there are mobility issues and bedpans unless on strict bed rest</li> <li>Adopt a semi-squatting position with knees above hips and leaning slightly forward on the toilet/commode. Consider footstool to elevate feet.</li> <li>Increase physical activity and mobilization as able and appropriate. If bedbound, exercise abdominal muscles by tightening and relaxing them, move legs</li> <li>Gently massage abdomen in clockwise manner to stimulate bowel movement</li> </ul>
			Laxatives and rectal measures	<ul style="list-style-type: none"> <li>Take laxatives as prescribed by your doctor</li> <li>Know the mechanism of action and time to onset for each laxative             <ul style="list-style-type: none"> <li>Senna: Increases gut motility, onset: 6-24 hours</li> <li>Lactulose: Stool softener, onset: 24-48 hours</li> <li>Enemas/suppositories: Stimulate stool evacuation, onset: rather immediate. Avoid in low blood counts, recent anal/rectal trauma, pelvic radiotherapy, or colorectal/gynecological surgery</li> </ul> </li> <li>Discuss with your doctor before using laxatives (especially enemas/suppositories) or stopping offending medications that can cause constipation</li> <li>Avoid herbs, supplements or over the counter medications that may cause constipation</li> </ul>

# Diarrhoea Practice Guide

Diarrhoea: A disorder characterized by an increase in frequency and/or loose or watery bowel movements

## [RED FLAGS: CTCAE Grade 4] Life-threatening consequences; urgent intervention indicated

- Severe dehydration: Weakness, dizziness, confusion, dry mouth, increased thirst, reduced urine output/dark urine, reduced skin turgor
- Infection in immunocompromised host or sepsis in any host: Fever >38°C, hemodynamic instability
- Bowel obstruction, perforation or peritonitis: Acute abdominal pain/cramps, nausea/vomiting, constipation preceding diarrhoea, reduced/absent bowel sounds
- GI bleed: Fresh blood in stools, melena, acute abdominal pain

If Yes, advise patient to go to nearest DEM & inform oncologist

## ASSESSMENT

## MANAGEMENT

### [Normal]

- What is your normal bowel movement like? (Frequency & characteristic)
- Do you have a stoma? If so, how many times do you normally empty/change the bag?

### [Onset]

- When did the diarrhoea begin?
- Have you been in contact with anyone with anyone who has diarrhoea?

### [Provoking/Palliating]

- What brings on the diarrhoea?
- Any recent use of antibiotics or PPI (consider *Clostridium difficile* infection)
- Is there anything that makes the diarrhoea better or worse?

### [Quality]

- Can you describe your diarrhoea/stools?
  - Characteristic: Loose, watery, oily/greasy, well-formed, hard, pellets, explosive. Refer to Bristol Stool Chart.
  - Colour: Black, red, brown, green
  - Presence of blood/mucus/pus or malodorous?

### [Severity/Other symptoms]

- Is there an increase in stool amount/volume or frequency? Specifically: Number of increased bowel movements per day over baseline or increase in stoma output compared to baseline
- On a scale of 0 to 10, how bothersome is this symptom to you?
- Have you been experiencing other symptoms, such as
  - Weakness, dizziness, confusion, dry mouth, increased thirst, reduced urine output/dark urine
  - Fever >38°C
  - Severe abdominal pain/cramps, bloating, nausea/vomiting, unable to tolerate any food or drinks
  - Constipation preceding diarrhoea (possible overflow diarrhoea)
  - Stool incontinence, tenesmus
  - Skin breakdown around rectum/stoma

### [Treatment]

- What medications/treatments have you tried ? Was it effective?

### [Value]

- What do you believe is causing your diarrhoea?

## CTCAE GRADING

## Grade 1

## Grade 2

## Grade 3

### [Understanding/Impact]

- For severity, refer above
- How has diarrhoea affected you, your role, function, or ability to do activities of daily living?

Increase of <4 stools per day over baseline; **mild** increase in ostomy output compared to baseline

Increase of **4-6** stools per day over baseline; **moderate** increase in ostomy output compared to baseline; limiting **instrumental ADL**

Increase of **≥7** stools per day over baseline; hospitalization indicated; **severe** increase in ostomy output compared to baseline; limiting **self care ADL**

### Plans

- Patient education
- Return advice
- Update oncologist

- Refer to Chemo Review Clinic or Emergency department if patient is **on** immunosuppressive cancer treatment
- Refer to Polyclinic or Emergency department if patient is **not on** any immunosuppressive cancer treatment
- Update oncologist: Consider admission for diagnostic workup and rehydration.

## BRISTOL STOOL CHART

	TYPE 1 - SEVERE CONSTIPATION Separate, hard lumps
	TYPE 2 - MILD CONSTIPATION Lumpy and sausage-like
	TYPE 3 - NORMAL A sausage-shape with cracks in the surface
	TYPE 4 - NORMAL Like a smooth, soft sausage or snake
	TYPE 5 - LACKING FIBER Soft blobs with clear-cut edges
	TYPE 6 - MILD DIARRHEA Musty consistency with ragged edges
	TYPE 7 - SEVERE DIARRHEA Liquid consistency with no solid pieces

# Diarrhoea Reference Guide

Contributing Factors		
Category	Specific factors	Inform Oncologist/Discuss specific management
Cancer-related	<ul style="list-style-type: none"> <li>Colorectal cancer</li> <li>Neuroendocrine tumors</li> <li>Pheochromocytoma</li> <li>Pancreatic cancer</li> <li>Graft versus host disease after bone marrow transplant</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Pharmacological interventions</li> <li>Update oncologist</li> </ul>
Anti-cancer therapy & its side effects	<ul style="list-style-type: none"> <li>Chemotherapy e.g. irinotecan, capecitabine, 5-FU</li> <li>Targeted therapy e.g. tyrosine kinase inhibitors, monoclonal antibodies</li> <li>Immunotherapy e.g. nivolumab, pembrolizumab</li> <li>Radiotherapy (Pelvic/abdominal)</li> <li>Surgery e.g. celiac plexus block, gastric resection, bowel resection (short gut syndrome), cholecystectomy, Whipple's procedure</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Pharmacological interventions</li> <li>Update oncologist to review systemic therapy and supportive medications</li> </ul>
Medications, supplements, substances	<ul style="list-style-type: none"> <li>Laxatives</li> <li>Prokinetic agents e.g. metoclopramide</li> <li>Antibiotics e.g. augmentin, erythromycin</li> <li>Potassium, magnesium supplements</li> <li>Enteral feeds</li> <li>Caffeine, alcohol, tobacco, spices, sorbitol</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Review medications</li> <li>Update primary prescriber to consider alternative medications, if appropriate</li> </ul>
Pre-existing medical conditions	<ul style="list-style-type: none"> <li>Inflammatory bowel disease</li> <li>Irritable bowel syndrome</li> <li>Diverticulitis</li> <li>Celiac disease</li> <li>Lactose intolerance</li> <li>Diabetes</li> <li>Hyperthyroidism</li> </ul>	<ul style="list-style-type: none"> <li>Patient education including compliance to primary care follow up.</li> <li>Specialist referral to optimize management of pre-existing medical condition, if necessary</li> </ul>
Infections	<ul style="list-style-type: none"> <li>Viruses e.g. Rotavirus</li> <li>Bacteria e.g. Clostridium difficile, Campylobacter, Salmonella, Shigella, enterohemorrhagic Escherichia coli, Tuberculosis)</li> <li>Protozoa e.g. Entamoeba, Giardia, Cryptosporidium</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Pharmacological interventions*</li> <li>Update oncologist</li> </ul>
Others	<ul style="list-style-type: none"> <li>Anxiety/Stress</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> </ul>

Patient Education		
Category	Specific points	
Medications	<ul style="list-style-type: none"> <li>Take anti-diarrhoeal medications as prescribed by your doctor e.g. PO Loperamide*: Usual dosing 4mg initially, 2mg after each loose stool (Max:16mg/day)</li> <li>Discuss with your doctor about stopping laxatives or offending medications that can cause diarrhoea</li> <li>Avoid herbal supplements or over the counter medications that may cause diarrhea</li> </ul>	
Fluids and electrolytes replacement	<ul style="list-style-type: none"> <li>Drink enough fluids (water, broth, isotonic sports drinks, oral rehydration salts) as able and appropriate throughout the day to replenish lost fluids and electrolytes (potassium, sodium) lost through diarrhoea</li> </ul>	
Dietary and lifestyle management	<ul style="list-style-type: none"> <li>Avoid foods, drinks or substances that can aggravate diarrhoea (e.g. alcohol, raw/partially cooked, spoilt/leftover, high fiber, fried, greasy or spicy food, milk/dairy/lactose/sorbitol or caffeine containing products)</li> <li>Take small, frequent meals that are easy to digest, bland and low in fiber (e.g. porridge, soup, noodles)</li> </ul>	
Hygiene/ Infection control	<ul style="list-style-type: none"> <li>Perform proper hand hygiene</li> <li>Practice safe food handling and preparation practices</li> </ul>	
Perianal care	<ul style="list-style-type: none"> <li>Clean skin gently with water and use a soft cloth to dry gently after each bowel movement. Do not rub.</li> <li>Apply barrier cream at the perianal area to reduce skin irritation</li> </ul>	

\* Please note that anti-motility agents e.g. loperamide may be CONTRAINDICATED in certain situations for example confirmed/suspected bowel obstruction/ileus, Clostridium difficile/ bacterial enterocolitis, acute ulcerative colitis or dysentery

# Fatigue Practice Guide

Cancer-related fatigue is a distressing, persistent, subjective sense of physical, emotional, and/or cognitive tiredness or exhaustion related to cancer or cancer treatment that is not proportional to recent activity and interferes with usual functioning.

## [RED FLAGS] Presence of:

- Severe dehydration: Weakness, dizziness, confusion, dry mouth, increased thirst, reduced urine output/dark urine, reduced skin turgor
- Infection in immunocompromised host or sepsis in any host: Fever >38°C, hemodynamic instability
- Symptomatic anaemia: breathlessness at rest, fast heart rate, chest pain, blood loss, fainting spells
- Organ failure: cardiac, respiratory, renal, hepatic

If Yes, advise patient to go to nearest DEM & inform oncologist

ASSESSMENT				MANAGEMENT
<b>[Normal]</b> <ul style="list-style-type: none"> <li>• What is your normal energy/activity level/exercise?</li> </ul>				<b>[Patient Education]</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Reinforce that cancer-related fatigue is:           <ul style="list-style-type: none"> <li>• normal, often treatable and needs to be reported</li> <li>• not necessarily a sign of cancer progression or that treatment is not working.</li> </ul> </li> <li><input type="checkbox"/> Goal-setting</li> <li><input type="checkbox"/> Exercise</li> <li><input type="checkbox"/> Energy conservation</li> <li><input type="checkbox"/> Distraction &amp; Relaxation</li> <li><input type="checkbox"/> Sleep Hygiene</li> <li><input type="checkbox"/> Dietary Management</li> <li><input type="checkbox"/> Psychosocial and wellness support</li> </ul>
<b>[Onset]</b> <ul style="list-style-type: none"> <li>• When did the fatigue begin?</li> <li>• Was it sudden or gradual?</li> </ul>				
<b>[Quality]</b> <ul style="list-style-type: none"> <li>• Describe your fatigue – Does your body and/or mind feel tired?</li> <li>• How would you describe the pattern of your fatigue?</li> <li>• Does it follow the same pattern everyday? Is it stable, improving or worsening?</li> </ul>				
<b>[Severity]</b> <ul style="list-style-type: none"> <li>• On a scale of 0 to 10, how would you score your fatigue now? At worst? At best? On average?</li> </ul>				
<b>[Other symptoms]</b> <p>Have you been experiencing other symptoms, such as</p> <ul style="list-style-type: none"> <li>• Chills, sweating, fever, or feeling unwell</li> <li>• Shortness of breath at rest or with activity, rapid heart rate, chest pain, or leg heaviness?</li> <li>• Any bleeding, bloody, black sticky tarry stools?</li> <li>• Sleep problems? Mood changes? Ability to concentrate?</li> </ul>				<b>[Specialist Referrals PRN]</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Medical Social Worker</li> <li><input type="checkbox"/> Dietician</li> <li><input type="checkbox"/> Rehab Medicine (Fatigue Management)</li> </ul>
<b>[Treatment]</b> <ul style="list-style-type: none"> <li>• How have you tried to manage your fatigue in the past? Have you had a blood transfusion? When was the last blood transfusion?</li> </ul>				
<b>[Value]</b> <ul style="list-style-type: none"> <li>• What do you believe is causing your symptom?</li> <li>• What is an acceptable level of fatigue for you?</li> </ul>				
CTCAE GRADING	Grade 1	Grade 2	Grade 3	
<b>[Provoking / Palliating]</b>	<input type="checkbox"/> Relieved by rest	<input type="checkbox"/> Not relieved by rest	<input type="checkbox"/> Not relieved by rest	
<b>[Understanding / Impact]</b>	<input type="checkbox"/> Not affecting activities	<input type="checkbox"/> Limiting instrumental ADLs	<input type="checkbox"/> Limiting self-care ADLs	
Plans	<input type="checkbox"/> Patient Education <input type="checkbox"/> Education Resource <input type="checkbox"/> Return advice	<input type="checkbox"/> Advise to seek immediate medical attention <input type="checkbox"/> Update oncologist		

# Fatigue Reference Guide

Contributing Factors			Patient Education	
Category	Specific factors	Inform Oncologist/ Discuss specific management	Category	Specific points
Anaemia	<ul style="list-style-type: none"> <li>Chemotherapy-induced anaemia</li> <li>Tumour-related blood loss</li> </ul>	Consider blood transfusion	Goal Setting	<ul style="list-style-type: none"> <li>Set specific, achievable &amp; realistic goals, based on current health status</li> </ul>
Tumour pathology	<ul style="list-style-type: none"> <li>Elevated levels of pro-inflammatory cytokines</li> <li>Suppressed hypothalamic-pituitary-adrenal axis and blunting of stress response</li> <li>Circadian rhythm disruption</li> </ul>	Patient education	Exercise	<ul style="list-style-type: none"> <li>Start with light activity for short periods of time, gradually increase to include 20 mins of endurance (walking, jogging, swimming) and resistance (light weights) activities.</li> <li>Use caution for patients with some conditions (e.g. bone mets)</li> </ul>
Anti-cancer therapy	<ul style="list-style-type: none"> <li>Cytotoxic agents</li> <li>Hormonal therapies (e.g. androgen deprivation therapy)</li> <li>Direct CNS toxicity of cancer treatment</li> <li>Cranial irradiation</li> <li>Sunitinib/Sorafenib-induced hypothyroidism, chronic heart failure from anthracycline-induced cardiomyopathy, bleomycin-related pulmonary dysfunction.</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Inform oncologist</li> </ul>	Energy Conservation	<ul style="list-style-type: none"> <li>Pacing <ul style="list-style-type: none"> <li>Balance activities with rest throughout the day</li> <li>Slow and steady pace saves more energy</li> </ul> </li> <li>Planning <ul style="list-style-type: none"> <li>Organize your time and methods of execution</li> <li>Do activities you most enjoy on days when you feel best</li> <li>Have a routine for rest and activities</li> <li>Break activities or responsibilities into smaller tasks</li> <li>Put frequently used objects within reach, and place chairs around the house so that you can sit down between activities or when moving from room to room</li> </ul> </li> <li>Priority setting <ul style="list-style-type: none"> <li>Delegate responsibilities and accept help from others</li> </ul> </li> <li>Posture <ul style="list-style-type: none"> <li>Avoid bending and lifting heavy objects</li> </ul> </li> <li>Proficiency <ul style="list-style-type: none"> <li>Use assistive device (e.g. wheelchair, walking aids) or labour-saving device (elevator/lift) to decrease effort and maximize efficiency</li> </ul> </li> </ul>
Medications	<ul style="list-style-type: none"> <li>Analgesics (opioids)</li> <li>Sedating agents (e.g. anti-histamines, antidepressants, anti-emetics medications)</li> </ul>	<ul style="list-style-type: none"> <li>Consider alternative medications, if appropriate.</li> <li>Consider psychostimulants (e.g. methylphenidate if opiate-induced fatigue is limiting ADLs)</li> </ul>	Distraction & Relaxation	<ul style="list-style-type: none"> <li>Reading, games, music</li> <li>Support groups</li> <li>Relaxation therapy, Massage <math>\pm</math> aromatherapy</li> </ul>
Nutritional issues	<ul style="list-style-type: none"> <li>Poor nutrition</li> <li>Loss of lean muscle mass</li> </ul>	Patient education	Sleep Hygiene	<ul style="list-style-type: none"> <li>Encourage comfortable sleep surroundings</li> <li>Bedtime routine &amp; soothing activities before sleep</li> <li>Avoid caffeine/exercise before sleep</li> <li>Limit daytime naps to less than 1 hour</li> <li>Ensure light exposure soon after waking</li> </ul>
Metabolic issues	<ul style="list-style-type: none"> <li>Hypothyroidism, adrenal insufficiency, hypogonadism, electrolytes disturbance</li> </ul>	Endocrine Referral	Dietary Management	<ul style="list-style-type: none"> <li>Encourage adequate hydration &amp; nutrition – high iron, protein.</li> <li>Caution in sensitive fluid-balance e.g. CCF, CRF etc.</li> <li>KIV nutritional supplements (e.g. Ensure, Fortisip)</li> </ul>
Rheumatologic issues	<ul style="list-style-type: none"> <li>Fibromyalgia, SLE, Rheumatoid arthritis</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Optimize disease management</li> </ul>	Psychosocial and Wellness Support	<ul style="list-style-type: none"> <li>Mind-body strategies e.g. meditation, yoga, acupuncture</li> <li>Cognitive Behavioural Therapy, Mindfulness-based stress</li> </ul>
Symptom burden	<ul style="list-style-type: none"> <li>Pain, anxiety, depression, sleep dysfunction</li> </ul>	Optimize symptoms management		

# Fever Practice Guide

Fever: A disorder characterized by elevation of the body's temperature above the upper limit of normal (see below).  
 Low-grade fever: A body temperature between 37.5 and 37.9°C

## [RED FLAGS]

- Sepsis, febrile neutropenia
- Meningitis: Fever, headache, neck stiffness, photophobia, altered mental status
- DVT/Pulmonary embolism: Calf swelling, breathlessness, fever, tachycardia, hypoxia
- Neuroleptic Malignant Syndrome: A set of four clinical signs i.e. fever, rigidity, altered mental status, and autonomic instability; with concurrent use of 1<sup>st</sup> generation antipsychotics or anti-emetics (e.g. metoclopramide, promethazine)
- Serotonin Syndrome: A set of three clinical signs of altered mental status, autonomic hyperactivity (diaphoresis, tachycardia, hypertension, hyperthermia) and neuromuscular abnormalities (e.g. tremor, muscle rigidity, myoclonus, hyperreflexia) with concurrent use of serotonergic drugs (Duloxetine, Fluoxetine, Escitalopram)
- Life-threatening consequences [CTCAE Grade 4]: Septic shock

If Yes, advise patient to go to nearest DEM & inform oncologist

## ASSESSMENT\*

## MANAGEMENT

### [Normal]

- What is your normal temperature trend?

### [Onset]

- When did the fever begin?
- What is your temperature now?

### [Predisposing]

- Did you receive any treatment that can cause low immunity (e.g. chemotherapy), or fever (e.g. blood transfusion, vaccination, GSCF)? When did you receive it?
- Do you have any wounds or recent surgery?
- Do you have any lines, drains, or catheters?
- Did you have any recent travel or exposure to possible sick individuals?

### [Quality] In the last 24 hours,

- How would you describe your symptoms?

### [Severity/ Other symptoms]

- Have you been experiencing any other symptoms such as:
  - Chills, sweating, fatigue, or feeling unwell
  - Shortness of breath, cough, with sputum (colour?)
  - Mouth sores or sore throat
  - Problems in urination (burning, urgency, frequency)
  - Vaginal discharge, itching
  - Constipation, diarrhea
  - Altered behavior
  - Faintness, shuffling gait, excessive sleepiness
  - Broken skin, areas of redness/swelling/pain

### [Consider Contributing Factors]

- Review cancer treatment and potential for neutropenia
- Some patients may not mount a fever even with presence of an infection e.g. patients on corticosteroids, elderly.
- Determine need for further investigations
- Refer to specific management on next page.

### [Patient Education]

- General advice for prevention of infection
- Hygiene
- Safe food handling
- Managing fever

### [Treatment]

- Are you taking any medications to relieve the fever? If so, what type? When was the last dose?
- Any medications or treatments to relieve other symptoms? (e.g. anti-diarrhoeal, antihistamine, mouthwash)

### [Understanding / Impact]

- How is this affecting you?

CTCAE GRADING	Grade 1	Grade 2	Grade 3
Fever	38.0 - 39.0 °C	>39.0 - 40.0 °C	>40.0°C for ≤24 hours
Febrile Neutropenia	-		ANC < 1000/mm <sup>3</sup> with a single temperature of >38.3°C or a sustained temperature of ≥38°C for more than one hour
Plans		<input type="checkbox"/> Refer to Chemo Review Clinic or Emergency department if patient is <u>on</u> immunosuppressive cancer treatment <input type="checkbox"/> Refer to Polyclinic or Emergency department if patient is <u>not on</u> any immunosuppressive cancer treatment <input type="checkbox"/> Update oncologist accordingly	

# Fever Reference Guide

Contributing Factors			Patient Education	
Category	Specific factors	Inform Oncologist/ Discuss specific management	Category	Specific points
Infection	<ul style="list-style-type: none"> <li>Bacterial</li> <li>Viral (e.g. Dengue)</li> <li>Fungal</li> </ul>	<ul style="list-style-type: none"> <li>Refer to management plans on previous page</li> </ul>	General advice for prevention of infection	<ul style="list-style-type: none"> <li>Maintain adequate hydration and a well-balanced diet</li> <li>Avoid handling bodily excretions/ waste from animals</li> <li>Avoid placing fresh flowers and live plants indoor, and refrain from gardening, handling soil and fertilizers</li> <li>Avoid crowds and anyone with signs of infection (e.g. flu-like symptoms, fever, cough)</li> <li>Avoid usage of tampons, enemas, and suppositories when immunity is low</li> <li>Follow your doctor or nurse's instruction on care of your device (port/catheter) and keep it clean and dry.</li> <li>Discuss with your doctor before going for any of the following: immunization, dental work, other invasive procedures</li> </ul>
Medications	<ul style="list-style-type: none"> <li>Chemotherapy, immunotherapy, targeted therapy</li> <li>Calcineurin inhibitors, mycophenolate, methotrexate, corticosteroids (use in post-transplant, GVHD, immunotherapy-related adverse events) leading to increase risks of infection</li> <li>Anti-convulsants (e.g. Sodium valproate)</li> <li>Anti-thyroid (e.g. Carbimazole)</li> <li>Anti-microbial (e.g. Bactrim)</li> </ul>	<ul style="list-style-type: none"> <li>Refer to management plans on previous page</li> <li>Review medication and update primary prescriber</li> <li>Patient education and provide return advice</li> </ul>	Hygiene	<ul style="list-style-type: none"> <li>Practice good personal hygiene e.g. bathe daily, keep mouth clean</li> <li>Use soap or antiseptic hand sanitizer to wash hands frequently</li> <li>Avoid touching face and mucous membranes as much as possible.</li> <li>Avoid sharing towels, drinking glasses with others in your household without washing them first with soap and water.</li> <li>Avoid sharing personal items (e.g. toothbrush, razor) with others.</li> </ul>
Treatment which can potentially induce fever	<ul style="list-style-type: none"> <li>Long term anti-microbials</li> <li>Chimeric Antigen Receptor (CAR) T-cell therapy</li> <li>Recent history of blood-product transfusion           <p><i>(Acute reaction: during blood transfusion, and usually within 24 hours after completion of blood transfusion;</i></p> <p><i>Delayed reaction: days to weeks after completion of blood transfusion)</i></p> </li> <li>Recent history of vaccination           <p><i>(Fever with most vaccines begin within 24 hours and lasts 1-2 days)</i></p> </li> </ul>	<ul style="list-style-type: none"> <li>Refer to management plans on previous page</li> <li>Review medication and update primary prescriber</li> <li>Patient education and provide return advice</li> </ul>	Safe food handling	<ul style="list-style-type: none"> <li>Wash all fresh fruits and vegetables thoroughly</li> <li>Consume clean and fully cooked food; avoid unpasteurized juices or dairy products.</li> <li>Prevent cross-contamination of raw meats and produce</li> </ul>
Co-morbidities	<ul style="list-style-type: none"> <li>Autoimmune disease, AIDS</li> <li>Hypersplenism, aplastic anemia</li> <li>Diabetes</li> <li>Tuberculosis and chronic respiratory disease</li> <li>Thyroid storm</li> </ul>	<ul style="list-style-type: none"> <li>Refer to management plans on previous page</li> <li>Ensure immunisations are up-to-date</li> </ul>	Managing fever	<ul style="list-style-type: none"> <li>Take medications to bring down body temperature as advised/prescribed.</li> <li>Drink cool fluids or suck ice chips</li> <li>Apply cold compress, or have a tepid bath or sponge down.</li> <li>Keep the room well ventilated by opening the window or by using a fan.</li> <li>Rest as much as possible</li> </ul>
Malignant fever	<ul style="list-style-type: none"> <li>Diagnosis of exclusion</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Symptomatic management</li> <li>Anti-pyretics, if necessary</li> </ul>		

# Hair and Nail Problem Practice Guide

Alopecia: A disorder characterized by a decrease in density of hair compared to normal for a given individual at a given age and body location

Paronychia: A disorder characterized by an infectious process involving the soft tissues around the nail.

[RED FLAGS] Nil		If Yes, advise patient to go to nearest DEM & inform oncologist	
ASSESSMENT			MANAGEMENT
<b>[Normal]</b> <ul style="list-style-type: none"> <li>Do you normally have hair or nail problem?</li> <li>What are your normal hair or nail care practices/habits e.g. tight braids, ponytails, nail-biting?</li> </ul>		<b>[Consider Contributing Factors]</b> <ul style="list-style-type: none"> <li>Review cancer treatment and potential for paronychia or alopecia</li> <li>Determine need for further investigations</li> <li>Refer to specific management on next page</li> </ul>	
<b>[Onset]</b> <ul style="list-style-type: none"> <li>When did this problem occur?</li> </ul>			
<b>[Provoking/Palliating]</b> <ul style="list-style-type: none"> <li>What makes the problem better or worse?</li> <li>Do your activities or hobbies affect or traumatize your hair or nails e.g. hair-perming/colouring, manicure/pedicure, playing the guitar?</li> </ul>			
<b>[Quality]</b> <ul style="list-style-type: none"> <li>Hair: How would you describe your problem?             <ul style="list-style-type: none"> <li>Sites of hair loss e.g. scalp, eyelashes, eyebrow, armpit, pubic</li> <li>Distribution of hair loss e.g. Focal, patterned (male-pattern, female-pattern), diffuse [See illustration 1 on next page]</li> <li>Rate of progression e.g. acute, gradual, associated with chemotherapy</li> </ul> </li> <li>Nail: How would you describe your problem?</li> </ul>		<b>[Patient Education]</b> <ul style="list-style-type: none"> <li>Nail- prevent nail damage and infection</li> <li>Hair- general tips for hair care before, during and after treatment</li> </ul>	
<b>[Severity/Other Symptoms]</b> <ul style="list-style-type: none"> <li>Have you ever had ingrown nails?</li> <li>Do you have other associated symptoms e.g. itch, redness, pain, presence of papules/pustules/scarring/excoriations?</li> <li>On a scale of 0 to 10, how bothersome is the symptom(s) to you?</li> </ul>			
<b>[Treatment]</b> <ul style="list-style-type: none"> <li>Have you tried any medications/strategies/treatments? Was it effective?</li> </ul>			
<b>[Understanding/Impact]</b> <ul style="list-style-type: none"> <li>How has the symptom(s) affected you, your role, function, or activities of daily living?</li> </ul>			
<b>[Value]</b> <ul style="list-style-type: none"> <li>What do you believe is causing this problem?</li> <li>What is acceptable to you with regards to the management of this problem?</li> </ul>			
CTCAE GRADING			
<b>Alopecia</b> Hair loss of <50% of normal for that individual that is not obvious from a distance but only on close inspection; a different hair style may be required to cover the hair loss but it does not require a wig or hair piece to camouflage.		Grade 1	Grade 2
			Hair loss of ≥50% normal for that individual that is readily apparent to others; a wig or hair piece is necessary if the patient desires to completely camouflage the hair loss; associated with psychosocial impact
<b>Paronychia</b> Nail fold edema or erythema; disruption of the cuticle			Local intervention indicated; oral intervention indicated (e.g. antibiotic, antifungal, antiviral); nail fold edema or erythema with pain; associated with discharge or nail plate separation; limiting instrumental ADL
			Operative intervention indicated; IV antibiotics indicated; limiting self care ADL
<b>Plans</b> <ul style="list-style-type: none"> <li>Patient education</li> <li>Return advice</li> <li>Update oncologist</li> </ul>		<b>For Paronychia:</b> <ul style="list-style-type: none"> <li>Patient education</li> <li>Return advice</li> <li>Refer to Chemo Review Clinic or Emergency department if patient is <u>on</u> immunosuppressive cancer treatment</li> <li>Refer to Polyclinic or Emergency department if patient is <u>not on</u> any immunosuppressive cancer treatment</li> <li>Update oncologist</li> </ul>	

# Hair and Nail Problem Reference Guide

Contributing Factors			Patient Education	
Category	Specific factors	Inform Oncologist/ Discuss specific management	Category	Specific points
<b>Alopecia</b>			<b>Hair</b>	
<b>Anticancer therapy and its side effects</b>	<ul style="list-style-type: none"> <li>Chemotherapy e.g. Docetaxel, Paclitaxel, Doxorubicin</li> <li>Targeted therapy</li> <li>Hormonal therapy</li> <li>Radiation therapy to hair-growing area</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Update Oncologist</li> </ul>	<b>Before treatment</b>	<ul style="list-style-type: none"> <li>Plan early. If you wish to get a wig, get it while you still have hair, so that you can match it to your hair colour and style. You may wish to obtain your wig from commercial hair wigs shops.</li> <li>Alternatively, you can contact NCCS' Wig bank managed by Cancer Helpline at +6562255655 to fix an appointment for wig loan, fitting and styling.</li> <li>If you find wigs uncomfortable, you may choose to use other head coverings like a scarf or hat.</li> <li>If you prefer not to have head coverings, you may choose to cut your hair short or shave your head.</li> </ul>
<b>Metabolic</b>	<ul style="list-style-type: none"> <li>Iron deficiency</li> <li>Thyroid disorder</li> <li>Vitamin D Deficiency</li> </ul>	<ul style="list-style-type: none"> <li>Patient education including compliance to specialist care follow up</li> <li>Specialist referral to optimize management of pre-existing medical condition, if necessary</li> </ul>	<b>During treatment</b>	<ul style="list-style-type: none"> <li>Be gentle to your remaining hair. Brush hair gently using a hairbrush with soft bristles or a wide-tooth comb. Wash hair only as needed with a mild / baby shampoo, and pat dry with a soft towel, avoid hair dryer.</li> <li>Avoid treatments or products that may hurt your scalp (e.g. hair gels, hair dyes, perms, clips)</li> <li>Protect your scalp. Wear a scarf or hat when you are outdoors.</li> <li>If you scalp is itchy or tender, you may use lotions to soothe it.</li> <li>Wear a hair net at night when you sleep, to prevent getting hair over your bed and pillow.</li> <li>Applying a little make-up will brighten up your face. The most important thing is to do whatever feels comfortable and gives you the most confidence</li> <li>Share your feelings with your loved ones, or join a support group. Many people feel angry, depressed or embarrassed about hair loss. Talking about it openly and honestly can help.</li> </ul>
<b>Others</b>	<ul style="list-style-type: none"> <li>Poor diet (caloric or protein restriction)</li> <li>Major psychologic stress</li> <li>Childbirth</li> <li>Genetics</li> <li>Poisoning (arsenic, mercury, or thallium)</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Specialist referral if indicated</li> </ul>	<b>After treatment</b>	<ul style="list-style-type: none"> <li>Be patient as it will take a few months or longer for your hair to regrow.</li> <li>Continue the above hair care practices for at least 3-6 months after treatment.</li> </ul>
<b>Paronychia</b>			<b>Nail</b>	
<b>Trauma</b>			<b>Prevent nail damage</b>	<ul style="list-style-type: none"> <li>Keep your nails short and smoothen any jagged edges with a nail file</li> <li>Moisturize your nails and surrounding skin regularly</li> <li>Apply formaldehyde-free nail polish to hide colour changes and increase nail strength</li> <li>Use an acetone-free nail polish remover, which is gentler and less drying on your nails</li> </ul>
<b>Medications</b>	<ul style="list-style-type: none"> <li>Chemotherapy</li> <li>Hormonal therapy</li> <li>Targeted therapy</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Update Oncologist</li> </ul>	<b>Prevent infection</b>	<ul style="list-style-type: none"> <li>Wear protective gloves to protect your nails when doing household chores or gardening. Prolonged exposure to water leads to a higher risk of fungal infection in the nail bed.</li> <li>Avoid using artificial nails, professional manicures and pedicures to minimize risk of infection</li> <li>Avoid biting your nails, ripping or peeling off any loose surrounding skin.</li> </ul>

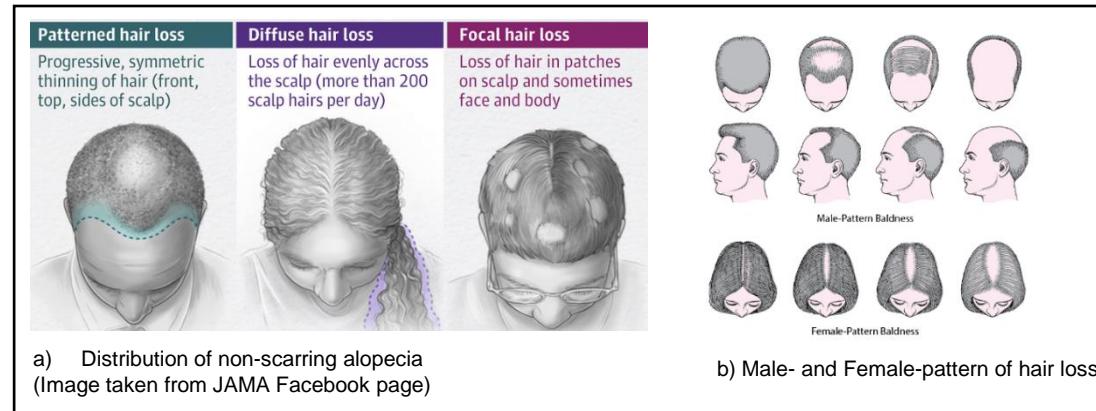


Illustration 1.

# Skin Problem Practice Guide

**[RED FLAGS: CTCAE 4]** Life-threatening consequences; urgent intervention indicated

- Allergic Reaction: angioedema, breathlessness
- Infection in immunocompromised host or sepsis in any host: Fever >38°C, infected open wound
- Stevens-Johnson Syndrome/ Toxic Epidermal Necrolysis: Fever, pain/blister on skin/mucous membranes, systemic symptoms (malaise, myalgia, arthralgia), photophobia, conjunctival itching/redness, odynophagia
- [Radiation Dermatitis] Skin necrosis or ulceration of full thickness dermis; spontaneous bleeding from involved site; skin graft indicated
- [Bullous Dermatitis] Blisters covering >30% BSA; associated with fluid or electrolyte abnormalities; ICU or burn unit indicated
- [Rash Acneiform] Papules and/or pustules covering any % BSA, which may or may not be associated with symptoms of pruritus or tenderness and are associated with extensive superinfection with IV antibiotics indicated

If Yes, advise patient to go to nearest DEM & inform oncologist

## ASSESSMENT\*

### [Normal]

- How was your skin condition before treatment? Did you have previous episode of skin problem?
- Do you have any underlying skin conditions (e.g. psoriasis, eczema)?

### [Onset]

- When did your symptoms appear? ( Refer to table on next page)
- Any exposure to new foods or topical products, supplements, transfusions or medications?

### [Provoking/Palliating]

- What makes your symptom(s) better or worse?

### [Quality] In the last 24 hours,

- How would you describe your symptoms?
  - Colour – redness, pale-looking, dark patches, generalized darkening of skin
  - Morphology- flat, raised, acne-like bumps, scaly/leathery
  - Swelling – If swelling present, what is the degree/ extent?
  - Thickening- over soles of feet and palmar surfaces
  - Integrity- Desquamation, flaking, cracking, peeling, blisters, and/or ulcer? Any discharge/pus?
  - Sensory changes- Any itch, tingling, burning or pain?

### [Region/ Radiation]

- What areas are affected (sites and extent)? (Refer to BSA chart)
- Does it affect your eyes, genitals, anus or mouth?

### [Severity/Other Symptoms]

On a scale of 0 to 10, how bothersome is the symptom(s) to you?

- Have you been experiencing any other signs or symptoms such as:
  - Fever, chills, flushing, wheezing, itch, chest tightness, breathlessness, palpitations, dizziness

### [Treatment]

- Have you tried any medications/strategies/treatments? Was it effective?

### [Understanding/Impact]

- How has the symptom(s) affected you, your role, function, or activities of daily living?

### [Value]

- What do you believe is causing your symptom?
- What is an acceptable level of symptom control for you?

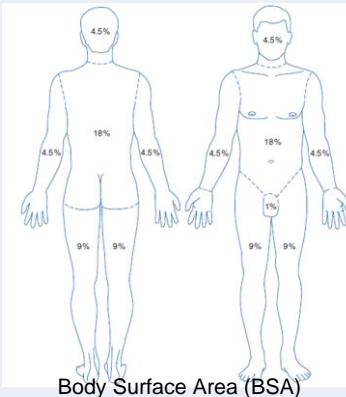
## MANAGEMENT

### [Consider Contributing Factors]

- Review cancer treatment and potential for development of skin problem
- Consider potential serious conditions such as Varicella Zoster Virus (VZV), Herpes Simplex Virus (HSV), cutaneous metastases and graft-versus-host disease.
- Determine need for further investigations
- Refer to specific management on next page.

### [Patient Education]

- Photograph-monitoring
- General skin care advice
- Special considerations



# Skin Problem Practice Guide

	Rash Acneiform	Rash Maculopapular	Palmar-Plantar Erythrodysesthesia Syndrome	Dermatitis Radiation	Urticaria	
						
<b>CTCAE Definition</b>	A disorder characterized by an eruption of papules and pustules, typically appearing in face, scalp, upper chest and back	A disorder characterized by the presence of macules (flat) and papules (elevated)	A disorder characterized by redness, marked discomfort, swelling, and tingling in the palms of the hand or the soles of the feet	A finding of cutaneous inflammatory reaction occurring as a result of exposure to biologically effective levels of ionizing radiation	A disorder characterized by an itchy skin eruption characterized by wheals with pale interiors and well-defined red margins.	
<b>Possible contributing factors</b>	EGFR inhibitors • TKIs (Afatinib, Dacomitinib ) • Monoclonal antibodies (Cetuximab, panitumumab)	• Immunotherapy agents: Pembrolizumab, nivolumab, durvalumab • Graft-versus-host disease	• Conventional chemo: capecitabine, 5-FU, liposomal doxorubicin(Caelyx), cytarabine, docetaxel • Multikinase inhibitors: -nibs	Radiation therapy	• Allergic reactions e.g. food, medications, insects bite • Infections	
<b>Distribution</b>	Usually around areas rich in sebaceous glands e.g. scalp, face, nose, chest, back	Mainly on the trunk and to a lesser extent on the upper limbs. Face is commonly spared	Typically palms, soles, fingertips	Skin sites exposed to radiation	Various skin sites	
<b>Onset</b>	EGFR inhibitors: Within first two weeks after initiation, peak in week 4-6, reduce in severity after week 6-8.  Immunotherapy: Within few weeks after initiation e.g. faster (~2 weeks) with combination therapy  Infusion reaction: Within a few hours, or 1-2 days after infusion	Immunotherapy: Within few weeks after initiation e.g. faster (~2 weeks) with combination therapy  Infusion reaction: Within a few hours, or 1-2 days after infusion	Usually within first 2-4 weeks of treatment	Acute: Within hours to weeks after irradiation  Chronic: Months to years after irradiation	Allergy reaction: Typically 1 hour or within first 24 hour following exposure  Infusion reaction: Within a few hours, or 1-2 days after infusion	
<b>CTCAE GRADING</b>						<b>Plans</b>
<b>Grade 1</b>	Papules and/or pustules covering <10% BSA, which may or may not be associated with symptoms of pruritus (e.g., pruritus, burning, tightness) or tenderness	Macules/papules covering <10% BSA with or without symptoms	Minimal skin changes or dermatitis (e.g., erythema, edema, or hyperkeratosis) without pain	Faint erythema or dry desquamation	Urticarial lesions covering <10% BSA; topical intervention indicated	<input type="checkbox"/> Patient education <input type="checkbox"/> Return advice <input type="checkbox"/> Update oncologist if treatment-related <input type="checkbox"/> Consider pharmacological measures <input type="checkbox"/> Consider specialist nurse referral
<b>Grade 2</b>	Papules and/or pustules covering 10 - 30% BSA, which may or may not be associated with symptoms of pruritus or tenderness; associated with psychosocial impact; limiting instrumental ADL; papules and/or pustules covering > 30% BSA with or without mild symptoms	Macules/papules covering 10 - 30% BSA with or without symptoms (e.g., pruritus, burning, tightness); limiting instrumental ADL; rash covering > 30% BSA with or without mild symptoms	Skin changes (e.g., peeling, blisters, bleeding, fissures, edema, or hyperkeratosis) with pain; limiting instrumental ADL	Moderate to brisk erythema; patchy moist desquamation, mostly confined to skin folds and creases; moderate edema	Urticarial lesions covering 10-30% BSA; oral intervention indicated	<input type="checkbox"/> Refer to Chemo Review Clinic or Emergency department if patient is <u>on</u> anticancer treatment <input type="checkbox"/> Refer to Polyclinic or Emergency department if patient is <u>not on</u> any anticancer treatment <input type="checkbox"/> Update oncologist for dermatology referral if necessary
<b>Grade 3</b>	Papules and/or pustules covering >30% BSA with moderate or severe symptoms; limiting self-care ADL; associated with local superinfection with oral antibiotics indicated	Macules/papules covering >30% BSA with moderate or severe symptoms; limiting self care ADL	Severe skin changes (e.g., peeling, blisters, bleeding, fissures, edema, or hyperkeratosis) with pain; limiting self care ADL	Moist desquamation in areas other than skin folds and creases; bleeding induced by minor trauma or abrasion	Urticarial lesions covering >30% BSA; IV intervention indicated	

# Skin Problem Reference Guide

Patient Education	
Category	Specific points
Photograph-monitoring	<ul style="list-style-type: none"><li>• Use photographs to monitor progress of skin conditions.</li></ul>
General skin care	<ul style="list-style-type: none"><li>• Shower<ul style="list-style-type: none"><li>- Use mild soaps to cleanse your skin. Pat dry, instead of rubbing vigorously after bathing.</li><li>- Take lukewarm instead of hot showers. Avoid bubble baths and bath scrubs.</li></ul></li><li>• Moisturize<ul style="list-style-type: none"><li>- Use fragrance-free, hypoallergenic cream-based moisturizers or lotions</li><li>- Use creams with menthol or camphor to help relieve itchy skin twice a day, preferably within 5 minutes after showering, when your skin is still damp</li></ul></li><li>• Sun protection<ul style="list-style-type: none"><li>- Avoid direct sunlight.</li><li>- Apply sunscreen with SPF at least 30, especially over areas not covered by clothing when going outdoors, even on cloudy days</li><li>- Use sun-protective lip balm</li><li>- Wear loose-fitting long-sleeved clothes to prevent sunburn and protect any areas of irritation or radiation treatment area from sun</li></ul></li><li>• Clothing<ul style="list-style-type: none"><li>- Choose undergarments and clothes that are made of cotton or other soft fabrics, to prevent skin irritation</li><li>- Use mild detergent to wash clothes</li><li>- Wear comfortable socks and shoes to protect against injury</li><li>- Use non-rubber protective gloves when cleaning dishes or when doing gardening</li></ul></li><li>• Be compliant to moisturizers and medications (e.g. painkillers, antibiotics, antihistamines, topical/oral steroids) prescribed to help with current skin condition and associated symptoms</li><li>• Avoid alcohol based products</li></ul>
Special considerations	<ul style="list-style-type: none"><li>• Patient with acneiform rash<ul style="list-style-type: none"><li>- Avoid popping acne pustules</li><li>- Avoid topical anti-acne or anti- rosacea agents</li></ul></li><li>• Patient with PPE<ul style="list-style-type: none"><li>- Avoid use of abrasive chemicals e.g Benzoyl peroxide or alcohols to rash affected areas</li><li>- Avoid pressure or friction e.g. reflexology pebble walk</li><li>- Avoid extreme temperature e.g. steam, saunas, hot baths, heating pads</li></ul></li><li>• Patients on radiation therapy<ul style="list-style-type: none"><li>- StrataXRT gel can be applied anytime.</li><li>- Check with your doctor/radiation therapy team before using anything on the skin in the treatment area and use only the moisturizers, creams, or lotions that are recommended.</li><li>- Avoid placing heat or cold packs, or bandages over radiation treatment area. Use cool, wet cloth to soothe the area if needed.</li></ul></li><li>• Patients with radiation dermatitis<ul style="list-style-type: none"><li>- Avoid petroleum jelly based products</li><li>- Avoid baby powder/ cornstarch (promotes yeast and bacterial migration)</li><li>- Avoid adhesive tapes. Secure dressing with net tubing or under clothing if necessary.</li></ul></li></ul>

# Hot Flashes Practice Guide

Hot flashes: A disorder characterized by an uncomfortable and temporary sensation of intense body warmth, flushing, sometimes accompanied by sweating upon cooling.  
 Menopause is the permanent cessation of menses and includes a profound and permanent decrease in ovarian estrogen synthesis.

## [RED FLAGS]

- Infection: fever > 38, myalgia/arthralgia, fatigue, localizing signs of infection; and/or night sweats.
- Malignancy: Lymphoma (fever, night sweats, weight loss), carcinoid syndrome (flushing accompanied by red/purple skin changes leading to hypotension, diarrhea, wheezing), or Pheochromocytoma (episodic headache, sweating, tachycardia, hypertension)

If Yes, advise patient to go to nearest DEM & inform oncologist

## ASSESSMENT\*

### MANAGEMENT (Generalist/Specialists\*)

#### Consider Contributing Factors

- Determine need for further investigations\*
- Refer to specific management on next page.

#### Patient Education

- Lifestyle modification
- Medication-related

#### Specialist Referrals PRN

- SGH Menopause Clinic (for women, regardless of treatment status if indicated)

## [Normal]

NA

## [Onset]

- When did the symptom of hot flashes start?
- How long does an episode of hot flashes last?
- How often do you experience hot flashes?

## [Provoking / Palliating]

- What makes your hot flashes better or worse?

## [Quality]

- Can you describe what happens when you have hot flashes?

## [Other symptoms]

- Have you been experiencing other symptoms, such as
- (female) vaginal dryness, (male) gynaecomastia and balding
- sexual dysfunction, lack of sexual desire,
- sleep disturbance,
- mood disturbance,
- cognitive dysfunction,
- joint pain and muscle aches,
- fatigue

## [Treatment]

- Have you done anything about it? Has it been effective?

## [Value]

- What do you believe is causing your hot flashes?

### CTCAE GRADING

#### Grade 1

#### Grade 2

#### Grade 3

## [Severity]

How bothersome is this symptom to you?

## [Understanding / Impact]

- How has the symptom(s) affected you, your role, function, or ability to do activities of daily living?

Mild symptoms, intervention not indicated

Moderate symptoms; limiting instrumental ADL

Severe symptoms; limiting self care ADL

## Plans

Patient education

Patient education

Update oncologist

# Hot Flashes Reference Guide

Contributing Factors			Patient Education	
Category	Specific factors	Inform Oncologist/ Discuss specific management	Category	Specific points
Menopause/ Andropause	<ul style="list-style-type: none"> <li>Associated with menstrual cycle changes, vaginal dryness(female), gynaecomastia, genitourinary complaints, sexual dysfunction, sleep disturbances, joint and muscle aches, cognitive impairment, mood swing</li> </ul>	<ul style="list-style-type: none"> <li>Patient education and reassurance</li> <li>Women: Refer to SGH Menopause Clinic, if appropriate</li> </ul>	Lifestyle modification	<ul style="list-style-type: none"> <li>Healthy living including physical activity and maintaining a normal weight.</li> <li>Wear loose fitting and thin layers of clothing to keep yourself cool.</li> <li>Use fabric made of natural fibers such as cotton, and avoid synthetic fabrics.</li> <li>Take cold instead of hot drinks</li> <li>Take cold instead of hot showers. Use a facial water spray to refresh yourself when needed.</li> <li>Keep windows open to ensure good ventilation.</li> <li>Lower room temperature, use air conditions/fans to keep yourself cool.</li> <li>Avoid triggers of hot flashes (e.g. drinking alcohol or caffeine, eating hot and spicy foods, red meats, smoking)</li> <li>Discuss with your healthcare provider before taking any supplements</li> </ul>
Anti-cancer therapy & its side effect	<ul style="list-style-type: none"> <li>Radiation/Chemotherapy-induced ovarian suppression</li> <li>Surgical removal of testicles/ovaries</li> <li>Hormonal therapy e.g. GnRH antagonist (e.g. degarelix), GnRH agonists (e.g. goserelin, leuprorelin), antiandrogens (e.g. bicalutamide, abiraterone, enzalutamide), aromatase inhibitors (e.g. letrozole, anastrozole, exemestane), SERMs (e.g. Tamoxifen, raloxifene)</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Update oncologist to consider change in treatment options, if appropriate.</li> </ul>	Medication related	<ul style="list-style-type: none"> <li>For patient who is on oral hormone therapy (e.g. tamoxifen, letrozole, anastrazole, exemestane), check with your pharmacist if you can take the medication at night instead of in the day.</li> </ul>
Medications and substances	<ul style="list-style-type: none"> <li>Cholinergic agonists (Pilocarpine)</li> <li>Steroids</li> <li>Opioids</li> <li>Hypoglycaemics</li> <li>Beta-agonists, calcium channel blockers, vasodilators (GTN)</li> <li>Alcohol</li> <li>Caffeine</li> <li>Smoking</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Review and consider alternative medications, if appropriate</li> </ul>		
Metabolic issues	<ul style="list-style-type: none"> <li>Hyperthyroidism</li> <li>Hyper-/Hypo-glycaemia</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Update oncologist, consider laboratory investigations if necessary</li> </ul>		

# Indigestion Practice Guide

**Dyspepsia:** Disorder characterized by an uncomfortable, often painful feeling in the stomach, usually from impaired digestion  
Symptoms include burning stomach, bloating, early satiety, heartburn, nausea & vomiting

<p><b>[RED FLAGS: CTCAE Grade 3]</b> Severe symptoms; operative intervention indicated</p> <ul style="list-style-type: none"> <li>• New/progressive malignancy: Unintentional weight loss, severe dysphagia/odynophagia, voice hoarseness</li> <li>• GI/abdominal bleed/peptic ulcer disease: Severe abdominal pain, hypotension, loss of consciousness, syncope, hemoptysis/emesis, melena, anemia</li> <li>• Bowel obstruction, ischemia, perforation or peritonitis: Acute abdominal pain/cramps/distension, nausea/vomiting, unable to tolerate any food or drinks, no bowel output/flatus, constipation preceding diarrhoea, reduced/absent bowel sounds, tachycardia, abdominal rigidity</li> <li>• Acute coronary syndromes: Chest pain/discomfort, dyspnea, diaphoresis, dizziness</li> </ul>			If Yes, advise patient to go to nearest DEM & inform oncologist
<b>ASSESSMENT</b>			<b>MANAGEMENT</b>
<p><b>[Normal]</b></p> <ul style="list-style-type: none"> <li>• Do you normally have indigestion (prior to your treatment)?</li> </ul>			<p><b>[Consider Contributing Factors]</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Review cancer treatment and potential for indigestion</li> <li><input type="checkbox"/> Determine need for further investigations</li> <li><input type="checkbox"/> Refer to specific management on next page</li> </ul>
<p><b>[Onset]</b></p> <ul style="list-style-type: none"> <li>• When did the indigestion begin?</li> </ul>			
<p><b>[Provoking/Palliating]</b></p> <ul style="list-style-type: none"> <li>• What brings on the indigestion?</li> <li>• Is there anything that makes the indigestion better or worse (e.g. eating, milk, fatty/fried or gluten-containing or sour/spicy foods, alcohol, position, bowel output, antacids, stress)?</li> <li>• Are you on any medications that could cause indigestion (e.g. corticosteroids, NSAIDs, bisphosphonate, antibiotics)?</li> <li>• Any abdominal/gastrointestinal surgery/procedures?</li> </ul>			
<p><b>[Quality]</b></p> <ul style="list-style-type: none"> <li>• How would you describe your symptoms? <ul style="list-style-type: none"> <li>➢ Character (bloating/fullness, early satiety, nausea/vomiting, sour taste in mouth, heartburn, cough, sore throat)</li> <li>➢ For heartburn- location, radiation, character (to rule out chest tightness/heaviness)</li> <li>➢ Timing/pattern (constant/intermittent, associated with oral intake)</li> <li>➢ Frequency/no. of episodes, duration of each episode</li> </ul> </li> </ul>			<p><b>[Patient Education]</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Dietary measures</li> <li><input type="checkbox"/> Lifestyle measures</li> <li><input type="checkbox"/> OTC/ Pharmacological</li> <li><input type="checkbox"/> Complementary/ Alternative Medicine</li> </ul>
<p><b>[Severity/Other Symptoms]</b></p> <ul style="list-style-type: none"> <li>• On a scale of 0 to 10, how bothersome is this symptom to you?</li> <li>• Have you been able to tolerate any oral intake in the past 24 hours?</li> <li>• Have you been experiencing any other symptoms such as: <ul style="list-style-type: none"> <li>➢ Chest pain, dyspnea, diaphoresis, dizziness</li> <li>➢ Unintentional weight loss, abdominal pain/discomfort, nausea/vomiting (coffee ground/bloody vomitus), unable to tolerate any food or drinks, melena</li> <li>➢ Difficulty/pain on swallowing, chronic cough, voice hoarseness</li> </ul> </li> </ul>			
<p><b>[Treatment]</b></p> <ul style="list-style-type: none"> <li>• Have you tried any medications/strategies/treatments? Was it effective?</li> </ul>			
<p><b>[Understanding/Impact]</b></p> <ul style="list-style-type: none"> <li>• How has the symptom(s) affected you, your role, function, or ability to do activities of daily living?</li> </ul>			
<p><b>[Value]</b></p> <ul style="list-style-type: none"> <li>• What do you believe is causing your indigestion?</li> </ul>			
CTCAE GRADING	Grade 1	Grade 2	Grade 3
Dyspepsia	Mild symptoms; intervention <b>not</b> indicated	Moderate symptoms; <b>medical intervention</b> indicated	Severe symptoms; <b>operative intervention</b> indicated
Plans	<ul style="list-style-type: none"> <li><input type="checkbox"/> Patient education</li> <li><input type="checkbox"/> Return advice</li> <li><input type="checkbox"/> Update oncologist</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Patient education</li> <li><input type="checkbox"/> Return advice</li> <li><input type="checkbox"/> Refer to Chemo Review Clinic or Emergency department if patient is <u>on</u> immunosuppressive cancer treatment</li> <li><input type="checkbox"/> Refer to Polyclinic or Emergency department if patient is <u>not on</u> any immunosuppressive cancer treatment</li> <li><input type="checkbox"/> Update oncologist</li> </ul>	

# Indigestion Practice Guide

Contributing Factors			Patient Education	
Category	Specific factors	Discuss with Oncologist/ Specific management	Category	Specific points
Cancer-related	<ul style="list-style-type: none"> <li>Gastrointestinal/abdominal tumors/involvement (stomach, colorectal, pancreatic, esophageal, gynecological cancer)</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Update oncologist</li> </ul>	Dietary Measures	<ul style="list-style-type: none"> <li>Take small, frequent (5-6) meals and snack throughout the day. Stop eating when you start to feel full. If you experience discomfort after eating, decrease your portion sizes or number of foods eaten</li> <li>Eat at regular times. Avoid large or late meals in the day or going to bed on full stomach.</li> <li>Eat/drink slowly and enjoy your meal, do not rush. Have relaxed, pleasant meals.</li> <li>Take small mouthfuls and chew your food well.</li> <li>Sip fluids between meals rather than drinking large amounts before mealtimes to reduce bloating</li> <li>Note and avoid any food/drink that seems to make your indigestion worse. These could include caffeinated/carbonated drinks, alcohol, chocolates, citrus/spicy/gas producing/high fibre/fatty foods</li> <li>Consider soft, moist foods as these may be more easily tolerated.</li> </ul>
Anti-cancer therapy & its side effects	<ul style="list-style-type: none"> <li>Chemotherapy</li> <li>Targeted therapy</li> <li>Immunotherapy</li> <li>Radiotherapy</li> <li>Surgery/Procedures (Abdominal/gastrointestinal)</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Pharmacological interventions</li> <li>Update oncologist</li> </ul>	Lifestyle Measures	<ul style="list-style-type: none"> <li>Eat/Stay in a well ventilated place or take a walk outside. Open the window or turn on a fan.</li> <li>Wear clothes that are comfortable and loose especially when eating.</li> <li>Keep your body upright for at least 1-2 hours after meals to reduce indigestion.</li> <li>Sleep with your head elevated.</li> <li>Stop smoking. Chemicals in cigarette smoke can worsen indigestion.</li> <li>Avoid exercise/strenuous activities immediately after meals</li> <li>Manage stress/anxiety through relaxation techniques</li> <li>Maintain a healthy weight, exercise regularly as tolerated</li> </ul>
Medications, supplements, substances	<ul style="list-style-type: none"> <li>NSAIDS, steroids, iron/potassium supplements</li> <li>Antibiotics, metformin</li> <li>Bisphosphonates</li> <li>Opioids (morphine, tramadol), anticholinergics</li> <li>Alcohol, Caffeine</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Review medications</li> <li>Update primary prescriber, consider alternative medications, if appropriate</li> </ul>	OTC/ Pharmacological	<ul style="list-style-type: none"> <li>Use antacid when necessary for immediate symptom relief after meals and at bedtime as instructed by your healthcare provider</li> </ul>
Pre-existing medical conditions	<ul style="list-style-type: none"> <li>Gastrointestinal disorders (GERD, gastritis, irritable bowel syndrome, motility issues/gastroparesis)</li> <li>Food intolerances (lactose, celiac)</li> <li>Hyper/Hypothyroidism</li> <li>Diabetes</li> </ul>	<ul style="list-style-type: none"> <li>Patient education including compliance to primary care follow up</li> <li>Specialist referral to optimize management of pre-existing medical condition, if necessary</li> </ul>	Complementary/ Alternative Medicine	<ul style="list-style-type: none"> <li>Medicated oil/balm</li> <li>Ginger/peppermint candies, lemon drops, ginger ale, tea with lemon zest/mint leaves</li> </ul>
Intra-abdominal related conditions	<ul style="list-style-type: none"> <li>Constipation, intestinal obstruction</li> <li>Pancreatitis, biliary tract disease</li> <li>Ascites, hepatomegaly</li> <li>Infections (gastroenteritis)</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Optimize symptom management</li> </ul>		
Others	<ul style="list-style-type: none"> <li>Anxiety, stress</li> <li>Pregnancy</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Optimize symptom management</li> </ul>		

# Memory and Concentration Impairment Practice Guide

Memory and Concentration impairment: A disorder characterized by a deterioration in memory function and the ability to concentrate.

<p><b>[RED FLAGS]</b> Recent head injury and/or presence of focal neurological deficits suggestive of reversible or organic causes (brain metastases, stroke), for example</p> <ul style="list-style-type: none"> <li>• Sudden facial drooping</li> <li>• Sudden numbness/weakness especially unilateral over face, arms, legs;</li> <li>• Sudden confusion, altered consciousness, trouble speaking or visual changes;</li> <li>• Severe headache, nausea/vomiting or seizures;</li> <li>• Fever &gt; 38°C and/or neck stiffness</li> </ul>		<p>If Yes, advise patient to go to nearest DEM &amp; inform oncologist</p>	
<b>ASSESSMENT</b> Corroborative history from family/caregiver may be required if patient cannot provide accurate information		<b>MANAGEMENT</b>	
<p><b>[Normal]</b></p> <ul style="list-style-type: none"> <li>• How was your memory and/or concentration previously?</li> </ul>	<p><b>[Onset]</b></p> <ul style="list-style-type: none"> <li>• When did you notice yourself feeling more forgetful or having more difficulty concentrating?</li> <li>• How fast was the change?</li> </ul>	<p><b>[Consider Contributing Factors]</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Determine need for further investigations</li> <li><input type="checkbox"/> Refer to specific management on next page.</li> </ul>	
<p><b>[Provoking / Palliating]</b></p> <ul style="list-style-type: none"> <li>• What do you think makes your memory or concentration either better or worse (e.g. physical symptoms, emotional distress, medications, alcohol)?</li> </ul>	<p><b>[Patient Education]</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> General advice</li> <li><input type="checkbox"/> Self-care</li> <li><input type="checkbox"/> Engage in mind-stimulating activities</li> <li><input type="checkbox"/> Organizational strategies</li> <li><input type="checkbox"/> Optimize physical environment</li> <li><input type="checkbox"/> Optimize social environment</li> <li><input type="checkbox"/> Specific tips for caregiver</li> </ul>		
<p><b>[Quality]</b></p> <ul style="list-style-type: none"> <li>• Do you have difficulty remembering things? Do you frequently misplace objects?</li> <li>• Do you have difficulties paying attention/multi-tasking?</li> <li>• Do you have difficulties concentrating? Do you frequently leave tasks incomplete?</li> <li>• Does it take you longer to think through problems? Does your thinking seem slower?</li> <li>• Did you notice any changes in your mood? Did anyone mention/notice any changes in our behavior?</li> </ul>	<p><b>[Specialist Referrals PRN]</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Medical Social Worker</li> <li><input type="checkbox"/> Occupational therapist</li> <li><input type="checkbox"/> Rehabilitation medicine</li> </ul>		
<p><b>[Severity]</b></p> <ul style="list-style-type: none"> <li>• On a scale of 0 to 10, how would you score your memory and/or concentration problem?</li> </ul>			
<p><b>[Treatment]</b></p> <ul style="list-style-type: none"> <li>• What strategies/treatment have you tried? Have any of the strategies/treatments been effective?</li> </ul>			
<p><b>[Value]</b></p> <ul style="list-style-type: none"> <li>• Are there any beliefs, views or feelings about your memory/concentration problems that are important to you &amp; your family/caregivers?</li> </ul>			
CTCAE GRADING	Grade 1	Grade 2	Grade 3
<p><b>[Understanding / Impact]</b></p> <ul style="list-style-type: none"> <li>• How is memory impairment affecting your ability to perform daily activities?</li> </ul>	Mild memory impairment	Moderate memory impairment; limiting instrumental ADL	Severe memory impairment; limiting self-care ADL
<p><b>[Understanding / Impact]</b></p> <ul style="list-style-type: none"> <li>• How is concentration impairment affecting your ability to perform daily activities?</li> </ul>	Mild inattention or decreased level of concentration	Moderate impairment in attention or decreased level of concentration; limiting instrumental ADL	Severe impairment in attention or decreased level of concentration; limiting self-care ADL
	<ul style="list-style-type: none"> <li><input type="checkbox"/> Patient education</li> <li><input type="checkbox"/> Specialist referral PRN</li> <li><input type="checkbox"/> Return advice</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Patient education</li> <li><input type="checkbox"/> Specialist referral PRN</li> <li><input type="checkbox"/> Return advice</li> <li><input type="checkbox"/> Update oncologist</li> </ul>	

# Memory and Concentration Impairment Reference Guide

Contributing Factors			Patient Education	
Category	Specific factors	Inform Oncologist/ Discuss specific management	Category	Specific points
<b>Pre-existing medical conditions</b>	<ul style="list-style-type: none"> <li>Neurological conditions (Mild cognitive impairment, dementia, epilepsy)</li> <li>Previous stroke</li> <li>Existing brain metastases</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Geriatric referral</li> <li>Neurology referral</li> </ul>	<b>General advice</b>	<ul style="list-style-type: none"> <li>Validate experience of cognitive dysfunction associated with cancer diagnosis and treatment</li> <li>Reassure patient that cancer-associated cognitive dysfunction is not a progressive neurologic disorder (unlike dementia)</li> <li>Suggest self-care and coping strategies (See below)</li> </ul>
<b>Anti-cancer therapy</b>	<ul style="list-style-type: none"> <li>Chemotherapy</li> <li>Hormonal therapy</li> <li>Immunotherapy</li> <li>Radiation therapy to head and neck region</li> <li>Brain surgery</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> </ul>	<b>Self-care</b>	<ul style="list-style-type: none"> <li>Have a healthy, well-balanced diet</li> <li>Sleep and rest well</li> <li>Exercise regularly (can provide sense of wellbeing, decrease stress and improve alertness)</li> <li>Limit use of alcohol and other agents that alter alertness</li> <li>Engage in stress-reduction activities (e.g. physical activity, meditation, yoga, listening to music)</li> <li>Learn relaxation techniques (e.g. breathing and/or visualization exercises)</li> <li>Be kind to yourself- give yourself permission to make mistakes</li> </ul>
<b>Medications and substances</b>	<ul style="list-style-type: none"> <li>Sedating agents e.g. anti-emetics, opioids, benzodiazepines</li> <li>Alcohol and other agents that alter cognition</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Review and consider alternative medications, if appropriate</li> </ul>	<b>Engage in mind-stimulating activities</b>	<ul style="list-style-type: none"> <li>Reading, knitting, playing musical instrument, board games, mahjong, crossword puzzles, word games, sudoku regularly to keep mind active</li> </ul>
<b>Metabolic issues</b>	<ul style="list-style-type: none"> <li>Vitamin B12, iron, folic acid deficiencies</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Endocrine referral</li> </ul>	<b>Organizational strategies</b>	<ul style="list-style-type: none"> <li>Avoid multi-tasking and minimize distractions during task (e.g. turn off TV while having a conversation)</li> <li>Develop and keep to a routine schedule</li> <li>Plan and prepare for your day in advance</li> <li>Do tasks that need the most concentration at the time of day when you feel the best</li> <li>Pace activities, allow adequate time to complete tasks</li> <li>Take mental breaks</li> </ul>
<b>Symptom burden</b>	<ul style="list-style-type: none"> <li>Pain, fatigue, sleep dysfunction</li> <li>Depression, anxiety</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Optimize symptom control</li> <li>Consider Psychosocial Oncology referral</li> </ul>	<b>Optimize physical environment</b>	<ul style="list-style-type: none"> <li>Keep items (e.g. keys) in the same place where they are easily seen or accessible</li> <li>Color code or label cabinets or drawers to keep track of where things are kept</li> <li>Use aids (e.g. calendar, reminder notes, to-do lists, planners, alarms) to keep track of important activities</li> <li>Write things down</li> <li>Store or place important numbers in mobile phone or next to home phone</li> </ul>
			<b>Optimize social environment</b>	<ul style="list-style-type: none"> <li>Surround self with supportive family and friends</li> <li>Ask for help when necessary (e.g. bring along a friend or family member to doctor's appointment to take note of important information)</li> </ul>
			<b>Specific tips for caregivers</b>	<ul style="list-style-type: none"> <li>Plan your time together and review regularly to discuss if there are any changes or updates</li> <li>Encourage patients even if they are not able to complete their tasks</li> <li>Have a clock and calendar available readily in sight for their reference</li> </ul>

# Mouth/Swallowing Practice Guide

Xerostomia: A disorder characterized by reduced salivary flow in the oral cavity  
 Oral mucositis: A disorder characterized by ulceration or inflammation of the oral mucosal  
 Dysphagia: A disorder characterized by difficulty in swallowing

**[RED FLAGS: CTCAE Grade 4]** Life threatening consequences; urgent intervention indicated

- Dehydration: Weakness, dizziness, confusion, dry mouth/mucous membrane, increased thirst, reduced urine output/dark urine, reduced skin turgor
- [Dysphagia] New stroke: Acute onset slurred speech, associated with numbness/weakness in arms, legs, or face, severe headache, nausea/vomiting.
- [Dysphagia] Brain/meningeal involvement (e.g. raised intracranial pressure, meningitis): Headache, blurred/double vision, altered consciousness, speech/movement difficulties.

If Yes, advise patient to go to nearest DEM & inform oncologist

## ASSESSMENT

## MANAGEMENT

**[Normal]**

- Do you normally have dry mouth, ulcers, difficulty swallowing or other mouth problems (prior to treatment)?

**[Consider Contributing Factors]**

- Review cancer treatment and potential for oral/oropharyngeal mucositis
- Determine need for further investigations
- Refer to specific management on next page

**[Onset]**

- When did the symptom(s) begin?

**[Provoking/Palliating]**

- What makes your symptom(s) better or worse?

**[Patient Education]**

- Maintain good oral hygiene
- Maintain good hydration and nutrition
- Dentures care
- Other tips for dealing with mouth ulcers or painful swallowing

**[Quality]**

- How would you describe your symptoms?

**[Severity/Other Symptoms]**

On a scale of 0 to 10, how bothersome is the symptom(s) to you?

- Have you been able to tolerate any oral intake in the past 24 hours?
- Have you been experiencing any other signs or symptoms such as:
  - Pain?
  - Fever, white patches (tongue, throat), sore throat, ulcers/blister in mouth/ on lips?
  - Prolonged or spontaneous bleeding from oral mucosa? Swelling of mouth or gum?
  - Difficulty with speech/chewing/swallowing? Cough after swallowing? Sensation of residual food 'stuck' in throat?
  - Diarrhoea? Blood in stools?
  - Weight loss?

**[Treatment]**

- Have you tried any medications/strategies/treatments? Was it effective?

**[Understanding/Impact]**

- How has the symptom(s) affected you, your role, function, or activities of daily living?

**[Value]**

- What do you believe is causing your symptom?

- What is an acceptable level of symptom control for you?

CTCAE GRADING	Grade 1	Grade 2	Grade 3
Xerostomia	Symptomatic (e.g. dry or thick saliva) without significant dietary alteration; unstimulated saliva flow $>0.2\text{mL/min}^*$	Moderate symptoms; oral intake alterations (e.g. copious water, other lubricants, diet limited to purees and/or soft, moist foods); unstimulated saliva $0.1$ to $0.2\text{mL/min}^*$	Inability to adequately aliment orally; tube feeding or TPN indicated; unstimulated saliva $< 0.1\text{mL/min}^*$
Oral Mucositis	Asymptomatic or mild symptoms; intervention not indicated	Moderate pain or ulcer that dose not interfere with oral intake; modified diet indicated	Severe pain; interfering with oral intake
Dysphagia	Symptomatic, able to eat regular diet	Symptomatic and altered eating/swallowing	Severely altered eating/swallowing; tube feeding, TPN, or hospitalization indicated
Plans	<input type="checkbox"/> Patient education <input type="checkbox"/> Return advice	<input type="checkbox"/> Patient education <input type="checkbox"/> Return advice <input type="checkbox"/> Refer to Chemo Review Clinic or Emergency department if patient is <u>on</u> immunosuppressive cancer treatment <input type="checkbox"/> Refer to Polyclinic if patient is <u>not on</u> any immunosuppressive cancer treatment <input type="checkbox"/> Recommend dental review as needed <input type="checkbox"/> Update oncologist	

\*Not routinely performed clinically

# Mouth/Swallowing Reference Guide

Contributing Factors			Patient Education	
Category	Specific factors	Discuss with Oncologist/ Specific management	Category	Specific points
Anti-cancer therapy & its side effects	<ul style="list-style-type: none"> <li>Chemotherapy (e.g. Everolimus, methotrexate, 5-FU, melphalan)</li> <li>Radiotherapy (Head and neck or Salivary glands, total body irradiation)</li> <li>Surgery e.g. brain, oral cavity or throat surgery</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Speech therapist referral for assessment and therapeutic intervention</li> </ul>	Maintain good oral hygiene	<ul style="list-style-type: none"> <li>Rinse mouth with water (or salt water mouth rinse with <math>\frac{1}{2}</math> teaspoon of salt to a cup of water) after meals; or as frequently as possible if you have a sore mouth.</li> <li>Use a soft-bristle toothbrush to clean the teeth and tongue gently half an hour after each meal and before bedtime. Toothettes, or sponge swabs, can be used if toothbrush causes pain.</li> <li>Floss gently at least once daily. Do not floss if: <ul style="list-style-type: none"> <li>It causes pain or bleeding fums which does not stop after 2 minutes</li> <li>It is not part of your regular routine unless advised otherwise by your doctor or dentist.</li> </ul> </li> <li>Use a water-based mouth moisturizer/lip balm to keep your mouth/lip moist.</li> <li>Alcohol can worsen dry mouth and cause stinging sensation if mouth ulcers are present- avoid mouth rinses that contain alcohol.</li> <li>Be compliant with the mouthwash regimen prescribed e.g. Dexamethasone mouthwash</li> </ul>
Cancer-related	<ul style="list-style-type: none"> <li>Swallowing problems : <ul style="list-style-type: none"> <li>Compression on oesophagus</li> <li>Tracheo-oesophageal fistula</li> <li>Compression on cranial nerves or intracranial tumour mass</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Patient education and optimize symptoms management</li> </ul>	Maintain good hydration and nutrition	<ul style="list-style-type: none"> <li>Suck on ice chips, sugar-free sweets or popsicles to stimulate the salivary glands to produce more saliva.</li> <li>Select moist foods or use milk, soup, gravy or sauces to moisten solid foods before eating- this also makes chewing and swallowing easier.</li> <li>Eat foods that are caloric- and protein-dense e.g. cream-based soups, soy beancurd, ice-cream, and milkshakes; or try liquid nutritional supplements if you are having trouble taking solid foods.</li> </ul>
Pre-existing medical conditions	<ul style="list-style-type: none"> <li>Autoimmune disease e.g. Sjogren's</li> <li>Neurological problems e.g. stroke, Parkinson's disease, dementia, multiple sclerosis, Myasthenia gravis</li> <li>Infection e.g. HSV ulcers</li> </ul>	<ul style="list-style-type: none"> <li>Patient education including compliance to specialist care follow up</li> <li>Specialist referral to optimize management of pre-existing medical condition, if necessary</li> </ul>	Dentures care	<ul style="list-style-type: none"> <li>Remove dentures whenever possible, to help reduce gum irritation.</li> <li>Remove dentures before cleaning your mouth. Brush and rinse dentures after every meal and at bedtime, and store them in antibacterial soak.</li> <li>Avoid tight or loose fitting dentures.</li> </ul>
Medications, supplements, substances	<ul style="list-style-type: none"> <li>Potential dry-mouth inducing medications e.g. opioids, anticholinergics, Tricyclic antidepressants</li> <li>Medications predisposing patients to infection e.g. oral steroids, inhalers containing steroids</li> <li>Bisphosphonate causing osteonecrosis of the jaw</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Update primary prescriber, consider dose adjustment or alternative medications, if appropriate</li> <li>Referral for dental review</li> </ul>	Other tips for dealing with mouth ulcers or painful swallowing	<ul style="list-style-type: none"> <li>Rinse your mouth with ice water to stop minor bleeding.</li> <li>Use mouth gels or take pain medications before eating as prescribed.</li> <li>Drink with a straw to bypass mouth ulcers</li> <li>Try warm or cool foods as hot foods may worsen pain.</li> </ul>
Others	<ul style="list-style-type: none"> <li>Pre-existing periodontal disease e.g. gum disease, tooth decay, pre-existing dental infections</li> <li>Poor oral hygiene</li> <li>Poorly fitting dentures</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Referral for dental review</li> </ul>		

# Nausea and Vomiting Practice Guide

Nausea: A queasy sensation and/or the urge to vomit.

Vomiting: The reflexive act of ejecting the contents of the stomach through the mouth.

## [RED FLAGS: CTCAE 4] Life-threatening consequences; urgent intervention indicated

- Bowel obstruction, ischemia, perforation or peritonitis: Acute abdominal pain/cramps/distension, unable to tolerate any food or drinks, no bowel output/flatus, constipation preceding diarrhoea, reduced/absent bowel sounds
- GI bleed: Abdominal pain, coffee-ground or bright red vomitus
- Dehydration: Weakness, dizziness, confusion, dry mouth/mucous membrane, increased thirst, reduced urine output/dark urine, reduced skin turgor
- Hypercalcemia: Anorexia, constipation, excessive thirst/urination, lethargy, confusion, bone pain, muscle ache/cramp/twitch, palpitations
- Brain/meningeal involvement (e.g. raised intracranial pressure, meningitis): Headache, blurred/double vision, altered consciousness, speech/movement difficulties
- Infection in immunocompromised host or sepsis in any host: Fever >38°C, hemodynamic instability

If Yes, advise patient to go to nearest DEM & inform oncologist

## ASSESSMENT\*

## MANAGEMENT

### [Normal]

- Do you normally have nausea and/or vomiting (prior to your treatment)? Can you describe more e.g. morning/motion sickness?

### Consider Contributing Factors

- Review cancer treatment and potential for nausea/vomiting.
- Determine need for further investigations
- Refer to specific management on next page.

### [Onset]

- When did the nausea and/or vomiting begin? Was it sudden or gradual? How long does it occur after eating?

### Promoting/Palliating

- What brings on the nausea and/or vomiting?
- Is there anything that makes the nausea/vomiting better or worse e.g. cough, straining, certain foods/smells?
- Are you aware of any medications that you are taking that could cause nausea and/or vomiting e.g. antibiotics?
- Any abdominal/gastrointestinal surgery/procedures?

### [Quality] In the last 24 hours,

- How would you describe your symptoms (differentiate between retching vs. nausea vs. vomiting)?
  - Colour (blood, coffee ground, bile, undigested food)
  - Volume (small, moderate, large amount)
  - Timing/pattern (morning vs throughout the day), frequency/no. of episodes, duration

### Severity/ Other symptoms

- On a scale of 0 to 10, how bothersome is this symptom to you?
- Are you able to tolerate any oral intake in the past 24 hours?
- Have you been experiencing any other symptoms such as:
  - Severe abdominal pain/cramps/distension, unable to tolerate any food or drinks, unable to pass gas, rectal leakage/ diarrhea following constipation (overflow diarrhea)
  - Headache, dizziness, neck pain, blur/double vision, confusion, speech/movement difficulties, memory issues
  - Fever, coffee ground/bright red vomitus
  - Excessive thirst/urination, lethargy, confusion, bone [pain, muscle ache/cramps/twitching, palpitations, dark urine

### Treatment

- Have you been prescribed any (preventive or standby) anti-vomiting medications? Can you describe how are you taking them? If not, why?
- What other strategies/treatments have you tried? Was it effective?

### Understanding / Impact

- How has the symptom(s) affected you, your role, function, or ability to do activities of daily living?

### Value

- What do you believe is causing your nausea and/or vomiting?

CTCAE GRADING	Grade 1	Grade 2	Grade 3
Nausea	Loss of appetite without alteration in eating habits	Oral intake decreased without significant weight loss, dehydration or malnutrition	Inadequate oral caloric or fluid intake; tube feeding, TPN or hospitalization indicated
Vomiting	Intervention not indicated * (1-2 episodes)	Outpatient IV hydration; medical intervention indicated * (3-5 episodes)	Tube feeding, TPN, or hospitalization indicated *(≥6 episodes)
*Ver 4: No. of episodes in 24hrs			
Plans	<input type="checkbox"/> Patient education <input type="checkbox"/> Return advice <input type="checkbox"/> Reinforce pharmacological measures <input type="checkbox"/> Update oncologist	<input type="checkbox"/> Patient education <input type="checkbox"/> Return advice <input type="checkbox"/> Reinforce pharmacological measures <input type="checkbox"/> Update oncologist, discuss if <b>medical intervention</b> required	<input type="checkbox"/> Patient education <input type="checkbox"/> Return advice <input type="checkbox"/> Reinforce pharmacological measures <input type="checkbox"/> Update oncologist, discuss if <b>admission</b> required

# Nausea and Vomiting Reference Guide

Contributing Factors		
Category	Specific factors	Inform Oncologist/ Discuss specific management
Anticancer therapy and its side effects	<ul style="list-style-type: none"> <li>Chemotherapy e.g. doxorubicin, epirubicin, cisplatin, carboplatin, cyclophosphamide, temozolamide</li> <li>Targeted therapy</li> <li>Radiation therapy esp to GI tract, brain and total body irradiation.</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Pharmacological interventions (prophylactic/rescue antiemetics)</li> <li>Update oncologist</li> </ul>
Medications, supplements, substances	<ul style="list-style-type: none"> <li>Opioids analgesics e.g. morphine, tramadol</li> <li>Antibiotics</li> <li>Metformin</li> <li>Iron supplements</li> <li>Alcohol, Caffeine</li> <li>Withdrawal syndromes</li> <li>Overdose/Poisoning</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Prophylactic antiemetics for opioids</li> <li>Review medications</li> <li>Update primary prescriber, consider alternative medications, if appropriate</li> </ul>
Tumour-related	<ul style="list-style-type: none"> <li>Primary or secondary brain tumours/mets, base of skull/ leptomeningeal involvement</li> <li>Gastrointestinal/abdominal involvement causing gastric outlet/bowel obstruction, extrinsic compression, delayed GI motility</li> </ul>	<ul style="list-style-type: none"> <li>Patient education and optimize symptoms management</li> </ul>
Abdominal/GI/ GU related	<ul style="list-style-type: none"> <li>Previous GI surgery</li> <li>Dyspepsia/ Gastritis</li> <li>Constipation, obstruction</li> <li>Hydronephrosis, ascites, hepatomegaly</li> <li>Infections e.g. gastroenteritis</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Optimize symptoms management</li> </ul>
Nervous system related	<ul style="list-style-type: none"> <li>Raised intracranial pressure (e.g. Traumatic brain injury, hemorrhage)</li> </ul>	
Metabolic issues	<ul style="list-style-type: none"> <li>Electrolyte abnormalities e.g. hypercalcemia, hyponatraemia</li> <li>Hyper/hypo-glycaemia</li> <li>Uremia, acidosis</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Consider laboratory investigations and correction</li> <li>Update oncologist</li> </ul>
Psychological	<ul style="list-style-type: none"> <li>Anxiety, stress, anticipatory nausea/vomiting</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> </ul>

Patient Education	
Category	Specific points
Medication/ Communication	<ul style="list-style-type: none"> <li>Take your anti-nausea and vomiting medications as prescribed (regular vs. standby)</li> <li>Keep a diary of when you vomit/feel nausea and why</li> <li>Speak to your healthcare team, especially if your medications are not helping</li> <li>Talk with a dietitian about ways to get enough to eat even if you have nausea.</li> </ul>
Dietary measures	<ul style="list-style-type: none"> <li>Plan when it is best to eat and drink. Eat when you have the biggest appetite.</li> <li>Take small, frequent (5-6) meals throughout the day instead of 3 large meals</li> <li>Eat even if you do not feel hungry, do not skip meals/snacks as having empty stomach makes nausea worse for many people. Keep snacks nearby.</li> <li>Have relaxed, pleasant meals. Eat/drink slowly, do not rush.</li> <li>Avoid foods that make you feel nauseated (greasy, spicy, fatty, strong smelling). Do not force yourself to take good/drink that makes you feel sick.</li> <li>Choose foods that appeal to you. Eat small, bland/light/plain meals at room temperature.</li> <li>Do not drink too much fluids during mealtimes to reduce bloating</li> <li>Take clear, non-carbonated, non-caffeinated drinks/fluids or liquid meal replacements.</li> <li>Do not eat/drink anything until vomiting stops. Once vomiting stops, slowly introduce back diet as tolerated, start with little sips/small amounts of clear liquids (water, sport drinks, clear apple juice, broth), gradually escalate to full-liquid foods and drinks or those easy on stomach (white rice/bread/toast, plain noodles/pasta, crackers, eggs, cheese, broiled chicken/fish without skin) to solid foods.</li> </ul>
Lifestyle measures	<ul style="list-style-type: none"> <li>Eat/stay in a well ventilated place or take a walk outside. Avoid areas which are too warm/stuffy or open a window or turn on a fan. Fresh air can help relieve nausea.</li> <li>Wear clothes that are comfortable and loose especially when eating.</li> <li>Keep mouth clean by brushing teeth and rinsing your mouth before and after meals.</li> <li>Avoid lying flat for at least 1-2 hours after meals to reduce indigestion. Sit up to rest.</li> <li>Avoid alcohol, tobacco and caffeine</li> <li>Avoid triggers such as strong smells (fish, oil/food smells from being cooked) or odours that bother you (cigarette smoke, perfume, fragrances)</li> <li>If you are nauseated from food smells and are unable to cook, get someone else to help with the cooking or prepare and freeze meals in advance</li> <li>Rest well and exercise as tolerated</li> </ul>
Distraction/relaxation	<ul style="list-style-type: none"> <li>Use distraction techniques e.g. chatting with family or friends, watch TV, short walk</li> <li>Use relaxation techniques e.g. listen to music, deep breathing, focus your mind on a happy scene, pray</li> </ul>
Complementary/ Alternative Medicine	<ul style="list-style-type: none"> <li>Medicated oil/balm</li> <li>Ginger/peppermint candies, lemon drops, ginger ale, tea with lemon zest/mint leaves</li> <li>P6 acupoint (Neiguan) pressure/massage: <a href="https://www.mskcc.org/cancer-care/patient-education/acupressure-nausea-and-vomiting">https://www.mskcc.org/cancer-care/patient-education/acupressure-nausea-and-vomiting</a></li> </ul>

# Pain Practice Guide

Pain: A disorder characterized by the sensation of marked discomfort, distress or agony.

<b>[RED FLAGS: CTCAE 4]</b> Life-threatening consequences; urgent intervention indicated <ul style="list-style-type: none"> <li>• Signs suggestive of new or worsening intracranial pathology, spinal cord compression, acute coronary syndromes, ischemia, visceral perforation, bowel obstruction, peritonitis, hypercalcaemia, fracture and infection.</li> </ul>		<b>If Yes, advise patient to go to nearest DEM &amp; inform oncologist</b>																
<b>ASSESSMENT*</b>		<b>MANAGEMENT</b>																
<b>[Normal]</b> <ul style="list-style-type: none"> <li>• Do you have any pre-existing pain?</li> </ul>		<b>[Consider Contributing Factors]</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Determine need for further investigations</li> <li><input type="checkbox"/> Refer to specific management on next page.</li> </ul>																
<b>[Onset]</b> <ul style="list-style-type: none"> <li>• When did it begin? Is this a different pain?</li> <li>• Did the pain come on suddenly or gradually?</li> <li>• How often does it occur? How long does it last?</li> </ul>		<b>[Patient Education]</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Self-monitoring</li> <li><input type="checkbox"/> Try non-drug therapies for pain relief</li> <li><input type="checkbox"/> Compliance with treatment regimen</li> </ul>																
<b>[Provoking/ Palliating]</b> <ul style="list-style-type: none"> <li>• Was there any event that was associated to the onset of the pain (e.g. recent GCSF, falls, trauma)?</li> <li>• Is there anything that makes the pain better? Or worse?</li> </ul>																		
<b>[Quality] In the last 24 hours,</b> <ul style="list-style-type: none"> <li>• How would you describe the pain (e.g. throbbing, stabbing, aching, needle-prick)?</li> </ul>																		
<b>[Region/Radiation]</b> <ul style="list-style-type: none"> <li>• Where is the pain?</li> <li>• Does the pain radiate to other parts of the body?</li> </ul>																		
<b>[Severity/ Other symptoms]</b> <ul style="list-style-type: none"> <li>• On a scale of 0 to 10, how would you rate your pain level now? What is your pain score on average? At worst/ best?</li> <li>• On a scale of 0 to 10, how bothersome is this symptom to you?</li> <li>• Does the pain keep you awake at night?</li> <li>• Have you been experiencing any other symptoms? (e.g. nausea/vomiting, constipation, diarrhea, lower limb weakness)</li> </ul>																		
<b>[Treatment]</b> <ul style="list-style-type: none"> <li>• What pharmacological / non-pharmacological strategies have you tried? Was it effective?</li> <li>• If you are taking any medications to relieve the pain- How much? How often? Has this been effective? Any side effects?</li> </ul>																		
<b>[Value]</b> <ul style="list-style-type: none"> <li>• What do you believe is causing your pain?</li> <li>• What are your goals for pain management?</li> <li>• What are your concerns with regards to pain and pain management, if any?</li> </ul>																		
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #668d4c; color: white;">CTCAE GRADING</th> <th style="background-color: #668d4c; color: white;">Grade 1</th> <th style="background-color: #668d4c; color: white;">Grade 2</th> <th style="background-color: #668d4c; color: white;">Grade 3</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;">Pain grading scale</td> <td>Mild pain (pain score 1-3)</td> <td>Moderate pain (pain score 4-6);</td> <td>Severe pain (pain score 7-10);</td> </tr> <tr> <td style="vertical-align: top;"><b>[Understanding / Impact]</b> Does the pain prevent you from performing ADLs?</td> <td>Not limiting ADLs</td> <td>Limiting instrumental ADL</td> <td>Limiting self-care ADL</td> </tr> <tr> <td style="vertical-align: top;"><b>Plans</b></td> <td> <input type="checkbox"/> Patient education  <input type="checkbox"/> Return advice  <input type="checkbox"/> Refer to WHO Analgesic Ladder         </td> <td> <input type="checkbox"/> Patient education  <input type="checkbox"/> Refer to WHO Analgesic Ladder  <input type="checkbox"/> Seek urgent medical attention  <input type="checkbox"/> Update oncologist accordingly         </td> <td></td> </tr> </tbody> </table>			CTCAE GRADING	Grade 1	Grade 2	Grade 3	Pain grading scale	Mild pain (pain score 1-3)	Moderate pain (pain score 4-6);	Severe pain (pain score 7-10);	<b>[Understanding / Impact]</b> Does the pain prevent you from performing ADLs?	Not limiting ADLs	Limiting instrumental ADL	Limiting self-care ADL	<b>Plans</b>	<input type="checkbox"/> Patient education <input type="checkbox"/> Return advice <input type="checkbox"/> Refer to WHO Analgesic Ladder	<input type="checkbox"/> Patient education <input type="checkbox"/> Refer to WHO Analgesic Ladder <input type="checkbox"/> Seek urgent medical attention <input type="checkbox"/> Update oncologist accordingly	
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Image taken from:  
 Pergolizzi J, Raffa R. The WHO Pain Ladder: Do We Need Another Step?. Pract Pain Manag. 2014; 14 (1).

# Pain Reference Guide

Contributing Factors			Patient Education	
Category	Specific factors	Inform Oncologist/ Discuss specific management	Category	Specific points
Cancer-related	<ul style="list-style-type: none"> <li>Neuropathic pain (i.e. tumour or metastases compressing/infiltrating nerves)</li> <li>Nociceptive pain (e.g. bone/pleuritic pain, liver capsular stretch)</li> </ul>	<ul style="list-style-type: none"> <li>Patient education and optimize symptoms management</li> </ul>	Self-monitoring	<ul style="list-style-type: none"> <li>Keep a pain diary of the following aspects: <ul style="list-style-type: none"> <li>How does the pain feel like? E.g. burning, sharp</li> <li>When did the pain start?</li> <li>What makes the pain better or worse?</li> <li>Dose the pain interfere with any activities?</li> <li>How bad is the pain (pain score 0-10) ?</li> <li>The medications you are using- how much, how frequent?</li> </ul> </li> </ul>
Anti-cancer therapy & its side effects	<ul style="list-style-type: none"> <li>Hormonal therapy: tumour flare reaction, arthralgia, myalgia</li> <li>Chemotherapy: peripheral neuropathy, arthralgia, myalgia, mucositis, acute pain syndrome (Taxanes)</li> <li>Immunotherapy: pain at affected sites</li> <li>Post- RT pain/ flare to targeted sites</li> <li>Post-operative pain</li> <li>GVHD: pain at affected sites</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Optimize symptoms management e.g. short-term use of dexamethasone for RT flare if no contraindication</li> </ul>	Try non-drug therapies for pain relief	<ul style="list-style-type: none"> <li>Gentle massage of the feet, hands and forehead or near the site of your pain may help to relieve tension and stress over the area</li> <li>Use distraction techniques e.g. chatting with family or friends</li> <li>Use relaxation techniques e.g. listen to music, deep breathing, focus your mind on a happy scene</li> <li>Form peaceful and relaxing images in your mind with your eyes closed.</li> <li>Meditation can help with relaxation and reducing negative emotions associated with pain.</li> <li>Attending a support group can also help you learn about what others do to manage their pain.</li> <li>Ask your doctor about other therapies such as the use of hot/cold pads and acupuncture. While it is not suitable/unsafe for some, it can be effective for others.</li> <li>Counselling and therapy can help you cope better with your pain.</li> </ul>
Side effects of medications	<ul style="list-style-type: none"> <li>GCSF: transient bone pain</li> <li>Bone-modifying agents, bisphosphonates: bone pain, osteonecrosis of the jaw</li> <li>Ondansetron: headache</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Review medication and update primary prescriber</li> </ul>	Compliance with treatment regimen	<ul style="list-style-type: none"> <li>Take your medications as prescribed. Do not wait till your pain worsens before taking the pain medications as it could take longer for the pain to subside.</li> <li>Certain medications take some time to work. Discuss with your doctor or nurse if you feel that the prescribed medication does not help with your pain</li> </ul>

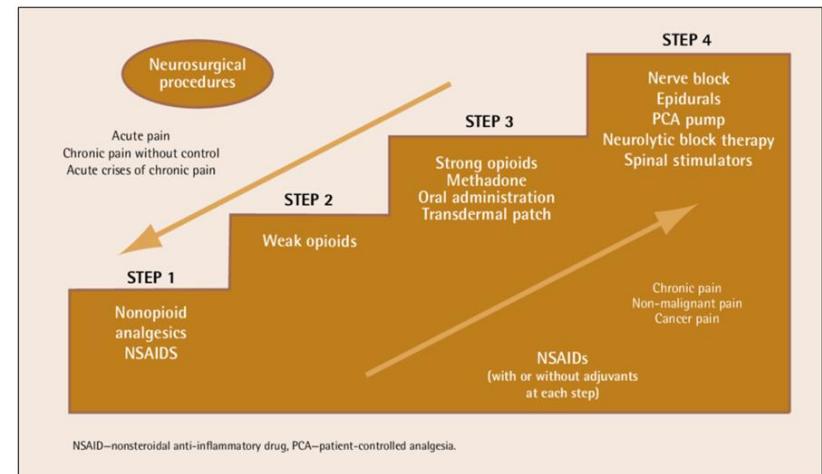


Image taken from:  
Vargas-Schaffer Grisell. (2012). Is the WHO analgesic ladder still valid?. Can Fam Physician. 56.

# Sexual Problems Practice Guide

Sexuality: Encompasses sexual behaviors, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction. Is a complex phenomenon which encompasses our biological being, sense of self, and the way in which we relate to others. Intimacy: Sharing of identity, mutual acceptance, closeness and reciprocated rapport more closely linked to communication than sexual function. Intimacy, like sexuality, is intrinsic to a sense of self.

ASSESSMENT	MANAGEMENT
<b>[Normal] (Highlight to normalize the issue)</b> <ul style="list-style-type: none"> <li>What problems are you facing (e.g. difficulty discussing/initiating sexual intimacy with your partner, low desire/libido, discomfort during intercourse, problems with erection)?</li> <li>Do you feel that your cancer diagnosis has led to changes in your sexual functioning?</li> </ul>	<b>[Consider Contributing Factors]</b> <ul style="list-style-type: none"> <li>Determine need for further investigations</li> </ul>
<b>[Onset]</b> <ul style="list-style-type: none"> <li>When did the problem(s) start?</li> </ul> <b>[Provoking / Palliating]</b> <ul style="list-style-type: none"> <li>What do you believe is causing the problem (e.g. tiredness, fear or worry, vaginal dryness, pain during intercourse, problem with erection)?</li> <li>Which problem(s) is most bothersome?</li> <li>What makes it worse or better?</li> </ul>	<b>[Patient Education]</b> <ul style="list-style-type: none"> <li>Improve physical and emotional intimacy</li> <li>Manage sexual activity concerns</li> <li>Manage body image and emotional concerns</li> </ul>
<b>[Quality]</b> <ul style="list-style-type: none"> <li>Can you describe the problem(s) with your sexual function? <ul style="list-style-type: none"> <li>(F): Problem with little or no interest in sex, decreased genital sensation (feeling), decreased vaginal lubrication (dryness), reaching orgasm, pain during sex; and or other (please specify)</li> <li>(M): Problem with little or no interest in sex, erection, reaching orgasm and or other (please specify).</li> </ul> </li> <li>Which problem(s) is most bothersome?</li> </ul>	<b>[Specialist Referrals PRN]</b> <ul style="list-style-type: none"> <li>Medical Social Worker/ Psychologist</li> <li>Sexual/couple counselling (RISE programme)</li> <li>Gynaecologist</li> <li>Urologist</li> <li>SCS (Sexologist)</li> </ul>
<b>[Treatment]</b> <ul style="list-style-type: none"> <li>Have you tried to do anything to address your concerns? Was this successful?</li> <li>Have you been able to discuss this with your partner? Are you able to work on this together?</li> </ul>	
<b>[Understanding ]</b> <ul style="list-style-type: none"> <li>How has this treatment/experience affected your body image i.e. how you see yourself ?</li> <li>How has this treatment/experience affected your relationship with your partner?</li> </ul>	
<b>[Value]</b> <ul style="list-style-type: none"> <li>How important is sexual health to you?</li> <li>Is there something about your sexual health that you would like to see a change?</li> </ul>	<input type="checkbox"/> Patient Education <input type="checkbox"/> Education Resource <input type="checkbox"/> Specialist Referrals PRN

# Sexual Problem Reference Guide

Contributing Factors			Patient Education	
Category	Specific factors	Discuss with Oncologist/ Specific management	Category	Specific points
Pre-existing medical conditions	<ul style="list-style-type: none"> <li>• Diabetes</li> <li>• Hypertension</li> <li>• Endometriosis</li> </ul>	<ul style="list-style-type: none"> <li>• Specialist referral to optimize management of pre-existing medical condition, if necessary</li> </ul>	Address misconceptions	<ul style="list-style-type: none"> <li>• Do take note that cancer is not contagious and your partner will not get cancer from kissing, touching or having sexual intercourse with you.</li> <li>• Engaging in sexual activity does not cause your cancer to grow faster, nor does it increase the chance of cancer coming back.</li> </ul>
Medications	<ul style="list-style-type: none"> <li>• SSRIs</li> <li>• Antihypertensives e.g. beta-blockers</li> </ul>	<ul style="list-style-type: none"> <li>• Review medication</li> </ul>	Improve physical and emotional intimacy	<ul style="list-style-type: none"> <li>• Spend more time communicating and actively listening to each other to maintain emotional closeness. This includes having open, honest talks regarding both your thoughts and feelings.</li> <li>• Show your feelings towards your partner through gestures such as holding hands, hugging, and kissing</li> </ul>
Anti-cancer treatment	<ul style="list-style-type: none"> <li>• Surgery (surgical sites which may result in infertility or altered sexual function/ body image)</li> <li>• Chemotherapy</li> <li>• Radiation therapy to pelvic area</li> <li>• Hormonal agents</li> <li>• Immunotherapy</li> <li>• Biologic agents</li> </ul>	<ul style="list-style-type: none"> <li>• Patient education</li> </ul>	Manage sexual concerns	<ul style="list-style-type: none"> <li>• Be patient with each other. It may take more time and effort to keep or get back the same level of intimacy you shared before cancer. Let your partner known if you are too tired to engage in sexual activities, and be open to different ways of feeling or creating sexual pleasure.</li> <li>• Try doing pelvic floor exercises. This may help reduce pain during sexual intercourse by relaxing and strengthening the pelvic floor muscles</li> <li>• Engage in exercises such as walking, dancing or gentle yoga, to help increase your energy and sexual vitality</li> <li>• Protective measures should be taken if and when engaging in sexual intercourse.</li> </ul>
Symptom burden	<ul style="list-style-type: none"> <li>• Physical symptoms (e.g. <b>fatigue</b>, pain, dyspnea) can alter comfort, interest, desire and ability to engage in sexual activities.</li> <li>• Menopausal symptoms (e.g. hot flushes, vaginal dryness, insomnia)</li> </ul>	<ul style="list-style-type: none"> <li>• Optimize symptoms management</li> <li>• Psychosocial Oncology referral (for expectation management)</li> <li>• Specialist referral (urologist, gynecologist) if necessary</li> </ul>	Manage body image and emotional concerns	<ul style="list-style-type: none"> <li>• Try to find quiet time when you can talk openly and honestly about your concerns, fears, or worries with your partner or close friend. Sometimes talking things out can make you feel better.</li> <li>• Keep up with your appearance (e.g. wearing a wig) to make yourself look and feel good</li> <li>• Engage in activities of self-care that will help you regain/maintain a positive body image e.g. eat healthy meals, exercise regularly, quit smoking</li> <li>• Practising deep breathing or engaging in hobbies like listening to music can also help you feel more relaxed.</li> <li>• Think positively about yourself. Remind yourself that you are a unique, special and valuable person and that you deserve to feel good about yourself.</li> </ul>
Psychological distress and body image disturbance	<ul style="list-style-type: none"> <li>• Anxiety, depression, fear, uncertainty</li> <li>• Body image disturbances (e.g. mastectomy, weight changes, hair loss, surgical scarring)</li> </ul>	<ul style="list-style-type: none"> <li>• Psychosocial Oncology and/or Psychiatrist referral</li> </ul>	Use topical treatment, if necessary	<ul style="list-style-type: none"> <li>• Topical vaginal moisturizers: use regularly 3-5 times per week for vaginal dryness. (<b>e.g. Vagisil, Prohydrate, Replens, Luvena</b>)</li> <li>• Lubricants: water-based lubricating gel (<b>liquid silk, astroglide, KY jelly</b>) before each sexual activity.</li> <li>• Topical lidocaine 2% gel PRN</li> </ul>
Partner concerns	<ul style="list-style-type: none"> <li>• Role shifting can cause difficulty in intimacy when partner has various roles e.g. caregiver, partner, lover.</li> </ul>	<ul style="list-style-type: none"> <li>• Psychosocial Oncology</li> </ul>		

# Sleep Problem Practice Guide

**Sleep-wake disturbances:** Perceived or actual alterations in sleep resulting in daytime impairment. Clinically it is manifested by difficulty falling or staying asleep, early morning awakenings, non-restorative sleep or daytime sleepiness. Includes sleep disorders such as insomnia, sleep apnea, and sleep related movement disorders. They may occur during all phases of the cancer trajectory.

**Insomnia:** Difficulty falling asleep, staying asleep and/or early awakening or non-restorative sleep that causes significant distress and impairs function. Insomnia is the most common category of sleep disorder. It is important to rule out other sleep disorders.

ASSESSMENT		MANAGEMENT		
<b>[Normal]</b> <ul style="list-style-type: none"> <li>What is your normal sleep pattern?</li> </ul>		<b>[Consider Contributing Factors]</b> <ul style="list-style-type: none"> <li>Determine need for further investigations</li> </ul>		
<b>[Onset]</b> <ul style="list-style-type: none"> <li>When did you notice a change in your sleep pattern?</li> </ul>		<b>[Patient Education]</b> <ul style="list-style-type: none"> <li>Regular exercise</li> <li>Sleep hygiene</li> <li>Relaxation strategies</li> <li>Useful apps</li> </ul>		
<b>[Provoking / Palliating]</b> <ul style="list-style-type: none"> <li>What brings on your sleeping problem? What makes it worse or better?</li> <li>Explore possible barriers to sleep (e.g. environmental factors, exercise and dietary patterns, stimulant use etc.)</li> </ul>		<b>[Specialist Referrals PRN]</b> <ul style="list-style-type: none"> <li>Medical Social Worker</li> <li>Psychiatrist</li> <li>Sleep Clinic</li> </ul>		
<b>[Quality]</b> Sleep log [Appendix A] <ul style="list-style-type: none"> <li>Describe your sleep pattern and problem (e.g. trouble falling asleep, staying asleep, daytime somnolence, poor sleep efficiency*) *Sleep efficiency = No. of hours slept / No. of hours spent in bed X 100%; Score &gt;85% = normal</li> </ul>				
<b>[Severity]</b> <ul style="list-style-type: none"> <li>On a scale of 0 to 10, how would you score your sleep problem?</li> </ul>				
<b>[Other symptoms]</b> Presence of: <ul style="list-style-type: none"> <li>Pain, fatigue, shortness of breath, cough</li> <li>Anxiety, worry, depression</li> <li>Have people around you noticed any unusual behaviours while you sleep? (e.g. snoring, sleep walking, interrupted breathing, leg movements or confusion)</li> </ul>				
<b>[Treatment]</b> <ul style="list-style-type: none"> <li>What sleeping strategies have you tried? Has any of the strategies been effective?</li> </ul>				
<b>[Understanding ]</b> <ul style="list-style-type: none"> <li>What do you believe is causing your sleep problem? How is it affecting you and/or your family? What is most concerning to you?</li> </ul>				
<b>[Value]</b> <ul style="list-style-type: none"> <li>Are there any beliefs, views or feelings about your sleep problem that are important to you and your family?</li> </ul>				
CTCAE GRADING (Insomnia)		Grade 1	Grade 2	
<b>[Understanding / Impact]</b> <ul style="list-style-type: none"> <li>How would you grade your <u>insomnia</u>?</li> </ul>		<input type="checkbox"/> Mild difficulty falling asleep, staying asleep or waking up early	<input type="checkbox"/> Moderate difficulty falling asleep, staying asleep or waking up early	<input type="checkbox"/> Severe difficulty falling asleep, staying asleep or waking up early
<b>Plans</b>		<input type="checkbox"/> Patient Education <input type="checkbox"/> Consider pharmacological treatment (e.g. Melatonin PR 2mg ON) <input type="checkbox"/> Return Advice <input type="checkbox"/> Specialist Referrals PRN		

# Sleep Problem Reference Guide

Contributing Factors		
Category	Specific factors	Inform Oncologist/ Discuss specific management
Organ failures	<ul style="list-style-type: none"> <li>Liver and/or renal failure causing sleep-wake reversal</li> <li>Heart failure causing orthopnoea</li> </ul>	Optimize symptoms management
Dementia	<ul style="list-style-type: none"> <li>Sleep-wake reversal with behavioural issues, problems with recent memories, difficulties in completing familiar tasks.</li> </ul>	Geriatric referral
Sleep Apnoea	<ul style="list-style-type: none"> <li>Daytime somnolence, morning headaches, nocturia</li> <li>Reported by other family members to have loud snoring, gasping, choking, interruptions in breathing while sleeping</li> <li>Obesity, large neck and/or waist circumference</li> </ul>	Sleep clinic referral
Restless Legs Syndrome	<ul style="list-style-type: none"> <li>Unpleasant/uncomfortable urge to move the legs during period of inactivity.</li> </ul>	Sleep hygiene advice
Metabolic issues	<ul style="list-style-type: none"> <li>Hypothyroidism or hyperthyroidism</li> </ul>	Endocrinology referral
Medications	<ul style="list-style-type: none"> <li>Stimulants e.g. Methylphenidate, modafinil</li> <li>Antidepressants e.g. SSRIs and SNRIs</li> <li>Glucocorticoids</li> </ul>	Review medications
Cancer- or treatment-related symptoms	<ul style="list-style-type: none"> <li>Pain, shortness of breath, nausea/vomiting, cough, hiccups, hot flashes, itching, diarrhea, frequent urination, recent weight changes.</li> </ul>	Optimize symptoms management
Psychological distress	<ul style="list-style-type: none"> <li>Generalized anxiety disorder, depression, stress, fear of recurrence, disease progression or death</li> </ul>	Psychosocial Oncology or Psychiatrist referral

Patient Education	
Category	Specific points
Exercise	<ul style="list-style-type: none"> <li>Regular exercise, use caution for patients with bone mets.</li> </ul>
Sleep Hygiene	<ul style="list-style-type: none"> <li>Maintain consistent bedtime</li> <li>Dark and quiet sleep environment with a comfortable room temperature</li> <li>Soothing activities before bedtime e.g. listen to relaxing music</li> <li>If not asleep within 20-30 minutes, get up and engage in a relaxing activity (e.g. reading) and return to bed when sleepy</li> <li>Avoid caffeine/exercise before sleep</li> <li>Limit daytime naps to less than 1 hour, and not too close to bedtime</li> <li>Ensure light exposure soon after waking</li> </ul>
Relaxation Strategies	<p><b>Relaxed (Diaphragmatic) Breathing</b></p> <ul style="list-style-type: none"> <li>Sit in a chair or lie down on your back</li> <li>While breathing through your nose with mouth closed, gently expand your belly to fill it with air each time you inhale.</li> <li>Breathe out through your mouth, empty your belly while pursing your lips like gently blowing on a candle.</li> <li>If you become dizzy or light-headed, take smaller breaths and slow down</li> </ul>
Muscle Relaxation	<ul style="list-style-type: none"> <li>Get in a comfortable position, calm yourself with relaxed breathing. Take 4 slow, deep breaths.</li> <li>Relax your body from face to toe, muscle by muscle. [Face-forehead-eyes-tongue-jaw-shoulders-neck-arms-hands-fingers-back-chest-abdomen-legs-feet-toes)</li> <li>For the next minute, let your entire body relax</li> </ul>
Useful apps	<p><b>Headspace</b></p> <p>Contains Sleep Stories, meditation programme as well as music to help you focus, relax and sleep.</p> <p><b>InsightTimer</b></p> <p>An app with guided meditations, live yoga classes/events, sleep talks and sleep meditations.</p> <p><b>Calm</b></p> <p>Contains Sleep Stories, meditation programme as well as music to help you focus, relax and sleep.</p> <p><b>Sleep Cycle</b></p> <p>Tracks sleep patterns and provides tips to optimize snooze time.</p>

# Appendix A Sleep Log

## Sleep Log

Please fill this out for the previous day and night no more than 3 hours after waking.  
The information can be an estimate when necessary.



NAME \_\_\_\_\_

WEEK OF \_\_\_\_\_

DAY	SUN	MON	TUES	WED	THURS	FRI	SAT
Did you nap?	<input type="checkbox"/> Yes <input type="checkbox"/> No						
For how long?	mins.						
At what time?							
Did you have any caffeine* after 6pm?	<input type="checkbox"/> Yes <input type="checkbox"/> No						
Did you drink alcohol after 6pm?	<input type="checkbox"/> Yes <input type="checkbox"/> No						
Did you use nicotine after 6pm?	<input type="checkbox"/> Yes <input type="checkbox"/> No						
Did you exercise?	<input type="checkbox"/> Yes <input type="checkbox"/> No						
Did you eat a heavy meal or snack after 6pm?	<input type="checkbox"/> Yes <input type="checkbox"/> No						
Did you take any sleeping medication	<input type="checkbox"/> Yes <input type="checkbox"/> No						
What medication?							
Amount							
At what time?							
Were you sleepy during the day?	<input type="checkbox"/> Yes <input type="checkbox"/> No						
NIGHT	SUN	MON	TUES	WED	THURS	FRI	SAT
What time did you turn off the lights to go to sleep?							
What time did you wake up?							
How many total hours did you sleep?							
How many times did you wake up in the night?							
Rate the quality of your sleep:	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
Do you feel you got enough sleep?							

\* Caffeine = coffee, tea, caffeinated soda, chocolate, energy drinks, certain medications.

# Chemotherapy-Induced Peripheral Neuropathy (CIPN) Practice Guide

CIPN: injury, or degeneration of the peripheral nerve fibres (motor, sensory, autonomic) caused by certain neurotoxic systemic therapy agents. Symptoms usually start in the fingers and toes and spread proximally in a glove and stocking distribution.

## [RED FLAGS]

- Spinal cord compression: Back/neck pain, difficulty walking, upper/lower limb weakness or numbness, urinary or faecal incontinence/retention.
- Acute extremity ischaemia: Unilateral pain with pallor and coldness localized in extremity that gradually increases in severity over time.

If Yes, advise patient to go to nearest DEM & inform oncologist

## MANAGEMENT

### [Consider Contributing Factors]

- Determine need for further investigations\*
- Refer to specific management on next page.

### [Patient Education]

- General advice
- Prevention of thermal injury
- Falls prevention

### [Specialist Referrals PRN]

- Rehabilitation medicine
- Physiotherapist (for prescription of lower limb exercises)
- Acupuncture
  - RMD (Dr. Tan Yeow Leng)
  - SGH Acupuncture Centre
  - Others (Chung Hwa, Thong Chai, Bao Zhong Tang)
- Medical Social Worker

### Note on Acupuncture:

- Check with primary oncologist if referral is contraindicated.
- SGH Rehab Dr Tan YL: Wed pm and Thurs pm, Full rate: \$68
- SGH Acupuncture Centre 6321 4746: Mon to Friday, Full rate \$93, Lower back and neck (MOH subsidize rate) \$40.

## ASSESSMENT\*

### [Normal]

- Do you have any pre-existing tingling and/or numbness in your hand and/or legs?
- Are you left or right-handed?

### [Onset]

- When did the symptoms begin? Is it gradual or sudden?

### [Provoking / Palliating]

- What brings it on?
- What makes it better or worse?
- Does it get better in between treatment?

### [Quality] In the last 24 hours,

- Can you describe the symptoms?
  - **Sensory:** numbness, tingling, pain, burning, hyperaesthesia, hyperalgesia
  - **Motor:** falls, muscle weakness, abnormal gait, paralysis, fine motor changes (e.g. buttoning, putting on jewellery)
  - **Autonomic:** constipation, urinary dysfunction, sexual dysfunction, orthostatic hypotension
- Are the symptom(s) intermittent or constant?

### [Region]

- Where are you experiencing your symptoms(e.g. toes, fingers)? Is it symmetrical or unilateral?

### [Severity]

- On a scale of 0 to 10, how bothersome is this symptom to you?

### [Treatment]

- What strategies/treatment have you tried? Have any of the strategies/treatments been effective?

### [Value]

- What do you believe is causing this problem?
- What is your comfort goal or acceptable level for this symptom (0-10 scale)?

### [Understanding/Impact]

- Do your symptoms affect your mood, ability to sleep and/or enjoy your hobbies?

	CTCAE GRADING	Grade 1	Grade 2	Grade 3
• Do your symptoms affect your role/occupation, function or ability to do activities of daily living?	Motor Grade	Asymptomatic; clinical or diagnostic observations only	Moderate symptoms or pain; limiting instrumental ADL (e.g. preparing meals, shopping, managing money)	Severe symptoms; Limiting self-care ADLs (e.g. bathing, dressing, feeding self, using the toilet, taking medications); Assistive device indicated.
	Sensory Grade	Asymptomatic; loss of deep tendon reflexes or paresthesia		
	Pain Grading Scale	Mild pain	Moderate pain	Severe Pain

### Plans

- Patient education
- Return advice
- Specialist referral PRN
- Return advice
- Update oncologist
- Consider pharmacological treatment (e.g. pregabalin, duloxetine)

# Chemotherapy-Induced Peripheral Neuropathy (CIPN) Reference Guide

Contributing Factors		
Category	Specific factors	Inform Oncologist/ Discuss specific management
<b>Chemotherapy regimen</b>	<ul style="list-style-type: none"> <li>Platinum compounds e.g. cisplatin, oxaliplatin</li> <li>Taxanes: Paclitaxel, Docetaxel</li> <li>Vinca alkaloids: vincristine</li> <li>Bortezumib (Velcade)</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> </ul>
<b>Acute neurotoxicity with oxaliplatin</b>	<ul style="list-style-type: none"> <li>Onset: 72-96 hours after each infusion</li> <li>Associated with cold exposures e.g. drinking cold liquids, inhaling cold air, direct contact with cold things</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> </ul>
<b>Tumour pathology</b>	<ul style="list-style-type: none"> <li>Direct compression or infiltration of nerves by primary or metastatic lesions</li> </ul>	<ul style="list-style-type: none"> <li>Patient education</li> <li>Optimize symptom control</li> </ul>
<b>Metabolic issues</b>	<ul style="list-style-type: none"> <li>Diabetes neuropathy, uraemia, hypothyroidism, Vitamin B12, and folic acid deficiencies</li> </ul>	<ul style="list-style-type: none"> <li>Patient education including compliance to primary care follow up.</li> <li>Endocrine referral</li> </ul>
<b>Autoimmune disease</b>	<ul style="list-style-type: none"> <li>Guillain-Barre syndrome</li> </ul>	<ul style="list-style-type: none"> <li>Neurology referral</li> </ul>

Patient Education	
Category	Specific points
<b>General advice</b>	<ul style="list-style-type: none"> <li>Do light exercises to strengthen your muscle</li> <li>Inspect your fingers and feet regularly for cuts and scrapes.</li> <li>Wear rubber gloves when washing dishes for better grip.</li> <li>Wear gloves when gardening or doing household repairs.</li> <li>Avoid driving if there's difficulty feeling the gas, brake pedals and steering wheel; or difficulty alternating foot between pedals</li> <li>Avoid operating power tools or needlework until numbness has recovered.</li> <li>Orthostatic hypotension: Dangle legs prior to getting up, hold onto secure surfaces when getting up and change positions slowly.</li> <li>Constipation: Adequate daily fluid intake and high fibre diet</li> <li>Urinary retention: Adequate daily fluid intake</li> </ul>
<b>Prevention of thermal injury</b>	<ul style="list-style-type: none"> <li>Wear padded gloves when handling hot objects.</li> <li>Avoid exposure of fingers and toes to very hot or very cold temperatures.</li> <li>Avoid ice packs or heating pads.</li> <li>For patients receiving Oxaliplatin: wear gloves, socks and scarf to protect against cold. Avoid eating cold food or drinks for few days after treatment.</li> </ul>
<b>Falls prevention</b>	<ul style="list-style-type: none"> <li>Keep living areas well lit.</li> <li>Wear well-fitting, non-skid shoes with rubber soles.</li> <li>Install handrails where needed, use anti-slip mats.</li> <li>Remove objects that can cause you to slip and fall (e.g. rugs, clutter, spilled water).</li> <li>Use assistive device (walking stick, walking frame) if needed.</li> </ul>

# Mood Alteration: Depression Practice Guide

Depression: A disorder characterized by melancholic feelings of grief or unhappiness.

<b>[RED FLAG: CTCAE Grade 4]</b> <b>Suicidal ideation; danger to self or others.</b>		<b>If Yes, please refer to Suicide assessment and management</b>							
<b>ASSESSMENT</b> <b>Consider taking a corroborative history from family/caregiver if appropriate</b>			<b>MANAGEMENT (All)</b>						
<b>[Normal]</b> What is your mood like before illness?			<b>Consider Contributing Factors</b>						
<b>[Onset]</b> When did you notice changes in your mood? Did it happen gradually or was there a triggering event?			<input type="checkbox"/> <u>_&gt; 2 weeks</u>						
<b>[Provoking / Palliating]</b> What have you noticed that makes your feelings of sadness better or worse? (Consider asking about substance use, e.g. alcohol, smoking, drugs)									
<b>[Quality: PHQ-9]</b> Over the <u>last 2 weeks</u> , how often have you been bothered by any of the following problems: 1. Little interest or pleasure in doing things 2. Feeling down, depressed or hopeless 3. Trouble falling asleep, staying asleep or sleeping too much 4. Feeling tired or having little energy 5. Poor appetite or overeating 6. Feeling bad about yourself (or that you are a failure or have let yourself or your family down) 7. Trouble concentrating on things, e.g. watching television 8. Moving or speaking so slowly that others could have noticed? Or the opposite- being so fidgety or restless that you have been moving around a lot more than usual 9. Thoughts that you would be better off dead or hurting yourself in some way (Yes to Q9: Treat as Grade 3)			<b>Add up score for each point under PHQ-9:</b> 0 = Not at all; 1= Several days; 2= More than half the days; 3=Nearly everyday						
			<input type="checkbox"/> Total score 5-9	<input type="checkbox"/> Total score 10-14	<input type="checkbox"/> Total score 15-27*	* PHQ-9 Scores of >14 warrants medical treatment for depression			
<b>[Treatment]</b> What medications or treatments are you currently using? How effective are these?						<b>[Patient Education]</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Explore &amp; reinforce on getting support from family/social network</li> <li><input type="checkbox"/> Encourage patient to reach out for help</li> <li><input type="checkbox"/> Educate on signs &amp; symptoms of worsening depression, to seek medical attention as needed</li> <li><input type="checkbox"/> General advice</li> <li><input type="checkbox"/> Self- care</li> <li><input type="checkbox"/> Ways to deal with unhappy thoughts</li> <li><input type="checkbox"/> Provide support resources PRN</li> </ul>			
CTCAE GRADING		Grade 1	Grade 2	Grade 3	<b>[Specialist Referrals PRN]</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Medical Social Worker</li> <li><input type="checkbox"/> Psychologist</li> <li><input type="checkbox"/> Psychiatrist</li> </ul>				
<b>[Severity]</b> On a scale of 0 to 10, how would you score your depression?		<input type="checkbox"/> 1-3: Mild depressive symptoms	<input type="checkbox"/> 4-6: Moderate depressive symptoms	<input type="checkbox"/> 7-10: Severe depressive symptoms					
<b>[Understanding / Impact]</b> Are you having difficulty performing daily activities because of the low mood?		<input type="checkbox"/> Not affecting function	<input type="checkbox"/> Limiting Instrumental ADLs	<input type="checkbox"/> Limiting self-care ADLs					
<b>Plans</b> For all grades, use clinical judgement to ascertain need for specialist referrals and/or other interventions.		<input type="checkbox"/> Patient Education <input type="checkbox"/> Support Resources <input type="checkbox"/> Specialist Referrals <input type="checkbox"/> Return advice			<input type="checkbox"/> Advise to seek immediate medical attention <input type="checkbox"/> Update oncologist				

Support Resources			Patient Education	
Category	Sources		Category	Specific points
Useful Contacts	<b>Samaritans of Singapore (SOS)</b>	1767	General advice	<ul style="list-style-type: none"> <li>Acknowledge and validate distress</li> <li>Provide reassurance that depression is a common problem among cancer patients and survivors, and that it can be managed.</li> <li>Strengthen the habit of being grateful - acknowledge good things that happen each day</li> <li>Address treatable contributing factors e.g. pain.</li> </ul>
	<b>S'pore Association of Mental Health (SAMH)</b>	1800-283-7019		
	<b>National Care Hotline</b>	1800-202-6868		
	<b>IMH Mental Health Helpline</b>	6389-2222		
Useful videos	<b>10 tips for Better Mental Health (from Singhealth)</b>	<a href="https://m.youtube.com/watch?v=agPsqRDNS.3g">https://m.youtube.com/watch?v=agPsqRDNS.3g</a>	Self-care	<ul style="list-style-type: none"> <li>Sleep hygiene</li> <li>Self-management of fatigue</li> <li>Eat well to cope with stress of illness and treatment</li> <li>Encourage routine exercise</li> <li>Engage in at least one pleasurable activity a day</li> <li>Sort out other sources of stress to help better cope with additional burden of cancer treatment e.g. involve others to help with house chores</li> <li>Share their feelings with loved ones who are understanding and supportive</li> </ul>
	<b>Mental Health Minute (from National Institute of Health)</b>	<a href="https://m.youtube.com/watch?v=lQhpetkwWnM">https://m.youtube.com/watch?v=lQhpetkwWnM</a>		
Useful websites	<b>Samaritans of Singapore (SOS)</b>	<a href="https://www.sos.org.sg">https://www.sos.org.sg</a>	Dealing with unhappy thoughts	<ul style="list-style-type: none"> <li>Normalize feelings</li> <li>Identify where the thoughts come from</li> <li>Explore how they have been coping</li> <li>Explore what they think could have been done to change or improve the situation</li> <li>Suggest different strategies e.g. mindful breathing, writing down thoughts to help with processing thoughts and feelings, listening to music that evokes good feelings etc.</li> <li>Encourage the use of affirming thoughts to work through difficulties e.g. "I can do it", "I can get through this", "This feeling will pass"</li> </ul>
	<b>Mental Health Resources- How and Where to Seek Help</b>	<a href="https://stayprepared.sg/mymentalhealth/">https://stayprepared.sg/mymentalhealth/</a>		
	<b>S'pore Association of Mental Health (SAMH)</b>	<a href="https://www.samhealth.org.sg">https://www.samhealth.org.sg</a>		
Useful apps	<b>Calm</b> Contains Sleep Stories, meditation programme as well as music to help you focus, relax and sleep.			
	<b>Happify</b> Overcome negative thoughts with science-based activities and games.			
	<b>Headspace</b> Guided meditations on managing stress, everyday anxiety, etc. There's also Move Mode i.e. mood-boosting, at-home workouts.			
	<b>Adult Colouring App</b> e.g. Happy Colour by Numbers			

# Suicide assessment and management

This guideline provides a framework for staff to assess risk for **suicide in palliative care patients**, **ethical guidance** (see appendix A) for **medical confidentiality in patients at risk of self-harm as well as advice on subsequent management**. There is no evidence that talking about suicide increases the suicide risk to the patient.<sup>[1]</sup> Several versions of the Columbia Suicide Severity Rating Scale (C-SSRS) have been developed for clinical practice. Following is the Columbia-Suicide Severity Rating Scale (C-SSRS)- Screen version which can be used as a routine screening instrument for suicide in palliative care patients; and definitely with the exercise of clinical judgement.

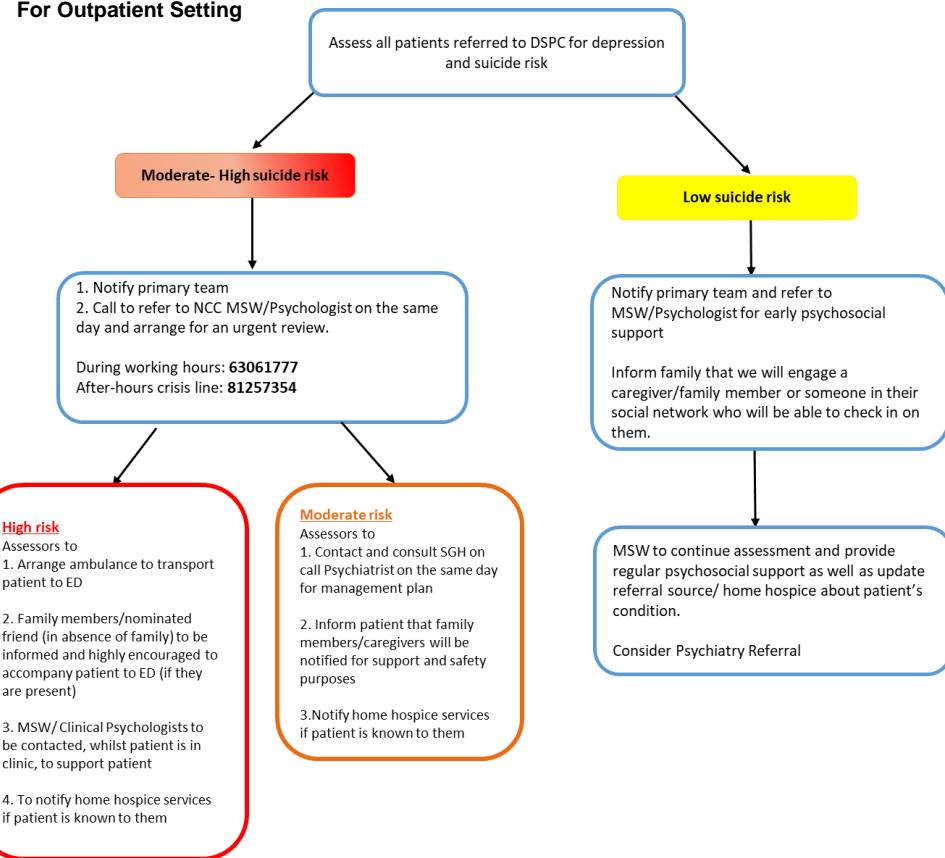
## A. Columbia suicide severity rating scale- screen version<sup>[2]</sup>

Answers are colour-coded for immediate risk level identification and interventions can be modified using clinical judgement.

- Low Risk
- Moderate Risk
- High Risk

Past Month	
<b>Instructions:</b> Ask questions that are <b>bolded</b> and <b>underlined</b> .	YES
<b>Ask Questions 1 and 2</b>	
1) <u>Have you wished you were dead or wished you could go to sleep and not wake up?</u>	YES
2) <u>Have you actually had any thoughts of killing yourself?</u>	YES
<b>If YES to 2, ask questions 3, 4, 5, and 6. If NO to 2, go directly to question 6.</b>	
3) <u>Have you been thinking about how you might do this?</u>	YES
4) <u>Have you had these thoughts and had some intention of acting on them?</u>	YES
5) <u>Have you started to work out or worked out the details of how to kill yourself? Do you intend to carry out this plan?</u>	YES
6) <u>Have you ever done anything, started to do anything, or prepared to do anything to end your life?</u>	YES
<b>If YES, ask:</b> <u>Was this within the past three months?</u>	

## For Outpatient Setting



## C. For Caregivers/ Family members who have suicide risk

1. Please employ the steps in flowchart B for caregivers/ family members who have suicide risk after screening with C-SSRS screening tool.
2. Please refer to Medical Social Worker as soon as possible.
3. Whenever appropriate, please give at-risk persons the following helpline/resources:

Samaritans of Singapore (SOS): <https://www.sos.org.sg>



24-Hour Care Text: 9151 1767

CAREmail : [pat@sos.org.sg](mailto:pat@sos.org.sg)

## References

1. T Dazzi, R Gribble, S Wessely et al, Does asking about suicide and related behaviours induce suicidal ideation? What is the evidence? *Psychol Med* 2014 Dec; 44 (16): 3361-3
2. Columbia university, 2008, HRSA, 09/12/2020 (<https://cssrs.columbia.edu/the-columbia-scale-cssrs/healthcare/accesseed>)

# Anxiety Practice Guide

Anxiety: A disorder characterized by apprehension of danger and dread accompanied by restlessness, tension, tachycardia, and dyspnoea unattached to a clearly identifiable stimulus

## [RED FLAG: CTCAE Grade 4] Life-threatening consequences; urgent intervention indicated

- Risk of harm to self and/or to others
- Severe anxiety or agitation, or the presence of psychosis or confusion/delirium (infection, electrolyte imbalance)

If Yes, please refer to **Suicide assessment and management**  
If Yes, please advise to seek immediate medical attention

## ASSESSMENT

## MANAGEMENT (All)

### [Normal]

- Do you feel nervous easily or worry a lot before illness?

### [Onset]

- When did you notice yourself feeling more nervous or worried than before?

### [Provoking / Palliating]

- What have you noticed that makes your feelings of anxiety either better or worse? (Consider asking about substance use, e.g. alcohol, smoking, drugs)

### [Quality: GAD-7]

Over the last 2 weeks, how often have you been bothered by any of the following problems:

1. Feeling nervous, anxious, or on edge
2. Not being able to stop or control worrying
3. Worrying too much about differing things
4. Trouble relaxing
5. Being so restless that it is hard to sit still
6. Becoming easily annoyed or irritable
7. Feeling afraid as if something awful might happen

Add up score for each point under GAD-7:  
0 = Not at all; 1= Several days; 2= More than half the days; 3=Nearly everyday

Total score  
5-9

Total score  
10-14

Total score  
15-21

### [Consider Contributing Factors]

- Consider possible contributing factors for anxiety such as comorbidities (e.g. panic disorder, social phobia, hyperthyroidism, phaeochromocytoma), medications/substances/stimulants (e.g. caffeine), stressful or traumatic events

### [Patient Education]

- General advice
- Self-care
- Dealing with anxious thoughts
- Organize information

### [Specialist Referrals PRN]

- Medical Social Worker/Psychologist
- Psychiatrist

### [Severity]

- On a scale of 0 to 10, how would you score your anxiety (0 being not anxious, 10 being worst anxiety possible) ?

### [Treatment]

- What have you tried or have found helpful to manage feelings of anxiety?

### [Value]

- What is most concerning to you?

## CTCAE GRADING

### Grade 1

Mild symptoms

### Grade 2

Moderate symptoms; limiting Instrumental ADLs

### Grade 3

Severe symptoms, limiting self-care ADLs

### [Understanding / Impact]

- How is anxiety affecting your ability to perform daily activities?

- Patient education
- Support resources
- Specialist referral
- Return advice

- Advise to seek immediate medical attention
- Update oncologist

### Note

Use clinical judgement to:

- grade anxiety
- ascertain need for specialist referrals and/or other interventions

Support Resources		
Category	Sources	
Useful Contacts	Samaritans of Singapore (SOS)	1800-221-444
	S'pore Association of Mental Health (SAMH)	1800-283-7019
	National Care Hotline	1800-202-6868
Useful websites	IMH Mental Health Helpline	6389-2222
	Samaritans of Singapore (SOS)	<a href="https://www.sos.org.sg">https://www.sos.org.sg</a>
	Mental Health Resources- How and Where to Seek Help	<a href="https://stayprepared.sg/mymentalhealth/">https://stayprepared.sg/mymentalhealth/</a>
Useful apps	S'pore Association of Mental Health (SAMH)	<a href="https://www.samhealth.org.sg">https://www.samhealth.org.sg</a>
	Calm	Contains Sleep Stories, meditation programme as well as music to help you focus, relax and sleep.
	Breathe2Relax	A stress management tool providing practice exercises for diaphragmatic breathing.
	Breathwrk	Guided breathing exercises to help alleviate anxiety, fall asleep, get energized, and more!
	AntiStress Anxiety Relief Game	Fun games e.g. bubble popper, bubble wrap, and fidget spinner.
Adult Colouring App e.g. Happy Colour by Numbers, Colorfy		

Patient Education		
Category	Specific points	
General advice	<ul style="list-style-type: none"> <li>Acknowledge and provide reassurance that stress and anxiety are common problems among cancer patients and survivors</li> <li>Though there's no best way of coping, having different strategies may provide greater sense of control and confidence</li> <li>Address treatable contributing factors e.g. pain.</li> </ul>	
Self-care	<ul style="list-style-type: none"> <li>Provide sleep hygiene advice</li> <li>Advice on eating well to cope with stress of illness and treatment</li> <li>Encourage routine exercise</li> </ul>	
Dealing with anxious thoughts	<ul style="list-style-type: none"> <li>Normalize feelings</li> <li>Identify where the thoughts come from</li> <li>Explore how they have been coping</li> <li>Suggest different strategies e.g. mindful breathing, writing down thoughts to help with processing thoughts and feelings, listening to music that evokes good feelings etc.</li> <li>Encourage the use of affirming thoughts to work through difficulties e.g. "I can do it", "I can get through this", "This feeling will pass"</li> </ul>	
Organize information	<ul style="list-style-type: none"> <li>Take time to work out information</li> <li>Share their feelings with loved ones who are understanding and supportive</li> <li>Sort out other sources of stress to help better cope with additional burden of cancer treatment e.g. involve others to help with house chores</li> <li>Encourage consults with healthcare teams whenever needed</li> <li>Bring a supportive family member or friend to consultations</li> </ul>	

# Spiritual/ Religious Concerns

<b>[RED FLAG]</b> Suicidal ideation; danger to self or others.	If Yes, please refer to Suicide assessment and management
ASSESSMENT [FICA]	MANAGEMENT (All)
<b>[F: Faith or Beliefs]</b> <ul style="list-style-type: none"><li>• Do you consider yourself spiritual or religious?</li><li>• Do you have spiritual beliefs that help you cope with stress/your illness?</li><li>• What gives your life meaning?</li></ul> <b>[I: Importance and influence]</b> <ul style="list-style-type: none"><li>• What importance does your faith or belief have in your life?</li><li>• On a scale of 0 (not important) to 5 (very important), how would you rate the importance to faith/belief in your life?</li><li>• Have your beliefs influenced you in how you handle stress/ your illness?</li><li>• What role do your beliefs play in your healthcare decision making?</li></ul> <b>[C: Community]</b> <ul style="list-style-type: none"><li>• Are you part of a spiritual or religious community?</li><li>• Is this of support to you and how?</li><li>• Is there a person or group of people you really love or who are really important to you?</li></ul> <b>[A: Address]</b> <ul style="list-style-type: none"><li>• How would you like me, your healthcare provider, to address these issues in your healthcare?</li></ul>	<b>[Therapeutic Communication Technique]</b> <ul style="list-style-type: none"><li><input type="checkbox"/> Compassionate presence, acknowledge concerns</li><li><input type="checkbox"/> Reflective listening, query about important life events</li><li><input type="checkbox"/> Support patient's sources of spiritual strength</li><li><input type="checkbox"/> Open ended questions to elicit feelings</li><li><input type="checkbox"/> Inquire about spiritual beliefs, values and practices</li></ul> <b>[Patient Education]</b> <ul style="list-style-type: none"><li><input type="checkbox"/> Encourage to share concerns and struggles with trusted friends or loved ones.</li><li><input type="checkbox"/> Consider sharing concerns with religious leaders if patient is linked to a religious group</li></ul> <b>[Referrals PRN]</b> <ul style="list-style-type: none"><li><input type="checkbox"/> Medical social workers</li><li><input type="checkbox"/> Support group</li></ul>

# References

1. Common Terminology Criteria for Adverse Events (CTCAE) Version 5.0. (2017)
2. National Cancer Centre Singapore Website
3. BC Cancer Agency Symptoms Management Guidelines
4. National Comprehensive Cancer Network (NCCN) Guidelines
5. American Society of Clinical Oncology (ASCO) Guidelines
6. European Society for Medical Oncology (ESMO) Guidelines
7. Multinational Association of Supportive Care in Cancer (MASCC) Guidelines
8. UpToDate Website

## Specific references:

1. [Constipation]: Heaton, K.W. & Lewis, S.J. (1997), 'Stool form scale as a useful guide to intestinal transit time'. Scandinavian Journal of Gastroenterology, vol. 32, no.9, 920-4.
2. [Depression]: Kroenke,K. & Spitzer, R.L. (2002). The PHQ-9: A new depression and diagnostic severity measure. Psychiatric Annals, 32, 509-521.
3. [Anxiety]: Spitzer, R.L., Kroenke, K, Williams, J.B.& Lowe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. Arch Intern Med, 166(10): 1092-7
4. [Spiritual/Religious Concern]: Puchalski, C.M. (2014). The FICA Spiritual History Tool #274. Journal of Palliative Medicine, 17(1), 105-106.