

Malnutrition Characteristics

Characteristics	Non severe/Moderate	Severe
Insufficient Energy Intake	≤ 75% for ≥ 7 days	≤ 50% for ≥ 5 days
Unintended Weight Loss	1-2% in 1 week 5% in 1 month 7.5% in 3 months	>2% in 1 week >5% in 1 month >7.5% in 3 months
Loss of Subcutaneous Fat (orbital, rib cage, tricep)	Mild loss of subcutaneous fat	Moderate loss of subcutaneous fat
Loss of Muscle Mass (grip strength, temple, chest, shoulder, back, thighs, calves)	Mild muscle wasting	Moderate muscle wasting
Fluid Accumulation (feet, legs, arms, back, perineal)	Mild generalized or localized fluid collection	Moderate generalized or localized fluid collection
Diminished Functional Capacity (Karnofsky)	No change White et al	Decline in physiological function

Validated Nutrition Screening Tools for Oncology Patients

Inpatient	Outpatient
Patient Generated Subjective Global Assessment (PG-SGA) - 17 data points -Screening and Assessment Tool	Patient Generated Subjective Global Assessment (PG-SGA) -17 data points -Screening and Assessment Tool
Malnutrition Screening Tool (MST) -3 data points	Malnutrition Screening Tool (MST) -3 data points
Malnutrition Screening Tool for Cancer Patients (MSTC) –only validated in one hospital setting at this time	
Malnutrition Universal Screening Tool (MUST)	

Scored Patient-Generated Subjective Global Assessment (PG-SGA)

History (Boxes 1-4 are designed to be completed by the patient.)

1. Weight (See Worksheet 1)

In summary of my current and recent weight:

I currently weigh about _____ kg
I am about _____ cm tall

One month ago I weighed about _____ kg
Six months ago I weighed about _____ kg

During the past two weeks my weight has:

☐ decreased ⁽¹⁾ ☐ not changed ⁽²⁾ ☐ increased ⁽³⁾ Box 1 ☐

3. Symptoms: I have had the following problems that have kept me from eating enough during the past two weeks (check all that apply):

- ☐ no problems eating ⁽⁴⁾
- ☐ no appetite, just did not feel like eating ⁽⁵⁾
- ☐ nausea ⁽⁶⁾
- ☐ constipation ⁽⁷⁾
- ☐ mouth sores ⁽⁸⁾
- ☐ things taste funny or have no taste ⁽⁹⁾
- ☐ problems swallowing ⁽¹⁰⁾
- ☐ pain; where? ⁽¹¹⁾ _____
- ☐ other** ⁽¹²⁾ _____

** Examples: depression, money, or dental problems

Box 3 ☐

2. Food Intake: As compared to my normal intake, I would rate my food intake during the past month as:

- ☐ unchanged ^(a)
- ☐ more than usual ^(b)
- ☐ less than usual ^(c)
- ☐ I am now taking:
 - ☐ normal food but less than normal amount ^(d)
 - ☐ little solid food ^(e)
 - ☐ only liquids ^(f)
 - ☐ only nutritional supplements ^(g)
 - ☐ very little of anything ^(h)
 - ☐ only tube feedings or only nutrition by vein ⁽ⁱ⁾

Box 2 ☐

4. Activities and Function: Over the past month, I would generally rate my activity as:

- ☐ normal with no limitations ^(a)
- ☐ not my normal self, but able to be up and about with fairly normal activities ^(b)
- ☐ not feeling up to most things, but in bed or chair less than half the day ^(c)
- ☐ able to do little activity and spend most of the day in bed or chair ^(d)
- ☐ pretty much bedridden, rarely out of bed ^(e)

Box 4 ☐

Additive Score of the Boxes 1-4 ☐ A ☐ B ☐ C ☐ D

The remainder of this form will be completed by your doctor, nurse, or therapist. Thank you.

5. Disease and its relation to nutritional requirements (See Worksheet 2)

All relevant diagnoses (specify) _____

Primary disease stage (circle if known or appropriate) I II III IV Other _____

Age _____

6. Metabolic Demand (See Worksheet 3)

7. Physical (See Worksheet 4)

Global Assessment (See Worksheet 5)

- ☐ Well-nourished or anabolic (SGA-A)
- ☐ Moderate or suspected malnutrition (SGA-B)
- ☐ Severely malnourished (SGA-C)

Total PG-SGA score

(Total numerical score of A+B+C+D above)
(See triage recommendations below)

Clinician Signature _____

RD RN PA MD DO Other _____

Date _____

Nutritional Triage Recommendations: Additive score is used to define specific nutritional interventions including patient & family education, symptom management including pharmacologic intervention, and appropriate nutrient intervention

(food, nutritional supplements, enteral, or parenteral triage). First line nutrition intervention includes optimal symptom management

0-1 No intervention required at this time. Re-assessment on routine and regular basis during treatment.

2-3 Patient & family education by dietitian, nurse, or other clinician with pharmacologic intervention as indicated by symptom survey (Box 3) and laboratory values as appropriate.

4-8 Requires intervention by dietitian, in conjunction with nurse or physician as indicated by symptoms survey (Box 3).

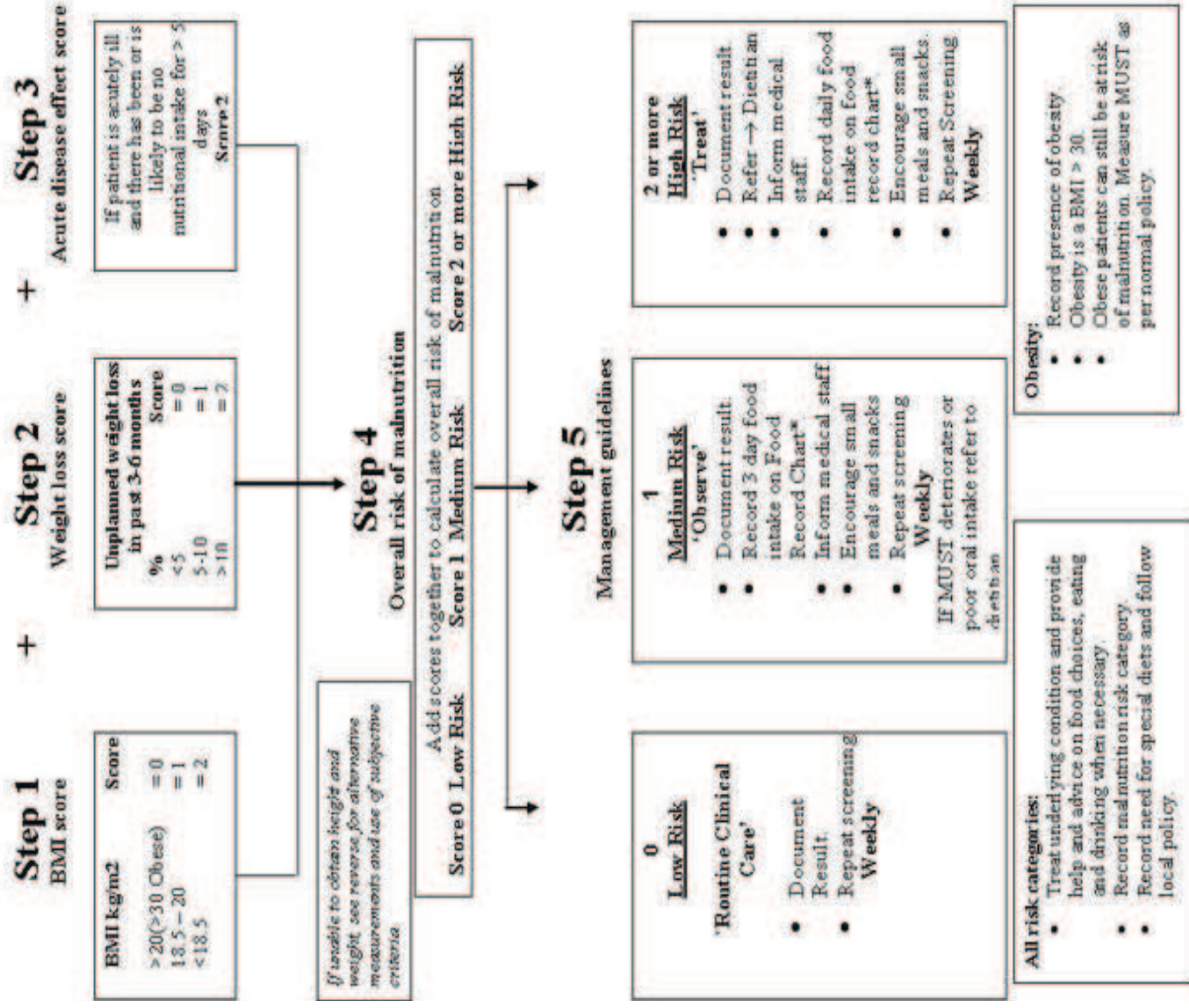
≥ 9 Indicates a critical need for improved symptom management and/or nutrient intervention options.

Malnutrition Screening Tool (MST)

Question	Score
Have you lost weight recently without trying?	
No	0
Unsure	2
Yes	See below
If yes, how much weight (kg) have you lost?	
1–5	1
6–10	2
11–15	3
> 15	4
Unsure	2
Have you been eating poorly because of a decreased appetite?	
No	0
Yes	1
Total*	

*Score of two or more = patient at risk of malnutrition.

'MALNUTRITION UNIVERSAL SCREENING TOOL'



$$\text{MSTC} = -0.116 + (1.777 \times \text{intake change}) + (1.304 \times \text{Eastern Cooperative Oncology Group performance status}) + (1.568 \times \text{weight loss}) + (-0.187 \times \text{body mass index})$$

<u>Intake change:</u>	no change or increase - 0
	mild decrease - 1
	large decrease - 2
<u>Weight loss:</u>	no weight loss or increase -0
	weight loss- 1
<u>ECOG performance status:</u>	normal without limit -0
	self activity possible with symptoms- 1
	in bed less than 1/2 day with symptoms -2
	in bed more than ½ day with symptoms -3
	in bed all day -4
<u>BMI:</u>	weight (kg)/height (m2)