Patient-Generated Subjective Global Assessment (PG-SGA)

PG-SGA is a 4 in 1 tool that can be used for nutrition screening, assessment, triaging and monitoring.

Materials required:

- **PG-SGA worksheet**

Procedure:

The PG-SGA consists of 2 main components. The patient generated component, (also known as the PG-SGA short form) and then worksheets 1 to 5.

The patient generated component:

Consists of boxes 1-4 and can be completed by the patient prior to dietitian assessment.

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

History: Boxes 1 - 4 are designed to be completed by the patient.
[Boxes 1-4 are referred to as the PG-SGA Short Form (SF)]

Patient Identification Information

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 (0) ☐ increased (0)

Box 1 ☐

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

☐ unchanged (0)
☐ more than usual (0)
☐ less than usual (1)

I am now taking

☐ *normal food* but less than normal amount (1)
☐ little solid food (2)
☐ only liquids (3)
☐ only nutritional supplements (3)
☐ very little of anything (4)
☐ only tube feedings or only nutrition by vein (0) **Box 2** ☐

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 (0)
☐ no appetite, just did not feel like eating (3)   ☐ vomiting (3)
☐ nausea (1)   ☐ diarrhea (3)
☐ constipation (1)   ☐ dry mouth (1)
☐ mouth sores (2)   ☐ smells bother me (1)
☐ things taste funny or have no taste (1)   ☐ feel full quickly (1)
☐ problems swallowing (2)   ☐ fatigue (1)
☐ pain; where? (3) _____
☐ other (1)** _____
  Examples: depression, money, or dental problems **Box 3 ☐

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

☐ normal with no limitations (0)
☐ not my normal self, but able to be up and about with fairly normal activities (1)
☐ not feeling up to most things, but in bed or chair less than half the day (2)
☐ able to do little activity and spend most of the day in bed or chair (3)
☐ pretty much bed ridden, rarely out of bed (3)

Box 4 ☐

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

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Additive Score of Boxes 1-4 ☐ **A**

Box 1 - Assesses chronic, intermediate, or acute weight change.

Complete for both 1 and 6 months. Use 6-month history only if 1 month is not available. Refer to worksheet 1 for weight loss scoring.

The maximum score is 5 points for this box. Up to 4 points for weight loss and up to one point for the past 2 weeks

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1. **Weight** *(See Worksheet 1)*

In summary of my current and recent weight:

> While height is not essential for scoring, the app calculates BMI

I currently weigh about _____ pounds
I am about _____ feet _____ inches tall

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

> Complete both 1 & 6 months; for scoring, use 1 mo if available. Use 6 months only if 1 month is not available

During the past two weeks my weight has:
☐ decreased $_{(1)}$ ☐ not changed $_{(0)}$ ☐ increased $_{(0)}$

> Box 1 max score = 5 points: up to 4 pts from wt loss + up to 1 point for past 2 wks

Box 1 ☐

Box 2 - Assesses changes in the amount, type and consistency of food intake during the past 2 months.

Score how the patient self-rates his/her intake.

Note: The score is not additive for this box. Use the highest score checked i.e., max score = 4.

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2. **Food intake:** As compared to my normal intake, I would rate my food intake during the past month as
☐ unchanged $_{(0)}$
☐ more than usual $_{(0)}$
☐ less than usual $_{(1)}$

> Score how the patient self-rates his/her intake during the past month; this helps to address recent deficit / current risk

I am now taking
☐ *normal food* but less than normal amount $_{(1)}$
☐ little solid food $_{(2)}$
☐ only liquids $_{(3)}$
☐ only nutritional supplements $_{(3)}$

> Box 2 not additive; max = 4; use the highest score checked, no matter how many options checked; not additive

☐ very little of anything $_{(4)}$
☐ only tube feedings or only nutrition by vein $_{(0)}$ **Box 2** ☐

Box 3 - Assesses symptoms that have negatively influenced food intake/absorption or utilisation of nutrients during the past 2 weeks.

Note: Only score symptoms impacting on nutritional intake. Add all points for box 3 total score.

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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 $_{(0)}$
☐ no appetite, just did not feel like eating $_{(3)}$ ☐ vomiting $_{(3)}$
☐ nausea $_{(1)}$ ☐ diarrhea $_{(3)}$
☐ constipation $_{(1)}$ ☐ dry mouth $_{(1)}$
☐ mouth sores $_{(2)}$ ☐ smells bother me $_{(1)}$
☐ things taste funny or have no taste $_{(1)}$ ☐ feel full quickly $_{(1)}$
☐ problems swallowing $_{(2)}$ ☐ fatigue $_{(1)}$
☐ pain; where? $_{(3)}$ _____
☐ other $_{(1)}$** _____
   Examples: depression, money, or dental problems   **Box 3 ☐

Box 4 - Assesses the patients' activities and function over the past month and is based on the Eastern Cooperative Oncology Group (ECOG) performance status.

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

☐ normal with no limitations $_{(0)}$

☐ not my normal self, but able to be up and about with fairly normal activities $_{(1)}$

☐ not feeling up to most things, but in bed or chair less than half the day $_{(2)}$

☐ able to do little activity and spend most of the day in bed or chair $_{(3)}$

☐ pretty much bed ridden, rarely out of bed $_{(3)}$

Box 4 ☐

Worksheet 1 – Provides guidance on scoring weight loss

Use 1 month data if available.

Use points to score weight change and add one extra point if patient has lost weight during the past 2 weeks.

Worksheet 1 – Scoring Weight Loss

To determine score, use 1-month weight data if available. Use 6-month data only if there is no 1-month weight data. Use points below to score weight change and add one extra point if patient has lost weight during the past 2 weeks. Enter total point score in Box 1 of PG-SGA.

Weight loss in 1 month	Points	Weight loss in 6 months
10% or greater	4	20% or greater
5-9.9%	3	10- 19.9%
3-4.9%	2	6- 9.9%
2-2.9%	1	2- 5.9%
0-1.9%	0	0- 1.9%

Numerical score from Worksheet 1 ☐

Worksheet 2 – Identifies conditions that may increase nutritional risk or requirements

Add one point for each of these conditions identified.

5. Worksheet 2 – Disease and its relation to nutritional requirements:
Score is derived by adding 1 point for each of the following conditions:

☐ Cancer   ☐ Presence of decubitus, open wound or fistula

☐ AIDS   ☐ Presence of trauma

☐ Pulmonary or cardiac cachexia   ☐ Age greater than 65

☐ Chronic renal insufficiency

Other relevant diagnoses (specify) _____

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

Numerical score from Worksheet 2 ☐ **B**

Worksheet 3 – Assesses metabolic demand considering fever (how high and for how long) and corticosteroid use

6. Worksheet 3 – Metabolic Demand
Score for metabolic stress is determined by a number of variables known to increase protein & caloric needs. **Note:** Score fever intensity or duration, whichever is greater. The score is additive so that a patient who has a fever of 38.8 °C (3 points) for < 72 hrs (1 point) and who is on 10 mg of prednisone chronically (2 points) would have an additive score for this section of 5 points.

Stress	none (0)	low (1)	moderate (2)	high (3)
Fever	no fever	> 37.2 and < 38.3	≥ 38.3 and < 38.8	≥ 38.8 °C
Fever duration	no fever	< 72 hours	72 hours	> 72 hours
Corticosteroids	no corticosteroids	low dose (< 10 mg prednisone equivalents/day)	moderate dose (≥ 10 and < 30 mg prednisone equivalents/day)	high dose (≥ 30 mg prednisone equivalents/day)

Numerical score from Worksheet 3 ☐ **C**

Worksheet 4 – Captures the results of a nutrition focused physical exam

7. Worksheet 4 – Physical Exam
Exam includes a subjective evaluation of 3 aspects of body composition: fat, muscle, & fluid. Since this is subjective, each aspect of the exam is rated for degree. Muscle deficit/loss impacts point score more than fat deficit/loss. Definition of categories: 0 = no abnormality, 1+ = mild, 2+ = moderate, 3+ = severe. Rating in these categories is *not* additive but are used to clinically assess the degree of deficit (or presence of excess fluid).

Muscle Status

temples (temporalis muscle)	0	1+	2+	3+
clavicles (pectoralis & deltoids)	0	1+	2+	3+
shoulders (deltoids)	0	1+	2+	3+
interosseous muscles	0	1+	2+	3+
scapula (latissimus dorsi, trapezius, deltoids)	0	1+	2+	3+
thigh (quadriceps)	0	1+	2+	3+
calf (gastrocnemius)	0	1+	2+	3+
Global muscle status rating	**0**	**1+**	**2+**	**3+**

Fat Stores

orbital fat pads	0	1+	2+	3+
triceps skin fold	0	1+	2+	3+
fat overlying lower ribs	0	1+	2+	3+
Global fat deficit rating	**0**	**1+**	**2+**	**3+**

Fluid status

ankle edema	0	1+	2+	3+
sacral edema	0	1+	2+	3+
ascites	0	1+	2+	3+
Global fluid status rating	**0**	**1+**	**2+**	**3+**

Point score for the physical exam is determined by the overall subjective rating of the total body deficit.

No deficit	score – 0 points	**Again, muscle deficit/loss takes precedence over fat loss or fluid excess.**
Mild deficit	score – 1 point	
Moderate deficit	score – 2 points	
Severe deficit	score – 3 points	

Numerical Score for Worksheet 4 ☐ **D**

Total PG-SGA Score (Total numerical score of A+B+C+D) ☐

Clinician Signature _____ RD RN PA MD DO Other _____ Date _____

Global PG-SGA Category Rating (Stage A, Stage B or Stage C) ☐

Scoring of physical exam:

A score of 0-3 points for each site is given.

No deficit = 0 points

Mild deficit = 1 point

Moderate deficit = 2 points

Severe deficit = 3 points

Point score for the physical exam is determined by the overall subjective rating of the total body deficit.

No deficit	score – 0 points	**Again, muscle deficit/loss takes precedence over fat loss or fluid excess.**
Mild deficit	score – 1 point	
Moderate deficit	score – 2 points	
Severe deficit	score – 3 points	

Determine global rating for muscle, fat and fluid stores, noting that muscle loss takes precedence. Determine overall rating and record in Box D

Note: You do not have to complete assessment at all sites to have a global sense for loss or deficit of muscle or fat. Remember the maximum point score for the physical exam is only 3 points – and you are not likely to be off by more than 1 point.

Scoring:

TOTAL PG-SGA SCORE = A + B + C + D

Total PG-SGA Score (Total numerical score of A+B+C+D)	☐
Global PG-SGA Category Rating (Stage A, Stage B or Stage C)	☐

Worksheet 5 – **Global rating of nutritional status**

A = well nourished,
B = moderate or suspected malnutrition,
C = severely malnourished.

You may find it easiest to circle A, B or C for each category as you work down the list. The global status will be determined by the column with the most circles.

Worksheet 5 – PG-SGA Global Assessment Categories

Category	Stage A Well-nourished	Stage B Moderate/suspected malnutrition	Stage C Severely malnourished
Weight	No weight loss OR recent non-fluid wt gain	≤ 5% loss in 1 month (≤10% in 6 months) OR Progressive weight loss	> 5% loss in 1 month (>10% in 6 months) OR Progressive weight loss
Nutrient intake	No deficit OR Significant recent improvement	Definite decrease in intake	Severe deficit in intake
Nutrition Impact Symptoms (NIS)	None OR significant recent improvement allowing adequate intake	Presence of NIS (Box 3 of PG-SGA)	Presence of NIS (Box 3 of PG-SGA)
Functioning	No deficit OR Significant recent improvement	Moderate functional deficit OR Recent deterioration	Severe functional deficit OR Recent significant deterioration
Physical Exam	No deficit OR chronic deficit but with recent clinical improvement	Evidence of mild to moderate loss of muscle mass &/or muscle tone on palpation &/or loss of SQ fat	Obvious signs of malnutrition (e.g., severe loss muscle, fat, possible edema)

Total PG-SGA Score:

The PG-SGA provides a score, which is a continuous measure (from 0-16) with the higher the score, the higher the malnutrition risk.

The score can be used to triage nutrition intervention.

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.

Triage based on PG-SGA point score
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 lab values as appropriate.
4-8   Requires intervention by dietitian, in conjunction with nurse or physician as indicated by symptoms (Box 3).
≥ 9   Indicates a critical need for improved symptom management and/or nutrient intervention options.

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Frequently asked questions:

Q: Should we score all symptoms present, or only those impacting nutritional intake?
A: Only score those that affect nutritional intake.

Q: If a symptom was affecting intake withing the past 2 weeks but has resolved on the day of assessment, should it still be scored?
A: Yes

Q. Do we score for reduced activity levels even if this is not due to nutrition status (e.g. trauma)?
A: Yes, one week of complete bed rest can be associated with up to 4% loss in lean body mass.

Q: Should I use loss of weight over 1 month or 6 months?
A: Use 1 month if available, this gives a more recent idea of metabolic status (anabolic or catabolic)

Q: If a patient is receiving 100% nutrition requirements via enteral/parenteral nutrition but still has nutrition impact symptoms, do we still score them?

A: Yes. This box helps to determine what symptoms are stopping the patient meeting requirements orally and what nutrition interventions are required.

Key references:

Ottery FD. Patient-Generated Subjective Global Assessment In: The Clinical Guide to Oncology Nutrition ed. PD McCallum & CG Polisena, 2000; pp 11–23 Chicago: The American Dietetic Association

Bauer J, Capra S, Ferguson M. Use of the scored Patient-Generated Subjective Global Assessment (PG-SGA) as a nutrition assessment tool in patients with cancer. Eur J Clin Nutr. 2002 Aug;56(8):779-85. doi: 10.1038/sj.ejcn.1601412.

Also available on the patient global platform in 20 different languages. Each language has undergone translation and cross-cultural adaptation. https://pt-global.org/pt-global/