

# Assessing Person-Centered Health Outcomes in Cancer Patients

*These recommendations are offered as a starting point for consideration. They are not necessarily the best choices for every application and do not substitute for a comprehensive literature review.*

## Key Domains to Consider in Cancer

Both cancer and its treatments can have a significant impact on an individual's **physical functioning** and symptoms of **fatigue, pain, anxiety** and **depression**. To capture these effects, patient-reported assessments have a long history of being used successfully in oncology clinical trials, observational studies, population surveillance studies, and, more recently, quality improvement initiatives and healthcare delivery.

## Suggested HealthMeasures for Primary Domains in Cancer

### Physical Function

A computer adaptive test (CAT) maximizes the precision of the score and minimizes the number of questions a patient has to answer. Thus, we recommend the PROMIS® Physical Function CAT (4-12 questions), which measures mobility and upper extremity physical function. If CAT is not possible, the Physical Function 8c or 10a (8 or 10 questions) short form is available. The NIH Toolbox for Assessment of Neurological and Behavioral Function (NIH Toolbox®) offers measures that must be administered by a trained proctor to evaluate motor function and takes about 30 minutes.

### Fatigue

PROMIS Fatigue measures assess both the experience of fatigue (frequency, duration, and intensity) and the impact of fatigue on physical, mental, and social activities. If computer technology is available, the PROMIS Fatigue CAT (4-12 questions) offers an option for brief but precise assessment. If CAT is not possible, the PROMIS Fatigue 7a for large group comparisons or Fatigue 13a (FACIT-Fatigue) short form for individual evaluation is available.

### Pain

For pain intensity, consider the Pain Intensity 3a (3 questions) scale. Pain Interference considers the consequences of pain on relevant aspects of a person's life, including the impact of pain on social, cognitive, emotional, physical, and recreational activities. Consider the PROMIS Pain Interference CAT (4-12 questions); alternatively, the PROMIS Pain Interference 6a (6 questions) short form is an option.

### Anxiety

The PROMIS Anxiety CAT (4-12 questions) is appropriate for persons with cancer; another option is the PROMIS v1.0 Anxiety 4a (4 questions) short form for comparing large groups or the Anxiety 8a (8 questions) short form for comparing small groups or monitoring an individual patient.

## Summary

- Recommended primary domains for cancer research or care include physical function, fatigue, pain, anxiety and depression.
- HealthMeasures offers brief, psychometrically sound measures for these domains.
- Recommended assessment times include those scheduled to capture the effects of treatment as well as longer-term outcomes, such as survivorship.

## Depression

Options for measuring depression include the PROMIS Depression CAT (4-12 questions), the PROMIS Depression 4a (4 questions) short form for comparing large groups or PROMIS 8a short form for small group comparisons.

## Suggested HealthMeasures for Secondary Domains in Cancer

Because of the impact of cancer on the many aspects of a person's physical, emotional and social functioning, other health status and quality of life domains can also be significantly impacted and represent secondary domains worth assessment:

Secondary HealthMeasures	Description
PROMIS Cognitive Function 8a (8 questions) short form <b>or</b> NIH Toolbox Cognition Battery (approx. 30 min.)	PROMIS: Concerns and perceived decline in mental acuity, concentration, verbal and nonverbal memory, and verbal fluency; NIH Toolbox: Assessment of <b>Executive Function, Attention, Episodic Memory, Language, Processing Speed and Working Memory</b>
PROMIS Satisfaction with Social Roles and Activities 4a (4 questions) short form; Ability to Participate in Social Roles and Activities 4a (4 questions) short form; Social Isolation 4a (4 questions) short form. Use the 8a short forms for individual evaluation.	Satisfaction: Satisfaction with performing one's usual social roles and activities; Ability: Perceived ability to perform one's usual social roles and activities; Isolation: Perceptions of being avoided, excluded, detached, disconnected from, or unknown by, others
PROMIS-29 Profile (29 questions) for large group comparisons or PROMIS-57 for individual evaluation.	Measures Physical Function, Fatigue, Pain Interference, Pain Intensity, Sleep Disturbance, Depression, Anxiety, Ability to Participate in Social Roles and Activities

## Assessment Times

Ideally, a pre-intervention or pre-surgery assessment should be captured to serve as a reference point for monitoring response to treatment, with a follow-up assessment outside of the post-operative recovery period or post intervention. Assessment can also be used to measure decompensation, stability and improvement in people with stable cancer.

## Additional Information

The [www.HealthMeasures.net](http://www.HealthMeasures.net) website includes more information about measure selection, administration platforms, scoring, and interpretation. Its *Search & View Measures* tool includes access to all HealthMeasures described here. A [Forum](#) allows for questions and responses from the HealthMeasures community. The HealthMeasures team is also available for collaboration or consultation via [help@HealthMeasures.net](mailto:help@HealthMeasures.net).

## Primary HealthMeasures for Cancer Patients

- PROMIS Physical Function CAT **or** PROMIS Physical Function 8c or 10a short form
- PROMIS Fatigue CAT **or** PROMIS Fatigue 7a or 13a (FACIT-Fatigue) short form.
- PROMIS Pain Interference CAT **or** PROMIS Pain Interference 6a short form.
- PROMIS Anxiety CAT, **or** PROMIS Anxiety 4a or 8a short form.
- PROMIS Depression CAT **or** PROMIS Depression 4a or 8a short form.
- Use longer short form for individual patient evaluation.

## Learn More!

You can read about CATs and watch a video tutorial at the [HealthMeasures.net](http://HealthMeasures.net) website [here!](#)