

# 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 **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 (V1.0 bank; 4-12 questions), which measures mobility and upper extremity physical function. If CAT is not possible, the Physical Function V1.0 10a (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-Cancer (PROMIS-Ca) Fatigue CAT (v1.0 bank; 4-12 questions) offers an option for brief but precise assessment. The PROMIS-Ca measures were developed for use with any cancer patient. If CAT is not possible, the PROMIS Fatigue v1.0 7a (7 questions) short form is available.

### Pain

For pain intensity, consider the Pain Intensity V1.0 3a (3 questions) short form. 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-Ca Pain Interference CAT (V1.1 bank; 4-12 questions) or the PROMIS Pain Interference CAT (v1.1 bank; 4-12 questions); alternatively, the PROMIS Pain Interference V1.0 6a (6 questions) short form is an option.

### Anxiety

The PROMIS-Ca Anxiety CAT (v1.0 bank; 4-12 questions) or PROMIS Anxiety CAT (v1.0 bank; 4-12 questions) are appropriate for persons with cancer; another option is the PROMIS v1.0 Anxiety 4a (4 questions) short form.

## 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-Ca Depression CAT (v1.0 bank; 4-12 questions) or the PROMIS Depression CAT (v1.0 bank; 4-12 questions) are options; alternatively, the PROMIS v1.0 Depression 4a (4 questions) short form is an option.

## 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	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)	Measures Physical Function, Fatigue, Pain Interference, Pain Intensity, Sleep Disturbance, Depression, Anxiety, Ability to Participate in Social Roles and Activities
PROMIS Global Health Scale (10 questions)	Global ratings of general health. Scores are produced for physical health and mental health.

## 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 measurement selection, data collection tools, scoring, and interpretation. Its *Search for 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 V1.0 10a short form
- PROMIS Cancer Fatigue CAT **or** PROMIS Fatigue 7a short form.
- PROMIS-Ca Pain Interference CAT, PROMIS Pain Interference CAT **or** PROMIS Pain Interference 6a short form.
- PROMIS-Ca Anxiety CAT, PROMIS Anxiety CAT, **or** PROMIS Anxiety 4a short form.
- PROMIS-Ca Depression CAT, PROMIS Depression CAT **or** PROMIS Depression 4a short form.

## Learn More!

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