

Assessing Person-Centered Health Outcomes in Adults with Diabetes

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 Diabetes

Diabetes is the leading cause of blindness, kidney disease, and non-traumatic lower limb amputations. It increases risk for heart disease and stroke. Both Type 1 and Type 2 Diabetes result in chronically high blood sugar that must be regulated in order to mitigate the effects of the disease on a wide variety of bodily systems. Diabetes and its treatments can have a significant impact on an individual's **global health, including: fatigue, cognitive function, sexual function and satisfaction, mood and general life satisfaction**. Patient-reported outcomes assessments can be used in both clinical care and clinical research for monitoring a patient's quality of life and the functional impact of Diabetes, both of which are important to adherence to self-care and treatment adherence.

Suggested HealthMeasures for Primary Domains in Diabetes

Depression

PROMIS Depression assesses negative mood (sadness, guilt), views of self (self-criticism, worthlessness), and social cognition (loneliness, interpersonal alienation), as well as decreased positive affect and engagement (loss of interest, meaning, and purpose). It is available as an 8-item short form or as a computer adaptive test (CAT).

Fatigue

Persistent and chronic fatigue is common in Diabetes patients. The PROMIS Fatigue (FACIT-Fatigue) measure assesses extent of fatigue experience and the effect of that fatigue on daily activities. It is available as a 13-item short form or via CAT.

Cognition

Cognitive dysfunction is common among diabetes patients who also have increased risk of developing Alzheimer's or dementia. The PROMIS Cognitive Function measure assesses mental acuity, concentration, verbal and nonverbal memory, verbal fluency, etc. The PROMIS Cognitive Function Abilities assesses patient-perceived functional abilities with regard to cognitive tasks. Both PROMIS measures are available as an 8-item short form or as computer adaptive tests. Additionally, the NIH Toolbox Cognition battery is available as a physician administered test.

Global Health Scale

The PROMIS Global Health measure is a general health assessment that includes ratings of general physical and mental health as well as ability to participate in social roles and daily tasks. It is available via a 10-item short form.

Summary

- Recommended primary domains for Diabetes research or care include depression, fatigue, cognition, and global health.
- Recommended secondary domains for Diabetes research or care include anger, sexual function and satisfaction, and life satisfaction.
- HealthMeasures offers brief, psychometrically sound measures for these domains.
- Recommended assessment times include pre-treatment (baseline) and post-treatment.

Suggested HealthMeasures for Secondary Domains in Diabetes

Diabetes may impact many aspects of a person's physical, emotional and social functioning, which means that other health status and quality of life domains can also be significantly impacted and represent secondary domains worth assessing:

Secondary HealthMeasures	Description
PROMIS Anger 5-item short form or CAT	Assesses angry mood (irritability, frustration), negative social cognitions (interpersonal sensitivity, envy, disagreeableness), and efforts to control anger.
PROMIS Sexual Function and Satisfaction: Brief Profile (Male)	Assesses sexual satisfaction, ability to achieve and maintain an erection for sexual activity, etc.
PROMIS Sexual Function and Satisfaction: Brief Profile (Female)	Assesses sexual satisfaction, wetness or dryness of the vagina during sexual activity, vaginal pain during sexual activity, etc.
PROMIS Life Satisfaction 5-item short form or CAT	Assesses one's cognitive evaluation of life experiences and whether one likes his/her life or not.

Assessment Times

Ideally, patient-report measures included in the set of primary domains (and secondary domains if patient response burden is not too great) would be used at a variety of assessment time points including pre- and post- treatment intervention, both in clinical care and clinical trials. Capturing these PROs in general clinical care for pre-diabetic patients could also be useful for comparisons to post-diagnosis data.

Additional Information

The www.HealthMeasures.net website includes more information about measurement selection, data collection tools, scoring, and interpretation. Its [Search and View Measures](#) tool includes access to all HealthMeasures described here. The *Forum* allows for questions and responses from the HealthMeasures community. The HealthMeasures team is also available for collaboration or consultation via help@healthmeasures.net.

Primary HealthMeasures for Diabetes Patients

- PROMIS Depression 8-item short form or CAT
- PROMIS Fatigue 13-item short form or CAT
- PROMIS Cognitive Function 8-item short form or CAT
- PROMIS Global Health 10-item short form

Learn More!

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