

# NIH: Patient-Reported Outcomes Measurement Information System (PROMIS®)

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*Functional Vision and Visual Function*

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# Disclosures

- Professor, UCLA Department of Medicine, Division of General Internal Medicine and Health Services Research ([drhays@ucla.edu](mailto:drhays@ucla.edu))
- Research funding from NIH for PROMIS and Patient-Centered Assessment Resource (PCAR)
- Collaborator on prior vision-related projects with NEI, FDA, and Allergan





# PROMIS

Self-report measures that assess physical, mental, and social health in adults and children.

Can be used with the general population and with individuals living with chronic conditions

T-score metric for U.S. general population  
(Mean = 50, SD = 10)



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ASCQ-Me™  
Adult Stroke Out Quality of Life Measurement Information System



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# PROMIS® Adult Self-Reported Health

Global Health

## Physical Health

Physical Function  
Pain Intensity  
Pain Interference  
Fatigue  
Sleep Disturbance

## Mental Health

Depression  
Anxiety

## Social Health

Ability to  
Participate in Social  
Roles & Activities

PROMIS Profile  
Domains

PROMIS Additional  
Domains

Pain Behavior  
Pain Quality  
Sleep-related  
Impairment  
Sexual Function  
Gastro-Intestinal  
Symptoms  
Dyspnea

Anger  
Cognitive Function  
Alcohol Use,  
Consequences, &  
Expectancies  
Smoking  
Substance Use  
Psychosocial Illness  
Impact  
Self-efficacy

Satisfaction with  
Social Roles &  
Activities  
Social Support  
Social Isolation  
Companionship

10/7/2016



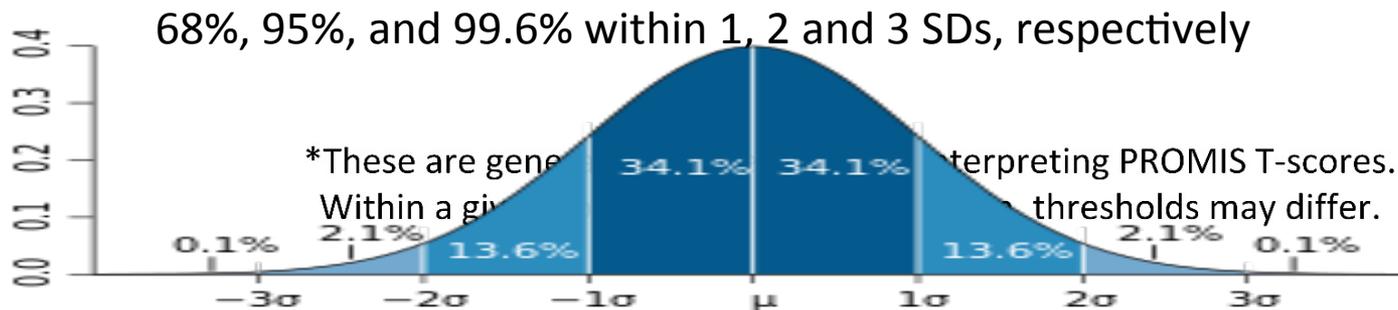
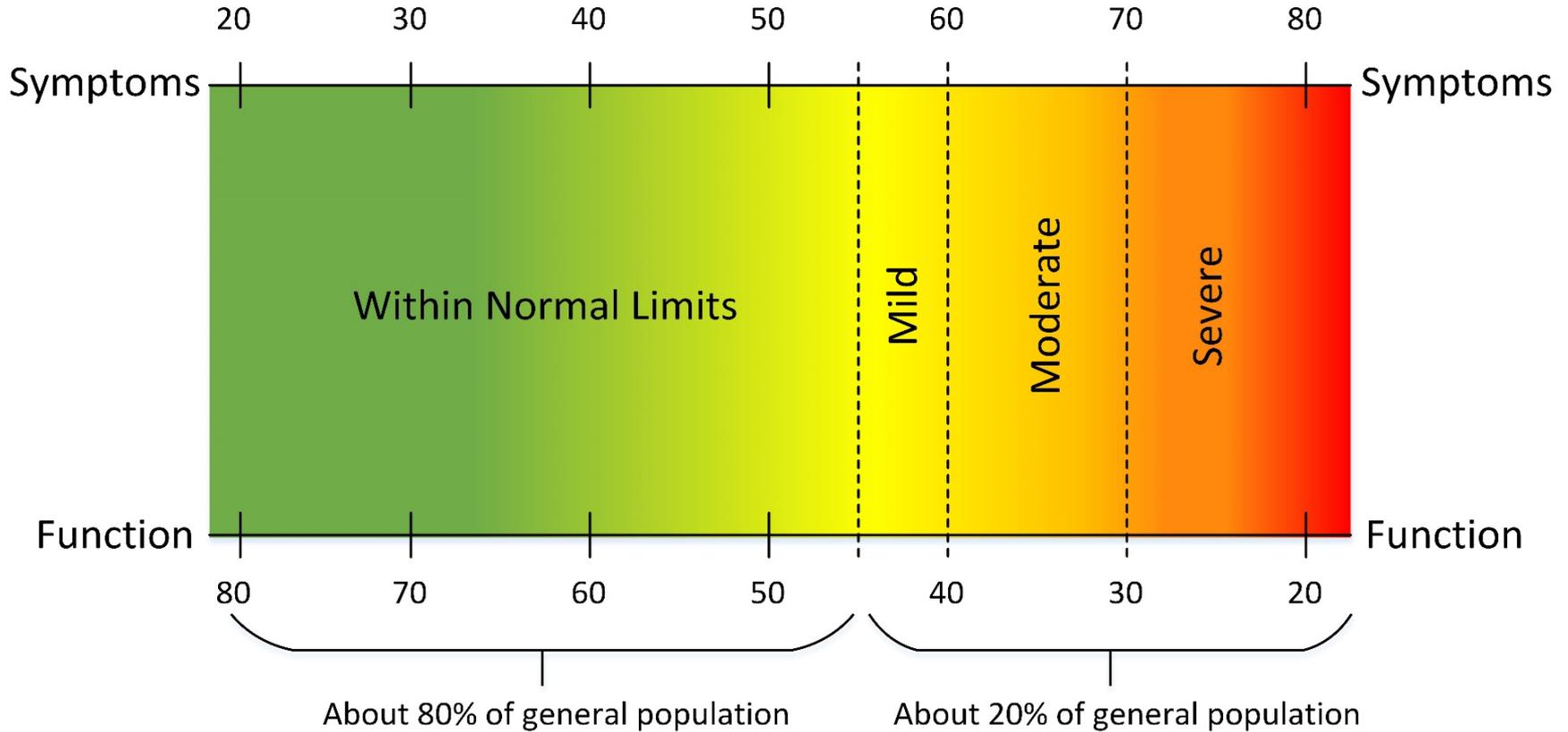
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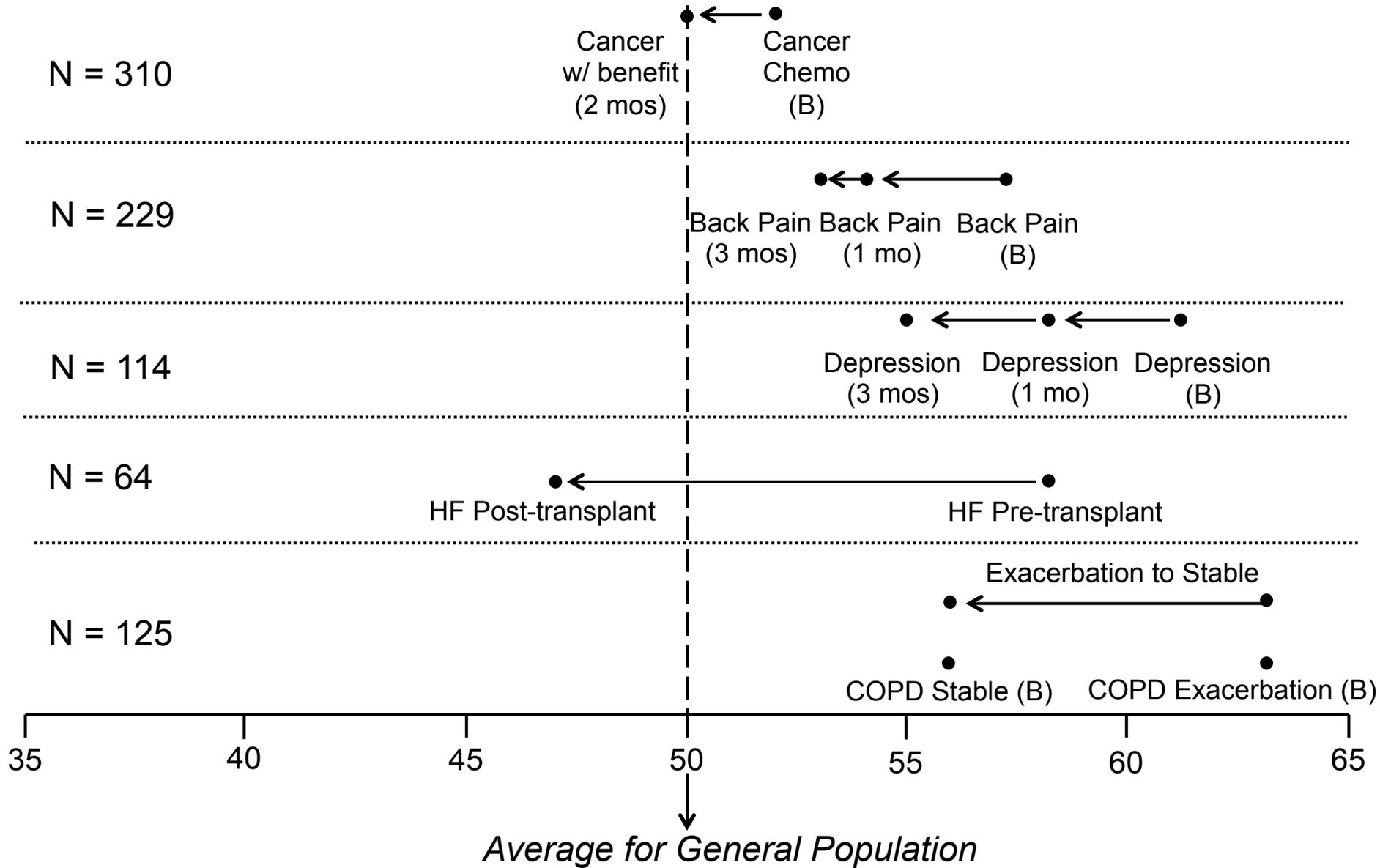


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# Interpreting PROMIS T-Scores



# PROMIS Fatigue Across Five Clinical Conditions



# Content can be expanded to be condition-specific: Pain Interference “Plus” Items

## ***Existing PROMIS items (8)***

- How much did pain interfere with
  - your enjoyment of life?
  - your close personal relationships?
  - your day-to-day activities?
  - your ability to work (include work at home)?
  - your ability to participate in social activities?
  - your ability to remember things?
- How irritable did you feel because of pain?
- How often did pain prevent you from walking more than 1 mile?

## ***New condition-specific “gap” items (5)***

- How much did knee pain
  - limit your daily activities?
  - interfere with your walking?
  - interfere with going up stairs?
  - interfere with going down stairs?
- How often did knee pain make you feel depressed?

# Administration Options



- Paper (short forms and profiles only)
- Computer (e.g., Assessment Center, REDCap)
- App (e.g., PROMIS iPad app)



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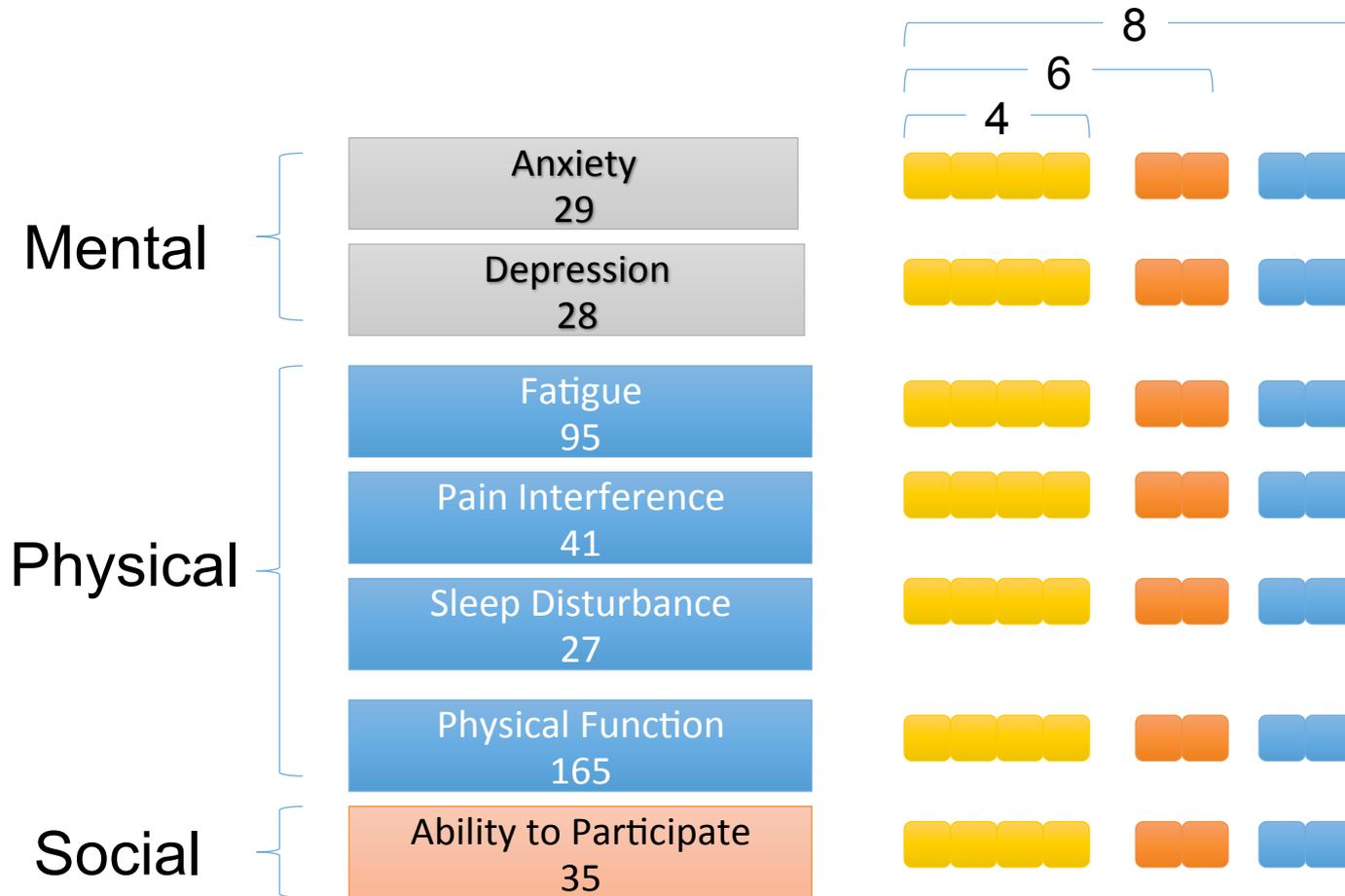
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# PROMIS<sup>®</sup> Profile Short Forms (v2)

(29-43-57 items)



(+ pain intensity)

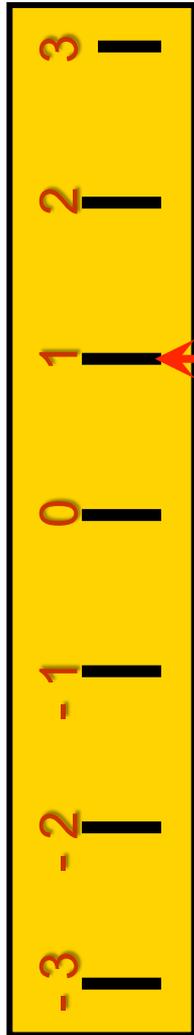


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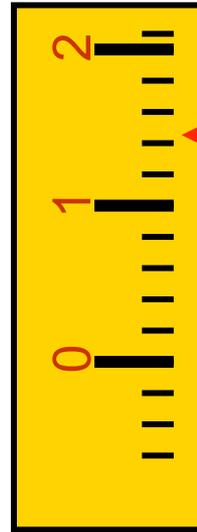
# Computer Adaptive Tests

high  
physical  
function

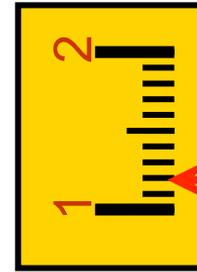
Question #1



Question #2



Question #3



Questionnaire  
with a high  
precision -  
AND a  
wide range

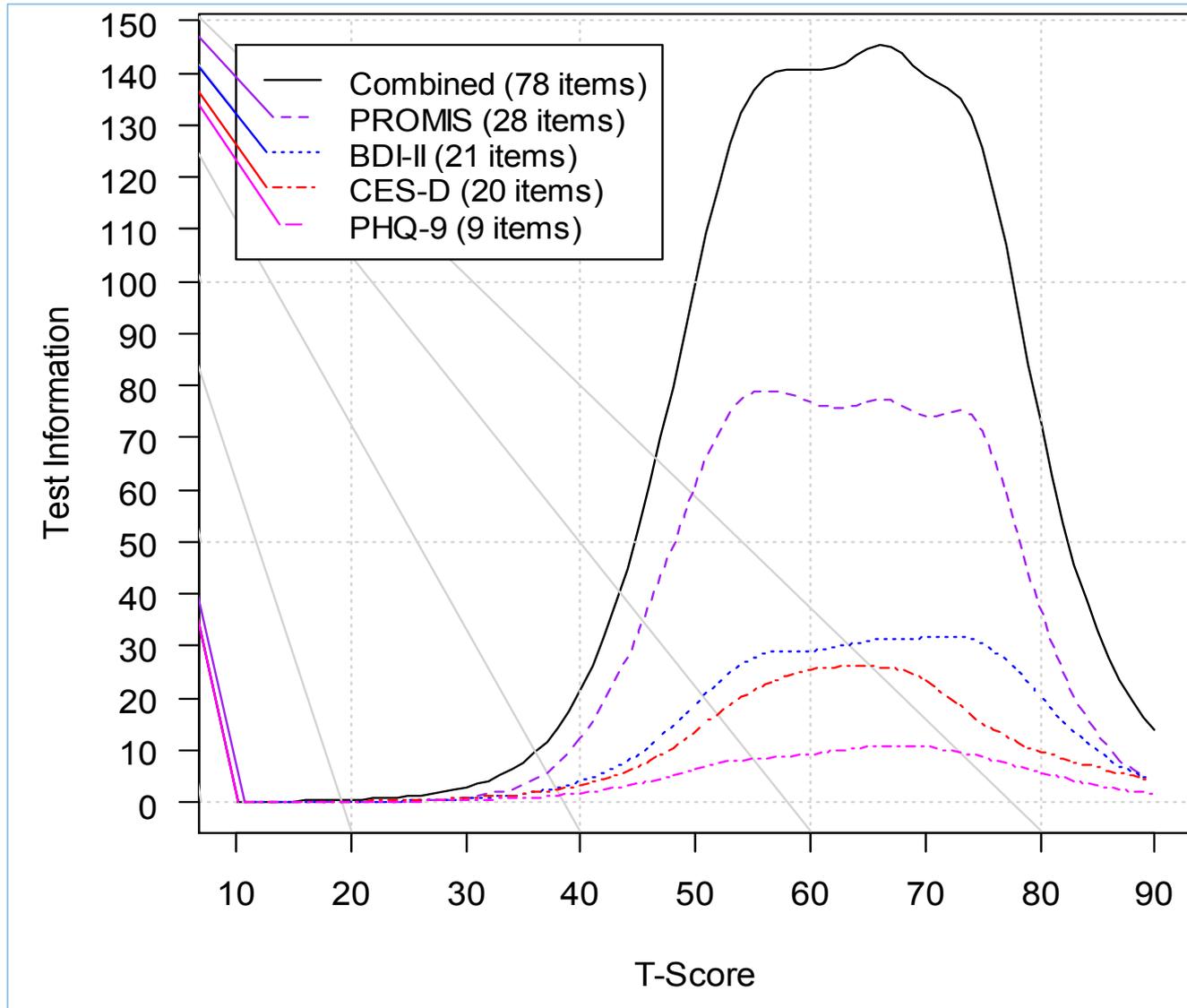
low  
physical  
function

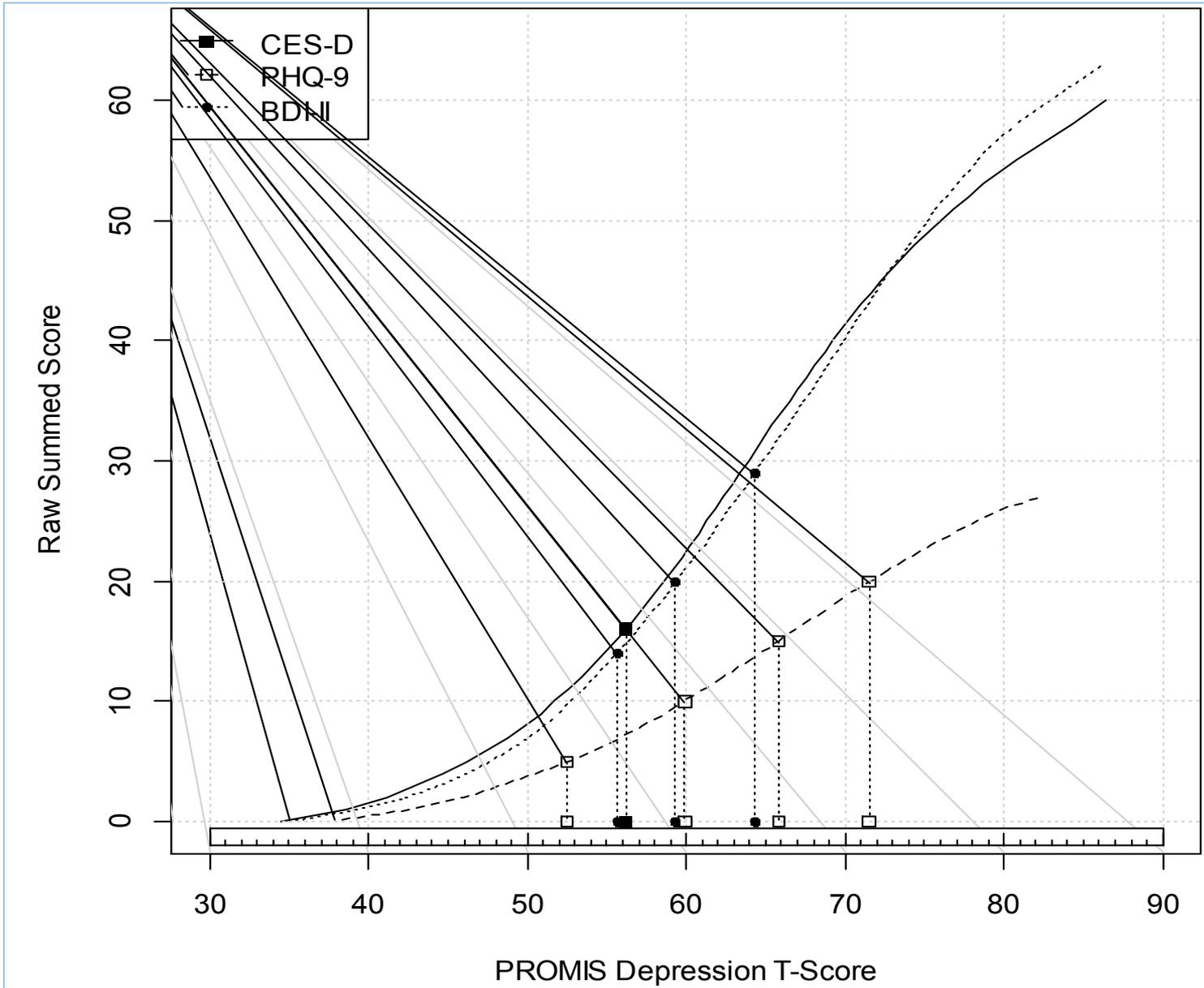


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# Test Information Functions: Separate and Combined





# Questions?

