

Supplemental online content for:

Cross-Sectional Analysis of the Associations Between Four Common Cancers and Disability

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eAppendix 1: Question Stems and Response Categories for the Adult Health Status and Limitations Module

eAppendix 2: Definitions of Disability Measures Using National Health Interview Survey Responses

eAppendix 1. Question Stems and Response Categories for the Adult Health Status and Limitations Module in the Sample Adult Core Questionnaire of the National Health Interview Survey

“The next questions ask about difficulties you may have doing certain activities because of a HEALTH PROBLEM. By ‘health problem’ we mean any physical, mental, or emotional problem or illness (not including pregnancy). By yourself, and without using any special equipment, how difficult is it for you to...”

Response categories are: “not at all difficult,” “only a little difficult,” “somewhat difficult,” “very difficult,” “can’t do at all,” “do not do this activity” (“refused” and “don’t know”).

Categories of disability created by combining responses from functional and activity limitation questions:

Basic Action Difficulties (BADs)

- **Movement difficulty (MD):** at least somewhat difficult to walk, stand, climb stairs, sit, stoop, reach, grasp, or carry
- **Sensory difficulty:** trouble seeing even when wearing glasses/contact lenses; or deaf or trouble hearing without a hearing aid
- **Emotional difficulty:** sad, nervous, restless, hopeless, “everything was an effort,” and worthless feelings in the past 30 days
- **Cognitive difficulty:** limited in any way because of difficulty remembering or because of periods of confusion

Complex Activity Limitations (CALs)

- **Self-care limitation:** difficulty with any component of activities of daily living (ADLs) or instrumental ADLs (IADLs)
- **Social limitation:** going out, participating in social activities or relaxing at least somewhat difficult
- **Work limitation:** cannot work or has work limitations because of physical, mental or emotional problem

eAppendix 2. Definitions of Disability Measures Using National Health Interview Survey Responses

Basic Action Difficulties	
Movement Disability	<p>A response of “only somewhat difficult,” “very difficult,” or “can’t do at all” on any of the following questions: “By yourself, and without using any special equipment, how difficult is it for you to</p> <ul style="list-style-type: none"> ... Walk a quarter of a mile—about 3 city blocks? ... Walk up 10 steps without resting? ... Stand or be on your feet for about 2 hours? ... Sit for about 2 hours? ... Stoop, bend, or kneel? ... Reach up over your head? ... Use your fingers to grasp or handle small objects? ... Lift or carry something as heavy as 10 pounds such as a full bag of groceries?”
Sensory Disability	<p>A “yes” response to either of the following questions: “Do you have any trouble seeing, even when wearing glasses or contact lenses?” If the response is yes: “Are you blind or unable to see at all?” “Have you ever worn a hearing aid?” OR a response of “a lot of trouble” or “deaf” to the following: “Which statement best describes your hearing without a hearing aid: Good, a little trouble, a lot of trouble, deaf?”</p>
Emotional Disability	<p>A score of 13 or more based on the following questions which comprise the K6 serious psychological distress scale: “During the past 30 days, how often did you feel</p> <ul style="list-style-type: none"> ... So sad that nothing could cheer you up? ... Nervous? ... Restless or fidgety? ... Hopeless? ... That everything was an effort? ... Worthless? <p>Possible answers are “all of the time” (4 points) “most of the time” (3 points) “some of the time” (2 points) “a little of the time” (1 point) “none of the time” (0 points).</p> <p>To score the K6, the points are added together yielding a possible total of 0 to 24 points</p>
Cognitive Disability	<p>A “yes” response to the following: {Are/Is} {person} LIMITED IN ANY WAY because of difficulty remembering or because {you/they} e experience periods of confusion?”</p>

Complex Activity Limitations	
Self Care Limitation	<p>Require help with any daily living activities: bathing or showering dressing getting in or out of bed or a chair using the toilet eating and getting around inside the home</p> <p>OR</p> <p>Require help with any instrumental daily living activities: household chores doing necessary business shopping getting around for other purposes</p>
Social Limitation	<p>A response of “only somewhat difficult,” “very difficult,” or “can’t do at all” on any of the following questions: “By yourself and without using any special equipment, how difficult is it for you to</p> <ul style="list-style-type: none"> ... Go out to things like shopping, movies, or sporting events? ... Participate in social activities such as visiting friends, attending clubs and meetings, going to parties? ... Do things to relax at home or for leisure (reading, watching TV, sewing, listening to music)?”
Work Limitation	<p>A “yes” response to either of the following: “Does a physical, mental, or emotional problem NOW keep {you/anyone in the family (age ≥18 years)} from working at a job or business?” “{Are you/any of these family members} limited in the kind OR amount of work {you/they} can do because of a physical, mental or emotional problem?”</p>