

THE QUICK DEMENTIA RATING SYSTEM (QDRS) PATIENT VERSION

Purpose of Use

The detection of mild cognitive impairment (MCI), Alzheimer's disease (AD) and related dementias in community samples of older adults may be limited in part due to the lack of brief tests that capture and characterize the earliest signs of impairment and monitor response to therapies and interventions. The average busy clinician does not have 90-120 minutes to examine each patient, yet this is the time required to generally collect the detailed information needed to make a diagnosis of Alzheimer's disease. This may affect eligibility determination for care and services, impede case ascertainment in epidemiologic studies, and inhibit the ability to identify eligible individuals for clinical trial recruitment. We developed the Quick Dementia Rating System (QDRS)—a rapid dementia staging tool to meet these needs. The QDRS provides a brief but valid and reliable assessment of whether a problem is present, and if present how severe it is. The QDRS was tested and validated in 261 patient-caregiver dyads compared with Clinical Dementia Ratings (CDR), neuropsychological testing, and gold standard measures of function, mood, and behavior. Like all brief tests, a positive result should be followed up with a more comprehensive evaluation or a referral to a specialist. However in places where specialist are limited, use of the QDRS could help to more appropriately triage patients for appropriate use of services. It could also be used to follow patients in a succinct way to see how they are responding to therapy or if they have progressed and need more services. In a broader sense, a brief test such as the QDRS can be used to enroll people in research projects, and help determining prevalence of disease in communities in a very quick fashion

Administration and Scoring Guidelines

The questions are given to the respondent on a clipboard or computer screen for self-administration or can be read aloud to the respondent either in person or over the phone. The QDRS was originally designed as an informant rating, and then validated as patient-reported outcome in order to provide a rating of the extent and severity of change from prior abilities.

When administered to a patient, specifically ask the respondent to rate change in their abilities with emphasis placed on changes due to cognitive problems (not physical problems). If the patient has a physical limitation, ask them to rate whether their ability to perform the tasks if the physical limitations were not present.

The QDRS has 10 categories, each with 5 options that characterize changes in the patient's cognitive and functional abilities. The patient is asked to compare their abilities now to how they used to be – the key feature is **change** – no specific time frame for change is required. Have the patient choose **one answer** for each category that best fits them – **NOTE**, not all descriptions need to be present to choose an answer

Interpretation of the QDRS

A screening test in itself is insufficient to diagnose a dementing disorder. The QDRS is, however, quite sensitive to detecting early cognitive changes associated many common dementing illness including Alzheimer disease, vascular dementia, Lewy body dementia and frontotemporal dementia. The QDRS may also capture change in cognitive abilities due to other conditions, including depression, traumatic brain injury, and medication-induced cognitive dysfunction.

The QDRS is scored on a continuous scale with a range of 0-30 in 0.5 increments. Higher scores suggest more impairment. Based on receiver operator characteristic curves from 261 individuals included in the development and validation samples, QDRS scores differentiate with the following cut-points:

Normal	0-1.5
Mild cognitive impairment	2-5.5
Mild dementia	6-12.5
Moderate dementia	13-20.5
Severe dementia	21-30

Scores in the impaired range indicate a need for further assessment to establish a formal diagnosis. Scores in the "normal" range suggest that a dementing disorder is unlikely, but a very early disease process cannot be ruled out. More advanced assessment may be warranted in cases where other objective evidence of impairment exists.

The QDRS can also be used to calculate a Clinical Dementia Rating (CDR score) using the first six categories. Note: for the Toileting and Personal Hygiene category the 0 and 0.5 category would be counted as 0 in computing the CDR.

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Instructions

Please read the following instructions to the participant:

I'm going to ask you to answer some questions about changes you have noticed in your cognitive and functional abilities. Please compare your memory and recall abilities now to how they used to be – the key feature is change.

Then read each question to the subject and record their answer.

If the subject has difficulty selecting a response, prompt with:

Choose the one answer that best fits you at the present time.

NOTE

- Not all descriptions need to be present to select an answer. For example, on Memory and Recall, if the patient repeats themselves but doesn't misplace items, you can still score a 0.5 in this domain.
- Read the entire descriptor to the patient. If they ask for you to clarify, read the highlighted prompt. You can read the full descriptor again if needed.

QUICK DEMENTIA RATING SYSTEM (QDRS) - Patient Version

The following descriptions characterize changes you may have noticed in your cognitive and functional abilities. The important thing to consider is comparing how your memory and thinking abilities are **now** compared with how they **used** to be – the key feature is ***change***.

Choose the ***one best answer*** for each category that best describes you – Note: not all the descriptions need to be present to choose an answer. Please make only one choice per category.

1. MEMORY AND RECALL	
<input type="checkbox"/> ₀	No obvious memory loss or slight inconsistent forgetfulness that does not interfere with your everyday function
<input type="checkbox"/> _{0.5}	Consistent mild forgetfulness or partial recollection of events that may interfere with performing your everyday activities; repeats questions/statements, misplaces items, forgets appointments
<input type="checkbox"/> ₁	Mild to moderate memory loss ; more noticeable for recent events; interferes with performing your everyday activities
<input type="checkbox"/> ₂	Moderate to severe memory loss ; only highly learned information remembered; new information rapidly forgotten
<input type="checkbox"/> ₃	Severe memory loss , almost impossible to recall new information; long-term memory may be affected

2. ORIENTATION	
<input type="checkbox"/> ₀	Fully oriented to person, place, and time nearly all the time
<input type="checkbox"/> _{0.5}	Slight difficulty keeping track of time; may forget day or date more frequently than in the past
<input type="checkbox"/> ₁	Mild to moderate difficulty keeping track of time and sequence of events; forgets month or year; oriented to familiar places but gets confused outside of familiar areas; gets lost or wanders
<input type="checkbox"/> ₂	Moderate to severe difficulty , usually disoriented to time and place (familiar and unfamiliar); frequently dwells in past
<input type="checkbox"/> ₃	Only oriented to your name , although may recognize family members

3. DECISION MAKING AND PROBLEM SOLVING ABILITIES	
<input type="checkbox"/> ₀	Solves everyday problems ; handles personal business and financial affairs well; decision-making abilities consistent with your past performance
<input type="checkbox"/> _{0.5}	Slight impairment or takes longer to solve problems; trouble with abstract concepts; decisions still sound
<input type="checkbox"/> ₁	Moderate difficulty with handling problems and making decisions; defers many decisions to others; social judgment and behavior may be slightly impaired; loss of insight
<input type="checkbox"/> ₂	Severely impaired in handling problems, making only simple personal decisions; social judgment and behavior often impaired; lacks insight
<input type="checkbox"/> ₃	Unable to make decisions or solve problems; others make nearly all decisions for you

4. ACTIVITIES OUTSIDE THE HOME

<input type="checkbox"/> ₀	Independent in function at usual level of performance in profession, shopping, community activities, religious services, volunteering or social groups
<input type="checkbox"/> _{0.5}	Slight impairment in these activities compared to previous performance; slight change in driving skills; still able to handle emergency situations
<input type="checkbox"/> ₁	Unable to function independently but still may attend and be engaged; appears "normal" to others; notable changes in driving skills; concern about ability to handle emergency situations
<input type="checkbox"/> ₂	No pretense of independent function outside the home; appears well enough to be taken to activities outside the family home but generally needs to be accompanied by someone
<input type="checkbox"/> ₃	No independent function or activities; appear too ill to be taken to activities outside the home

5. FUNCTION AT HOME AND HOBBY ACTIVITIES

<input type="checkbox"/> ₀	Chores at home, hobbies and personal interests are well maintained compared to your past performance
<input type="checkbox"/> _{0.5}	Slight impairment or less interest in these activities; trouble operating appliances (particularly new purchases)
<input type="checkbox"/> ₁	Mild but definite impairment in home and hobby function; more difficult chores or tasks abandoned; more complicated hobbies and interests given up
<input type="checkbox"/> ₂	Only simple chores preserved , very restricted interest in hobbies which are poorly maintained
<input type="checkbox"/> ₃	No meaningful function in household chores or with prior hobbies

6. TOILETING AND PERSONAL HYGIENE

<input type="checkbox"/> ₀	Fully capable of self-care (dressing, grooming, washing, bathing, toileting)
<input type="checkbox"/> _{0.5}	Slight changes in abilities and attention to these activities
<input type="checkbox"/> ₁	Needs prompting to complete these activities but may still complete independently
<input type="checkbox"/> ₂	Requires some assistance in dressing, hygiene, keeping of personal items; occasionally incontinent
<input type="checkbox"/> ₃	Requires significant help with personal care and hygiene; frequent incontinence

7. BEHAVIOR AND PERSONALITY CHANGES

<input type="checkbox"/> ₀	Socially appropriate behavior in public and private; no changes in personality
<input type="checkbox"/> _{0.5}	Questionable or very mild changes in behavior, personality, emotional control, appropriateness of choices
<input type="checkbox"/> ₁	Mild changes in behavior or personality
<input type="checkbox"/> ₂	Moderate behavior or personality changes , affects interactions with others; may be avoided by friends or distant family
<input type="checkbox"/> ₃	Severe behavior or personality changes ; making interactions with others unpleasant or avoided all together

8. LANGUAGE AND COMMUNICATION ABILITIES

<input type="checkbox"/> ₀	No language difficulty or occasional word searching; reads and writes as well as in past
<input type="checkbox"/> _{0.5}	Consistent mild word finding difficulties, using descriptive terms or takes longer to get point across, mild problems with comprehension, decreased conversation; may affect reading and writing
<input type="checkbox"/> ₁	Moderate word finding difficulty in speech, cannot name objects, marked reduction in word production; reduced comprehension, conversation, writing and/or reading
<input type="checkbox"/> ₂	Moderate to severe impairments in speech production or comprehension; has difficulty communicating thoughts to others; limited ability to read or write
<input type="checkbox"/> ₃	Severe deficits in language and communication; little to no understandable speech

9. MOOD

<input type="checkbox"/> ₀	No changes in your mood, interest or motivation level
<input type="checkbox"/> _{0.5}	Occasional sadness, depression, anxiety, nervousness or loss of interest/motivation
<input type="checkbox"/> ₁	Daily mild issues with sadness, depression, anxiety, nervousness or loss of interest/motivation
<input type="checkbox"/> ₂	Moderate issues with sadness, depression, anxiety, nervousness or loss of interest/motivation
<input type="checkbox"/> ₃	Severe issues with sadness, depression, anxiety, nervousness or loss of interest/motivation

10. ATTENTION AND CONCENTRATION

<input type="checkbox"/> ₀	Normal attention, concentration and interaction with your environment and surroundings
<input type="checkbox"/> _{0.5}	Mild problems with attention, concentration, and interaction with environment and surroundings, may appear drowsy during day
<input type="checkbox"/> ₁	Moderate problems with attention and concentration, may have staring spells or spend time with eyes closed, increased daytime sleepiness
<input type="checkbox"/> ₂	Significant portion of the day is spent sleeping, not paying attention to environment, when having a conversation may say things that are illogical or not consistent with topic
<input type="checkbox"/> ₃	Limited to no ability to pay attention to external environment or surroundings