

FUNCTION (from Bentvelzen et al. 2017 JAMDA)

| | | Dementia-specific | | | | | | Generic | | | | |
|----|-------------------------------|-------------------|-----------|-------------|--------------|-----------|-------------|-----------|-----------|-----------|-----------|-----------|
| | | Informant | | | | Perform. | Observ. | IADL | | ADL | | |
| No | Rating Criteria | BAYER-ADL | DAD | Bristol ADL | ADCS/MCI/ADL | DAFS-R | CS-ADL | L&B IADL | OARS-IADL | BARTHEL | KATZ | FIM |
| 1 | Inter-rater reliability (/4) | 0 | 4 | 0 | 0 | 4 | 4 | 4 | 4 | 4 | 0 | 4 |
| 2 | Test-retest reliability (/4) | 4 | 4 | 2 | 4 | 4 | 0 | 4 | 4 | 2 | 0 | 4 |
| 3 | Internal consistency (/2) | 2 | 2 | 0 | 0 | 1 | 2 | 1 | 1 | 1.5 | 1 | 2 |
| 4 | Content validity (/2) | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 0.5 | 1 | 0.5 |
| 5 | Concurrent validity (/4) | 4 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 4 | 3 |
| 6 | Discriminant validity (/4) | 4 | 4 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 7 | Sensitivity (/4) | 4 | 2 | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 4 | 0 |
| 8 | Specificity (/4) | 4 | 2 | 2 | 4 | 2 | 4 | 4 | 0 | 0 | 0 | 0 |
| 9 | Responsiveness (/4) | 2 | 2 | 4 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 2 |
| 10 | Dementia types (/2) | 0 | 2 | 1 | 1 | 1 | 0 | 1 | 0 | 2 | 1 | 0 |
| 11 | Clinical settings (/2) | 1 | 1 | 2 | 1 | 2 | 0 | 0 | 2 | 2 | 2 | 2 |
| 12 | Education/literacy (/2) | 2 | 0 | 1 | 2 | 2 | 1.5 | 2 | 0 | 0 | 0 | 0 |
| 13 | Translations (/2) | 2 | 2 | 2 | 1.5 | 2 | 0 | 2 | 2 | 2 | 2 | 2 |
| 14 | International acceptance (/4) | 0 | 2 | 4 | 2 | 0 | 2 | 2 | 0 | 4 | 2 | 4 |
| 15 | Administration time (/4) | 0 | 1 | 2 | 0 | 0 | 0 | 4 | 4 | 2 | 2 | 0 |
| 16 | A: Ease of use (/4) | - | - | - | - | 2 | 2 | 4 | 4 | 4 | 4 | 4 |
| | B: Respondent burden (/4) | 4 | 4 | 4 | 2 | - | - | - | - | - | - | - |
| 17 | Qualifications required (/4) | 4 | 2 | 4 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| 18 | Cost of tool/training (/4) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 2 |
| | Weighted score (/60) | 43 | 42 | 42 | 35.5 | 41 | 36.5 | 44 | 37 | 39 | 35 | 34 |

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| <p>1 Reliability 1: inter-rater 4 excellent (ICC/k \geq .90) 2 adequate (ICC/k .70 to .89) 0 low (ICC/k < .70) or no data</p> <p>2 Reliability 2: test-retest 4 excellent (ICC/k \geq .90) 2 adequate (ICC/k .70 to .89) 0 low (ICC/k < .70) or no data</p> <p>3 Reliability 3: internal consistency 2 excellent (Cronbach's α \geq .90) 1 adequate to good (Cronbach's α from .70 to .89) 0 low (Cronbach's α < .70) or no data</p> <p>4 Validity 1: Content validity—domain of interest is comprehensively sampled by the items 2 domain comprehensively sampled 1 domain reasonably well sampled 0 important aspects of domain are not sampled or irrelevant items included</p> <p>5 Validity 2: Concurrent validity—expected correlations with similar validated measures 4 high ($r/k \geq$.70) 2 moderate (r/k from .40 to .69) 0 low concurrent validity ($r/k <$.30), or no data</p> <p>6 Validity 3: Discriminant validity - cross-sectional (eg, dementia vs depression; low vs high levels of severity/impairment; AD vs FTD etc.)</p> | <p>4 can distinguish between >2 clinically important categories of respondents 2 can distinguish between 2 categories of respondents 0 no evidence</p> <p>7 Validity 4: Sensitivity to diagnosis/category 4 high (\geq.85) 2 moderate (.70 to .84) 0 low (<.70)</p> <p>8 Validity 5: Specificity to diagnosis/category 4 high (\geq.85) 2 moderate (.70 to .84) 0 low (<.70)</p> <p>9 Validity 6: Responsiveness—ability to detect clinically important change over time (eg, because of course of the condition or in response to intervention) 4 availability of minimum clinically important difference (MCID) in appropriate metrics (eg, standardized response means) at the individual patient level on external clinical criteria 2 can detect statistically significant changes over time in hypothesized direction on external clinical criteria, but no metrics available to quantify MCID at the individual patient level 0 no evidence for responsiveness</p> <p>10 Generalizability 1: validity in different dementia populations (eg, AD, FTD, PD etc.) 2 > 2 types of dementia</p> | <p>1 two different types of dementia 0 only 1 type of dementia</p> <p>11 Generalizability 2: validity in different clinical settings (ie, nursing home, community, primary care, specialist) 2 > 2 types of setting 1 two different types of setting 0 only 1 type of setting</p> <p>12 Generalizability 3: validity in patients with low education/literacy 2 scale shown to be resistant to low education/literacy, or effects of education/literacy shown but alternative cut-offs or corrections published 1 effect of low education/literacy on validity, but no alternative cut-offs or corrections available 0 not investigated</p> <p>13 Generalizability 4: validity in multiple countries/languages 2 multiple countries or languages 1 different countries but only 1 language 0 1 country and language</p> <p>14 Recommended in published international dementia guidelines 4 \geq 2 countries 2 1 country 0 0 countries</p> <p>15 Administration time (minutes) 4 \leq 5</p> | <p>2 6–15 0 > 15</p> <p>16A Ease of administration and scoring (for clinician-administered tools) 4 does not require algorithm to score or special equipment 2 requires an algorithm to compute score OR special equipment 0 requires an algorithm to compute score AND special equipment</p> <p>16B Burden on respondent (for self-reported or proxy tools) 4 items are worded simply 2 minor challenges for respondent (eg, minority of items are worded in a complex manner) 0 reasonable degree of burden on respondent (majority of items worded in a complex manner)</p> <p>17 Clinical qualifications required to administer tool 4 untrained rater (eg, general nursing staff, patient/informant) 2 paraprofessional/staff member (eg, clinical nurse; research assistant) 0 professional (eg, doctor, occupational therapist, or neuropsychologist)</p> <p>18 Cost of the tool and training for clinicians 4 no charge for tool or for training 2 small 1-time costs to acquire tool or for training 0 costs charged each time tool is used</p> |
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