Original Research

How Well Does the Brief Interview for Mental Status Identify Risk for Cognition Mediated Functional Impairment in a Community Sample?

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Abstract *Objective:* To determine the adequacy of the Brief Interview for Mental Status (BIMS) compared with other screening tools in identifying individuals with limitations in functional cognition and instrumental activities of daily living (IADL).
Design: Cross-sectional observational study.
Setting: Midsized midwestern city.
Participants: We assessed a convenience sample of community dwelling individuals (N=197) aged 55 years and older who were living independently.
Main Outcome Measures: Participant scores on the BIMS, Mini-Cog, Menu Task, and Montreal Cognitive Assessment (MoCA) were compared with the Performance Assessment of Self-Care Skills Checkbook Balancing and Shopping tasks (PCST), which are known to predict impairment in complex IADLs associated with a diagnosis of mild cognitive impairment. Multiple logistic regression analyses controlling for participant demographics, as well as sensitivity and specificity, were computed for each screening measure using the PCST as the criterion measure.
Results: The Mini-Cog, Menu Task, and MoCA identified 25.89%, 32.49%, and 47.21% more individuals, respectively, as impaired than the BIMS. In multiple logistical regression analyses, the BIMS correctly identified 58% of those impaired on the PCST. However, each of the alternate screening measures correctly identified at least 70% of individuals as impaired on the PCST.

Conclusions: In this community sample, the BIMS was insensitive to subtle impairments with the potential to compromise community living, suggesting that the BIMS may be inappropriate for use outside nursing home settings.

The ability to predict an individual's ability to perform instrumental activities of daily living (IADL) in real-world contexts is notoriously difficult.[1] Typically, complex IADL performance is not directly observable in acute, postacute, or primary care settings,[2] and other methods of determining the presence of subtle, but still potentially significant, cognitive impairments are limited.[1,3] Cognitive impairment and cognitive decline are known to affect community dwelling elders. For example, a cognitive impairment rate of 23% was observed in a large longitudinal study of community dwelling older adults,[4] and cognitive decline is estimated to affect 15 to 35% of hospitalized older adults receiving general medicine services.[5] Furthermore, higher rates of cognitive impairment have been observed in acute or postacute care settings for older adults and specific diagnostic populations, such as stroke and cardiopulmonary disease.[6,7] Although unimpaired performance of IADLs was initially a prerequisite for the diagnosis of mild neurocognitive disorder, current evidence suggests that unrecognized deficits in complex IADL, also termed "preclinical" disability, may occur in such individuals[8-11] and may presage the need for ongoing monitoring and support.[9,12]

The Brief Interview for Mental Status (BIMS) was introduced as part of the Minimum Data Set 3.0 to measure cognitive impairment in nursing home populations.[13,14] The BIMS is a brief cognitive screening measure that focuses on orientation and short-term word recall. The BIMS represented a major improvement from the Minimum Data Set 2.0 cognitive assessment, which relied on subjective staff observations and had the potential for misclassification of cognitively unimpaired individuals as cognitively impaired.[13,14] The 15-point BIMS can be administered in an average of 3.2±2.0 min, resulting in low user and administrator burden,[14] and categorizes test takers as severely impaired (0-7 points), moderately impaired (8-12 points), or cognitively intact (13-15 points). The Center for Medicare and Medicaid Services (CMS) has mandated that use of the BIMS be extended across all postacute care settings.[15] Although the stated intent of CMS is to use the BIMS "to screen for cognitive impairment in a broad population,"[15(p605)] given its reliance on short-term memory and orientation assessment, the BIMS may not be an ideal measure for use outside of a skilled nursing context.[16-18] Additionally, the BIMS has been found to have limitations in the identification of milder forms of cognitive impairment even in nursing homes.[14,19] It has been argued that measures that incorporate assessments of executive function may perform better in evaluating older adults' everyday IADL performance,[20,21] and that performance-based tests, particularly those that simulate real-life activities, may add to the information derived from traditional neuropsychological measures.[22,23] The construct of functional cognition, which has been developed primarily by occupational therapists, is one approach to performance-based testing.[15,24] Rather than assess specific cognitive skills in isolation (eg, attention, memory, executive functions), the goal of the evaluation of functional cognition is to assess the capacity to perform essential tasks given the totality of the clients' abilities, including their use of strategies, habits and routines, and environmental resources.[25]

In its continuing response to the IMPACT Act,[26] the CMS identified both cognition screening and the screening of functional cognition as important domains for measurement consideration.[26,27] At this time, the CMS has not selected a functional cognition assessment, but has selected the BIMS for use across postacute care settings (ie, skilled nursing facilities, inpatient rehabilitation facilities, long-term acute care hospitals, and home health care).[15] The selection of the BIMS as the neuropsychological screening measure of choice by the CMS may accelerate the adoption of the BIMS by other providers. Indeed, use of the BIMS to screen for cognitive impairment has been reported by care providers in community settings,[18,28] and it has been used to validate the hospital-based diagnosis of dementia.[29,30] Despite this expanding use of the BIMS, we have been unable to identify reports of its performance relative to other available measures outside inpatient or skilled nursing environments.

With the expanding use of the BIMS in mind, we compared the ability of the BIMS to identify individuals classified as having potential for complex IADL deficits by a measure of functional cognition, the Performance Assessment of Self-Care Skills (PASS) Checkbook Balancing and Shopping tasks (PCST). The PASS has been shown to both predict home care utilization 30-days post hospital discharge[31] and to distinguish individuals with mild cognitive impairment from neurologically healthy older adults.[12] We selected 3 methodologically distinct measures that include assessments of executive function to compare with the performance of the BIMS in identifying impaired performance on the PCST: the Mini-Cog (a 3-5-minute cognitive screening measure), the Menu Task (a 3-5-minute functional cognitive screening measure), and the Montreal Cognitive Assessment (MoCA) (a 10-minute neuropsychological screening measure). The Mini-Cog is an established screening measure sensitive to cognitive impairments across a variety of diagnoses, including dementia, diabetes, and heart failure, and with demonstrated clinical utility in primary care, acute care, and community settings.[32-34] The Mini-Cog uses a 3-word delayed recall task, but instead of the orientation assessment, which is part of the BIMS, the Mini-Cog has the participant perform a clock-drawing test that is considered sensitive to executive function deficits. The Menu Task is a performance-based measure of

functional cognition that is comparable in time to administer to the BIMS and the Mini-Cog.[35] The MoCA was selected as a broader measure of neuropsychological functioning and one that is used widely in acute, postacute, and primary care settings.[36] We hypothesized that the Mini-Cog, Menu Task, and MoCA would be more sensitive than the BIMS in identifying individuals who were identified by the PCST as having impaired functional cognition with potential for IADL disability. Given that the BIMS is a screening test and not a diagnostic test, the primary focus of our study was on sensitivity, or the capacity of the BIMS to correctly identify individuals with possible impaired functional cognition.[37] We also examined the specificity of the BIMs and hypothesized that the BIMS would have the highest specificity and therefore the highest percentage of false negative classifications compared with the other 3 screening measures. We compared the percentages of individuals correctly classified as impaired on the PCST by the BIMS with percentage impairment obtained by each of the other 3 screening measures.

Methods

Research design

This cross-sectional observational study was approved by the Institutional Review Board of the University of Wisconsin–Madison. All participants provided written informed consent. Occupational therapy graduate students from the University of Wisconsin were trained to criterion with each study measure and received weekly supervision during data collection.

Participants and recruitment

A convenience sample of community dwelling adults was recruited in Madison, Wisconsin and its environs (n=197). Inclusion criteria were age 55 years or older, living independently in the community, and willingness and ability to read and write in English.

Study measures

Baseline demographic information was collected for each study participant, including sex, age, education, and chronic health conditions (eg, heart disease, stroke, diabetes, arthritis, kidney disease, etc). To evaluate the relative sensitivity of the BIMS to impaired functional cognition as measured by the PCST, the following measures were administered to study participants: the BIMS, MoCA, Menu Task, Mini-Cog, and PCST. These measures are described in table 1.

Statistical analyses

The current study is a secondary analysis of data collected as part of another study designed to assess functional cognition among community dwelling middle-aged and older adults. Descriptive analyses for continuous data and frequency distributions for noncontinuous demographic data were computed. We used established cutoff scores for impairment on each screening measure as follows: 13 for the BIMS, 4 for the Mini-Cog, 8 for the Menu Task, and 25 for the MoCA. A series of 2×2 contingency tables were computed to compare each of the screening measures to the PCST. Sensitivity and specificity values were generated in these analyses for each scale.[45] A receiver operating characteristic curve was generated for each screening test to further evaluate the diagnostic performance of the screening tests in the classification of impairment on the PCST.

The PCST was used as the index measure for the computation of a series of multiple logistic regression analyses. Participants with PCST scores of 9 or higher were classified as impaired for the purpose of these analyses.[12] Multiple stepwise logistic regression analyses using forward model selection procedures were computed separately for each screening measure to estimate odds ratios and 95% confidence intervals. The regression equations predicted membership in the PCST impaired group. Age was categorized as younger or older than 65 years, education was classified as high school or less or at least some college, and sex and number of chronic health conditions were included as covariates to estimate the fit of the final model and the odds of impairment on the PCST. The Nagelkerke R^2 was used to report the variance accounted for by the final model. IBM SPSS, version 25,[a] was used for all statistical analyses.

Results

Table 2 presents the demographic characteristics and scores for each study measure. The sample was predominantly female (76.65%) and White (80.71%) and generally in good health as indicated by a low number of reported chronic health conditions (mean ± SD, 1.16±1.26) detailed in table 2. Participants ranged in age from 55 to 93 years (mean ± SD, 70.46±8.26y), and just under half of the sample reported currently living alone (47.21%) compared to living with a friend or family member (52.79%). Participants were highly educated with between 8 and 27 years of education (mean ± SD, 15.10±3.05y). Men were more likely than women to be categorized as impaired on the Mini-Cog (χ^2=5.24, P=.02), Menu Task (χ^2=6.32, P=.01), and MoCA (χ^2=4.67, P=.03).

Pearson correlations between age and each of the screening measures showed little or no relationship: BIMS (r=.01), Mini-Cog (r=−.14), Menu Task (r=−.20), and MoCA (r=−.18). The number of chronic conditions was not significantly associated with the total scores on any of the screening measures: BIMS (r=−.02), Mini-Cog (r=−.14), Menu Task (r=−.18), and MoCA (r=−.22). There was a minimal association between the BIMS and education (r=.14). The correlations between BIMS total scores and the 3 comparison measures were higher: Mini-Cog (r=.28), Menu Task (r=.37), and MoCA (r=.37).

Based on the previously described scoring criteria, the percentage of participants impaired on each measure was computed. Our index measure, the PCST, categorized 42.13% of participants as impaired (ie, showing difficulty with complex simulated IADL activities). The BIMS, which is

Table 1 Study measures

Measure	Description
BIMS	The BIMS[13,14] is a 15-point cognitive screening measure that evaluates memory and orientation and includes free and cued recall items. A cutoff score of 13 is recommended to indicate the presence of any cognitive impairment and was adopted for this study.
MoCA	The MoCA is a multicomponent cognitive screening tool that takes approximately 10 minutes to administer.[38] Possible scores range from 0 to 30, with higher scores indicating better performance. Results from a meta-analysis concluded that a cutoff score of 25 was optimal for individuals older than the age of 60 years (sensitivity, 80.48%; specificity, 81.19%) and was adopted for this study.[39]
Menu Task	The Menu Task is a brief performance-based screening measure of functional cognition[35] that involves completing a simulated menu and following instructions regarding how the participant must approach the task. The average time to completion was 4 minutes or less in both a community and hospital sample.[35] Possible scores range from 0 to 12, with higher scores indicating better performance. This study used a cutoff score of 8 to classify participants as impaired.[40]
Mini-Cog	The Mini-Cog is a widely used 2-part cognitive screening measure that incorporates 3-word recall and a clock-drawing test and that takes 2 to 3 minutes to administer.[41] Possible scores range from 0 to 5, with lower scores indicative of greater impairment. A cutoff score of 4 is recommended for greater sensitivity[42,43] and was adopted for this study.
PCST	The PASS[44] includes 26 items that measure activities of daily living and IADL skills, 14 of which are described as IADL items with a cognitive emphasis. Using a cutoff score of 8, the combined scores of the PASS PCST have been found to be as sensitive as the sum score of all PASS items in discriminating between individuals with mild cognitive impairment and healthy older adults.[12] These 2 subtests were adopted as a criterion measure in this study. PCST scores are the sum of the number of cues required for independence and adequacy on each task, with lower scores indicating better performance (fewer cues needed). The PASS has been shown to predict hospitalized patients' 30-day postdischarge home care needs.[31]

the primary focus of the study, categorized only 4.06% of participants as impaired, compared to the Mini-Cog, which categorized 29.95% as impaired, the Menu Task, which categorized 36.55% as impaired, and the MoCA, which categorized 51.27% as impaired (fig 1). Our results indicate that, although the BIMS is highly specific (96% specificity), it has very low sensitivity (5%) as well as the highest misclassification rates of each of the 4 measures we compared. The BIMS had a 50% rate of false positives compared to 35% for the MoCA, 29% for the Menu Task, and 25% for the Mini-Cog. The BIMS also had the highest rate of false negatives (42%) compared to the Mini Cog (28%), the Menu Task (26%), and the MoCA (18%). Although each of the comparison measures included in this study had sensitivities above 50% (ie, >10 times that of the BIMS), the balance of sensitivity and specificity varied across the measures. The MoCA had the highest sensitivity (79%), followed by the Menu Task (61%) and the Mini-Cog (53%). The Mini-Cog had the highest specificity (87%), followed by the Menu Task (82%) and the MoCA (69%). In the receiver operating characteristic curve analysis to detect impairment on the PCST (fig 2), the area under the curve (AUC) for the BIMS was 0.62 (95% confidence interval [CI], 0.54-0.70; $P<.01$), the AUC for the Mini-Cog was 0.76 (95% CI, 0.69-0.83; $P<.001$), the AUC for the Menu Task was 0.77 (95% CI, 0.70-0.84; $P<.001$), and the AUC for the MoCA was 0.83 (95% CI, 0.77-0.89; $P<.001$) (table 3).

In the multiple logistic regression models, the MoCA, Mini-Cog, and Menu Task all outperformed the BIMS (table 4). Having less than a college education was independently associated with increased odds of poor performance on the PCST compared with having at least some college in each multiple logistic regression model.

However, number of chronic conditions was not associated with increased odds of impaired performance on the PCST for any of the multiple logistic regression models. Impaired cognition vs unimpaired cognition as measured by the BIMS (odds ratio [OR], 1.14; 95% CI, 0.20-6.67) did not significantly increase the odds of impaired performance on the PCST impairment after controlling for the independent effects of sex and education. In this model, men and all individuals with less than a college education irrespective of sex had significantly increased odds of impaired scores on the PCST, relative to women and individuals with at least some years of college. This model explained 28% of the variance and correctly classified 57% of the participants.

Scores below vs above the MoCA cutoff (OR, 6.17; 95% CI, 2.35-16.16) were associated with having impaired functional cognition as measured by the PCST. Less than a college education (OR, 0.14; 95% CI, 0.05-0.38) independently increased the odds of impaired performance on the PCST relative to individuals with at least some college. This model explained 40% of the variance and correctly classified 74% of the participants.

Scoring below vs above the Mini-Cog cutoff (OR, 10.65; 95% CI, 2.77-40.91) was an independent risk factor for impaired functional cognition as measured by the PCST. Less than a college education (OR, 0.13; 95% CI = 0.05-0.35) independently increased the odds of impaired performance on the PCST relative to having at least some years of college. This model explained 39% of the variance and correctly classified 76% of the participants.

Scoring below vs above the Menu Task cutoff (OR, 3.06; 95% CI, 1.37-6.85) was a predictor of having impaired functional cognition as measured by the PCST. In this model, having less than a college education (OR, 0.15; 95%

Table 2 Demographic characteristics and scores on study measures

Variable	Mean ± SD or n (%)	Range	Impaired, n (%)
Age, y	70.46±8.26	55-93	-
Chronic Health Conditions	1.16±1.26	0-7	-
Arthritis	75 (38.07)	-	-
Cancer	21 (10.70)	-	-
COPD	19 (9.64)	-	-
Diabetes	40 (20.30)	-	-
Heart disease	32 (16.24)	-	-
Kidney disease	12 (6.09)	-	-
Mental health condition	20 (10.15)	-	-
Stroke	6 (3.05)	-	-
Education, y	15.10±3.05	8-27	-
BIMS	14.57±0.88	11-15	8 (4.06)
Mini-Cog	3.98±1.28	0-5	59 (29.95)
Menu Task	8.24±2.0	4-12	72 (36.55)
MoCA	24.09±3.55	14-30	101 (51.27)
PCST cues	10.08±9.63	0-48	83 (42.13)
Women	151 (76.65)		
White	159 (80.71)		

NOTE. N=197. BIMS possible range: 0-15; Mini-Cog possible range: 0-5, Menu Task possible range: 0-12, MoCA possible range: 0-30, PCST possible range: 0+.

CI, 0.05-0.40), and being male (OR, 0.41; 95% CI, 0.16-0.95) significantly increased the odds of impaired performance on the PCST relative to having at least some years of college. This model explained 34% of the variance and correctly classified 73% of the participants.

The results of the sensitivity and specificity and multiple logistic regression analyses indicated that the BIMS has limited sensitivity to IADL deficits as measured by the PCST, suggesting that screening measures such as the Mini-Cog, Menu Task, or MoCA may be more appropriate than the BIMS for use in a general population.

Discussion

The goal of the present study was to evaluate the performance of the BIMS compared with that of 3 other brief screening measures in the identification of community
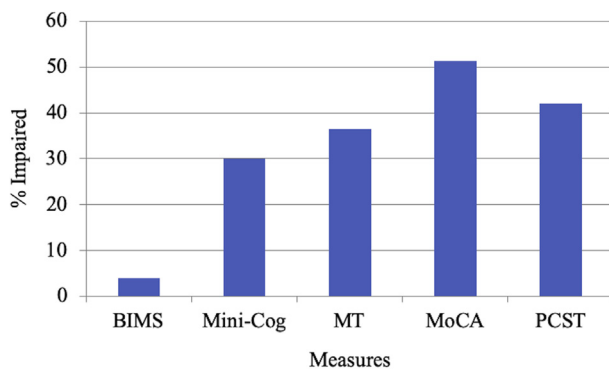

Fig 1 Percentage of the sample (N=197) identified as impaired by each measure. Measures included the BIMS (cutoff: 13,) Mini-Cog (cutoff: 4), Menu Task (cutoff: 8), Montreal Cognitive Assessment (cutoff: 25), and PCST (cutoff: 8). Abbreviation: MT, Menu Task.

residing individuals with impaired functional cognition as indicated by the PCST. Our results indicate that the BIMS, with low sensitivity and high specificity and high rates of both false positives and false negatives, is not an optimal screening tool for the purpose of identifying individuals at risk for IADL impairment. This result is not surprising given the nature of the BIMS as a measure that includes only 3-word recall and orientation information. The better performance of the other measures may at least partially be accounted for by their inclusion of activities believed to be sensitive to executive function impairment. Although the comparison measures included in this study have markedly higher levels of sensitivity, their balance of sensitivity and specificity varies. The BIMS had the highest specificity (ie, the lowest rate of false positive findings) across all of the screening measures. Individuals unimpaired on the PSCT were also likely to be classified as unimpaired on the BIMS. Because the BIMS is highly specific, a positive result provides solid evidence for impairment. While screening tests are ideally both highly sensitive and specific, sensitivity is generally preferred over specificity if the objective is early identification and intervention.[46] If the goal of screening programs is to identify individuals at risk for impaired cognition and potential for impaired community independence, then the scales with low false negative rates are likely to be the most useful. All 3 comparison measures evaluated have far lower false negative rates than the BIMS. Nonetheless, other factors such as ease of administration and scoring may also be relevant to measure selection depending on setting.

The BIMS was designed to identify cognitive deficits among a postacute skilled nursing population and was a major advance over the procedures in use before its introduction. However, the BIMS does not distinguish between individuals with milder impairments and cognitively healthy individuals, even in a skilled nursing population.[13,14,19] Nevertheless, the use of the BIMS is being
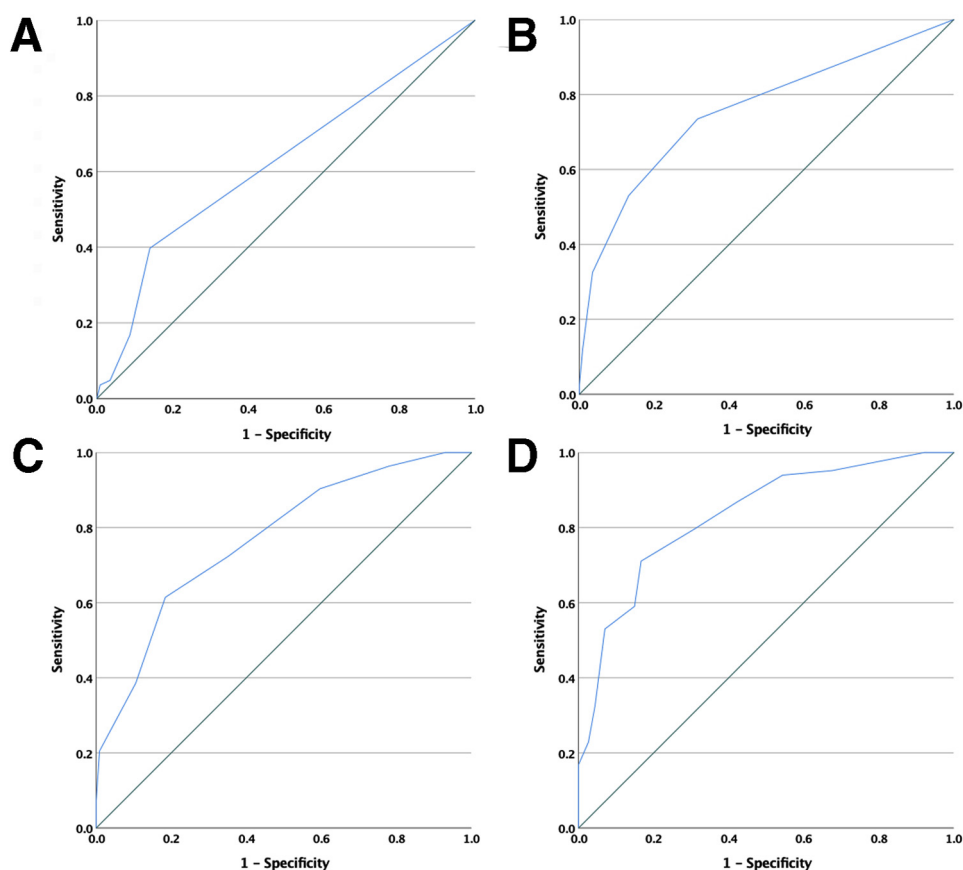
Fig 2 Receiver operating characteristic curve analysis demonstrating the accuracy of the (A) BIMS, (B) Mini-Cog, (C) Menu Task, and (D) Montreal Cognitive Assessment, in classifying individuals as impaired versus unimpaired on the PCST.

expanded beyond the population for which it was designed. The results of this study highlight the limitations of the BIMS in identifying individuals with cognitive deficits significant enough to suggest the need for ongoing monitoring and support. Each comparison measure identified more individuals with impaired performance on simulated complex IADL tasks than the BIMS. The 3 comparison measures were selected as methodologically distinct from the BIMS and from each other. The Mini-Cog is the most similar to the BIMS in that it uses 3-word registration and recall, but it differs from the BIMS in using clock drawing, a measure considered sensitive to executive functioning, instead of an assessment of orientation.[47,48] As previously noted, the BIMS assesses memory and orientation, but does not include items sensitive to impaired executive functions[13,14] that are considered critical to IADL and community independence.[1] The Menu Task was designed to be a performance-based

measure of functional cognition in which an individual has to complete a simulated menu while following rules. A single task with subcomponents intended to impose cognitive load. Like the BIMS, both the Mini-Cog and the Menu Task take 3 to 4 minutes to administer and require no equipment other than preprinted stimulus materials and a pencil. The MoCA was included in our comparison because it is widely used in acute, postacute, and primary care settings and was developed as a measure of mild cognitive impairment. The MoCA also requires no equipment; however, it takes approximately 10 minutes to administer, making it longer than may be ideal for a screening measure, and, as of 2020, paid certification is required for each user.

We found no association between age or number of self-reported chronic diseases and impairment on the PCST, but a higher proportion of men than women were found to be impaired on 2 of the 4 measures used in this study. Lower

Table 3 Sensitivity and specificity of screening measures with PCST as index measure

Test (Cutoff)	Sensitivity, % (95% CI)	Specificity, % (95% CI)	TP (%)	TN (%)	FP (%)	FN (%)
BIMS (13)	5 (1.33-11.88)	96 (91.26-99.04)	50	58	50	42
Mini-Cog (4)	53 (41.74-64.07)	87 (79.23-92.44)	75	72	25	28
MoCA (25)	79 (69.24-87.59)	69 (59.97-77.60)	65	82	35	18
Menu Task (8)	61 (50.12-71.93)	82 (73.23-88.22)	71	74	29	26

NOTE. N=197.
Abbreviations: FN, false negative; FP, false positive; TN, true negative; TP, true positive.

Table 4 Multiple logistic regression models predicting IADL impairment

Measure/Variable	OR (95% CI)	P Value	Nagelkerke R^2	Model Correct Classification IADL Impairment, %
BIMS			.28	57
Women	0.34 (0.14-0.82)	.02		
Age >65 y	1.04 (0.43-2.48)	.93		
Education ≥ high school	0.11 (0.04-0.29)	.001		
Chronic health conditions	1.18 (0.83-1.58)	.23		
BIMS impaired	1.14 (0.20-6.67)	.88		
MoCA			.40	74
Women	0.47 (0.19-1.20)	.12		
Age >65 y	0.97 (0.39-2.44)	.95		
Education ≥ high school	0.14 (0.05-0.38)	<.001		
Chronic health conditions	1.15 (0.87-1.55)	.37		
MoCA impaired	6.17 (2.35-16.16)	<.001		
Mini-Cog			.39	76
Women	0.42 (0.17-1.06)	.07		
Age >65 y	0.94 (0.37-2.37)	.89		
Education ≥ high school	0.13 (0.05-0.35)	.001		
Chronic health conditions	1.18 (0.86-1.65)	.30		
Mini-Cog impaired	10.65 (2.77-40.91)	.001		
Menu Task			.34	73
Women	0.41 (0.16-0.95)	.05		
Age >65 y	0.98 (0.43-2.37)	.96		
Education ≥ high school	0.15 (0.05-0.40)	<.001		
Chronic health conditions	1.16 (0.86-1.56)	.39		
Menu Task impaired	3.06 (1.37-6.85)	.01		

NOTE. N=197. BIMS possible range: 0-15, MoCA possible range: 0-30, Mini-Cog possible range: 0-5, Menu Task possible range: 0-12, PCST possible range: 0+.

educational attainment was also associated with impaired performance on the BIMS and the 3 comparison measures. The MoCA scoring system includes a 1-point adjustment for less than 12 years of education, but none of the other measures have education related adjustments. The independent effects of sex and education suggests that the measures current cutoff scores may require re-evaluation in larger, more diverse samples.

The IMPACT Act was intended to bring uniformity to data collection measures across postacute care settings, but the measures adopted for use still need to be adequate for the intended purpose in each of the settings to which they are applied. Adoption of a measure by the CMS is also likely to lead to its general implementation as a standard across providers. This study raises doubt regarding the adequacy of the BIMS for the expanded purpose proposed by the CMS and suggests that other potentially superior measures are available that meet the criteria established by the CMS. Further research should examine whether a brief screening measure with the components considered sensitive to executive function can be administered routinely by staff with minimal training. Screening measures should be assessed for their ability to predict future IADL impairments.

Study limitations

This study has limitations and caution should be used in interpreting the findings. Participants in the sample were 55 years old and older and were not selected for the presence of cognitive impairment. As a result, the number of individuals with cognitive impairments was lower in our community sample than would be expected across post-acute care populations. All measures were administered in the same session, and individual assessment results may have been affected by cross measure contamination. Our estimates of administration time for each measure were derived from the original reports and our own observations. We did not formally record administration times. Because impairments rates in our sample are lower than those expected across postacute settings, it is possible that each of these screening tests would take longer to administer in these populations. In addition, given the relatively small sample size of this study, caution is warranted in interpreting the ORs given the wide CIs. These findings should be independently verified with a larger sample.

Conclusions

This study has important clinical implications for the selection of screening measures used to identify individuals with impaired functional cognition who are at risk for IADL impairments. Functional cognitive impairment has been associated with unstable community placement and the potential for readmission among recently discharged hospital patients who may need additional supports to safely remain in the community. The current findings confirm prior

reports that the BIMS is not sensitive to milder forms of cognitive impairments[13,14] and provide evidence that several rapid screening measures more accurately identify individuals with deficits in functional cognition than the BIMS.

Supplier

a. SPSS, version 25.0; IBM Corp.

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