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REVIEW

Tools that assess functional decline: systematic literature review update

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Background: Screening for risk of functional decline in the elderly is increasingly important in ambulatory health care settings, to ensure that appropriate services are provided to reduce the risk of downstream decline. These screening tools should have sound psychometric properties and clinical utility.

Design: An updated systematic literature review for (1) new screening tools published since the last review, conducted in 2007 and published in 2008, and (2) recent research into psychometric properties of the five tools identified in the previous review.

Methods: A comprehensive review of multiple databases using the search terms from the Sutton et al review was conducted. The reference lists of included articles were hand-searched for additional articles, and the literature was evaluated with the appropriate critical appraisal tool. Included screening tools should be designed for, or applicable to, hospital emergency departments.

Results: Two relevant new tools were identified (the Simplified PROFUNCTION index and Brief Risk Identification for Geriatric Health Tool). Six additional papers testing psychometric properties of four of the five previously reported screening tools were also found.

Conclusion: Seven relevant screening tools are available with similar validity and reliability estimates. They consider similar constructs and have convincing evidence of applicability to a range of older populations, or different cultures. Identification of Seniors at Risk, is the most frequently reported screening tool. The wider unanswered question is how, why, and where these functional decline screening tools are used; how valid the findings are on ill, stressed, older people in emergency departments; and how the findings are acted upon in terms of community intervention to slow functional decline.

Keywords: functional decline, older adults, screening and assessment tools

Background

Systematic literature reviews are a good method of presenting the current evidence to busy clinicians in a condensed summary; however, they need to be regularly updated to ensure access to the latest evidence. The systematic review conducted by Sutton et al published in 2008[1] is the first we know of that reported on screening tools to identify older individuals at risk of functional decline, specific to use in a hospital emergency department.

As the general population increases in age, there is a need for a valid and reliable tool that can quickly and accurately screen for functional decline. Functional decline is a term used to reflect the loss of an individual's ability to independently and safely perform activities of daily living (ADLs) (usually at home, in the community).[2,3]

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Basic ADLs encompass everyday tasks (bathing, dressing, feeding, continence, transferring, and toileting)[2] and instrumental ADLs address higher-level tasks (shopping, driving, and banking).[3] Functional decline has been associated with increased rates of mortality, health service use and institutionalization, and higher health care costs.[4–6] There is currently no gold standard measure of the attributes or timing of functional decline, as it generally occurs insidiously across a number of domains over time.[7] Functional decline has been variously described, including loss of independence in ADLs,[8–10] confusion and loss of morale, increasing frequency of falls and use of polypharmacy,[8] need for permanent institutionalization or permanent care, increased rates of hospitalization, prolonged hospital stays and/or frequent presentations to emergency departments,[6,8–10] consumption of higher health care costs,[11] and avoidable mortality.[9,10]

The aim of the Sutton et al[1] systematic review was to compare the diagnostic accuracy and clinical utility of the then-available screening tools for functional decline, which could be relevant to older adults presenting to hospital emergency departments for crisis health management. That review identified five tools: the Hospital Admission Risk Profile (HARP),[12] the Identification of Seniors At Risk (ISAR),[13] the Triage Risk Screening Tool (TRST),[14] a tool developed by Inouye et al,[6] and the Score Hospitalier d'Evaluation du Risque de Perte d'Autonomie (SHERPA).[15]

This systematic review aims to update the information presented by Sutton and colleagues[1], thus providing clinicians with a synthesis of the most current evidence base for current screening tools for functional decline.

Methods

Updated search approach

The previous review[1] conducted library database searches that sought studies from 1990 to November 2007 and limited to English studies only. The updated systematic review reported in this paper therefore sought studies published from November 2007 to October 2012, limited to English studies only.

Search strategy

Type of studies

Any peer reviewed article was included if it reported on:

- the development and psychometric testing of a new tool for assessing functional decline in ambulatory older adults;
- functional decline tools tested in emergency departments or suitable for this use;
- subsequent testing of the psychometric properties of the five previously reported functional decline tools;
- the subsequent use of one or more of the five functional decline tools reported on in Sutton et al.[1]

Type of participants

Study participants must have been ≥65 years old and presented to a hospital for treatment of an acute condition.

Types of exposure

Screening tools designed specifically to identify older people at risk of functional decline or reduced functional status at time of presentation to hospital were included in the report.

Types of comparator

Any other screening tool(s) that identified older people at risk of functional decline or reduced functional status were included in the report.

Type of outcomes

Prediction of change in functional status.

Search terms

The search terms covered older populations, screening tools to assess mental and physical functional decline and/or loss, loss of quality of life, and care and hospitalization. The full search strategy can be obtained from the authors on request.

Literature sources

Databases searched were AgeLine, CINAHL, Health Source: Nursing/Academic Edition, PsycARTICLES, Psychology and Behavioral Sciences Collection, PsycINFO, AMED, MEDLINE, EMBASE, Cochrane Library, Wiley Online Library. The reference lists of the included articles were hand searched and any texts potentially matching the inclusion criteria were retrieved.

Study selection

Potentially relevant studies were imported into EndNote reference manager software (Thomson Reuters, New York, NY, USA) and screened for duplicates. Titles and abstracts were screened for relevance to the review questions, and finally full texts were acquired and screened for adherence to inclusion/exclusion criteria. Any disagreements or uncertainties regarding inclusion were resolved via discussion between the authors.

Critical appraisal

Relevant articles were critically evaluated using critical appraisal tools appropriate for the study design. The qual-

ity assessment of diagnostic accuracy studies (QUADAS) critical appraisal tool,[16] which is a validated tool specifically developed to appraise studies assessing the accuracy of diagnostic tools for systematic reviews, was used to appraise the articles on the development of a new tool (See Table 1 for QUADAS scores). Articles reporting on the tools reviewed by Sutton et al[1] were appraised using the Critical Appraisal Skills Programme (CASP) critical appraisal tool for cohort studies[17] (see Table 2 for CASP scores).

Data extraction

The data was extracted into a custom designed spread sheet based on the information extracted by Sutton et al.[1]

This paper reports two separate sets of data:

- Part one: new tools published since Sutton et al's[1] 2008 report to detect functional decline in elderly patients who present to a hospital.
- Part two: subsequent use of the functional decline screening tools identified by Sutton et al.[1]

Results

Search findings

The search returned 601 articles. Eight articles were included in this review (see Figure 1 for the Preferred Reporting Items for Systematic Reviews and Meta-Analyses [PRISMA] diagram of search results).

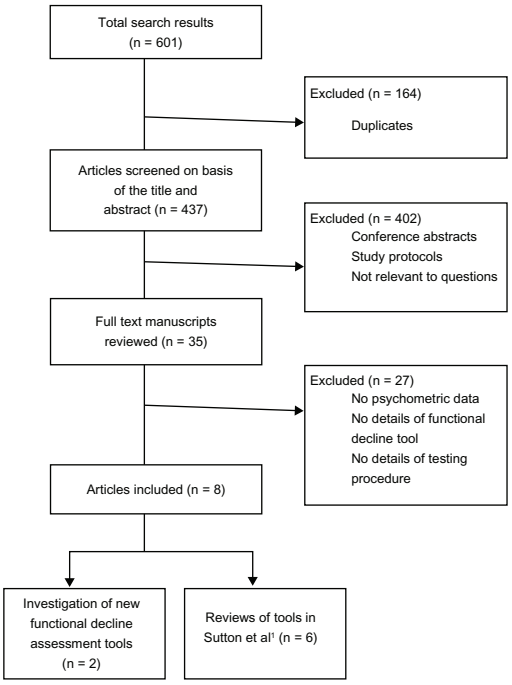

Figure 1 PRISMA diagram of search results.
Abbreviation: PRISMA, Preferred Reporting Items for Systematic Reviews and Meta-Analyses.

Part one: new tools identified in the search

Two additional tools to the five identified by Sutton et al[1] were found:

- Simplified PROFUNCTION index developed by Bernabeu-Wittel et al.[18]
- Brief Risk Identification for Geriatric Health Tool (BRIGHT) developed by Boyd et al.[9]

The Simplified PROFUNCTION index and BRIGHT were assessed using the QUADAS critical appraisal tool. Both screening tools scored moderately for diagnostic accuracy and predictive reliability: the Simplified PROFUNCTION index scored 9/14 and BRIGHT scored 8/14. Both achieved lower scores than those reported for the tools assessed by Sutton et al[1] (these tools ranging between 10/14 to 12/14 on the QUADAS critical appraisal tool). The psychometric properties and QUADAS scores of the new instruments are outlined in Table 1.

Development of the new tools

The PROFUNCTION index and the Simplified PROFUNCTION index were developed by Bernabeu-Wittel et al[19] to assess functional decline in polypathological patients (chronic disease sufferers with multiple pathologies), as the authors believed that the current functional decline assessment tools were not sufficiently specific for this population. The PROFUNCTION index is scored from 0–31 while the Simplified PROFUNCTION index is scored from 0–7. The Simplified PROFUNCTION index, in which all items have an even weighting, was created in the same manner as the PROFUNCTION index, in which items had unequal weightings, and had minimal prognostic differences amongst the original score items. The Simplified PROFUNCTION index obtained similar goodness of fit and discrimination values as the longer version; as such, Bernabeu-Wittel et al[18] suggest using the simplified version, as it is easier to perform. In light of this, only the results from the Simplified PROFUNCTION index are reported here. The tool's generalizability is limited to polypathological patients and the tool, to date, has only been tested in one development study in Spain.[18]

The predictive validity of the Simplified PROFUNCTION index[18] was found to be good when compared to the TRST.[14] The stability of the final model of the Simplified PROFUNCTION index[18] was tested with alternate methods (forward and bidirectional selection techniques) to determine whether the resulting model would differ from the original PROFUNCTION index. They found good reliability. The clinical utility of the Simplified PROFUNCTION index was not discussed other than a recommendation to use the simplified version over the original version.

Table 1 Psychometric properties of new tools found in this search

Functional decline assessment tool	Author, date, and critical appraisal score	Population group and country	Reference standard used	Psychometric properties
				Content validity
Simplified PROFUNCTION	Bernabeu-Wittel et al[18] QUADAS score: 9/14	958 polypathological patients in 36 Spanish hospitals over a 12 month period. Patients aged ≥ 85 years	Flemish version of TRST	Clinical features (chronic neurological condition, chronic osteoarticular disease, class III–IV in New York Heart Association and/or Medical Research Council, four or more polypathology categories), and functional-socio-familial features (Basal Barthel's Index < 60, risk or established social problem)
BRIGHT	Boyd et al[9] QUADAS score: 8/14	Older peoples (aged ≥ 75 years) presenting to emergency departments in New Zealand	inter-Residential Assessment Instrument (interRAI) Minimum Data Set for Home Care Version 2.0 (MDS-HC)	11 functional decline measures of need help with housework; times tripped or fallen; depression; general health; shortness of breath with light activity; need help with bathing; memory problems; difficulty making decisions, need help dressing lower body, need help with transfers, and need help with personal grooming

Abbreviations: ADL, activity of daily living; AUC, area under the curve; BRIGHT, Brief Risk Identification for Geriatric Health Tool; CI, confidence interval; IADL, instrumental ADL; QUADAS, quality assessment of diagnostic accuracy studies; TRST, Triage Risk Screening Tool.

BRIGHT was developed by Boyd et al[9] to identify older patients with functional and physical impairments presenting to the emergency department. BRIGHT has a scoring range of 0–11 (each item is equally weighted) with higher scores negatively correlating to impairment levels.[9] BRIGHT was compared with the current standard (inter-Residential Assessment Instrument [interRAI] Minimum Data Set for Home Care Version 2.0 [MDS-HC])[19–21] as approved by the New Zealand government in functional testing for older adults. There has been no comparison between the BRIGHT instrument and any other functional decline assessment tool. However, as the interRAI tool had not been validated at the time of the Boyd et al[9] study, it provided limited validation evidence for the BRIGHT instrument. At this point in time, BRIGHT has only been tested in New Zealand and included Māori and Pasifika elders; however, the cohort reflected predominantly Caucasian participants.[9] The predictive validity of BRIGHT compared to the New Zealand reference tool was found to be good, when a cut off score of 3–4 is used. Boyd et al[9] state that BRIGHT has good reliability, however, they do not report supporting statistical evidence.

BRIGHT was originally designed to be either patient self-administered or administered with the aid of a caregiver; however, Boyd et al[9] found that only 25% of the sample was able to complete the questionnaire without some form of assistance from the research or nursing staff. They did find that BRIGHT requires no special training for health care staff and takes little time to complete. According to Boyd et al,[9] BRIGHT was designed to be part of a two-stage assessment process; BRIGHT was to be used initially, to quickly identify older adults at risk of functional decline, and then a more intensive tool, in this case the interRAI home care version, used by Boyd et al[9] as the validation tool, to establish the level of aid/care that was necessary at the time of discharge and to aid in the design of a home care program.

Part two: subsequent use of tools identified in Sutton et al[1]

The literature search identified six papers[11,22–26] which reported on one or more of the functional decline screening instruments reported by Sutton et al[1] (HARP was reported in two of the six papers,[22,25] ISAR in all six,[11,22–26] SHERPA in one,[25] and TRST in two[11,26]). No further reports were found on the Inouye instrument. Table 2 lists the assessment items in each screening tool, highlighting the overlap and gaps between these tools.

Braes et al[11] conducted a longitudinal comparative study that tested the predictive validity of the TRST and the ISAR. They found the TRST and the ISAR to be comparable regarding their diagnostic characteristics, with a small advantage

Predictive validity	Reliability	Generalizability	Clinical utility
Discrimination power: Developmental cohort: AUC 0.59 (range: 0.526–0.635) Validation cohort: AUC 0.56 (range: 0.51–0.641)	Good reliability between the derivation cohort and the validation cohort (good Hosmer-Lemeshow goodness-of-fit test ($P = 0.13$)). Global functional decline rate in the validation cohort was 42%	Authors validated predictive indexes in a different region of the country from where it was developed to test geographic transportability as well as diagnostic accuracy	Not Reported
Predicting IADL deficit cutoff: 3+ Sensitivity: 0.76 Specificity: 0.79 AUC 0.83 (95% CI: 0.74–0.91) Predicting cognitive performance Cutoff: 4+ Sensitivity: 0.70, Specificity: 0.74 AUC 0.73 (95% CI: 0.62–0.84) Predicting ADLs Cutoff: 3 or 4 Sensitivity: 0.69, Specificity: 0.70 AUC 0.66 (95% CI: 0.54–0.78)	Not reported	Boyd et al[9] indicate BRIGHT had restricted generalizability at time of publication	Able to be quickly and efficiently administered by nurse. Designed to be used in combination with the interRAI

for the TRST over the ISAR (see Table 3 for psychometric and population data). Based on this, Braes et al[11] concluded that both the ISAR and TRST are good screening instruments for functional decline after hospitalization, however, they do add one caveat: the specificity of both tools was low, leading to approximately 50% false positive scores.

de Saint-Hubert et al[25] conducted a prospective cohort study in order to compare the respective performances of the HARP, ISAR, and SHERPA. They found no statistical difference between HARP and ISAR ($P = 0.12$), no significant statistical difference between SHERPA and HARP ($P = 0.08$), but a significant statistical difference between SHERPA and ISAR ($P = 0.001$) (see Table 3). They concluded that the SHERPA was the most useful tool for identification of patients at low level risk of functional decline.

Graf et al[26] examined a historical cohort to evaluate the performances of ISAR and TRST to predict unplanned readmission after emergency department presentation (see Table 3). The authors concluded that while both tools predicted unplanned hospital readmissions moderately well, they would be better applied to identify patients who could safely be discharged home, and who did not require a more comprehensive geriatric evaluation.

Hoogerduijn et al[22] conducted a prospective cohort study comparing the performance of ISAR and HARP (see Table 3). They concluded that while the instruments tested were strong in both predicting who was at risk of functional decline and who was not at risk, the ISAR showed the best ability to predict functional decline, and was the easier tool to administer.

Salvi et al reported two studies.[23,24] In 2009,[23] these authors conducted a prospective observational cohort study evaluating the predictive validity of ISAR. With a cutoff of 2, the ISAR was positive for 70.5% of patients who had high cognitive impairment, disability, and comorbidities, which was reflected in longer lengths of hospital stay, frailty, and older age. We calculated sensitivity and specificity from raw scores reported in the paper (see Table 3).

In 2012, Salvi et al[24] conducted a second prospective observational cohort study to test the validity of the ISAR tool as an indicator of patients in need of a comprehensive geriatric assessment. The authors found that the ISAR was highly correlated with frailty. Using a cutoff score of 3, they showed ISAR had good sensitivity and specificity (see Table 3), thus allowing for strict selection of frail geriatric patients in an emergency department. The authors concluded that ISAR is a useful screening tool for frailty and identifies those at risk of adverse outcomes after an acute emergency department visit. They also found that the ISAR tool can be used to more effectively select those patients that will benefit from geriatric interventions in the community.

Table 2 Assessment items reported in the various tools reviewed in this paper

Functional decline assessment questions	Functional decline assessment tools						
	BRIGHT (Boyd et al[9])	HARP (Sager MA et al[12])	SHERPA (Cornette et al[15])	ISAR (McCusker et al[13])	TRST (Hustey et al[14])	Inouye instrument (Inouye et al[6])	Simplified PROFUNCTION (Bernabeu-Wittel et al[18])
Age		√	√				√
Instrumental ADLs (eight items)	√	√	√				
Cognitive status (MMSE)	√	√	√	√	√	√	
History of hospitalization				√	√		
Impaired vision				√			
Polypharmacy				√	√		
Recent fall	√		√		√		
Lives alone					√		
Registered nurse concern					√		
Decubitus ulcer						√	
Social activity level						√	√
Self-rated health	√		√				
Basic ADLs (six items)	√			√	√	√	
Acute decline in function				√			
Feelings of depression	√						
Shortness of breath	√						√
Difficulty decision making	√						
Bethel index of >60							√
Osteoarticular disease							√
Neurological condition							√
Four polypathology categories							√

Note: Data for this table was retrieved from the original documents cited in Sutton et al.[1]
Abbreviations: ADL, activity of daily living; BRIGHT, Brief Risk Identification for Geriatric Health Tool; HARP, Hospital Admission Risk Profile; ISAR, Identification of Seniors At Risk; MMSE, Mini Mental State Examination; SHERPA, Score Hospitalier d'Evaluation du Risque de Perte d'Autonomie; TRST, Triage Risk Screening Tool.

Discussion

This is the first comprehensive review of functional decline screening tools in 5 years. We have identified that functional decline in elderly patients presenting to an emergency department can now be measured with eight instruments. While not all of the instruments have been tested in an emergency department, their clinical utility and predictive validity suggests that they can appropriately be used in this setting. Since the Sutton et al[1] review, two new instruments have been developed, which are specific to select patient populations (polypathological older people [Simplified PROFUNCTION], and New Zealand's [BRIGHT]).

Of the five instruments reported in Sutton et al,[1] six subsequent papers have examined four of the tools. No further research has been conducted on the Inouye tool.

The ISAR instrument is the most commonly reported screening tool since the Sutton review (ie, since 2008). It appears to be the most useful tool for assessing functional decline in elderly patients presenting to an emergency department because it is quick to administer, does not require specialized training for its administrators, and is efficient. It has good predictive capacity in terms of area under the curve and sensitivity (using cut off points at scores of 2 and 3), however specificity is less convincing.

The tools all assess similar constructs, albeit presented in questions using different wording. ADLs are most commonly assessed, although using different ways (validated tools such as Lawton and Brody's instrumental ADL[27] and Katz et al's ADL[28]) or using purpose-built questions. The intent of functional decline screening in emergency departments is to gain a snapshot of a patient in a short timeframe, regarding their risk of declining in ADL performance in the next few months. The ability to accurately assess the potential for functional decline in a setting such as an emergency department is an important step in reducing unnecessary hospital readmissions and assisting in maintaining functional independence in the home for older people. In light of this, it is not surprising that the ISAR is the most frequently reported tool, as this is consistently cited as the easiest tool to administer of all those discussed in this paper.

Table 3 Psychometric properties of tools used since Sutton et al[1]

Functional decline assessment tools	Author, date, and critical appraisal score	Population group and country	Psychometric properties			
			Predictive validity	Reliability	Generalizability	Clinical utility
HARP	de Saint-Hubert et al[25] CASP score: 7/10	98 participants, ≥75 years, at a tertiary care hospital in Belgium	AUC 0.68 (95% CI: 0.57–0.77)	Findings similar to other studies	Findings similar to other studies with larger cohorts.	Not stated
	Hoogerduijn et al[22] CASP score: 8/10	177 older participants in a 1024 bed university teaching hospital in the Netherlands	Low, intermediate, and high risk. Sensitivity was 61%, 40%, and 21%, respectively. Specificity was 68%, 81%, and 89%, respectively. AUC was 0.65, 0.60, and 0.56, respectively.	Not stated	Not stated	Identifying patients at risk for functional decline is a first step in prevention, followed by geriatric assessment and targeted interventions. Studying the validity of existing instruments is necessary before implementation in clinical practice.
SHERPA	de Saint-Hubert et al[25] CASP score: 7/10	98 participants, ≥75 years, at a tertiary care hospital in Belgium	AUC 0.73 (95% CI: 0.63–0.82) at a cutoff of 3.5 Sensitivity 98% Negative LR: 0.07	Findings similar to other studies	Findings similar to other studies with larger cohorts.	Not stated
ISAR	Braes et al[11] CASP score: 8/10	Older Dutch-speaking adults, hospitalized following an emergency department presentation in a 1470 bed academic hospital in Belgium	All measures at 90 days: Sensitivity: 0.74 (95% CI: 0.59–0.85) NPV 83 Specificity: 0.36 (95% CI: 0.32–0.40) PPV 25 Accuracy 45%	Not stated	Not stated	Increases awareness regarding the basic geriatric attention points.
	de Saint-Hubert et al[25] CASP score: 7/10	98 participants, ≥75 years, at a tertiary care hospital in Belgium	AUC: 0.549	Findings similar to other studies	Findings similar to other studies with larger cohorts.	Not stated
	Graf et al[26] CASP score: 10/10	An historical cohort of 345 patients' ≥75 years, assessed by a geriatric team at the Geneva university hospital in Switzerland	All measures at 6 months AUC 0.660 Sensitivity 91.8% Specificity 28.6% PPV 55.5% NPV 78.1%	Not stated	Among ED-patients ≥ 75 years, the ISAR predicted unplanned readmission with moderate accuracy, due to low specificity.	The ISAR seems to be easier to routinely use in the ED.
	Hoogerduijn et al[22] CASP score: 8/10	177 older participants in a 1024 bed university teaching hospital in the Netherlands.	AUC 0.67 Sensitivity 93% Specificity 39%	Not stated	Not stated	Identifying patients at risk for functional decline is a first step in prevention, followed by geriatric assessment and targeted interventions. Studying the validity of existing instruments is necessary before implementation in clinical practice.

(*Continued*)

Table 3 (*Continued*)

Functional decline assessment tools	Author, date, and critical appraisal score	Population group and country	Psychometric properties			
			Predictive validity	Reliability	Generalizability	Clinical utility
	Salvi et al[23] CASP score: 9/10	200 older patients, presenting at the emergency department of a tertiary hospital in Italy	Specificity 46.5% Sensitivity 77.5%	Not Stated	Was an effective test for frailty in the Italian population as well as the Canadian population the tool was originally trialled on.	Is easily administered by a nurse post admission with no further training required or appreciable time taken.
	Salvi et al[24] CASP score: 9/10	All patients aged ≥ 75, assessed by the geriatric team during a 3-year period (2007–2009) in the emergency department of two urban hospitals in Italy, and discharged home	Cutoff of 3 AUC 0.92 Sensitivity 0.79 (95% CI: 0.71–0.86) Specificity 0.93 (95% CI: 0.84–0.97)	Valid and reliable	Findings similar to previous larger studies, but conducted in two EDs of a large Italian city. Recommend caution in generalizing results.	May be administered by a trained nurse just after triage, without any further workload for the ED staff.
TRST	Braes et al[11] CASP score: 8/10	Older Dutch-speaking adults, hospitalized following an emergency department presentation in a 1470 bed academic hospital in Belgium	All measures at 90 days: Sensitivity: 0.78 (95% CI: 0.63–0.89) NPV 89 Specificity: 0.50 (95% CI: 0.46–0.53) PPV 31 Accuracy 56%	Not stated	Not stated	Increases awareness regarding the basic geriatric attention points.
	Graf et al[26] CASP score: 10/10	An historical cohort of 345 patients >75 years, assessed by a geriatric team at the Geneva University hospital in Switzerland	All measures at 6 months AUC 0.640 Sensitivity 88.8% Specificity 27.4% PPV 54.3% NPV 71.6%	Not stated	Among ED patients ≥ 75 years, the TRST predicted unplanned readmission with moderate accuracy, due to low specificity.	The "professional recommendation" item of the TRST tool is subjective and particularly difficult to estimate in clinical use.
Inouye instrument	No articles using/testing this instrument were found in this systematic review.					

Abbreviations: AUC, area under the curve; CASP, Critical Appraisal Skills Programme; CI, confidence interval; ED, emergency department; HARP, Hospital Admission Risk Profile; ISAR, Identification of Seniors At Risk; LR, likelihood ratio; NPV, negative predictive value; PPV, postive predictive value; TRST, Triage Risk Screening Tool.

The application of any functional decline screening tool in an emergency department should be carefully considered. Older people presenting to emergency departments are generally sick and distressed, and the emergency department itself is a fast-paced, high-energy environment which may not be conducive to accurate screening. The eight instruments all contained two types of elements: immutable (eg, education, age, living arrangements, and previous mobility state) as well as mutable elements that may well be influenced by the older person's current health state and distress (such as their recollections regarding their ability to manage ADLs, and their cognition). It is probable that poor cognition scores, suspected delirium, poor balance, and depressive feelings, which are often associated with acute illness,[12] could be abnormally present (ie, not a true reflection of how the older person usually is if they were well). Assessing these elements in a busy emergency department with a sick, distressed individual will affect the accuracy of the assessment. This brings the validity of administration of any functional decline screening tool in an emergency department into question.

However, for many older people, the only time they come to the notice of health professionals is when they are in a health crisis. Therefore, considering them for their capacity to decline functionally over the coming months is essential when the opportunity arises.[9,11] Thus, a balance needs to be struck between assessing capacity in a less than ideal situation (emergency department) and coming to a wrong conclusion (such as not identifying someone who has the capacity for functional decline, or wrongly identifying someone as having the capacity to decline), compared with not assessing them at all, and allowing functional decline to occur without any attempt at screening. The opportunity for older people to be screened in less stressful environments (such as their doctor's rooms or a community clinic) depends on their regular community health contacts. It would seem that there are opportunities to screen older people more accurately, using any of the tools described in this review, when they are well. However, this requires awareness by community-based health care providers of the need for functional decline assessment as part of aging and regular health checks.

Conclusion

There are seven documented instruments, with generally similar validity and reliability estimates, to assess older people for functional decline. They contain similar elements and have convincing evidence of applicability to a range of older populations and cultures. To date, the ISAR is the most frequently used, perhaps due to the small number of questions. However, the bigger issues are how, why, and where any of these functional decline screening tools are used; how valid the findings are on ill, stressed older people in emergency departments; and how the findings are acted upon in terms of community intervention to slow functional decline.

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Disclosure

The authors report no conflicts of interest in this work.

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