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SCREENING FOR FRAILTY IN ELDERLY SUBJECTS LIVING AT HOME: VALIDATION OF THE MODIFIED SHORT EMERGENCY GERIATRIC ASSESSMENT (SEGAm) INSTRUMENT

N. OUBAYA[1], R. MAHMOUDI[2,3], D. JOLLY[1,2], A.-A. ZULFIQAR[3], E. QUIGNARD[4], C. CUNIN[5], P. NAZEYROLLAS[2,6], J.-L. NOVELLA[2,3], M. DRAMÉ[1,2]

1. Reims Teaching Hospitals, Robert Debré Hospital, Department of Research and Innovation, Reims, F-51092, France; 2. University of Reims Champagne-Ardenne, Faculty of Medicine, E.A 3797, Reims, F-51095, France; 3. Reims Teaching Hospitals, Maison Blanche Hospital, Department of Clinical Gerontology, Reims, F-51092, France; 4. Hospital of Troyes, Department of Palliative Care, Troyes, F-10003, France; 5. Caisse d'assurance retraite et de santé au travail du Nord-Est, Mission RELAIS – Actions collectives gérontologiques, Nancy, F-54000, France; 6. Reims Teaching Hospitals, Robert Debré Hospital, Department of Cardiology, Reims, F-51092, France. Corresponding author: Moustapha Dramé, MD, MPH, PhD, Department of Research and Innovation, Reims Teaching Hospitals, Robert Debré Hospital, Avenue du Général Koenig - 51092 Reims cedex, France, Telephone: + 33 3 26 78 44 12, Fax: + 33 3 26 83 25 89, E-mail: mdrame@chu-reims.fr

Abstract: *Objectives:* To validate the modified version of the Short Emergency Geriatric Assessment (SEGAm) frailty instrument in elderly people living at home. *Design:* Longitudinal, prospective, multicentre study. *Setting:* Four departments (Ardennes, Marne, Meurthe-et-Moselle, Meuse) in two French Regions (Champagne-Ardenne and Lorraine). *Participants:* Subjects aged 65 years or more, living at home, who could read and understand French, with a degree of autonomy corresponding to groups 5, or 6 in the AGGIR autonomy evaluation scale. *Measurements:* Assessment included demographic characteristics, comprehensive geriatric assessment, and the SEGAm instrument. Psychometric validation was used to study feasibility and acceptability, internal structure validity, reliability, and discriminant validity of the SEGAm instrument. *Results:* Between July 1st 2012 and March 31st 2013, 167 patients were included in the study. Averaged age was 77±7 years, the majority were women (70.7%). Feasibility and acceptability of the SEGAm instrument were excellent: we observed no refusal to participate, no drop-out during administration, no missing items, no ceiling or floor effects, and the administration time was short (5.0±3.5 min). By factor analysis, the instrument proved to be unidimensional. It showed good internal consistency (Cronbach's alpha coefficient: 0.68) and good test-retest (intra-class correlation: 0.88) at 7 days interval. Discriminant validity showed a significant difference, mainly for nutritional status, fall risk, dependency, mood and depression risk, and comorbidities. *Conclusion:* Based on these psychometric properties, the SEGAm appears to be an easy-to-use instrument that is particularly suitable for use in the community to identify frail elderly people who could benefit from early targeted interventions.

Key words: Frailty, elderly people, community dwelling, psychometric properties, validation.

Introduction

The term "frailty" is used more and more often in the terminology of geriatric medicine, and characterises a subgroup of elderly persons who are at particularly high risk of poor prognosis. It is a complex concept, since each individual reacts different to stressors (physical, psychological or social) in their environment, and these stress factors become ever more numerous with advancing age. The definition of frailty has progressively evolved over the last few decades, and remains to this day the subject of some controversy. Every researcher defines frailty from the point of view of their own research interests, resulting in various approaches, e.g. medical, physiological, biological… Nonetheless, the notion of frailty is useful in the field of geriatric medicine to prevent, anticipate, manage and accompany such patients. Indeed, it is generally acknowledged that frailty exposes elderly patients to deleterious health situations, such as emergency hospital admissions, nursing home entry, excess morbidity with secondary incapacity, and death (1-7).

Over a three-year follow-up period, Fried et al (5) showed that compared to non-frail patients, patients qualified as frail had a six-fold higher risk of death, a fivefold increase in the risk of becoming dependent, and a twofold increase in the risk of falling or being admitted to hospital. According to Rockwood et al (8), frailty increased by 9 the risk of nursing home placement, while Winograd et al (9) reported that the average duration of hospital stay was 12 days longer in frail vs non-frail patients.

The interesting characteristic of frailty is that it can be reversed, if appropriate management is implemented. Regardless of the definition of frailty used, the prevalence of frailty is quite high, as shown by Santos-Eggimann et al. (10), who reported a prevalence of 17% of frail subjects in a population of European subjects aged 65 and over living at home. Similarly, Collard et al (11) reported a rate of 11% in a systematic review in community-dwelling subjects. This relatively high prevalence has incited growing interest in the concept, and as a result, despite the absence of a consensual definition, tools to detect and characterise frailty have been increasingly used over the last 20 years. Indeed, clinicians, researchers and political leaders all agree that it is necessary to develop instruments to detect frailty, with a view to implementing appropriate management strategies, such as specific or multidisciplinary care, and to taking a coherent approach to prevention. The result of this policy is that helping

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elderly persons to remain living at home is a priority. Elderly persons generally prefer to stay at home, even when their health deteriorates, but anything that perturbs this delicate state of equilibrium may lead to emergency admission to hospital, which is known to contribute to increased mortality in this population (8-9, 12-13). Indeed, hospital admission often reveals a latent state of frailty in elderly patients that screening programmes implemented while the person was still living at home could probably identify and treat.

Many tools to evaluate frailty have been developed (14). However, most are designed for use in the hospital setting, with the resultant drawback that they are not suitable for routine use in the community setting. A few tools have been developed for use in community-dwelling subjects, such as the Cardiovascular Health Study (CHS) developed by Fried from a cohort of subjects aged 65 and older (5) ; the Study of Osteoporotic Fractures (SOF) (15) ; or the SHARE frailty instrument, developed in a cohort of the same name comprising subjects aged 50 years and older living at home. However, at the time our study was designed, none of these instruments had been validated in terms of psychometric properties.

With the ageing of the population in industrialized countries, and the ever stronger desire of our senior citizens to remain living at home, it appears important to be able to detect frailty as early as possible in the community, in order to take appropriate and efficacious measures in terms of health promotion and secondary prevention. This would also help to delay the loss of autonomy as long as possible, by gradually introducing support services to help keep subjects living at home as their needs change. This in turn would defer nursing home placement, and avoid unnecessary hospital admissions by anticipating sudden deteriorations in health status.

Schoevaerdts et al developed a simple tool to detect frailty in elderly subjects from a population of French-speaking older adults admitted to the emergency department, namely the Short Emergency Geriatric Assessment (SEGA) (16). This tool is increasingly used by geriatric medicine specialists in French-speaking countries (17).

The aim of this study was to validate the psychometric properties of the modified SEGA (SEGAm) in a cohort of subjects aged 65 years or more, living at home, with a view to using this simple tool to detect frailty in community-dwelling elderly persons.

Methods

Study design and population

This was a longitudinal, prospective, multicentre study performed in four French Departements (Ardennes, Marne, Meurthe-et-Moselle, Meuse) in two French regions (Champagne-Ardenne and Lorraine). Subjects aged 65 years or older, living at home, and able to read and understand French were eligible for inclusion. Subjects also had to have a level of autonomy corresponding to grade 5 or 6 (out of a maximum of 6) on the French AGGIR scale (Autonomie Gerontologique Groupes Iso Ressources) (18). The AGGIR scale has been used in France by the national social security system to evaluate the level of autonomy for the allocation of social welfare. It distinguishes 6 groups of subjects, who require the same resources to meet their needs. Group 1 corresponds to subjects who unequivocally require the continual presence of a caregiver; group 2 describes subjects requiring permanent monitoring with regular help; group 3 includes persons requiring daily help, several times per day, for their physical autonomy only; group 4 includes subjects who cannot transfer alone, but who can get about, or who do not have mobility problems, but who need to be aided or simulated for physical activities; group 5 corresponds to persons requiring monitoring and sporadic help, mainly for housework; finally, group 6 corresponds to subjects who are independent in the activities of daily living. Subjects in hospital or living in a nursing home or other long-term care facility were not included.

Study variables

We recorded: demographic data (age, sex, place of residence, marital status, level of education); presence of any informal aid (children, close relatives….) and formal aid (nurse, home help, help with housework, meal delivery, minder, physiotherapist, speech therapist, psychologist, personal alarm system). The frailty status of the patient was evaluated using the Short Emergency Geriatric Assessment (SEGA) developed by Schoevaerdts et al. (16). For the purposes of this study, we used a modified version (SEGAm), namely by modifying the titles of the response modalities in order to adapt them to French culture, but without modifying the content. The SEGAm comprises Sheet A, which evaluates frailty per se on a 13-item scale, with each item graded either 0 (most favourable state), 1, or 2 (least favourable state), thus making it possible to classify subjects into three groups: not very frail (score ≤8), frail (8< score ≤11), and very frail (score> 11). A second sheet, Sheet B, records complementary data on factors likely to impact on the patient's outcome (Appendix). The SEGAm was administered by social workers, ergotherapists, nurses and non-medical personnel trained in administration of the instrument. Comprehensive geriatric assessment was also performed. Cognitive function was evaluated using the Mini Mental State Examination (MMSE), based on the thresholds defined by Crum et al. (19). Depression was measured using the four-item Geriatric Depression Scale Short Form (GDS-S), which classifies patients as being at risk of depression if their score is ≥1 (20, 21). Number of different drugs used was recorded. Nutritional status was assessed using the Mini-Nutritional Assessment Short Form (MNA-SF) (22), with a score less than 12 defining malnutrition or risk thereof. The Norton scale (23) was used to assess risk of bedsores, and a score ≤14 defined patients at risk. Subjects were considered dependent for instrumental activities of daily living (IADL) if they had lost the ability to perform at least one of the following activities

unaided: use the telephone, shopping, transport or responsibility for own medication (24). Similarly, subjects were also classified as dependent for the activities of daily living (ADL) if they had lost the ability to perform at least one of the ADL according to Katz's scale, namely: bathing, dressing, toileting, transferring, continence, or feeding (25). Occurrence of a fall in the previous 12 months, and a negative result on the single-leg balance test (i.e. unable to remain standing on one leg for at least 5 seconds), were also noted to evaluate the risk of falls (26). Lastly, comorbidities were evaluated using the Charlson's index, with a score >1 indicating presence of comorbidities (27).

Statistical analysis

The sample size was estimated on the assumption that 10 subjects would be required per item of Sheet A of the SEGAm, thus obtaining a sample size of at least 130 subjects (28). We first evaluated the feasibility and acceptance rate of Sheet A of the SEGAm by evaluating the rate of response, the time required for completion, and the existence of ceiling or floor effects (defined as a single response modality obtaining >80% of responses). We then studied the validity of Sheet A of the SEGAm. Internal structure validity was assessed using factorial analysis (29-31) and the multitrait-multimethod matrix (32). For reliability, internal consistency was assessed using Cronbach's alpha coefficient (33, 34), and test-retest reliability between the responses at day 0 and at day 7 was evaluated with the intra-class correlation coefficient (ICC) (35). Internal consistency was considered to be satisfactory if Cronbach's alpha ≥ 0.70, and test-retest reliability was considered satisfactory if ICC ≥ 0.60. Discriminant capacity was explored by comparing percentages between clinical groups using the Chi square test or Fisher's exact test, as appropriate. Discriminant capacity was test for the usual variables composing comprehensive geriatric assessment (i.e. cognitive function, mood, nutritional status, balance, dependency, risk of falls, comorbidities). Analyses were performed using SAS version 9.3 (SAS Institute Inc., Cary, NC, USA) and R version 3.0.0 (R Development Core Team (2008). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. ISBN 3-900051-07-0, URL http://www.R-project.org).

Ethical considerations

This study was performed in accodance with the Declaration of Helsinki and current French legislation regarding health research.

Results

Between 1 July 2012 and 31 March 2013, 167 patients were included. Average age was 77±7 years; the majority (70.7%) were women. On average, subjects had 3±2 children, 94.5% saw their children regularly, and 90.9% also saw other close relatives regularly. Among the subjects included, 116 patients (69.5%) received at least one type of professional help. Overall, the medical data showed that the subjects were mostly not very frail (70.0%), with an average score on Sheet A of the SEGAm of 6.8±3.5. Overall, cognitive, nutritional and functional status was satisfactory, with few comorbidities. The average number of drugs being taken was 5±3. The socio-demographic and medical characteristics of the study population are shown in Table 1. Table 2 presents the average scores on Sheet B of the SEGAm according to level of frailty (as defined by the responses on Sheet A).

Table 1

Baseline characteristics of the study population (n=167)

Variables	n (%)
Socio-demographic	
Female gender	118 (70.7)
Age ≥ 85 years	24 (14.4)
Marital status	
Married or living maritally	61 (36.5)
Separated/divorced	28 (16.8)
Widowed	66 (39.5)
Single	12 (7.2)
Level of education	
Primary school	40 (24.1)
Secondary level	111 (66.9)
High school diploma or higher	15 (9.0)
Living alone	104 (62.3)
Living in an urban area	112 (67.1)
Living in a single-family house	89 (53.3)
Presence of a main caregiver	45 (27.0)
Medical data	
Level of Frailty according to Sheet A of the SEGAm	
Not frail or not very frail (≤ 8)	117 (70.0)
Frail (8 < score ≤ 11)	35 (21.0)
Very frail (> 11)	15 (9.0)
Impaired cognitive status (based on MMSE)	19 (11.6)
At risk of malnutrition : MNA-SF < 12	55 (35.9)
At risk of bedsores: Norton score ≤ 14	7 (4.2)
At risk of falls (Single-leg balance < 5 s)	95 (57.2)
At least 1 fall	
Within the previous 3 months	34 (20.5)
Within the previous 6 months	48 (29.1)
Within the previous 12 months	59 (35.8)
Probable depression (GDS-SF ≥ 1)	89 (53.6)
Dependency for ADLs : loss of at least 1 ADL	69 (41.6)
Dependency for IADL : loss of at least 1 IADL	83 (50.3)
Presence of comorbidities : Charlson Score >1	86 (51.8)

SEGAm, modified Short Emergency Geriatric Assessment; MMSE, Mini Mental State Examination; MNA-SF, Mini Nutritional Assessment Short Form; GDS-SF, Geriatric Depression Scale Short Form; ADL, Activities of Daily Living; IADL, Instrumental Activities of Daily Living.

Feasibility and Acceptability

Of the 167 patients included in this study, there were no missing data for the SEGAm instrument. Sheet A of the

SEGAm required an average of 5.0±3.5 minutes for completion, and no ceiling or floor effects were observed.

Table 2
Score on Sheet B of the SEGAm according to level of Frailty identified by Sheet A

Sheet A	Sheet B (mean ± SD)	p*
Not very frail	3.7 ± 2.3	<0.0001
Frail	5.8 ± 2.1	
Very frail	8.3 ± 2.4	

* ANOVA (test F de Fisher); SD, standard deviation.

Structure validity

The diagram of eigenvalues from factor analysis suggests the potential existence of two distinct domains; the first relating to health and the second, to life and autonomy. However, analysis of the correlations showed that the correlations between each individual item and the overall score were almost always higher than the correlations between each individual item and the score of the dimension each item belongs to (Table 3). This led us to retain the single-dimension model for Sheet A on the SEGAm instrument.

Reliability

The SEGAm instrument demonstrated good reliability. Indeed, internal consistency was good, with a Cronbach's alpha coefficient at 0.68, and test-retest reliability between day 0 and day 7 was acceptable, with an intra-class correlation coefficient of 0.88.

Discriminant capacity

The evaluation of the discriminant capacity (Table 4) showed that the SEGAm instrument could successfully distinguish, in a statistically significant manner, patients who differed in terms of mood, nutrition, balance, autonomy and comorbidities. However, the SEGAm could not distinguish patients to a statistically significant level on the basis of their cognitive function, even though the proportion of subjects with altered cognitive function was higher in the "frail" and "very frail" groups than in the "not very frail" group. Furthermore, we observed a significant difference between the average score on the Sheet A of the SEGAm between subjects with normal cognitive function (6.5±3.5) and those with impaired cognitive function (8.6 ± 3.0).

Comments

Our study validates the psychometric properties of the SEGAm instrument in subjects aged 65 years of older living at home. This instrument one-dimensional is useful to detect frailty, and has good discriminant capacity and reliability. Furthermore, acceptability and feasibility were satisfactory. The ease of use of this tool makes it the instrument of choice for an ambulatory, non-medical approach. This tool can easily be used to detect frailty, with a view to orienting potentially frail individuals towards geriatric care. It also presents an opportunity to perform a more in-depth evaluation in frail subjects, to identify the factors contributing to frailty on a case-by-case basis, in order to develop a personalised strategy to prevent deterioration. Indeed, Sheet A of the SEGAm showed excellent feasibility with a response rate of 100%, which could partially be explained by the short time required for

Table 3
Item-dimension and item-Total score* Pearson's Correlation Coefficients

	Correlation Item-Dimension 1	Correlation Item-Dimension 2	Correlation Item-Total Score
Medications	0.47		0.62
Mood	0.39		0.32
Perception of health	0.37		0.47
Fall in previous 6 months	0.27		0.44
Nutrition	0.38		0.50
Associated diseases	0.36		0.50
Mobility	0.38		0.51
Continence	0.29		0.45
Cognitive function	0.22		0.31
Age		0.46	0.37
Place of living		0.41	0.28
IADL		0.39	0.55
Meals		0.31	0.34

* Each correlation was calculated by removing the relevant item from the score's calculation; IADL, instrumental activities of daily living.

Table 4
Discriminant capacity of Sheet A of the SEGAm instrument

	Not very frail (score ≤8) n=117 n(%)	Frail (8<score≤11) n=35 n(%)	Very frail (score >11) n=15 n(%)	p
Cognitive function (based on MMSE)				0.16
Impaired	10 (8.7)	6 (17.7)	3 (20.0)	
Normal	105 (91.3)	28 (82.3)	12 (80.0)	
At risk of malnutrition				0.003
Yes (MNA-SF<12)	29 (27.4)	18 (52.9)	8 (61.5)	
No (MNA-SF≥12)	77 (72.6)	16 (47.1)	5 (38.5)	
At risk of bedsores				0.003
Yes (Norton score ≤14)	2 (1.7)	2 (5.7)	3 (20.0)	
No (Norton score >14)	114 (98.3)	33 (94.3)	12 (80.0)	
At risk of falls (Single-leg balance < 5 s)				<0.0001
No (Single-leg balance test ≥ 5s)	64 (55.2)	6 (17.1)	1 (6.7)	
Yes (Single-leg balance test < 5s)	52 (44.8)	29 (82.9)	14 (93.4)	
Fall within the previous 12 months				<0.0001
Yes	26 (22.4)	19 (44.1)	14 (93.3)	
No	90 (77.6)	15 (55.9)	1 (6.7)	
Mood				<0.0001
Probable depression (GDS-SF≥1)	49 (42.2)	28 (80.0)	12 (80.0)	
Depression unlikely (GDS-SF<1)	67 (57.8)	7 (20.0)	3 (20.0)	
Dependency for ADL				<0.0001
Yes (loss of at least 1 ADL)	33 (28.5)	22 (62.9)	14 (93.3)	
No (loss of 0 ADL)	83 (71.5)	13 (37.1)	1 (6.7)	
Dependency for IADL				<0.0001
Yes (loss of at least 1 IADL)	44 (38.3)	24 (68.6)	15 (100.0)	
No (loss of 0 IADL)	71 (61.7)	11 (31.4)	0 (0.0)	
Presence of comorbidities				0.002
Yes (Charlson score >1)	50 (43.1)	24 (68.6)	12 (80.0)	
No (Charlson score ≤1)	66 (56.9)	11 (31.4)	3 (20.0)	

Abbreviations as in Table 1.

completion. Other tools developed in the same indication, such as the Tilburg Frailty Index (36) and the Groningen Frailty Indicator (37) showed considerably lower response rates (54% and 84% respectively). The content validity of the original SEGA tool was validated by Schoevaerdts et al during the development (16). Currently, two conceptual approaches to frailty coexist. On the one hand, there is the single domain approach that describes sarcopenia as the outcome of frailty, as proposed by Fried et al (5). On the other hand, there is also the multi-domain approach, which is similar to comprehensive geriatric assessment. The SEGAm evaluation is based on the multi-domain concept and uses the classic features of frailty commonly found in other such instruments. It addresses the concept of frailty by assessing the person as a whole, including not only frailty in physical terms, but also cognitive function, mood and comorbidities. These aspects are also components of comprehensive geriatric assessment, which is the reference for evaluating the status of elderly subjects (38). Other available instruments for use among community-dwelling seniors include the Tilburg Frailty Index (36), the Groningen Frailty Indicator (37) or the Comprehensive Frailty Assessment Instrument (CFAI) (39), all of which take a multi-domainapproach to frailty by evaluating not social and psychological aspects, in addition to the physical status. The CFAI also takes into account the person's environment, in addition to the physical, psychological and social dimensions. The Tilburg Frailty Index evaluates physical, psychological and social dimensions, where the Groningen Frailty Indicator assessed ADLs, psychological functioning and health problems. The SEGAm does not take environmental factors into consideration, but the main advantage of this instrument is its simplicity, which renders it much quicker to implement than the other instruments mentioned above, which all contain a much larger number of items, resulting in lower response rates.

Furthermore, the single-dimension approach used in the SEGAm contributes to its ease of use, since only the overall total score is taken into account, whereas with multi-dimensional instruments, each dimension generates a distinct

score. Similarly, although the SEGAm covers areas that are also evaluated in comprehensive geriatric assessment, it does not require lengthy tests needing to be performed by specialised personnel, as is the case, for example for the CHS by Fried, or for comprehensive geriatric assessment itself. Thus, after only short training in the questionnaire's use, the SEGAm can easily be implemented on a wide scale by any type of personnel among community-dwelling subjects. Although not fully validated until now, the SEGAm instrument has already proven its ease of use in practice (16). Our validation of the SEGAm in subjects living at home will mean that researchers now have at their disposal a new, simple instrument that can be used in any situation to monitor the state of frailty of elderly subjects. Indeed, the increasingly widespread use of the SEGA instrument by geriatric medicine specialists in French-speaking countries is testimony to its growing popularity (17). Reliability tests showed satisfactory internal consistency for the SEGAm (Cronbach's alpha 0.68), comparable to that of other instruments such as the Tilburg Frailty Index (Cronbach's alpha between 0.34 and 0.70), or the Groningen Frailty Indicator (Cronbach's alpha between 0.57 and 0.81). Indeed, the test-retest reliability of the SEGAm was shown to be superior (ICC 0.88) than that of the Tilburg Frailty Index (ICC 0.77 to 0.87). With its excellent discriminant capacity, the SEGAm also makes it possible to distinguish patients with different clinical states, particularly as regards mood, nutritional status, balance, dependency and comorbidities. Although we did not demonstrate discriminant capacity for cognitive function, we nonetheless observed a significantly lower average score for Sheet A (corresponding to "not very frail" or "not frail") in the group with normal cognitive function, as compared to those with impaired cognitive function.

Another strongpoint of our study is the relatively large sample size, with 167 community-dwelling subjects evaluated. There are no clear rules for the calculation of sample sizes required to validate a questionnaire, but it is generally acknowledge that 10 subjects per items are required for the validation of psychometric properties (28). Given that there are 13 items on the SEGAm, our sample size is largely greater than the 130 subjects recommended according to this rule of thumb.

Therefore, our study validates this simple instrument, that is easy to implement thanks to its short completion time, and also because it can be administered by medico-social staff. In contrast, comprehensive geriatric assessment, admittedly yields a much more thorough evaluation, but is time consuming and can only be performed by trained medical personnel, often multidisciplinary teams.

In conclusion, our validation of the psychometric properties of the SEGAm instrument in subjects aged 65 and older living at home, yields a new instrument that can be used in common by all those involved in gerontological and geriatric care, to detect patent or latent frailty. This should help to take appropriate action for each individual's situation, with a view to maintaining subjects living at home as long as possible. In view of its metrological attributes and its ease of use, the SEGAm instrument appears to be particularly suitable for first-line community-based strategies to identify frailty among elderly subjects.

Key points

- Several instruments to evaluate frailty have been developed, but few are suitable for routine use in community-dwelling elderly subjects.
- Among the tools available to assess frailty in elderly subjects living at home, few have undergone validation of their psychometric properties.
- The SEGA instrument was initially developed for elderly subjects admitted to the emergency department, and is modified and validated in this study for use in community-dwelling subjects.
- The modified SEGA is easy to use, valid and reliable for the detection of frailty in elderly subjects living at home.

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Appendix

Sheets A and B of the SEGA instrument

Sheet A		**Geriatric Profile and Risk Factors**		
	0	**1**	**2**	**Score**
Age	74 years old or less	Between 75 and 84 years	85 years or older	
Origin	Living at home	Living at home with professional help	Nursing home or other	
Medications	3 medications or less	4 to 5 medications	6 medications or more	
Mood	Normal	Sometimes anxious or sad	Depressed	
Perception of own health compared to others of the same age	Better health	Similar level of health	Worse Health	
Fall in the last 6 months	No fall	One fall, not serious	Multiple falls, or serious fall(s)	
Nutrition	Weight stable, normal appearance	Clear loss of appetite in previous 2 weeks, or weight loss (3kg in 3 months)	Malnutrition	
Associated diseases	No known or treated disease	1 to 3 diseases	More than 3 diseases	
IADL (preparing meals, using telephone, take own medication, transport)	Independent	Some help required	Incapacity	
Mobility (get up, walk)	Independent	Support	Incapacity	
Continence (urinary and/or fecal)	Continent	Occasional incontinence	Permanent incontinence	
Meals	Independent	Some help required	Assistance complète	
Cognitive function (memory, orientation) (acute confusion, dementia)	Normal	Slightly impaired	Significantly impaired	
Total				…. / 26
		Groupes de fragilité selon le score au Volet A		
Score ≤ 8		8 < Score ≤ 11		Score > 11
Person not frail		Frail		Very frail

Sheet B		**Additional Data**		
	0	**1**	**2**	**Score**
Hospital admission in the previous 6 months	None	1 hospital admission, duration < 3 months	Several admissions or at least 1 lasting > 3 months	
Sight	Normal (with or without corrective lenses)	Poor	Very poor	
Hearing	Normal (with or without correction)	Poor	Very poor	
Social support / family circle	Couple (or family)	Alone without help	Alone with help	
Professional home help	Not required	Help required from time to time	Daily help or multiple interventions	
Natural caregiver	Not required	Help required from time to time	Daily help or multiple interventions	
Perception of burden by close relatives	Bearable	Considerable	Excessive	
Home environment	Appropriate	Not adapted	Unsuitable	
Financial situation	No problems	Already receiving help	Problem identified, no help in place	
Future perspectives (as evaluated by the subject)	Continue as at present	Continue as at present, with additional help	Change in living arrangements desirable	
Future perspectives (as evaluated by the subject's family)	Continue as at present	Continue as at present, with additional help	Change in living arrangements desirable	

TOTAL Sheet B : …. / 22
The higher the score, the higher the level of frailty

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