



SISTEMA SANITARIO REGIONALE

AZIENDA OSPEDALIERA UNIVERSITARIA  
POLICLINICO UMBERTO I



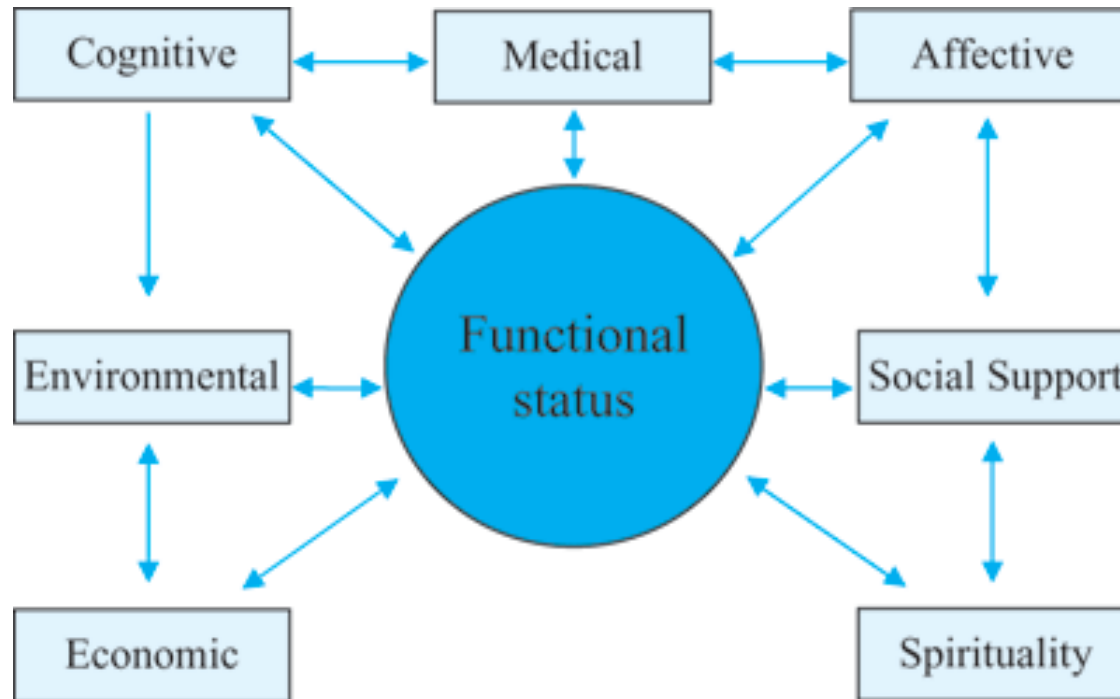
# Comprehensive Geriatric Assessment

## Internal Medicine and General Surgery

Geriatric Sciences  
CDL «F» AA 2021-2022

Dott.ssa Federica Moscucci, Geriatra  
Fisiopatologia ed Imaging Cardio-Toraco-Vascoalre

# Not a mere clinical evaluation



Source: Halter JB, Ouslander JG, Tinetti ME, Studenski S, High KP, Asthana S: *Hazzard's Geriatric Medicine and Gerontology, 6th Edition*; <http://www.accessmedicine.com>

Copyright © The McGraw-Hill Companies, Inc. All rights reserved.



# Purposes

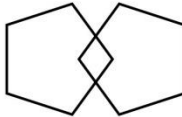
- 1) Management of clinical conditions
- 2) Legal/insurance problem

# Cognitive assessment

- Mini mental state examination (MMSE)

## MINI MENTAL STATE EXAMINATION (MMSE)

Name:
DOB:
Hospital Number:

One point for each answer	DATE:		
<b>ORIENTATION</b> Year    Season    Month    Date    Time  Country    Town    District    Hospital    Ward/Floor	...../ 5	...../ 5	...../ 5
<b>REGISTRATION</b> Examiner names three objects (e.g. apple, table, penny) and asks the patient to repeat (1 point for each correct. THEN the patient learns the 3 names repeating until correct).	...../ 3	...../ 3	...../ 3
<b>ATTENTION AND CALCULATION</b> Subtract 7 from 100, then repeat from result. Continue five times: 100, 93, 86, 79, 65. (Alternative: spell "WORLD" backwards: DLROW).	...../ 5	...../ 5	...../ 5
<b>RECALL</b> Ask for the names of the three objects learned earlier.	...../ 3	...../ 3	...../ 3
<b>LANGUAGE</b> Name two objects (e.g. pen, watch).  Repeat "No ifs, ands, or buts".  Give a three-stage command. Score 1 for each stage. (e.g. "Place index finger of right hand on your nose and then on your left ear").  Ask the patient to read and obey a written command on a piece of paper. The written instruction is: "Close your eyes".  Ask the patient to write a sentence. Score 1 if it is sensible and has a subject and a verb.	...../ 2  ...../ 1  ...../ 3  ...../ 1  ...../ 1	...../ 2  ...../ 1  ...../ 3  ...../ 1  ...../ 1	...../ 2  ...../ 1  ...../ 3  ...../ 1  ...../ 1
<b>COPYING:</b> Ask the patient to copy a pair of intersecting pentagons  	...../ 1	...../ 1	...../ 1
<b>TOTAL:</b>	...../ 30	...../ 30	...../ 30

**MMSE scoring**  
 24-30: no cognitive impairment  
 18-23: mild cognitive impairment  
 0-17: severe cognitive impairment

# Cognitive assessment

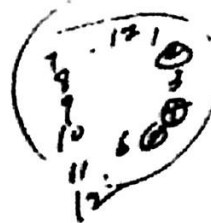
## Clock drawing test



Normal  
Score 10



Mild  
Cognitive  
Impairment  
(Numbers error  
and  
placement  
of hands)  
Score 8



Moderate  
Cognitive  
Impairment  
Score 4



Severe  
Cognitive  
Impairment  
Score 2

# Affective Assessment

## Geriatric Depression Scale (Short Form)

Patient's Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Instructions:** Choose the best answer for how you felt over the past week.

No.	Question	Answer	Score
1.	Are you basically satisfied with your life?	YES / NO	
2.	Have you dropped many of your activities and interests?	YES / NO	
3.	Do you feel that your life is empty?	YES / NO	
4.	Do you often get bored?	YES / NO	
5.	Are you in good spirits most of the time?	YES / NO	
6.	Are you afraid that something bad is going to happen to you?	YES / NO	
7.	Do you feel happy most of the time?	YES / NO	
8.	Do you often feel helpless?	YES / NO	
9.	Do you prefer to stay at home, rather than going out and doing new things?	YES / NO	
10.	Do you feel you have more problems with memory than most?	YES / NO	
11.	Do you think it is wonderful to be alive?	YES / NO	
12.	Do you feel pretty worthless the way you are now?	YES / NO	
13.	Do you feel full of energy?	YES / NO	
14.	Do you feel that your situation is hopeless?	YES / NO	
15.	Do you think that most people are better off than you are?	YES / NO	
TOTAL			

### **Scoring:**

Assign one point for each of these answers:

- |        |        |        |         |         |
|--------|--------|--------|---------|---------|
| 1. NO  | 4. YES | 7. NO  | 10. YES | 13. NO  |
| 2. YES | 5. NO  | 8. YES | 11. NO  | 14. YES |
| 3. YES | 6. YES | 9. YES | 12. YES | 15. YES |

A score of 0 to 5 is normal. A score above 5 suggests depression.

### **Source:**

- Yesavage J.A., Brink T.L., Rose T.L. et al. Development and validation of a geriatric depression screening scale: a preliminary report. J. Psychiatr. Res. 1983; 17:37-49.

# Assessment of function

Three levels:

- 1) Basic Activities of Daily Living (BADLs)
- 2) Instrumental or Intermediate Activities of Daily Living (IADLs)
- 3) Advanced Activity of Daily Living (AADLs).



# Assessment of function

- Measurement of functional status fundamental in geriatric medicine
- Summary of measure of the overall impact health conditions in the context of patient's environment and social support system.

# Assessment of functions

## KATZ INDEX OF INDEPENDENCE IN ACTIVITIES OF DAILY LIVING\*

<b>Activities</b> <i>POINTS (1 OR 0)</i>	<b>Independence</b> <i>(1 POINT)</i> <i>NO supervision, direction, or personal assistance</i>	<b>Dependence</b> <i>(0 POINT)</i> <i>WITH supervision, direction, personal assistance, or total care</i>
<b>BATHING</b>  Points: ____	(1 point) Bathes self completely or needs help in bathing only a single part of the body such as the back, genital area, or disabled extremity.	(0 points) Needs help with bathing more than one part of the body, getting in or out of bathtub or shower. Requires total bathing.
<b>DRESSING</b>  Points: ____	(1 point) Gets clothes from closets and drawers and puts on clothes and outer garments complete with fasteners. May have help tying shoes.	(0 points) Needs help with dressing self or needs to be completely dressed.
<b>TOILETING</b>  Points: ____	(1 point) Goes to toilet, gets on and off, arranges clothes, and cleans genital area without help.	(0 points) Needs help transferring to the toilet, cleaning self, or uses bedpan or commode.
<b>TRANSFERRING</b>  Points: ____	(1 point) Moves in and out of bed or chair unassisted. Mechanical transferring aides are acceptable.	(0 points) Needs help in moving from bed to chair or requires a complete transfer.
<b>CONTINENCE</b>  Points: ____	(1 point) Exercises complete self-control over urination and defecation.	(0 points) Is partially or totally incontinent of bowel or bladder.
<b>FEEDING</b>  Points: ____	(1 point) Gets food from plate into mouth without help. Preparation of food may be done by another person.	(0 points) Needs partial or total help with feeding or requires parenteral feeding.
<b>TOTAL POINTS: ____</b> <i>6 = High (client independent)</i> <i>0 = Low (client very dependent)</i>		

\* Slightly adapted with permission from Gerontological Society of America. Katz, S., Down, T.D., Cash, H.R., et al. (1970). Progress in the development of the index of ADL. The Gerontologist, 10, 20-30.

# Assessment of function

## Instrumental Activities of Daily Living (IADL)

**Instructions:** Circle the scoring point for the statement that most closely corresponds to the patient's current functional ability for each task. The examiner should complete the scale based on information about the patient from the patient him-/herself, informants (such as the patient's family member or other caregiver), and recent records.

<u>A. Ability to use telephone</u>	<u>Score</u>	<u>E. Laundry</u>	<u>Score</u>
1. Operates telephone on own initiative; looks up and dials numbers, etc.	1	1. Does personal laundry completely	1
2. Dials a few well-known numbers	1	2. Launders small items; rinses stockings, etc.	1
3. Answers telephone but does not dial	1	3. All laundry must be done by others	0
4. Does not use telephone at all	0		
<u>B. Shopping</u>		<u>F. Mode of transportation</u>	
1. Takes care of all shopping needs independently	1	1. Travels independently on public transportation or drives own car	1
2. Shops independently for small purchases	0	2. Arranges own travel via taxi, but does not otherwise use public transportation	1
3. Needs to be accompanied on any shopping trip	0	3. Travels on public transportation when assisted or accompanied by another	1
4. Completely unable to shop	0	4. Travel limited to taxi or automobile with assistance of another	0
<u>C. Food preparation</u>		5. Does not travel at all	0
1. Plans, prepares, and serves adequate meals independently	1	<u>G. Responsibility for own medications</u>	
2. Prepares adequate meals if supplied with ingredients	0	1. Is responsible for taking medication in correct dosages at correct time	1
3. Heats and serves prepared meals, or prepares meals but does not maintain adequate diet	0	2. Takes responsibility if medication is prepared in advance in separate dosages	0
4. Needs to have meals prepared and served	0	3. Is not capable of dispensing own medication	0
<u>D. Housekeeping</u>		<u>H. Ability to handle finances</u>	
1. Maintains house alone or with occasional assistance (e.g., "heavy work domestic help")	1	1. Manages financial matters independently (budgets, writes checks, pays rent and bills, goes to bank), collects and keeps track of income	1
2. Performs light daily tasks such as dishwashing, bed making	1	2. Manages day-to-day purchases, but needs help with banking, major purchases, etc.	1
3. Performs light daily tasks but cannot maintain acceptable level of cleanliness	1	3. Incapable of handling money	0
4. Needs help with all home maintenance tasks	1		
5. Does not participate in any housekeeping tasks	0		

(Lawton & Brody, 1969)

**Scoring:** The patient receives a score of 1 for each item labeled A – H if his or her competence is rated at some minimal level or higher. Add the total points circled for A – H. The total score may range from 0 – 8. A lower score indicates a higher level of dependence.

# **(Advance)AADL**

- Using internet, everyday technology, household devices, and sophisticated kitchen activities beyond preparing daily meals, etc
- Fulfill societal, community and family roles
- Participate in recreational or occupational task

**Administrable in 10-15 years**

## Barthel Index of Activities of Daily Living

Other test...

# Barthel Index

**Instructions:** Choose the scoring point for the statement that most closely corresponds to the patient's current level of ability for each of the following 10 items. Record actual, not potential, functioning. Information can be obtained from the patient's self-report, from a separate party who is familiar with the patient's abilities (such as a relative), or from observation. Refer to the Guidelines section on the following page for detailed information on scoring and interpretation.

### The Barthel Index

#### Bowels

0 = incontinent (or needs to be given enemata)  
1 = occasional accident (once/week)  
2 = continent

Patient's Score: \_\_\_\_\_

#### Bladder

0 = incontinent, or catheterized and unable to manage  
1 = occasional accident (max. once per 24 hours)  
2 = continent (for over 7 days)

Patient's Score: \_\_\_\_\_

#### Grooming

0 = needs help with personal care  
1 = independent face/hair/teeth/shaving (implements provided)

Patient's Score: \_\_\_\_\_

#### Toilet use

0 = dependent  
1 = needs some help, but can do something alone  
2 = independent (on and off, dressing, wiping)

Patient's Score: \_\_\_\_\_

#### Feeding

0 = unable  
1 = needs help cutting, spreading butter, etc.  
2 = independent (food provided within reach)

Patient's Score: \_\_\_\_\_

#### Transfer

0 = unable – no sitting balance  
1 = major help (one or two people, physical), can sit  
2 = minor help (verbal or physical)  
3 = independent

Patient's Score: \_\_\_\_\_

#### Mobility

0 = immobile  
1 = wheelchair independent, including corners, etc.  
2 = walks with help of one person (verbal or physical)  
3 = independent (but may use any aid, e.g., stick)

Patient's Score: \_\_\_\_\_

#### Dressing

0 = dependent  
1 = needs help, but can do about half unaided  
2 = independent (including buttons, zips, laces, etc.)

Patient's Score: \_\_\_\_\_

#### Stairs

0 = unable  
1 = needs help (verbal, physical, carrying aid)  
2 = independent up and down

Patient's Score: \_\_\_\_\_

#### Bathing

0 = dependent  
1 = independent (or in shower)

Patient's Score: \_\_\_\_\_

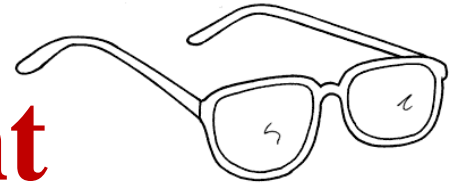
Total Score: \_\_\_\_\_

(Collin et al., 1988)

#### Scoring:

Sum the patient's scores for each item. Total possible scores range from 0 – 20, with lower scores indicating increased disability. If used to measure improvement after rehabilitation, changes of more than two points in the total score reflect a probable genuine change, and change on one item from fully dependent to independent is also likely to be reliable.

# Visual impairment



*Common but under-reported problem*

Major eye disease in elderly:

- 1) Cataract
- 2) Age related macular degeneration
- 3) Diabetic retinopathy
- 4) glaucoma

**PRESBYOPIA**

# Visual impairment

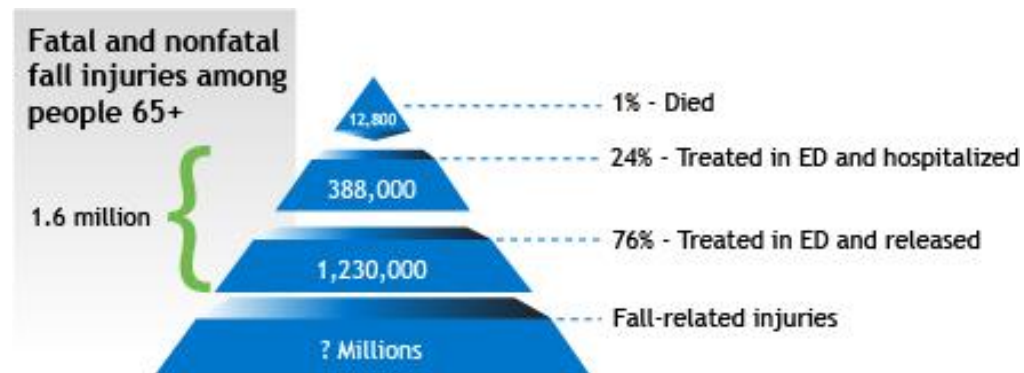
High risk of:

-Fall

-Functional and cognitive decline

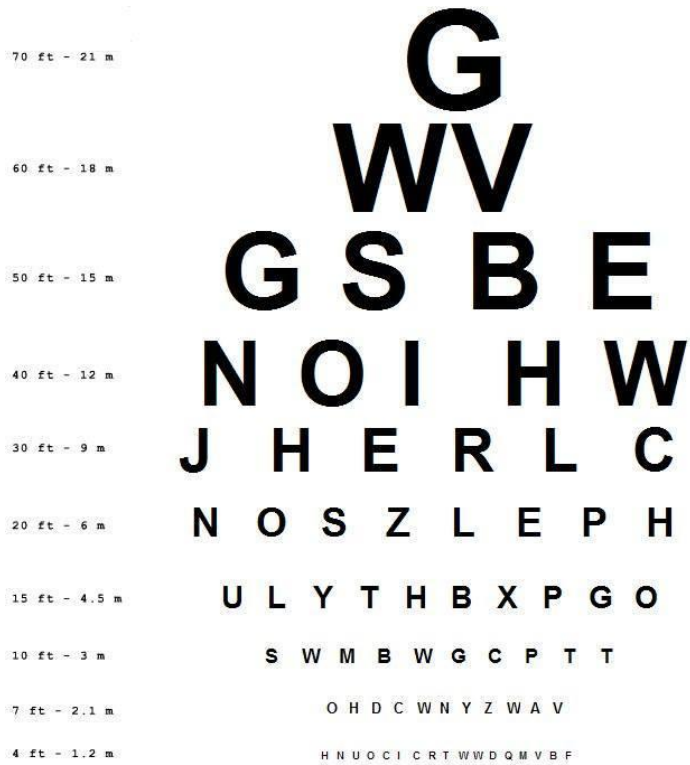
-Immobility

-Depression



# Visual impairment

Sellen Eye Chart



National Eye Institute  
Visual Functioning  
Questionnaire - 25  
(VFQ-25)

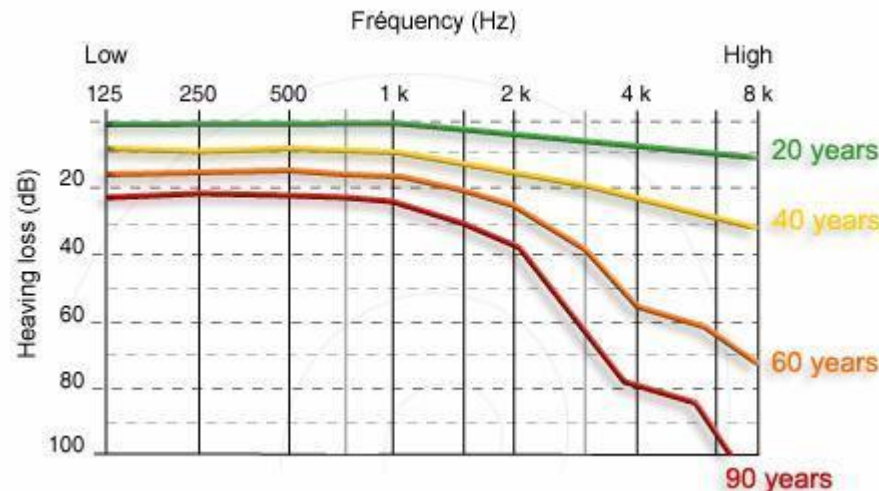




# Hearing Impairment

One third of over 65 complains hearing problems

*Reduced cognitive, emotional, social and physical function*



# Hearing Impairment

QUESTION/TEST	TIME TO ADMINISTER	COMMENTS
Audioscope	1–2 minutes	Sensitivity 87–90%, specificity 70–90%
Single question: "Do you feel you have a hearing loss?"	<1 minute	Sensitivity 75–81%, specificity 64–70%
Whisper test	1 minute	Sensitivity 80–100%, specificity 82–89%
Hearing handicap	2 minutes	Sensitivity 48–63%, specificity 75–86% at cutpoint >8
Inventory for the elderly NHANES* battery	<2 minutes	Sensitivity 80%, specificity 80% at cutpoint of >3
Age >70 = 1		
Male sex = 1		
12th grade education = 1		
Previously saw doctor about trouble hearing =1		
Without hearing aid, cannot hear whisper across the room = 1		
Without hearing aid, cannot hear normal voice across the room = 2		

# Malnutrition

Weight loss

Weight gain

## Lorenz Formula

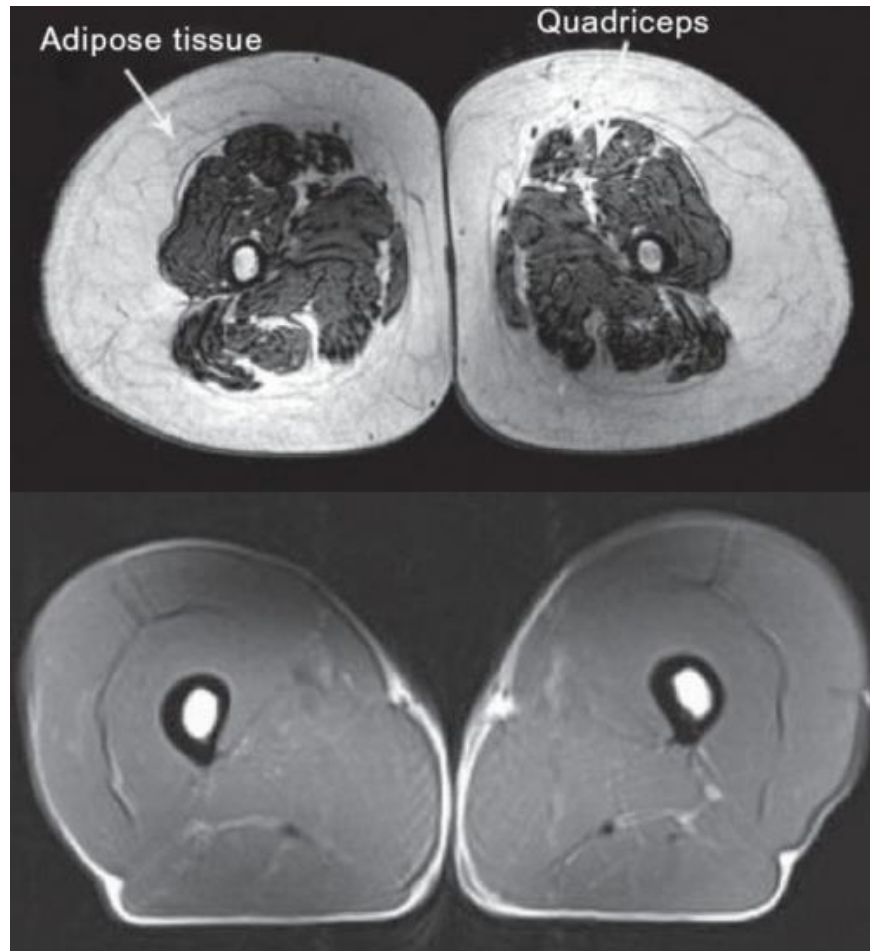
The Lorenz formula was launched in 1929 and has two versions.

One for males and the other for females. You need to know your height and weight before you apply it. Here is the equation:

$$\text{Female: } W(\text{kg}) = H(\text{cm}) - 100 - [H(\text{cm}) - 150]/2$$

$$\text{Male: } W(\text{kg}) = H(\text{cm}) - 100 - [H(\text{cm}) - 150]/4$$

# MRI evaluation



73 years old Female  
(BMI = 24.5 kg/m<sup>2</sup>)

21 years old Female  
(BMI = 24.3 kg/m<sup>2</sup>)

# Malnutrition

- *Protein energy undernutrition*: clinical (wasting, low body mass index) and biomedical (albumin or other protein) evidence of insufficient intake;
- *Serum albumin* and *low cholesterol* are prognostic factors for mortality in community-dwelling, hospitalized and institutionalized elderly

# Malnutrition

## Mini Nutritional Assessment

Screening	
<b>A</b> Has food intake declined over the past 3 months due to loss of appetite, digestive problems, chewing or swallowing difficulties? 0 = severe decrease in food intake 1 = moderate decrease in food intake 2 = no decrease in food intake	<input type="checkbox"/>
<b>B</b> Weight loss during the last 3 months 0 = weight loss greater than 3kg (6.6lbs) 1 = does not know 2 = weight loss between 1 and 3kg (2.2 and 6.6 lbs) 3 = no weight loss	<input type="checkbox"/>
<b>C</b> Mobility 0 = bed or chair bound 1 = able to get out of bed / chair but does not go out 2 = goes out	<input type="checkbox"/>
<b>D</b> Has suffered psychological stress or acute disease in the past 3 months? 0 = yes      2 = no	<input type="checkbox"/>
<b>E</b> Neuropsychological problems 0 = severe dementia or depression 1 = mild dementia 2 = no psychological problems	<input type="checkbox"/>
<b>F</b> Body Mass Index (BMI) = weight in kg / (height in m) <sup>2</sup> 0 = BMI less than 19 1 = BMI 19 to less than 21 2 = BMI 21 to less than 23 3 = BMI 23 or greater	<input type="checkbox"/>
<b>Screening score (subtotal max. 14 points)</b>	<input type="checkbox"/> <input type="checkbox"/>
12-14 points: <input type="checkbox"/> Normal nutritional status	
8-11 points: <input type="checkbox"/> At risk of malnutrition	
0-7 points: <input type="checkbox"/> Malnourished	
For a more in-depth assessment, continue with questions G-R	
Assessment	
<b>G</b> Lives independently (not in nursing home or hospital) 1 = yes      0 = no	<input type="checkbox"/>
<b>H</b> Takes more than 3 prescription drugs per day 0 = yes      1 = no	<input type="checkbox"/>
<b>I</b> Pressure sores or skin ulcers 0 = yes      1 = no	<input type="checkbox"/>

**References:**  
 1. Velaz B, Villars H, Abellan G, et al. Overview of the MNA® - Its History and Challenges. *J Nutr Health Aging*. 2006; 10:460-465.  
 2. Rubenstein LZ, Harker JO, Salva A, Gulgoz Y, Velaz B. Screening for Undernutrition in Geriatric Practice: Developing the Short-Form Mini Nutritional Assessment (MNA-SF). *J Geront*. 2001; 56A: M366-377  
 3. Gulgoz Y. The Mini-Nutritional Assessment (MNA®) Review of the Literature - What does it tell us? *J Nutr Health Aging*. 2006; 10:466-487.  
 © Société des Produits Nestlé, S.A., Vevey, Switzerland, Trademark Owners  
 © Nestlé, 1994, Revision 2009. N67200 12/99 10M  
 For more information: [www.mna-elderly.com](http://www.mna-elderly.com)

<b>J</b> How many full meals does the patient eat daily? 0 = 1 meal 1 = 2 meals 2 = 3 meals	<input type="checkbox"/>
<b>K</b> Selected consumption markers for protein intake • At least one serving of dairy products (milk, cheese, yoghurt) per day      yes <input type="checkbox"/> no <input type="checkbox"/> • Two or more servings of legumes or eggs per week      yes <input type="checkbox"/> no <input type="checkbox"/> • Meat, fish or poultry every day      yes <input type="checkbox"/> no <input type="checkbox"/> 0.0 = if 0 or 1 yes 0.5 = if 2 yes 1.0 = if 3 yes	<input type="checkbox"/> <input type="checkbox"/>
<b>L</b> Consumes two or more servings of fruit or vegetables per day? 0 = no      1 = yes	<input type="checkbox"/>
<b>M</b> How much fluid (water, juice, coffee, tea, milk...) is consumed per day? 0.0 = less than 3 cups 0.5 = 3 to 5 cups 1.0 = more than 5 cups	<input type="checkbox"/> <input type="checkbox"/>
<b>N</b> Mode of feeding 0 = unable to eat without assistance 1 = self-fed with some difficulty 2 = self-fed without any problem	<input type="checkbox"/>
<b>O</b> Self view of nutritional status 0 = views self as being malnourished 1 = is uncertain of nutritional state 2 = views self as having no nutritional problem	<input type="checkbox"/>
<b>P</b> In comparison with other people of the same age, how does the patient consider his / her health status? 0.0 = not as good 0.5 = does not know 1.0 = as good 2.0 = better	<input type="checkbox"/> <input type="checkbox"/>
<b>Q</b> Mid-arm circumference (MAC) in cm 0.0 = MAC less than 21 0.5 = MAC 21 to 22 1.0 = MAC greater than 22	<input type="checkbox"/> <input type="checkbox"/>
<b>R</b> Calf circumference (CC) in cm 0 = CC less than 31 1 = CC 31 or greater	<input type="checkbox"/>
<b>Assessment (max. 16 points)</b>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>Screening score</b>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>Total Assessment (max. 30 points)</b>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

**Malnutrition Indicator Score**  
 24 to 30 points  Normal nutritional status  
 17 to 23.5 points  At risk of malnutrition  
 Less than 17 points  Malnourished

**Save** **Print** **Reset**

# Balance and Gait Impairments and Falling

- Falls are independently associated with functional and mobility decline.
- Elderly evaluation:
  - Number of falls in the last year
  - Multifactorial falls assessment
  - Testing balance, gait, lower extremity strength

# Balance and Gait

## TINETTI BALANCE & GAIT ASSESSMENT



For both assessments, enter the date of each exam and circle your rating for each item. Indicate totals at the bottom of each section.

### BALANCE ASSESSMENT

To perform this assessment, seat the patient in a hard, armless chair.

Evaluated Function	Description of Behavior	Date:	Date:
Sitting Balance	Leans or slides in chair	0	0
	Steady, safe	1	1
Rises From Chair	Unable to rise without help	0	0
	Able to rise using arms to help	1	1
	Able to rise without using arms to help	2	2
Attempts To Rise	Unable to rise without help	0	0
	Able to rise, requires more than one attempt	1	1
	Able to rise, requires one attempt	2	2
Standing Balance (1 <sup>st</sup> 5 Seconds)	Unsteady (staggers, moves feet, trunk sways)	0	0
	Steady, but uses walker or other support	1	1
	Steady without walker or other support	2	2
Standing Balance	Unsteady	0	0
	Steady, but with wide stance and uses support	1	1
	Narrow stance without support	2	2
Nudged	Begins to fall	0	0
	Staggers, grabs, catches self	1	1
	Steady	2	2
Eyes Closed	Unsteady	0	0
	Steady	1	1
Turning 360 Degrees	Discontinuous steps	0	0
	Continuous steps	1	1
	Unsteady (grabs, staggers)	0	0
	Steady	1	1
	Sitting Down (Getting Seated)	0	0
	Unsafe (misjudged distance, falls into chair)	1	1
	Uses arms or not a smooth motion	2	2
	Safe, smooth motion	2	2
<b>Balance Score</b>			
Potential Points: 16		16	16

### GAIT ASSESSMENT

Stand with the patient. Walk across the room (+/- aids) at a usual pace, then rapidly

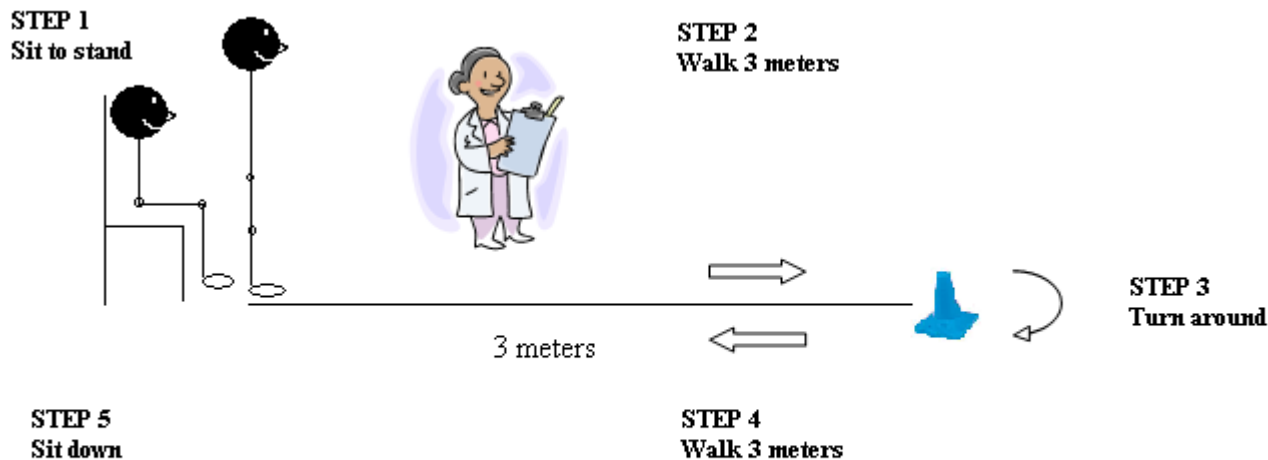
Evaluated Function	Description of Behavior	Date:	Date:
Indication of Gait	Any hesitancy or multiple attempts	0	0
	No hesitancy	1	1
Step Length & Height	Step to	0	0
	Step through right	1	1
	Step through left	1	1
Foot Clearance	Foot drop	0	0
	Left foot clears the floor	1	1
	Right foot clears the floor	1	1
Step Symmetry	Right and left step length are not equal	0	0
	Right and left step length appear equal	1	1
Step Continuity	Stopping or discontinuity between steps	0	0
	Steps appear continuous	1	1
Path	Marked deviation	0	0
	Mild/moderate deviation or uses a walking aid	1	1
	Straight without a walking aid	2	2
Trunk	Marked sway or uses a walking aid	0	0
	No sway, flexes knees/back/uses arms to balance	1	1
	No sway, no flexion of knees or back use of arms, or walking aid	2	2
Walking Time	Heels apart	0	0
	Heels almost touching while walking	1	1
<b>Gait Score</b>			
Potential Points: 12		12	12

<b>Combined Score</b>			
Potential Points For Balance & Gait		28	28



# Balance and Gait

- Up and go test
- Stability during 360-degree turn
- Maintain a side-by-side, semitandem, full-tandem stance for 10 seconds
- Resistance to a nudge
- Asking arising from a hard armless chair without the use of hands



# Polipharmacy



Multiple providers → polipharmacy

- Frequent adverse drug reactions
- Reduced adherence
- Inappropriate medication usage



# Providing AID

## ASSESSMENT OF SOCIAL SUPPORT:

- Loneliness/social net
- Isolation
- No more driving licence



## ECONOMIC ASSESSMENT:

- retirement
- disability pension
- special needs

## ENVIRONMENTAL ASSESSMENT:

- home architectural barrier (stairs, carpets, etc)
- home lightning;
- isolated house.



# SPIRITUALITY

## Aging and spirituality: Factorial structure and reliability of 2 scales

### INTRODUCTION:

In the field of gerontology, the study of the improvement of health and quality of life, and «successfully aging», spirituality plays a key role and, is one of the current research approaches. However, its incorporation into scientific literature is arduous and slow, a fact that is in part due to the absence of developed and validated measurement tools, particularly, in the Spanish speaking area. This work aims to present evidence of the psychometric properties of two tools for the measurement of spirituality: the Functional Assessment of Chronic Illness Therapy Spiritual Well-Being (FACIT-Sp) and the GES Questionnaire.

### MATERIALS AND METHODS:

A sample of 224 elderly persons from Valencia (Spain) was recruited, on which two confirmatory factor analyses were estimated, with the proposed a priori structures for each tool, together with several reliability coefficients.

### RESULTS:

Both models presented a good fit to the data:  $\chi^2(51)=104.97$  ( $P<.01$ ); CFI=.973; RMSEA=.076 for the FACIT-Sp, and  $\chi^2(17)=31.76$  ( $P>.05$ ); CFI=.996; RMSEA=.050 for the GES Questionnaire. Reliability indices also supported the use of the scales in elderly population, with alphas of .85 and .86, respectively.

### CONCLUSIONS:

**These results may be useful as a starting point to include spirituality in works that aim to discover the mechanisms involved in successful aging.**

# Geriatric Assessment

OLISTIC MEDICINE

DISCUSSION IN TEAM

PLANNING INTERVENTION

# Aging?

“productively and profitably by purchasing an inner peace that consists of an intuitive system of continuous adjustment to the exigencies of daily living”

Hernst Hemingway

