



# Functional assessment for elderly people (daily goals based)



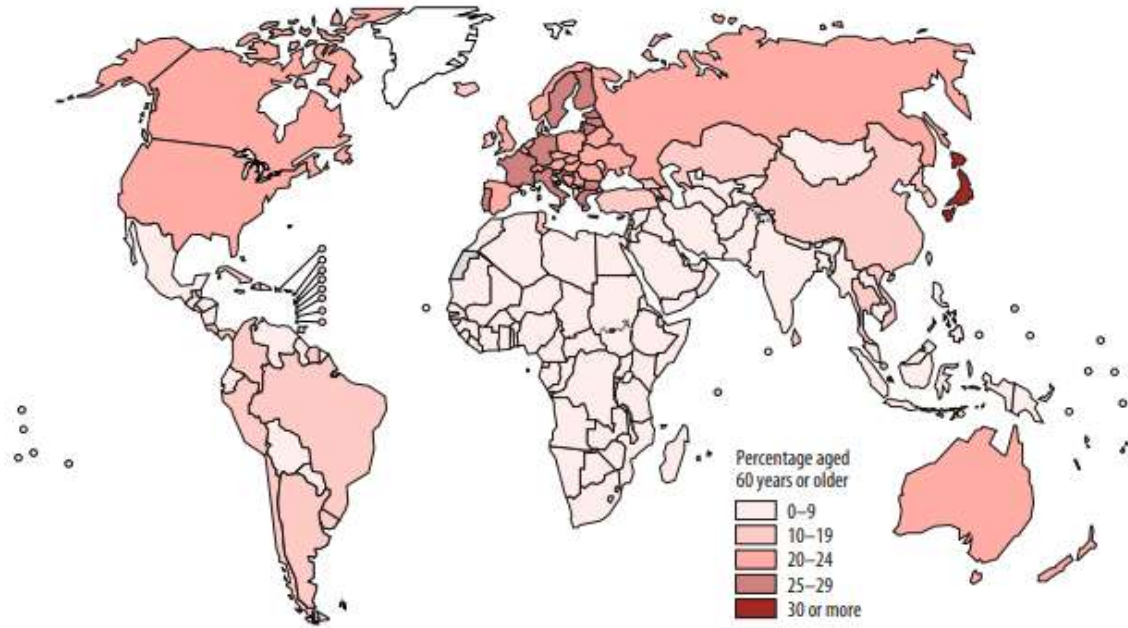
lecturer

**Martins Campa**

Program director of Professional Master higher education program  
„Health Care Specialist in Sport”

# AGING

**Fig. 3.1. Proportion of population aged 60 years or older, by country, 2015**



# AGING

## Ukraine enters top 30 nations with oldest population

16:01, 29 January 2018

UKRAINE



Ukraine's Ministry of Social Policy says Ukraine is among the top 30 nations with the oldest population in terms of the number of people aged 60 years or over.

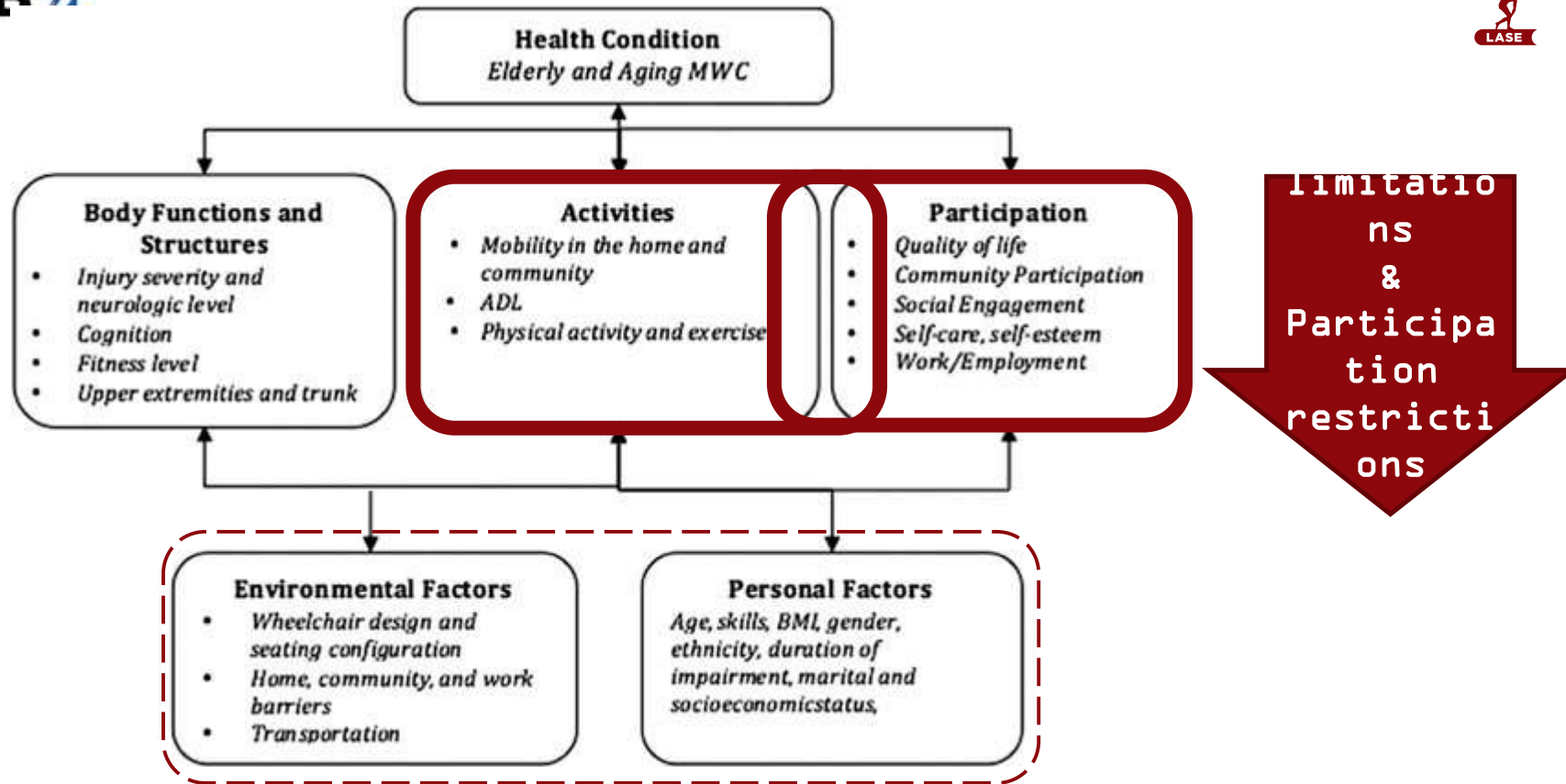
Their share was 21.8% in 2015, and it is projected to grow to 25% by 2025, according to the national demographic forecast, the ministry's press service said.

<https://www.unian.info/society/2371260-ukraine-enters-top-30-nations>

# SO WHAT?

- **FALLS**

- **30% OF PEOPLE AGED 65+ FALL EACH YEAR.**
- **10-15% OF THOSE FALLS ARE CONSIDERED “SERIOUS/NON-FATAL”**
- **FALLS REPRESENT THE LEADING CAUSE OF ACCIDENTAL DEATH IN PEOPLE AGED 65 AND OLDER.**
- **FEAR OF FALLING IS A LEADING REASON FOR NOT ENGAGING IN PHYSICAL ACTIVITY.**



\*Philip S. Requejo, et al., 2015, Topics in Geriatric Rehabilitation • Volume 31, Number 1, 26-41  
 Innovative Rehabilitation Education  
 Introduction of new master degree programs in Ukraine (REHAB)

# WHAT TO DO?

**OLDER ADULTS** (65 years old & older):

Weekly:  
150 minutes of  
Moderate  
OR  
75 minutes of  
Vigorous

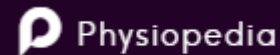


2 or more days  
of strength  
training (8-10  
exercises of 8-  
12 repetitions)



Types: Walking,  
gardening,  
water aerobics,  
group exercise  
classes and  
more

# ASSESSMENTS



- Functioning
- Self care
- Level of physical activity
- Aerobic capacity and endurance
- Fall risk
- Balance
- TIMED UP AND GO TEST (TUG)
- RIVERMEAD MOBILITY INDEX (RMI) / BARTHEL INDEX
- INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRE (IPAQ)
- 6 MINUTE WALK TEST
- MORSE FALL SCALE / JOHN JOPKINS FALL RISK ASSESSMENT TOOL
- BERG BALANCE SCALE (BBS) / FUNCTIONAL REACH TEST

# THE RIVERMEAD MOBILITY INDEX

## Purpose

- To assess the motor performance of patients with stroke and was developed for both clinical and research use
- !!!Also used:
- Brain Injury, Spinal Cord Injury, Stroke Recovery

## Area of assessment

- Balance - Non - vestibular
- Functional Mobility
- Gait



# THE RIVERMEAD MOBILITY INDEX

- The RMI is an extension of the Rivermead Motor Assessment Gross Function Scale.
- Appropriate for a range of disabilities that include anything from being bedridden to being unable to run.
- 15 items:
  - 14 self-reported items
  - 1 direct observation item
- Items progress in difficulty.
- Items are coded as either 0 or 1, depending on whether the patient can complete the task according to specific instructions.
- Items receive a score of 0 for a "No" response and 1 for a "Yes" response.
- Total scores are determined by summing the points for all items.
- A maximum of 15 points is possible; higher scores indicate better mobility performance.
- A score of "0" indicates an inability to perform any of the activities on the measure.

## The Rivermead Mobility Index

Name: \_\_\_\_\_

Day							
Month							
Year							
<b>Topic and Question:</b>							
<b>Turning over in bed:</b> Do you turn over from your back to your side without help?							
<b>Lying to sitting:</b> From lying in bed, do you get up to sit on the edge of the bed on your own?							
<b>Sitting balance:</b> Do you sit on the edge of the bed without holding on for 10 seconds?							
<b>Sitting to standing:</b> Do you stand up from any chair in less than 15 seconds and stand there for 15 seconds, using hands and/or an aid if necessary?							
<b>Standing unsupported:</b> (Ask to stand) Observe standing for 10 seconds without any aid							
<b>Transfer:</b> Do you manage to move from bed to chair and back without any help?							
<b>Walking inside:</b> (with an aid if necessary): Do you walk 10 meters, with an aid if necessary, but with no standby help?							
<b>Stairs:</b> Do you manage a flight of stairs without help?							
<b>Walking outside:</b> (even ground): Do you walk around outside, on pavements, without help?							
<b>Walking inside:</b> (with no aid): Do you walk 10 meters inside, with no caliper, splint, or other aid (including furniture or walls) without help?							
<b>Picking up off floor:</b> Do you manage to walk five meters, pick something up from the floor, and then walk back without help?							
<b>Walking outside:</b> (uneven ground): Do you walk over uneven ground (grass, gravel, snow, ice etc) without help?							
<b>Bathing:</b> Do you get into/out of a bath or shower and to wash yourself unsupervised and without help?							
<b>Up and down four steps:</b> Do you manage to go up and down four steps with no rail, but using an aid if necessary?							
<b>Running:</b> Do you run 10 meters without limping in four seconds (fast walk, not limping, is acceptable)?							
<b>Total</b>							

Downloaded from [www.rehabmeasures.org](http://www.rehabmeasures.org)

The Rivermead Mobility Index is provided courtesy of Dr. Derick Wade and the Oxford Centre for Enablement.

- RMI is an extension of Rivermead Motor Assessment:
  - Gross function
  - Leg and trunk
  - Arm

- Exists also The modified Rivermead Mobility Index (S.Lennon and L.Johnson,2000):

Scoring:	0	unable to perform
	1	assistance of 2 people
	2	assistance of 1 person
	3	requires supervision or verbal instruction
	4	requires an aid or an appliance
	5	independent

<https://www.nottingham.ac.uk/medicine/documents/publishedassessments/rma.pdf>

[https://www.academia.edu/21183408/The\\_modified\\_Rivermead\\_Mobility\\_Index\\_validity\\_and\\_reliability](https://www.academia.edu/21183408/The_modified_Rivermead_Mobility_Index_validity_and_reliability)

# INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRE

- LONG LAST 7 DAYS  
SELF-ADMINISTERED  
FORMAT
- FOR USE WITH  
YOUNG AND MIDDLE-  
AGED ADULTS (15-  
69 years)
- How it works?
  - Duration (minutes) and frequency (days) of physical activity in the last 7 days is measured in domains of:
    - 1) Job-related
    - 2) Transportation
    - 3) Housework, house maintenance, caring for family
    - 4) Recreation, sport, and leisure-time
    - 5) Time spent sitting
  - Overall score calculated using responses to all questions.

# FUNCTIONAL REACH TEST

- <https://www.youtube.com/watch?v=yYBmBkbvAyk>

# JOHN HOPKINS FALL RISK ASSESSMENT TOOL

- Developed JHFRAT v.1
  - Kept only evidence-based assessments
  - Identified **7 key screening areas**
  - Developed a risk-stratified rating scheme

Age

Fall History

Mobility

Elimination

Mental  
Status  
Changes

Medications

Equipment

# JOHN HOPKINS FALL RISK ASSESSMENT TOOL

Risk Level	Key Interventions
<p><b>Low Risk</b> (0-5)</p>	<p>Standard environmental, patient equipment, and patient instruction precautions</p>
<p><b>Moderate Risk</b> (6-10)</p>	<p>Standard precautions plus initiate patient - specific prevention items as needed (bed alarms, toileting schedules, increased levels of supervision and assistance)</p>
<p><b>High Risk</b> (&gt;10)</p>	<p>Standard precautions plus appropriate equipment, alarms, and more resource-intensive interventions (frequent observations &amp; patient safety attendants)</p>

Physiotherapy  
E-Training  
Re-Habilitation

PETRHA

**[HTTP://PETRHA.ORG/GAME/FRONT/PAGES/HOME?REDIRECT=%2FINVESTIGATIONS%2FPATIENT-CHART%2F4183](http://petrha.org/game/front/pages/home?redirect=%2Finvestigations%2fpatient-chart%2f4183)**