



# HELPE

Health Literacy in Physiotherapy Education

## Health Literacy Assessments for Clients



School  
of Health  
Sciences



HS Gesundheit  
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## Introduction

Health professionals have the key responsibility in promoting patients' health literacy (HL) to help them navigate through the health care system. This includes assisting patients in finding, understanding, and using health information. Health care professionals, including physiotherapists in their role as health promoters and educators, should assess patients' health literacy in order to provide them with appropriate health information (McCormack et al., 2013) and adjust their communication and treatment methods to the client's individual HL level.

The aim of this part of IO1 of the HELPE project was to identify health literacy assessment tools for the following client groups: older people, people with chronic diseases, with low economic status and with migration background, who often show limited HL. Not only physiotherapy professionals, but also physiotherapy students should obtain more knowledge on validated HL assessments in their application on these client groups. Therefore, the selected assessments will serve as basis for the further stages of the project in which they will be implemented in the developed educational courses and videos and incorporated in the curriculum of the physiotherapy bachelor's degree program.

## Methods

A literature search was performed between February and March 2021. The first step was to search for appropriate databases for HL assessments. Then an additional search on PubMed was carried out to identify which of the HL assessments are being used for clients. The results of these first two steps were supplemented by the literature from the hand search. The summary of these steps can be seen as an HL assessment pool for clients and is provided for further discussion (see Fig.1).

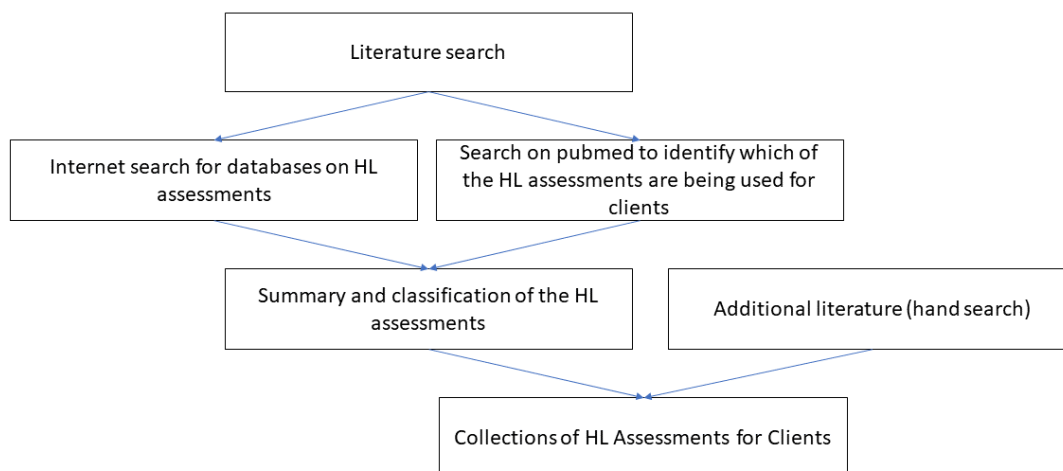


Figure 1: Process of identifying HL assessments for clients

## Results

By the internet search, two databases were identified: the *Health Literacy Tool Shed* from Boston university (U.S. Department of Health and Human Services, National Institutes of Health, National Library of Medicine, 2020) and the *Health Literacy: Assessment Tools & Resources* from University of Florida (University of Florida, 2020).

After the screening 31 assessments were included, (see Fig. 2).

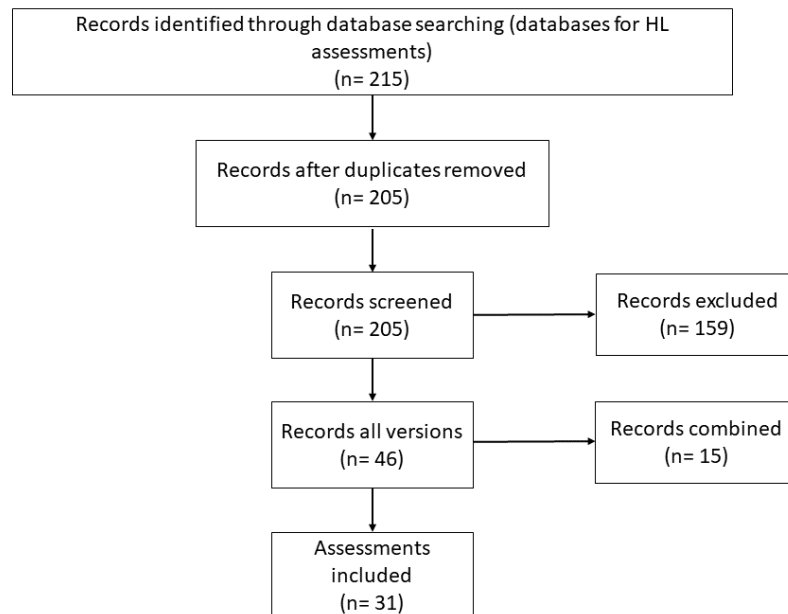


Figure 2: Flow chart

The literature search in PubMed was refined by adding the terms “elderly chronic diseases”, “economic status”, “education” and “migration” to the search terms “health literacy” and “assessment”. Two databases were found: the *Health Literacy Tool Shed* from Boston university (U.S. Department of Health and Human Services, National Institutes of Health, National Library of Medicine, 2020) and the *Health Literacy: Assessment Tools & Resources* from University of Florida (University of Florida, 2020).

The list of the assessments can be seen in Appendix A. The search terms for the respective client groups can be found in Appendix B. Selected sources can be seen in Appendix C, assigned to client groups. Also the HL assessments for the respective client groups can be found there.

According to the definition of Sørensen et al. (2012) HL can be described as the possession of literacy skills (reading and writing) and the ability to perform knowledge-based literacy and numeracy tasks (acquiring, understanding and using health information) that are required to make health related decisions in a variety of different environments (home, community, health clinic). These skills can be categorized as functional, interactive and critical health literacy. Therefore, an additional search with the search terms “measuring functional, interactive and critical health literacy” was conducted to address these subcategories. An additional search with the term “measuring digital or E-Health Literacy” was conducted as well.

## Measurements

The measurements found in the literature search were assigned to the client groups, which were identified in IO1 (older people, people with chronic diseases, with low economic status and with migration background). If the measurement was used in more than two client groups, it was included in the study as a HL assessment for clients (Tab. 1).

Table 1: Overview of the HL assessments for clients

Measurement	Context	Functional HL	Interactive HL	Critical HL	Items	Type	Languages (project-countries)
FCCHL	general	x	x	x	14	self-reported	English, Dutch, German
HELMA	general	x	x	x	44	self-reported	English
HLAT	family and friends	x	x	x	8	self-reported	English
HLS-EU-Q47	general	health care disease prevention health promotion			47	self-reported	English, Dutch, German, Spanish
HLS-EU-Q16	general				16	self-reported	
HLS-EU-Q6	general				6	self-reported	
HLQ	general	X multi-dimensional			44	self-reported	English, German
NVS	nutrition	x			6	performance based	English, Dutch, Spanish
REALM	health promotion	n.a.	n.a.	n.a.	125 (S-REALM 8)	performance based	English, Dutch
SAHL S&E	general	x			18 (Dutch 33)	performance based	English, Dutch, Spanish
S-(TOFHLA)	health promotion	x			40	performance based	English, German, Spanish

Most of the measurement tools have a general context. Therefore, we take a closer look at the client groups we have integrated in the study.

- 1) The main tools to evaluate HL in **older people** are (Vogt et al., 2018; Berens et al., 2016; Chesser et al., 2016):
  - a) the Health Literacy Survey European Questionnaire (HLS-EU-Q),
  - b) Test of Functional Health Literacy in Adults (TOFHLA),
  - c) Short-Test of Functional Health Literacy in Adults ((S-)TOFHLA),
  - d) Rapid Estimate of Adult Literacy in Medicine (REALM),
  - e) SAHL S&E (Short Assessment of Health Literacy—Spanish and English),
  - f) Short Assessment of Health Literacy—Spanish and English) (SAHL S&E),
  - g) Newest Vital Sign (NVS)

- 2) In order to measure HL in people with **chronic diseases**, mainly used are (Rheault et al., 2019; Miller, 2016; Puente-Maestu et al., 2016; Fraser et al., 2013; Shaw et al., 2012):
  - a) the Health Literacy Questionnaire (HLQ),
  - b) (S-)TOFHLA,
  - c) REALM,
  - d) SAHLSA, and
  - e) NVS
  
- 3) In order to measure HL in people with **low economic status** are used (Stormacq et al., 2019; Toçi et al., 2014; Berkman et al., 2011):
  - a) the TOFHLA,
  - b) (S)-TOFHLA,
  - c) REALM and
  - d) NVS
  
- 4) To measure HL among people with a **migration background** are used (Zhang et al., 2020; Quenzel et al., 2016):
  - a) the HLQ and
  - b) HLS-EU

Overall, no studies could be found with the defined client groups related to FCCL, HELMA and HLAT.

The results (Table 1.) show that seven of the listed assessments (FCCHL, HELMA, HLAT, HLS-EU-Q47, HLS-EU-Q16, HLS-EU-Q6, HLQ) can be categorized as self-reported assessments and the other four are performance-based measurements (NVS, REALM, SAHL S&E, S-(TOFHLA). All of the assessments are available in English, some of them are also available in the languages of the partner countries (see last column in Table 1). The following assessments cover all dimensions of health literacy and can be described as multidimensional: FCCHL, HELMA, HLAT, HLS-EU-Q (47-item-version, 16-item-version and 6-item-version) and the HLQ. Frequently applied HL assessments are the HLS-EU-Q and the HLQ. The HLS-EU was developed to identify and compare the levels of health literacy in the European population (Sørensen et al., 2015).

The HLQ is one of the most widely used HL assessments, it is a multidimensional assessment, and it demonstrates overall good measurement properties (Schie et al., 2021), HLQ is available in several languages (English, Dutch, French, Norwegian, German, Danish and Slovakian). The summation of the HLQ items within each dimension provides scale summary scores, with each scale representing one distinct component of health literacy. The HLQ describes nine dimensions of health literacy: (1) Feeling understood and supported by healthcare providers; (2) Having sufficient information to manage my health; (3) Actively managing my health; (4) Social support for health; (5) Appraisal of health information; (6) Ability to actively engage with healthcare providers; (7) Navigating the healthcare system; (8) Ability to find good health information; and (9) Understanding health information well enough to know what to do.

Since there were no hits regarding the digital or E-Health Literacy, but the topic is an essential part of the HELPE project, an additional search was conducted for measurements for this area. Two self-reported assessments could be elicited (Tab. 2) (Kayser et al., 2018; Norman & Skinner, 2006):

- eHLF (e-health literacy framework)
- eHEALS (The eHealth Literacy Scale)

Table 2: Digital or E- Health Literacy

Assessment	context	Functional HL	Interactive HL	Critical HL	Items	Self reported/ Performance/based	languages
eHLF			x			Self reported	
eHEALS	general				8	Self reported	English, Dutch

## Discussion

A wide spectrum of Health Literacy assessments was found in this literature review. HL assessments were based on self-reports (FCCHL, HELMA, HLAT, HLS-EU, HLQ) as well as on observed performance (NVS, REALM, SAHL S&E, S-(TOFHLA)). Assessments for unidimensional (functional- or interactive- or critical health literacy) (Tab. 1) as well as for multidimensional (covering functional-, interactive- and critical HL, e.g. HLQ) were identified. Most of the tools were designed as screening tools in clinical practice and they focused in measuring functional HL. The HL measurement tools should be able to analyse the determinants and consequences of limited HL, and offer the basis for the evaluation of interventions to improve HL (Nutbeam, 2017). Recent studies have shown some challenges. Voigt-Barbarowicz & Brütt (2020) investigated in a systematic review the agreement between patients' and healthcare professionals' assessments of patients' HL. They identified that health care professionals had difficulty to determine clients' HL adequately. Most of the reviewed studies showed substantial variations between the HL assessed by clients themselves (self-reported) and the ones, assessed by health professionals. The clients' HL was significantly overestimated by health professionals or there were discrepancies between patients' and health professionals' assessments of clients' HL. The authors were concerned that these differences might lead to communication problems (Voigt-Barbarowicz & Brütt, 2020). A Dutch study on the management of limited HL found similar results (Murugesu et al., 2018). In their research report, they described the challenges that healthcare providers had faced mainly regarding the insufficient recognition of people with limited health skills and the fact that the patients could not communicate their complaints clearly or often did not understand the information provided by the healthcare provider and therefore were not able to participate in decisions on treatment. This raises the question of what HL-assessments should examine and how do health professionals recognise people with limited HL. The Dutch report recommends not focusing extensively on patients' education level, age, ethnic background or other sociodemographic determinants, but rather integrate the handling (e.g. shared decision making and self-management) in the assessing tools (Murugesu et al., 2018). Clients' HL-competencies are context specific and the HL measurement instruments should focus more on that specificity. Different measurement tools are needed for different age groups and life stages, even if the structure of the HL concept remains constant (Nutbeam, 2017).



Although, it is evident from the literature that social determinants/education level are related to functional health literacy, it is also known that interactive- and critical health literacy are context specific (Murugesu et al., 2018). Taking into account the context specificity of health literacy assessments, it is recommendable in practice to train health care providers' communication skills/competencies in order to use for example tools such as Teach Back method, to prove patients' understanding/comprehension. These trainings could provide a practical way to increase health care providers' capacity to identify and respond to patients' health literacy needs. Another important recommendation was to consider patients' capacity to act and not to focus only on capacity to think, read and understand information (Murugesu et al., 2018; Rademakers & Heijmans, 2018). Comprehensive multidimensional health literacy assessments that cover all dimensions of HL seem to be more applicable in research projects and be less suitable as a context specific assessing tools in health care practice.

Another option that Health Care Professionals (HCPs), especially physiotherapists can use in clinical practice but did not show up in the literature review is the *Conversational Health Literacy Assessment tool* (CHAT). It is used to identify patients' HL needs and preferences. Based on the domains of the HLQ, the CHAT was developed in which the HCPs use ten open-ended questions (e.g., Who do you usually go to for health care?) to have a structured conversation with patients that targets five HL domains (O'Hara et al., 2018). CHAT seems to be a feasible and efficient tool for assessing health literacy needs among individuals with different socio-demographic characteristics and with different diagnoses (Jensen et al., 2021) and can easily be adapted in the physiotherapeutic process.

For evaluation of the digital health literacy, the *Digital Health Literacy Instrument* (DHLI) is available. It was not shown in the literature search, as it was found additionally during a hand search at a later stage. It is a self-assessment instrument with 21 items in seven domains and has additional performance-based components (van der Vaart & Drossaert, 2017). The digital health literacy measurement instruments are mainly based on respondents' self-report and are thus limited in their objectivity and validity. The DHLI could be an option for measuring digital health literacy, although validation studies suggest revision points

In the course of the development of a HL-Questionnaire for physiotherapy students in the HELPE project, an additional reflection tool was developed to reflect on one's own communication competencies, see Appendix D. It can be used in this context as self-assessment, peer-assessment or teacher/supervisor assessment as well in learning activities at school and during internships. Considering that the communication skills/competences of the physiotherapists should be improved, this reflection can be used as a checklist for the application in practice.

## Conclusion

This literature review summarized the available assessments for evaluation of HL in clients. The following HL assessments for clients were identified in this review: 1) self-reported versus performance-based assessment, 2) unidimensional (functional- or interactive- or critical health literacy) and multidimensional (covering all dimensions of health literacy: functional, interactive and critical health literacy). Comprehensive multidimensional health literacy assessments, such as the HLQ can be used in research projects but are not suggested for health care practice. It is recommended to train physiotherapists' communication skills/competences to increase their capacity to identify and



respond to patients' health literacy needs, whereby the CHAT and the **reflection tool developed in IO1** can be used in physiotherapy practice.

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## Appendix A: Health Literacy Assessment Tools

HL Assessment tools	English	Dutch	German	Spanish	Finnish
All Aspects of Health Literacy Scale - AAHLS	x				
Brief Health Literacy Screening Tool - BRIEF	x				
Brief Questions to Identify Patients with Inadequate Health Literacy	x				
Calgary Charter on Health Literacy Scale	x			x	
Composite Health Literacy Scale and Subjective Numeracy Scale - HLS/SNS	x				
Comprehension of 50 Medical Terms	x				
Consumer Assessment of Healthcare Providers and Systems - CAHPS	x				
Critical Health Competence Test - CHC	x				
Demographic Assessment for Health Literacy - DAHL	x				
eHealth Literacy Scale - eHEALS	x	x			
eHealth Literacy Scale - Older Adults - eHEALS	x				
European Health Literacy Survey - HLS-EU-Q6	x				
Functional Communicative Critical Health Literacy - German FCCHL			x		
Functional Health Literacy Test - FHLT	x				
General Health Numeracy Test - GHNT-21	x				
General Health Numeracy Test Short Form - GHNT-6	x				
Health Activities Literacy Scale of NALS - HALS	x				
Health Literacy Assessment Scale for Adolescents - HAS-A	x				
Health Literacy Assessment Tool - HLAT-8	x				
Health Literacy Assessment Using Talking Touchscreen Technology - Health LITT	x				
Health Literacy Management Scale - HeLMS	x				
Health Literacy Measure for Adolescents - HELMA	x				
Health Literacy Measure for High School Students	x				
Health Literacy Questionnaire - HLQ	x		x		
Health Literacy Skills Instrument - HLSI	x				
Health Literacy Skills Instrument- Short Form - HLSI-10	x				
Patient Education Materials Assessment Tool (PEMAT) and User's Guide	x				
Rapid Estimate of Adolescent Literacy in Medicine Short Form - REALM-Teens	x				
Rapid Estimate of Adult Literacy in Medicine (Short) - REALM-R	x				
Rapid Estimate of Adult Literacy in Medicine - REALM	x				
Rapid Estimate of Adult Literacy in Medicine Short Form - REALM-SF	x				
Short Assessment of Health Literacy-Spanish & English (SAHL-S&E) - SAHLE	x	x		x	
Short Test of Functional Health Literacy in Adults - German Version - Ger-STOFH LA			x		
Single Item Screener - SILS	x				
Spanish Health Literacy Assessment Using Talking Touchscreen (Pantalla Parlanchina) Test				x	
Test of Functional Health Literacy for Adults - TOFHLA	x			x	
Abbreviated version of the Test of Functional Health Literacy in Adults - S-TOFHLA	x				
The Newest Vital Sign	x				
Three-item Brief Health Literacy Screen - BHLS	x				

Total n= 31

## Appendix B: Search equations

Older people:

Search	Actions	Details	Query	Results	Time
#2	...	>	Search: <b>((health literacy[MeSH Terms]) AND (assess*)) AND (older)</b> Filters: <b>from 2011 - 2021</b>	343	06:06:50
#1	...	>	Search: <b>((health literacy[MeSH Terms]) AND (assess*)) AND (older)</b>	353	06:06:28

Chronic diseases:

Search	Actions	Details	Query	Results	Time
#4	...	>	Search: <b>((health literacy[MeSH Terms]) AND (assess*)) AND (chronic diseases)</b> Filters: <b>Review, Systematic Review, from 2011 - 2021</b>	26	05:50:42
#3	...	>	Search: <b>((health literacy[MeSH Terms]) AND (assess*)) AND (chronic diseases)</b> Filters: <b>Review, from 2011 - 2021</b>	21	05:50:37
#2	...	>	Search: <b>((health literacy[MeSH Terms]) AND (assess*)) AND (chronic diseases)</b> Filters: <b>from 2011 - 2021</b>	240	05:50:20
#1	...	>	Search: <b>((health literacy[MeSH Terms]) AND (assess*)) AND (chronic diseases)</b>	249	05:50:09

Patients with low economic status:

Search	Actions	Details	Query	Results	Time
#2	...	>	Search: <b>((health literacy[MeSH Terms]) AND (assess*)) AND (economic)</b> Filters: <b>from 2011 - 2021</b>	211	06:15:17
#1	...	>	Search: <b>((health literacy[MeSH Terms]) AND (assess*)) AND (economic)</b>	219	06:15:07

Patients with low education:

Search	Actions	Details	Query	Results	Time
#2	...	>	Search: <b>((health literacy[MeSH Terms]) AND (assess*)) AND (low educational status)</b> Filters: <b>from 2011 - 2021</b>	119	06:28:38
#1	...	>	Search: <b>((health literacy[MeSH Terms]) AND (assess*)) AND (low educational status)</b>	125	06:28:31

Patients with migration background:

Search	Actions	Details	Query	Results	Time
#1	...	>	Search: <b>((health literacy[MeSH Terms]) AND (assess*)) AND (migration)</b>	8	06:12:20

## Appendix C: Selected sources and HL assessments assigned to client groups

<b>older people</b>	<b>source (selected)</b>	<b>HL assessments</b>
	Berens et al. (2016). Health literacy among different age groups in Germany: results of a cross-sectional survey	HLS-GER, HLS-EU-Q47
	Chesser et al. (2016). Health Literacy and Older Adults: A Systematic Review	S-TOFHLA, REALM, NVS, SILS, SAHLSA, METER, FHLLT, HLSI, HealthLitTT
	Vogt et al. (2018). Health literacy in old age: results of a German cross-sectional study	HLS-GER, HLS-EU-Q47
<b>chronic disease</b>	<b>source (selected)</b>	<b>HL assessments</b>
	Fraser et al. (2013). Prevalence and associations of limited health literacy in chronic kidney disease: a systematic review	S-TOFHLA, REALM, NVS, SAHLSA
	Miller (2016). Health literacy and adherence to medical treatment in chronic and acute illness: A meta-analysis	REALM, TOFHLA
	Puente-Maestu et al. (2016). Health literacy and health outcomes in chronic obstructive pulmonary disease	SAHLSA, REALM
	Rheault et al. (2019). Health literacy in Indigenous people with chronic disease living in remote Australia	HLQ
	Shaw et al. (2012). Chronic Disease Self-Management and Health Literacy in Four Ethnic Groups	S-TOFHLA, REALM, SAHLSA
<b>low economic status</b>	<b>source (selected)</b>	<b>HL assessments</b>
	Berkman et al. (2011). Low Health Literacy and Health Outcomes: An Updated Systematic Review	S-TOFHLA, TOFHLA, REALM
	Toci et al. (2014). Socio-economic correlates of functional health literacy among patients of primary health care in Kosovo	TOFHLA
<b>low education</b>	<b>source (selected)</b>	<b>HL assessments</b>
	Stormacq et al. (2018). Does health literacy mediate the relationship between socioeconomic status and health disparities? Integrative review	HALS, NVS, S-TOFHLA, TOFHLA, REALM
<b>migration background</b>	<b>source (selected)</b>	<b>HL assessments</b>
	Zhang et al. (2020). Health literacy as a predictor of emergency department visits and self-rated health among Chinese immigrants: findings from an Australian survey	HLQ
	Quenzel et al. (2016). Unterschiede der Gesundheitskompetenz von Jugendlichen mit niedriger Bildung, Älteren und Menschen mit Migrationshintergrund	HLS-EU



	older people	chronic diseases	low economic status	low education	migration background
<b>HL Assessment tools</b>					
All Aspects of Health Literacy Scale - AAHLS					
Brief Health Literacy Screening Tool - BRIEF					
Brief Questions to Identify Patients with Inadequate Health Literacy					
Calgary Charter on Health Literacy Scale					
Composite Health Literacy Scale and Subjective Numeracy Scale - HLS/SNS					
Comprehension of 50 Medical Terms					
Consumer Assessment of Healthcare Providers and Systems - CAHPS					
Critical Health Competence Test - CHC					
Demographic Assessment for Health Literacy - DAHL					
eHealth Literacy Scale - eHEALS					
eHealth Literacy Scale - Older Adults - eHEALS					
European Health Literacy Survey - HLS-EU-Q6	x (HLS-EU-Q47)				x (HLS-EU-Q47)
Functional Communicative Critical Health Literacy - German FCCHL					
Functional Health Literacy Test - FHLT	x				
General Health Numeracy Test - GHNT-21					
General Health Numeracy Test Short Form - GHNT-6					
Health Activities Literacy Scale of NALS - HALS				x	
Health Literacy Assessment Scale for Adolescents - HAS-A					
Health Literacy Assessment Tool - HLAT-8					
Health Literacy Assessment Using Talking Touchscreen Technology - Health LITT	x				
Health Literacy Management Scale - HeLMS					
Health Literacy Measure for Adolescents - HELMA					
Health Literacy Measure for High School Students					
Health Literacy Questionnaire - HLQ		x			x
Health Literacy Skills Instrument - HLSI					
Health Literacy Skills Instrument- Short Form - HLSI-10					
Patient Education Materials Assessment Tool (PEMAT) and User's Guide					
Rapid Estimate of Adolescent Literacy in Medicine Short Form - REALM-Teens					
Rapid Estimate of Adult Literacy in Medicine (Short) - REALM-R					
<b>Rapid Estimate of Adult Literacy in Medicine - REALM</b>	x	x	x	x	
Rapid Estimate of Adult Literacy in Medicine Short Form - REALM-SF					
Short Assessment of Health Literacy-Spanish & English (SAHL-S&E) - SAHLE	x	x			
Short Test of Functional Health Literacy in Adults - German Version - Ger-STOFH LA					
Single Item Screener - SILS	x				
Spanish Health Literacy Assessment Using Talking Touchscreen (Pantalla Parlanchin	x				
<b>Test of Functional Health Literacy for Adults - TOFHLA</b>	x	x	x	x	
<b>Abbreviated version of the Test of Functional Health Literacy in Adults - S-TOFHLA</b>	x	x	x	x	
The Newest Vital Sign - NVS	x	x		x	
Three-item Brief Health Literacy Screen - BHLS					

## Reflection Tool

### Questionnaire & video observation: Your health literacy consultation and educational skills

#### INTRODUCTION

HL refers to the knowledge, motivation and competencies of individuals to access, understand, and apply health information for taking decisions for their own health. Those abilities are influenced by various social, environmental and educational factors.

Limited HL has been reported in nearly 45% of the European citizens. Client groups with limited HL require an individual therapeutic and communication approach from the physiotherapist. To respond to this requirement, physiotherapists need to acquire solid HL competencies during their education.

Health literacy consultation skills are defined as the communication and teaching strategies that have been described as effective with limited health literacy patients. These include, plain language communication, which is the avoidance of medical jargon, Teach-Back (let the patient explain the information in their own words to check understanding) and also include skills related to shared decision making and promoting self-management.

- Your knowledge of health literacy
- Your consultation skills focused on health literacy
- Your opinion on using health literacy consultation skills (attitude)
- Your confidence in using health literacy consultation skills

This tool is made to help you reflect on your own competences.

It consist of a combination of a questionnaire and a video-observation tool.

You can use the questions for self-assessment, peer-assessment or teacher/ supervisor assessment as well in learning activities at school as during your internships.

## General questions

In which year of your study are you?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> more
How many months of internship have you completed?	<input type="radio"/> 0-2 <input type="radio"/> 3-6 <input type="radio"/> 7-9 <input type="radio"/> 10-12 <input type="radio"/> 13-15

## A. Knowledge about health literacy

Please indicate how much you know about limited health literacy. Choose only one answer.

I know where to find information on limited health literacy	1 Strongly disagree	2 Disagree	3 Neither agree/ nor disagree	4 Agree	5 Strongly disagree
1. I understand the challenges that patients with limited health literacy can have					
2. I know which groups are more likely to have limited health literacy					
3. I can name several health outcomes associated with limited health literacy					

## B. I can adjust my communication and patient educational skills to patients with limited health literacy

The following communication and educational skills have been described as effective with patients with limited (digital) health literacy. Please indicate on which level you use the following health literacy communication skills during conversations with simulated patients or in internship/practices. Choose only one answer.

Fostering the relationship – I engage with the patient in a personal though professional way		1 Not present/ acquired	2 Partially present/ acquired	3 Present/ acquired to a minimal degree	4 Clearly present and largely acquired	5 Fully present/ acquired
4	Patient is greeted in a manner that is personal and warm (e.g. asks how the patient likes to be addressed, uses patient's name).					
	Example(s) from video observation					

5	Asking the patient what he/she hopes to achieve by attending therapy.					
	Example(s) from video observation					
6	Attempts to elicit all of the patient's concerns.					
	Example(s) from video observation					
7	Showing interest in how the problem is affecting patient's life.					
	Example(s) from video observation					
8	Encouraging patients to ask additional questions.					
	Example(s) from video observation					
9	Consider working with a (professional) interpreter, if necessary.					

<b>Gathering information – I have appropriate skills to identify and to gather adequate information from patients with limited health literacy</b>		<b>1 Not present/ acquired</b>	<b>2 Partially present/ acquired</b>	<b>3 Present/ acquired to a minimal degree</b>	<b>4 Clearly present and largely acquired</b>	<b>5 Fully present/ acquired</b>
10	Using instruments/ questionnaires to identify patients with limited health literacy.					
	Example(s) from video observation					
11	Identifying behavior typically exhibited by people with limited health literacy.					

12	Considering limited health literacy: do you need help to fill in forms? Cues: missed appointments, excuses, and inconsistent information.					
13	Encourage the patient to expand in discussing his/her concerns by using active listening techniques (e.g., using various continuers such as Aha, tell me more, go on).					
	Example(s) from video observation					
14	Observing non-verbal cues to gather information about (not) understanding information.					
	Example(s) from video observation					
15	Creating a shame-free environment.					
	Example(s) from video observation					
16	Being sensitive and capable in gathering information about the illness beliefs and the possible influence of personal/ environmental problems on physical problems (and in explaining this to the patient).					
	Example(s) from video observation					
17	Ask about the (cultural) background and taboos of the pt. which may influence their (illness)beliefs about cause and treatment and their coping style.					
	Example(s) from video observation					

<b>Providing information – I have appropriate skills to provide clear information to people with limited health literacy</b>		<b>1 Not present/ acquired</b>	<b>2 Partially present/ acquired</b>	<b>3 Present/ acquired to a minimal degree</b>	<b>4 Clearly present and largely acquired</b>	<b>5 Fully present/ acquired</b>
18	Speaking slowly and in short sentences.					
	Example(s) from video observation					
19	Using plain, understandable, non-medical language.					
	Example(s) from video observation					
20	Showing or drawing pictures.					
	Example(s) from video observation					
21	Using nonverbal communication to support the given information.					
	Example(s) from video observation					
22	Limiting the amount of information provided and ask the patient to repeat it.					
	Example(s) from video observation					
23	Checking if the patient understands the information (teach back, show me, chunk and chunk techniques, ASK me 3).					
	Example(s) from video observation					
24	Pausing after giving information with intent of allowing patient to react to and absorb the given information.					
	Example(s) from video observation					

25	Judging appropriateness of written health information for patients with limited health literacy.					

<b>Shared decision making – I involve patients with limited health literacy in shared decision making</b>		<b>1 Not present/ acquired</b>	<b>2 Partially present/ acquired</b>	<b>3 Present/ acquired to a minimal degree</b>	<b>4 Clearly present and largely acquired</b>	<b>5 Fully present/ acquired</b>
26	Involving the patient in the process of examination and treatment, so that he/she knows what and why I am doing it. Example(s) from video observation					
27	Informing patients about health care or treatment options in more detail, with taking into account the patient's frame of reference. Example(s) from video observation					
28	Supporting patients to explore 'what matters most to them' after informing them about treatment options (time to absorb and to discuss with significant others). Example(s) from video observation					
29	Asking permission for treatment. Example(s) from video observation					
<b>Enabling self-management- I apply strategies adjusted to patients' level of health literacy to enable self-management</b>		<b>1 Not present/ acquired</b>	<b>2 Partially present/ acquired</b>	<b>3 Present/ acquired to a minimal degree</b>	<b>4 Clearly present and largely acquired</b>	<b>5 Fully present/ acquired</b>
30	Assessing barriers and facilitators related to therapy compliance (e.g. illness beliefs, shame, level of education, influence of the family, taboos, cultural influences etc.). Example(s) from video observation					

31	Involving the patient in formulating personalized goals and action plans.					
	Example(s) from video observation					
32	Using the influence of the social context in a beneficial way.					
	Example(s) from video observation					
33	Checking the understanding and acceptance of the follow up – plans for next time.					
	Example(s) from video observation					

<b>Responding to emotions – I respond to verbal and nonverbal emotional expressions</b>		<b>1 Not present/ acquired</b>	<b>2 Partially present/ acquired</b>	<b>3 Present/ acquired to a minimal degree</b>	<b>4 Clearly present and largely acquired</b>	<b>5 Fully present/ acquired</b>
34	Openly encouraging or is receptive to the expression of emotion (e.g., through use of continuers or appropriate pauses (signals verbally or nonverbally that it is okay to express feelings).					
	Example(s) from video observation					
35	Recognizing emotional expression.					
	Example(s) from video observation					
36	Identifying, verbalizing and accepting feelings.					
	Example(s) from video observation					



37	To elicit and be open-minded for patients concerns and needs and explore possible taboos with them..					
	Example(s) from video observation					

Which skills would you like to develop in the next months?

How do you plan to practice these goals?

### C. Awareness of own attitude towards using health literacy communication skills and/ or teaching strategies

What is your opinion/ attitude on using health literacy communication skills and/or teaching strategies? Give an example of a concrete interaction with a patient with low health literacy. Reflect on own competences?

### D. My confidence in using health literacy communication and patient educational skills

How confident are you in your ability to:		1 Not confident at all	2 Not confident	3 Neither confident nor not confident	4 Confident	5 Very confident
38	Adjust your communication and patient educational skills to patients with limited health literacy.					
39	Engage with the patient in a personal though professional way.					
40	Identify and to gather adequate information from patients with limited health literacy.					
41	Provide clear information to patients with limited health literacy.					
42	Involve patients with limited health literacy in shared decision-making.					
43	Apply strategies adjusted to patients' level of health literacy to enable self-management.					
44	Respond to verbal and nonverbal emotional expressions.					
45	Create a shame free environment for patients with limited health literacy.					
46	Stimulate patients with limited health literacy to manage their own health.					
Which learning goals would you like to reach in the next months?						