

The Health Literacy Toolshed: An online database of health literacy measures

SE Armstrong, K Waite, L Henault, M Jones, & MK Paasche-Orlow HARC, Bethesda, MD – October 22nd, 2018





Conflict of Interest Disclosure

None

Background



- Health literacy definition: the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.¹
- Large number of validated tools exist
- Online repository did not exist to easily search for a measurement
- 2014 we began making plans to create a curated database

Database Creation



- Partnered with National Library of Medicine, Research Triangle Institute (RTI) International, and Communicate Health
 - Determined domains
 - Designed website layout
 - Created data abstraction process
- Literature Search
 - First literature search included articles prior to 2015
 - Beginning in early 2015, quarterly literature reviews were conducted

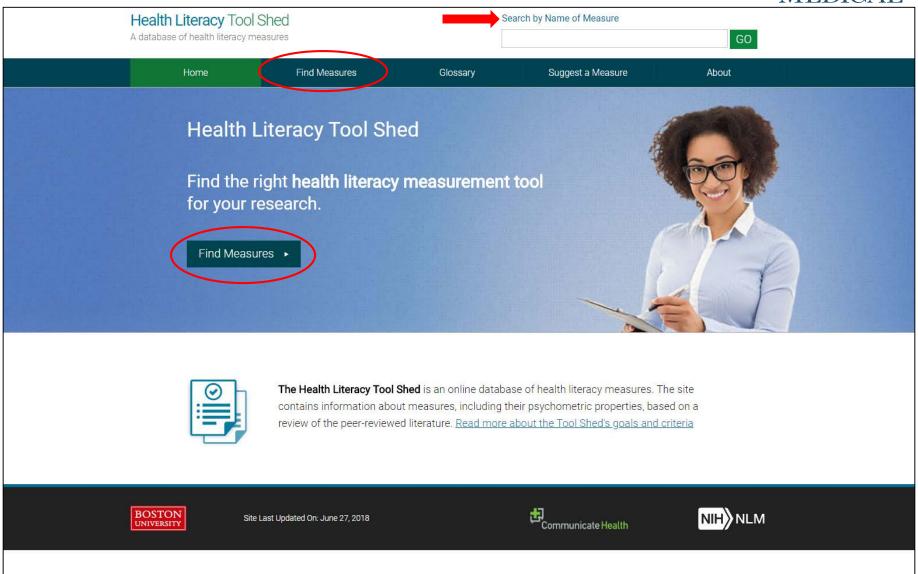
Domains



- Languages measured
- Validation sample size and demographic data
- Reliability and validity
- Measurement context
- Administration instructions
- Health Literacy sub-categories
- Psychometric methods (classical vs. item response theory)
- Author contact information

Tour of the Toolshed Database



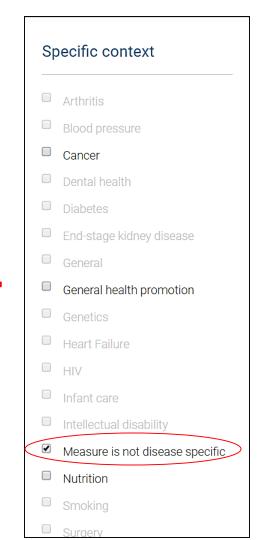


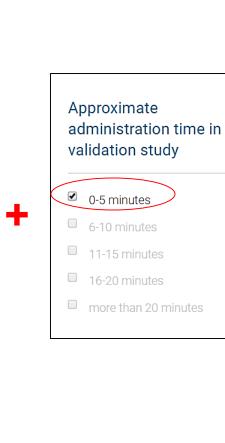


Filter Measures	No filters selected, all measures shown.
Lead author	Your Results: 133 matching measures Sort by: Measure Name A-Z (Default) ▼
	▼ 30-Item Cancer Health Literacy Test - CHLT-30
	✓ 6-Item Cancer Health Literacy Test - CHLT-6
Health literacy domain measured	✓ Abbreviated version of the Test of Functional Health Literacy in Adults - S-TOFHLA
Application/function	✓ All Aspects of Health Literacy Scale - AAHLS
Communication: Listener Communication: Speaker	✓ Arabic Cervical & Breast Cancer Literacy Assessment Tool - Ar-CB-LAT
Comprehension Conceptual Knowledge	▼ Arthritis-Adapted Rapid Estimate of Adult Literacy in Medicine - A-REALM
General Information seeking: Document	▼ Berlin Numeracy Test
☐ Information seeking: Interactive media navigation	▼ Breast Cancer Literacy Assessment Tool - B-CLAT
Listening comprehension Numeracy	▼ Brief Estimate of Health Knowledge and Action—HIV Version - BEHKA-HIV
Prose: Comprehension	☑ Brief Health Literacy Screener (Chew Items Spanish).
Prose: Pronunciation	☑ Brief Health Literacy Screener (Chew Items)
Specific context	
Arthritis	✓ Cancer Health Literacy Test - Spanish Version - CHLT-30-DKspa
Blood pressure Cancer	▼ Cancer Message Literacy Test- Reading - CMLT-Reading
Dental health	✓ Cancer Message Literacy Test-Listening - CMLT-Listening



Language of validated version Arabic Cantonese Dutch English French German Hebrew Italian Japanese Korean Mandarin Portuguese Serbian Setswana Spanish Taiwanese



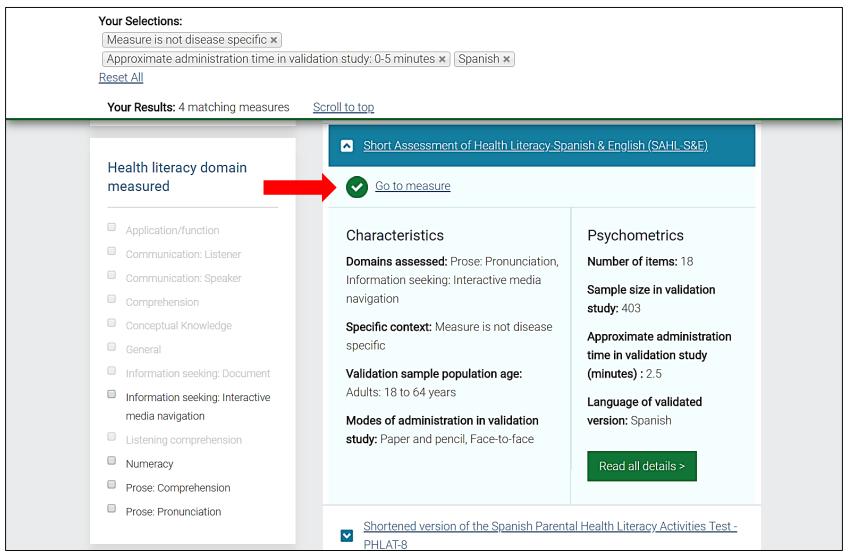




Health Literacy Tool Shed Search by Name of Measure A database of health literacy measures GO Home Find Measures Glossary Suggest a Measure About Filter Measures Your Selections: Measure is not disease specific × Approximate administration time in validation study: 0-5 minutes X Spanish X Lead author Reset All Your Results: 4 matching measures Sort by: Measure Name A-Z (Default) Short Assessment of Health Literacy for Spanish-Speaking Adults -Health literacy domain SAHLSA-50 measured Short Assessment of Health Literacy-Spanish & English (SAHL-S&E) Application/function Shortened version of the Spanish Parental Health Literacy Activities Test -Communication: Speaker PHLAT-8 Comprehension Conceptual Knowledge Spanish Parental Health Literacy Activities Test - PHLAT Spanish This tool may not display all health literacy measures. Read more about the Tool Information seeking: Document Shed and how measures were selected.

At-a-glance Feature







duide

- Eliminating CLABSI, Neonatal CLABSI Prevention
- Reducing Hospital-Acquired Conditions

SAHL-S&E validation study:

Lee S.-Y. D., Stucky B.D., Lee J. Y. et al. Short assessment of health literacy–Spanish and English: A comparable test of health literacy for Spanish and English speakers *HSR* 2010 August;45(4):1105–20. **Pub Med ID (PMID)**: 20500222 [Full text available in PubMedCentral]

Contents:

SAHL-S Test Form & User's Guide (Select for PDF Version [2-36.33 KB])
SAHL-E Test Form & User's Guide (Select for PDF Version [3-53.04 KB])

SAHL-S Test Form

Stem	Key or Distracter		"No sé" (Don't know)	
1. empleo	trabajo	educación	No sé	
2. convulsiones	mareado	tranquilo	No sé	
3. infección	mata	virus	No sé	
4. medicamento	instrumento	tratamiento	No sé	
5. alcoholismo	adicci ó n	recreo	No sé	
6. riñón	_orina	fiebre	No sé	
7. dosis	dormir	cantidad	No sé	
8. aborto espont á neo	pérdida	matrimonio	No sé	
9. estreñimiento	bloqueado	suelto	No sé	
10. embarazo	parto	ni ñ ez	No sé	
11. nervios	aburrido	ansiedad	No sé	
12. nutrición	saludable	gaseosa	No sé	
13. indicado	instrucción	decisi ó n	No sé	
14. hormonas	crecimiento	harmonía	No sé	
15. abnormal	diferente	similar	No sé	
16. diagn ó stico	evaluación	recuperación	No sé	
17. hemorroides	venas	coraz ó n	No sé	
18. sífilis	anticonceptivo	condón	No sé	



Your Selections: Measure is not disease specific x Approximate administration time in validation study: 0-5 minutes X Spanish X Reset All Your Results: 4 matching measures Scroll to top Short Assessment of Health Literacy-Spanish & English (SAHL-S&E). Health literacy domain measured Go to measure Characteristics **Psychometrics** Domains assessed: Prose: Pronunciation, Number of items: 18 Information seeking: Interactive media Sample size in validation navigation study: 403 Conceptual Knowledge Specific context: Measure is not disease Approximate administration specific ☐ General time in validation study Validation sample population age: (minutes): 2.5 Adults: 18 to 64 years Information seeking: Interactive Language of validated media navigation version: Spanish Modes of administration in validation study: Paper and pencil, Face-to-face Numeracy Read all details > Prose: Comprehension Prose: Pronunciation Shortened version of the Spanish Parental Health Literacy Activities Test -PHLAT-8

Health Literacy Tool Shed
A database of health literacy measures

GO

Home Find Measures Glossary Suggest a Measure About



Description General medical word recognition and matching test, shortened (18 items) Year measure first published: 2010 **About This Measure** About the Validation of this Measure Country where validated: United States of America Assessment: Objective Validation sample: Race: 50% Spanish-speaking, 50% English-Categorical scoring: Yes speaking Scoring categories: 2 categories: <15 is inadequate Content validity: Word recognition test: Spanish version of the test to SAHLSA and Spanish TOFHLA Concurrent criterion validity: Convergent (SAHL-S): SAHLSA r=0.88 and TOFHLA-S r=0.62 **Reliability notes:** α = 0.80 Spanish version We would love your feedback on this measure. Send feedback Please send your comments or questions to the Tool Shed.



	Health Literacy Tool Shed A database of health literacy measures			Search by Name of Measure		
ŀ	Home	Find Measures	Glossary	Suggest a Measure	Abou	ıt
	The Health Lit	teracy Tool Shed Gl	ossary			
	The Health Literacy Tool Shed Glossary includes vocabulary and terminology used to talk about features and aspects of the Health Literacy Tool Shed.					
		ninistration in validatior on study was administered (e	•	, face-to-face, paper and pend	cil, phone-based,	
		coring (yes/no) ses categories (e.g., low, med	lium, high) to catego	rize responses		
	The extent to whi	ity: Concurrent ich the results from this tool e time (i.e., how similar the re	·	s from other health literacy a	ssessments	
				an independent defined outco	ome (i.e., how	
		y domains measured	the measure (e.g. E	Prose: propunciation Prose: C	omprehension	



Home	Find Measures	Glossary	Suggest a Measure	About	
Shed.			to suggest a new measure for th	e Health Literacy Tool	
Measure Name Measure name (require		mit a separate measure entry	y for each one.		
Measure acronym					
Main Article Refer	ence				
Lead author first name					
Lead author last name APA citation					
I Ise APA reference style					



Home Find Measures Glossary Suggest a Measure About

About the Health Literacy Tool Shed

Welcome to the Health Literacy Tool Shed! This website helps you:

- 1. Learn about health literacy measurement tools
- 2. Find tools that meet your needs

Inclusion Criteria

This website includes tools (measures, instruments, and items) that:

- 1. Measure an individual's health literacy.
- 2. Are published in peer-reviewed journals the published articles describe the measure and its development process, along with the report validation procedures that include at least 100 participants.

We did not exclude tools on the basis of accessibility, so some tools may require payment or author permission. 1

The number of available tools to assess an individual's health literacy has increased during the past decade. There are more than 100 tools available on this site, and we review the Tool Shed quarterly so we can continue to add measures that meet our criteria. Please let us know if you have suggestions to improve the Tool Shed, such as adding tools or more information on the listed measures. To make a suggestion, you can <u>use the Contact Us web form</u>.

Michael Paasche-Orlow, MD, MA, MPH, the lead academic partner for this project, will incorporate your suggestions in future site updates.

Note: Some of the health literacy tools that are not included assess the complexity of the health care system

Results to Date



Tool Characteristics N=134		
Characteristic	n	(%)
Language		
English	84	63%
Spanish	12	9%
Japanese	7	5%
Cantonese	4	3%
German	4	3%
Italian	4	3%
Portuguese	4	3%
Other	15	11%
Administration Time		
0-5 minutes	35	45%
6-10 minutes	13	17%
11-15 minutes	14	18%
16-20 minutes	5	6%
20+ minutes	11	14%

Results to Date



Tool Characteristics N=134				
Characteristic	n	(%)		
Specific Context				
Not Disease Specific	84	63%		
Cancer	9	7%		
Nutrition	8	6%		
Dental Health	7	5%		
Diabetes	6	4%		
HIV	3	2%		
Other	17	13%		
Assessment				
Objective	105	78%		
Self-Report	29	22%		
Availability				
Available for Download	43	32%		
Available Online	31	23%		

Results to Date



Tool Characteristics N=134				
Characteristic	n			
Number of Items per Tool				
Min	1			
Max	127			
Average	33			
Frequency of Domains Measured				
Prose: Comprehension	78			
Numeracy	66			
Information Seeking: Document	33			
Application/function	29			
Prose: Pronunciation	22			
Information Seeking: Interactive Media Navigation	14			
Frequency of Mode of Administration				
Face-to-Face	87			
Paper and Pencil	65			
Computer-Based	24			
Mailed Survey	7			
Phone-Based	4			

Conclusions



- 37,000 visits since its publication in 2015
- We successfully created a curated website resource that provides validated, peer-reviewed health literacy tools for clinicians and researchers
- We will continue to add new tools quarterly as they become available

Thank You



- Thank you to Communicatehealth as well as Dr. Michael Paasche-Orlow, and the members of the team:
 - Lori Henault
 - Emily Armstrong
 - Margaret Jones



Questions?

https://healthliteracy.bu.edu/