

Health Literacy Screening Tools

Rapid Estimate of Adult Literacy in Medicine (REALM)	
Description	<ul style="list-style-type: none"> •A 66-item health-related word recognition test arranged in order of increasing difficulty. •Provides a reading level grade estimate for patients that read below a 9th- grade level. •Average administration time: 3-6 min.
Measurement	<ul style="list-style-type: none"> •<u>Low health literacy</u> (At or below 3rd-grade reading level): 0 to 18 (4th to 6th-grade reading level): 19 to 44 •<u>Marginal health literacy</u> (7th to 8th-grade reading level): 45 to 60 •<u>Adequate health literacy</u> (9th-grade reading level): 61-66
Strengths	<ul style="list-style-type: none"> •Word-recognition tests are useful for predicting general reading ability in English. •Used in health literacy research settings.
Limitations	<ul style="list-style-type: none"> •Does not measure comprehension skills or numeracy.
Location	<ul style="list-style-type: none"> •Available for purchase from Terry C. Davis, PhD: tdavis@lsuhsc.edu •Davis TC, Long SW, Jackson RH, Mayeaux EJ, George RB, Murphy PW, and Crouch MA. Rapid Estimate of Adult Literacy in Medicine: A Shortened Screening Instrument. <i>Clinical Research and Methods</i>. 1993, 25(6):391-395.

Rapid Estimate of Adult Literacy in Medicine - Revised (REALM-R)	
Description	<ul style="list-style-type: none"> •The word-recognition REALM test was shortened from 66 items to 8 items. •Average administration time: 2 min
Strengths	<ul style="list-style-type: none"> •Additional words can be added to this assessment and still maintain 2-minute administration time. This would allow for development of more disease-specific test, by choosing words related to a particular disease. •Short administration time
Limitations	<ul style="list-style-type: none"> •Poor literacy skills are thought to disproportionately affect the elderly and minorities, 2 groups who were underrepresented in the study validating the REALM-R. •Utility in research and clinical settings less known.
Location	<ul style="list-style-type: none"> •Available for purchase from Terry C. Davis, PhD: tdavis@lsuhsc.edu •Bass PF, Wilson JF, and Griffith CH. A Shortened Instrument for Literacy Screening. <i>Journal of General Internal Medicine</i>. 2003, 18:1036-1038.

Test of Functional Health Literacy in Adults (TOFHLA)	
Description	<ul style="list-style-type: none"> •Two-part assessment: <ol style="list-style-type: none"> 1) Provides participants with medical information or instructions (e.g. Instructions on a prescription label or instructions about preparation for a diagnostic procedure). Participants review the information and then answer questions that test their understanding of the provided information. 2) Based on the Cloze method, where participants are given passages of text about medical topics with certain words replaced with blank spaces. The participants must fill in the blank spaces using words selected from a multiple choice list. •Administration time: 22-25 min
Measurement	<ul style="list-style-type: none"> •Inadequate Literacy: 0-59 •Marginal Literacy: 60-74 •Adequate Literacy: 75-100
Strengths	<ul style="list-style-type: none"> •Indicator of a patient's ability to read and understand health-related prose passages and numerical information. •Used in health literacy research settings. •Spanish version available.
Limitations	<ul style="list-style-type: none"> •Primarily screens for reading ability. •Long administration time.
Location	<ul style="list-style-type: none"> •Available for purchase from http://www.peppercornbooks.com/ at \$60.

Short Test of Functional Health Literacy in Adults (S-TOFHLA)	
Description	<ul style="list-style-type: none"> •The TOFHLA is reduced to 2 reading comprehension passages with missing words, based on the Cloze method. The first passage is at the 4th grade reading level and the second passage is at the 10th grade reading level. •Average administration time: 12 min Average administration time: 8 min
Measurement	<ul style="list-style-type: none"> •Inadequate health literacy: 0-53 •Marginal health literacy: 54-66 •Adequate health literacy: 67-100
Strengths	<ul style="list-style-type: none"> • Indicator of a patient's ability to read and understand health-related prose passages •Tested on a variety of populations (young, elderly). •Shorter administration time.
Limitations	<ul style="list-style-type: none"> •Numeracy not tested. •Still longer administration time than other tools.
Location	<ul style="list-style-type: none"> •Available for purchase from http://www.peppercornbooks.com/ at \$60. •Baker DW, Williams MV, Parker RM, Gazmararian JA, Nurss J. Development of a brief test to measure functional health literacy. <i>Patient Education and Counseling</i>. 1999, 38:33-42.

Newest Vital Sign (NVS)	
Description	<ul style="list-style-type: none"> •This 6-item assessment measures reading and comprehension of a nutrition label. •Average administration time: 3-6 min
Measurement	<ul style="list-style-type: none"> •Patients with low literacy: 0-4 questions answered correctly •Patients unlikely to have low literacy: 5-6 questions answered correctly.
Strengths	<ul style="list-style-type: none"> •Tests for numeracy, reading ability and comprehension skills. •Available in English and Spanish. •Correlates with TOFHLA. •May be more sensitive to patients with marginal health literacy than other functional health literacy assessments.
Limitations	<ul style="list-style-type: none"> •May overestimate the percent of patients with low literacy, due to its specificity. •Does not differentiate well between adequate and marginal literacy.
Location	<ul style="list-style-type: none"> •Available online: http://www.pfizerhealthliteracy.com/physicians-providers/newest-vital-sign.html •Weiss BD, Mays MZ, Martz W, Castro KM, DeWalt DA, Pignone MP, Mockbee J, and Hale FA. Quick Assessment of Literacy in Primary Care: The Newest Vital Sign. <i>Annals of Family Medicine</i>. 2005, 3:514-522.

Brief Estimate of Health Knowledge and Action – HIV Version	
Description	<ul style="list-style-type: none"> •An 8-item assessment of HIV knowledge and treatment action. •The knowledge subscale measures a patient’s capacity to understand health information, while the action subscale measures a patient’s ability to make actionable decisions accordingly to obtain health information. •Three items are associated with knowledge, while 5 items are associated with action.
Measurement	<ul style="list-style-type: none"> •Low Literacy: 0-3 Marginal Literacy: 4-5 Adequate Literacy: 6-8
Strengths	<ul style="list-style-type: none"> •May better represent health literacy for HIV patients than more general tools measuring reading ability in a health context. •Scores on BEKHA-HIV were significantly associated with self-reported medication adherence.
Limitations	<ul style="list-style-type: none"> •Not a direct test of functional health literacy in terms of reading ability and reading comprehension. •Further validation needed.
Location	<ul style="list-style-type: none"> •Osborn CY, Davis TC, Bailey SC, and Wolf MS. Health Literacy in the Context of HIV Treatment: Introducing the Brief Estimate of Health Knowledge and Action (BEKHA)-HIV Version. <i>AIDS Behavior</i>. 2008.

Single Item Literacy Screen	
Description	<ul style="list-style-type: none"> •A single item question intended to identify adults in need of help with printed health material: “How often do you need to have someone help you when you read instructions, pamphlets, or other written material from your doctor or pharmacy?”
Measurement	1-Never 3-Sometimes 5-Always 2-Rarely 4-Often Scores greater than 2 are considered positive, indicating some difficulty with reading printed health related material.
Strengths	<ul style="list-style-type: none"> •Brief and therefore practical for use in clinical practice. •More a direct assessment of need than an assessment of skill. •Simpler than an estimate based on demographics.
Limitations	<ul style="list-style-type: none"> •False negatives are possible because of participants not recognizing that they need help with reading, feeling ashamed, or not understanding the question.
Location	<ul style="list-style-type: none"> •Morris NS, MacLean CD, Chew LD, and Littenberg B. The Single Item Literacy Screener: Evaluation of a brief instrument to identify limited reading ability. <i>BMC Family Practice</i>. 2006, 7(21).

How confident are you filling out medical forms by yourself?	
Description	<ul style="list-style-type: none"> •Two studies investigated the utility of three questions to detect limited health literacy. The three questions are: 1) How often do you have problems learning about your medical condition because of difficulty understanding written information? 2) How often do you have someone help you read hospital materials?” 3) How confident are you filling out medical forms by yourself? The researchers found that a single question was useful for detecting patients with inadequate health literacy (according to S-TOFHLA and REALM).
Measurement	The 5 possible responses are: always, often, sometimes, occasionally, or never. Answers of sometimes, occasionally and never indicate limited health literacy.
Strengths	<ul style="list-style-type: none"> •Brief and therefore practical for use in clinical practice. •More a direct assessment of need than an assessment of skill. •More reliable than an estimate based on demographics.
Limitations	<ul style="list-style-type: none"> •Study was conducted in a large population of VA primary care patients and may not be generalizable to other settings.
Location	<ul style="list-style-type: none"> •Chew LD, Griffin JM, Partin MR, Noorbaloochi S, Grill JP, Snyder A, Bradley KA, Nugent SM, Baines AD, and VanRyn M. Validation of Screening Questions for Limited Health Literacy in a large VA Outpatient Population. <i>Journal of General Internal</i>

	<p><i>Medicine</i>. 2007, 23(5):561-566.</p> <ul style="list-style-type: none"> •Wallace LR, Rogers ES, Roskos SE, Holiday DB, and Weiss BD. Brief Report: Screening Items to Identify Patients with Limited Health Literacy Skills. <i>Journal of General Internal Medicine</i>. 2006, 21:874-877.
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SOS Mnemonic	
Description	<ul style="list-style-type: none"> •This study found that self rated reading ability, Single Item Literacy Screen result, and highest education level independently predicted whether a patient has limited health literacy, as defined by their S-TOHFLA score. •The study suggests that the use of all these questions is superior to the use of any one of them individually.
Strengths	<ul style="list-style-type: none"> •Assesses need as well as skill. •Results correlate with S-TOFHLA.
Limitations	<ul style="list-style-type: none"> •Participants were all treated for diabetes at one academic family practice center. •Participants knew they were receiving reading tests and may have been less likely to attempt to conceal a reading problem. •Model not yet validated to determine how well these results apply to other populations.
Location	<ul style="list-style-type: none"> •Jeppesen KM, Coyle JD, and Miser WF. Screening Questions to Predict Limited Health Literacy: A Cross-Sectional Study of Patients with Diabetes Mellitus. <i>Annals of Family Medicine</i>. 2009, 7(1):24-31.