

## Health Literacy Tools in the Outpatient Setting

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This series is coordinated by John E. Delzell Jr., MD, MSPH, Assistant Medical Editor.

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### Clinical Question

Which screening tools are effective at identifying patients with limited health literacy in the outpatient setting?

### Evidence-Based Answer

Single-question screening tools regarding the need for help with understanding and completing medical forms and reading materials can be effective for detecting inadequate health literacy in the outpatient setting. The current standard tools, the Short Test of Functional Health Literacy for Adults (S-TOFHLA) and the Rapid Estimate of Adult Literacy in Medicine (REALM), are effective but more difficult to administer. (Strength of Recommendation: B, based on three cohort studies.)

### Evidence Summary

A 2013 convenience sample study of 599 English-speaking adults 18 to 80 years of age from six family medicine clinics compared a self-administered screen consisting of three questions (How often do you have problems learning about your medical condition because of difficulty understanding written information? How confident are you filling out medical forms by yourself? How often do you have someone help you read instructions, pamphlets, or other written materials from your doctor or pharmacy?) with the S-TOFHLA, a validated 36-item oral comprehension test for measuring health literacy.<sup>1</sup> Each participant completed both assessments. Compared with the S-TOFHLA, the combination of all three screening questions had greater accuracy than any question alone. The question with the greatest accuracy was "How often do you have someone help you read instructions, pamphlets, or other written materials from your doctor or pharmacy?" (area under the receiver operating characteristic [ROC] curve = 0.83; 95% confidence interval [CI], 0.70 to 0.95). There was

a low prevalence of inadequate health literacy (2.5%), as determined by the S-TOFHLA.

A 2008 survey of 1,796 adult veterans from four outpatient Veterans Affairs medical centers compared the performance of three screening questions with the S-TOFHLA and REALM via in-person interviews that included all three measures.<sup>2</sup> The previously validated REALM assesses medical vocabulary recognition. The screening question with the greatest accuracy was "How confident are you filling out medical forms by yourself?" (area under the ROC curve = 0.84; 95% CI, 0.79 to 0.89). With a cutoff score of 2 on a 6-point Likert scale (0 = extremely confident, 5 = not at all confident), this question had 60% sensitivity and 82% specificity for detecting inadequate health literacy. In this study, no combination of screening questions was better than the best-performing individual question.

A 2006 study of 305 adults attending a university-based primary care clinic compared the three health literacy screening questions with the REALM.<sup>3</sup> The question "How confident are you filling out medical forms by yourself?" performed best (area under the ROC curve = 0.82; 95% CI, 0.77 to 0.86). Combinations of screening questions were no better than any single question.

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