

THE RAPID ESTIMATE OF ADULT LITERACY IN MEDICINE (REALM)

TABLE OF CONTENTS

1. Background and rationale.....1

2. Equipment and supplies1

3. Safety issues and exclusions2

4. Participant and exam room preparation.....2

5. Detailed measurement procedures.....2

6. Procedures for performing the measurements at home (if applicable).....3

7. Alert values/follow-up/reporting to participants3

8. Quality assurance3

8.1 Training requirements3

8.2 Certification requirements3

8.3 Quality assurance checklist.....3

9. References4

THE RAPID ESTIMATE OF ADULT LITERACY IN MEDICINE (REALM)

1. Background and rationale

A major objective of Health ABC is to examine the relationship of socioeconomic factors to both body composition and physical decline in old age. Although years of school completed is commonly used to represent educational attainment, it may not accurately reflect educational background, as the quality of education available varies substantially by geographic region, race, and possibly sex (especially in the 1930's). Several studies have found reading ability to vary widely within a given level of schooling and that grade-equivalent reading level correlates more strongly with health status than years of school completed.

Scores on common measures of cognitive function, the MMSE (from which the Teng 3MS is based) in particular, have been found to vary by educational attainment, largely independent of evidence for decline in function. While formulas exist to “adjust” for differences in education, a recent study found reading level to have a much stronger correlation with MMSE score than other sociodemographic variables including education and that education level makes only a small additional contribution to the regression equation predicting MMSE score. Thus, proper interpretation of scores on tests of cognitive function, such as the 3MS, would benefit from knowledge of participant reading level.

Assessment of reading level will also provide needed data for evaluating the appropriateness of particular instruments and questionnaires for our study population as well as the feasibility of using self-administered forms.

The REALM is a brief, highly reliable (retest correlations > .9), and well-validated word recognition based measure of reading level, targeted to identify low literacy. It consists of 66 common lay-medical terms of variable difficulty and takes 1 to 3 minutes to administer. The REALM provides broad grade-range estimates (0-3, 4-6, 7-8, and 9+) of reading level, but raw scores from zero to 66 may also be used. The REALM has been used in several studies involving patient and clinic populations and appears to be well-suited for use in a large-scale epidemiologic study.

2. Equipment and supplies

- Laminated REALM word list
- Hand-held magnifying lens

