Health Promotion Board-Ministry of Health Clinical Practice Guidelines: Functional Screening for Older Adults in the Community


ABSTRACT
The Health Promotion Board (HPB) and the Ministry of Health (MOH) publish clinical practice guidelines to provide doctors and patients in Singapore with evidence-based guidance on managing important medical conditions. This article reproduces the introduction and executive summary (with recommendations from the guidelines) from the HPB-MOH clinical practice guidelines on Functional Screening for Older Adults in the Community, for the information of readers of the Singapore Medical Journal. Chapters and page numbers mentioned in the reproduced extract refer to the full text of the guidelines, which are available from the Health Promotion Board website (http://www.hpb.gov.sg/uploadedFiles/HPB_Online/Publications/CPGFunctionalscreening.pdf). The recommendations should be used with reference to the full text of the guidelines. Following this article are multiple choice questions based on the full text of the guidelines.

INTRODUCTION
1.1 Objectives and scope of guideline
These guidelines are not to be viewed as a protocol, but they provide a framework to:
• Assist non-physician health professionals and community service providers to perform easy and simple functional screening for older adults.
• Promote consistency in functional screening for older adults locally.
• Identify older adults at risk for common geriatric conditions to prevent deterioration in function and increase quality of life.

1.2 Target users
The primary target users of the guidelines are nursing/allied health professionals and community service providers who perform functional screening of older adults aged 60 years and above, in the community setting. The secondary target users include medical professionals involved in the care of older patients. Although these doctors may not be directly involved in functional screening of this nature, they may be called to evaluate older adults who have been identified as requiring further functional assessment after this screening process.

1.3 Guideline development
These guidelines have been developed by a committee comprising specialists from the fields of geriatric medicine, public health, family medicine, rehabilitation medicine, physiotherapy, occupational therapy, ophthalmology, psychiatry, otorhinolaryngology, dentistry, nursing as well as community stakeholders appointed by the Ministry of Health, Singapore. The guidelines were developed using the best available current evidence and expert opinion.

1.4 Review of guidelines
Evidence-based clinical practice guidelines are only as current as the evidence that supports them. Users must keep in mind that new evidence could supercede recommendations in these guidelines. The workgroup advises that these guidelines be scheduled for review five years after publication, or if new evidence emerges that requires substantive changes to the recommendations.

1.5 Use of guidelines
Potential users need to be aware that there are substantial gaps in the evidence on functional screening of community-dwelling older persons living in Singapore. In particular, there is paucity of evidence directly linking the screening processes with beneficial health outcomes; the evidence available largely hinges on intermediate outcomes.

The level of evidence and strength of recommendations provided in this document vary for different functional domains, and these need to be appreciated when service
providers consider embarking on such screening programs. Most screening instruments have not been validated in the local setting. Evidence is not available to inform decisions on screening frequency for most of the functional domains.

In addition, the commitment to ensure that there are systematic plans for appropriate follow-up of individuals with positive screens needs to be made by service providers before initiating screening programmes. It is recommended that service providers obtain the advice and collaboration of relevant health services when planning these programmes.

To assist guideline users, we have also included sections in most chapters with ‘Advice on provision of services’ and ‘Education’. These contain the workgroup’s suggestions on resources for implementing the recommendations, such as qualifications of assessors or useful equipment, and education for older adults. These suggestions do not amount to evidence-based clinical recommendations, but may be considered as good practice points.

It must be emphasised that these guidelines and tools are not designed for use by physicians. Functional screening by physicians needs to incorporate targeted history-taking and physical examination which are beyond the scope of these guidelines.

1.6 Components of functional screening

There is currently no standard definition for function. At one end of the spectrum, function could refer to the ability to carry out basic activities of daily living, such as bathing and dressing, but at the other end, it could include psychosocial functioning, nutritional status and oral functioning. For the purpose of this CPG, we will address the following domains of function:

- Physical Function
- Vision
- Hearing
- Oral Health
- Continence
- Mood
- Cognition

EXECUTIVE SUMMARY OF RECOMMENDATIONS

Details of recommendations can be found in the full text of the guidelines at the pages indicated. Details of the system of levels of evidence and grades of recommendations are also in the full text of the guidelines.

Physical Function

C Community-dwelling older adults should be screened for functional disability (pg 12).

Grade C, Level 2+

C The Vulnerable Elders Survey-13 (VES-13) and the Short Physical Performance Battery (SPPB) can be used to screen for functional disability in older adults (pg 12).

Grade C, Level 2+

D Older adults who score ≥ 3 on the Vulnerable Elders Survey-13 (VES-13) or ≤ 6 on the Short Physical Performance Battery (SPPB) tools can be considered for referral to a primary care physician (pg 13).

Grade D, Level 4

Vision

GPP Community-dwelling older adults should be screened for visual impairment (pg 15).

GPP

B A visual acuity chart (e.g. Snellen chart) is recommended for identifying the presence of visual impairment (pg 15).

Grade B, Level 2++

GPP Older adults with visual acuity 6/12 or better (acceptable/normal visual acuity) should be screened every 1–2 years (pg 15).

GPP

GPP Individuals with visual acuity worse than 6/12 (abnormal visual acuity) without pinhole on initial screening should have visual acuity testing repeated with pinhole.

GPP

Individuals with pinhole visual acuity of 6/12 or better are likely to have refractive error and should be referred to an optometrist based in an optical outlet.

Individuals with pinhole visual acuity worse than 6/12 may have eye conditions other than refractive error and should be referred to an ophthalmologist (pg 15).

GPP

Suggested algorithm for vision screening

![Suggested algorithm for vision screening](image-url)
Hearing

D Community-dwelling older adults should be screened for hearing impairment (pg 18).

Grade B, Level 1+

D The Single Global Screening Question: “Do you or your family think that you may have hearing loss?” is recommended as a first screening tool for hearing impairment, although mild hearing impairment might still be missed (pg 18).

Grade D, Level 2+

C The Hearing Handicap Inventory for the Elderly-Screening (HHIE-S) is recommended as a screening tool for hearing impairment (pg 19).

Grade C, Level 2+

B The audioscope is recommended as a screening tool for hearing impairment (pg 19).

Grade B, Level 2++

GPP The algorithm in section 4.5 is recommended for the screening of hearing impairment in older adults (pg 20).

GPP

GPP Currently in Singapore, individuals that fail any of the three tests (Single Global Screening Question, HHIE-S & Audioscope test) should be referred to an audiologist and/or otolaryngologist (pg 20).

GPP

GPP For older adults that have been screened for hearing impairment and found to have normal hearing, screening for hearing impairment should be repeated yearly (pg 21).

GPP

Oral Health

D All individuals should be screened on their level of oral cleanliness, number and condition of teeth, health of oral tissues, characteristics of saliva, condition of prosthesis, as well as the signs and symptoms of dental pain (pg 23).

Grade D, Level 3

D Individuals should be screened using the Oral Health Assessment Tool (OHAT) (pg 23).

Grade D, Level 3

D It is recommended that:
  • Individuals with only poor oral hygiene should be provided with advice and skills to improve oral self-maintenance.
  • Individuals with oral pain, dry mouth, poor dentition status, poor periodontal health, in need of oral prosthesis or have existing prosthesis in need of repair/relining should be referred to a dentist (pg 24).

Grade D, Level 3

Suggested algorithm for oral health screening

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Continence

D Community-dwelling older adults should be screened for urinary incontinence (pg 27).

Grade D, Level 3

D Individuals should be screened for urinary incontinence with the International Consultation on Incontinence Questionnaire Urinary Incontinence – Short Form. (ICIQ-U1 SF) (pg 27).

Grade D, Level 3

GPP Older adults with an ICIQ score of 1 or greater are recommended to visit a primary care physician for further evaluation and follow-up consultation (pg 28).

GPP
Mood

**GPP** Community-dwelling older adults should be screened for depression (pg 32).

**B** It is recommended that the 15-item Geriatric Depression Scale (GDS-15) be used to screen for depression among older adults (pg 32).

**Grade B, Level 2++**

**C** Individuals who score 5 or more points on the GDS-15 must be referred to primary care doctors for further assessment and treatment. Primary care doctors can refer the more complicated patients to mental health professionals for treatment as necessary (see algorithm in section 7.6) (pg 33).

**Grade C, Level 2++**

Cognition

**C** Currently, community screening or routine screening in the primary care setting for dementia in asymptomatic older persons is not recommended (pg 37).

**Grade C, Level 2+**
These questions are based on the full text of the guidelines which may be found at http://www.hpb.gov.sg/uploadedFiles/HPB_Online/Publications/CPGFunctionalscreening.pdf

**Question 1.** Community-dwelling older adults 60 years and above should be assessed for:
- (a) Visual impairment.
- (b) Hearing impairment.
- (c) Dementia.
- (d) Urinary incontinence.

**Question 2.** Older adults with the following results should be referred to an ophthalmologist or optometrist for follow-up consultation:
- (a) Visual acuity 6/12.
- (b) Visual acuity worse than 6/12.
- (c) Visual acuity 6/6.
- (d) Visual acuity worse than 6/9.

**Question 3.** What is the frequency for hearing assessment for an older adult with a “normal” outcome?
- (a) Yearly.
- (b) Every 2 years.
- (c) Every 3 years.
- (d) Every 4 years.

**Question 4.** Concerning the screening of older adults for depression:
- (a) Screening for depression is recommended.
- (b) GDS-15 has been validated in Singapore.
- (c) GDS-15 score of 5 or more should prompt referral to primary care physicians or mental health professionals.
- (d) GDS-15 can only be self-administrated.

**Question 5.** The following tools may be used to screen for functional disability in the older adults:
- (a) Short Physical Performance Battery.
- (b) Berg’s Balance Scale.
- (c) Abbreviated comprehensive geriatric assessment.
- (d) Vulnerable Elderly Survey-13.

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**SUBMISSION INSTRUCTIONS:**
1. Log on at the SMJ website: http://www.sma.org.sg/cme/smj and select the appropriate set of questions.
2. Select your answers and provide your name, email address and MCR number. Click on “Submit answers” to submit.

**RESULTS:**
1. Answers will be published in the SMJ August 2010 issue.
2. The MCR numbers of successful candidates will be posted online at www.sma.org.sg/cme/smj by 27 August 2010.
3. All online submissions will receive an automatic email acknowledgment.
4. Passing mark is 60%. No mark will be deducted for incorrect answers.
5. The SMJ editorial office will submit the list of successful candidates to the Singapore Medical Council.