

Screening for Early Identification of Mental Health Issues in Seniors: The Development of an Evidence-Based, Standardized, User-Friendly Toolkit for Use in the Primary Care Setting

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Introduction

- In 2004, the Alberta Government assigned priority to the development of a mental health plan
 - high prevalence
 - aging baby boomers (Statistics Canada, 2006)
 - low identification rates (Conn, 2002; Huestis et al., 2002; Robins, 1996; U.S. Department of Health and Human Services, 1999)
 - top 5 mental disorders: anxiety, depression, dementia, psychosis, and substance use disorder

Objectives

- To develop a *standardized, user-friendly* toolkit for the early identification of the top five mental health issues in seniors for use in primary care settings in Alberta.
- To facilitate knowledge translation

Method

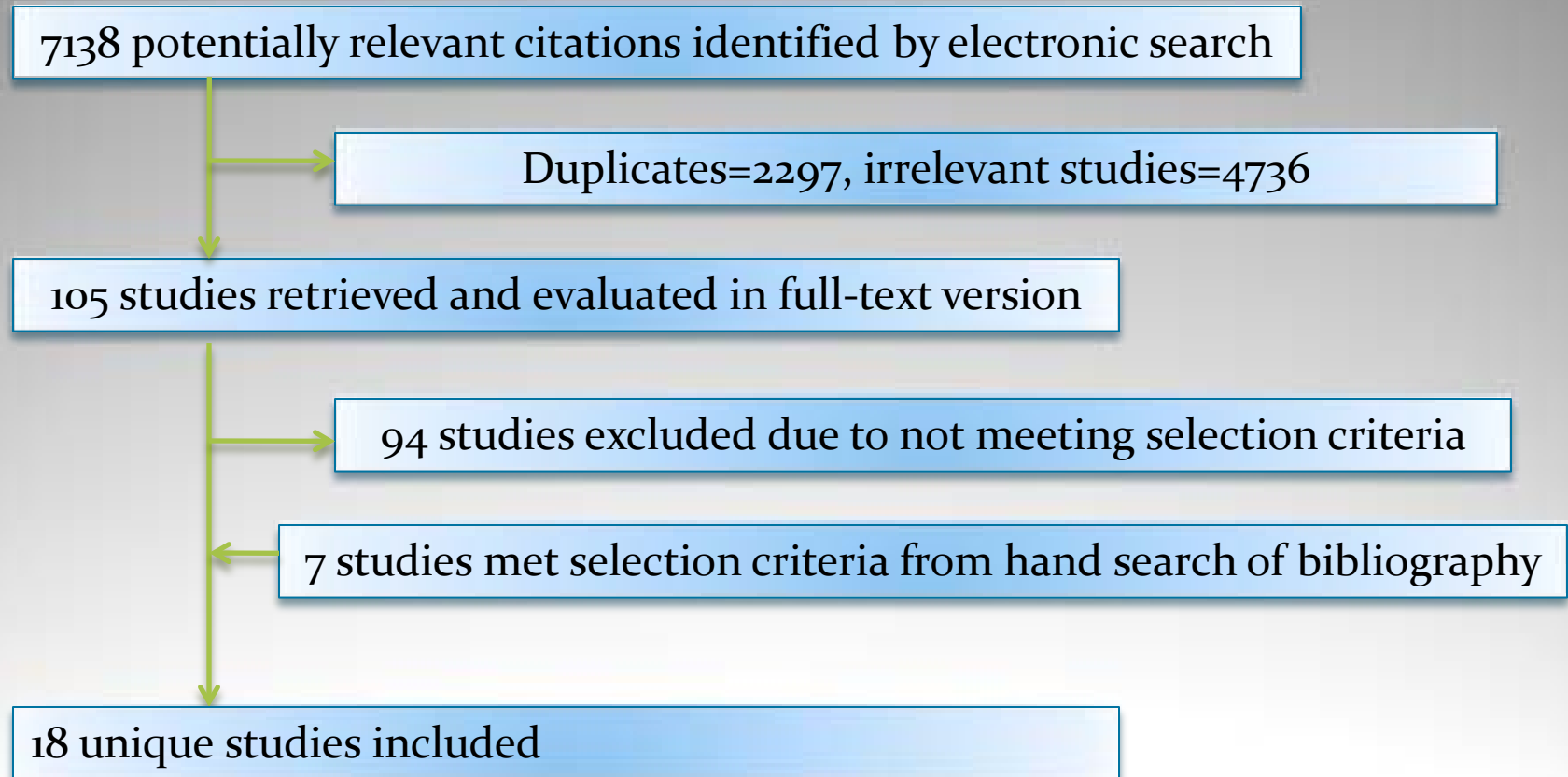
- Multi-phased, multi-method approach
 - **Phase 1: *Systematic Literature Review***
 - ❑ Depression
 - ❑ Dementia
 - ❑ Psychosis
 - ❑ Anxiety
 - ❑ Substance use disorder
 - ❑ Psychosocial factors (literature review)
 - **Phase 2: *Toolkit Development Process***

Phase 1: Systematic Review



Depression Systematic Review Results

Selection Flowchart



Data Extraction Form

Reviewer (circle one only): BD DM XYG

Study ID: Dep-

Authors:

Year of Publication:

Location of Sample: Canada Other (specify):

Study Setting: Family Physician Community health setting other (specify):

Study Design: Cohort study (prospective or retrospective) Cross-sectional
other (specify):

Study Period:

Time Interval between the screening tool test and gold standard test:

Objectives of the Study:

Study Participants (general characteristics):

Mean / Median (SD/IQR/Range) of Age in All Participants:

Mean / Median (SD/IQR/Range) in Screening Tool Group:

Mean / Median (SD/IQR/Range) in Gold Standard Group:

Ethnic Group:

Geographic Region:

Co-morbidities:

Female % in All Participants:

Female % in Screening Tool Group:

Female % in Gold Standard Group:

Prevalence of Depression (%) using Screening Tool:

Prevalence of Depression (%) using Gold Standard:

Total Sample Size / Sample Size for Screening

Tool Group / Sample Size for Gold Standard Group:

Source of Funding: Government Private Industry No funding other

(specify):

Results (screen tool: _____, N= _____, gold reference: _____, N= _____)

Screening Tool's Cut Point			
Sensitivity % (95%CI)			
Specificity % (95%CI)			
PPV %			
NPV %			
Kappa			

Data Extraction Results

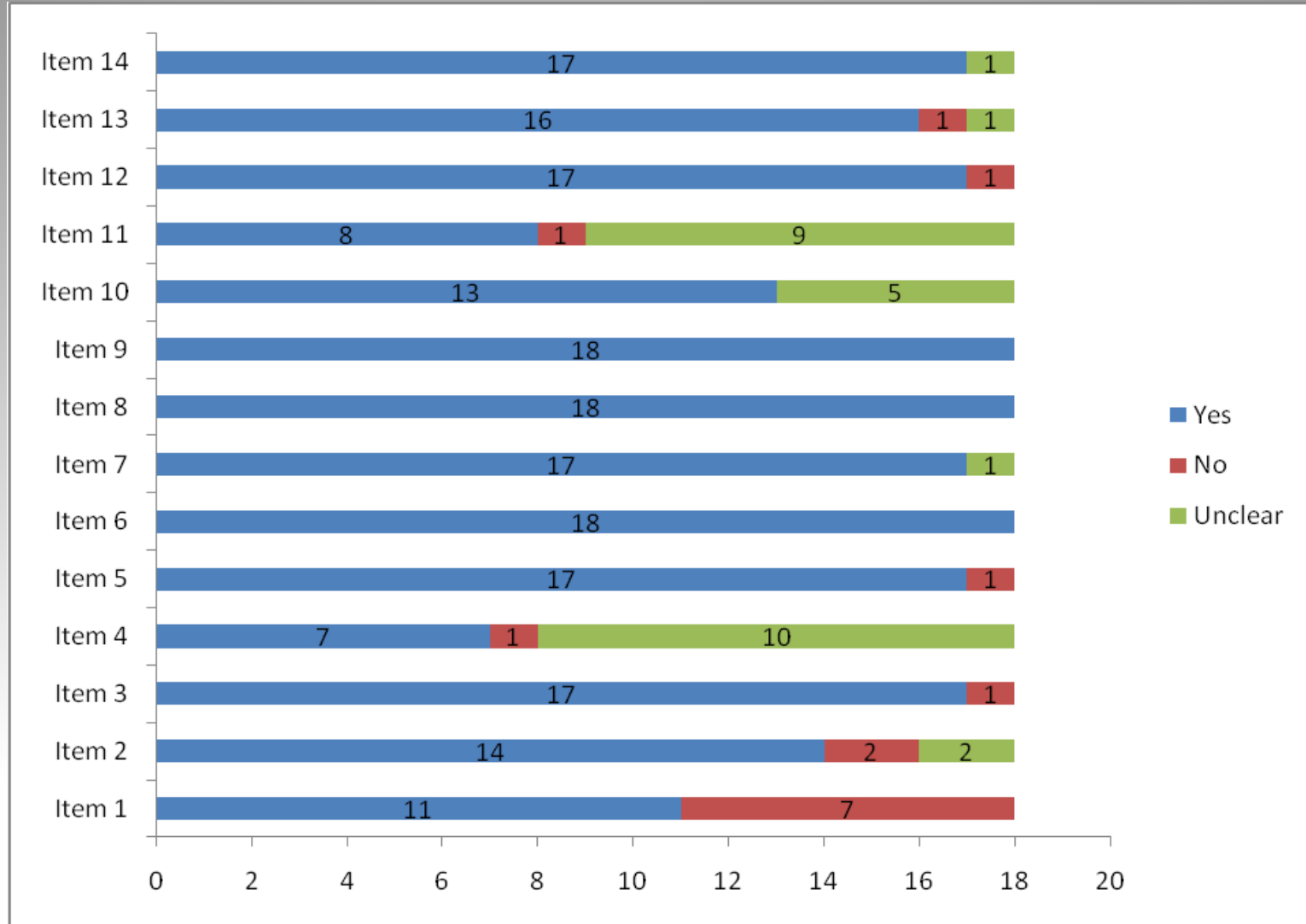
Screening Tool	Sample size	Optimal Cut-off Point	Sensitivity %	Specificity %
CES-D	84	≥12	80.0	78.0
GDS-1	120	NR	59.0	75.0
GDS-4	120	0/1	93.0	63.0
GDS-5	135	2	93.0	62.3
GDS-5	74	≥2	97.0	85.0
GDS-10	120	2/3	93.0	63.0
GDS-15	492	≥5	71.8	78.2
GDS-15	201	<4/4+	80.0	81.6
GDS-15	960	6	81.5	75.4
GDS-15	135	5	84.2	68.8
GDS-15	74	≥5	94.0	82.0
GDS-15	120	4/5	91.0	72.0
GDS-15	141	6	60.0	66.0
GDS-30	70	=9	77.0	63.0
GDS-30	84	≥9	80.0	85.0
GDS-30	142	≥14	80.0	78.0
GDS-30	135	11	82.5	76.6
GDS-30	170	14	70.0	67.0
CS-GDS-30	170	21	68.0	68.0
T-CS-GDS-30	83	19	61.0	58.0
T-GDS-30	101	11	86.0	70.0
HAD (D)	72	8/9	70.0	87.0
MHI-1	100	2/3	67.0	60.0
PHQ-2	8205	NR	100.0	77.0
SelfCARE (D)	72	5/6	95.0	86.0
SelfCARE(D)	214	7/8	90.0	53.0
Single Question	74	NR	85.0	65.0

QUADAS Quality Assessment Instrument

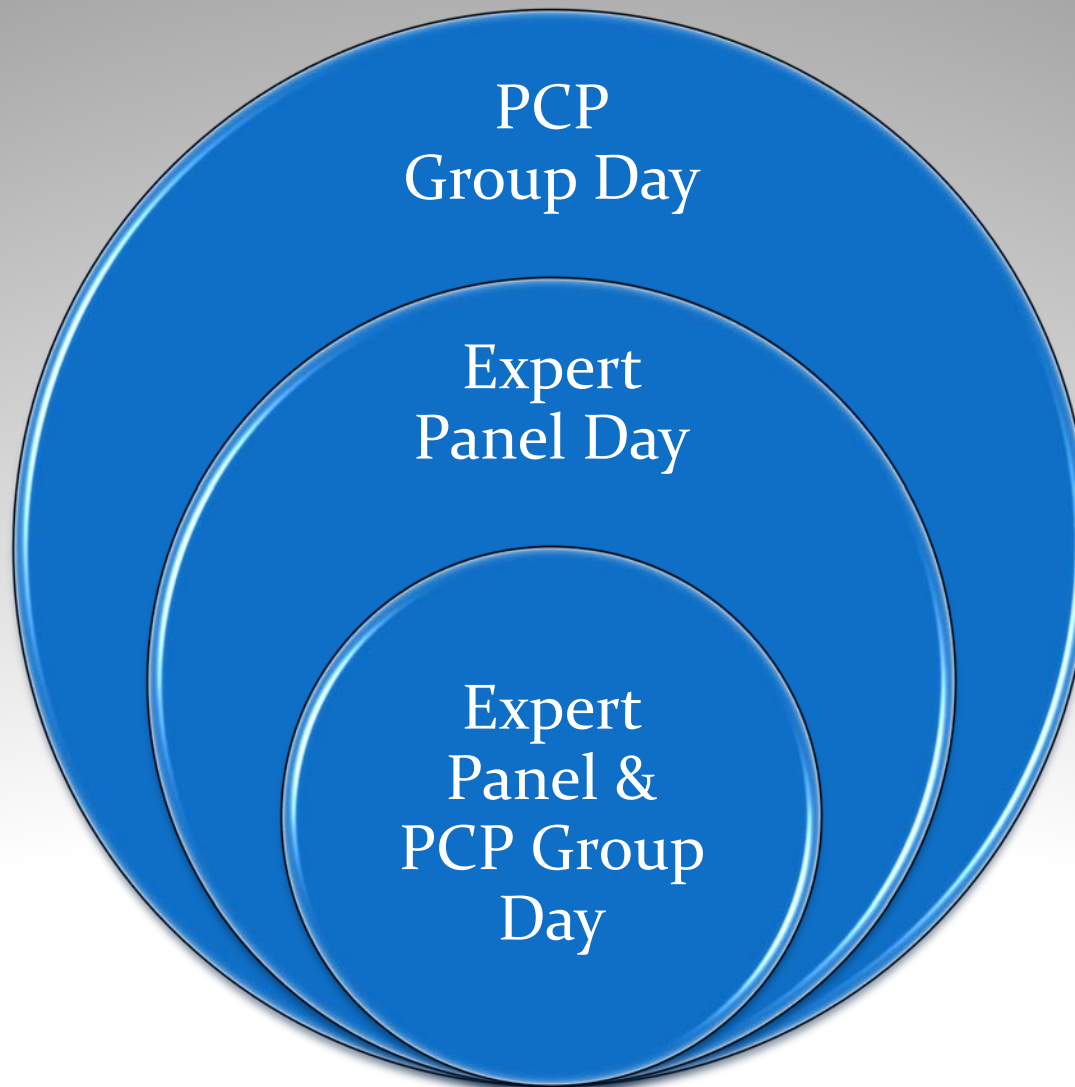
Circle one option for each question

Item 1	Was the spectrum of participants representative of the patients who will receive the test in practice?	Yes	No	Unclear
Item 2	Were selection criteria clearly described?	Yes	No	Unclear
Item 3	Was the reference standard likely to classify the target condition correctly?	Yes	No	Unclear
Item 4	Was the period between performance of the reference standard and the index test short enough to be reasonably sure that the target condition did not change between the two tests?	Yes	No	Unclear
Item 5	Did the whole sample or a random selection of the sample receive verification using the reference standard?	Yes	No	Unclear
Item 6	Did participants receive the same reference standard regardless of the index test result?	Yes	No	Unclear
Item 7	Was the reference standard independent of the index test? (that is, the index test did not form part of the reference standard)	Yes	No	Unclear
Item 8	Was the execution of the index test described in sufficient detail to permit its replication?	Yes	No	Unclear
Item 9	Was the execution of the reference standard described in sufficient detail to permit its replication?	Yes	No	Unclear
Item 10	Were the index test results interpreted without knowledge of the results of the reference standard?	Yes	No	Unclear
Item 11	Were the reference standard results interpreted without knowledge of the results of the index test?	Yes	No	Unclear
Item 12	Were the same clinical data available when the test results were interpreted as would be available when the test is used in practice?	Yes	No	Unclear
Item 13	Were uninterpretable, indeterminate or intermediate test results reported?	Yes	No	Unclear
Item 14	Were withdrawals from the study explained?	Yes	No	Unclear

QUADAS Results



Phase 2: Toolkit Development



Knowledge Translation/ Dissemination of Findings

- A Toolkit disseminated to end-users (e.g., practitioners in primary care)
- Conference presentations
- Academic publications

Acknowledgements

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Thank You!

Questions?

