

Appendix 2: Study design and outcomes of 16 trials of screening and case finding for depression

Study	Design	Population	Intervention and control	Outcomes
Bergus et al ¹	RCT, individual patients randomized	<ul style="list-style-type: none"> US rural fee-for-service primary care patients with a score of ≥ 10 on the PHQ9 ($n = 51$) 	<ul style="list-style-type: none"> Instrument: PHQ9 Intervention: clinicians provided with PHQ9 scores prior to consultation ($n = 24$) Control: usual care with no PHQ9 feedback ($n = 27$) 	<ul style="list-style-type: none"> Prescription of antidepressants and referral to a mental health specialist Outcome of depression using PHQ9 at 4, 10 and 24 weeks
Christiansen et al ²	RCT, individual patients randomized	<ul style="list-style-type: none"> Danish primary care, all patients screened and randomized ($n = 1785$) 	<ul style="list-style-type: none"> Instrument: SCL-8 (with questionnaires for somatisation and alcohol) Intervention: clinicians provided with screening scores prior to consultation ($n = 900$) Control: screening results withheld and usual care delivered ($n = 885$) 	<ul style="list-style-type: none"> Recognition of depression from case-note review
Callahan et al ^{3,4}	RCT, individual patients randomized	<ul style="list-style-type: none"> Elderly US primary care patients with a score > 15 on the HDRS ($n = 175$) 	<ul style="list-style-type: none"> Instrument: HDRS Intervention: clinicians provided with written patient specific materials, including HDRS scores; an interpretation of their meaning; a list of all medications and a specific instruction that drugs causing depression should be reviewed; and a written instruction that the presence of depression should be examined and managed appropriately. Clinical algorithm provided ($n = 100$) Control: No written feedback and no extra visits scheduled ($n = 75$) 	<ul style="list-style-type: none"> Diagnoses of depression Discontinuation of drugs causing depression Initiation of antidepressants. Psychiatric referrals Depression scores Functional status scores Symptom impact profile not used Follow up at 6 months
Dowrick et al ^{5,6}	RCT, individual patients randomized	<ul style="list-style-type: none"> Consecutive general practice patients ($n = 116$) in Liverpool, United Kingdom, with depression score > 14 on the BDI 	<ul style="list-style-type: none"> Instrument: BDI Intervention: BDI administered pre-consultation and depression scores disclosed to physician ($n = 52$) Control: BDI administered, but not fed back to physician ($n = 64$) 	<ul style="list-style-type: none"> Diagnoses of depression BDI scores at 6 and 12 months
German et al ^{7,8}	RCT, individual patients randomized	<ul style="list-style-type: none"> US adult and elderly general medical outpatients ($n = 1242$) Separate interventions for patients with high ($n = 488$) and low ($n = 754$) GHQ scores 	<ul style="list-style-type: none"> Instrument: GHQ Intervention: GHQ administered pre-consultation and results fed back to clinician, together with an indication that score was high and suggested "psychiatric diagnosis" ($n = 165$) Control: GHQ administered, but not fed back ($n = 323$) 	<ul style="list-style-type: none"> Detection of depression by clinicians Presence of depression according to diagnostic interview (DIS) Treatment initiated for depression
Hooper et al ⁹	RCT, individual patients randomized	<ul style="list-style-type: none"> Adult US primary care patients ($n = 2309$) 	<ul style="list-style-type: none"> Instrument: GHQ Intervention: GHQ administered by researcher and scores fed back to clinician, with information that a score > 5 indicated mental illness Control: GHQ administered, but not fed back to clinicians 	<ul style="list-style-type: none"> Physician diagnoses of depression at reference visit
Johnstone and Goldberg ¹⁰	RCT, individual patients randomized	<ul style="list-style-type: none"> Adults in UK primary care ($n = 1093$) Single practitioner 	<ul style="list-style-type: none"> Instrument: GHQ Intervention: GHQ administered by researcher and scores fed back to clinician. Screen-positive, but unrecognized patients followed-up ($n = 60$) Control: GHQ administered, but not fed back to clinicians. Screen-positive, but unrecognized patients followed up ($n = 59$) 	<ul style="list-style-type: none"> Duration of depression over a 12-month period, ascertained by patient interview

Lewis et al ¹¹	RCT, individual patients randomized	<ul style="list-style-type: none"> UK general practice patients at a single practice with GHQ-12 score > 2 (<i>n</i> = 454) 	<ul style="list-style-type: none"> Instrument: GHQ-12 and computerized assessment of psychiatric symptomatology Intervention: GHQ administered and placed in notes with no interpretation or instruction on the presence of mental disorder (<i>n</i> = 227) Control: no feedback given (<i>n</i> = 227) 	<ul style="list-style-type: none"> Consultation rates and clinician attribution of encounters as due to psychological or physical problems Prescription of a psychotropic drug Rates of outside mental health referrals to outside agencies GHQ scores at 6 weeks, 3 and 6 months
Linn et al ¹²	RCT, individual patients randomized	<ul style="list-style-type: none"> New referrals to US medical outpatients (<i>n</i> = 150), mean age 56 	<ul style="list-style-type: none"> Instrument: Zung self-rating depression scale (SDS) Intervention 1: SDS administered prior to consultation and results placed at front of notes, together with normative values. Physician also asked about depression post-consultation Intervention 2: SDS fed back to clinician following consultation Intervention 3: SDS provided pre-consultation, but clinician's impression of depression not elicited Intervention 4: SDS given to clinician following consultation, no impression of depression sought Intervention 5: no screening by SDS, but impression of depression sought Control: no screening by SDS, no physician opinion sought 	<ul style="list-style-type: none"> Depression noted in charts Initiation of treatment for depression
Magruder-Habib et al ¹³	RCT, individual patients randomized	<ul style="list-style-type: none"> Male adult US veterans (mean age 60) attending a general internal medicine outpatient clinic with Zung SDS score > 50 (<i>n</i> = 100) 	<ul style="list-style-type: none"> Instrument: Zung self-rating for depression scale (SDS) Intervention: SDS administered and fed back to physicians at first clinic assessment visit and placed at front of clinic notes (<i>n</i> = 48) Control: SDS administered but not fed back to clinicians (<i>n</i> = 52) 	<ul style="list-style-type: none"> Recognition of depression Initiation of management of depression Scores on SDS at 3, 6, 9 and 12 months
Moore et al ¹⁴	RCT, individual patients randomized	<ul style="list-style-type: none"> US primary care patients aged 20-60 years with Zung SDS score > 50 (<i>n</i> = 96) 	<ul style="list-style-type: none"> Instrument: Zung SDS score Intervention: SDS administered and score fed back, together with written indication of level of depression (<i>n</i> = 50) Control: screened, but no feedback (<i>n</i> = 46) 	<ul style="list-style-type: none"> Recognition of depression as indicated in case notes
Scriger et al ¹⁵	RCT, individual patients randomized	<ul style="list-style-type: none"> US emergency department patients with nonspecific diagnoses (<i>n</i> = 190) 	<ul style="list-style-type: none"> Instrument: self-administered computerized PRIME-MD Intervention: screening program administered, and computerized printout of summary report, including the presence of depression given to physician (<i>n</i> = 98) Control: screening plus no feedback (<i>n</i> = 92) 	<ul style="list-style-type: none"> Documentation of depression in the medical record Referral for a mental health consultation
Weatherall et al ¹⁶	RCT, individual patients	<ul style="list-style-type: none"> Elderly inpatients in New Zealand (<i>n</i> = 100) 	<ul style="list-style-type: none"> Instrument: GDS Intervention: GDS administered, together with the Mini Mental State Examination. Scores written in the notes (by hand) and an interpretation of the significance of scores given (<i>n</i> = 50) Control: an Activity of Daily living questionnaire administered in place of the GDS (<i>n</i> = 50) 	<ul style="list-style-type: none"> Rate of prescription of antidepressants Follow-up at discharge and 3 months

Whooley et al ¹⁷	RCT, primary care clinics randomized	<ul style="list-style-type: none"> Sequential US family practice patients > 65 years (<i>n</i> = 2 346), of whom 331 had depression 	<ul style="list-style-type: none"> Instrument: Geriatric Depression Scale (GDS) administered by a research assistant Intervention: GDS administered and scored by a research assistant. Scores fed back to physicians, with an indication that the score suggested moderate (score 6-10) or severe (11+) depression. In addition, patients with a positive score were offered a series of organized educational sessions (<i>n</i> = 162) Control: GDS administered, but scores not fed back. Educational sessions not offered (usual care) (<i>n</i> = 169) 	<ul style="list-style-type: none"> Physician diagnosis of depression (case note review, by blinded researcher) Prescription of antidepressants Healthcare utilization (number of clinical visits and hospital admissions) Depression scores of the GDS Outcomes all measured at two years. Only those positive for depression were followed-up (<i>n</i> = 331)
Williams et al ¹⁸	RCT, individual patients randomized*	<ul style="list-style-type: none"> Sequential patients at a US family medicine clinic (<i>n</i> = 969) 	<ul style="list-style-type: none"> Instrument: CES-D Questionnaire or Single item question "Have you felt depressed or sad much of the time in the past year?" Intervention 1: CES-D self administered, scored by researcher and results fed back to clinicians as either "positive" or "negative" (<i>n</i> = 323) Intervention 2: single item question asked and answer yes or no fed back to clinician (<i>n</i> = 330) Control: usual care (<i>n</i> = 316) 	<ul style="list-style-type: none"> Sensitivity and specificity of the instruments Recognition of depression from case-note review, corroborated by DSM-III-R interview schedule. Severity of depression from DSM-III-R symptom counts Treatment for depression (referral, antidepressants) Patient and physician satisfaction with care and use of questionnaires) Functional status from the SF36
Zung et al ¹⁹	RCT, individual patients randomized	<ul style="list-style-type: none"> US patients with undetected depression attending a family medicine centre (<i>n</i> = 143) 	<ul style="list-style-type: none"> Instrument: Zung self rating for depression scale (SDS) Intervention: patients' (<i>n</i> = 102) SDS results attached to the front of the medical record and the clinician verbally informed of the positive result and asked to evaluate the patient carefully for the presence of depressive disorder Control: patients' (<i>n</i> = 41) SDS results not fed back to the clinician 	<ul style="list-style-type: none"> Notation of depression in the medical notes SDS scores at 4 weeks and clinical improvement (operationally defined as a decrease of at least 12 points from baseline)

Note: BDI = Beck Depression Inventory, DIS = Diagnostic Interview Schedule, HDRS = Hamilton Depression Rating Scale, GDS = Geriatric Depression Rating scale, GHQ = General Health Questionnaire, PHQ9 = Patient Health Questionnaire 9, PRIME-MD = Primary Care Evaluation of Mental Disorders, RCT = randomized controlled trial, SCL-8 = Symptom Check List, SDS = Self-rating Depression Scale.

*All clinicians were given a copy of the Quick reference guide for clinicians on the management of depression (Depression Guideline Panel, 1993)

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