Appendix 17a: clinical studies characteristics tables – service delivery

Please note that references for studies from the previous guideline are in Appendix 18.

Stepped care: studies excluded in the guideline update

Characteristics of Excluded Studies

Reference ID	Reason for Exclusion
PATEL2008A	Protocol only
VANSTRATEN2006A	Mixed with anxiety - % with depression only is unclear

References of Excluded Studies

PATEL2008A (Published Data Only)

Patel, V. H., Kirkwood, B. R., Pednekar, S., Araya, R., King, M., Chisholm, D., et al. (2008) Improving the outcomes of primary care attenders with common mental disorders in developing countries: A cluster randomized controlled trial of a collaborative stepped care intervention in Goa, India. Trials, 9, 4.

VANSTRATEN2006A (Published Data Only)

Van Straten, A., Tiemens, B., Hakkaart, L., Nolen, W. A., & Donker, M. C. (2006) Stepped care vs. matched care for mood and anxiety disorders: a randomized trial in routine practice. Acta Psychiatrica Scandinavica, 113, 468-476.

Collaborative care: studies in the guideline update

Comparisons Included in this Clinical Question

Care Management v Feedback Only v Usual Care
Simon2000

Care Management v Usual Care
Blanchard1995
DIETRICH2004
MCMAHON2007
SIMON2006

'Collaborative Care' v Usual Care
CHEWGRAHAM2007
FINLEY2003
Katon1995
Katon1999
PILLING2010
RICHARDS2008
Unutzer2002

Decision Support Programme v Usual Care
DOBSCHA2006

Depression Recurrence Prevention Program (DRP) v DRP+Psych Consult v DRP+CBT v Usual Care
SMIT2006

Duloxetine+Telephone Intervention v Duloxetine Alone
PERAHIA2008

Enhanced Care v Usual Care
ROST2001a
Rost2001b

Feedback+Follow-up v Usual Care
Mann1998b

Integrated Primary Care v Usual Care (with feedback)
SWINDLE2003

Matched Care v Usual Care
Araya2003

Nurse Telehealth+Peer support v Nurse Telehealth v Usual Care
Hunkeler2000

Pharmacist Intervention v Usual Care
ADLER2004

Pharmacist Telemonitoring v Usual Care
RICKLES2005

Quality Improvement+Meds v Quality Improvement+Therapy v Usual Care
Wells1999

Structured Depression Treatment Programme v Usual Care
Katon1996

Telephone Care Management (TCM) v TCM+Peer-led Management v TCM+Professionaly led group v Usual Care
LUDMAN2007

Telephone Care Management (TCM) v TCM+Telephone Psychotherapy v Usual Care
SIMON2004

Telephone Disease Management v Usual Care
DATTO2003

Characteristics of Included Studies

Methods	Participants	Outcomes	Interventions	Notes
ADLER2004 Study Type: RCT Type of Analysis: 'ITT': any 6 month data even if no intervention Blindness: No mention Duration (days): Mean 180 Followup: 6 and 12 months Setting: Primary Care; US Notes: RANDOMISATION: computerised 'coin flip'	n= 507 Age: Mean 42 Sex: 143 males 364 females Diagnosis: 40% Major Depressive Disorder by DSM-IV 24% Dysthymia by DSM-IV 36% Major Depression and Dysthymia (double depression) by DSM-IV Exclusions: Not received care from a PCP in any site; <18 years old; unable to read or understand English; acute life threatening condition with terminal prognosis of <6 months;	**Data Used** Leaving early for any reason Modified BDI mean endpoint **Data Not Used** Adherence - 'use' rather than adherence MHI-5 - not relevant SF-12 - not relevant	**Group 1 N= 268** Pharmacist Intervention - Care management; psychoeducation; medication management **Group 2 N= 265** Usual Care	Funding: grant from National Institute of Mental Health

	pregnant or given birth in last 6 months; current alcoholism; bipolar disorder; psychotic disorders Notes: n=533 'enrolled'; 507 completed initial questionnaire; 464 any follow-up data; 384 6-month follow-up data Baseline: BDI(m): Int 23.2; Cntl 23.2			
Araya2003 Study Type: RCT Type of Analysis: ITT Blindness: Blinded assessment Duration (days): Mean 84 Followup: 3 months Setting: Primary Care; Chile Notes: RANDOMISATION: stratified by clinic and randomised in blocks of 20 by computer-generated random numbers. Allocations in sealed envelopes	n= 240 Age: Mean 43 Sex: all females Diagnosis: 100% Major Depression by DSM-IV Exclusions: GHQ-12 <5; current psychotic symptoms; serious suicidal risk; history of mania; current alcohol abuse; psychiatric consultation or admission to hospital in previous 3 months Baseline: HAMD: SC 19.8 (3.4); UC 19.7 (4.0)	**Data Used** Leaving early for any reason Remission: HAMD =/<7 Response: 50% reduction in HAMD HAMD mean follow-up HAMD mean endpoint **Data Not Used** SF-36 - not relevant Notes: Data available for 3 months and 3 month follow-up Removed all data as outlier at GDG request	**Group 1 N= 120** Matched Care - Stepped care algorithm based on HAMD scores at baseline and 6 weeks. Psychoeducational groups, monitoring and pharmacotherapy. **Group 2 N= 120** Usual Care - Physicians received guidelines on treatment of depression All services normally available including AD medication and referral for secondary services	Funding: US National Institute of Mental Health
Blanchard1995 Study Type: RCT Type of Analysis: Completers? Blindness: Blinded assessment Duration (days): Mean 90 Setting: Primary Care; UK Notes: RANDOMISATION: no details of method used; equal numbers of new and old cases in each arm	n= 96 Age: Mean 76 Sex: 14 males 82 females Diagnosis: 100% Probable Pervasive Depression by Short-CARE Exclusions: No details Notes: Further detailed assessment by Geriatric Mental State (GMS-AGECAT) - History and Aetiology Schedule (HAS) Baseline: DPDS: New cases 7.8 (2.1); Old cases 8.8 (2.5)	**Data Used** Leaving early for any reason **Data Not Used** Remission: Short-CARE <6 - not relevant Short-CARE mean endpoint - not relevant	**Group 1 N= 47** Care Management - Individually tailored care plans implemented by study nurse in collaboration with GPs and multidisciplinary team; weekly sessions with nurse **Group 2 N= 49** Usual Care	Funding: Department of Health and the Mental Health Foundation
CHEWGRAHAM2007 Study Type: RCT Type of Analysis: 'ITT': 'subject to availability of data' Blindness: No mention Duration (days): Mean 84 Setting: Primary Care; UK Notes: RANDOMISATION: computer programme for stochastic minimisation controlling for age, sex and depression severity	n= 105 Age: Mean 76 Sex: 29 males 76 females Diagnosis: Unclear Exclusions: <60 years of age; GDS score <5; MMSE score <24 Notes: SCID (DSM-IV) used as outcome measure but number with diagnosis at baseline is unclear - GPs referred patients who they had 'clinically identified as depressed' Baseline: SCL-20: Int 28.0 (13.7); UC 23.8 (14.6)	**Data Used** Leaving early for any reason Remission: <5 symptoms on SCID SCL-20 mean endpoint **Data Not Used** Burville Physical Illness - not relevant HAQ - not relevant	**Group 1 N= 53** Collaborative Care - Practices supplied with guidelines for treatment and management of depression Care management by CPN in collaboration with PCPs, psychoeducation, medication management and sign-posting to other services. 6 face-to-face sesssion and 5 telephone sessions **Group 2 N= 52** Usual Care - Practices supplied with guidelines for treatment and management of depression	Funding: the Department of Health
DATTO2003 Study Type: Cluster RCT Type of Analysis: Unclear	n= 61 Age: Mean 37 Sex: 24 males 37 females	**Data Used** Leaving early for any reason **Data Not Used**	**Group 1 N= 30** Telephone Disease Management Programme - Psychoeducation, provider guidelines, assistance with referral,	Funding: University of Pennsylvania Health System and grant from National Institute of Mental

Blindness: No mention Duration (days): Mean 112 Setting: Primary Care; US Notes: RANDOMISATION: no details	Diagnosis: 85% Major Depression by MINI 15% No Mention: See notes by Unclear Exclusions: CES-D <16; suicidal risk; substance abuse problems; current psychotic symptoms; evidence for bipolar affective disorder Notes: PCPs referred patients with depressive symptoms Baseline: CES-D: TDM 32.8 (10.5); UC 31.6 (10.0); Total 32.2 (10.2)	Response: 50% reduction in CES-D - given as OR Remission: CES-D =/<11 - given as OR SF-12 - not relevant and not reported CES-D mean endpoint - n unclear MINI - not extractable Adherence - given as OR Notes: Author emailed 18/11/08 for ns Adjusted for clustering with ICC 0.02	monitoring and feedback **Group 2 N= 31** Usual Care - Psychoeducation, provider guidelines, provider feedback at endpoint	Health
DIETRICH2004 Study Type: Cluster RCT Type of Analysis: ITT Blindness: Blinded assessment Duration (days): Mean 180 Setting: Primary Care; US Notes: RANDOMISATION: paired practices cluster randomised after stratification by healthcare organisation	n= 405 Age: Mean 42 Sex: 80 males 325 females Diagnosis: 79% Major Depression by DSM-IV 20% Major Depression and Dysthymia (double depression) by DSM-IV 3% Dysthymia by DSM-IV Exclusions: <18 years of age; not starting or changing treatment for depression; no telephone; unable to speak English Notes: Actual length of intervention unclear - 'as needed until remission' Baseline: SCL-20: Int 2.03 (0.65); Cntl 1.98 (0.65)	**Data Used** Leaving early for any reason Reporting side effects Response: 50% reduction in SCL-20 Remission: SCL-20 <0.5 SCL-20 mean endpoint Notes: Adjustment for clustering in paper	**Group 1 N= 224** Care Management - Care management, telephone support; self-management strategies **Group 2 N= 146** Usual Care - 45-60 minute programme on diagnosis of depression and assessment of suicidal thoughts	Funding: John D and Catherine T MacArthur Foundation
DOBSCHA2006 Study Type: Cluster RCT Type of Analysis: ITT: HLM Blindness: Blinded assessments Duration (days): Mean 365 Setting: Primary Care; US Notes: RANDOMISATION: Stratified technique using random number generator.Clinicians in 1 clinic block randomised.	n= 375 Age: Mean 57 Sex: 349 males 26 females Diagnosis: 49% Minor Depression by DSM-IV 47% Dysthymia by DSM-IV 4% No Mention: See notes Exclusions: Received treatment from mental health specialist in previous 6 months; diagnosis of psychotic disorder, dementia or bipolar disorder; terminally ill; PHQ-9 score <10 or >25; SCL-20 score <1.0 Notes: 4% of sample unaccounted for in baseline diagnosis Baseline: SCL-20: Int 1.9 (0.57); UC 1.9 (0.50)	**Data Used** SCL-20 mean endpoint **Data Not Used** Leaving early for any reason - not reported by study arm PHQ-9 - not extractable SF-36 - not relevant Notes: SCL available for 6 and 12 months Adjustment for clustering in paper	**Group 1 N= 189** Decision Support Programme - All clinicians invited to participate in MacArthur Foundation depression eduction programme 1 psychiatrist and 1 nurse care manager; psychoeducation, medication management, feedback and recommendations to clinicians **Group 2 N= 186** Usual Care - All clinicians invited to participate in MacArthur Foundation depression education programme. Clinician had access to all initial and follow-up PHQ-9 scores, clinicians and patients had access to mental health services including on-site teams	Funding: VA Health Services Research and Development Service
FINLEY2003 Study Type: RCT Type of Analysis: ITT	n= 125 Age: Mean 54 Sex: 19 males 106 females	**Data Used** Leaving early for any reason Adherence **Data Not Used**	**Group 1 N= 75** Collaborative Care - Implemented in HMO facility 2 years before initiation on this trial. Pharmacist care management,	Funding: in part by grant from the Sidney Garfield Memorial Fund and by unrestricted educational

Blindness: No mention Duration (days): Mean 170 Setting: Primary Care; US Notes: RANDOMISATION: sealed envelope determined group assignment; 3:2 ratio	Diagnosis: 100% No Formal Diagnosis Exclusions: Not member of HMO and not receiving primary care services at San Rafael facility; received antidepressant during preceding 6 months; concurrent psychiatric or psychological treatment; current symptoms of mania or bipolar disorder; psychotic symptoms; eminent suicidality; active substance abuse or dependence Notes: No formal diagnosis: relied on provider's clinical judgement that presenting symptoms warranted antidepressant treatment Baseline: BIDS (Brief Inventory for Depressive Symptoms): Int 18.7 (5.8); Cntl 18.3 (5.8)	WSDS - not relevant Response: 50% reduction in BIDS - not relevant Remission: BIDS <9 - not relevant BIDS - not relevant Notes: Check if BIDS is useable	psychoeducation, follow-up and clinic visits **Group 2 N= 50** Usual Care - Brief 'counselling' on prescribed drug, therapeutic endpoints and side effects; treatment and follow-up left to provider's discretion	grant from Pfizer Inc, New York
Hunkeler2000 Study Type: RCT Type of Analysis: Completers Blindness: No mention Duration (days): Mean 180 Setting: Primary Care; US Notes: RANDOMISATION:during 1st 9 months could be randomised to condition 1 or 2, then in final 9 months condition 3 also included. Stratified by facility	n= 302 Age: Mean 55 Sex: 92 males 210 females Diagnosis: Major Depressive Disorder by DSM-IV Dysthymia by DSM-IV Exclusions: Not given prescription for SSRI; previous antidepressant prescription in past 6 months; inadequate command of English language; current problems with substance abuse; surrent suicide risk; reported thoughts of violence Baseline: BDI: Int 18.4 (8.1); UC 19.9 (8.3) HAMD-17: Int 16.6 (8.1); 19.9 (8.3)	**Data Used** Response: 50% reduction in HAMD-17 **Data Not Used** Adherence - ns unclear SF-12 - not relevant HAMD-17 mean endpoint - ns unclear BDI mean endpoint - ns unclear Notes: Data reported at 3 and 6 months - 6 month extracted as endpoint Author emailed 11/11/08 for clarificaton of ns used in calculaton of mean endpoint data. Dichotomous outcomes for both intervention arms are combined as both reflect collaborative care	**Group 1 N= 117** Nurse Telehealth Care Usual Care **Group 2 N= 62** Nurse Telehealth Care - Telephone contacts, psychoeducation, medication management, follow-up and feedback Peer Support - Health plan members who had experienced successfully treated episode of depression, model and share successful coping skills, emotional support and encourage self monitoring Usual Care **Group 3 N= 123** Usual Care - Could be referred for other care as needed, physician training on identificaton and treatment of depression	Funding: grants from Innovations Program of Kaiser Permanente and the Community Services Programme of the Kaiser Permanente Medical Care Programme and by an unrestricted eductional grant from Smith-Kline Beecham Pharmaceuticals
Katon1995 Study Type: RCT Type of Analysis: Adherence & satisfaction= ITT; efficacy= completer Blindness: Blinded assessments Duration (days): Mean 210 Setting: Primary Care; US Notes: RANDOMISATION: stratified into moderate and severe and randomised in blocks by computer generated sequence	n= 217 Age: Mean 47 Sex: 51 males 166 females Diagnosis: 42% Major Depression by DSM-III-R 58% Minor Depression by DSM-III-R Exclusions: SCL-20 <0.75; <18 or >80; unwilling to take antidepressant medication; current alcohol abuse; current psychotic symptoms or serious suicidal ideation or plan; dementia; pregnancy; terminal illness; limited command of English; plan to disenrol from GHC insurance plan within next 12 months Notes: Intervention: major n=49; minor n=59 Control: major n=42; minor n=67 Baseline: SCL-depression subscale: Major - Int 2.35 (0.49); Cntl 2.23 (0.48); Minor - Int 1.67 (0.40); Cntl 1.72 (0.56)	**Data Used** Response: 50% reduction in SCL-20 Adherence **Data Not Used** Leaving early for any reason - does not separate by study arm CDS - not relevant NEO - not relevant IDS - Irrelevant Response: 50% reduction in IDS - Irrelevant SCL-20 mean endpoint - not extractable Notes: Data is reported by depression severity (major v minor) For dichotomous outcomes both severity groups are combined	**Group 1 N= 108** Collaborative Care - Psychoeducation; alternating visits between psychiatrist and PCP, follow-up Could also self-refer or be referred to GHC freestanding mental health clinic (short term psychotherapy or psychiatric consultation) **Group 2 N= 109** Usual Care - Treatment from PCP Could also self-refer or be referred to GHC freestanding mental health clinic (short term psychotherapy or psychiatric consultation)	Funding: grant from National Institute of Mental Health
Katon1996				

Study Type: RCT Type of Analysis: ITT Blindness: Blinded assessment Duration (days): Mean 210 Followup: 4 month endpoint 7 month follow-up* Setting: Primary Care; US Notes: RANDOMISATION: stratified by severity and randomised in blocks by computer generated sequence	n= 153 Age: Mean 46 Sex: 40 males 113 females Diagnosis: Major Depression by DSM-III-R Minor Depression by DSM-III-R Exclusions: SCL-20 <0.75; <18 or >80; unwilling to take antidepressant medication; current alcohol abuse; current psychotic symptoms or serious suicidal ideation or plan; dementia; pregnancy; terminal illness; limited command of English; plan to disenrol from GHC insurance plan within next 12 months Baseline: SCL-20: Major - Int 2.46 (0.53); Cntl 2.35 (0.51); Minor - Int 1.77 (0.49); Cntl 1.62 (0.54)	**Data Used** Response: 50% reduction in SCL-20 SCL-20 mean endpoint Remission: no longer meeting diagnosis Response: 50% reduction in SCL-depression Adherence Notes: *Intervention appears to last 7 months but last dichotomous data is at 4 months so have extracted dichotomous and continuous 4 months as endpoint Major & Minor reported separately Mean endpoint data for major removed as outlier at GDG request	**Group 1 N= 77** Structured Depression Treatment Programme - Psychoeducation, feedback, behavioural treatment and counselling, medicaton management **Group 2 N= 76** Usual Care - Treatment from PCP (usually antidepressant, 2-3 visits and option to refer to GHC mental health services)	Funding: grant from National Institute of Mental Health
Katon1999 Study Type: RCT Type of Analysis: ITT Blindness: blinded assessments Duration (days): Mean 90 Followup: 25 month follow-up Setting: Primary Care; US Notes: RANDOMISATION: stratified into moderate and severe depression and randomised in blocks of 8 by computer generated random number sequence	n= 228 Age: Mean 47 Sex: 58 males 170 females Diagnosis: 80% Recurrent Depression by DSM-IV 55% Dysthymia by DSM-IV Exclusions: <18 or >80 years of age; prior antidepressant prescription within past 120 days; score =/>2 on CAGE; pregnant or currently nursing; planning to disenrol from Group Health Cooperative Insurance Plan with next 12 months; currently seeing a psychiatrist; limited command of English; recently using lithium or antipsychotic medication Baseline: SCL-depression subscale: Int 1.9 (0.5); Cntl 1.9 (0.5)	**Data Used** Adherence SCL-20 mean endpoint Recovery: DSM score 0 or 1 **Data Not Used** Depression free days - not relevant SF-36 - not relevant Notes: Outcomes at 3, 6 and 28 months Intervention lasted for max 3 months so this extracted as endpoint; 6 month lost; 28 month extracted as follow-up SCL mean score for 'moderates' at 28 months - not used	**Group 1 N= 114** Collaborative Care - All patients prescribed antidepressant, psychiatrist case management, PCP collaboration Could self-refer to Group Health Cooperative mental health provider **Group 2 N= 114** Usual Care. Mean dose 2.75 visits - Usually treatment with antidepressant, 2 or 3 visits, option to refer to mental health services Could self-refer to Group Health Cooperative mental health provider	Funding: grant from National Institute of Mental Health, Rockville, MD
LUDMAN2007 Study Type: RCT Type of Analysis: ITT Blindness: No mention Duration (days): Mean 365 Setting: Primary Care; US Notes: RANDOMISATION: computer generated block randomisation	n= 104 Age: Mean 50 Sex: 30 males 74 females Diagnosis: 55% Minor Depression by DSM-IV Other Criteria: Persistent symptoms after >6months drug treatment 79% Dysthymia by DSM-IV Other Criteria: Persistent symptoms after >6months drug treatment Exclusions: <18 years of age; not initiated antidepressant treatment at least within last 180 days; not continuously enrolled in GHC for at least previous 180 days; diagnosis of bipolar disorder or psychotic disorder; prescription for mood stabiliser or antipsychotic medication in past 2 years Baseline: SCL-depression subscale: CM 1.61 (0.50); CM+peer management 1.63 (0.68); CM+professionally led group 1.72 (0.56); UC 1.66 (0.54); Total 1.66 (0.57)	**Data Used** Remission: no longer meeting diagnosis **Data Not Used** Leaving early for any reason - unclear for UC arm PGI - not relevant SCL-20 mean endpoint - no data Notes: Author emailed 12/11/08 for SCL-20 mear endpoint data. Have combined dichotomous arms for all three interventions because each represents collaborative care alone	**Group 1 N= 26** Care Management - Chronic care model: treatment adherence, telephone monitoring, decision support, follow-up **Group 2 N= 26** Peer-led Management - Peer-led chronic disease self-management programme: 6 week workshop, cognitive symptoms management, medication adherence, patient-physician partnership Care Management - Chronic care model: treatment adherence, telephone monitoring, decision support, follow-up	Funding: grant from National Institute of Mental Health

			Group 3 N= 26 Care Management - Chronic care model: treatment adherence, telephone monitoring, decision support, follow-up Professionally Led Group Programme - 10 week manualised intervention delivered by psychologist, cognitive-behavioural components, medication adherence, slef-management **Group 4 N= 26** Usual Care - Free to use any primary care or speciality services normally available inside or outside GHC	
Mann1998b Study Type: RCT Type of Analysis: Unclear Blindness: No mention Duration (days): Mean 120 Setting: Primary Care; UK Notes: RANDOMISATION: no details	n= 419 Age: Sex: no information Diagnosis: 100% Major Depression by DSM-III Exclusions: <18 years or >74 years of age; depressed for <4 weeks; not currently receiving treatment from GP for depression or not presenting with a new episode; suicidal ideation; manic-depressive psychosis; currently receiving treatment for depression from specialist psychiatric services. Notes: Two studies: Study 2 only extracted here Diagnosis unclear - GP thought depressed and above used as remission outcome Baseline: BDI at entry to study 2: Int 21.14; Cntl 20.75	**Data Used** Leaving early for any reason Remission: no longer meeting diagnosis **Data Not Used** BDI mean endpoint - not extractable Notes: Letter sent to author 11/11/08 for sample size used in mean calculations and for SDs	**Group 1 N= 271** Feedback+Follow-up. Mean dose total 8 hours recommended - Nurse case management **Group 2 N= 148** Usual Care	Funding: unclear
MCMAHON2007 Study Type: RCT Type of Analysis: 'ITT' Blindness: Blinded assessment Duration (days): Mean 180 Setting: Primary Care; UK Notes: RANDOMISATION: randomisation codes generated by independent researcher, patients balanced in blocks of 10	n= 62 Age: Sex: no information Diagnosis: 100% Depressive Illness by ICD-10 Other Criteria: Moderate to severe episode Exclusions: <18 or >65 years of age; not currently prescribed antidepressant or not been on antidepressant for minimum 8 weeks; diagnosis of personality disorder; organic brain disorder; alcohol or drug dependency; pregnancy; learning disability; HAMD-17 score <14 Baseline: BDI: CM 26.4 (11.9); Ctrl 26.2 (11.9) HAMD-17: CM 19.1 (4.7); Ctrl 18.1 (4.0) MADRS: CM 26.8 (6.6); Ctrl 24.3 (6.9)	**Data Used** Leaving early for any reason MADRS mean endpoint HAMD-17 mean endpoint BDI mean endpoint **Data Not Used** SASS - not relevant	**Group 1 N= 30** Care Management - All patients received prescription for alternative antidepressant in line with NICE guidelines. Case management from graduate mental health worker, 6 contacts over 16 weeks, no formal psychotherapy, collaboration with GP **Group 2 N= 32** Usual Care - All patients received prescription for alternative antidepressant in line with NICE guidelines Usual GP treatment	Funding: Wyeth Laboratories
PERAHIA2008 Study Type: RCT Type of Analysis: ITT Blindness: No mention Duration (days): Mean 84 Setting: Outpatients; 11 European countries Notes: RANDOMISATION: no details (1:1 ratio)	n= 962 Age: Mean 46 Sex: 345 males 617 females Diagnosis: 100% Major Depressive Disorder by DSM-IV Exclusions: <18 years of age; HAMD-17 <15; no access to telephone; other current primary axis I DSM-IV diagnosis;	**Data Used** Reporting side effects Leaving early for any reason Remission: HAMD-17 =/<7 Response: 50% reduction in HAMD-17 HAMD-17 mean change **Data Not Used** Adherence - n used in analysis unclear	**Group 1 N= 477** Telephone Care Management - 3 telephone sessions over 12 weeks; psychoeducation Duloxetine. Mean dose 60-120mg/day **Group 2 N= 485** Duloxetine. Mean dose 60-120mg/day	Funding: Eli Lilly and Company (US) and Boehringer Ingelheim (Germany). Note: ITT = minimum baseline & one post baseline evaluation

	lack of response to at least 2 adequate courses of antidepressant therapy during current episode; serious suicide risk; score >3 on item 3 of HAMD-17 at visit 1 and/or vist 2. Baseline: HAMD-17: Int 21.6 (4.0); Cntl 21.7 (4.2)	SQ-SS - not relevant SF-36 - not relevant EuroQOL - not relevant BMQ - not relevant VAS - not relevant PGI - not relevant CGI - not relevant Notes: HAMD-17 mean change is reported as Least Squares		
PILLING2010 Study Type: RCT Type of Analysis: ITT Blindness: Blinded to initial allocation Duration (days): Mean 120 Followup: 4 months Setting: Primary Care; UK Notes: RANDOMISATION: block randomisation by independent statistician	n= 87 Age: Mean 46 Sex: 35 males 52 females Diagnosis: 100% Clinical diagnosis established by GP by Clinical diagnosis Exclusions: <16 years of age; BDI-II score <10; prescribed ADs or referred to specialist mental health services in previous 4 months; current diagnosis of psychotic disorder; significant drug or alcohol problems; significant cognitive impairment Baseline: BDI: Int 30.88 (12.07); 30.75 (11.47); Total 30.82 (11.71)	**Data Used** Leaving early for any reason BDI-II mean endpoint **Data Not Used** CSQ-8 - not relevant SF-36 - not relevant WSAS - not relevant Adherence - not reported	**Group 1 N= 43** Collaborative Care - PCMHW delivered intervention:45 minute clinical interview and risk assesment, followed by 2-8 face-to-face and telephone contacts over next 4 months. Included guided self-help, support in taking medication, referral facilitation and co-ordination of care **Group 2 N= 44** Usual Care	
RICHARDS2008 Study Type: RCT Type of Analysis: 'ITT' Blindness: No mention Duration (days): Mean 90 Setting: Primary Care; UK Notes: RANDOMISATION: stratified by PCT	n= 114 Age: Mean 42 Sex: 26 males 88 females Diagnosis: 100% Major Depression by DSM-IV Exclusions: Aged <18 years; SCID score <5; postnatal, bereavement or physical causes for depression; not current episode of GP-initiated treatment of <1 month duration; active suicidal plan; primary drug or alcohol dependence Baseline: SCL-20: Int 47.34 (12.15); patient randomised Ctrl 43.84 (12.38); cluster randomised Ctrl 47.85 (14.60); Total 46.34 (13.02)	**Data Used** Leaving early for any reason PHQ-9 **Data Not Used** CORE-OM - not relevant SF-36 - not relevant Notes: Within Control group outcomes extracted for patient randomised arm only (and dropped cluster randomised) to match randomisation used in intervention arm	**Group 1 N= 41** Collaborative Care - Case manager co-ordinated medication management, brief psychological therapy, scheduled follow-ups and enhanced specialist and GP communication **Group 2 N= 73** Usual Care - Routine care with access to secondary services and to best practice guidance published by NHS Patient randomised n=38; cluster randomised n=35	Funding: MRC grant
RICKLES2005 Study Type: RCT Type of Analysis: Completers Blindness: Open Duration (days): Mean 90 Setting: Pharmacies; US Notes: RANDOMISATION: 10 pieces of paper with sequential numbers for each pharmacist, one number selected from envelope for each	n= 63 Age: Mean 38 Sex: 10 males 53 females Diagnosis: 100% No Mention: See notes Exclusions: Antidepressant use withing past 4 months; <18 years old; willing to pick up antidepressant from study pharmacy in next 4 months; no hearing impairment; planned	**Data Used** Response: 50% reduction in BDI-II BDI-II mean endpoint **Data Not Used** Adherence - continuous outcome; unclear n	**Group 1 N= 31** Pharmacist Intervention - Pharmacist Guided Education and Monitoring (PGEM): 3 monthly telephone calls, medication management and education **Group 2 N= 32** Usual Care	Funding: dissertation grant award from Sonderegger Research Centre and predoctoral National Research Service Award through National Institute of Mental Health

participant	to be in local area during next 4 months; BDI-II <16; required translator; pregnant or nursing; receiving medications for psychotic or bipolar disorder; physical condition requiring additional caution with their antidepressant Notes: Diagnosis method unclear - participants with antidepressant prescriptions were identified Baseline: BDI-II: PGEM 28.9 (8.15); UC 27.0 (8.40)	Notes: Study pharmacists had contact with both intervention and usual care participants; possible enhancing of usual care? Dropout data not extracted because unclear - usual care arm not referred to in text		
ROST2001a Study Type: Cluster RCT Type of Analysis: ITT Blindness: No mention Duration (days): Mean 730 Setting: Primary Care; US Notes: RANDOMISATION: paired into blocks according to proportion diagnosed with depression and first in each block randomised by coin toss Info on Screening Process: ROST2001a: All comers, split into newly treated and recently treated. Extracted recently treated only ROST2001b: Maintenance of newly treated patients only	n= 479 Age: Mean 43 Sex: 77 males 402 females Diagnosis: 100% Major Depression by DSM-III-R Exclusions: Not making routine-length visits where care was provided by one of the participating physicians; <18 years of age; pregnant, breastfeeding or >3 months post partum; insufficient literacy in English or insufficient cognitive function to complete surveys; acute life-threatening physical condition; no access to a telephone; bereavement; did not intend to receive ongoing care in the clinic during next year Notes: ROST2001a: n=479; recently treated n=243; newly treated n=189 (completers) ROST2001b: n=211 Baseline: CES-D (completers): recently treated - Int 56.9; Cntl 57.4; newly treated - Int 55.1; Cntl 52.7	**Data Used** Patient Satisfaction Remission: CES-D =/<16 Leaving early for any reason **Data Not Used** - not relevant CES-D mean endpoint - no variablility measure SF-36 - not relevant Notes: CES-D mean endpoint, SF-36 and Satisfaction: ROST2001a Remission and SF-36: ROST2001b Author emailed 18/11/08 for CES-D mean endpoint data Adjustment for clustering in paper	**Group 1 N= 239** Enhanced Care. Mean dose 5-7 week nurse contact - ROST2001a n=239 ROST2001b n=115 Feedback and monitoring by nurse **Group 2 N= 240** Usual Care - ROST2001a n=240 ROST2001b n=96 Doctors not informed when patients screened postive for depression; no regular contacts from nurse care managers	Funding: NIMH grants and grant from the John D and Catherine T MacArthur Foundation
Rost2001b Study Type: Cluster RCT Type of Analysis: ITT Blindness: No mention Duration (days): Mean 730 Setting: Primary Care; US Notes: RANDOMISATION: paired into blocks according to proportion of ps in practice diagnosed with depression and first in each block randomised by coin toss Info on Screening Process: ROST2001a: All comers, split into newly treated and recently treated. Have extracted recently treated only ROST2001b: Maintenance of newly treated ps only	n= 211 Age: Mean 43 Sex: 34 males 177 females Diagnosis: 100% Major Depression by DSM-III-R Exclusions: Meet criteria for bereavement, mania or acohol dependence; pregnant or in postpartum period; life threatening physical illness; did not intend to use clinic as usual source of care during year after index visit; no telephone access; illiterate in English; cognitively impaired; treatment resistant depression at baseline Baseline: Not reported	**Data Used** Remission: CES-D =/<16 Leaving early for any reason	**Group 1 N= 115** Enhanced Care - ROST2001a n=239 ROST2001b n=115 Feedback and monitoring by nurse **Group 2 N= 96** Usual Care - ROST2001a n=240 ROST2001b n=96 Doctors not informed when patients screened postive for depression; no regular contacts from nurse care managers	Funding: NIMH grants and grant from the John D and Catherine T MacArthur Foundation
Simon2000 Study Type: RCT Type of Analysis: Completers Blindness: No mention Duration (days): Mean 112 Setting: Primary Care; US Notes: RANDOMISATION: computer generated random numbers stratifed by clinic	n= 613 Age: Mean 47 Sex: 174 males 439 females Diagnosis: No Formal Diagnosis Exclusions: Antidepressant use in previous 120 days; not diagnosed with depression at any visit; bipolar disorder or psychotic disorder in previous 2 years; alcohol or other substance misuse in previous 90 days; visited psychiatrist in	**Data Used** Remission: no longer meeting diagnosis Leaving early for any reason Response: 50% reduction in SCL-depression **Data Not Used** SCL-depression mean endpoint - 3 month midpoint only	**Group 1 N= 196** Care Management - 3 telephone calls; feedback to doctors, support in implementation of recommendations **Group 2 N= 221** Feedback Only - Doctors received detailed report on each patient 8 and 16 weeks after the initial prescription (not extracted)	Funding: US National Institute of Mental Health

	previous 90 days. Notes: No formal diagnosis at baseline (patients who had received 'new' presciption for antidepressant for depression) but remission defined by DSM-IV criteria. Baseline: Hopkins SCL - depression score: CM 1.66 (0.76); Feedback 1.67 (0.72); UC 1.74 (0.77)	Notes: Author emailed 12/11/08 for mean endpoint SCL- depression subscale. Feedback only arm not extracted because alone does not constitute collaborative care. Remission data corrected from previous guideline where it was inverted by mistake	**Group 3 N= 196** Usual Care	
SIMON2004 Study Type: RCT Type of Analysis: 'ITT': completed at least 1 follow-up assesment Blindness: Blinded assessment Duration (days): Mean 180 Setting: Primary Care; US Notes: RANDOMISATION: computer generated random numbers without blocking or stratification	n= 600 Age: Mean 45 Sex: 154 males 446 females Diagnosis: Unclear Exclusions: Already receiving or planning to receive psychotherapy; already in remission when contacted; antidepressant use in previous 90 days; diagnosis of bipolar disorder or schizophrenia in past 2 years; cognitive, language or hearing impairment severe enough to preclude participation Notes: Diagnosis: patients beginning antidepressant treatment for depression. No stuctured diagnostic interview used. Baseline: SCL-depression subscale: TCM 1.54 (0.61); TCM+TP 1.52 (0.58); UC 1.55 (0.62)	**Data Used** Adherence Leaving early for any reason Response: 50% reduction in SCL-depression **Data Not Used** PHQ-9 - no data SCL-depression mean endpoint - no data Notes: Both intervention arms have been combined for dichotomous outcomes as they both individualy reflect collaborative care	**Group 1 N= 207** Telephone Care Management - Care management: motivational enhancement, collaboration with PCP, referrals & crisis intervention, 3 telephone contacts & 1 mail contact. Workbook with behavioural activation techniques, challenging negative thoughts & advice for self-care plan **Group 2 N= 198** Telephone Care Management - Care management: motivational enhancement, collaboration with PCP, referrals & crisis intervention, 3 telephone contacts & 1 mail contact. Workbook with behavioural activation techniques, challenging negative thoughts & advice for self-care plan Telephone Psychotherapy - Structured 8 session CBT programme **Group 3 N= 195** Usual Care	Funding: National Institute of Mental Health
SIMON2006 Study Type: RCT Blindness: Blinded assessment Duration (days): Setting: Behavioual re-paid health plan Notes: RANDOMISATION: computer generated random numbers	n= 207 Age: Mean 43 Sex: 73 males 134 females Diagnosis: 100% Depressive Disorder Exclusions: aged <18; antidpressant use in past 90 days; diagnosis not within past 30 days; bipolar disorder or schizophrenia diagnosis in past 2 years Notes: No structured diagnostic interview used Baseline: SCL-depression subscale: CM 1.61 (0.68); UC 1.57 (7.1)	**Data Used** Response: 50% reduction in SCL-depression **Data Not Used** Patient-rated measure of global improvement - not relevant SCL-depression mean endpoint - no variablility measure Notes: Author emailed 18/11/08 for SCL-depression subscale mean endpoint	**Group 1 N= 103** Telephone Care Management. Mean dose 3 telephone contacts - Care management, collaboratiion with psychiatrist, crisis intervention **Group 2 N= 104** Usual Care - no details	Funding: grant from National Institute of Mental Health; Lilly Research Laboratories
SMIT2006 Study Type: RCT Type of Analysis: ITT Blindness: No mention Duration (days): Mean 1095 Setting: Primary Care; Netherlands Notes: RANDOMISATION: computer generated random allocation list, stratified for AD use	n= 267 Age: Mean 43 Sex: 99 males 168 females Diagnosis: 100% Major Depression (current) by DSM-IV Exclusions: <17 years or >70 years of age; life threatening medical condition; psychotic disorder; dementia; addiction to	**Data Used** BDI mean endpoint **Data Not Used** BDI mean endpoint by number of previous episodes - subgroup analysis Leaving early for any reason - not reported at endpoint Relapse or Recurrence - not relapse prevention trial	**Group 1 N= 112** Depression Recurrence Prevention Program - DRP: 3 face to face sessions with prevention specialist; 4 telephone monitoring contacts per year	Funding: Dutch Organisation for Scientific Research, Medical Sciences Program & Chronic Diseases Program; Research Foundations of Health Insurance Co. 'Het Groene Land' & the Regional Health Insurance Co. RZG; University

	alcohol or psychotropic drugs; pregnant or nursing; already receiving treatment for depression elsewhere Notes: *authors advised using 24 month data because of dropout, but have used 36 month because attrition is still not above 50% at endpoint Baseline: BDI: DRP 20.6 (9.32); DRP+PC 20.3 (9.84); DRP+CBT 20.3 (9.25); UC 18.9 (9.49)	Recovery: no diagnosis for =>8 weeks - not reported at endpoint Remission: no diagnosis for 2-7 weeks - not reported at endpoint BDI mean change - reported between 3-6 months only Adherence - 'use' rather than adherance Notes: Author emailed 18/11/08 for mean BDI; responded 10/01/09 with data See 'notes' for time horizon details Have used PEP+PC for endpoint data	**Group 2 N= 39** Depression Recurrence Prevention Program Psychiatric Consultation - DRP+ One 1-hour visit with Psychiatrist who fed back to PCP (preceeding DRP) **Group 3 N= 44** Depression Recurrence Prevention Program CBT - DRP+ 10-12 weekly 1-hour sessions (preceeding DRP) **Group 4 N= 72** Usual Care - Usually antidepressants and counselling	Hospital Groningen
SWINDLE2003 Study Type: Cluster RCT Type of Analysis: ITT Blindness: No mention Duration (days): Mean 90 Followup: 9 month follow-up Setting: Primary Care; US Notes: RANDOMISATION: Two firms, each (including all patients and physicians) randomised to one of two study arms by coin flip	n= 268 Age: Mean 56 Sex: 259 males 9 females Diagnosis: 29% Major Depression by PRIME-MD 10% Dysthymia by PRIME-MD 3% Partially Remitted Major Depression by PRIME-MD 59% Major Depression and Dysthymic Disorder (double) by PRIME-MD Exclusions: <2 GMC visits during past year or no plans to receive ongoing primary care from GMC; no access to telephone; incompetent for interview; resident of nursing home; actively suicidal; seen in VAMC mental health program; active cocaine or opiate abusers; history of bipolar disorder; terminally ill. Baseline: BDI: Int 20.7 (9.1); Cntl 21.9 (7.9)	**Data Used** Leaving early for any reason **Data Not Used** Patient Satisfaction - n unclear BDI mean follow-up - n unclear BDI mean endpoint - n unclear Notes: Reports 'lost to follow up' and 'leaving for any reason'.The latter was extracted. Author emailed 18/11/08 for clarification of sample size used	**Group 1 N= 134** Care Management - In-service education programme on treatment strategies and interpretation of PRIME-MD and feedback of PRIME-MD results on patient charts. Care management, treatment plan, monitoring. **Group 2 N= 134** Feedback Only - In-service education programme on treatment strategies and interpretation of PRIME-MD and feedback of PRIME-MD results on patient charts	Funding: grant from the Department of Veterans Affairs and the Career Development Program
Unutzer2002 Study Type: RCT Type of Analysis: 'ITT' Blindness: Blinded assessments Duration (days): Mean 365 Followup: 6 and 12 months Setting: Primary Care; US Notes: RANDOMISATION: stratified by recruitment method and clinic; assignment according to random number sequence using computer random number generator	n= 1801 Age: Mean 71 Sex: 633 males 1168 females Diagnosis: 17% Major Depression by DSM-IV 30% Dysthymia by DSM-IV 53% Major Depression and Dysthymia (double depression) by DSM-IV Exclusions: <60 years of age; not endorse one of core depression symptoms on initial screen; not plan to use participating clinic during coming 12 months; current drinking problems; history of bipolar disorder or psychosis; in ongoing treatment with psychiatrist; severe cognitive impairment; acute risk for suicide	**Data Used** Response: 50% reduction in SCL-20 at follow-up Remission: SCL-20 <0.5 at follow-up SCL-20 mean follow-up Remission: SCL-20 <0.5 Response: 50% reduction in SCL-20 SCL-20 mean endpoint Leaving early for any reason **Data Not Used** Self care behaviours for diabetes and chronic pain - not relevant Cornell Services Index - not relevant SF-12 - not relevant	**Group 1 N= 906** Collaborative Care - IMPACT: case management, psychoeducation, medication management or PST-PC and follow-up; stepped care algorithm **Group 2 N= 895** Usual Care - Informed of diagnosis and encouraged to follow up with PCP; access to all primary care and speciality mental health treatments without restrictions; PCPs notified if patient assigned to usual care	Funding: grants from John A Hartford Foundation and Robert Wood Johnson Foundation

	Baseline: SCL-20: INT 1.7 (0.6); UC 1.7 (0.6); Total 1.7 (0.6)	Notes: Outcome data at 3, 6 and 12 months (12 month extracted as endpoint) and 6 and 12 month follow-ups		
Wells1999 Study Type: Cluster RCT Type of Analysis: ITT Blindness: No mention Duration (days): Mean 180 Followup: extra 6 months for 1/2 QI-meds Setting: Primary Care; US Notes: RANDOMISATION: within matched 'sets' (matching on clinician speciality, scoiodemographics and relationship with behavioural health	n= 1356 Age: Mean 43 Sex: 375 males 981 females Diagnosis: 44% Major Depression by CIDI 3% Dysthymic Disorder by CIDI 13% Major Depression and Dysthymic Disorder (double) by CIDI 41% Subthreshold Depression by CIDI Exclusions: Not visiting a study clinician; had acute medical emergency; under age of 18; not speak English or Spanish; not insured by plan that covered the specified behavioural health group for that organization; did not consider clinic their main source of primary care for next 12 months.	**Data Used** Remission: current depressive disorder at 2 years Leaving early for any reason Remission: CES-D <20 **Data Not Used** CES-D mean endpoint - no data SF-36 - not relevant Notes: Author emailed 18/11/08 for mean CES-D enpoint scores Outcomes-(6)&12 month endpoint & follow up. Non-remission at 12month follow-up is current depressive disorder;45month follow-up is probable dep disorder. Not possible to convert ITT.	**Group 1 N= 424** Quality Improvement Programme - MEDS - PARTNERS in CARE: Basic QI model QI-meds: nurse specialists trained to provide follow-up assessments and support adherance **Group 2 N= 489** Quality Improvement Programme - THERAPY - PARTNERS in CARE: Basic QI model QI-therapy: manualised individual and group CBT for 12 to 16 sessions **Group 3 N= 443** Usual Care - Clinic medical directors mailed the Agency for Healthcare Research and Quality depression practice guidelines	Funding: Agency for Health Care Policy and Research

Characteristics of Excluded Studies

Reference ID	Reason for Exclusion
BEARDSLEE2007	Not just depression - mixed 'mood disorder' diagnoses; prevention - not relevant to clinical question
BOUDREAU2002	No extractable data (reported in Capoccia2004 in figures but not numerically). Author emailed 12/11/08 for mean endpoint SCL-20.
BROOK2003	No extractable data
BRUCE2004	Only 66% had depressive diagnosis at baseline
BUSH2004	Not RCT
Callahan1994	Only 21% had diagnosis of depression at baseline
CULLUM2007	Only 40% had depressive disorder at baseline
GILBODY2007	Not RCT
GLICK1986	No usual care arm
HEDRICK2003	No usual care arm
HILTY2007	No usual care arm
HORTONDEUTSCH2002	No relevant outcomes
NAGEL2008	Mixed diagnosis
RIVERA2007	Sample had mixed axis I diagnoses - only 22% had dignosis of depression
ROSS2008	No diagnosis of depression needed for inclusion into study

RUBENSTEIN2006	No extractable data because depression outcome combines CES-D with CIDI and SF-12; care management was only implemented in 3 of the 6 practices
SHELDON1964	n (depressed) per group <10
UNUTZER2007	Not RCT
VERGOUWEN2005	No usual care arm
WANG2007	No formal diagnosis: QIDS-SR =/>8 at baseline but this measure not used in our review and is equivalent to only 11 on HAMD-17
WANG2008	Not RCT
ZANJANI2008	No relevant outcomes; only 80% had diagnosis of depression

References of Included Studies

ADLER2004 (Published Data Only)

Adler, D. A., Bungay, K. M., Wilson, I. B., Pei, Y., Supran, S., Peckham, E. et al. (2004) The impact of a pharmacist intervention on 6-month outcomes in depressed primary care patients. General Hospital Psychiatry, 26, 199-209.

Araya2003 (Published Data Only)

Araya, R., Rojas, G., Fritsch, R., Gaete, J., Rojas, M., Simon, G. & Peters, T.J. (2003) Treating depression in primary care in low-income women in Santiago, Chile: a randomised controlled trial. Lancet, 361, 995-1000.

Blanchard1995 (Published Data Only)

Blanchard, M.R., Waterreus, A., Mann, A.H. (1995) The effect of primary care nurse intervention upon older people screened as depressed. International Journal of Geriatric Psychiatry, 10, 289-298.

CHEWGRAHAM2007 (Published Data Only)

Chew-Graham, C. A., Lovell, K., Roberts, C., Baldwin, R., Morley, M., Burns, A. et al. (2007) A randomised controlled trial to test the feasibility of a collaborative care model for the management of depression in older people. British Journal of General Practice, 57, 364-370.

DATTO2003 (Published Data Only)

Datto, C. J., Thompson, R., Horowitz, D., Disbot, M., & Oslin, D. W. (2003) The pilot study of a telephone disease management program for depression. General Hospital Psychiatry, 25, 169-177.

DIETRICH2004 (Published Data Only)

Kroenke, K., Shen, J., Oxman, T. E., Williams, J. W. J., & Dietrich, A. J. (2008). Impact of pain on the outcomes of depression treatment: results from the RESPECT trial. Pain., 134, 209-215.

*Dietrich, A., Oxman, T., Williams, J., Schulberg, H., Bruce, M., Lee, P. et al. (2004). Re-engineering systems for the treatment of depression in primary care: Cluster randomised controlled trial. British Medical Journal, 329, 602.

DOBSCHA2006 (Published Data Only)

Dobscha, S. K., Corson, K., Hickam, D. H., Perrin, N. A., Kraemer, D. F., & Gerrity, M. S. (2006) Depression decision support in primary care: a cluster randomized trial. Annals of Internal Medicine, 145, 477-487.

FINLEY2003 (Published Data Only)

Finley, P. R., Rens, H. R., Pont, J. T., Gess, S. L., Louie, C., Bull, S. A. et al. (2003) Impact of a collaborative care model on depression in a primary care setting: a randomized controlled trial. Pharmacotherapy, 23, 1175-1185.

Hunkeler2000 (Published Data Only)

Hunkler, E.M., Meresman, J.F., Hagreaves, W.A., Fireman, B., Berman, W.H., Kirsch, A.J., Groebe, J., Hurt, S., Braden, P., Getzell, M., Feigenbaum, P.A., Peng, T. & Salzer, M. (2000) Efficacy of nurse telehealth care and peer support in augmenting treatment of depression in primary care. Archives of Family Medicine, 9, 700-708.

Katon1995 (Published Data Only)

Katon, W., Von Korff, M., Lin, E., Walker, E., Simon, G.E., Bush, T., Robinson,, P. & Russo, J. (1995) Collaborative management to achieve treatment guidelines: impact on depression in primary care. Journal of the American Medical Association, 273, 1026-1031.

Katon1996 (Published Data Only)

Katon, W., Robinson, P., Von Korff, M., Lin, E., Bush, T., Ludman, E., Simon, G. & Walker, E. (1996) A mulifaceted inervention to improve treatment of depression in primary care. Archives of General Psychiatry, 53, 924-932.

Katon1999 (Published Data Only)

Lin, E.H.B., Von Korff, M., Russo, J., Katon, W., Simon, G.E., Unutzer, J., Bush, T., Walker, E. & Ludman, E. (2000) Can depression treatment in primary care reduce disability? A stepped care approach. Archives of Family Medicine, 9, 1052-1058.

Katon, W., Russo, J., Von Korff, M., Lin, E., Simon, G., Bush, T., Ludman, E., Walker, E. (2002) Long-term effects of a collaborative care intervention in persistently depressed primary care patients. Journal of General Internal Medicine, 17, 741-748.

Simon, G.E., Katon, W.J., Von Korff, M., Unutzer, J., Lin, E.H.B., Walker, E.A., Bush, T., Rutter, C. & Ludman, E. (2001) Cost-effectivness of a collaborative care program for primary care patients with persistent depression. American Journal of Psychiatry, 158 (10), 1638-1644

*Katon, W., Von Korff, M., Lin, E., Simon, G., Walker, E., Unutzer, J., Bush, T., Russo, J. & Ludman, E. (1999) Stepped collaborative care for primary care patients with persistent symptoms of depression: a randomised trial. Archives of General Psychiatry, 56, 1109-1115.

LUDMAN2007 (Published Data Only)

Ludman, E. J., Simon, G. E., Grothaus, L. C., Luce, C., Markley, D. K., & Schaefer, J. (2007). A pilot study of telephone care management and structured disease self-management groups for chronic depression. Psychiatric Services, 58, 1065-1072.

Mann1998b (Published Data Only)

Mann, A.H., Blizard, R., Murray, J., Smith, J.A., Botega, N., Macdonald, E. & Wilkinson, G. (1998) An evaluation of practice nurses working with general practitioners to treat people with depression. British Journal of General Practice, 48, 875-879.

MCMAHON2007 (Published Data Only)

McMahon, L., Foran, K. M., Forrest, S. D., Taylor, M. L., Ingram, G., Rajwal, M. et al. (2007) Graduate mental health worker case management of depression in UK primary care: A pilot study. British Journal of General Practice, 57, 880-885.

PERAHIA2008 (Published Data Only)

Perahia, D. G., Quail, D., Gandhi, P., Walker, D. J., & Peveler, R. C. (2008) A randomized, controlled trial of duloxetine alone vs. duloxetine plus a telephone intervention in the treatment of depression. Journal of Affective Disorders, 108, 33-41.

PILLING2010 (Unpublished Data Only)

Pilling, S. A., Cape, J., Liebowitz, J. A., et al. (2010) Enhanced care for depression: A study in primary care. Unpublished.

RICHARDS2008 (Published Data Only)

Richards, D. A., Lovell, K., Gilbody, S., Gask, L., Torgerson, D., Barkham, M. et al. (2008) Collaborative care for depression in UK primary care: a randomized controlled trial. Psychological Medicine, 38, 279-287.

RICKLES2005 (Published Data Only)

Rickles, N. M., Svarstad, B. L., Statz-Paynter, J. L., Taylor, L. V., & Kobak, K. A. (2005) Pharmacist telemonitoring of antidepressant use: Effects on pharmacist-patient collaboration. Journal of the American Pharmacists Association, 45, 344-353.

ROST2001a (Published Data Only)

Rost, K., Smith, J. L., & Dickinson, M. (2004) The effect of improving primary care depression management on employee absenteeism and productivity. A randomized trial. Medical Care, 42, 1202-1210.

Rost, K., Pyne, J. M., Dickinson, L. M., & LoSasso, A. T. (2005) Cost-effectiveness of enhancing primary care depression management on an ongoing basis. Annals of Family Medicine, 3, 7-14.

Pyne, J. M., Rost, K. M., Zhang, M., Williams, D. K., Smith, J., & Fortney, J. (2003) Cost-effectiveness of a primary care depression intervention. Journal of General Internal Medicine., 18, 432-441.

Rost, K., Nutting, P.A., Smith, J. & Werner, J.J. (2000) Designing and implementing a primary care intervention trial to improve the quality and outcome of care for major depression. General Hospital Psychiatry, 22, 66-77.

*Rost, K., Nutting, P., Smith, J., Werner, J. & Duan, N. (2001) Improving depression outcomes in community primary care practices: a randomized trial of the QuEST intervention. Journal of General Internal Medicine, 16, 143-149.

Rost2001b (Published Data Only)

Rost, K., Nutting, P.A., Smith, J. & Werner, J.J. (2000) Designing and implementing a primary care intervention trial to improve the quality and outcome of care for major depression. General Hospital Psychiatry, 22, 66-77.

Dickinson, L. M., Rost, K., Nutting, P. A., Elliott, C. E., Keeley, R. D., & Pincus, H. (2005) RCT of a care manager intervention for major depression in primary care: 2-year costs for patients with physical vs psychological complaints. Annals of Family Medicine, 3, 15-22.

Pyne, J. M., Rost, K. M., Zhang, M., Williams, D. K., Smith, J., & Fortney, J. (2003) Cost-effectiveness of a primary care depression intervention. Journal of General Internal Medicine, 18, 432-441.

Rost, K., Pyne, J. M., Dickinson, L. M., & LoSasso, A. T. (2005) Cost-effectiveness of enhancing primary care depression management on an ongoing basis. Annals of Family Medicine, 3, 7-14.

*Rost, K., Nutting, P., Smith, J.L., Elliott, C.E. & Dickinson, M. (2002) Managing depression as a chronic disease: a randomised trial of ongoing treatment in primary care. British Medical Journal, 325, 1-6.

Simon2000 (Published Data Only)

Simon, G.E., Von Korff, M., Rutter, C. & Wagner, E. (2000) Randomised trial of monitoring, feedback, and management of care by telephone to improve treatment of depression in primary care. British Medical Journal, 320, 550-554.

SIMON2004 (Published Data Only)

Simon, G.E., Ludman, E.J., Tutty, S., Operskalski, B., Von Korff, M. (2004) Telephone psychotherapy and telephone care management for primary care patients starting antidepressant treatment: a randomized trial. Journal of the American Medical Association, 292, 935-942.

SIMON2006 (Published Data Only)

Simon, G. E., Ludman, E. J., & Operskalski, B. H. (2006) Randomized trial of a telephone care management program for outpatients starting antidepressant treatment. Psychiatric Services, 57, 1441-1445.

SMIT2006 (Published Data Only)

Conradi, H.J., de Jonge, P. & Ormel, J. (2008) Cognitive-behavioural therapy v usual care in recurrent depression. The British Journal of Psychiatry, 193, 505-506

Conradi, H. J., de Jonge, P., Kluiter, H., Smit, A., vander-meek, K., Jenner, J. A. et al. (2007). Enhanced treatment for depression in primary care: long-term outcomes of a psycho-educational prevention program alone and enriched with psychiatric consultation or cognitive behavioral therapy. Psychological Medicine, 37, 849-862.

Smit, A., Kluiter, H., Conradi, H. J., vander-meek, K., Tiemens, B. G., Jenner, J. A. et al. (2006). Short-term effects of enhanced treatment for depression in primary care: results from a randomized controlled trial. Psychological Medicine, 36, 15-26.

SWINDLE2003 (Published Data Only)

Swindle, R. W., Rao, J. K., Helmy, A., Plue, L., Zhou, X. H., Eckert, G. J. et al. (2003) Integrating clinical nurse specialists into the treatment of primary care patients with depression. International Journal of Psychiatry in Medicine, 33, 17-37.

Unutzer2002 (Published Data Only)

Katon, W., Unutzer, J., Fan, M.Y., Williams, J.W., Schroenbaum, M., Lin, E.H.D & Hunkeler, E.M. (2006) Cost effectiveness and net benefit of enhanced treatment of depression for older adults with diabetes and depression. Diabetes Care, 29, 265-270.

Unutzer, J., Katon, W. J., Fan, M. Y., Schoenbaum, M. C., Lin, E. H., Della, P. et al. (2008) Long-term cost effects of collaborative care for late-life depression. American Journal of Managed Care, 14, 95-100.

Vannoy, S. D., Duberstein, P., Cukrowicz, K., Lin, E., Fan, M. Y. & Unutzer, J. (2007) The relationship between suicide ideation and late-life depression. American Journal of Geriatric Psychiatry, 15, 1024-1033.

Hunkeler, E. M., Katon, W., Tang, L., Williams, J. W. J., Kroenke, K., Lin, E. H. et al. (2006) Long term outcomes from the IMPACT randomised trial for depressed elderly patients in primary care. British Medical Journal., 332, 259-263.

Unutzer, J., Tang, L., Oishi, S., Katon, W., Williams, J. W. J., Hunkeler, E. et al. (2006) Reducing suicidal ideation in depressed older primary care patients. Journal of the American Geriatrics Society, 54, 1550-1556.

Hegel, M. T., Imming, J., Cyr-Provost, M., Noel, P. H., Arean, P. A., & Unutzer, J. (2002) Role of behavioral health professionals in a collaborative stepped care treatment model for depression in primary care: Project IMPACT. Families, Systems and Health, 3, 265-277.

*Unutzer, J., Katon, W., Callahan, C., Williams, J., Hunkeler, E., Harpole, L. et al. (2002) Collaborative care management of late-life depression in the primary care setting: A randomized controlled trial. Journal of the American Medical Association, 288, 2836-2845.

Arean, P., Hegel, M., Vannoy, S., Fan, M.Y. & Unutzer, J. (2008) Effectiveness of problem-solving therapy for older, primary care patients with depression: results from the IMPACT project. The Gerontologist, 48 (3), 311-323

Unutzer, J., Katon, W., Williams, J.W., Callahan, C.M., Harpole, L., Hunkeler, E.M., Hoffing, M., Arean, P., Hegel, M.T., Schoenbaum, M., Oishi, S.M. & Langston, C.A. (2001) Improving primary care for depression in late life: the design of a multicentre randomized trial. Medical Care, 39 (8), 785-799.

Wells1999 (Published Data Only)

Unutzer, J., Rubenstein, L., Katon, W. J., Tang, L., Duan, N., Lagomasino, I. T. et al. (2001) Two-year effects of quality improvement programs on medication management for depression. Archives of General Psychiatry, 58, 935-942.

Wells, K.B., Schoenbaum, M., Unutzer, J., Lagomasinio, I.T. & Rubenstein, L.V. (2008) Quality of care for primary care patients with depression in managed care. Archives of Family Medicine, 8, 529-536.

Sherbourne, C., Wells, K.B., Duan, N., Miranda, J., Unutzer, J., Jaycox, L., Schoenbaum, M., Meredith, L.S. & Rubenstein, L.V. (2001) Long-term effectiveness of disseminating quality improvement for depression in primary care. Archives of General Psychiatry, 58, 696-703.

Wells, K.B., Sherbourne, C., Schoebaum, M., Duan, N., Meredith, L., Unutzer, J., Miranda, J., Carney, M.F. & Rubenstein, L.V. (2000) Impact of disseminating quality improvement programs for depression in managed primary care. Journal of the American Medical Association, 283 (2), 212-220.

Sherbourne, C. D., Weiss, R., Duan, N., Bird, C. E., & Wells, K. B. (2004) Do the effects of quality improvement for depression care differ for men and women? Results of a group-level randomized controlled trial. Medical Care, 42, 1186-1193.

Sherbourne, C. D., Edelen, M. O., Zhou, A., Bird, C., Duan, N., & Wells, K. B. (2008) How a therapy-based quality improvement intervention for depression affected life events and psychological well-being over time: a 9-year longitudinal analysis. Medical Care, 46, 78-84.

*Wells, K.B. (1999) The design of partners in care: evaluating the cost-effectiveness of improving care for depression in primary care. Social Psychiatry and Psychiatric Epidemiology, 34, 20-29.

Wells, K. B., Schoenbaum, M., Duan, N., Miranda, J., Tang, L., & Sherbourne, C. (2007) Cost-effectiveness of quality improvement programs for patients with subthreshold depression or depressive disorder. Psychiatric Services, 58, 1269-1278.

Wells, K.B., Tang, L., Miranda, J., Benjamin, B., Duan, N. & Sherbourne, C.D. (2008) The effects of quality improvement for depression in primary care at niine years: results from a randomized, controlled group-level trial. Health Services Research, 43 (6), 1952-1974.

Schoenbaum, M., Sherbourne, C., & Wells, K. (2005) Gender patterns in cost effectiveness of quality improvement for depression: results of a randomized, controlled trial. Journal of Affective Disorders, 87, 319-325.

Wells, K., Sherbourne, C., Schoenbaum, M., Ettner, S., Duan, N., Miranda, J. et al. (2004) Five-year impact of quality improvement for depression: results of a group-level randomized controlled trial. Archives of General Psychiatry, 61, 378-386.

Wells, K.B., Schoenbaum, M., Unutzer, J., Lagomastino, I.T. & Rubenstein, L.V. (1999) Quality of care for primary care patients with depression in managed care. Archives of Family Medicine, 8, 529-536.

Miranda, J., Duan, N., Sherbourne, C., Schoenbaum, M., Lagomasino, I., Jackson-Triche, M. et al. (2003) Improving care for minorities: can quality improvement interventions improve care and outcomes for depressed minorities? Results of a randomized, controlled trial. Health Services Research, 38, 613-630.

Miranda, J., Schoenbaum, M., Sherbourne, C., Duan, N., & Wells, K. (2004) Effects of primary care depression treatment on minority patients' clinical status and employment. Archives of General Psychiatry, 61, 827-834.

Masaquel, A., Wells, K., & Ettner, S. L. (2007) How does the persistence of depression influence the continuity and type of health insurance and coverage limits on mental health therapy? The Journal of Mental Health Policy & Economics, 10, 133-144.

Wells, K. B., Sherbourne, C. D., Miranda, J., Tang, L., Benjamin, B., & Duan, N. (2007) The cumulative effects of quality improvement for depression on outcome disparities over 9 years: results from a randomized, controlled group-level trial. Medical Care, 45, 1052-1059.

References of Excluded Studies

BEARDSLEE2007 (Published Data Only)

Bearslee, W. R., Wright, E. J., Gladstone, T. R., & Forbes, P. (2007) Long-term effects from a randomized trial of two public health preventive interventions for parental depression. Journal of Family Psychology, 21, 703-713.

BOUDREAU2002 (Published Data Only)

Capoccia, K. L., Boudreau, D. M., Blough, D. K., Ellsworth, A. J., Clark, D. R., Stevens, N. G. et al. (2004) Randomized trial of pharmacist interventions to improve depression care and outcomes in primary care. American Journal of Health-System Pharmacy, 61, 364-372.

*Boudreau, D. M., Capoccia, K. L., Sullivan, S. D., Blough, D. K., Ellsworth, A. J., Clark, D. L. et al. (2002) Collaborative care model to improve outcomes in major depression. Annals of Pharmacotherapy, 36, 585-591.

BROOK2003 (Published Data Only)

Brook, O. H., van Hout, H. P., Nieuwenhuysea, H., & De Hann, M. (2003) Effects of coaching by community pharmacists on psychological symptoms of antidepressant users; a randomised controlled trial. European Neuropsychopharmacology, 13, 347-354.

BRUCE2004 (Published Data Only)

Schulberg, H.C., Bryce, C., Chism, K., Mulsant, B.H., Rollman, B., Bruce, M., Coyne, J., Reynolds, C.F. and the PROSPECT Group (2001) Managing late-life depression in primary care practice: a case study of the health specialist's role. International Journal of Geriatric Psychiatry, 16, 577-584.

Mulsant, B.H., Alexpoulos, G.S., Reynolds, C.F., Katz, I.R., Abrams, R., Oslin, D., Schulberg, H.C. and the PROSPECT Study Group (2001) Pharmacological treatment of depression in older primary care patients: the PROSPECT algorithm. International Journal of Geriatric Psychiatry, 16, 585-592.

Bogner, H. R., Bruce, M. L., Reynolds, I. I. I. C., Mulsant, B. H., Cary, M. S., Morales, K. et al. (2007) The effects of memory, attention, and executive dysfunction on outcomes of depression in a primary care intervention trial: The PROSPECT study. International Journal of Geriatric Psychiatry, 22, 922-929.

Bogner, H. R., Cary, M. S., Bruce, M. L., Reynolds, C. F., Mulsant, B., Ten, H. et al. (2005) The role of medical comorbidity in outcome of major depression in primary care: the PROSPECT study. American Journal of Geriatric Psychiatry, 13, 861-868.

*Bruce, M.L., Have, T.R.T., Reynolds, C.F, Katz, I.I., Schulberg, H.C., Mulsant, B.H., Brown, G.K., McAvoy, G.J., Pearson, J.L. & Alexpolous, G.S. (2004) Reducing suicidal ideation and depressive symptoms in depressed older primary care patients: a randomized controlled trial. Journal of American Medical Association, 291 (9), 1081-1091.

Alexopoulos, G. S., Katz, I. R., Bruce, M. L., Heo, M., Ten, H., Raue, P. et al. (2005) Remission in depressed geriatric primary care patients: a report from the PROSPECT study. American Journal of Psychiatry, 162, 718-724.

BUSH2004 (Published Data Only)

Bush, T., Rutter, C., Simon, G., Von Korff, M., Katon, W. J., Walker, E. A. et al. (2004) Who benefits from more structured depression treatment? International Journal of Psychiatry in Medicine, 34, 247-258.

Callahan1994 (Published Data Only)

Callahan, C.M., Hendrie, H.C., Dittus, R.S., Brater, D.C., Hui, S.L. & Tierney, W.M. (1994) Improving treatment of late life depression in priamary care: a randomised clinical trial. Journal of the American Geriatrics Society, 42, 839-846

CULLUM2007 (Published Data Only)

Cullum, S., Tucker, S., Todd, C., & Brayne, C. (2007) Effectiveness of liaison psychiatric nursing in older medical inpatients with depression: a randomised controlled trial. Age and Ageing, 36, 436-442.

GILBODY2007 (Published Data Only)

Gilbody, S. M. (2007) IMPACT collaborative care programme reduces suicide ideation in depressed older adults. Evidence-Based Mental Health, 10, 51.

GLICK1986 (Published Data Only)

Glick, I. D., Fleming, L., DeChillo, N., Meyerkopf, N., Jackson, C., Muscara, D. et al. (1986) A controlled study of transitional day care for non-chronically-ill patients. American Journal of Psychiatry, 143, 1551-1556.

HEDRICK2003 (Published Data Only)

Liu, C. F., Hedrick, S. C., Chaney, E. F., Heagerty, P., Felker, B., Hasenberg, N. et al. (2003) Cost-effectiveness of collaborative care for depression in a primary care veteran population. Psychiatric Services, 54, 698-704.

Lin, P., Campbell, D.G., Chaney, E.F., Liu, C.F., Heagerty, P., Felker, B.L. & Hedrick, S.C. (2005) The influence of patient preference on depression treatment in primary care. Annals of Behavioral Medicine, 30(2), 164-173.

Kanter, J.W., Epler, A.J., Chaney, E.F., Liu, C.F., Heagerty, P., Lin, P., Felker, B & Hedrick, S.C. (2003) Comparison of 3 depression screening methods and provider referral in a veterans affairs primary care clinic. Primary Care Companion Journal of Clinical Psychiatry, 5(6), 245-250.

Felker, B.L., Hedrick, S.C., Chaney, E.F., Liu, C.F., Heagerty, P., Caples, H., Lin, P. & Katon, W. (2003) Identifying depressed patients with a high risk of comorbid anxiety in primary care. Primary Care Companion Journal of Clinical Psychiatry, 5, 104-110.

*Hedrick, S. C., Chaney, E. F., Felker, B., Liu, C. F., Hasenberg, N., Heagerty, P. et al. (2003) Effectiveness of collaborative care depression treatment in Veterans' Affairs primary care. Journal of General Internal Medicine, 18, 9-16.

HILTY2007 (Published Data Only)

Hilty, D. M., Marks, S., Wegeland, J., Callahan, E. J., & Nesbitt, T. S. (2007) A randomized, controlled trial of disease management modules, including telepsychiatric care, for depression in rural primary care. Psychiatry, 4, 58-65.

HORTONDEUTSCH2002 (Published Data Only)

Horton-Deutsch, S. L., Farran, C. J., Choi, E. E., & Fogg, L. (2002) The PLUS intervention: a pilot test with caregivers of depressed older adults. Archives of Psychiatric Nursing, 16, 61-71.

NAGEL2008 (Published Data Only)

Nagel, T., Robinson, G., Trauer, T. & Condon, J. (2008) An approach to treating depressive and psychotic illnes in indigenous communities. Australian Journal of Primary Health, 14 (1), 17-24.

RIVERA2007 (Published Data Only)
Rivera, J. J., Sullivan, A. M., & Valenti, S. S. (2007) Adding consumer-providers to intensive case management: does it improve outcome? Psychiatric Services, 58, 802-809.

ROSS2008 (Published Data Only)
Ross, J.T., TenHave, T., Eakin, A.C., Difilippo, S. & Oslin, D.W. (2008) A randomized controlled trial of a close monitoring program for minor depression and distress. Journal of General Internal Medicine, 23 (9), 1379-385

RUBENSTEIN2006 (Published Data Only)
Rubenstein, L. V., Meredith, L. S., Parker, L. E., Gordon, N. P., Hickey, S. C., Oken, C. et al. (2006) Impacts of evidence-based quality improvement on depression in primary care: a randomized experiment. Journal of General Internal Medicine, 21, 1027-1035.

SHELDON1964 (Published Data Only)
Sheldon, A. (1964) An evaluation of psychiatric after-care. British Journal of Psychiatry, 110, 662-667.

UNUTZER2007 (Published Data Only)
Unutzer, J. (2007) Late-life depression. New England Journal of Medicine, 357, 2269-2276.

VERGOUWEN2005 (Published Data Only)
Vergouwen, A. C., Bakker, A., Burger, H., Verheij, T. J., & Koerselman, F. (2005) A cluster randomized trial comparing two interventions to improve treatment of major depression in primary care. Psychological Medicine, 35, 25-33.

WANG2007 (Published Data Only)
Wang, P. S., Simon, G. E., Avorn, J., Azocar, F., Ludman, E. J., McCulloch, J. et al. (2007) Telephone screening, outreach, and care management for depressed workers and impact on clinical and work productivity outcomes: a randomized controlled trial. Journal of the American Medical Association, 298, 1401-1411.

WANG2008 (Published Data Only)
Wang, P.S., Simon, G.E., Kessler, R.C. (2008) Making the business case for enhanced depression care: the National Institute of Mental Health-Harvard Work Outcomes Research and Cost-effectiveness Study. Journal of Occupational and Environmental Medicine.

ZANJANI2008 (Published Data Only)
Zanjani, F., Miller, B., Turiano, N., Ross, J. & Oslin, D. (2008) Effectiveness of telephone-based referral care management, a brief intervention to improve psychiatric tretament engagement. Psychiatric Services, 59, 776-781.

Collaborative care relapse prevention: studies in the guideline update

Comparisons Included in this Clinical Question

Collaborative Depression Relapse Prevention Programme v Usual Care
KATON2001

Characteristics of Included Studies

Methods	Participants	Outcomes	Interventions	Notes
Katon2001 Study Type: RCT Type of Analysis: ITT: multiple imputation Blindness: Blinded assessment Duration (days): Mean 365 Setting: Primary Care; US Notes: RANDOMISATION: no details	n= 386 Age: Mean 46 Sex: 100 males 286 females Diagnosis: 100% Recovered but high risk of relapse (see below) by DSM-IV Exclusions: <18 or >80 years of age; prior antidepressant prescription within last 120 days; not at high risk for relapse; score =/>2 on CAGE; pregnant or currently nursing; planning to disenroll from GHC within next 12 months; currently seeing a psychiatrist; limited command of English; recently using Lithium or antipsychotic medication; SCL-20 score >1; no history of major depression/dysthymia Notes: Risk of relapse: Fewer than 4 MD symptoms and history of 3 or more episodes of MD or dysthymia or 4 residual depressive symptoms Baseline: None relevant	**Data Used** Relapse or Recurrence **Data Not Used** Sheehan Disability Scale - not relevant Chronic Disease Score - not relevant NEO - not relevant Adherence - not reported Notes: For adherance authors report refill data (use) rather than self-reported adherance, despite the latter being identified in outcomes.	**Group 1 N= 194** Collaborative Care Relapse Prevention Programme - Patient education, 2 visits with depression specialist, telephone monitoring and follow-up Could also self-refer to a GHC mental health provider **Group 2 N= 192** Usual Care - Usually prescription of an anidepressant, 2 to 4 visits over first 6 months of treatment and option to refer to GHC mental health services Could also self-refer to a GHC mental health provider	Funding: grants from Natinonal Institute of Mental Health Services Division

Characteristics of Excluded Studies

Reference ID	Reason for Exclusion
VONKORFF2003	no relevant outcomes

References of Included Studies

Katon2001 (Published Data Only)

Ludman, E., Katon, W., Bush, T., Rutter, C., Lin, E., Simon, G., Von Korff, M. & Walker, E. (2003) Behavioural factors associated with symptom outcomes in a primary care-based depression prevention intervention trial. Psychological Medicine, 33, 1061-1070.

Ludman, E., Von Korff, M., Katon, W., Lin, E., Simon, G., Walker, E., Unutzer, J., Bush, T. & Wahab, S. (2000) The design, implementation, and acceptance of a primary care-based intervention to prevent depression relapse. International Journal of Psychiatry in Medicine, 30 (3), 229-245.

*Katon, W., Rutter, C., Ludman, E. J., et al. (2001) A randomized trial of relapse prevention of depression in primary care. Archives of General Psychiatry, 58, 241-247.

References of Excluded Studies

VONKORFF2003 (Published Data Only)

Von Korff, M., Katon, W., Rutter, C., Ludman, E., Simon, G., Lin, E.& Bush, T. (2003) Effect on disability outcomes of a depression relapse prevention program. Psychosomatic Medicine, 65, 938-943.

Medication management: new studies in the guideline update

Comparisons Included in this Clinical Question

Leaflet v Drug Counselling v Leaflet+Drug Counselling v Usual Care
PEVELER1999

Medication Management v Usual Care
ADLER2004
CROCKETT2006
RICKLES2005
WILKINSON1993

Characteristics of Included Studies

Methods	Participants	Outcomes	Interventions	Notes
ADLER2004 Study Type: RCT Type of Analysis: 'ITT': any 6 month data even if no intervention Blindness: No mention Duration (days): Mean 180 Followup: 6 and 12 months Setting: Primary Care; US Notes: RANDOMISATION: computerised 'coin flip'	n= 507 Age: Mean 42 Sex: 143 males 364 females Diagnosis: 40% Major Depressive Disorder by DSM-IV 24% Dysthymia by DSM-IV 36% Major Depression and Dysthymia (double depression) by DSM-IV Exclusions: Not received care from a PCP in any site; <18 years old; unable to read or understand English; acute life threatening condition with terminal prognosis of <6 months; pregnant or given birth in last 6 months; current alcoholism; bipolar disorder; psychotic disorders Notes: n=533 'enrolled'; 507 completed initial questionnaire; 464 any follow-up data; 384 6-month follow-up data Baseline: BDI(m): Int 23.2; Cntl 23.2	**Data Used** Leaving early for any reason Modified BDI mean endpoint **Data Not Used** Adherence - 'use' rather than adherence MHI-5 - not relevant SF-12 - not relevant	**Group 1 N= 268** Pharmacist Intervention - Care management; psychoeducation; medication management **Group 2 N= 265** Usual Care	Funding: grant from National Institute of Mental Health
CROCKETT2006 Study Type: Cluster RCT Type of Analysis: Completers Blindness: No mention Duration (days): Mean 60 Setting: Pharmacies, Australia Notes: RANDOMISATION: no details	n= 119 Age: Mean 46 Sex: 22 males 84 females Diagnosis: Unclear Exclusions: <18 years of age; not likely to be resident in the area for the next 3 months; history of psychosis Notes: Diagnosis: patients who used the word 'depression' when asked what antidepressant prescription was for Demographic data is reported for completers only Baseline: NR	**Data Used** Adherence **Data Not Used** K10 - not relevant DAI - not relevant Leaving early for any reason - no data Patient Satisfaction - no data Notes: Dropout: reports number for whom there is 'complete data set' available but cannot assume remainder are lost to follow-up Can't adjust for clustering because number of clusters not reported - author emailed 26/01/09 for details	**Group 1 N= 51** Pharmacist Intervention - Pharmacists given training on management of depression and asked to dispense medication with extra advice and support including psychoeducation in form of SANE brochures **Group 2 N= 68** Usual Care - Asked to administer usual care	Funding: grant from the Rural and Remote Pharmacy Infrastructure Grants Scheme, administered by Pharmacy Guild of Australia
PEVELER1999 Study Type: RCT Type of Analysis: ITT	n= 213 Age: Mean 45 Sex: 56 males 157 females	**Data Used** HADS - depression score Adherence **Data Not Used**	**Group 1 N= 53** Leaflet - Developed according to published principles and European Union Directives	Funding: Medical Research Council

Blindness: Blinded assessment Duration (days): Mean 84 Setting: Primary Care; UK Notes: RANDOMISATION: blocks of 8	Diagnosis: 100% Depressive Illness by Clinical diagnosis 49% Major Depressive Disorder by DSM-III-R Exclusions: Received either drug within 3 months; had contraindication; receiving other incompatible drugs; high suicide risk Notes: 37/250 participants allocated to attentional control Baseline: No relevant statistics reported	Leaving early for any reason - lost to follow-up only - total dropout not clear SF-36 - not relevant Notes: Last counselling session at 8 weeks; outcomes reported at 6 & 12 weeks so 12 week extracted as endpoint. Counselling and Counselling+ Leaflet arms extracted & combined v no treatment (leaflet arm dropped because not medication management).	**Group 2 N= 52** Drug Counselling - Given by nurse at weeks 2 and 8: daily routine, understanding treatment, psychoeducaton about depression, self help & resources; management of side effects; reminders; feasibility of involving family and friends **Group 3 N= 53** Leaflet+Drug Counselling - See above **Group 4 N= 55** No Intervention	
RICKLES2005 Study Type: RCT Type of Analysis: Completers Blindness: Open Duration (days): Mean 90 Setting: Pharmacies; US Notes: RANDOMISATION: 10 pieces of paper with sequential numbers for each pharmacist, one number selected from envelope for each participant	n= 63 Age: Mean 38 Sex: 10 males 53 females Diagnosis: 100% No Mention: See notes Exclusions: Antidepressant use withing past 4 months; <18 years old; willing to pick up antidepressant from study pharmacy in next 4 months; no hearing impairment; planned to be in local area during next 4 months; BDI-II <16; required translator; pregnant or nursing; receiving medications for psychotic or bipolar disorder; physical condition requiring additional caution with their antidepressant Notes: Diagnosis method unclear - participants with antidepressant prescriptions were identified Baseline: BDI-II: PGEM 28.9 (8.15); UC 27.0 (8.40)	**Data Used** Response: 50% reduction in BDI-II BDI-II mean endpoint **Data Not Used** Adherence - continuous outcome; unclear n Notes: Study pharmacists had contact with both intervention and usual care participants; possible enhancing of usual care? Dropout data not extracted because unclear - usual care arm not referred to in text	**Group 1 N= 31** Pharmacist Intervention - Pharmacist Guided Education and Monitoring (PGEM): 3 monthly telephone calls, medication management and education **Group 2 N= 32** Usual Care	Funding: dissertation grant award from Sonderegger Research Centre and predoctoral National Research Service Award through National Institute of Mental Health
WILKINSON1993 Study Type: RCT Type of Analysis: Unclear Blindness: Open Duration (days): Mean 56 Setting: Primary Care; UK Notes: RANDOMISATION: sealed envelopes containing group allocation opened for each subject in turn	n= 61 Age: Mean 49 Sex: 16 males 45 females Diagnosis: 100% Depressive Disorder Exclusions: Not judged by GP to require treatment with antidepressant; <18 years old; use of TCA within 28 days preceding study Baseline: No relevant baseline statistics	**Data Used** Adherence Reporting side effects Leaving early due to side effects Leaving early for any reason **Data Not Used** Global Illness rating - not relevant Notes: Adherence: number with =/<80% adherence	**Group 1 N= 30** Medication Management. Mean dose 5 assessments - Practice Nurse care management, medication management **Group 2 N= 31** Usual Care - Standard GP care	Funding: unclear

Characteristics of Excluded Studies

Reference ID	Reason for Exclusion
TRIVEDI2004B	No relevant outcomes

References of Included Studies

ADLER2004 (Published Data Only)

Adler, D. A., Bungay, K. M., Wilson, I. B., Pei, Y., Supran, S., Peckham, E. et al. (2004) The impact of a pharmacist intervention on 6-month outcomes in depressed primary care patients. General Hospital Psychiatry, 26, 199-209.

CROCKETT2006 (Published Data Only)

Crockett, J., Taylor, S., Grabham, A., & Stanford, P. (2006) Patient outcomes following an intervention involving community pharmacists in the management of depression. Australian Journal of Rural Health, 14, 263-269.

PEVELER1999 (Published Data Only)

Peveler, R., George, C., Kinmouth, A.L., Campbell, M. & Thompson, C. (1999) Effect of antidepressant drug counselling and information leaflets on adherence to drug treatment in primary care: randomised controlled trial. British Medical Journal, 319, 612-615.

RICKLES2005 (Published Data Only)

Rickles, N. M., Svarstad, B. L., Statz-Paynter, J. L., Taylor, L. V., & Kobak, K. A. (2005) Pharmacist telemonitoring of antidepressant use: Effects on pharmacist-patient collaboration. Journal of the American Pharmacists Association, 45, 344-353.

WILKINSON1993 (Published Data Only)

Wilkinson, G., Allen, P., Marshall, E., Walker, J., Browne, W. & Mann, A.H. (1993) The role of the practice nurse in the management of depression in general practice: treatment adherence to antidepressant medication. Psychological Medicine, 23, 229-237.

References of Excluded Studies

TRIVEDI2004B (Published Data Only)

Trivedi, M. H., Rush, A. J., Crismon, M. L., Kashner, T. M., Toprac, M. G., Carmody, T. J. et al. (2004) Clinical results for patients with major depressive disorder in the Texas Medication Algorithm Project. Archives of General Psychiatry, 61, 669-680.

Crisis resolution and home treatment teams: studies in the previous guideline (review not updated)

Characteristics of included studies

Study	Methods	Participants	Interventions	Outcomes	Notes	AC
Stein1975 Madison	Allocation: random Blindness: single, independent raters. Duration: 14 months	Diagnosis: any severe psychiatric disorder. N = 130. History: in need of psychiatric hospital admission. Sex: 55% M, 45% F. Age: 18-62 years (mean 31). Exclus-ions: dual diagnosis.	1. Home care: CLP's home-based care, multidisciplinary team, 24-hour service, drug treatment, coping skills, family support, use of community agencies for 14 months and then withdrawn. N=65. 2. Standard care: hospitalisation, aim of returning to community as soon as possible, normal staffing levels, standard outpatient follow-up. N=65	1. Death. (any cause) 2. Death (due to suicide or death in suspicious circumstances) 3. Attempted suicide 4. Leaving the study early at 6, 12 and 20 months 5. Disruption to daily routine of family at 3 and months. 6. Disruption to social life of family at 3 and 6 months. 7. Family physical illness due to patient's illness at 3 and 6 months 8. At least one arrest during study 9. At least one use of emergency services during the study		B

Characteristics of excluded studies

Study	Reason for exclusion
Bond - USA	Allocation: not randomised, parallel case series.
Burns - UK	Allocation: randomised. 332 allocated but only 162 entered the study. Participants: anyone presenting for treatment to the mental health services in

	the relevant catchment area. Majority not severely ill, only 35% met PSE category 'psychotic'.
Bush - USA	Allocation: randomised. Participants: those with severe psychosis and high rate of re-hospitalisation - not necessarily in 'crisis' or need of readmission at time of allocation. Interventions: community intensive outreach versus hospital care.
Fenton - Montreal	Majority had an unknown or non-mood disorder diagnosis
Hoult - Sydney	Majority had an unknown or non-mood disorder diagnosis
Levenson - USA	Allocation: randomised. Participants: people with acute schizophrenia (Spitzerian criteria). Intervention: admission versus 'community care'. Non hospitalised group sent home but not treated there - required to attend outpatient clinic daily, treatment not delivered by multidisciplinary team, not available 24 hours.
Merson - UK	Allocation: randomised. Participants: anyone with a psychiatric disorder referred as a psychiatric emergency from the accident and emergency department or GP. Intervention: early intervention service (EIS) designed to treat people as quickly as possible versus standard care. EIS assessment at home and then case managers assigned - not a crisis intervention and not available 24 hours a day.
Mosher - USA	Allocation: quasi-randomisation. Participants: those with schizophrenia, first admission. Interventions: treated in a residential home versus hospital care - not managed in their home environment.
Muijen - London	Majority had an unknown or non-mood disorder diagnosis
Muijen 2 - UK	Allocation: randomised. Participants: people with serious mental illness in home care for 18 months (Phase I of study) - not in acute phase. Interventions: continue in home care versus withdrawal of home care.
Pay - India	Allocation: quasi randomised - therefore excluded. Participants: those with severe mental illness in need of hospitalisation. Interventions: home care by nurse versus hospital care.
Pasamanick-Ohio	Majority had an unknown or non-mood disorder diagnosis
Pasamanick2-USA	Allocation: randomised. Participants: those with serious mental illness referred to the study from community centres. Not necessarily in a crisis and not allocated to the standard care as not in need in of hospitalisation. Instead, they were allocated to the home-drug or home-placebo group. See included studies table (Pasmanick-Ohio) for more detail.
Polak - USA	Allocation: randomised. Participants: people with psychiatric illness requiring hospitalisation in a setting where a crisis ethos was already being practiced. Intervention: home based care via multidisciplinary team with 24 hours on-call service available versus hospital based care. Outcomes: denominators unclear, no usable data.
Sledge - USA	Allocation: randomised. Participants: people in acute phase of psychiatric disorder. Intervention: partial hospitalisation versus standard hospitalisation - both hospital-based packages.
van Minnen - Holland	Allocation: randomised. Participants: those with both "mental retardation and severe mental illness" - not clearly those with schizophrenia. Interventions: outreach versus hospital-based treatment.

Day hospitals: studies in the previous guideline (review not updated)

Characteristics of included studies

Study	Methods	Participants	Interventions	Outcomes	Notes	AC
Dick1985 UK	Allocation: random - no further details. Follow up: 0, 3, 12 and 52 weeks. Evaluation: by an independent research psychiatrist, not blind to group allocation. Analysis: ITT. Setting: acute day hospital in Dundee, UK	Diagnosis: schizophrenia % not known, mood disorder 56%. Inclusion criteria: suitable for day hospital treatment (excluded if too ill, suicidal, or day care impractical). N=91. Age: mean ~ 35 years. Sex: F 67.6%, M 32.4%. History: ethnic minority % not reported; married 50.4%; unemployed 56.6%; mean previous admissions not known.	1. Acute day hospital: 2 trained staff + OT, patient /staff ratio: 12.5:1, individual counselling, groups, activities and medication. N=43. 2. Inpatient care: mixed sex and female wards. N=48	1. Leaving the study early 2. Readmitted to inpatient or day patient care after discharge from inpatient or day patient care	Type 1 trial (contacted but individual patient data no longer exists). Lost to follow-up: 29.6%.	B
Dick1991 Dundee	Setting: acute day hospital in Dundee, Scotland. Allocation: random, sealed envelopes used. Follow-up: 0, 6 months. Evaluation: by person independent of treating clinician and blind to group allocation (blindness not evaluated). Unclear if statistical analysis performed blind. Analysis: ITT	Diagnosis: depression 92%, anxiety 8%. Inclusion criteria: continuous moderate anxiety/depression for 6/12 months; not 'too well' for day hospital; not requiring inpatient; no need for specific behavioural programme; willing to accept day hospital or outpatient treatment. N= 96. Age: not clear but 50% under 45 years. Sex: 75% F. History: Subjects referred from outpatient clinics. Number of previous admissions not known.	1. Day hospital specialising in treatment of patients with severe neurotic disorders. The day hospital was problem-oriented with time-structuring and behavioural programmes. Staff ratio 1:12. N=46. 2. Outpatient care, seen monthly for medication and anxiety management. N=50.	1. Number lost to follow-up at 6 months 2. Patients not satisfied with care 3. Patients admitted to hospital during the study counted at 6 months	Dropout rate: 4% at 6 months. Type of intervention: day treatment programme. Characteristics of subjects reported only for those who completed follow-up (thus excludes 2 from each group).	A
Piper1993 Alberta	Setting: day treatment programme for outpatients with affective and personality disorders. Allocation: Random - patients matched in pairs, then one member of each pair randomly assigned to treatment or control group - no further details.	Diagnosis: depression no data, anxiety no data. Inclusion criteria: (i) long-term psychiatric problems; (ii) willing and able to engage in programme; (iii) age >13 years; (iv)no psychotic, or suicidal, or misusing substances or learning disabled or in treatment elsewhere. N =226 Age: no data	1. Day treatment programme (7 hours per day/5 days per week) involving: (i) psychotherapy in large and small groups; (ii) group activities including: psychotherapy, role play, peer feedback, life skills training and daily living tasks. N=137.	1. Number lost to follow-up at 12 months	Dropout rate: 38%. Type of intervention: day treatment programme. This was not an intention to treat analysis - analysis was based only on those pairs who completed treatment - moreover, if a member of a pair dropped out, they were	B

	Follow-up: after treatment (4.5 months from baseline), 12.5 months from baseline. Evaluation: independent of treating clinician, not blind to group allocation. Unclear if statistical analysis performed blind. Analysis: completer (see notes).	Sex: no data. History: no data on number of previous admissions.	2. Waiting list control condition consisting of a weekly supportive outpatient group, which "few attended". N=89.		replaced by a new matching subject. It is not clear why the numbers randomised to treatment and control groups were not equal, given that randomisation was meant to occur in pairs	
Sledge1996 US	Allocation: Random - computer-generated randomisation by a researcher unaware of patient characteristics. (However, if no bed available candidate was allocated to the other condition). Follow up: discharge, 2, 5, 10 months. Evaluation: by rater independent of treating clinician, but not blind to group allocation. Analysis: ITT. Setting: Day hospital of a community mental health centre day hospital in New Haven, Connecticut, USA.	Diagnosis: schizophrenia 39%, mood disorder 52%, other 9%. Inclusion criteria: (i) >18 years; (ii) presenting for inpatient admission; (iii) living locally; (iv) not involuntary; (v) not too ill for day patient treatment; (vi) not intoxicated or medically unwell. N=197. Age: mean ~33 years. Sex: F 49% M 51%. History: ethnic minority 32%, married 13.7%, unemployed 37%, previous admissions - unknown, 52% previously high service users	1. Acute day hospital: crisis respite programme + 'back up' bed if necessary, day hospital = 20 patient facility with doctors, nurses, social workers, therapists, weekdays 9-3pm, group work, control of symptoms & improvement of daily skills. N=93. 2. Inpatient care: 36 bed unit with doctors & nursing staff, psychologist, mental health workers + very active programme. N=104	1. Leaving the study early 2. Readmitted to inpatient or day patient care after discharge from inpatient or day patient care 3. Duration of index admission (individual patient data) 4. Inpatient days/month (individual patient data) 5. Day patient adjusted days/month (individual patient data) 6. All hospital days/month (individual patient data)	Type 1 trial (individual patient data obtained). Lost to follow up: 28.4%. Our individual patient data analysis required us to choose between the two measure of mental state (BPRS or SCL 90) used in this study - BPRS was chosen because it was more similar to the CPRS used in the two Creed studies - the two scales have similar effect sizes in Sledge1996.	A
Tyrer1979 Southampton	Setting: two day hospitals in Southampton, UK. Allocation: random, sealed envelopes used (information from trialist). Follow-up: 4, 8, 24 months. Evaluation: independent and blind to group allocation (not tested). Data analysed blind to group allocation (information	Diagnosis: neurotic disorder severe enough for day hospital treatment. N=106 Age: 16 - 60 years. Sex: no data.	1. Two different types of day hospital; one specialising in neurotic disorders (well staffed with psychotherapeutic orientation) and the other a standard day hospital (psychiatrists, nurses, occupational & art therapists). N=48. 2. Routine outpatient care.	1. Deaths (all causes) 2. Number lost to follow up at 8 months and 24 months 3. Patients not satisfied with care 4. Patients admitted to hospital during the study counted at 8 months and at 24 months 5. Mental state (change from baseline on the PSE [Wing 1972] at 4 and 8 months)	Dropout rate (24 months): 26%. Type of intervention: day treatment program-me. Data from day hosp-ital groups combined for this analysis.	

	from trialist). Analysis: ITT.		N=58	6. Social functioning (change from baseline on the SFS [Remington 1979a] at 4 and 8 months)		

Characteristics of excluded studies

Study	Reason for exclusion
Austin-Los Angeles	Allocation: not randomised, survey comparing randomly selected people from two different day hospitals.
Azim-Alberta	Allocation: not randomised, quasi-experimental design, comparing inpatients, day hospital patients and non-patient controls.
Barkley-Ontario	Allocation: not randomised, retrospective study.
Basker-Jerusalem	Allocation: not randomised, before and after design.
Bateman-London	Majority had an unknown or non-mood disorder diagnosis
Beigel-New York	Allocation: not randomised, quasi-experimental design, comparing people who completed a partial hospitalisation programme with those who dropped out.
Boath-Stoke	Allocation: not randomised, quasi-experimental design comparing a day treatment programme for postnatal depression with primary care.
Bowman-Dublin	Allocation: not randomised, survey examining differences between people admitted to day hospital and inpatient care.
Bradshaw-Minnesota	Allocation: randomised. Participants: people with schizophrenia who were long-term attendees at a day care centre. Intervention: day care + cognitive behavioural therapy versus day care alone, not acute day hospital care versus admission.
Brook-Denver	Allocation: not randomised, survey comparing people treated in a crisis hostel with those treated in inpatient care.
Carey-US	Allocation: randomised. Participants: attendees at a day care centre who also abused substances. Intervention: problem-solving training + day care versus day care alone, not acute day hospital care versus admission.
Case-New York	Allocation: not randomised, retrospective study.
Comstock-Texas	Allocation: not randomised, retrospective multivariate analysis.
Creed-Blackburn	Allocation: randomised by sealed envelope, however, the trialists judged that the randomisation procedure had been compromised as people allocated to the day hospital condition were much less disabled that those admitted to inpatient care (available data bear this out in terms of diagnosis & behaviour).
Creed – UK 1990	Majority had an unknown or non-mood disorder diagnosis
Creed – UK 1996	Majority had an unknown or non-mood disorder diagnosis
Creed-Manchester	Allocation: not randomised, quasi-experimental study comparing consecutive admission to day hospital and inpatient care.
Drake-New Hampshire	Allocation: not randomised, quasi-experimental design, comparing day treatment with supported employment programme.
Ettlinger-New York	Allocation: not randomised, case-control study of day hospital versus inpatient care.
Fink-Toronto	Allocation: not randomised, quasi-experimental study of inpatient care versus day patient care.
Glick-New York	Majority had an unknown or non-mood disorder diagnosis
Glick-San Francisco	Allocation: randomised. Participants: people requiring hospital in-patient care. Intervention: short versus long hospital admission, not acute day hospital care versus admission.

Grad-Chichester	Allocation: not randomised, quasi-experimental design comparing community care in two towns.
Gudeman-Boston	Allocation: not randomised, before and after design.
Guidry-New Orleans	Allocation: not randomised, before and after design.
Guillette-Maryland	Allocation: not randomised, survey comparing costs of day patient care with theoretical costs of inpatient care.
Guy-Baltimore	Allocation: randomised by sealed envelope. Participants: people with a variety of psychiatric disorders referred for day care. Intervention: day hospital treatment versus out patient care, not acute day hospital care versus admission.
Herz-New York2	Allocation: randomised (method not specified).Participants: people with acute psychiatric disorders about to be admitted to inpatient care. Interventions: routine inpatient care versus brief inpatient care versus brief inpatient plus day care, not acute day hospital care versus admission.
Herz US 1971	Majority had an unknown or non-mood disorder diagnosis
Hirsch-London	Allocation: random allocation.Participants: people with acute psychiatric disorders about to be admitted to inpatient care. Interventions: brief inpatient care with some use of day hospital (47% patients in the brief care group were exposed to day hospital) versus routine inpatient care, not acute day hospital care versus admission.
Hogg-Glasgow	Allocation: not randomised, a survey comparing long-term inpatients with long-term day patients.
Inch-Saskatchewan	Allocation: not randomised, a prospective study comparing day hospital patients receiving 'therapeutic' and 'non-therapeutic' discharges.
Jarema-Warsaw	Allocation: not randomised, a survey comparing quality of life scores between day hospital patients, inpatients and outpatients.
Kandel-US	Allocation: randomised. Adult general psychiatry patients attending a day treatment programme. Intervention: day treatment plus a small group intervention compared against day treatment, in order to assess effect on 'future time perception', not acute day hospital care versus admission.
Kecmanovic-Sarajevo	Allocation: not randomised, case-control study comparing discharged inpatients with discharged day patients.
Klyczek-US	Allocation: not randomised, quasi-experimental design comparing outcome in two day hospitals, one of which offered mainly psychotherapy, whilst the other offered mainly activity therapy.
Konieczynska-Warsaw	Allocation: not randomised, follow-up study comparing the outcome for patients treated in a day hospital, inpatient ward and community mental health team.
Kris-US-1965	Majority had an unknown or non-mood disorder diagnosis
Kuldau-California	Allocation: randomised. Participants: inpatients about to be discharged. Interventions: rapid discharge from inpatient care versus community transitional system (34% of intervention group were discharged via day hospital), not acute day hospital care versus admission.
Levenson-Houston	Allocation: randomised by table of random numbers. Participants: people with acute schizophrenia. Intervention: treatment in an outpatient clinic versus hospital admission, excluded as outpatient clinic does not meet criteria for day hospital.
Liang-Taipei	Allocation: not randomised, a survey comparing quality of life in patients in various care settings, including day hospitals.
Linn-USA	Majority had an unknown or non-mood disorder diagnosis
Lystad-Louisiana	Allocation: not randomised, quasi-experimental design.
Mathai-Bangalore	Allocation: not randomised, survey.
Meltzoff-New York	Majority had an unknown or non-mood disorder diagnosis
Michaux-Maryland	Allocation: not randomised, quasi-experimental study of inpatient care versus day hospital care.
Milne-Wakefield	Allocation: not randomised, quasi-experimental study.
Niskanen-Helsinki	Allocation: not randomised, compared patients before and after treatment in a day hospital.
Odenheimer-USA	Allocation: not randomised, survey of the relatives of day hospital patients.
Oka-Kurume-Japan	Allocation: not randomised, quasi-experimental design comparing outcome in 31 patients with schizophrenia entering a day care centre with that of

	30 outpatients with schizophrenia matched for age and sex.
O'Shea-Ireland	Allocation: not randomised, retrospective cost-effectiveness analysis comparing day patients and inpatients.
Penk-Dallas	Allocation: not randomised, case-control study of day hospital versus inpatient care.
Piersma-Michigan	Allocation: not randomised, quasi-experimental study compared improvement in a group of inpatients with that in a group in day hospital.
Platt-London	Allocation: randomised. People with acute psychiatric disorders. Intervention: admission to day hospital versus inpatient care, trial abandoned when insufficient people (10) were randomised in first 10 weeks. No data available.
Russell-Ottawa	Allocation: not randomised, outcome for day patients compared with a retrospectively obtained sample of inpatients.
Sandell-Stockholm	Allocation: not randomised, cohort study.
Schene-NL-1993	Allocation: problems with randomisation process, unable to use any data
Tam-Hong Kong	Allocation: not randomised, survey comparing day patients with inpatients on demographic and psychological variables.
Tantam-Manchester	Allocation: not randomised, case-control study of a rehabilitation treatment for long-stay day patients.
Vaglum-Oslo	Allocation: not randomised, follow-up study comparing outcome in day patients with different types of personality disorder.
Vaitl-Haar-Germany	Allocation: not randomised, retrospective study comparing outcome in patients treated at day hospitals with those treated at "night" hospitals.
van den Hout-NL	Allocation: randomised. Depressed patients on a day treatment programme. Intervention: self-control therapy plus day care versus day care, not acute day hospital care versus admission.
Washburn-Boston	Allocation: randomised, method not specified. Participants: women receiving inpatient treatment. Intervention: continuing inpatient admission versus discharge to day patient care, not acute day hospital care versus admission.
Welburn-Ottawa	Allocation: not randomised, quasi-experimental design in which outcome for patients participating in a psychotherapy-oriented day treatment programme was compared against outcome for those awaiting admission to the programme.
Weldon-New York	Majority had an unknown or non-mood disorder diagnosis
Wilberg-Oslo	Allocation: not randomised, quasi-experimental study of day treatment + psychotherapy vs day treatment alone, for people with borderline personality disorder.
Wiersma-NL-1989	Majority had an unknown or non-mood disorder diagnosis
Zwerling-US-1964	Majority had an unknown or non-mood disorder diagnosis

Non-statutory support: studies in the previous guideline (review not updated)

Characteristics of included studies

Study	Methods	Participants	Interventions	Outcomes	Notes	AC
Harris 1999	Allocation: Random (no details). Duration: 12 months. Analysis: ITT	N=86, all female, aged 25-40. Diagnosis: meeting criteria for Present State Examination (PSE-10) depressed mood with at least 4/10 core symptoms.	1. Befriending (volunteers met and talked with participants, on a one-to-one basis, for a minimum of 1 hour a week and acted as "friends" to them, listening and "being there" for them. 2. Wait list control	1 Non-remitters (patients meeting criteria for PSE-10 depressed mood with at least 4/10 core symptoms)		B

Characteristics of excluded studies

Study	Reason for exclusion
Grant 2000	Not all participants had primary diagnosis of depression

Employment: studies excluded in the guideline update

Characteristics of Excluded Studies

Reference ID	Reason for Exclusion
MACIAS2006	Approx 52% had diagnosis of schizophrenia
NAKAO2007	Not RCT; not depressed

References of Excluded Studies

MACIAS2006 (Published Data Only)

Macias C., Jones, D.R., Hargreaves, W.A., Wang, Q., Rodican, C.F., Barreira, P.J. & Gold, P.B. (2008) When programs benefit some people more than others: tests of differential service effectiveness. Administration and Policy in Mental Health and Mental Health Research, 35, 283-294.

*Macias, C., Rodican, C.F., Hargreaves, W.A., Jones, D.R., Barreira, P.J. & Wang, Q. (2006) Supported employment outcomes of a randomized controlled trial of ACT and clubhouse models. Psychiatric Services, 57 (10), 1406-1415.

NAKAO2007 (Published Data Only)

Nakao, M., Nishikitani, M., Shima, S., & Yano, E. (2007). A 2-year cohort study on the impact of an Employee Assistance Programme (EAP) on depression and suicidal thoughts in male Japanese workers. International Archives of Occupational & Environmental Health, 81, 151-157.

Studies included in the previous guideline and excluded in the guideline update

Study ID	Previous guideline review	Reason for exclusion
Callahan1994	Screening	Only 21% had diagnosis of depression at baseline