Improving Mental Health and Addressing Mental Illness: Collaborative Care for the Management of Depressive Disorders

Summary Evidence Table

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
Authors: Asarnow et al 2005 **Location:** 6 study sites from 5 health care organizations – California and Pittsburgh, PA **Population:** Adolescents aged 13 through 21 years **Design:** RCT **Quality of Execution**: Good (1 limitation) **Funding:** AHRQ; NIMH	**Target population**: **(N= 7472)** Patients with current Depressive Symptoms from 5 health care organizations (public sector, managed care, academic health programs). **Inclusion**: Eligibility was based on youth meeting either of 2 criteria: (1) endorsed "stem items" for major depression or dysthymia from the 12 International Diagnostic Interview (CIDI-12 [Core Version 2.1]) 38 modified slightly to conform to diagnostic criteria for adolescents, 39 1 week or more of past-month Depressive Symptoms, and a total Center for Epidemiological Studies – Depression Scale (CES-D) 40 score of 16 of greater (range of possible scores, 0-60); or (2) a CES-D score of $\geq$24. **Exclusion**: Having previously completed screening, not English-speaking, clinician not in the study, and sibling already in the study. **Demographics**: Mean age (SD) : 17.3 (2.1) Female: 78.7%; Black/African: 13.7%; White 10.9% Hispanic/Latino 57.4%; Asian 1.9%, other 3.3% **Organization and Setting** 5 health care organizations including managed care, public sector, and academic medical center clinics.	**Intervention:** **(n= 211)** YPIC Quality Improvement included: (1) expert leader teams at each site that adapted and implemented the intervention; (2) care managers who supported primary care clinicians with patient evaluation, education, medication and psychosocial treatment, and linkage with specialty mental health service; (3) training of care managers in annualized CBT for depression; and (4) patient and clinician choice of treatment modalities (CBT, medication, combined CBT and medication, care manager follow-up, or referral). **Providers** **Case Manager**: Master's or PhD degrees in a mental health field or nursing **PC Provider:** Nurse practitioner and primary care physician **MHS:** Master's or PhD degrees in a mental health field or nursing **Collaborative Care Components:** Patient education + support for self-care + provider education + provider feedback + emphasis on the use of evidence-based guidelines/protocols + medication and psychotherapy	**Depressive Symptoms**:**MHI-5/CES-D** **Mean (SD)** **Baseline**: Usual care + edu. (n=207):19.5(5) Intervention (n=211):18.9(4.8) **6 m**: **CES-D** Usual care + education (n=174): 21.4(13.1) Intervention (n=170): 19(11.9) ES (b/t-group-differences) = -2.9,95% CI (-5.3,-0.4), p=0.02 **Quality of Life: MCS-12 Mean (SD)** **Baseline:** Usual care + edu. (n=207): 39.5(12.4) Intervention (n=211): 37.5(11.6) **6 m:** Usual care + edu. (n=174) 42.8(12.9) Intervention (n=170): 44.6(11.3) ES (b/t-group-differences) = 2.6, 95% CI (0.3-4.8), p=0.03 **Satisfaction with Care: Range 0-5** **6 m**: Usual care + edu. (n=174) 3.5(1) Intervention (n=170): 3.8(0.9) ES (b/t-group-differences) = 0.3, 95% CI (0.1-.5), p=0.004 **Utilization of Care: Any psychotherapy visit (%)** **6 m**: Usual care + edu. (n=174) 21.3% Intervention (n=170):32% ES: OR = 2.4, 95% CI (1.4-4.1),p=0.003 **Depressive Symptoms: severe range (CES-D >= 24)** **6 m**: Usual care + education. (n=174): 42% Intervention (n=170): 31.4% ES: OR = 0.6, 95% CI (0.4-0.9), p=0.02

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See Previous	See Previous	**Usual Care + Education (n= 207)** The usual care condition was enhanced by providing primary care clinicians with training and educational materials on depression evaluation and treatment. Patients receiving usual care had access to usual treatment at the site but not to the specific mental health provider trained in the CBT and care management services used in the study.	**Summary:** • Depression and quality-of-life was improved. **Limitations:** • A portion of the targeted sample was lost during screening/recruitment/enrollment procedures, compromising the generalizability of study findings. • It may not be generalizable across all ethnic groups, geographic locations, and practice setting.
Authors: Baldwin 2004 **Location:** 4 acute medical wards of Tameside General Hospital, Ashton-underLyne, a semi-rural area of Northern England **Population:** Older people aged 65 and over with depression and/or cognitive impairment **Design:** RCT **Quality of Execution:** Fair (2 limitations) **Funding:** North West Research and Development arm of the Department of Health, UK	**Target Population: (N=264)** Older people over 65 with depression and/or cognitive impairment in 4 acute medical wards of Tameside General Hospital, Ashton-under-Lyne, a semi-rural area of Northern England **Inclusion:** Score of 2 or above on the GDS4 (Geriatric Depression Scale) and/or above 10 on the OMC (Orientation-Memory Concentration Test) **Exclusion:** Discharge within 3 days of admission, inability to complete research schedule due to medical instability or profound sensory loss, or acute risk of self-harm **Baseline Demographics:** Mean Age (SD): 80.6 (7.2) Female: 70.1% Male: 29.9% **Organization and Setting:** In-patient hospital in a managed care organization.	**Intervention (Nurse-led mental health liaison services): (n=77)** There were 3 components involved: assessment (including risk), direct interventions, and liaison support. Depression interventions included medication concordance, enhanced self-esteem, managing anxiety, problem-solving, addressing role transitions and adjusting to loss. Research nurse discussed with the relevant medical team, Liaison support comprised encouragement of person-centered care, education about mental disorders, nutrition and safety issues, and sign-posting to relevant services. **Providers** **Case Manager:** Mental Health RN **PC Provider:** Mental Health RN Relevant Medical Team **MHS:** Mental Health RN **Collaborative Care Components:** Patient education + support for self-care + provider feedback +	**Depression symptoms: Geriatric Depression Scale (GDS): Mean (SD)** **Baseline:** usual care (n=73): 14 (6.6) Intervention (n=73): 14.4 (6.8) **2 m**: usual care (n=60): 14 (6.6) Intervention (n=54): 12.2 (6.2) ES: adjusted mean difference = -2, 95% CI(-4,-0.1) **Depression symptoms: Standardized Mini-Mental State Examination Score: Mean (SD)** **Baseline:** usual care (n=76): 18.8 (6.9) Intervention (n=75):18.2 (6.4) **2 m**: usual care (n=61): 21.8 (6.6) Intervention (n=57): 20.3 (7.3) ES: adjusted mean difference = -0.4 95% CI(-2.1,1.3) **Quality of Life: Health of the Nation Outcome Scale for Older People (HoNOS65+): Mean (SD)** **Baseline:** usual care (n=74): 12.6 (5.4) Intervention (n=74):12.4 (5.7) **2 m**: usual care (n=59): 11.5 (4.3) Intervention (n=58):11.5 (5.3) ES: adjusted mean difference = -0.04 95% CI(-1.4,1.3)

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
See previous	See previous	emphasis on use of evidence-based guidelines + Medication and psychotherapy **Usual Care:(n=76)** Care and treatment delivered by staff, which can include referral to a psychiatrist or psychiatry team.	**Summary:** • There is an improvement in depression; however the psychiatric morbidity is not improved. **Limitations:** • Study may have been underpowered to detect changes in the depression and confusion groups • High levels of physical morbidity in the sample did not help the lost-to follow up/refusal rates.
Authors: Bogner, H.R.,de Vries, H.F. 2008 **Location:** West Philadelphia **Population:** Adults with Hypertension **Design:** RCT **Quality of Execution:** Fair (2 limitations) **Funding:** American Heart Association Grant-in-Aid, NIMH Mentored Patient-Oriented Research Career Development Award	**Target Population: (N=109)** Depressed older adults with hypertension and upcoming appointments were recruited **Inclusion:** 1. 50 yrs and older 2. Systolic blood pressure of 140 mm Hg or greater or diastolic blood pressure of 90 mm Hg or greater for non-diabetic pts., or a systolic blood pressure of 130 mm Hg or greater or diastolic blood pressure of 80 mm Hg or greater for patients with diabetes on at least two visits in the previous year, or a prescription for an antihypertensive medication within the past year. 3. a diagnosis of depression or a prescription for an antidepressant medication within the past year **Exclusion:** cognitive impairment, unable to communicate in English, resided in a care facility that provides medications on a schedule or unable to use medication event monitoring system (MEMS) **Baseline Demographics:** Mean Age (SD): 59.7 (7.3) Female: 75%,Male: 25%, Black: 78.1%	**Intervention:(n=32)** Consisted of 3, 30-minute in-person sessions and 2, 15-minute telephone-monitoring contacts during a 4-week period. the integrated care manager provided education about depression and hypertension, emphasizing the importance of controlling depression to manage hypertension **Providers** **Case Manager:** Master's level research coordinator **PC Provider:** PCP, Master's level research coordinator **MHS:** Master's level research coordinator **Collaborative Care Components:** Patient education + provider education + oversight/supervision of providers + medication only + medication and psychotherapy + the use of telephones **Usual Care:(n=32)** The principal investigator randomly monitored 25% of sessions weekly to ensure that there was no carryover of the intervention into the usual care group	**Depressive Symptoms:** **Center for Epidemiologic Studies Depression Scale (CES-D) Mean score (SD)** **Baseline:** usual care (n=32): 19.6(14.2) Intervention (n=32):17.5(13.2),p=0.54 **1.5 m**: usual care (n=32):19.3(15.2) intervention (n=32):9.9(10.7),P=0.006 **Adherence to Prescribed Treatment** **Baseline:** usual care (n=32): 50.0% Intervention (n=32): 43.0%,p=0.81 **1.5 months (6 weeks):** usual care (n=32) 31.3% intervention (n=32): 71.9%,p=0.001 **> 80% adherence (antihypertensive)** **Baseline:** usual care (n=32):34.4% intervention (n=32): 50%, p=0.31 **1.5 m (6 weeks):** usual care (n=32): 31.3% intervention (n=32): 78.1%,p=0.001 **Summary:** • Patients in intervention group had fewer Depressive Symptoms at 6 weeks • Systolic and Diastolic BP was lower for intervention group • Higher adherence to antidepressants and antihypertensives in intervention group.

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
See Previous	**Organization and Setting:** Community-based primary care clinic with 12 family physicians	See Previous	**Limitations:** • MEMS caps used to measure adherence • Adherence threshold of 80% • Only one clinic, small sample(n=64) • Hawthorne effect
Authors: Ciechanowski et al 2004 **Location:** Metro Seattle, Washington. **Population:** Elderly **Design:** RCT **Quality of Execution:** Fair (2 limitations) **Funding:** Prevention Research Centers Program of CDC, Univ. of Wash. Health Promotion Research Center	**Target Population: (N=150)** Adults aged 60 years or older receiving services from senior service agencies or living in senior public housing **Setting:** Senior service agencies and senior public housing **Inclusion:** Aged 60 years or older with DSM-IV minor depression or dysthymia **Exclusion:** No depression, major depression, bipolar disorder, psychosis, and substance abuse and cognitive impairment from Mini-Mental State Exam **Baseline Demographics:** Mean Age (SD): 72.6(8.4) Female N (%): 59 (82) Male N (%): 13 (18) Other race/ethnic minority (African American, Asian American, Hispanic and American Indian): 42% Low SES: 64% On antidepressant treatment at baseline: 29.0% **Organization and Setting:** Senior service agencies and senior public housing	**Intervention: (n=72)** Pts. Received eight 50 minute in-home PST from PEARLS therapists over 19 weeks. Then therapists maintained monthly telephone contact. Psychiatrist reviewed all cases for medical problems and meds, contacted primary care MDs and called pts. **Care Providers** **Case Manager:** Nurse, psychiatrist, social worker **PC Provider:** PCP **MHS:** Nurse, psychiatrist, social worker **Collaborative Care Components:** Provider education, provider feedback, oversight/supervision of providers, emphasis on the use of evidence-based guidelines, medication only, psychotherapy only, medication and psychotherapy, use of telephones and other technology **Usual Care: (n=30)** No additional services offered, letters sent to regular physicians and social workers reporting their diagnosis of depression with recommendations to continue usual care	**Depressive Symptoms:HSCL-20 Mean** **Baseline:** usual care (n=66): 1.2(0.5) Intervention (n=72): 1.3(0.5) ES =-0.06, 95% CI(-0.23-0.11) **6** months: usual care (n=66): 1.17(0.53) intervention (n=72): 0.71(0.60) ES =-0.41, 95% CI(-0.7, -0.29) **12** months: usual care (n=66):1.01(0.46) intervention (n=72): 0.82(0.62) ES=-0.19, 95% CI (-0.4, -0.02) **Rate of Remission/Recovery:** **6** months: usual care (n=66): 8% intervention (n=72): 54% ES: OR=14.2, 95% CI (4.65, 43.66) **12** months: usual care (n=66): 15% intervention (n=72): 43% ES: OR = 5.21, 95% CI (2.01, 13.49) **Remission:HSCL-20 <0.5** **6** months: usual care (n=66): 10% intervention (n=72): 44% ES: OR=7.39,95% CI(2.62, 20.85) **12** months: usual care (n=66): 12% intervention (n=72): 36% ES: OR = 4.96,95% CI(1.79, 13.72) **Functional Well-Being: FACT-G Mean** **Baseline:** usual care (n=66): 2.0(0.7) Intervention (n=72): 1.7(0.7) **12** months: usual care (n=66) mean change score =0.09. 95% CI (-0.14, 0.33) intervention (n=72): mean change score =0.52,95% CI (0.29, 0.74) **Emotional Well-Being: FACT-G Mean** **Baseline:** usual care (n=66):2.8(0.7) Intervention (n=72): 2.7(0.7) **12** months: usual care (n=66): mean change score =0.33,95% CI (-0.09, 0.31) intervention (n=72): mean change score =0.11,95% CI (0.14, 0.52)

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See Previous	See Previous	See Previous	**Health Care Utilization:** **(>=5 outpatient visits in prior 6 mo)** **Baseline:** usual care (n=66):46% Intervention (n=72): 56% **6** months: usual care (n=66):43% intervention (n=72):40% **12** months: usual care (n=66):47% intervention (n=72):43% **Summary:** • The PEARLS program significantly reduced Depressive Symptoms and improved health status in chronically ill older adults with minor depression and dysthymia **Limitations:** • Sample size moderate and limited to 1 urban geographical area **Economic Data:** • Mean costs per pt. of providing PEARLS intervention were $422 for PST sessions, $28 for telephone calls, & $87 for psychotherapy quality assurance and $81 for depression management team sessions. Total mean cost per pt was $630.
Authors: Chew-Graham et al 2007 **Location:** Primary Trust Centers (PTC) in Northwest England **Population:** Elderly persons **Design:** RCT **Quality of Execution:** Good (0 limitations)	**Target Population: (N=120,000)** 180 patients were referred and 105 randomized **Inclusion:** > 60 years old; score 5 or more on the Geriatric Depression Scale (GDS) and 24 or more on the Mini-Mental State Exam. Many had comorbid physical disorders **Exclusion:** Less than 5 on the GDS Demographics: Mean age 75 years Female: 73%	**Intervention: (n=53)** Intervention consisted of management by a community psychiatric nurse who delivered a self-help program with close liaison with primary care professionals and psychiatrist.. **Care Providers** **Case Manager:** Community psychiatric nurse **PC Provider**: Primary Care Physician	**Depressive Symptoms: HSCL-20** Intervention (n=44); Usual care (n=42); F/u 1 month ES= -5.12; 95% CI (-10.5, 0.27) **Structured Clinical Interview for DSM-IV (SCID):** Intervention (n=45); Usual care (n=43) ES= 0.38, 95% CI (0.15,0.97),p=.042 **Health-Related Quality of Life: Health Assessment Questionnaire- Disability at 1 month** Intervention (n=44), Usual care n=43, ES=.01, 95% CI (-0.10, 0.11)

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Funding: United Kingdom Department of Health	**Organization and Setting**: Government Universal care 43 practices	**MH Specialist**: Psychiatrist, community psychiatric nurse **Collaborative Care Components:** Patient education + support for self care + provider education + oversight of providers +emphasis on the use of evidence-based guidelines/protocols + medication + use of telephones to manage caseload **Comparison: (n=52)** Usual care group received usual GP care. Both groups were supplied with guidelines for diagnostic criteria, suggestions of appropriate investigations and primary care management of depression in older people	**Summary** Collaborative care in a primary care setting for older persons with depression was significantly more effective than usual care. **Barriers:** Face-to-face contact was preferred to telephone consultations; difficult for patients to engage in telephone discussions

Authors: Cole et al 2006 **Location:** St Mary's Hospital Center, a university -affiliated primary acute care hospital in Montreal, Canada. **Population:** Older than 65 **Design:** RCT **Quality of Execution:** Fair (3 limitations) **Funding:** Canadian Institutes of Health Research See Previous	**Target population: (N=1500)** Patients screened and 225 had major depression. They were block randomized into usual care (n=79) and intervention (n=78). **Inclusion:** All patients 65 years and over admitted from ER to medical services who were found to have major depression and had no more than mild cognitive impairment as measured by the Short Portable Mental Status Questionnaire. **Exclusion:** Admitted to ICU or cardiac monitoring unit for > 48 hours, imminently terminal illness, did not speak or understand English or French, did not live on the Island of Montreal **Baseline Demographics:** Age mean (SD) = 77.5 yrs (6.7) Female = 69.2% History of depression - 14.5% **Organization & Setting:** Hospital in Canadian universal healthcare.	**Intervention: (n=78)** Patients received intervention for 24 weeks in 3 parts: 1) assessment and treatment by a psychiatrist in hospital's geriatric service, 2) follow-up by research nurse and 3) follow-up by patient's family physician. The psychiatrist assessed each patient and made management recommendations. Research nurse informed psychiatrist of follow-up by PCP and liaised with family, psychiatrist and PCP. **<u>Providers:</u>** **Case manager:** Nurse **PC Provider**: Physician **MHS:** Psychiatrist, Nurse **Collaborative Care Components:** oversight/supervision of providers + emphasis on evidence based treatment + medication and/or psychotherapy + use of telephones & technology (case manager contacted patients by phone after discharge from hospital) **Comparison:** **(n=79)** Usual care, before and after discharge. Subjects were informed that they had major depression and advised to discuss treatment with their PCP but received no systematic intervention or follow-up.	**Depressive Symptoms: HAMD** Intervention (n=33) -6.3 Usual care (n=31) -5.0 ES: (between group difference) = -1.3 95% CI (-4.9, 2.2) **Quality of Life: SF-36 Mental** Intervention (n=33) 9.4 usual care (n=31) 9.2 ES (between group difference) = 0.2 95% CI (-8.7, 8.9) **Quality of Life: SF-36 Physical** Intervention (n=33) -2.9 usual care (n=31) -2.7 ES (between group difference) = -0.2 95% CI (-5.4, 5.0) **Response: HAMD** Intervention (n=33) 28.1% usual care (n=31) 20% ES (between group difference) = 8.1 95% CI (-13.3, 29.3) **Remission: HAMD score<7.0** Intervention (n=33) 15.6% usual care (n=31) 16.7% ES (between group difference) = -1.1 95% CI (-19.4, 17.3) **Healthcare utilization (Readmission)** Intervention (n=31) 39.4% usual care (n=33) 29.0% ES=10.4%, 95% CI (-21.3, 23.5) **Other outcomes:** **Suicide or suicide attempt at 6 month f/u:** intervention n=33; 3.2%; usual care n=31; 3.3%; absolute percent difference = 0.1 95 CI (-9.8, 9.4) **Summary**: • No significant differences in intervention and comparison group on depression outcomes. **Limitations:** • high patient attrition (57 withdrew, 36 died), • low number of contacts between patients and psychiatrists, • suboptimal compliance with antidepressant meds, • possible contamination of usual care group (both groups managed on same units by same attending physicians) **Barriers**: • Many patients died during the study • Other illness priority and may interfere with treatment of depression (team impression) **Applicability:** • Elderly with other medical conditions

Authors: Cullum et al 2007 **Location:** Rural East Anglia, U.K **Quality of Execution**: Fair (2 limitations) **Study design:** RCT **Funding:** MRC Health Services Research Training Fellowship & NHS	**Target population:** **(N = 3047)** n = 121 (entered into trial) • 62 randomized into intervention arm • 59 randomized into control arm For intervention arm: **Mean age** = 79.7 (SD = 7.94) **Sex =** 53% female **Marital stat** = 55% widowed **History of depression** = 45% **Inclusion:** - Age 65+, current residence within the area covered by the PCT, and in hospital	**Intervention:(n = 62)** LPN assessed patients within 5 days of allocation to intervention arm and formulated a care/treatment plan. This plan addressed psychological and social needs of the patient and need for antidepressant medication. The LPN liaised with the medical team, primary care, social services, and other agencies as well as informal care givers to ensure implementation of appropriate management of the patient in hospital and in the community after	**Depressive disorder among those who screened positive at baseline** **4** months: Control (n=43): 60% Intervention (n=41): 46% ES: OR (adjusted effect) = 0.4 95% CI (0.2, 1.2), *p* = 0.10 **Depressive disorder among those with depressive disorder at baseline <u>%</u>** **4** months: Control (n=18): 72% Intervention (n=20): 55% ES: OR (adjusted effect) = 0.2 95% CI (0.0, 1.5), *p* = 0.13
Study Details	**Population, Organization and Setting**	**Intervention + Comparison description**	**Major results and summary**

Executive Eastern Research and Development Project Grant	3 to 6 days at time of screening - After screening interview, participants were eligible if they scored greater than or equal to 8 on the GDS-15 (15 item geriatric depression scale). **Exclusion:** - Severe dysphasia, severe deafness, current alcohol dependency, or too physically unwell/confused to participate. **Organization and Setting:** Medical wards of UK district general hospital in rural East Anglia	discharge. **Providers** **Case Manager**: Liaison Psychiatric Nurse **PC Provider**: General Practitioner **MHS**: General Practitioner & Liaison Psychiatric Nurse **Collaborative Care Components**: Provider Feedback + Patient assessment/liaison **Comparison:** **(n = 59)** Usual care, undefined	**Among those who screened positive at baseline - Reduction in GDS-15 score Mean (SD)** **4** months: Control (n=45): 3.6 (3.61) Intervention (n=41): 4.6 (3.85) ES: adjusted effect = 0.4, 95% CI (−1.1, 1.9), p = 0.59 **Among those with depressive disorder at baseline - Reduction in GDS-15 score Mean (SD)** **4** months: Control (n=20): 2.2 (3.87) Intervention (n=20): 4.3 (3.48) ES: 2.0, 95% CI (−0.6, 4.6), p = 0.12 **Among those who screened positive for depression at baseline - Number of QALWs in study period - EuroQol Mean (SD)** **4** months: Control (n=45) 8.4(5.47) Intervention (n=41) 9.9(3.96) ES: 1.0 95% CI (−0.1, 2.0) p = 0.07 **Among those with depression at baseline - Number of QALWs in study period - EuroQol Mean (SD)** **4** months: Control (n=20) 5.9 (5.70) Intervention (n=20) 8.6 (4.38) ES: mean difference (adjusted effect) = 1.8 95% CI (−0.1, 3.7) p = 0.06 **Summary:** • Participants in the intervention group were more satisfied with their care • No significant differences were found in depressive disorder, depression rating or quality adjusted life weeks • Effect sizes were higher in the subgroup with depressive disorder.
Study Details	**Population, Organization and Setting**	**Intervention + Comparison description**	**Major results and summary**

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
Authors: Dietrich et al 2004 **Location**: Five health care organizations (Clinics) across the U.S. **Quality of Execution**: Good (0 limitations) **Study design:** RCT **Funding:** John D. and Catherine T. MacArthur Foundation	**Target population**: **(N=987)** Patients aged 18 years or older who were starting or changing treatment for depression **Inclusion criteria**: Patients had to have a telephone, speak English, and meet criteria of the DSM-IV for MDD and dysthymia **Exclusion Criteria**: Patients were excluded if they were unobtainable for an evaluation interview within 14 days of index primary care visit, were pregnant, or had suicidal thoughts, schizophrenia, bipolar disorder, post-traumatic stress disorder, or a substance misuse disorder. **Demographics:** Intervention group (n=224) Mean age, Years (SD) = 41.8 (14.1) Female (%) = 83.5 Income above poverty level, N (%) = 172 (83.5) Race: Other= 16%; Not reported= 84% **Organization and Setting:** Outpatient setting (clinic) throughout the United States	**Intervention:** **(n =224)** *Three Component Model*: • Care manager called at 1, 4, and 8 week interval and every 4 weeks thereafter until remission. • Care manager supported self management (exercise or social activities) and made a 10 minute call to identify barriers to adherence, assist the patient to overcome them, and measure treatment response at 1-month intervals (with PHQ-9). • Primary care clinicians received a faxed progress report (PHQ-9 scores and care management) • Two final telephone calls are made to all patients during a 6-month continuation phase. **Care Providers:** **Case Manager**: Primary or Mental Health Nurse **PC Provider**: Psychiatrist **MHS**: Psychiatrist and mental health nurse (with PhD) **Collaborative Care Components:** patient education + support for self care+ provider feedback + oversight of providers + medication and psychotherapy + use of phones for case management **Usual Care:(n=181)** No description given.	**Depressive Symtpoms: HSCL-20: Mean (SD)** **Outcomes / Intervention / Usual care** Baseline 2.04 (0.66)(n=224) 1.98 (0.65) (n=181) 3 months 1.16 (0.80) (n=185) 1.29 (0.76) (n=152) 6 months 0.97 (0.80) (n=179) 1.09 (0.74) (n=146) **Outcomes / Between Group Difference (CI) / *p*** Baseline 0.15 (-.03 to .33) 0.105 3 months -0.16 (-.32 to -.002) 0.048 6 months -0.20 (-.39 to -.014) 0.036 **Response:** **Outcomes / Intervention / Usual care** 3 months 53% (97/183) 34.2 (52/152) 6 months 59.9% (106/177) 46.6 (68/146) **Outcomes / OR (CI) / *p*** 3 months 2.2 (1.4 to 3.4) .001 6 months 1.7 (1.1 to 2.7) .021 **Rate of Remission/Recovery: HSCL-20<0.5** **Outcomes / Intervention / Usual care** 3 months 26.2% (48/183) 16.5 (25/152) 6 months 37.3% (66/177) 26.7 (39/146) **Outcomes / OR (CI) / *p*** 3 months 2.1 (1.2 to 3.7) .018 6 months 1.9 (1.2 to 3.3) .014 **Antidepressants use:** **Baseline**: Intervention 95%(n=223), Usual care 88% (n=179) p=.23; **3** months: Intervention 88% (n=182), Usual care 85%(n=149), p=.48; **6** months: Intervention 79 %(n=177) Usual care 81 %(n=146), p=.74.

See Previous	See Previous	See Previous	**Satisfaction with care: Good to excellent** **3** months: Intervention 91% (n=179). Usual care 81%(n=147) p=.008; **6** months: Intervention (n=177) 90%, usual care 75% (n=146), p=.0003 **Summary** ▪ After 6 months, 60% (106/177) of the intervention vs. 47% (88/146) of usual care had responded to treatment (p < .05). ▪ The intervention group had a higher rate of remission (37%) vs. usual care (27%) (p < .05) ▪ The intervention group rated their depression care more favorably (as good or excellent) at 6 than the usual care group (p< .05). **Limitations** ▪ All patients were identified during routine care by clinicians and had already accepted their depression diagnosis as well as their treatment regimen (drugs or counseling). **Barriers** For telephone counseling, individuals must have working phones.

Authors:
Dobscha et al 2006

Location:
Veterans Affairs medical center in Portland, Oregon

Population:
Adults with depression

Design:
RCT group

Quality of Execution:
Fair (3 limitations)

Funding:
VA Health Services Research & Development
Service Project (Mental Health Initiative)

Target Population:
(N=5,434)
Patients from 41 of 43 eligible clinicians

Inclusion:
All patients of participating providers with
PHQ-9 score of 10 to 25 or Hopkins Symptoms Check list -20 (SCL-20) of 1 or greater.

Exclusion:
Treatment by mental health specialists previous 6 months; psychotic disorder, dementia, or bipolar disorder; or terminally ill

Demographics
Mean age (SD) = 57.3 (10.9). Female 6.9%; Male = 93.1%; White 49.2%;

Organization and Setting: VA, Rural and Urban Clinics

Intervention:
(n=189)
Depression decision Support: Care manager had central role:
- called each enrolled patient to provide education, explore barriers, emphasize adherence to the treatment, encouraged communication with clinicians
- invited to attend 2 hour group depression education program
-mailed supplemental materials
Depression decision support team
-reviewed records
-contacted clinicians their nurses to discuss treatment strategies
- offered consultation and facilitated referrals to psychiatrists.

Providers
Case Manager: Nurse
PC Provider: Primary care physician, nurse practitioner, physician assistant, fellows
MH Specialist: Psychiatrist, Nurse care manager

Collaborative Care Components:
Patient education + provider education + provider feedback and oversight + support for self care + medication & psychotherapy + use of telephones & related technology + technology manage caseload

Comparison:
Usual care (n=186):
Clinicians had access initial and follow-up PHQ-9 scores and did not receive notifications, reminders, or recommendations about scores from the depression decision support team. Usual care clinicians and their patients also had access to mental health services, including on-site mental health teams.

Depressive Symptoms:
SCL Mean (SD):
Baseline: Intervention group (n=189) 1.89 (0.69)
Usual care (n=186) 1.92 (0.68)
6 months
Intervention (n=163)1.54 (0.64)
Control (n=153) 1.58(0.74)
12 months:
Intervention (n=164) 1.63(0.77)
Usual care group(n=154) 1.62 (0.75)
PHQ-9 mean (SD):
Baseline: Usual Care(n=101): 13.59(5.1)
Intervention (n=106): 13.86(4.42)
6 months: Intervention (n=106) 11.26(5.67)
Usual care (n=101): 10.82(5.61)
9 months Intervention (n=106): 10.34(5.81)
Usual Care (n=101): 10.14(6.02).
Concordance:
12 months: Intervention (n=164) 72.1%,
Usual Care (n=154) 58.4%, p=0.019
Satisfaction with Care mean:
12 months: Intervention (n=164): 3.58
Usual Care (n=154): 3.16, p=0.002
Assessed for depression by clinician, % of patients
12 months: Intervention (n=164) 93.5
Usual care: (n=154) 77.4, p=0.003
Primary care clinician performed ≥1 follow up depression related action;
Intervention: (n=164) 84.8
Usual care: (n=154) 53.6,p= 0.000
Attended >3 appointments with mental health specialist
12 months: Intervention (n=164) 22.4%
Usual care (n=154) 16.5%, p=0.25
Attended >3 (median) primary care appointments
12 months:
Intervention (n=164) 39.2%
Usual care (n=154) 49.1%
p=0.106

Summary
- Intervention affected the recognition and treatment of depression and satisfaction
- It did not improve long term depression severity
- Did not improve health-related quality of life

Barriers:
- No phone prevented contact from case manager

Study Limitations:
- Very few patients received a call
- Only 13% met their psychiatrist
- Case manager did not have direct contact with patients

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
Authors: Dwight-Johnson et al 2005 **Location:** Los Angeles County/USC Oncology Program **Design:** RCT **Quality of Execution:** Fair (2 limitations) **Funding:** NCI; UCLA/NIMH Faculty Scholars Program - NIMH grant	**Target Population:** **(N= 55)** Women at least 3 months past initial diagnosis (to avoid recruiting women with adjustment disorder) with carcinoma of the cervix (FIGO IA–IVb) or breast cancer (stage I–IV) receiving care in the LAC/USC outpatient breast and gynecology clinics **Inclusion**: Women at least 3 months post-diagnosis of cervical or breast cancer; met criteria for major depression or dysthymia or had persistent Depressive Symptoms at both baseline and 1 month later. **Exclusion**: Palliative care, suicidal, bipolar/psychotic, gross cognitive impairment, drug/alcohol abuse, currently receiving psychotherapy or unable to speak Spanish or English. **Baseline Demographics:** major depression 21%, dysthymia 39%, comorbid major depression & dysthymia 32%, persistent Depressive Symptoms 32% Age mean (SD) = 47.7 yrs (11.9) Female = 100% Hispanic/Latino = 100% Low SES = 100% **Organization & Setting:** Educational, public health agency (LAC/USC outpatient breast and GYN clinics)	**Intervention**: Multifaceted Oncology Depression Program **(n=28)** Initial assessment by SW then contact every 2 wks. SW provides manualized psychotherapy (problem-solving therapy), supports antidepressant medication adherence and assists with systems navigation. Psychiatrist available for phone consult with oncologist and SW. Oncologists provided medication f/u for patients during clinic visits. Patients < 50% reduction in Depressive Symptoms after 8 sessions problem solving therapy or 8 wks med treatment evaluated by psychiatrist. Results fed back to oncologist and SW. Med f/u after consult provided by psychiatrist or oncologist as clinically indicated. **<u>Providers:</u>** **Case manager:** Social worker **PC Provider**: Oncologist **MHS:** Psychiatrist, Social worker **Collaborative Care Components:** Case management + patient education + support for self care + provider education & feedback + oversight/supervision of providers + medication + psychotherapy + use of telephones & technology (web based tracking system) **Usual Care:** **(n = 27)** Usual care, undefined.	**Depressive symptom: PHQ-9** **8** months: OR = 3.33, 95% CI (1.05, 10.59) **Response: PHQ-9** OR = 4.51, 95% CI(1.07, 18.93) **Quality of Life: Functional Assessment of Cancer Therapy Scale (total score):** Mean change group difference = 6.53 95% CI (-2.23, 15.29) **Summary**: • Patients receiving collaborative care more likely to show >= 50% improvement in Depressive Symptoms. **Limitations:** • Small sample size **Barriers**: • Too ill to attend • forgetting appointments • personal/family problems and responsibilities • Transportation • financial problems • stigma **Applicability:** • Hispanic, low SES, Females, dysthymia, major depression

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
Authors: Ell et al 2007 **Location:** California **Population:** 65 and older **Design:** RCT **Quality of Execution:** Fair quality of execution (4) **Funding:** NIMH	**Target Population:** **(N=11,859)** Geriatric patients 65 and older referred to home health care were screened to obtain a sample of 311. **Inclusion:** Patients diagnosed with clinically significant depression **Exclusion:** significant cognitive impairment, Reasons for not participating included: refusal to participate, declining health status, lack of agreement by referring primary care physician **Baseline Demographics**: 61% were over 75 years, 67% white, 75% female **Organization and Setting:** Managed care, community home health care service.	**Intervention:** **(n=155)** HOPE D: Collaborative care model that included system changes like screening for depression, antidepressant treatment algorithm, psychotherapy, problem solving therapy. **<u>Providers</u>** **Case Manager:** Nurse, nurse practioner, primary care physician, psychiatrist, psychologist, social worker **PC Provider:** Primary care physician **MHS:** Clinical depression specialist: psychiatric nurse, social worker, psychologist or psychiatrist. **Components:** Patient education + support for self-care + provider education + provider feedback + evidence-based guidelines + medication + psychotherapy + medication and psychotherapy + oversight/supervision of providers **Enhanced Usual Care:** **(n=156)** Routine depression screening and depression care by trained staff. PCP notified if patient had depression.	**Depressive Symptoms: PHQ-9** **4** months: Control (n=100) 75% intervention (n=97) 77% 95% CI (0.61-2.34), OR 1.20, p=0.6 **8** months control (n=85) 74% intervention (n=91) 79% 95% CI (0.74-3.2), OR 1.54, p=0.25 **12** months control (n=77) 78% intervention (n=81) 79% 95 % CI (0.52-2.4), OR 1.12, p=0.78 **Response: PHQ-9** **4** months: Control (n=100) 47% intervention (n=98) 41% 95% CI (0.45-1.4), OR 0.79, p=0.42 **8** months control (n=85) 39% intervention (n=90) 41% 95% CI (0.6-2.03), OR 1.10,p=0.75 **12** months control (n=78) 36% intervention (n=82) 44% 95 % CI (0.73-2.64),OR 1.39,p=0.31 **Response in group with major depression: PHQ-9** **4** months: control (n=100) 46% intervention (n=98) 49% 95% CI (0.66-2.11), OR 1.18, p=0.57 **8** months control (n=85) 55% intervention 47% (n=91) 47% 95% CI (.42-1.44),OR 0.77, p=0.43 **12** months control (n= 76) 51% Intervention (n=54) 41% 95% CI (.36-1.33), OR 0 .69,p=0.27 **Quality of life: SF-20** **4** months control (n=96) 55% intervention (n= 95) 65% 95% CI (0.75-2.76), OR 1.44, p=0.27 **8** months control (n=79) 66% intervention (n=90) 68% 95% (.58-2.32), OR 1.16, p=0.67 **12** months control (n=71) 68% intervention (n=80) 69% 95% CI (0.48-2.06), OR 1.0, p=0.99

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
See Previous	See Previous	See Previous	**Functional status: SF-20** **4** months Control (n=97) 35% intervention (n=95) 40% 95% CI (0.67-2.19), OR 1.21, p=0.52 **8** months control (n=79) 33% intervention (n=89) 36% 95% CI (0.6-2.19), OR 1.14, p=0.69 **12** months control (n=73) 40% intervention (n=80) 46% 95% CI (0.65-2.4), OR 1.25, p=0.5 73% received care at 12 months. **Summary:** • Screening for depression in adults over 65 and referral to a collaborative care intervention improved depression outcomes **Limitations**: • Contamination: control group treated. • Small sample (low power) • Low follow-up rate. • Did not implement adequate number of sessions. **Barriers**: • High attrition • High death rate
Authors: Ell et al 2008 **Location:** Los Angeles County and University of Southern California Medical Center **Population:** Adults with cancer and depression **Design:** RCT **Quality of Execution:** Good (1 limitation)	**Target Population:** **(N=2,551)** Patients from a medical oncology clinic of the LA county and University of Southern California Medical Center. **Inclusion:** Inclusion: >= 90 days after cancer diagnosis and receiving acute or follow-up care in oncology clinics. Age 18 yrs or older with one of two cardinal depression symptoms more than half of the days to nearly every day plus major depression (PHQ-9 >= 10) and/or two questions from the dysthymia. **Exclusion:** Acute suicidal ideation, advanced cancer	**Intervention: The Alleviating Depression Among Patients with Cancer (ADAPt-C) (n=242)** Intervention adapted the IMPACT stepped care model with cancer depression clinical specialists (CDCS), provided psychotherapy, community services navigation, a psychiatrist who supervised and prescribed antidepressants, personalized treatment plan that included patient antidepressants or problem solving preferences and a structured algorithm for stepped care management and protocol for Problem Solving Therapy and CDCS telephone maintenance/relapse	**Response: >50% reduction in score** **6** months: EUC (n=152) 41.4% Intervention (n=166): 49.4% OR=1.26, 95% CI (0.79, 2.02) **12** months : EUC (n=114):50% intervention (n=144):63.2% OR=1.98, 95% CI (1.16, 3.38) **Depressive Symptoms: 5 point PHQ-9 reduction (%)** **6** months**:** EUC (n=152) 50% Intervention (n=166) 61.5% OR=1.45, 95% CI (0.9, 2.33) **12** months: EUC (n=114): 59.7% Intervention (n=144): 72.2% OR=1.99, 95% CI (1.14, 3.5) **PHQ-9 Mean (SD)** **Baseline**: EUC (n=230): 12.79 (4.4) intervention (n=242): 13.17 (4.51)

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
Funding: National Cancer Institute, Office of Cancer Survivorship	or other condition that limited remaining life expectancy to less than 6 months, a score of 8 or greater on the Alcohol Use Disorders Identification Test alcohol assessment, recently used antipsychotic meds, self reported adaption of the Karnofsky Performance Status Scale score of 2 or less on an 11-pt scale representing severe functional impairment in CA pts and inability to speak English or Spanish. **Baseline Demographics:** Female: 83.5% Hispanics: 90.5% Low SES: 100% History of depression: 11.6% **Organization and Setting:** Educational institution and oncology clinic.	prevention and outcomes monitoring over 12 months. **Care Providers** **Case Manager:** Social Worker **PC Provider:** Oncologist **MHS:** Psychiatrist, Social Worker **Collaborative Care Components:** Patient education + support for self care+ provider education + oversight/supervision of providers + emphasis on the use of evidence-based guidelines + medication and/or psychotherapy + use of telephones+ use of technology to manage caseload. **Comparison: Enhanced Usual Care (EUC):** **(n=230)** Enhanced usual care (EUC) received standard oncology care and was given patient/family depression and cancer educational pamphlets and a listing of center/community financial, social services, transportation and childcare resources. The treating oncologist was informed of patients' depression status. Treating oncologists attended a depression treatment didactic session by study psychiatrist at the beginning of the study and yearly thereafter. Oncologists were free to prescribe antidepressants or to refer patients for any usually available mental health treatment and patients were free to see care in the community.	ES Adjusted Mean Difference: 0.37 95% CI (-.37, 1.12) **6** months: EUC (n=152):8.14 (4.19) intervention (n=166):7.34 (4.38) ES Adjusted Mean Difference: -0.8 95% CI (-1.7, 0.11) **12** months: EUC (n=114): 7.1 (4.16) intervention (n=144): 6.4 (4.32) ES Adjusted Mean Difference: -0.74 95% CI (-1.74, -0.27) **FACT-G functional well-being Mean (SD)** **Baseline**: EUC (n=230):11.37 (5.61) intervention (n=242):11.27 (5.76) ES Adjusted Mean Difference: -0.11 95% CI (-1.06, 0.84) **6** months: EUC (n=152): 12.45 (5.42) intervention (n=166): 13.65 (5.54) ES Adjusted Mean Difference: 1.2 95% CI (0.06, 2.34) **12** months: EUC (n=114): 12.97 (5.23) intervention (n=144): 14.31 (5.52) ES Adjusted Mean Difference: 1.34 95% CI (0.08, 2.59) **Quality of Life – SF12 Physical- Mean** **Baseline**: EUC (n=230): 36.28 (10.46) intervention (n=242): 37.59 (10.73) ES Adjusted Mean Difference: 1.3 95% CI (-0.46,3.07) **6** months: EUC (n=152): 38.87 (9.99) intervention (n=166): 40.2 (10.31) ES Adjusted Mean Difference: 1.31 95% CI (-0.79, 3.41) **12** months: EUC (n=114): 38.68 (9.72) intervention (n=144): 41.48 (10.08) ES Adjusted Mean Difference: 2.79 95% CI (0.49, 5.1) **Quality of Life – SF12 Mental- Mean** **Baseline**: EUC (n=240):33.97 (10.77) intervention (n=242):32.15 (11.05) ES Adjusted Mean Difference: -1.82 95% CI (-3.64, 0.01) **6** months: EUC (n=152):41.74 (10.36) intervention (n=166): 44.49 (10.69) ES Adjusted Mean Difference: 2.75

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
See Previous	See Previous	See Previous	95% CI (0.54, 4.96) **12** months: EUC (n=114): 43.5(10.25) intervention (n=144): 45.7 (10.56) ES Adjusted Mean Difference: 2.19 95% CI (-0.26-4.63) **Summary:** • Findings suggest that a collaborative care model adapted for low-income minority patients results in significant reduction in Depressive Symptoms and improvement in quality of life, particularly among women without advanced cancer. • Improvement likely attributable to increased access to care and choice of treatment as well as navigation services and attention to accessibility. • High rate of patients preferred Problem Solving Therapy over antidepressants. • Significant improvement required up to one year. **Limitations:** • Death, palliative care and attrition rates were high. • Cancer related symptoms, including pain, progressive disease over time and economic stresses associated with the study population may have contributed to ongoing Depressive Symptoms. **Economic:** • Authors estimated the mean cost of the ADAPt-C services to be $524 per intervention patient over 12 months including costs for the CDCS and patient navigation services, telephone and in-person supervision, evaluation and prescription by the study psychiatrist and educational brochures and relaxation tapes.

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
Authors: Fortney et al 2007 **Location:** 7 COBCs (community-based outpatient clinics) in a mostly rural area under South Central Veterans Healthcare Network, USA. **Population:** VA patients with depression **Design:** RCT **Quality of Execution:** Good (0 limitations) **Funding:** VA grants	**Target Population:** **(N=24,882)** CBOC depressed patients from one of 7 outpatient clinics with no on-site psychiatrist, but access to telepsychiatrists. **Inclusion:** All patients with depression that PCPs would be comfortable treating and those screening positive for depression with a score of at least 12 on PHQ-9. **Exclusion:** Those with severe mental illness, a diagnosis of schizophrenia, current suicide ideation, recent bereavement, pregnancy, a court-appointed guardian, substance dependence, bipolar disorder, cognitive impairment, or receiving specialty mental health treatment. **Baseline Demographics:** Mean Age (SD): 58.4 (12.2) Female: 6.2% Male: 93.8% White: 76.3% **Organization and Setting:** 7 small community-based VA outpatient clinics	**Intervention (TEAM):** **(n=177)** Stepped-care model of depression treatment for up to 12 months. Patients in either 'watchful waiting' or antidepressant treatment. Psychotherapy available to all in intervention group while case managers intervened via telephone. Pharmacists worked especially with those patients not responding to the initial antidepressant. **Providers** **Case Manager:** Nurse **PC Provider:** Primary care physician **MHS:** Psychiatrist, 2 telepsychiatrists **Collaborative Care Components:** Patient education + support for self-care + oversight/supervision of providers + emphasis on use of evidence-based guidelines + medication only + the use of telephones + the use of technology to manage caseload **Usual Care (treated control):** **(n=218)** Provider and patient education was offered to the treated control sites.	**Medication adherence:** **6** months: usual care (n=122):68.3% Intervention (n=107): 74.5% ES: OR=2.11, 95% CI(1.02-4.36),p=0.04 **12** months: usual care (n=133):66.2% intervention (n=110):76.4% ES: OR=2.72,95% CI(1.36-5.44),p=0.01 **Response:SCL-20** **6** months: usual care (n=200):15.5% intervention (n=160):23.8% ES: OR=1.94,95% CI(1.09-3.45),p=0.02 **12** months: usual care (n=189): 27.0% intervention (n=146): 36.3% ES: OR=1.42,95% CI(0.85-2.37),p=0.18 **Rate of remission/recovery:SCL-20 < 0.5:** **6** months: usual care (n=200):8.5% intervention (n=160):13.8% ES: OR=1.79,95% CI(0.82-3.88),p=0.14 **12** months: usual care (n=189):12.7% intervention (n=146):24.0% ES: OR=2.39, 95% CI(1.13-5.02),p=0.02 **Satisfaction with care: Depression Health Benefits Inventory** **6** months: usual care (n=200):58.1% intervention (n=160):71.4% ES: OR=1.83,95% CI(1.14-2.93),p=0.01 **12** months: usual care (n=189):61.4% intervention (n=146):70.9% ES: OR=1.71,95% CI(1.06-2.77),p=0.03 **Functional Status: SF-12 V PCS Mean** **6** months: usual care (n=200): -0.09(9.42) intervention (n=160): 0.07(9.27) ES: mean difference=0.31,95% CI(-1.61-2.24),p=0.75 **12** months: usual care (n=189): -1.38 (10.31) intervention (n=146): -0.34(10.17) ES: mean difference=1.09, 95% CI(-0.94-3.12),p=0.29

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
See Previous	See Previous	See Previous	**Functional Status: SF-12 V MCS Mean** **6** months: usual care (n=200):2.69(12.87) intervention (n=160): 5.67(14.03) ES: mean difference=2.46, 95% CI(-0.20-5.12),p=0.07 **12** months: usual care (n=189): 4.7(14.55) intervention (n=146): 9.4(15.18) ES: mean difference=3.9,95% CI(0.97-6.83),p=0.01 **Summary:** • Telemedicine-based collaborative care patients more likely to be adherent to medications at 6 and 12 months • Intervention patients more likely to respond to treatment by 6 months and; • Intervention patients more likely to remit by 12 months • Intervention patents reported larger gains in mental health status and health-related- quality of life and satisfaction with care **Limitations:** • Findings do not generalize to public sector • High level of co-morbidities and treatment resistant that kept remission/recovery rates relatively low.
Authors: Gallo, J. J., et al., 2007 Bogner, H. R., 2007 **Location:** New York, NY, and Philadelphia and Pittsburgh, PA. **Population:** Patients $\geq$ 60 **Design:** RCT	**Target population:** **(N= 21,185)** Patients were randomly selected from 20 primary care practices with individual patients followed for 2 years from May 1999 to August 2001 **Inclusion:** Age >= 60 yrs, Mini Mental State Exam sore >= 18 and English speaking, score > 20 on Centers for Epidemiologic Studies Depression scale. Patents from a 5% sample with lower scores also invited for assessment of false negative results on screening. Scores less than	**Intervention:** **(n= 320)** PROSPECT, included • educational sessions for primary care physicians • education for patients' families, and a depression care manager who worked within the practice • the care manager implemented the intervention by reviewing patients' depression status, medical history, and medication use and subsequently worked with the primary care physician to recommend treatment according to	**Mortality Rate: 52.8 months** Intervention (n=260); 18.8% Usual Care (n=224); 19.7% ES**:** (Adjusted Hazard Ratio): 0.67 95% CI (0.44-1.0) **Mortality Rate for all patients with major depression: 52.8 months** Intervention (n=175); 17.9 Usual Care (n=144): 20.8 ES: (Adjusted Hazard Ratio): 0.55 95% CI (0.36-0.84) **Mortality Rate for all patients with minor depression: 52.8 months** Intervention (n=85): 19.8 Usual Care (n=80): 17.5

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
Quality of Execution: Good (1 limitation) **Funding:** National Institute of Mental Health, Forest Labs and John D Hartford Foundation	20 and positive response to questions about previous depression. **Exclusion:** Those who did not meet inclusion criteria **Baseline Demographics:** Mean Age (SD): 71 (7.8) Women, n(%): 221 (69) Black/ African American (%): 26.5 White (%): 69.7 Hispanic/Latino(%): 4.3 Asian (%): 0.7 **Organization and Setting:** Educational institution, community based, clinic, and primary care centers	standard guidelines **Providers:** **Case Manager:** Nurse, Psychologist, and social worker **PC Provider:** Primary Care Physician **MHS:** Nurse, Psychiatrist, Psychologist, and Social Worker **Collaborative Care Components:** Provider education + Provider Feedback+ Medication Alone+ Oversight/Supervision of Providers+ Emphasis on the use of evidence-based guidelines/protocols + Psychotherapy only+ Medication and Psychotherapy+ The use of telephones and related-technology in the intervention **Usual care:** **(n=279)** Patients received • educational sessions for primary care physicians • notification of the depression status of their patients • no specific recommendations were given to physicians about individual patients, except for psychiatric emergencies	ES: (Adjusted Hazard Ratio): 0.97 95% CI (0.49-1.92) **Mortality for all patients with no depression: Adjusted Hazard Ratio 60** months Intervention (n=289): HR (adjusted): 17.9 Usual Care (n=338):HR(adjusted) : 16.5 ES value: 1.14, 95% CI (0.84-1.53) **Mortality Intervention Practice: :Adjusted Hazard Ratio: 60** month F/U Intervention (n=609),Usual Care (n=617):ES value: 1.14, 95% CI (0.84-1.53) **Mortality: number died: Adjusted Hazard Ratio: 60** month F/U Intervention (n=609), Usual Care (n=617):ES value: 0.59, 95% CI (0.36-0.95) **Summary:** • Patients who received depression care management were less likely to die over a 5 year period than usual care patients **Limitations:** ▪ The reduction in death seemed to be almost entirely attributable to a reduction in deaths due to cancer. ▪ Misclassification in cause of death derived from death certificates may be substantial .Misclassification of depression status can result in misleading inference. ▪ Depression and other mental health problems may be underestimated in the elderly because stigma leads many elderly persons to minimize reports of sadness or anhedonia and to attribute other symptoms of depression to physical health causes. ▪ Misclassification of vital status was also a potential limitation of our study findings. **Additional Benefit:** Reduction in death due to cancer (but may be deaths due to misclassification of cause of death)

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
Authors: Gensichen, J., et al. 2008 **Location:** Germany **Population:** Adults (18-80 years) with major depression **Design:** RCT **Quality of Execution:** Fair (2 limitations) **Funding:** German Ministry of Education and Research	**Target population:** **(N= 3051)** Adults with depression from 74 practices. 626 patients enrolled in the study; 310 intervention recipients, and 316 control groups. **Inclusion:** For practices: acceptance of all major health plans and that provides primary care service For patients: major depression with indication of anti-depressive treatment, 18 to 80 years, access to a private telephone, ability to give informed consent and communicate in German **Exclusion:** Confirmed pregnancy, severe alcohol or illicit drug consumption, acute suicidal ideation **Demographics:** Mean age (SD) = 51.7 (14.05) Female, n (%) = 200 (74.9) **Organization and Setting:** Managed care/HMO/PPO /EPO+ Clinic	**Intervention:** **(n= 310)** Case management based on the chronic care model. Uses proactive support that includes: structured telephone interview to monitor Depressive Symptoms, support for the adherence to medication, feedback to the family physician by a trained health care assistant from each practice **Providers** **Case Manager:** Health care assistant **PC Provider**: Primary Care Physician **MHS**: Psychiatrist **Collaborative Care Components**: Patient education + Support for self-care + Provider education+ Provider feedback + Emphasis on the use of evidence-based guidelines/protocols + Medication only + Medication and Psychotherapy + The use of telephones and related-technology in the intervention. **Control group: (n= 316)** Physician in usual care group were trained on evidence-based depression treatment guidelines.	**Depressive Symptoms:PHQ-9 Mean** **Baseline:** Intervention (n=267) 17.43 (3.6) Control group (n= 288) 17.17 (3.51) ES = 0.26, p= 0.57 **12** months: Intervention (n=267) 10.72 (5.43) Control group(n= 288) 12.13 (5.60) ES (mean difference) = -1.41 95% CI (-2.29 to -.33), p= 0.014 **Response:** **12** months: Intervention (n=267) 41.2% Control group(n=288) 27.3% ES (mean difference) =13.9, 95% CI (4.8-22.9), p= 0.003 **Rate of remission/recovery: PHQ- 9 <5, (% of people)** **12** months: Intervention (n=267) 15.7% Control group(n= 288) 10.7% ES (mean difference) =5, 95% CI (-0.3 to10.4), p= 0.057 **Quality of Life: SF36 Physical -Mean** **Baseline:** Intervention (n=267) 40.34 (10.92) Control group(n= 288) 40.88 (11.46) ES (mean difference) = -0.54, p= 0.64 **12** months: Intervention (n=201) 41.49 (11.4) Control group(n= 224) 43.23 (12.09) ES(mean difference) = -1.77; 95% CI (-4.29 to .75), p= 0.170 **Quality of Life:SF36 Mental - Mean** **Baseline**: Intervention (n=267) 28.35 (9.65) Control group(n= 288) 27.56 (10.74) ES(mean difference) = 0.79, p= 0.59 **12** months: Intervention (n=201) 35.5 (12.39) Control group (n= 224) 33.24 (12.57) ES (mean difference) = 2.45; 95% CI (- .01 to 4.90), p= 0.05 **Adherence to treatment: Modified Morisky score: Mean (SD)** **12** months: Intervention (n=142) 2.70 (0.63), Control group(n= 158) 2.53 (.83)

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
See Previous	See Previous	See Previous	ES (mean difference) = 0.17; 95% CI (0.01 to 0.34),p= 0.042 **EuroQol-5D :Mean (SD)** **Baseline**: Intervention (n=267) 45.82(17.39), Control (n=288) 46.19 (20.32) ES (mean difference) = -.37 p=.80; **12** months: Intervention (n=267) 55.30 (20.55), Control (n=288) 53.86 (21.76). ES (mean difference) = 1.44, p=0.52. **Summary:** • An intervention based in primary care may be effective in reducing depression symptoms and improve the process of care for patients with major depression **Limitations:** • Selection bias • Some eligible patients with depression may have been left out • Enrolled were slightly more depressed than non-enrolled • More than half of patients were unemployed (indicative of lower socioeconomic status) • Most had 1 or more chronic diseases.
Authors: Joubert et al 2008 **Location:** Melbourne, Australia **Population:** Stroke Survivors **Design:** RCT **Quality of Execution:** Fair (2 limitations)	**Target Population:** **(N=233)** Depressed stroke survivors aged 20 and over that were admitted to hospital between 200-2004 **Inclusion:** Patients who were aged 20 years and older and who were admitted with transient ischemic attack (TIA) or completed stroke (cerebral infarction or hemorrhage), as confirmed by CT scan, were considered for inclusion. **Exclusion:**	**Integrated Care:(n=123)** Patients received a structured model of care that linked specialist stroke services with ongoing general practice care. A week before each GP visit, a semi-structured telephone interview was conducted. The information collected from this call was faxed to the GP prior to their pre-booked consultation **Care Providers** **Case Manager:** Study Coordinator **PC Provider:** PCP	**Depressive Symptoms: PHQ-9 Median** **12** months: usual care (n=95):5 (2-8) intervention (n=91):3 (0-6) ES: Z-test = -2.78, p=0.006 **Depressive Symptoms: PHQ-9 %** **12** months: usual care (n=95): 55% intervention (n=91): 33% ES: OR = 1.48, p=0.003 **Summary:** • Integrated care group exhibited significantly fewer Depressive Symptoms than controls at 12 months • Percentage of those in treatment group with Depressive Symptoms less than

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
Funding: Commonwealth of Australia General Practice Evaluation Program grant and by the Lord Mayor's Charitable Fund - Eldon and Anne Foote Trust	a) Were not returning to their GPs for management, (b) were discharged to a nursing home, (c) had serious co-morbidities or cognitive impairment that precluded them from completing the study, (d) were non-English speaking (e) died while in hospital, (f) were notably aphasic, or (g) lived more than 2 h away by car. **Baseline Demographics:** Mean Age (SD): 63.4 (13.7) Female: 42% Male: 58% **Organization and Setting:** Royal Melbourne and Western General Hospitals	**MHS:** PCP **Collaborative Care Components:** Patient education + provider education + provider feedback + support for self care + emphasis on the use of evidence-based guidelines/protocols + medication only + the use of telephones in intervention + Use of telephones to manage caseload **Standard Care:(n=110)** The frequency of visits, the guidelines adopted, and the actions taken were all left up to the discretion of the GP. These patients were followed up 12 months post-discharge.	control group (33 vs. 55%) • Major associates of being depressed at 12 months were group allocation and physical disability **Limitations:** • Half of patients did not have MRI scans (CT scans had to be relied on for radiological information) • Less than 80% completion rate
Authors: Ludman et al 2007 **Location:** Washington State, US **Population:** Patients aged 18 and older from the Central Behavioral Health Clinic of Group Health Cooperative (GHC) **Design:** RCT **Quality of Execution**: Good (1 limitations) **Implementer and Funder:** NIMH	**Target population:** **(N=1,700)** Eligible persons included 1,700 (20% of the total) patients treated for chronic or persistent depression in a clinic (part of an HMO). **Inclusion:** Patients 18 and older with persistent symptoms of depression, at least six months of antidepressant treatment, one major depressive episode in the past two years (diagnosed by a structured interview) and a history of either recurrent major depression (more than three episodes in the past five years) or dysthymia. **Exclusion:** History of mania or hypomania, cognitive impairment, near-terminal medical illness, intent to leave GHC within the next 12 months, and emergent clinical problems (such as harm to oneself).	**Intervention: (n=26)** Telephone Monitoring and Care Management: monitor treatment quality and treatment adherence, decision support through treatment algorithms and appropriate specialty consultation, practice redesign to ensure appropriate follow-up care. The care manager also provided any needed outreach and care coordination, including facilitation of follow-up care. **Providers** **Case Manager:** Master's level counselor **PC Provider:** Primary Care Physician **MHS:** Psychiatrist and Psychologist **Collaborative Care Components:** Patient education +Support for self-care+ Provider education+ Provider feedback+ Oversight/Supervision of	**Depressive Symptoms: SCL 20: Mean** **Baseline:** TCM (n=26): 1.61 (.50) Usual Care (n=26): 0.66 (.54) ES: mean difference = -0.05 **3** months: TCM (n=23): 1.65 (.68) Usual Care (n=23): 1.21 (.58) ES: mean difference = 0.44 **6** months: TCM (n=22): 1.42(.55) Usual Care (n=23): 1.37(.77) ES: mean difference = 0.05 **9** months: TCM (n=20): 1.18(.60) Usual Care (n=24): 1.37(.74) ES: mean difference = -0.19 **12** months**:** TCM (n=20): 1.19(.68) Usual Care (n=23):1.19(.65) ES: mean difference = 0 **Satisfaction with care: Patients Satisfaction Index (change in %)** **12** months: TCM (n=20): -2%

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
See Previous	**Baseline demographics:** Mean age(SD): 49.6 (12.5) Female: 69% White: 92% Not reported:8% **Organization and Setting:** Managed Care/HMO, clinic	Providers + Emphasis on the use of evidence-based guidelines/protocols + Medication and Psychotherapy + The use of telephones and related-technology in the intervention + Use of technology to manage caseload **Usual Care: (n=26)** Participants could use any primary care or specialty services normally available.	Usual Care (n=23): 6% **Having adequate dosages for both 6-month periods: (<u>%</u>)** TCM (n=12): 46%, Control (n=13): 50%, ES: -4 **Summary** No significant differences in clinical outcomes were reported. However, this pilot study demonstrated the feasibility and acceptability of a telephone care management program. **Limitation** Small sample, one HMO limits applicability. **Barrier** Significant resources required, limited training of professionals, and expertise available in most health care settings. **Research Gap**: Utility of content that teaches how to deal with chronic depression.
Authors: Ludman et al 2007 (1) TCM professional vs Usual Care **Location:** Washington State, US **Population:** Patients aged 18 and older from the Central Behavioral Health Clinic of Group Health Cooperative (GHC) **Design:** RCT **Quality of Execution**: Good (1 limitations)	**Target population**: **(N=1,700)** Eligible persons included 1,700 (20% of the total) patients treated for chronic or persistent depression in a clinic (part of an HMO). **Inclusion:** Patients 18 and older with persistent symptoms of depression, at least six months of antidepressant treatment, one major depressive episode in the past two years (diagnosed by a structured interview) and a history of either recurrent major depression (more than three episodes in the past five years) or dysthymia. **Exclusion:** History of mania or hypomania,	**Intervention: (n=26)** Professional-led psychotherapy group program: Combined telephone care management and psychologist delivered group intervention (ten consecutive weeks, followed by six months of twice-monthly "booster" sessions). **<u>Providers</u>** **Case Manager:** Master's level counselor **PC Provider:** Primary Care Physician **MHS:** Psychiatrist and Psychologist **Collaborative Care Components:** Patient education +Support for self-care+	**Depressive Symptoms:** **SCL 20: <u>Mean (SD)</u>** **Baseline:** Intervention (n=26): 1.72 (.56) Usual Care (n=26): 1.66 (.54),ES = 0.06 **3** months: Intervention (n=26): 1.44 (.66) Usual Care (n=23): 1.21 (.58),ES = 0.23 **6** months: Intervention (n=25): 1.24(.66) Usual Care (n=23): 1.37(.77),ES= -0.13 **9** months: Intervention (n=22): 1.13(.71) Usual Care (n=24): 1.37(.74),ES= -0.24 **12** months: Intervention (n=21): 1.24(.95) Usual Care (n=23): 1.19(.65),ES= 0.05 **Satisfaction with care:** **Patients Satisfaction Index** **12** months: Intervention (n=24): 18% Usual Care (n=24):6 %, ES: 12

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
Funding: NIMH	cognitive impairment, near-terminal medical illness, intent to leave GHC within the next 12 months, and emergent clinical problems (such as harm to oneself). **Baseline demographics:** Mean age(SD): 50.1(15.2) Female: 77% White: 81% Not reported:19% **Organization and Setting:** Managed Care/HMO, clinic	+ Provider education+ Oversight/Supervision of Providers + Emphasis on the use of evidence-based guidelines/protocols + Medication and Psychotherapy + The use of telephones and related-technology in the intervention + Use of technology to manage caseload **Usual Care: (n= 26)** Participants were free to use any primary care or specialty services normally available.	**Summary** • No significant differences in clinical outcomes were reported. However, this pilot study demonstrated the feasibility and acceptability of a telephone care management program • Change in treatment satisfaction was greater for the intervention group
Authors: Ludman et al 2007 (2) TCM-Peer vs. Usual Care **Location:** Washington State, US **Population:** Patients aged 18 and older from the Central Behavioral Health Clinic of Group Health Cooperative (GHC) **Design:** RCT **Quality of Execution**: Good (1 limitations) **Funding:** NIMH	**Target population:(N=1,700)** Eligible persons included 1,700 (20% of the total) patients treated for chronic or persistent depression in a clinic (part of an HMO). **Inclusion:** Patients 18 and older with persistent symptoms of depression, at least six months of antidepressant treatment, one major depressive episode in the past two years (diagnosed by a structured interview) and a history of either recurrent major depression (more than three episodes in the past five years) or dysthymia. **Exclusion:** History of mania or hypomania, cognitive impairment, near-terminal medical illness, intent to leave GHC within the next 12 months, and emergent clinical problems (such as harm to oneself). **Baseline demographics:** Mean age(SD): 50.4(10.7) Female:69%	**Intervention: (n=26)** Peer-led chronic-disease self-management program: Telephone care management and a peer led six-week workshop including disease-related goal setting and problem solving, cognitive symptom management, communication skills, medication management, development of a patient-physician partnership, and use of community resources. **Case Manager:** Master's level counselor **PC Provider:** Primary Care Physician **MHS:** Psychiatrist and Psychologist **Collaborative Care Components:** Patient education +Support for self-care+ Provider education+ Oversight/Supervision of Providers + Emphasis on the use of evidence-based guidelines/protocols + Medication and Psychotherapy + The use of telephones and related-	**Depressive Symptoms:** **SCL20: <u>Mean (SD)</u>** **Baseline:** Intervention (n=26): 1.63 (.68) Usual Care (n=26): 1.66 (.54) ES: mean difference = -0.03 **3** months: Intervention (n=22): 1.22 (.54) Usual Care (n=23): 1.21 (.58) ES: mean difference = -0.01 **6** months: Intervention (n=21): 1.22(.85) Usual Care (n=23): 1.37(.77) ES: mean difference = -0.15 **9** months: Intervention (n=22): 1.19(.79) Usual Care (n=24): 1.37(.74) ES: mean difference = -0.18 **12** months: Intervention (n=22): 1.24(.95) Usual Care (n=23): 1.19(.65) ES: mean difference = 0.05 **Satisfaction with care:** **Patients Satisfaction Index <u>(change in %)</u>** **12** months: Intervention (n=22): 9% Usual Care (n=24):6 %

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
See Previous	White:92% Not reported:8% **Organization and Setting:** Managed Care/HMO, clinic	technology in the intervention + Use of technology to manage caseload **Usual Care: (n= 26)** Participants could use any primary care or specialty services normally available	**Summary** No significant differences in clinical outcomes were reported. However, this pilot study demonstrated the feasibility and acceptability of a telephone care management program.
Authors: McMahon et al 2007 **Location:** North-east England **Population:** Depressed UK primary care NHS patients **Design:** RCT (individual) **Quality of Execution:** Fair (3 limitations) **Funding:** Independent investigator -led award from Wyeth Labs	**Target Population: (N=1,073)** Patients with ICD-10 depressive illness suffering from moderate to severe depression with a score of at least 14 on HDRS17 (not in remission) who had failed to achieve remission of symptoms despite a minimum of an 8-week trial with an antidepressant. **Inclusion:** Age 18-65 who were currently on an antidepressant and had been for at least 8 weeks. **Exclusion:** Secondary care mental health involvement, personality disorder, organic brain disorder, alcohol or drug dependency, pregnancy, or learning disability **Baseline Demographics:** Age range: 18-65 History of depression: 100% **Organization and Setting:** 3 primary care practices in the North East of England	**Intervention:(n=30)** In-person or telephone case management of six contacts over a 16 week period from graduate MH workers in addition to treatment as usual. Medication change directed by case manager and GP collaboration with minimal supportive counseling by GP. **Care Providers** **Case Manager:** Graduate MH worker **PC Provider:** Primary care physician **MHS:** Psychiatrist, graduate MH worker **Collaborative Care Components:** Provider education +oversight/supervision of providers + medication only + the use of telephones **Usual Care:(n=32)** GP usual treatment only	**Depressive Symptoms: BDI Mean:** **Baseline:** usual care (n=23):26.4(10.5) Intervention (n=22): 26.2(11.9) **3** months: usual care (n=23): 20.5(12.7) Intervention (n=22): 19.2(11.3) **6** months: usual care (n=23): 18.3(14.0) intervention (n=22): 15.1(10.9) ES: mixed-design ANOVA=1.0,p=0.32 Difference in BDI scores over time:(f[1,43] =22.1, p = < 0.01 **Depressive Symptoms: HDRS17 Mean:** **Baseline:** usual care (n=23):18.1(4.0) Intervention (n=22):19.1(4.7) **3** months: usual care (n=23):12.3(5.7) Intervention (n=22): 12.9(6.9) **6** months: usual care (n=23):11.3(7.4) intervention (n=22):10.9(7.4) **Depressive Symptoms: MADRS Mean:** **Baseline:** usual care (n=23):24.3(6.9) Intervention (n=22):26.8(6.6) **3** months: usual care (n=23):16.8(10.3) Intervention (n=22): 16.5(10.5) **6** months: usual care (n=23):14.3(12.4) intervention (n=22):13.2(12.0) **Functional status: SASS Mean:** **Baseline:** usual care (n=23): 29.0(9.9) Intervention (n=22): 28.3(10.2) **3** months: usual care (n=23): 30.5(9.3) Intervention (n=22): 30.5(11.6) **6** months: usual care (n=23): 29.9(10.5) intervention (n=22):32.6(12.4)

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
See Previous	See Previous	See Previous	**Satisfaction with care: CSQ <u>Mean:</u>** **6** months: usual care (n=23): 15(1.66) intervention (n=22): 14(1.61) **Summary:** • No significant difference between two treatment arms • Client satisfaction high in both groups **Limitations:** • No study population statistics reported • Less than 80% of study participants completed study • Small sample size • Contamination; both groups received an alternative antidepressant **Ethical issues:** • No formal psychotherapeutic techniques were permitted
Authors: Oslin et al 2004 **Location:** Loma Linda, Long Beach, West Los Angeles, Bay Pines, Miami, Tampa, Albany, Brockton, and West Haven VAMCs **Population:** Older persons **Design:** RCT **Quality of Execution:** Fair (3 limitations) **Funder:** NIMH and mental Illness research center	**Target population:** **(N=2,637)** New admissions older than 59 years admitted for a medical/surgical problem to one of 9 VAMCs **Inclusion:** Significant anxiety symptoms, Depressive Symptoms; and/or at-risk drinking **Exclusion:** Receiving mental health treatment. Dementia or out of the hospital catchment area. And if not community dwelling (e.g., homeless or in an institutional setting), had spinal cord injuries, or in chemotherapy) **Baseline Demographics:** Mean Age (SD): 69.7 (6.5); Male 96.6%; White 69.5%,	**Intervention (UPBEAT):** **(n=1313)** Patient had a care coordinator that worked with team of staff from geropsychiatry, geropsychology, social work, and/or nursing. Coordinator conducted a clinical assessment, engaged patients in treatment, and helped them to adhere to treatment plan. **<u>Care Providers</u>** **Case Manager:** care coordinator **PC Provider:** unknown **MHS:** Psychiatrist, psychologist, other **Collaborative Care Components:** Patient education + support for self	**Depressive Symptoms: SF-36 MCS <u>Mean (SD)</u>** **Baseline**: UpBeat (n=1086) 41.64 (10.36) UC: (n=1102) 41.54 (9.79) **6** months: UpBeat (n=625) 46.92 (11.19) UC: (n=671) 47.01 (11.09) **12** months: UpBeat (n=593) 47.4 (11.33) UC: (n=598) 47.65 (10.68) **24** months: UpBeat (n=417) 47.65 (10.64) **Mental Health Inventory: <u>Mean (SD)</u>** **Baseline:** UpBeat (n=1099) 8.8 (1.98), UC (n=1112) 8.6 (1.8) **6** months UpBeat (n=633) 7.17 (2.57), UC (n=678) 7.34 (2.42), ES: 0.3; **12** months: UpBeat (n=593) 7.16 (2.45), UC (n=600) 7.2 (2.41), ES: -0.13; **24** months Upbeat (n=420) 7.24 (2.34), UC (n=449) 7.25 (2.48), ES: -0.03 **Summary**: • No differences between UPBEAT and

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
See Previous	**Organization and Setting:** Veterans Administration; Clinics and hospitals	care + provider education+ provider feedback + oversight/supervision+ emphasis on evidence based Guidelines + medication & psychotherapy + the use of telephones and related technology in the intervention. **Comparison (n = 1324)** Usual care received services offered at the VA, this may have included referral to mental health and/or pharmacological Treatment (but not the specialized UPBEAT care).	• UC on reduction of symptoms or functional outcomes at any follow-up point **Limitations:** • Engagement and adherence to treatment potentially affected the models **Barriers:** • Transportation • having to make several telephone calls • difficult insurance paperwork
Authors: Reiss-Brennan, B., et al. 2009 Reiss-Brennan, B., et al. 2006 Reiss-Brennan, B., et al. 2003 **Location:** Utah and Idaho **Population:** Depressed adults between 18-63 **Design:** Retrospective cohort **Quality of Execution:** Fair (3 limitations) **Funding:** Intermountain Healthcare Medical Group	**Target Population:** **(N=18,587)** Patients culled from depression registry who were diagnosed for the first time with depression between 2004 and 2006 **Inclusion:** Patients identified by insurance claims with either of two billed diagnoses or a billed diagnosis of depression with a filled antidepressant prescription within the same 365-day window, each patient be between 18 and 63, covered under the same group insurance level throughout study period **Exclusion:** Diagnosis for a mental health condition in the pre-period, a development of a medical comorbidity like diabetes, asthma, chronic heart failure, coronary artery disease or cancer in the post period. **Baseline Demographics:** Mean age: 39 years % Female: 66	**Intervention (Bryner): (n=796)** Care manager responsible for education and follow up and communication with the MHI team, MHI APRN/psychiatrist provides onsite and phone consultation to the integrated teams, MHI licensed therapist provides brief solution focused psychotherapy, referral to MH specialists from PCP if necessary. **Providers** **Case Manager:** Nurse, psychiatrist **PC Provider:** Nurse practitioner, PCP **MHS:** Nurse, psychiatrist, social worker **Collaborative Care Components:** Patient education + support for self care + provider education + provider feedback + emphasis on the use of evidence-based guidelines + medication and psychotherapy + use of telephones to manage caseloads + use of technology in intervention	**Screening: Rate of detection for adults** **Baseline:** central region (usual care n=2,923): 20%, Bryner (n=777): 21% **12** months central region (usual care n=2,923): 22%, Bryner (n=777): 24% **24** months: central region (usual care n=2,923): 24.5%, Bryner (n=777): 23% **36** months: central region (usual care n=2,923): 25%, Bryner (n=777): 26% **48** months: central region (usual care n=2,923): 27%, Bryner (n=777): 26.8% **60** months: central region (usual care n=2,923): 27.5%, Bryner (n=777): 30% **72** months: central region (usual care n=2,923):27%, Bryner (n=777): 30.5% **Screening: Rate of detection for children** **Baseline:** central region (usual care n=744): 1.5%, Bryner (n=577): 1.8% **12** months central region (usual care n=744): 1%, Bryner (n=577): 2.2% **24** months: central region (usual care n=744): 1.4%, Bryner (n=577): 3.6% **36** months: central region (usual care n=744): 3.2%, Bryner (n=577): 4.3% **48** months: central region (usual care n=744): 3.7%, Bryner (n=577): 5.2%

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
See Previous	**Organization and Setting:** 5 Mental health Integration and 8 non-MHI Intermountain Healthcare hospital facilities	**Usual Care:(n=429)** Included those patients treated in "matched" (based on patient volume, practice size, urban setting) non-MHI clinics	**60** months: central region (usual care n=744): 4.2%, Bryner (n=577): 6.4% **72** months: central region (usual care n=744): 5.8%, Bryner (n=577): 7% **Satisfaction with care: Likert scale** **6** months: usual care (n=26): 85% Bryner (n=41): 73% **Summary:** • Patients in MHI clinics were 54% less likely to use high order ER services **Limitations:** • Cannot generalize to non-commercially insured population due to confounding • contamination among groups **Economic Evaluation:** • Those in an MHI clinic have a lower rate of growth in average per patient allowed charges for all service lines except outpatient psychiatry/counseling and filled prescriptions for antidepressants
Authors: Richards et al 2008 **Location:** Northern UK **Population:** Depressed adults **Design:** RCT (Cluster) **Quality of Execution:** Fair (2 limitations) **Funding:** Public - MRC grant, International Standard RCT	**Target Population: 24 practices (N=176)** General practice sites were randomly allocated to treatment or cluster control conditions from four primary-care trusts (PCT) in the northern UK, stratified by PCT. **Inclusion:** Recruited patients from primary care aged >18 years diagnosed as depressed by a GP, confirmed by a score of ≥ 5 on the depression section of the Standard Clinical Interview for DSM-IV. We only included patients with a newly identified episode of major depression, defined as a current episode of GP-initiated treatment of not more than 1 month's duration.	**Intervention: (n=41)** Experimental, UK-specific collaborative care model. Case manager worked with the GP under weekly telephone supervision from specialist mental health medical and psychological therapies clinicians. Medication support and behavioral activation – a structured cognitive-behaviorally based, depression-specific psychological intervention which has equivalent efficacy to other more complex CBT interventions. Ten scheduled contacts over a period of 3 months, predominantly using the telephone. Written feedback to GPs	**Depressive Symptoms: PHQ-9 <u>Mean:</u>** **Baseline**: cluster control usual care (n=35): 18.17 (5.58) intervention (n=41): 17.51 (4.90) **3** months: cluster control usual care (n=27): 13.8 (8.32) intervention (n=35): 8.8 (7.02) ES: mean difference/pooled SD=0.63 95% CI (1.07-0.18) **Quality of Life: CORE-OM <u>Mean:</u>** **Baseline**: cluster control usual care (n=35): 2.12 (0.55) Intervention (n=41): 2.02 (0.58) **3** months: usual care cluster control (n=32): 2.12 (0.55) intervention (n=39): 2.02 (0.58) ES: mean difference/pooled SD= 0.45 95% CI (1.01 – 0.11)

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
See Previous	**Exclusion:** Patients with post-natal, bereavement or physical causes for their depression. Patients reporting active suicidal plans and those with a primary drug or alcohol dependence. **Baseline Demographics:** Mean Age (SD): 42.63(12.33) Female: 78% Male: 22% White:93% Other: 7% **Organization and Setting:** 4 primary care trusts (24 primary care practices) in northern UK	**Care Providers** **Case Manager:** Nurse, Counselor, Occupational Therapist; Graduate primary-care mental health workers. **PC Provider:** Primary care physician **MHS:** Psychiatrist, psychologist **Collaborative Care Components:** Support for self-care + provider feedback + oversight/supervision of providers + medication and psychotherapy + the use of telephones + the use of technology to manage caseload **Usual Care (patient-randomized control):(n=38)** Usual care management of depression by patients' GPs, including access to secondary services, and to best practice guidance published in local NHS depression protocols in the trial localities. **Usual Care cluster-randomized control): (n=35)** Usual care management of depression by patients' GPs, including access to secondary services, and to best practice guidance published in local NHS depression protocols in the trial localities.	**Quality of Life: SF-36 MCS Mean:** **Baseline**: cluster control usual care (n=35): 18.64 (10.98) intervention (n=41): 19.06 (11.42) **3** months: cluster control usual care (n=33): 18.64 (10.98) intervention (n=39): 19.06 (11.42) ES: mean difference/pooled SD=0.67 95% CI (0.19-1.16) **Quality of Life: SF-36 PCS Mean:** **Baseline**: cluster control usual care (n=35): 49.2 (14.18) intervention (n=41): 50.8 (10.88) **3** months: cluster control usual care (n=33): 49.2 (14.18) intervention (n=39): 50.8 (10.88) ES: mean difference/pooled SD=0.11 95% CI(-0.49- 0.72) p=0.694 (intervention) **Summary:** • Intervention more effective than cluster control on the CORE-OM and SF-36 MCS • Moderate to large effect of collaborative care **Limitations:** • Substantial contamination between intervention and patient-randomized control groups; less so for cluster-randomized control group • Small sample size • Ambiguous knowledge of usual care in control groups

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
Authors: Rollman et al 2009 **Location:** Pittsburgh, PA **Population:** Patients that had coronary artery bypass graft surgery **Design:** RCT **Quality of Execution:** Good (1 limitation) **Funding:** NIH & UPMC endowed chair of geriatric psychiatry	**Target Population:** **(N=3790)** Patient's post-CABG who signed HIPAA consents. Researchers screened post-CABG patients for depression prior to hospital discharge at 2 university-affiliated and 5 community hospitals in metropolitan Pittsburgh, PA. **Inclusion:** Post-CABG patients MINI score of 24 or greater, speak English, have access to a telephone **Exclusion:** no current alcohol dependence or other substance abuse disorder; not be in treatment with a mental health specialist, express active suicidality, or have a history of psychotic illness or bipolar disorder; be discharged home or to short-term rehabilitation; and have no communication barriers, **Baseline Demographics:** Age 64 (10.8); Male:54%; White: 88%; **Organization and Setting:** University and Community Hospitals	**Intervention:** **(n=150)** Nurse care manager telephoned pts. to review their psychiatric history, provide basic psychoeducation about depression and its effect of cardiac disease, and describe treatment options (self-care depression workbook, initiation or adjustment of antidepressant pharmacotherapy as prescribed by PCP, referral to mental health specialist) **Providers** **Case Manager:** Nurse **PC Provider:** Primary Care Physician **MHS:** PCP & Psychiatrist **Collaborative Care Components:** Patient education + support for self care + provider feedback + Emphasis on the use of evidence-based guidelines/protocols + medication only + Medication and Psychotherapy + the use of telephones in intervention **Usual Care:(n=152)** Patients and Physician notified about depression status	**Depressive Symptoms: HRS-D Mean** **Baseline:** Intervention (n=150):16.6 (7.3) Usual Care (n=152):16 (7.4) **8** month: Intervention (n=150):9 (8.6) Usual Care (n=152):11.4 (8.6) Effect: Between group difference = 3.1 95% CI (1.3-4.9), *p*=.001 **Functional Status**: **SF-36 MCS Mean** **Baseline:** Intervention (n=150):43.1 (12.2) Usual Care (n=152):42.5 (12.3) **8** month Intervention (n=150):50 (12.2) Usual Care (n=152):46.2 (13.6) ES: Between group difference = 3.2 95% CI (0.5 to 6.0), *p*=.02 **Functional Status: SF-36 PCS Mean** **Baseline:** Intervention (n=150):31.2 (9.8) Usual Care (n=152): 30.3 (9.9) **8** month: Intervention (n=150):44 (9.8) Usual Care 41.4 (9.9) ES: Between group difference = 1.6 95% CI (-0.5 to 3.8), p=0.14 **Response: 8** months: Intervention (n=150):50%, Usual care (n=152):29.6% ES: OR = 0.42,95% CI(0.19-0.65),*p*=.001 **Summary:** • Telephone-delivered collaborative care for treatment of post-CABG depression resulted in improved HRQL, physical functioning, and mood symptoms **Applicability:** • Medically frail persons; rural areas.
Authors: Schrader et al 2005 **Location:** 4 teaching hospitals in the city of Adelaide, in the state of South Australia **Design:** RCT, nested within a prospective cohort	**Target population:** **(N=2,113)** Patients aged between 18 and 84 years and admitted to cardiology units for myocardial infarction, unstable angina, arrhythmia, congestive heart failure, coronary artery bypass graft surgery or angioplasty was eligible for inclusion. **Inclusion:** Men and women were eligible to	**Intervention: (n= 331)** IDACC Intervention In addition to usual care: 1. The patient was referred to the hospital Liaison Psychiatrist and Cardiac Rehabilitation Nurse 2. The General Practitioner (GP) was notified of patients' Depressive Symptoms and given evidence based guidelines for managing depression in cardiac patients.	**Rate of remission/recovery :CES-D** **12** months: usual care (n=298): 39% Intervention (n=274): 40% ES**:** 1%, p=0.043 **Proportion-moderate to severe:** **Baseline:** usual care (n=338): 46% Intervention (n=331): 44% **12** months: usual care (n=298):35% Intervention (n=274): 25% 95% CI (0.54, 0.96), RR = 0.72,ES: 8%

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
Quality of Execution: Fair (2 limitations) **Funding:** South Australia Department of Health	participate in the study if they were (a) admitted to a cardiac unit in one of the 4 major teaching hospitals in Adelaide, South Australia during the IDACC study period from Aug 2000 to Dec 2001, with a 6 month extension in one hospital: Royal Adelaide Hospital (Aug 2000 - Dec 2001) Flinders Medical Centre (Oct 2000 - June 2002) The Queen Elizabeth Hospital (Feb 2001 - Dec 2001) Lyell McEwin Health Service (Mar 2001 - Dec 2001) (b) with cardiac admission reason: * myocardial infarction, * unstable angina, * arrhythmia, * congestive heart failure, * angioplasty, or * coronary artery bypass graft surgery (CABG) (c) aged 18 - 84 years. **Exclusion:** • Language difficulties prevented them from completing the self-report questionnaires • Serious physical or cognitive impairment. **Baseline Demographics:** Total Mean age (SD): 62.2 (12.4) Depressed Female (%): 37.1% **Organization and Setting** Teaching hospitals, cardiac care unit	3. Psychiatrist advice was provided to support GP management of co-morbid depression via Case Conference or Telephone Advice. **<u>Providers</u>** **Case Manager:** Nurse **PC Provider:** PCP **MHS:** Psychiatrist **Collaborative Care Components:** Patient education + Provider education + Provider feedback + Oversight/Supervision of Providers + Emphasis on the use of evidence-based guidelines/protocols + Medication only + The use of telephones and related-technology in the intervention **Comparison: (n= 338)** Usual Care	**Mild depression to moderate/severe**: **12** months: usual care (n=136): 24% Intervention (n=125): 10% ES: 14%, p=0.025 **Rate of remission/recovery (from moderate/severe)** : **12** months: usual care (n=101): 30% Intervention (n=88): 30% ES: 0% **From moderate/severe to moderate/severe:** **Baseline:** usual care (n=154):100% Intervention (n=144): 100% **12** months: usual care (n=101):50% Intervention (n=88): 40% ES: 10% **Summary** • The intervention prevented mild depression from developing into moderate to severe depression. • It also demonstrated a reduction in depression severity in cardiac patients 12 months after hospitalization. **Barriers** Even with substantial infrastructure supporting the project, in-patient visits by psychiatry liaison and the cardiac rehabilitation nurse, followed by multidisciplinary EPC case conferences, were logistically complex and difficult to implement.

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
Study: Sharpe et al 2004 **Location:** Edinburgh, UK **Population:** Depressed adults **Design:** Cohort study (nonrandomized) **Quality of Execution:** Fair (3 limitations) **Funding:** NHS Research and Development/Cancer Research Campaign Cancer Research Programme	**Target Population:** **(N=196)** Patients with MDD came from breast, gynecological, bladder, prostate, testicular and colorectal clinics at the Edinburgh Cancer Centre between Sept. '99 and Sept. 2000 using a screening procedure described in the companion paper Sharpe et al, 2003. Patients recruited between 1999 and Feb. 2000 were assigned to the 'usual care only' group and those recruited from March 2000 to Aug. 2000 were assigned to the 'usual care plus the experimental intervention' group. **Inclusion:** Patients with MDD from consecutive attendants at breast, gynecological, bladder, prostate, testicular and colorectal clinics **Exclusion:** Oncologist determines pt. will not survive to follow-up or a complicated or uncontrolled medical problem or a complicating psychological diagnosis, a history of continuous depression for more than 1 year prior to cancer diagnosis or difficulty in communicating or currently receiving specialist treatment from a psychiatrist or psychologist **Baseline Demographics:** Mean Age (SD): 58(10.6) Female N (%): 28 (93.3) Male N (%): 2 (6.7) **Organization and Setting:** Edinburgh Cancer Centre	**Intervention:** **(n=30)** Pts. received education about depression, up to ten 30-min problem-solving therapy sessions from 2-16 weeks, encouraged anti-depressant discussion with GP, coordination and monitoring of MDD treatment **Care Providers:** **Case Manager:** Nurse **PC Provider:** PCP **MHS:** Psychiatrist, psychologist **Collaborative Care Components:** Patient education+ provider education+ supervision of providers+ medication and psychotherapy+ telephones + technology to manage caseload **Usual Care:** **(n=30)** GP, oncologist told to manage MDD patients "as they normally would".	**Depressive Symptoms: SCID (%)** **No MDD:** **3** months: usual care (n=28):32% intervention (n=28):71% ES: 39.3,95% CI(7.9-56) **6** months: usual care (n=26):42% intervention (n=26): 81% ES: 38.5, 95% CI(5.4-57) **Number of symptoms: Mean(SD)** **Baseline:** usual care (n=30): 6.5(1.3) intervention (n=30): 6.4(1.2) ES:0, 95% CI(-0.7to 0.5) **3** months: usual care (n=28): 5.5(2.2) intervention (n=30): 3.1(2.4) ES:2.3, 95% CI(-3.6 to -1.1) **6** months: usual care (n=26): 4.9(2.2) intervention (n=26): 2.6(2.3) ES: 2.2, 95% **Quality of life: HADS Mean (SD)** **HADS self-rated anxiety:** **Baseline:** control (n=30): 12.8(3.6) intervention (n=30): 12.9(3.1) ES: 0, 95% CI(-1.9-2.0) **3** months: usual care (n=27):12.6(3.6) intervention (n=27):7.7(4.1) ES: 4.8, 95% CI(-7.1-(-2.6)) **6** months: usual care (n=26):11.7(3.7) intervention (n=26):7.9(4.7) ES: 3.8, 95% CI(-6.6-(-0.9)) **HADS self-rated depression: Mean** **Baseline:** usual care (n=30):10.3(4.0) intervention (n=30):10.4(3.6) ES: 0, 95% CI(-1.8-2.0) **3** months: usual care (n=27):10.6(3.7) intervention (n=27): 7.0(4.4) ES: 3.5, 95% CI(-5.9 to -1.1) **6** months: usual care (n=26): 9.6(4.7) intervention (n=26): 7.0(4.1) ES: 2.7, 95% CI(-5.5-0.1) **Summary:** Nurse-delivered intervention is feasible, produces substantially better outcomes for patients.

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
See Previous	See Previous	See Previous	**Limitations:** • Participants were predominately females with inactive breast cancer, limiting generalizability. • Small sample size, only one nurse administered intervention; • Effectiveness of treatment is limited.
Authors: Simon et al 2006 **Location:** Washington and Northern Idaho **Population:** Adult behavioral health clinic outpatients **Design:** RCT **Quality of Execution:** Good (1 limitation) **Funding:** NIMH, Lilly Research Laboratories	**Target Population:** **(N=217)** Participants were enrolled in 2002 at four group-model behavioral health clinics of Group Health Cooperative, a prepaid health plan serving over 500,000 patients. **Inclusion:** Age 18 and over. Received a new antidepressant prescription from a psychiatrist (no antidepressant use in the past 90 days), received a visit diagnosis of a depressive disorder in the past 30 days, and had no recorded diagnosis of bipolar disorder or schizophrenia in the past two years. **Exclusion:** A score on the SCL depression scale that was less than .5 (that is, remission of depression), regular use of antidepressant medication in the prior 90 days (that is, the index prescription was not actually a new prescription), and cognitive, language, or hearing impairment severe enough to preclude participation **Baseline Demographics:** Mean Age (SD): 41(15); Female N (%): 71(69%); Male N (%): 32(31%); Caucasian N (%): 92(89) **Organization and Setting:** Group-model outpatient behavioral health clinics	**Intervention:** **(n=103)** Care managers contacted pts. 3 times during 6 month period, assessed Depressive Symptoms, use of anti- depressant medication, side effects. Contacted 3 and 6 months into study for blinded telephone assessment. Global improvement self-rated measurement and SCL-20 taken **<u>Providers</u>** **Case Manager:** Registered Nurse **PC Provider:** Psychiatrist **MHS:** Psychiatrist, Registered Nurse **Collaborative Care Components:** Provider education + oversight/supervision of providers + medication and psychotherapy + use of telephones + use of technology to manage caseload **Usual Care:(n=104)** Contacted 3 and 6 months into study for blinded telephone assessment. Global improvement self-rated measurement and SCL-20 taken. This was only contact by study implementers, usual care otherwise.	**Depressive Symptoms:HSCL-20 <u>Mean</u>** **Baseline:** usual care (n=104):1.57(0.71) Intervention (n=103): 1.61(0.68) ES: t-test=0.39 **6** months: usual care (n=94):1.08 intervention (n=94):0.95 ES: adjusted difference=0.13, 95% CI(-0.7, 0.31) **Rate of Remission/Recovery:** **6** months: usual care (n=94):37% intervention (n=91):41% **Self-rating of "much improved" or "very much improved"** **6** months: usual care (n=94):52% intervention (n=91):57% **Adequate filled prescription** **6** months: usual care (n=97): 55% intervention (n=98): 64% ES: x-squared=1.88 **Summary:** • Care management intervention has no significant effect on SCL-20 scores, probability of 50% improvement, patient-reported improvement at six months • Care management patients made more medication management visits over six months • No significant differences in rates of adequate medication treatment • Care management program does not significantly improve clinical outcomes for patients starting antidepressant medication

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
See Previous	See Previous	See Previous	**Limitations:** • Sample size not adequate to detect small differences in clinical outcomes, • Intervention not intense enough to determine efficacy of treatment
Authors: Simon et al 2007 **Location:** Washington State **Population:** Depressed adults with diabetes mellitus **Design:** RCT **Quality of Execution:** Good (1 limitation) **Funding:** NIMH	**Target Population: (N=9063)** The PATHWAYS study was conducted at 9 primary care clinics of Group Health Cooperative (GHC). A randomized trial of a systematic depression treatment program for people with comorbid depression and diabetes. Participants were identified by a population based depression screening program. **Inclusion:** A Hopkins Symptom Checklist (SCL) depression score of 1.1 or greater at the second screening (indicating at least moderate Depressive Symptoms). Also, patients were ambulatory, were English speaking, had adequate hearing to complete a telephone interview, and planned to continue to be enrolled in GHC during the next year. **Exclusion:** Low depression scores, recent psychiatric treatment, indications of a bipolar or psychotic disorder, cognitive impairment, or plans to move or for disenrollment from the health plan. **Baseline Demographics: intervention group** Mean age (SD): 58 (12) Female 35% White 71%; diabetes 96% History of depression: 53% **Organization and Setting:** 9 primary care clinics of Group Health Cooperative (GHC)	**Intervention (PATHWAYS): (n=165)** Tri-modal stepped-care model using psychotherapy or pharmacotherapy. In-person or telephone contact twice a month. Physician prescribed meds, depression nurse followed-up with supervision by study psychiatrists. Follow up reduced to every 2 months, until the 12 month follow-up. Treatment followed protocol of IMPACT late-life depression trial. **Providers** **Case Manager:** Nurse **PC Provider:** Primary care physician **MHS:** Psychiatrist, psychologist **Collaborative Care Components:** Provider feedback + oversight/supervision of providers + emphasis on the use of evidence-based guidelines/protocols + medication only + psychotherapy only + medication and psychotherapy + the use of telephones and related technology + the use of technology to manage caseload **Usual Care:(n=164)** Continued usual care without any special intervention	**Depressive Symptoms: SCL-90 Mean** **Baseline:** usual care (n=164):1.63(0.46) PATHWAYS (n=165):1.71(0.51) ES: t-test=1.39, p=0.17 **6** months: usual care (n=146): 1.25 PATHWAYS (n=147): 1.15 **12** months: usual care (n=145): 1.20 PATHWAYS (n=146): 1.05 ES: mean difference=0.23, p=0.03 **24** months: usual care (n=140): 1.22 PATHWAYS (n=141): 1.10 ES: mean difference=0.20, p=0.048 **Summary:** • Intervention group accumulated 61 additional free days of depression • Intervention group had outpatient health services costs that were $314 less on average than control **Limitations:** • Contamination between groups • Cannot distinguish specific effects from antidepressant medication or psychotherapy from nonspecific effects from supportive healthcare personnel • Cannot generalize due to special population studied **Research Gaps:** • Effectiveness level of graduate primary care mental health workers providing case mgmt of depressed UK patients needs to be studied more. **Economic Evaluation:** • When an additional day free of depression is valued at $10, the net economic benefit of the intervention is $952 per patient

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
Authors: Smit et al 2006 Depression Recurrence Prevention (DRP) vs. Care as Usual **Location:** City of Groningen, in the northern part of The Netherlands **Population:** 18 years of age to 70 **Design:** RCT **Quality of Execution:** Good (1 limitation) **Funding:** Dutch Organizations and hospitals	**Target Population:** **(N=397)** Adult patients in 55 practices that have recurrent major depression **Inclusion:** Current (i.e. present in the past 2–12 weeks) diagnosis of major depression according to DSM-IV criteria. **Exclusion:** Younger than 17 years and older than 70 years of age, a life-threatening medical condition, psychotic disorder, dementia, and a primary addiction to alcohol or psychotropic drugs. Pregnant/ nursing; if receiving treatment for depression elsewhere. **Demographics**: Age mean (SD): 42.5 (10.6) Female 65% **Organization and Setting:** Primary care practices	**Intervention:** **(n=44)** DRP is a psychoeducational intervention that promotes a relationship between the patient, a prevention specialist and PCP. Attempts to reduce the recurrence of depression by increasing patients' self-efficacy to cope with Depressive Symptoms. Uses pro-active measures, stress-management strategies and skills to identify relapse or recurrence. Three individual face-to-face sessions with a trained prevention specialist, followed by four telephone calls per year for a 3-year period. **Providers** **Case Manager:** Psychologist **PC Provider:** Primary care physician **MHS:** Psychiatrist, psychologist, psychiatric nurse **Collaborative Care Components:** Patient education + support for self-care + provider education + provider feedback + oversight/supervision + evidence-based guidelines + medication + use of telephones **Comparison:** **Enhanced Usual Care (n=72)** Own PCP provided care that may include a combination of antidepressants and counseling. PCPs could refer to services normally available (social workers, private practice psychiatrists or psychologists, or specialized mental health agencies).	**Depressive Symptoms: BDI: Mean** **Baseline:** DRP (n=112) 20.6 (9.32), Care as Usual (n=72) 18.9 (9.49). **Recovery:** **6** months: DRP (n=96) 61%, CAU (n=62) 68%. **Remission**: DRP(n=96) 28%, CAU (n=62) 25% **Adherence:** **Baseline**: DRP (n=112) 74%, CAY (n=72) 76% **3** months DRP (n=102) 70%, CAU (n=64) 72% **6** months DRP (n=96) 59%, CAU (n=62) 60% **Healthcare Utilization: ≥1 visit to PCP** **3** months: DRP: (n=102) 85%, CAU (n=64) 94%, **6** months (n=96) 78%, CAU (n=62) 66% **Summary:** • Depression and remission outcomes were the same for DRP and Usual Care • The addition of other components to the DRP model did not improve outcomes **Limitations**: • Selection of PCPs was not random • PCPs may have been more interested in treating depression than the average PCP • Treatment for depression was high in the CAU • PCPs awareness of depression diagnosis may have influenced referral to specialists

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
Authors: Smit et al 2006 (1) Psychiatric Consultation + Depression Recurrence Prevention (PC+DRP) vs Care as Usual **Location:** City of Groningen, in the northern part of The Netherlands **Population:** 18 years of age to 70 **Design:** RCT **Quality of Execution:** Good (1 limitation) **Funding:** Dutch Organizations and hospitals	**Target Population: (N=397)** Adult patients in 55 practices that have recurrent major depression **Inclusion:** Current (i.e. present in the past 2–12 weeks) diagnosis of major depression according to DSM-IV criteria **Exclusion:** Younger than 17 years and older than 70 years of age, a life-threatening medical condition, psychotic disorder, dementia, and a primary addiction to alcohol or psychotropic drugs. Pregnant/nursing; if receiving treatment for depression elsewhere **Demographics**: Age mean (SD): 41 (13) Female: 69% **Organization and Setting:** Primary care practices	**Intervention:(n=39)** Combination of DRP (Attempts to reduce the recurrence of depression by increasing patients' self-efficacy to cope with Depressive Symptoms. Uses pro-active measures, stress-management strategies and skills to identify relapse or recurrence) and Psychiatric Consultation (one 1-hour visit with psychiatrist, prior to the DRP program. The PCP provided the psychiatrist with information about the patients' health and treatment status. Afterwards, the psychiatrist reported his diagnostic findings and treatment advice to the PCP) **Providers** **Case Manager:** Psychologist **PC Provider:** Primary care physician **MHS:** Psychiatrist; psychiatric Nurse **Collaborative Care Components:** Patient education + support for self-care + provider education + provider feedback + oversight/supervision+ evidence-based guidelines + medication + use of telephones **Comparison: (n=72)** Enhanced Usual Care. Own PCP provided care that may include a combination of antidepressants and counseling. PCPs could refer to services normally available (social workers, private practice psychiatrists or psychologists, or specialized mental health agencies).	**Depressive Symptoms: Beck Depression Inventory Mean (SD)**: **Baseline:** PC+DRP (n=39) 20.3 (9.84); Care as Usual (n=72) 18.9 (9.49); **Percent recovered:** **6** months: PC+DRP (n=32) 79%, CU (n=62) 68%. **Percent remitted:** **6** months. PC+DRP (n=32) 15%, CU (n=62) 25% **Adherence:** **Baseline**: PC+DRP (n=39) 72% UC (n=72) 76% **3** months PC+DRP (n=34) 74% UC (n=64) 72% **6** months PC+DRP (n=32) 69% UC (n=62) 60% **Healthcare Utilization: At least 1 visit** **3** months: PC+DRP: (n=34) 79% UC (n=64) 94% **6** months PC+DRP (n=32) 69% UC (n=62) 66% **Summary:** • The PC+DRP and Usual Care did not have a significant difference in depression and remission outcomes.

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
Authors: Smit et al 2006 (2) Brief Cognitive Behavior Therapy + Depression Recurrence Prevention (CBT+DRP) vs Care as Usual **Location:** City of Groningen, in the northern part of the Netherlands **Population:** 18 years of age to 70 **Design:** RCT **Quality of Execution:** Good (1 limitation) **Funding:** Dutch Organizations and hospitals	**Target Population:** **(N=397)** Adult patients in 55 practices that have recurrent major depression. **Inclusion:** Current (i.e. present in the past 2–12 weeks) diagnosis of major depression according to DSM-IV criteria. **Exclusion:** Younger than 17 years and older than 70 years of age, a life-threatening medical condition, psychotic disorder, dementia, and a primary addiction to alcohol or psychotropic drugs. Pregnant/ nursing; if receiving treatment for depression elsewhere **Demographics**: Age: mean (SD)42.8 (11.6) Female 54% **Organization and Setting:** Primary care practices	**Intervention: (n=44)** Combination of DRP (reduces the recurrence of depression by increasing patients' self-efficacy to cope with Depressive Symptoms. Uses pro-active measures, stress-management strategies and skills to identify relapse or recurrence) and CBT (Exposed to a 10–12 individual weekly 1-hour sessions of CBT tailored to primary care). The DRP program started after the final CBT session. CBT therapist informed the prevention specialist of main themes of CBT and the progress achieved. **<u>Care Providers</u>** **Case Manager:** Psychologist **PC Provider:** Primary care physician **MHS:** Psychiatrist, psychologist, psychiatric nurse **Collaborative Care Components:** Patient education + support for self-care + provider education + provider feedback + oversight/supervision, evidence-based guidelines + medication + medication and psychotherapy+ use of telephones **Enhanced Usual Care:** **(n=72)** PCP provided care that may include a combination of AD medication and counseling PCPs could refer to services normally available (social workers, private practice psychiatrists or psychologists, or specialized mental health agencies).	**Depressive Symptoms:** **Beck Depression Inventory:** **Baseline:** CBT+DRP (n=44) 20.3 (9.25) Care as Usual (n=72) 18.9 (9.49); **Percent recovered:** **6** months: CBT+DRP (n=36) 70% CU (n=62) 68%. **Percent remitted:** 6 months. CBT+DRP (n=36) 18% CU (n=62) 25% **Adherence:** **Baseline** CBT+DRP (n=44) 73% UC (n=72) 76% **3** months CBT+DRP (n=40) 50% UC (n=64) 72% **6** months CBT+DRP (n=36) 42% UC (n=62) 60% **Healthcare Utilization: At least 1 visit** **3** months: CBT+DRP: (n=40) 58% UC (n=64) 94% **6** months CBT+DRP (n=36) 61% UC (n=62) 66% **Summary:** • Depression and remission outcomes were not statistically significant for CBT+DRP and Usual Care

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
Authors: Stiefel et al 2008 **Location:** The University Hospital of Lausanne, Switzerland **Population:** Diabetes and rheumatoid patients **Design:** RCT **Quality of Execution:** Fair (4 limitations) **Funding:** Swiss National Foundation; Novartis Foundation; University Hospital Lausanne	**Target Population: (N=885)** Complex (INTERMED >20) medically ill diabetes outpatients and rheumatoid inpatients **Inclusion:** Complex (INTERMED > 20) rheumatoid inpatients and diabetes outpatients **Exclusion:** not speaking French, severe cognitive disturbances, terminal illness, planned placement in an institution, hospitalization for less than 3 days and suicidal risk. **Baseline Demographics:** None reported **Organization and Setting:** diabetes outpatient clinic of the Division of Endocrinology and Metabolism and rheumatology inpatient unit of the Rheumatology Service of the University Hospital of Lausanne	**Intervention:(n=125)** Most patients (n = 107) received an intervention conducted by the psychiatric liaison nurse; consisted of 'facilitating emotional expression' (73%), 'practical advice' (71%), 'promoting life narrative' (48%) and 'psycho-educational interventions' (44%). For about half of the patients in the intervention group (n = 76) also other types of intervention were proposed, such as referral to a liaison psychiatrist (n =36), psychiatric advice to the treating physician (n = 32) or interdisciplinary case conferences (n = 8). A minority of patients (n = 13) did not receive any treatment (due to a lack of indication for a psychosocial intervention or patient lacking motivation). The liaison nurses, who effectuated the intervention, were supervised weekly by a senior psychiatrist or an experienced psychiatric liaison nurse. **<u>Providers</u>** **Case Manager:** Psychiatric Nurse Liaison **PC Provider:** Primary Care Physician **MHS:** Psychiatrist **Collaborative Care Components:** Patient education + provider education + provider feedback + oversight/supervision of providers + medication & psychotherapy **Usual Care:(n=122)** Care as usual which includes the	**Prevalence of Depression: MINI (%)** **Baseline:** usual care (n=120):56% Intervention (n=120): 61% **3** months: usual care (n=78):53.5% intervention (n=84):39% ES: change in prevalence=19.5 **6** months: usual care (n=73):53% intervention (n=83):41% ES: change in prevalence=17.0 **9** months: usual care (n=68):48% intervention (n=74):37% ES: change in prevalence=16.0 **12** months: usual care (n=83):49% intervention (n=76):27.5% ES: change in prevalence=26.5 **Depressive Symptoms :CES-D mean** **Baseline:** usual care (n=120):27.5 Intervention (n=120):27.2 **3** months: usual care (n=78):30.2 intervention (n=84):26.5 ES: mean difference=3.4 **6** months: usual care (n=73):28.9 intervention (n=83):26.6 ES: mean difference=2.0 **9** months: usual care (n=68):27.2 intervention (n=74):24.5 ES: mean difference=2.4 **12** months: usual care (n=83):27.8 intervention (n=76):24.8 ES: mean difference=2.7 **Functional Status:SF-36 PCS (mean)** **Baseline:** usual care (n=120):29.5 Intervention (n=120):32 **3** months: usual care (n=78):33 intervention (n=84):37.3 ES: mean difference=1.8 **6** months: usual care (n=73):33.5 intervention (n=83):37.8 ES: mean difference=1.8 **9** months: usual care (n=68):34 intervention (n=74):38 ES: mean difference=1.5 **12** months: usual care (n=83):33.7 intervention (n=76):37.4 ES: mean difference=1.2

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
See Previous	See Previous	possibility for the treating physician to request a psychiatric consultation; both somatic services involved in this study have access to liaison psychiatry and regularly refer patients.	**Functional Status: SF-36 MCS (mean)** **Baseline:** usual care (n=120):35.4 Intervention (n=120): 34.8 **3** m: usual care (n=78):35.2; intervention (n=84):37.4; ES: mean difference=2.8 **6** m: usual care (n=73):34.9; intervention (n=83):37.6; ES: mean difference =1.3 **9** m: usual care (n=68):36.8; intervention (n=74):38; ES: mean difference =1.8 **12** months: usual care (n=83):36.8 intervention (n=76):37.7, ES: mean difference =1.5 **Quality of Life: EuroQol (mean)** **Baseline:** usual care (n=120):45.1 Intervention (n=120):44.8 **3** months: usual care (n=78):47.2 intervention (n=84):54 ES: mean difference=7.1 **6** months: usual care (n=73)47.7 intervention (n=83): 55.4 ES: mean difference=8.0 **9** months: usual care (n=68):49 intervention (n=74):54 ES: mean difference =5.3 **12** months: usual care (n=83):47.2 intervention (n=76):55.4 ES: mean difference=7.5 **Summary:** • Significant improvement over time was observed in the intervention group with regard to Depressive Symptoms, perception of physical and mental health and quality of life • Effects stronger in diabetes patients with baseline MDD and in patients with moderate INTERMED scores **Limitations:** • MINI used for depression diagnosis • Restricted sampling • No baseline data presented • Psychopharmacology treatment not recorded • Low completion rate

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
Authors: Strong et al 2008 **Location:** regional tertiary National Health Service (NHS) Cancer Center Southeast of Scotland, UK. **Population:** People with Cancer **Design:** RCT **Quality of Execution:** Good (1 limitation) **Funding:** Private institution/agency	**Target Population:** **(N=200)** Cancer patients with a prognosis of greater than 6 months who and major depression were recruited **Inclusion:** Cancer prognosis of at least 6 months; major depressive disorder of at least a month's duration that was not associated with major changes in the patient's cancer or its management ; and a minimum severity of major depressive disorder, defined by a score on the Symptom Checklist-20 (SCL-20) depression scale14 of at least 1·75. **Exclusion:** unlikely to be able to adhere to the intervention: reasons included major communication difficulties such as severe deafness or dementia, inability to attend the cancer centre, concurrent intensive anticancer treatment such as frequent chemotherapy or radiotherapy, or another poorly controlled medical disorder such as epilepsy that dominated their care. We also excluded those who were receiving, or were judged to need, specialist psychiatric care (eg, chronic major depressive disorder of more than 2 years' duration, severe substance or alcohol misuse, co-morbid severe psychiatric disorder such as psychosis, or risk of suicide). **Baseline Demographics:** Mean Age (SD): 56.6 (11.4) Female: 69% Male: 31% **Organization and Setting:** regional tertiary National Health Service Cancer Center	**Intervention:** Depression Care for People with Cancer**(n=101)** The intervention group was offered a max. of 10 one-to-one sessions over 3 months, preferably in person, but some over the phone. The content comprised education about depression and its treatment (including antidepressant medication); problem-solving treatment to teach the patients coping strategies designed to overcome feelings of helplessness; and communication about management of major depressive disorder with each patient's oncologist and primary-care doctor. **Providers** **Case Manager:** Cancer Nurse **PC Provider:** PCP **MHS:** Cancer Nurse, Psychiatrist, Psychologist **Collaborative Care Components:** Patient education + provider education + oversight/supervision of providers + medication only + the use of telephones **Usual Care:(n=99)** Each patient's primary-care doctor and oncologist were informed of the major depressive disorder diagnosis. Upon request, advice was provided regarding choice of anti-depressant drug	**Depressive Symptoms: SCL-20 Adjusted Mean** **Baseline:** usual care (n=99):2.25 Intervention (n=101): 2.35 **3** months: usual care (n=99):1.54(0.8) intervention (n=97):1.25(0.77) ES: 0.34 95% CI (-0.55- -0.13),p=0.002 **6** months: usual care (n=80):1.51(0.81) Intervention (n=85):1.03(0.79) ES: -0.59 95% CI (-0.81- -0.37) **12** months: usual care (n=80):1.43(0.94) Intervention: (n=85): 1.12(0.89) ES: -0.42 95% CI (-0.67- -0.17) **Quality of Life: EORTC Pain Score (1-100) Adjusted Mean** **Baseline**: usual care (n=99):33 intervention (n=101):33 **3** months: usual care (n=93): 37.8(33.1) Intervention (n=91): 36.8(31.0) ES: -2.2 95% CI (-10.2-5.9),p=0.597 **Quality of Life: EORTC fatigue Mean** **Baseline**: usual care (n=99):56 intervention (n=101):56 **3** months: usual care (n=93):55.4(27.6) Intervention (n=91):49.7(27.1) ES: -9.4 95% CI (-15.5- -3.4),p=0.003 **Functional Status: EORTC physical functioning: Mean Score (SD)** **Baseline**: usual care (n=99): 73 intervention (n=101): 67 **3** months: usual care (n=92): 67.6(23.6) Intervention (n=91): 66.8(24.4) ES: 1.0, 95% CI (-3.4-5.5),p=0.643 **Rate of Remission/Recovery:SCL-20** **3** months: usual care (n=99): 14% Intervention (n=97): 29% OR: 2.9 95% CI (1.4-6.3),p=0.005 **Summary:** • Depression Care for People with Cancer improved the symptoms of depression more than usual care. The relative benefit of the intervention could have been greater if the doctors who provided usual care were not informed

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
See Previous	See Previous	See Previous	of the major depressive disorder diagnosis. • Patients in the intervention group experienced a greater reduction in anxiety and fatigue, but not in pain or physical functioning at 3 months. **Limitations:** • Generalizability is uncertain because the study is done in the UK NHS, where all patients are registered with a PCP and have free access to specialist services. • Prescriptions for antidepressants were higher in both groups. • Cancer patients with poor prognosis excluded.
Authors: Wang et al. 2007 **Linked to:** Care managers affect worker productivity (Authors unknown) **Location:** 16 national companies for employees enrolled in United Behavioral Health, a large nationwide managed behavioral health care company in the United States. **Design:** RCT **Quality of Execution:** Good (1 limitation) **Funding:** NIMH, Robert Wood Johnson Foundation, John D. and Catherine T. MacArthur Foundation	**Target population: (N=263,843)** people with depression working in large companies from diverse sectors (airline, insurance, banking public utility, state government, manufacturing) and representing broad range of occupations **Inclusion:** Moderate depression severity QIDS-SR score >= 8. **Exclusion:** History of mania, substance dependence, suicidal ideation or attempts in prior week, treatment by mental health specialist in past year. **Demographics:** Mean Age (SD): 40.7 yrs (10.5) Female 70.7% **Organization and Setting:** Managed behavior health plan, worksites.	**Intervention (n=304)** Telephonic outreach and care management program encouraged workers to enter outpatient treatment. Initial telephone contacts included assessment, recommendation for in-person psychotherapy and medication evaluation. For decline of in person treatment, care managers provided brief motivational intervention and telephone contact. **<u>Providers</u>** **Case Manager:** Licensed masters' degree level mental health clinicians **PC Provider:** PCP (Primary Care Physician) and other providers. **MHS:** Psychiatrist, psychologist, care manager, therapists, mental health counselor. **Collaborative Care Components:** Patient education + support for self care + provider feedback + oversight/supervision of providers + emphasis on evidence based guidelines+ medication and/or	**Depressive Symptoms : QIDS-SR score** Intervention (n=304), comparison (n=300) 6 mo ES: Regresion Coefficient, 95% CI= -1.0 (-1.8, 0.2), p=0.01 12 mo ES: Regression coefficient, 95% CI = -1.1 (-1.8, 0.3), p=0.005 **Response:** 6 mo OR – 1.2 (0.8, 2.0) 12 mo OR – 1.7 (1.1, 2.5) **Recovery (QIDS-SR score 5 or <):** 6 mo OR = 1.7 (1.0, 2.5) 12 mo OR = 1.7 (1.1, 2.4) **Summary**: • Clinical and workplace outcomes were improved **Limitations:** • Generalizability of findings unclear because trial participants had less severe depression and different socio-demographic profile than nationally representative sample of depressed workers **Barriers:** • Insurance coverage by employer • Employer must be willing to include coverage for mental health services

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
See Previous	See Previous	psychotherapy + use of telephone in intervention + use of technology to manage caseload **Comparison: (n = 300)** Patients assigned to usual care were informed that screening indicated possible depression and advised to consult with a clinician; they could receive any normally available insurance benefit or service (e.g., psychotherapy or medications), but not the additional telephone care management component.	**Benefits:** • Positive impact on job retention • higher mean hours work by intervention group • Intervention group received more mental health specialist treatment **Harms:** • Care may be interrupted if job is lost **Economic information:** $1800 annualized value of higher mean hours worked among intervention participants exceeds the $100 to $400 outreach and care management costs associated with low to moderate intensity interventions of this sort.
Authors: Williams et al 2007 **Location:** 4 Indianapolis hospitals **Population:** Adults (>18 years) **Design :** RCT **Quality of Execution:** Fair (2 limitations) **Implementer and Funder:** None reported	**Target population: (N= 1,175)** Depressed ischemic stroke survivors were randomized from 4 Indianapolis hospitals. **Inclusion:** Adults 18 years and older, with ischemic stroke and that had no severe language impairment, no severe cognitive impairment, understood English, had a telephone, and who had a life expectancy of at least 6 months. **Exclusion:** Persons with hemorrhagic stroke, active psychosis, suicidality, or substance abuse; those currently taking a monoamine oxidase inhibitor; and women pregnant at the time of stroke. **Baseline Demographics:** Intervention Female: 61%, Male: 39% Race ethnicity: White: 61%; Black/ African American: 36%; Others: 3% Mean Age (SD) : 60 (13) **Organization and Setting:** Hospital (in-patients), VA and others	**Intervention:(n=89)** **A**ctive-**I**nitiative-**M**onitor intervention included: **A**ctivating stroke survivors and their families to understand and accept depression diagnosis and treatment. 20-minute structured session at entry. **I**nitiating antidepressant medication. Study nurse recommends an AD to the stroke survivor's treating physician (neurologist or primary care provider). **M**onitoring treatment effectiveness **Providers** **Case Manager:** Nurse **PC Provider:** Primary care physician or neurologist **MHS:** Nurse and study physician **Collaborative Care Components:** Patient education + support for self care + provider feedback+ Oversight/Supervision of Providers + Emphasis on the use of evidence-based guidelines/protocols + medication only + the use of telephones and related-technology	**Depressive Symptoms**: **HAM-D Mean** **Baseline:** Intervention (n=89) 18(5.4) Control (n=93) 19.2 (5.9),*p*=0.16 **3** months: Intervention (n=89) 10.6(6.9) Control (n=93) 13.9 (7.8),*p*=0.004 **PHQ-9: Mean** **Baseline:** Intervention (n=89) 14.0(5.2) Control (n=93) 14.4 (5.2), *p*=0.54. **3** months: Intervention (n=89) 6.0(5.0) Control (n=93) 9.4 (6.3), *p*=<0.001 **Response: HAM-D** **3** months: Intervention (n=89) 51% Control (n=93)30%,*p*=0.005 **Rate of Remission: HAM-D <8** **3** months: Intervention (n=89) 39% Control (n=93) 23%, *p*=0.01 **Rate of Remission:PHQ-9 <5** **3** months: Intervention (n=89) 48% Control (n=93) 26%, *p*=0.002 **Summary:** • The model was significantly more effective than usual care in improving depression outcomes in patients with post-stroke depression. **Limitations:** • 12 weeks may not be enough time to notice an effect in some patients with depression.

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
See Previous	See Previous	in the intervention **Comparison:(n= 94)** Usual Care identical number of baseline and telephone sessions controlled for an "attention effect". Sessions focused on recognition and monitoring of stroke symptoms and risks; and not on depression.	• Subjects in the study were slightly younger and has less physical impairment than may be seen in other stroke samples
Authors: Wells et al 2008 **Location:** seven care management organizations covering each of the four US census regions (LA, California; San Antonio, Texas, Twin Cities, Minnesota, San Luis Valley, Colorado, Columbia, Maryland) in urban, suburban and rural areas **Population:** Patients with depression **Design:** RCT **Quality of Execution:** Good (1 limitation) **Funding:** NIMH	**Target Population: (N=3918)** Patients in primary care practices (clinics) with depression **Inclusion:** Patients intended to use the practice for next 12 months and screened positive for current Depressive Symptoms plus probable depression disorder in last year. **Exclusion:** < 18 yrs old, not fluent in English or Spanish, lacked insurance coverage for the local therapists participating in the intervention. **Baseline Demographics:** Age 42.3 (13.7); Female:68%; White: 59.9%; Hispanic: 27.4%;Black:6%; Other:6.8% **Organization and Setting:** Non-academic managed care and primary care clinics.	**Intervention: (n=397)** QI-Meds: Local practice teams were trained to educate primary care clinicians, practice nurses were trained to help in patient assessment, education and activation for treatment. Practice teams were given patient education materials for distribution. Nurse specialists were trained to support medication adherence through monthly visit or telephone contacts for 6 or 12 months. **Providers** **Case Manager:** Nurse **PC Provider:** Primary Care Physician **MHS:** Psychiatrist and designated therapists from a behavioral health group who received formal training **Collaborative Care Components:** Patient education + provider education + provider feedback + Oversight/Supervision of Providers + Emphasis on the use of evidence-based guidelines/protocols + Psychotherapy only + Medication and Psychotherapy + the use of telephones in intervention **Usual Care: (n=421)** Usual practice management and resources plus mailing AHCPR practice guidelines to the medical director of each clinic with copies for each clinician.	**Depressive Symptoms:** **(MHI-5) Mean (SD)** **Baseline:** Intervention (n=397) 35.65 (10.57) Usual Care (n=421) 36.39 (10.98) **9 years**: Intervention (n=397) 60.74 Usual Care (n=421) 64.91 ES: t statistic : -2.02, p=.05 **Summary:** • Main intervention effects were not seen sustained at 9 years.

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
Authors: Wells et al 2008 (1) **Location:** seven care management organizations covering each of the four US census regions (LA, California; San Antonio, Texas, Twin Cities, Minnesota, San Luis Valley, Colorado, Columbia, Maryland) in urban, suburban and rural areas **Population:** Patients with depression **Design:** RCT **Quality of Execution:** Good (1 limitation) **Funding:** NIMH	**Target Population:** **(N=3918)** Patients in primary care practices (clinics) with depression **Inclusion:** Patients intended to use the practice for next 12 months and screened positive for current Depressive Symptoms plus probable depression disorder in last year. **Exclusion:** < 18 yrs old, not fluent in English or Spanish, lacked insurance coverage for the local therapists participating in the intervention. **Baseline Demographics:** Age 42.6 (13.7); Female:78.8%; White: 52.6%; Hispanic: 34.2%;Black:6.5%; Other:6.7% **Organization and Setting:** Non-academic managed care and primary care clinics.	**Intervention:(n=451)** QI-Therapy: Local practice teams were trained to educate primary care clinicians, practice nurses were trained to help in patient assessment, education and activation for treatment. Practice teams were given patient education materials for distribution. Practice therapists were trained to provide individual and group cognitive behavioral therapy. 8-12 weeks of therapy provided by a study psychologist with active case management by psychotherapists. **Providers** **Case Manager:** Nurse **PC Provider:** Primary Care Physician **MHS:** Psychiatrist and designated therapists from a behavioral health group who received formal training **Collaborative Care Components:** Patient education + provider education + provider feedback + Oversight/Supervision of Providers + Emphasis on the use of evidence-based guidelines/protocols + Psychotherapy only + Medication and Psychotherapy + the use of telephones in intervention **Usual Care:(n=421)** Usual practice management and resources plus mailing AHCPR practice guidelines to the medical director of each clinic with copies for each clinician.	**Depressive Symptoms: MHI-5 Mean** **Baseline:** Intervention (n=451)34.83 (10.47),Usual Care (n=421) 36.39 (10.98) **9 years**: Intervention (n=451) 61.87 Usual Care (n=421) 64.91 ES: t statistic : -1.57, p=.12 **Summary:** • Main intervention effects were not sustained at 9 years. **Limitations:** • Moderate response rates. only conducted in certain minority groups, reliance on self report measures, limited sample sizes and power for some comparisons **Barriers:** • There was a significant intervention effect among whites on barriers due to insurance not paying for treatment. • Among whites there was a borderline significant effect on barriers due to difficulty finding providers with both intervention groups. • There was a sign overall intervention effect among minorities on barriers due to respondents thinking they could handle the problem on their own. • Whites in QI-Meds had less support compared with UC or QI-therapy. This was a Level 1 significant overall intervention effect.

Study Details	Population, Organization and Setting	Intervention + Comparison description	Major results and summary
Authors: Williams et al 2007 **Location:** 4 Indianapolis hospitals **Population:** Adults (>18 years) **Design :** RCT **Quality of Execution:** Fair (2 limitations) **Implementer and Funder:** None reported	**Target population: (N= 1,175)** Depressed ischemic stroke survivors were randomized from 4 Indianapolis hospitals. **Inclusion:** Adults 18 years and older, with ischemic stroke and that had no severe language impairment, no severe cognitive impairment, understood English, had a telephone, and who had a life expectancy of at least 6 months. **Exclusion:** Persons with hemorrhagic stroke, active psychosis, suicidality, or substance abuse; those currently taking a monoamine oxidase inhibitor; and women pregnant at the time of stroke. **Baseline Demographics:** Intervention Female: 61%, Male: 39% Race ethnicity White: 61% Black/ African American: 36% Others: 3% Mean Age (SD) : 60 (13) **Organization and Setting:** Hospital (in-patients), VA and others	**Intervention:(n=89)** **A**ctive-**I**nitiative-**M**onitor intervention included: **A**ctivating stroke survivors and their families to understand and accept depression diagnosis and treatment. 20-minute structured session at entry. **I**nitiating antidepressant medication. Study nurse recommends an AD to the stroke survivor's treating physician (neurologist or primary care provider). **M**onitoring treatment effectiveness **Providers** **Case Manager:** Nurse **PC Provider:** Primary care physician or neurologist **MHS:** Nurse and study physician **Collaborative Care Components:** Patient education + support for self care + provider feedback+ Oversight/Supervision of Providers + Emphasis on the use of evidence-based guidelines/protocols + medication only + the use of telephones and related-technology in the intervention **Comparison:(n= 94)** Usual Care identical number of baseline and telephone sessions controlled for an "attention effect". Sessions focused on recognition and monitoring of stroke symptoms and risks; and not on depression.	**Depressive Symptoms**: **HAM-D Mean** **Baseline:** Intervention (n=89) 18(5.4) Control (n=93) 19.2 (5.9),*p*=0.16 **3** months: Intervention (n=89) 10.6(6.9) Control (n=93) 13.9 (7.8),*p*=0.004 **PHQ-9: Mean** **Baseline:** Intervention (n=89) 14.0(5.2) Control (n=93) 14.4 (5.2), *p*=0.54. **3** months: Intervention (n=89) 6.0(5.0) Control (n=93) 9.4 (6.3), *p*=<0.001 **Response: HAM-D** **3** months: Intervention (n=89) 51% Control (n=93)30%,*p*=0.005 **Rate of Remission: HAM-D <8** **3** months: Intervention (n=89) 39% Control (n=93) 23%, *p*=0.01 **Rate of Remission:PHQ-9 <5** **3** months: Intervention (n=89) 48% Control (n=93) 26%, *p*=0.002 **Summary:** • The model was significantly more effective than usual care in improving depression outcomes in patients with post-stroke depression. **Limitations:** • 12 weeks may not be enough time to notice an effect in some patients with depression. • Subjects in the study were slightly younger and has less physical impairment than may be seen in other stroke samples