

Decision matrix for 6-year surveillance review of CG91 Depression in adults with a chronic physical health problem

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
Experience of care			
091-01 What are the experiences of people with depression and a chronic physical health problem and their families/carers and healthcare professionals? (1.1.1, 1.1.2)			
<p>2-year Evidence Update (2012) None identified</p> <p>3-year surveillance (2012) None identified</p>	<p>A mixed method systematic review¹ of people's beliefs about depression associated with chronic physical disease (65 studies, n=not reported in abstract) concluded that approaches to detection of depression in physical illness need to be receptive to the range of beliefs held by patients and that patient beliefs have implications for engagement with depression screening.</p> <p>A systematic review and meta-synthesis² of patient experiences of depression and anxiety with chronic disease (20 studies, n=not reported in abstract) found that patients tend to experience their chronic conditions and anxiety or depression as either independent or inter-related; that patients may be reluctant to acknowledge depression or anxiety as a separate condition, or may not recognise that the conditions are separate because of overlapping physical symptoms.</p>	None identified relevant to this question.	<p>New evidence is unlikely to impact on guideline recommendations.</p> <p>The new evidence from the 6-year surveillance review emphasises the importance of being receptive to beliefs and experiences of people with depression and chronic disease. This is in line with the guideline recommendations which highlight the significance of providing information and support and building a trusting relationship and working in an open, engaging and non-judgemental manner when working with patients with depression and a chronic physical health problem and their families or carers.</p>

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Case identification			
091-02 What methods are effective in identifying people with depression who have a physical health problem in primary care, hospital (including general medical), and residential settings and/or nursing homes? In which populations should identification methods be used? (1.3.1, 1.3.2, 1.1.3)			
<p>2-year Evidence Update (2012) A meta-analysis of 76 prospective studies³ involving over 160,000 patients with cancer showed that 91% of the bivariate associations between depression and mortality, and 90.5% of the multivariate analyses that controlled for confounding variables, reported a relative risk of more than 1.0. This finding demonstrates that a diagnosis of depression and elevated level of depressive symptoms are predictive of increased mortality in patients with cancer. The authors suggested that consideration could be given to screening for depression as part of cancer treatment.</p> <p>The Evidence Update concluded that although screening was not a focus of this meta-analysis, the conclusion is consistent with the recommendation to screen for psychological distress in the NICE guidance on cancer services 'Improving supportive and palliative care for adults with cancer'.</p> <p>3-year surveillance (2012) None identified</p>	<p>A Canadian Health Technology Assessment report⁴ on screening and management of depression for adults with chronic diseases (9 studies, n=not reported in abstract) concluded that there was no evidence to suggest that a screen-and-treat strategy for depression among adults with chronic diseases results in improved chronic disease outcomes.</p> <p>A systematic review⁵ of the utility of the revised Beck Depression scale (Beck Depression Inventory-II, BDI-II) for detecting depression in medical patients (70 articles, n=not reported in abstract) found that BDI-II had high reliability and good correlation with measures of depression and anxiety in this group of patients.</p> <p>One systematic review⁶ of the psychometric properties of the Cardiac Depression Scale (CDS) for screening of depression in patients with coronary heart disease (CHD) concluded that CDS is a psychometrically sound measurement instrument for identifying depression in cardiac populations.</p> <p>A systematic review⁷ of depression</p>	<p>Members of the Guideline Committee provided a number of references, these have been summarised as follows:</p> <p>A retrospective cohort study⁸ of patients with CHD or diabetes in Scotland (n=database of 1.3 million patients) concluded that systematic screening for depression in patients with chronic disease in primary care results in a significant but small increase in new diagnosis and treatment in the following 4 weeks.</p> <p>A diagnostic accuracy study⁹ of the Hospital Anxiety and Depression Scale (HADS) and Beck Depression Inventory-II (BDI-II) for screening of depression in CHD (n=522) found that HADS and BDI-II have high internal consistency but low positive predictive values; at optimal cut-off values BDI-II had slightly superior psychometric properties when compared to HADS.</p> <p>A diagnostic accuracy study¹⁰ of the Patient Health Questionnaire (PHQ-9) and the Hospital Anxiety and Depression Scale depression subscale (HADS-D) in patients with CHD (n=730) concluded that both these scales can be used as case identification instruments for depression in</p>	<p>New evidence is unlikely to impact on guideline recommendations</p> <p>The guideline does not recommend routine screening for depression but instead advocates the use of two questions to identify depression and a further three questions if depression is in chronic physical health.</p> <p>This approach is supported by two studies identified from the 6-year surveillance review - a Canadian Health Technology Assessment report⁴ which concluded that there was no evidence to suggest that a screen-and-treat strategy for depression among adults with chronic diseases results in improved chronic disease outcomes, and by a systematic review⁷ of depression screening in CHD which concluded that there is no evidence to support routine screening for depression in CHD as recommended by the American Heart Association.</p> <p>However, a retrospective examination of a large database of primary care patients in Scotland⁸ indicated that screening those with either CHD or diabetes was associated a significant but small increase in new diagnoses of depression</p>

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	<p>screening in CHD (15 studies, n=not reported in abstract) concluded that there is no evidence to support routine screening for depression in CHD as recommended by the American Heart Association.</p>	<p>patients with CHD, however, PHQ-9 was diagnostically superior.</p> <p>A systematic review and meta-analysis¹¹ of tools for detecting post-stroke depression (24 studies, n=2907) concluded that there are a number of possible instruments that may help but none is satisfactory for case-finding, although the Center of Epidemiological Studies-Depression Scale (CESD), the Hamilton Depression Rating Scale (HDRS) or the PHQ-9 are the most promising options.</p> <p>A systematic review¹² of screening tools for the detection of depression among patients with CHD (8 studies, n=not reported in abstract) found that PHQ-9, BDI-II and HADS-D were widely used but there is no consensus on the optimal screening tool.</p> <p>A systematic review and meta-analysis¹³ of the accuracy of HADS as a screening tool for depression in cancer patients (28 studies, n=not reported in abstract) concluded that its diagnostic accuracy varied widely by threshold but was consistently superior for depression screening than for screening of any mental disorder.</p>	<p>and a new course of antidepressant treatment in the month after screening. The authors of the study, however, caution that the resource implications of such screening approaches may not be justified by the modest improvements beyond standard care.</p> <p>A number of studies on the utility or diagnostic accuracy of various screening scales and tools were also identified but there was limited evidence of differences between scales on validity coefficients. There was also insufficient evidence to suggest that using a scale specifically tailored to people with a chronic physical health problem improved identification of depression in this population.</p>

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Service configuration			
<p>091-03 In the treatment of depression for people with a chronic physical health problem, which service-level interventions improve outcomes compared with standard care?</p> <ul style="list-style-type: none"> ● collaborative care ● stepped care ● case management ● stratified (matched) care ● attached professional model ● chronic disease (disease management) model <p>Are different models appropriate to the care of people in different phases of the illness, such as treatment resistant depression and relapse prevention? (1.1.4, 1.5.4, 1.6)</p>			
<p>2-year Evidence Update (2012)</p> <p>A review by de Man-van Ginkel and colleagues¹⁴ focused on interventions delivered by nurses to patients with depression following stroke and included 15 studies (2054 participants) with a range of designs and one systematic review of 17 RCTs (1773 patients). With a wide variety of outcomes reported, a meta-analysis was not possible. The positive impact of information provision, group physical activities and support programmes on depressive symptoms was noted. Beneficial effects from life review therapy and motivational interviewing were also noted in the review.</p> <p>An RCT by Huffman and colleagues¹⁵ assessed a depression care management programme in patients hospitalised with cardiac disease. Patients with depression (but not psychotic symptoms or other</p>	<p>A systematic review and meta-analysis²² of nurse-delivered collaborative care compared to usual care for depression in patients with long-term physical conditions (14 studies, n=4440) concluded that nurse led depression management provides effective treatment across a range of long term health conditions.</p> <p>A systematic review and meta-analysis²³ of practice-based interventions for depression in chronic medical conditions in the primary care setting (12 studies, n=not reported in abstract) concluded that collaborative care interventions improve outcomes for depression and quality of life in varying medical conditions, with few data available on medical outcomes.</p> <p>A systematic review and meta-analysis²⁴</p>	<p>One member of the Guideline Committee commented that emphasis on low intensity peer support groups remains important, and is even more relevant given changes in service configurations/reduction in levels of care.</p> <p>Members of the Guideline Committee also highlighted a number of references. These have been summarised as follows:</p> <p>One cluster RCT (COINCIDE trial)²⁷ of collaborative care versus usual care for patients with depression comorbid with diabetes or cardiovascular disease (n=387 from 36 General Practices in England) concluded that collaborative care, which incorporates brief low intensity psychological therapy, delivered in partnership with practice nurses in primary care can reduce depression and improve self-management of chronic disease in this</p>	<p>New evidence is unlikely to impact on guideline recommendations.</p> <p>Among the evidence for the 6-year surveillance review is the report of the COINCIDE trial²⁷ which suggests that patients with high levels of mental and physical co-morbidity can gain modest but additional benefits from brief low-intensity psychological interventions when delivered in partnership with practice nurses when compared to usual care, which may have included low intensity psychological therapy or medicines. However, many of the study participants were already receiving antidepressant medication, which may suggest that they would already fit the criteria for collaborative care specified in the guideline. In addition, the study findings are limited by a short follow up period and the cost-effectiveness of the</p>

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<p>symptoms needing psychiatric referral) were randomly assigned to collaborative care (n=90) or usual care (n=85). A case manager, in consultation with a study psychiatrist, worked with patients assigned to collaborative care to coordinate pharmacotherapy and psychological interventions that were deemed appropriate. The cardiac in-patient care team were informed of the depression in patients assigned usual care, and could instigate treatment in line with usual practice; information was not provided on any treatment for depression received by these patients. Patients assigned to collaborative care showed significantly greater response in depressive symptoms than those receiving usual care after 6 weeks (59.7% vs 33.7% response, odds ratio [OR] = 2.91, p = 0.003) and 12 weeks (51.5% vs 34.4% response, OR = 2.02, p = 0.042), but this was not maintained after 6 months (48.7% vs 43.9% response, OR = 1.21, p = 0.57).</p> <p>Evidence from an RCT by Ell et al.¹⁶ conducted in the USA involving 387 patients with diabetes (all of low-income and predominantly Hispanic) suggested that under-served populations may also benefit from collaborative care as part of a stepped-care programme. The intervention group received first-line treatment choice of problem-solving therapy provided by bilingual clinical specialists in diabetes</p>	<p>of collaborative care for patients with depression and diabetes mellitus (8 studies, n=2238) concluded that collaborative care was associated with significantly better depressive outcomes and adherence compared to usual care.</p> <p>A systematic review and meta-analysis²⁵ of collaborative care for comorbid depression and diabetes (7 RCTs, n=1895 participants) concluded that collaborative care for depression significantly improves both depression and glycaemia outcomes in this group of people.</p> <p>One systematic review²⁶ of treatment of depression in people with lung cancer found no completed trials in this population but the authors did, however, find six trials of interventions intended to improve quality of life in people with lung cancer which suggested that enhanced care is more effective in reducing depressive symptoms than standard care.</p>	<p>group of people.</p> <p>A pilot multi-centre RCT (UPBEAT)²⁸ of a nurse-led personalised care intervention for patients with chest pain and depression (n=81 from 17 GP CHD registers in South London) concluded that the intervention demonstrated good acceptability and feasibility, allowed patients to work on unaddressed problems and appeared cheaper than treatment as usual.</p> <p>One multicentre RCT (SMaRT Oncology-2)²⁹ of integrated collaborative care for comorbid depression in people with cancer (n=500 from 3 cancer centres in Scotland) concluded that the intervention is an effective treatment for depression in cancer and offers a model for the treatment of depression comorbid with other medical conditions.</p> <p>Another multicentre RCT(SMaRT Oncology-3)³⁰ of integrated collaborative care for depression in people with lung cancer (n=142 from 3 cancer centres in Scotland) concluded that the intervention was substantially more efficacious than usual care and that larger trials are needed to estimate the effectiveness and cost-effectiveness of this care programme in this population.</p> <p>One RCT³¹ of integrated collaborative care for depression and poorly controlled diabetes and/or risk factors for CHD</p>	<p>COINCIDE care model is unknown. More research outputs from the trial may be published. In addition, NICE is currently developing a guideline on multi-morbidity and the Depression in adults guideline is being updated, the update mainly being triggered by recent studies on collaborative care for depression in adults. Therefore, it is considered that this study is not a very clear indication to update the guideline at this point in time and should be flagged for the next surveillance review, when there may be additional relevant evidence.</p> <p>Recommendation 1.5.4.1 of the guideline states: “Consider collaborative care for patients with moderate to severe depression and a chronic physical health problem with associated functional impairment whose depression has not responded to initial high-intensity psychological interventions, pharmacological treatment or a combination of psychological and pharmacological interventions”.</p> <p>This recommendation is under the section on step 3 of the stepped care approach, the focus of which is “persistent subthreshold depressive symptoms or mild to moderate depression with inadequate response to initial interventions; moderate and severe depression”.</p>

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<p>depression or antidepressant medication (usually an SSRI); monthly telephone follow-up identified non-responders or partial responders (after 9–12 weeks) who received both treatments. Patients who remained non-responders were considered for additional therapy and specialist referral. Significantly more patients in the intervention group showed 50% or more reduction in depressive symptoms from baseline than in the usual care group after 6, 12 and 18 months (OR = 2.46–2.57, all p < 0.001).</p> <p>The Evidence Update concluded that the findings of the de Man-van Ginkel study¹⁴ in regards to the positive impact of information provision, group physical activities and support programmes on depressive symptoms were in line with NICE CG91 guidance. For the Huffman study¹⁵, the Evidence Update concluded that although the study provided some evidence for the value of collaborative care in patients hospitalised with cardiac disease who may not previously have received step 2 or individual step 3 therapies, the organisation of the NHS may not be conducive to this approach because few cardiac units have a social worker and psychiatrist available to coordinate and deliver the intervention - the evidence from this narrowly-defined patient population was considered unlikely to change the recommendations of NICE</p>		<p>(n=214 from 14 primary care clinics in Seattle, USA) concluded that integrated care that covers chronic physical disease and comorbid depression can reduce social disability and enhance global quality of life.</p>	<p>Recommendation 1.5.4.2 of the guideline states: “Collaborative care for patients with depression and a chronic physical health problem should normally include:</p> <ul style="list-style-type: none"> • case management which is supervised and has support from a senior mental health professional • close collaboration between primary and secondary physical health services and specialist mental health services • a range of interventions consistent with those recommended in this guideline, including patient education, psychological and pharmacological interventions, and medication management • long-term coordination of care and follow-up. <p>At step 2, the followings are recommended: low-intensity psychosocial interventions, psychological interventions, medication and referral for further assessment and interventions (recommendation 1.2). The guideline does not currently recommend collaborative care at Step 2.</p>

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<p>CG91 for stepped care.</p> <p>3-year surveillance (2012)</p> <p>Five studies relevant to the clinical questions were identified.</p> <p>One RCT¹⁷ on coordinated care management of patients with depression and poorly controlled diabetes, coronary heart disease, or both, was found. Patients were randomly assigned to usual-care or to a medically supervised nurse, who worked with each patient's primary care physician, and provided guideline-based, collaborative care management, with the goal of controlling risk factors associated with multiple diseases. The authors concluded that compared to usual care, an intervention involving nurses who provided guideline-based, patient-centred management of depression and chronic disease significantly improved control of medical disease and depression.</p> <p>One RCT¹⁸ assessed the impact of a collaborative, team-based, care management program for complex patients (TEAMcare) with poorly controlled diabetes or coronary heart disease with coexisting depression. In the TEAMcare program, a nurse care manager collaborated closely with primary care physicians, patients, and consultants to deliver a treat-to-target approach across multiple conditions. Measures included</p>			

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<p>medication initiation, adjustment, adherence, and disease self-monitoring. Results showed that compared to usual care, TEAMcare improved control of depression, diabetes and heart disease, with no change in medication adherence rates.</p> <p>One RCT¹⁹ on the integrated management of type 2 diabetes and depression treatment to improve medication adherence was found. Patients were randomly assigned to an integrated care intervention or usual care. Integrated care managers collaborated with physicians to offer education and guideline-based treatment recommendations and to monitor adherence and clinical status. Results showed that patients who received the intervention were more likely to achieve HbA1c levels of less than 7% and remission of depression in comparison with patients in the usual care group at 12 weeks.</p> <p>One RCT²⁰ determined the effectiveness of PEARLS, a home-based, collaborative care intervention consisting of problem solving treatment, behavioural activation, and psychiatric consultation program for managing depression in adult individuals with epilepsy and clinically significant acute and chronic depression. Patients were randomly assigned to the PEARLS intervention or usual care, and assessed</p>			

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<p>at baseline, 6 months, and 12 months. Results showed that compared with patients who received usual care, patients assigned to the PEARLS intervention achieved lower depression severity. The authors concluded that the PEARLS program effectively reduced depressive symptoms in adults with epilepsy and comorbid depression.</p> <p>One study²¹ presented the long-term effectiveness of PEARLS. Results showed that patients assigned to PEARLS achieved lower depression severity, lower suicidal ideation, and better emotional wellbeing over 18 months, compared with patients given the usual care. The authors' conclusion was that the PEARLS program significantly reduces depressive symptoms in adults with epilepsy, and this effect is maintained for 18 months after baseline and for more than 1 year after completion of home visits.</p> <p>In summary, a number of studies were identified from the 3-year surveillance review in relation to the use of the collaborative care approach for people with depression and a chronic physical health problem and the conclusion at the time was that the findings of these studies were in line with guideline recommendations.</p>			

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091-4 In the treatment of depression for people with a chronic physical health problem, what systems promote more effective access to care, for example for black and minority ethnic groups, people with learning difficulties, people in care homes and people experiencing social deprivation?			
2-year Evidence Update (2012) None identified 3-year surveillance (2012) None identified	None identified	One member of the Guideline Committee commented that inequity of access for members of BME communities remains a concern.	Although inequity of access was raised as a concern by a member of the Guideline Committee, no evidence was identified through the surveillance to support this view.
Psychological/psychosocial interventions			
091-5 In the treatment of depression for people with a chronic physical health problem, do any of the following (either alone or in combination with pharmacotherapy) improve outcomes compared with other interventions (including treatment as usual): <ul style="list-style-type: none"> • cognitive and behavioural interventions (including problem solving therapy, acceptance and commitment therapy, self-help/guided self-help, CCBT) • counselling/person-centred therapy • IPT • psychodynamic psychotherapy • family, couples and systemic interventions • psychoeducation • solution-focused therapy • occupational therapy • support (including groups, befriending and non-statutory provision) • programmes to facilitate employment • physical activity Does mode of delivery (group-based or individual) impact on outcomes? Does setting impact on outcomes? Are brief interventions (for example, 6–8 weeks) effective? Are psychological interventions harmful? (1.1.4, 1.4.1.2, 1.4.1.3, 1.4.2, 1.4.2.2, 1.5.1, 1.5.3)			
2-year Evidence Update (2012) A systematic review ³² examined the efficacy of various interventions to treat depression in 90 studies of people with HIV, primarily among men in North America (total number of participants not stated). Of nine studies included that examined psychosocial interventions, five	<i>General</i> A systematic review and meta-analysis ⁵³ of exercise training on depressive symptoms among patients with a chronic illness (90 articles, n=10,534) concluded that overall, exercise significantly reduced depressive symptoms, with largest effects in mild-to-moderate	One member of the Guideline Committee commented that emphasis on low intensity peer support groups remains important, and is even more relevant given changes in service configurations/reduction in levels of care. A number of references were also provided by members of the Guideline	New evidence on web-based intervention is unlikely to impact on guideline recommendations at this time. Internet-based interventions are generally not mentioned in the guideline. The only web-based intervention recommended in the guideline relates to delivery of computerised cognitive

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<p>showed no benefit. The studies were diverse and only two examined a similar intervention (art therapy), one of which was effective and the other was not (no data provided). Evidence was also mixed from the four studies of exercise, two of which were effective and two were not (no data provided).</p> <p>One RCT³³ conducted in 255 patients with diabetes and depressive symptoms, evaluated the efficacy of web-based cognitive behaviour therapy (CBT) by comparing people undergoing this intervention with those placed on a waiting list for the same intervention. The intervention consisted of eight consecutive lessons, with feedback on homework assignments provided by certified health psychologists. Depressive symptoms were significantly reduced by the web-based CBT (41% experienced clinical improvement vs 24% in the control group, $p < 0.001$). Diabetes-specific emotional distress was also significantly reduced by the intervention ($p = 0.03$), but there was no impact on glycaemic control.</p> <p>One Cochrane review³⁴ of approximately 4000 patients with coronary artery disease and major or minor depression included seven RCTs that investigated psychological interventions (for example, CBT, resource-orientated psychotherapy, telephone counselling). Two trials provided</p>	<p>depression and for whom exercise training improves function-related outcomes.</p> <p>A systematic review and meta-analysis⁵⁴ of self-help interventions for depression in patients with physical illnesses (25 studies, $n=4211$) concluded that with appropriate design and implementation, self-help interventions may potentially improve symptoms of depression in this group of people.</p> <p><i>Cancer</i></p> <p>A systematic review and meta-analysis⁵⁵ of arts therapies for anxiety, depression, and quality of life in breast cancer patients (13 studies, $n=606$) concluded that arts therapies affect patients' anxiety but not depression or quality of life.</p> <p>One systematic review⁵⁶ of psychosocial strategies on anxiety and depression in patients diagnosed with prostate cancer (14 studies, n=not reported in abstract) concluded that these strategies are effective in reducing anxiety and depression, although the effect was not sustainable 3 months post-intervention.</p> <p>A systematic review and meta-analysis⁵⁷ to determine the antidepressant effect of exercise in cancer survivors (15 RCTs, n=not reported in abstract) showed that exercise has modest positive effects on depressive symptoms with larger effects</p>	<p>Committee, these are summarised as follows:</p> <p>One RCT⁷⁴ of mindfulness meditation for younger breast cancer survivors ($n=71$) concluded that a brief, mindfulness-based intervention revealed preliminary short-term efficacy in reducing stress, depressive and behavioural symptoms, and pro-inflammatory signalling.</p> <p>A preliminary report of an RCT⁷⁵ that compared e-communication, web-based self-management support and usual care among breast cancer patients in Norway ($n=167$) concluded that both interventions resulted in significantly lower depression compared to usual care, but that the multicomponent web-based self-management intervention had additional positive effects.</p> <p>This RCT was prioritised for a full commentary and discussed by topic experts. However, feedback from the topic experts suggested that although the results of this trial are positive this is a preliminary report of the trial and is not sufficient evidence to draw a conclusion at this time. The intervention has potential for patient groups with long-term conditions as it could improve their accessibility to psychological interventions: web-based intervention is a key area where we are likely to be seeing development in the future. Hence, it is pertinent to await</p>	<p>behavioural therapy (CCBT) as part of Step 2 care. The guideline states that CCBT should be provided via a stand-alone computer-based or web-based programme for patients with persistent subthreshold depressive symptoms or mild to moderate depression and a chronic physical health problem, and for patients with subthreshold depressive symptoms that complicate the care of the chronic physical health problem.</p> <p>Among the evidence from the 6-year surveillance review was a preliminary report of an RCT⁷⁵ that compared e-communication, web-based self-management support and usual care among breast cancer patients in Norway ($n=167$). The trial concluded that both interventions resulted in significantly lower depression compared to usual care, but that the multicomponent web-based self-management intervention had additional positive effects.</p> <p>However, topic expert feedback suggested that although the results of this trial are positive this is a preliminary report of the trial and is not sufficient evidence to draw a conclusion at this time. The intervention has potential for patient groups with long-term conditions as it could improve their accessibility to psychological interventions: web-based intervention is a key area where we are</p>

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<p>sufficient information for meta-analysis compared with placebo, showing a non-significant difference on depression score. Limited evidence from one study showed a beneficial impact of interpersonal psychotherapy compared with clinical management. This evidence was considered insufficient to affect NICE CG91 recommendations.</p> <p>3-year surveillance (2012)</p> <p>Twenty one studies relevant to the clinical question were identified through the 3-year surveillance.</p> <p><i>Diabetes</i></p> <p>A 3-year follow-up of a multicentre cluster RCT³⁵ on the effectiveness of a diabetes education and self-management programme (DESMOND) for people with newly diagnosed type 2 diabetes mellitus was found. Results showed that glycated haemoglobin (HbA_{1c}) levels at three years had decreased in both groups with no significant difference between the groups. The groups did not differ for the other biomedical and lifestyle outcomes and drug use. The significant benefits in the intervention group across four out of five health beliefs seen at 12 months were sustained at three years. Depression scores and quality of life did not differ at three years.</p> <p>One RCT³³ evaluated the effectiveness of</p>	<p>for exercise that was supervised, not conducted at home, and of 30 minutes duration.</p> <p>One systematic review of RCTs⁵⁸ of treatment of depression in adults with cancer (7 studies, n=not reported in abstract) concluded that there is very limited evidence from clinical trials to guide the treatment of cancer patients with a diagnosis of depression, especially for psychological treatments.</p> <p>A systematic review and meta-analysis⁵⁹ of mindfulness-based therapy (MBT) on anxiety and depression in adult cancer patients and survivors (32 studies, n=1403) concluded that that the overall quality of trials varies but evidence from high-quality RCTs support the use of MBT in this group of patients.</p> <p><i>Cardiovascular</i></p> <p>A systematic review and meta-regression⁶⁰ of psychological interventions for depression in people with CHD (64 treatment comparisons, n=not reported in abstract) found that overall these interventions improved depression although the effect was small; among high-quality trials though only CBT showed significant effects; when entered into multivariable analysis, no treatment had a significant effect.</p> <p>A meta-analysis⁶¹ of treatments to</p>	<p>further evidence before considering for inclusion in the guideline.</p> <p>One RCT⁷⁶ of home-based walking on depression and cancer-related symptoms in patients with lung cancer in Taiwan (n=116) concluded that the exercise group showed significant improvements in their anxiety and depression levels over time than did the usual-care group.</p> <p>One RCT⁷⁷ of a self-guided online psychological intervention to reduce distress in men treated for localised prostate cancer (n=142) found that the intervention combined with an online peer discussion forum significantly improved reductions in distress compared with the online intervention alone or the forum alone.</p> <p>One Cochrane review⁷⁸ of psychosocial interventions for men with prostate cancer (19 studies, n=3,204) concluded that the findings do not provide sufficiently strong evidence to permit meaningful conclusions about the effects of these interventions in men with prostate cancer</p> <p>One RCT⁷⁹ of a yoga exercise programme in women with breast cancer undergoing adjuvant chemotherapy (n=60) showed that the yoga exercise programme reduced fatigue but not depression.</p> <p>One RCT⁸⁰ of electro-acupuncture versus sham acupuncture and usual care in</p>	<p>likely to be seeing development in the future. Hence, it is pertinent to await further evidence before considering for inclusion in the guideline.</p>

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<p>web-based CBT for treatment of depression in adults with type 1 or type 2 diabetes. The trial was conducted in the Netherlands in adult diabetic patients with elevated depressive symptoms. Results showed that the web-based CBT depression treatment was effective in reducing depressive symptoms and emotional distress in depressed patients with diabetes.</p> <p>One RCT³⁶ on mindfulness-based stress reduction (MBSR) intervention for patients with type 2 diabetes was found. Patients with type 2 diabetes and microalbuminuria were randomised to a mindfulness-based intervention or a treatment-as-usual control group. At the first year follow up, the MBSR group showed lower levels of depression and improved health status compared with the control group.</p> <p>One RCT³⁷ assessed the effect of lifestyle intervention on depressive symptoms during a 36-month study designed to prevent Type 2 diabetes. Middle-aged participants, who were overweight or obese and had impaired glucose tolerance, were randomised to the lifestyle intervention or control group in the Finnish Diabetes Prevention Study. The authors concluded that participation in the study lowered depression scores, with no specific group effect. Among the lifestyle changes, particularly successful reduction</p>	<p>improve clinical outcomes and depression among patients with CHD (70 studies, n=not reported in abstract) concluded that mental health treatments (antidepressants and psychotherapy) and cardiac rehabilitation may each reduce depression and CHD events.</p> <p>A systematic review and meta-analysis⁶² of exercise training in patients with heart failure (19 RCTs, n=3447) concluded that exercise reduced depression, however, this benefit is unclear in heart failure with a normal ejection fraction and combined aerobic and strength training.</p> <p><i>Chronic obstructive pulmonary disease (COPD)</i></p> <p>A systematic review and meta-analysis⁶³ of complex psychological or lifestyle interventions in people with COPD (29 RCTs, n=2063) concluded that interventions that include an exercise component significantly improve symptoms of depression and anxiety, regardless of severity, in this group of people.</p> <p>A systematic review and meta-analysis⁶⁴ of the effectiveness of psychological interventions for anxiety and depression in adults with COPD (7 studies, n=193) showed a small decrease in symptoms of anxiety and depression.</p> <p><i>Multiple sclerosis</i></p>	<p>postmenopausal women with breast cancer with joint pain (n=67) found that both electro-acupuncture and sham acupuncture produced significant improvements in depression.</p> <p>A 5-year follow-up of an RCT⁸¹ of cognitive behavioural stress management (CBSM) in non-metastatic breast cancer (original RCT n=240, 5-year follow-up n=130) found that the intervention group reported significantly fewer depressive symptoms than the control group.</p> <p>One RCT⁸² of a single psycho-oncological therapy session or a single-session relaxation in patients with gynaecological cancer (n=45) showed a trend in favour of psycho-oncological therapy for the treatment of depression in this group of people.</p> <p>One RCT⁸³ of exercise and hypocaloric healthy eating after early-stage breast cancer (n=85) showed that compared with the control group, the intervention group exhibited a reduction in depressive symptoms but no significant decrease in perceived stress.</p> <p>One Canadian multicentre RCT⁸⁴ of exercise dose and type in breast cancer patients undergoing chemotherapy (n=301) found that higher volumes of exercise did not affect depressive symptoms, but were effective in patients</p>	

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<p>of body weight was associated with the greater reduction of depressive symptoms.</p> <p>One RCT³⁸ on motivational interviewing for people with type 2 diabetes was found. People with Type 2 diabetes were randomly allocated into either the motivational interview group or the usual care group from baseline to 3 months follow-up. Results showed that the motivational interview significantly improved participants in self-management, self-efficacy, quality of life, and HbA1c but not depression, anxiety and stress compared to the control group, at 3 months follow-up.</p> <p><i>Heart disease</i></p> <p>One Cochrane review³⁴ on psychological and pharmacological interventions for depression in patients with coronary artery disease (CAD) was found. Results showed that psychological interventions and pharmacological interventions with selective serotonin reuptake inhibitors (SSRIs) may have a small yet clinically meaningful effect on depression outcomes in CAD patients. No beneficial effects on the reduction of mortality rates and cardiac events were found. The authors concluded that overall, however, the evidence is sparse due to the low number of high quality trials per outcome and the heterogeneity of examined populations and interventions.</p>	<p>A systematic review and meta-analysis⁶⁵ of the effect of exercise on depressive symptoms in multiple sclerosis (15 RCTs, n=591) concluded that exercise may be a potential treatment to prevent or reduce depressive symptoms in these individuals, but existing studies do not allow firm inferences.</p> <p>One systematic review and meta-analysis⁶⁶ of CBT for the treatment of depression in people with multiple sclerosis (7 studies, n=433) concluded that CBT is effective for the treatment of depression in multiple sclerosis.</p> <p><i>Stroke</i></p> <p>A systematic review and meta-analysis⁶⁷ of exercise for depressive symptoms in patients with stroke (13 studies, n=1022) found that exercise resulted in less depressive symptoms in the immediate post-intervention period across both the sub-acute and chronic stage of recovery but were not retained with longer term follow-up.</p> <p><i>Diabetes</i></p> <p>One systematic review⁶⁸ of exercise training in type 2 diabetes mellitus (20 RCTs, n=1719) showed conflicting evidence of effectiveness of the intervention on quality of life, symptoms of depression and anxiety, and emotional well-being.</p>	<p>with depression at baseline.</p> <p>One RCT⁸⁵ of yoga in women with breast cancer undergoing radiotherapy (n=163) found that yoga improved quality of life and physiological changes associated with radiotherapy beyond the benefits of simple stretching exercises but there were no group differences for depression and quality of sleep.</p>	

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
<p>One RCT³⁹ assessed the impact of a modified, stage-of-change-matched, gender-tailored cardiac rehabilitation (CR) program for reducing depressive symptoms among women with coronary heart disease (CHD). Depressive symptoms of women in a traditional 12-week CR program were compared to those completing a tailored program that included motivational interviewing guided by the trans-theoretical model of behaviour change. The authors concluded that the modified, gender-tailored CR program reduced depressive symptoms in women when compared to a traditional program.</p> <p>One pilot RCT⁴⁰ compared the effects of a nondenominational spiritual retreat, Medicine for the Earth (MFTE), on depression and other measures of well-being six- to 18-months post-acute coronary syndrome (ACS). Participants were randomised to MFTE, Lifestyle Change Program (LCP), or usual cardiac care. The MFTE intervention included guided imagery, meditation, drumming, journal writing, and nature-based activities. The LCP included nutrition education, exercise, and stress management. Both retreat groups received follow-up phone coaching biweekly for three months. The authors concluded that the MFTE intervention can be used to increase hope while reducing depression in patients with</p>	<p><i>Epilepsy</i></p> <p>One systematic review⁶⁹ of CBT for depression in people with epilepsy (13 trials including 6 RCTs and 7 case series, n=not reported in abstract) found two types of studies: those tailored toward improving depression which showed that CBT was effective and those that focused on improving seizure-control which do not.</p> <p><i>Acquired brain injury</i></p> <p>A systematic review and meta-analysis⁷⁰ of psychological interventions for depression in long-term rehabilitation after an acquired brain injury (13 studies, n=not reported in abstract) showed moderate effectiveness compared with control conditions; studies with adequate randomisation did not, however, suggest effectiveness.</p> <p><i>Spinal cord injury</i></p> <p>One systematic review⁷¹ of psychological therapies for the management of co-morbid depression following a spinal cord injury (9 studies, n=591) showed that overall, multimodal CBT was moderately effective, and that activity scheduling, psychoeducation, problem solving and cognitive therapy may be particularly beneficial therapies within CBT.</p> <p><i>Human immune deficiency virus (HIV)</i></p>		

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
<p>ACS.</p> <p>One open trial⁴¹ examined the effectiveness of tailored cognitive-behavioural therapy (CBT) for veterans with congestive heart failure (CHF) and chronic obstructive pulmonary disease (COPD) with comorbid symptoms of depression and/or anxiety. Results showed that symptoms of depression and anxiety were improved at 8 weeks and maintained at 3-month follow-up compared to baseline; physical disease outcomes were also improved for COPD and CHF. The authors concluded that modifications to traditional CBT approaches have the potential to address the emotional and physical health challenges associated with complex cardiopulmonary patients but that additional trials are needed.</p> <p><i>Breast cancer</i></p> <p>One RCT⁴² evaluated the efficacy of an interactive self-help workbook in reducing distress, and improving quality of life (QOL) and coping for women recently diagnosed with breast cancer. The authors' conclusion was that a self-help workbook can be an effective, short-term intervention for improving posttraumatic stress, cognitive avoidance, and certain depressive symptoms in women recently diagnosed with breast cancer. However, issues related to body image need to be dealt with differently.</p>	<p><i>infection</i></p> <p>A systematic review⁷² of group psychotherapies for depression, based on the CBT model against other therapeutic interventions or controls, in persons with HIV (4 studies, n=not reported in abstract) revealed a significant effect of group CBT on depression in this group of people.</p> <p><i>Other</i></p> <p>A systematic review and individual patient data meta-analysis⁷³ of the effectiveness of CBT for depression in patients receiving disability benefits (2 trials, n=227) showed no significant difference for CBT versus control or between those in receipt of benefits not those not receiving benefits.</p>		

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
<p>One RCT⁴³ investigated the impact of pilates exercises on physical performance, flexibility, fatigue, depression and quality of life in women who had been treated for breast cancer. Patients in the intervention group performed pilates and home exercises while patients in the control group performed only home exercises. The authors concluded that pilates exercises are effective and safe in female breast cancer patients and that there is a need for further studies so that its effect can be confirmed.</p> <p>One RCT⁴⁴ tested the efficacy of behavioural activation treatment for depression (BATD) compared to problem-solving therapy for depressed breast cancer patients. No significant group differences were found at post-treatment and treatment gains were maintained at 12-month follow-up, with some support for stronger maintenance of gains in the BATD group. The authors concluded that BATD and problem-solving interventions represent practical interventions that may improve psychological outcomes and quality of life among depressed breast cancer patients.</p> <p>One RCT⁴⁵ on the effects of a physical exercise rehabilitation group program on anxiety, depression, body image, and health-related quality of life among breast cancer patients was found. Women with</p>			

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
<p>primary non-metastatic breast cancer after a minimum 4-week period post chemotherapy and/or radiotherapy completion were randomly assigned to the intervention group or the waiting group. The authors concluded that the 10-week physical exercise intervention significantly improved psychosocial wellbeing, individual body image, and physical fitness.</p> <p><i>HIV</i></p> <p>One systematic review³² of evaluated interventions related to HIV and depression was found. The review revealed that the interventions were diverse and could broadly be categorised into psychological, psychotropic, psychosocial, physical, HIV-specific health psychology interventions and HIV treatment-related interventions. Psychological interventions were particularly effective and in particular interventions that incorporated a cognitive-behavioural component. Psychotropic and HIV-specific health psychology interventions were also generally effective. Evidence was not clear-cut regarding the effectiveness of physical therapies and psychosocial interventions were generally ineffective. Interventions that investigated the effects of treatments for HIV and HIV-associated conditions on depression found that these treatments often decreased</p>			

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
<p>depression.</p> <p>One pilot trial⁴⁶ on a brief interpersonal psychotherapy delivered via telephone to reduce psychiatric distress among persons living with HIV-AIDS in rural areas in the United States was found. The authors concluded that the telephone-delivered interpersonal therapy intervention showed potential to reduce depressive and psychiatric symptoms among HIV-infected persons in rural areas and that on the basis of these encouraging findings, additional research examining this intervention with this clinical population is warranted.</p> <p><i>Other conditions</i></p> <p>One RCT⁴⁷ evaluated the effectiveness of a brief psychosocial-behavioural intervention in those with post-stroke depression. Clinically depressed patients with ischemic stroke within 4 months of index stroke were randomly assigned to an 8-week brief psychosocial-behavioural intervention plus antidepressant or usual care, including antidepressant. The primary end point was reduction in depressive symptom severity at 12 months after entry. Results showed that the intervention reduced post-stroke depression significantly more than usual care.</p> <p>One RCT⁴⁸ assessed the efficacy of a</p>			

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
<p>scheduled telephone intervention for ameliorating depressive symptoms during the first year after traumatic brain injury (TBI). The treatment group received up to 7 scheduled telephone sessions over 9 months designed to elicit current concerns, provide information, and facilitate problem solving in domains relevant to TBI recovery. The authors concluded that compared to usual care telephone-based interventions using problem-solving and behavioural activation approaches may be effective in ameliorating depressive symptoms following TBI.</p> <p>One RCT⁴⁹ assessed the effect of telephone-administered cognitive-behavioural therapy on quality of life among patients with multiple sclerosis. Participants with multiple sclerosis and depression were randomly assigned to either a telephone-administered CBT (T-CBT) or telephone-administered supportive emotion-focused therapy (T-SEFT) intervention. The authors concluded that T-CBT provided greater QOL improvements and benefits compared with T-SEFT.</p> <p>One RCT⁵⁰ assessed the effects of an electrical stimulation (ES) program on trunk muscle strength, functional capacity, quality of life, and depression in the patients with chronic low back pain</p>			

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
<p>(CLBP). Patients in the intervention group received an ES program and exercises while patients in the control group had only exercises. Results showed that, except depression and social function, the improvements for all the parameters were better in the ES group than in the control group. The authors concluded that the ES program was very effective in improving QOL, functional performance and isometric strength.</p> <p>One RCT⁵¹ of cognitive behaviour therapy for psychosis in a routine clinical service was found. Participants were randomised into immediate therapy or waiting list groups. The intervention group was offered 6 months of therapy and followed up 3 months later. The waiting list group received therapy after waiting 9 months. Results showed that depression improved in the combined therapy group at both the end of therapy and follow-up.</p> <p>One study⁵² on social and vocational skills training to reduce self-reported anxiety and depression among young adults on the autism spectrum was found. Results showed that at post intervention, participants who received the training reported significantly lower depression and anxiety compared to pre intervention. Responses on a measure of peer relationships were also improved post-intervention, although this did not reach</p>			

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
<p>significance. The authors concluded that although preliminary, their findings demonstrate the broader, positive impact that such programs may have.</p> <p>In summary, a number of studies were identified from the 3-year surveillance review in relation to the use psychological and psychosocial interventions for people with depression and a chronic physical health problem and the conclusion at the time was that the findings of these studies were generally in line with guideline recommendations.</p>			
<p>091-6 In people with a chronic physical health problem whose depression has responded to treatment, what psychological, psychosocial and pharmacological strategies are effective in preventing relapse (including maintenance treatment, continued support)? (1.5.2.22)</p>			
<p>2-year Evidence Update (2012) None identified</p> <p>3-year surveillance (2012) None identified</p>	None identified	None identified relevant to this question.	No new evidence was identified that would affect recommendations.

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
Pharmacological interventions			
<p>091-7 In the treatment of depression for people with a chronic physical health problem, which drugs improve outcomes compared with placebo: (1.4.3, 1.5.1, 1.5.2)</p> <ul style="list-style-type: none"> • SSRIs (for example, escitalopram) • ‘Third generation’ antidepressants (for example, venlafaxine, desvenlafaxine, agomelatine, duloxetine, mirtazapine, reboxetine) • MAOIs • TCAs • antipsychotics (for example, quetiapine) • trazodone • maprotiline 			
<p>2-year Evidence Update (2012)</p> <p><i>Treatment options</i></p> <p>A Cochrane review³⁴ assessed both pharmacological and psychological interventions for depression in approximately 4000 patients with coronary artery disease. However, comparison of the alternative approaches was not possible from the 16 RCTs included, only one of which included both types of intervention.</p> <p>A meta-analysis⁸⁶ to assess the impact of treatment for depression on health-related quality of life (HRQOL) in cardiac patients included five RCTs (n=2105); two of psychotherapeutic interventions, one of pharmacotherapy and two of collaborative care or combined therapy. The analysis did not distinguish between the different types of intervention. HRQOL was assessed in four of the studies using the Short Form 36, with the other study using</p>	<p><i>Cancer</i></p> <p>An evidence-based review¹⁰¹ of treatment of depression in patients with cancer concluded that both psychosocial and pharmacologic interventions are efficacious in treating depression in cancer, but further research is needed to establish their relative and combined benefit.</p> <p>One systematic review and meta-analysis¹⁰² of antidepressants in the treatment of depression in cancer patients (6 studies, n=563) concluded that antidepressants can be effective in treating depressive symptoms.</p> <p>A systematic review and meta-analysis¹⁰³ of the role of antidepressants in cancer-related depression (9 trials, n=1169) concluded that paroxetine, fluoxetine and mianserin improve cancer-related depression but may vary</p>	<p>One member of the Guideline Committee provided the following reference:</p> <p>One Danish RCT¹¹² of melatonin in women undergoing surgery for breast cancer (n=54) showed that risk of developing depressive symptoms was significantly lower with melatonin than with placebo in women with breast cancer during a three-month period after surgery.</p>	<p>The new evidence is unlikely to impact on guideline recommendations.</p> <p>Two anti-depressant drugs (agomelatine and vortioxetine) have gained marketing approval since the guideline was published.</p> <p>NICE was unable to recommend agomelatine for the treatment of major depressive episodes because no evidence submission was received from the manufacturer or sponsor of the technology - TA231 Agomelatine for the treatment of major depressive episodes (terminated appraisal) July 2011. However, it is now proposed that the update of the clinical guideline on depression in adults (CG90) should make recommendations on the use of agomelatine, meaning that the termination advice in TA231 would be withdrawn at the point which the clinical guideline is published.</p>

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
<p>the Clinical Global Impressions Scale Score. After 6 months, treatment resulted in statistically significant improvement in mental HRQOL compared with usual care or placebo.</p> <p>A systematic review⁸⁷ examined the effect of interventions to treat depression in patients with diabetes in 15 RCTs (1724 patients; type 1 and 2 diabetes; five studies investigated a psychotherapeutic intervention, three of which also included a diabetes self-management intervention; seven studies assessed antidepressant medication; three studies were of collaborative care in a primary care setting with stepped care starting with choice of psychotherapy or pharmacotherapy). A combined outcome measure was used, with equal weighting for depressive symptom severity and glycaemic control, as well as separate measures. There was a moderate impact on the combined clinical measure when all studies were analysed together, with a greater impact from psychotherapeutic interventions than antidepressant drugs although this could have been due in part to the impact of diabetes education and self-management on glycaemic control; an effect was also noted in the large population-based studies of collaborative care.</p> <p><i>Antidepressant drugs</i></p> <p>A systematic review by Dowlati et al.</p>	<p>in efficacy and tolerability, hence high-quality RCTs of newer antidepressant agents are needed.</p> <p>A systematic review¹⁰⁴ of treatment of depression in breast cancer (2 studies, n=not reported in abstract) concluded that there is little data available to guide clinicians in treatment decisions in this group of people; hence treatment is primarily based on clinical experience.</p> <p>A systematic review¹⁰⁵ of pharmacological treatment of depression in women with breast cancer (6 studies, n=not reported in abstract) concluded that antidepressants may improve depression and QOL, however, the evidence is limited, and the studies are too heterogeneous to recommend one regimen or drug over another, thus, further studies are needed to guide depression treatment in patients with breast cancer.</p> <p><i>Cardiovascular</i></p> <p>A systematic review¹⁰⁶ of treatment of depression in patients with CHD (10 trials, n=not reported in abstract) found that antidepressant or psychotherapy did not significantly influence CHD outcomes, however, there was a trend toward worse CHD outcomes after treatment with bupropion.</p> <p>One systematic review¹⁰⁷ of the effects</p>		<p>Furthermore, an STA on Vortioxetine for treating major depressive disorder is currently in development with an anticipated publication date of September 2015.</p> <p>However, both these drugs do not directly impact on the guideline recommendations as they are not specifically licensed for depression in chronic ill health. The new evidence is unlikely to impact on guideline recommendations.</p>

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
<p>(2010) evaluated the efficacy of antidepressant drugs (mirtazapine, citalopram, fluoxetine, sertraline) in patients with coronary artery disease and major or minor depression. Four RCTs were included (n=402 patients treated with antidepressants; n=396 receiving placebo). Compared with placebo, antidepressant treatment in this patient population significantly decreased Hamilton Depression Rating Scale (HDRS) score and Beck Depression Inventory score and increased the proportion of patients responding with 50% or greater reduction in HDRS score. There was no significant difference in the proportion of patients who dropped out from treatment with placebo or active treatment, although information on drop-outs due to adverse events could be obtained from only two of the studies.</p> <p>All of the RCTs included in the review above were also included in the Cochrane review by Baumeister et al. (2011)³⁴, which considered a total of 16 RCTs of pharmacological and psychological treatment for depression in approximately 4000 patients with coronary artery disease. Eight trials (n=1098 patients) compared pharmacological treatment with placebo; meta-analysis was possible with three studies, indicating a beneficial effect on depression score and remission rate. Treatment for depression appeared to</p>	<p>of interventions on depression in adults with heart failure (HF) (23 studies, n=3564) concluded that the review does not support the development of guidelines for treatment of depression in HF because evidence is insufficient and, at times, contradictory.</p> <p>One systematic review¹⁰⁸ of diagnosis and treatment of depression in people with congestive heart failure (19 articles, n=not reported in abstract) concluded that limited empirical data exist for treatment of depression in this population, however, both psychotherapeutic and pharmacologic treatment are safe and effective in reducing depression severity in people with cardiovascular disease.</p> <p><i>Stroke</i></p> <p>One systematic review¹⁰⁹ of treatment of post-stroke depression (28 studies, n=not reported in abstract) revealed that modest effects favouring treatment of post-stroke depression could be found for pharmacological treatment as well as repetitive transcranial magnetic stimulation.</p> <p>One systematic review and meta-analysis¹¹⁰ of Wuling capsule (Chinese herbal formula) for post stroke depression (16 studies, n=1378) concluded that the capsule used alone or</p>		

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
<p>have no impact on all-cause mortality (four studies) or cardiac events (three studies). The review also included one study that compared the effects of paroxetine and nortriptyline treatment in 81 patients; no differences in depression outcomes were observed.</p> <p>A systematic review⁸⁸ of patients with depression and coronary heart disease including six studies (observational and RCTs; one study was incorrectly randomised and one was a re-analysis of RCT data; n=2461) was found. A significantly greater improvement in symptoms of depression among patients treated with SSRIs was noted compared with the control group (placebo or no antidepressants). Furthermore, SSRI use was associated with a significant decrease in re-admission for coronary heart disease and mortality rate. However, although analysis of data from only the 734 patients in the properly randomised studies showed a significant positive impact of SSRIs on depressive symptoms, the impact on readmission rates and mortality did not reach significance.</p> <p>A systematic review⁸⁹ included 25 RCTs of antidepressant therapy in patients with significant and/or severe or unstable co-morbid axis-III disorders (that is, physical</p>	<p>integrated with conventional treatment was effective for post stroke depression, however, the authors contended that further large scale and rigorously designed trials are warranted.</p> <p><i>Kidney disease</i></p> <p>One systematic review¹¹¹ of pharmacokinetics of antidepressants for depression in stage 3-5 chronic kidney disease (CKD3-5) (28 studies, n=not reported in abstract) concluded that dose reduction in CKD3-5 is necessary for selegiline, amitriptyline, venlafaxine, desvenlafaxine, milnacipran, bupropion, reboxetine and tianeptine.</p>		

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
<p>health problems). Antidepressants were more effective at reducing depression symptoms than placebo. A positive effect of antidepressants was also observed in subgroup analysis of the six studies in post-stroke patients (and five studies in HIV/AIDS but not in four studies of patients with cancer. This review provided some indication of a higher response rate to antidepressant treatment among patients with chronic physical health problems than in the general population.</p> <p>A total of 51 placebo-controlled RCTs (n=3603) were included in a Cochrane review⁹⁰ of antidepressant therapy for depression in physically ill people. The review included 11 studies in stroke, seven in HIV/AIDS, six in Parkinson's disease, four in cancer, three each in chronic obstructive pulmonary disease (COPD), diabetes and myocardial infarction, and two in renal failure; other studies looked at different conditions or were in patients with mixed diagnoses. The primary outcome measure was efficacy 6–8 weeks after randomisation. The response to treatment was shown to be superior with antidepressants compared with placebo, although fewer patients receiving placebo dropped out of the studies.</p> <p>Subgroup analysis ranked the response rate compared with placebo in the order</p>			

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
<p>tricyclic antidepressants (TCA), mianserin/mirtazapine, SSRIs. Compared with patients receiving placebo, drop-out rates were increased with TCA therapy and SSRIs but not with mianserin/mirtazapine.</p> <p>Subsets of the papers included in the Cochrane review discussed above were analysed separately in publications by the same group. Price et al. (2011)⁹¹ included 20 RCTs conducted in adults with a neurological disorder, of which half were in patients who had a stroke, six were in Parkinson's disease, two were in multiple sclerosis, one in brain injury and one in epilepsy; studies in patients with dementia, cognitive impairment and headache were excluded, although such conditions are common neurological disorders. After 6–8 weeks, antidepressant therapy in this patient population resulted in significantly increased remission compared with placebo.</p> <p>The Evidence Update concluded that overall, the evidence from these studies supports the recommendation of NICE CG91 for antidepressant treatment in patients with depression and chronic physical health problems, although evidence continues to be insufficient to guide the specific choice of medication, beyond the general preference for SSRIs; at least in patients with coronary artery disease, use of antidepressants does not</p>			

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
<p>appear to result in additional risks and there is limited evidence that cardiac outcomes may be improved by such treatment.</p> <p>3-year surveillance (2012)</p> <p>Nine studies relevant to the clinical question were identified at the 3-year surveillance.</p> <p>One systematic review and meta-analysis⁹² on the safety and efficacy of pharmacological interventions for people with depression and chronic physical health problems was found. Sixty-three studies met inclusion criteria. The authors concluded that antidepressants are efficacious and safe in the treatment of depression occurring in the context of chronic physical health problems and that the SSRIs are probably the antidepressants of first choice given their demonstrable effect on quality of life and their apparent safety in cardiovascular disease.</p> <p>One Cochrane review⁹³ investigated the efficacy and tolerability of pharmacologic treatments for depression in patients with multiple sclerosis (MS). Two trials - one of desipramine and the other of paroxetine - were included. There was a trend towards efficacy of both treatments compared to placebo, but this difference was not statistically significant except for one outcome. Both treatments were associated</p>			

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
<p>with adverse effects, with significantly more patients treated with paroxetine suffering from nausea or headache. The authors concluded that further clinical research on the treatment of depression in MS addressing efficacy and tolerability in the long term and comparing antidepressant treatments head-to-head is needed.</p> <p>One RCT⁹⁴ on the use of citalopram for adults with schizophrenia or schizoaffective disorder and subsyndromal depression was found. Patients were randomly assigned to flexible-dose treatment with citalopram or placebo (in addition to their current antipsychotic medication(s) which was stable for 1 month). The authors concluded that citalopram augmentation of antipsychotic treatment in middle aged and older patients with schizophrenia and subsyndromal depression may improve social and mental health functioning as well as quality of life. Thus they suggest that it is important for clinicians to monitor these aspects of functioning when treating this population of patients with schizophrenia with SSRI agents.</p> <p>One RCT⁹⁵ compared the antidepressant effects of citalopram with fluoxetine and their effect on glycaemic control in diabetic patients. Patients with type II diabetes and suffering from major depression were</p>			

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
<p>randomly assigned to receive either 40 mg/d of fluoxetine or citalopram. After 12 weeks of treatment, both groups showed significant improvement in severity of depression, FBS, and HbA1c. There were no significant differences between the 2 groups in terms of improvement in depression and diabetic status. The authors concluded that fluoxetine and citalopram can effectively reduce the severity of depression in diabetic patients without an adverse effect on glycaemic control.</p> <p>One study⁹⁶ on the effect of levetiracetam (licensed in the UK for epilepsy but not depression) on depression and anxiety in adult epileptic patients was found. Adults with uncontrolled partial seizures and concomitant depressive symptoms were treated with levetiracetam and evaluated for depression and anxiety with several psychometric measures. Results showed that treatment with levetiracetam may improve depression and anxiety in patients with partial seizures. The authors cautioned that as the sample of patients was limited and the possibility of a placebo effect cannot be excluded, these findings must be considered preliminary and should be replicated under placebo-controlled conditions.</p> <p>One RCT⁹⁷ on the effect of adalimumab on reducing depression symptoms in patients</p>			

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
<p>with moderate to severe psoriasis was found. Results showed that compared with the placebo group, the adalimumab group experienced an additional 6-point reduction in the Zung Self-rating Depression Scale (ZDS) score by week 12 or early termination. Depression improvement was correlated with improvement in Psoriasis Area and Severity Index (PASI) and Dermatology Life Quality Index. The authors concluded that adalimumab treatment reduced psoriasis symptoms, reduced depression symptoms, and improved health-related quality of life in patients with moderate to severe psoriasis.</p> <p>One RCT⁹⁸ on the treatment of depressive symptoms in patients with early stage breast cancer undergoing adjuvant therapy was found. Newly diagnosed patients were screened for depressive symptoms prior to the initiation of adjuvant therapy and those with depressive symptoms were randomised to a daily oral fluoxetine or a placebo. Results showed that the use of fluoxetine for 6 months resulted in an improvement in quality of life, a higher completion of adjuvant treatment and a reduction in depressive symptoms, compared to patients who received placebo. The authors concluded that an antidepressant should be considered for early stage breast cancer patients with depressive symptoms who are receiving</p>			

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
<p>adjuvant treatment.</p> <p>One RCT⁹⁹ examined the effects of citalopram augmentation of antipsychotics on suicidal ideation in middle-aged and older people with schizophrenia and subthreshold depressive symptoms. Patients with schizophrenia or schizoaffective disorder and subthreshold depressive symptoms were randomly assigned to flexible-dose citalopram or placebo augmentation of their antipsychotic for 12 weeks. Results showed that in participants with no baseline suicidal ideation, there were no significant differences between citalopram and placebo regarding "emergent" ideation. In participants with baseline suicidal ideation, citalopram reduced suicidal ideation, especially in those whose depressive symptoms responded to treatment.</p> <p>One open-label pilot study¹⁰⁰ on duloxetine pharmacotherapy and Depression and Pain Care Management (DPCM) in older adults with major depressive disorder (MDD) and chronic low back pain (CLBP) was found. Results showed significant improvements in mental health-related quality of life, anxiety, sleep quality, somatic complaints, and both self-efficacy for pain management and for coping with symptoms. Physical health-related quality</p>			

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
<p>of life, back pain-related disability, and self-efficacy for physical functioning did not improve. The authors concluded that serotonin and norepinephrine reuptake inhibitors like duloxetine delivered with DPCM may be a good choice to treat these linked conditions in older adults.</p> <p>In summary, a number of studies were identified from the 3-year surveillance review in relation to the use of pharmacological interventions for people with depression and a chronic physical health problem and the conclusion at the time was that the findings of these studies were in line with guideline recommendations.</p>			
<p>091-8 In the treatment of depression for people with a chronic physical health problem, to what extent do the following factors affect the choice of drug: (1.5.2)</p> <ul style="list-style-type: none"> • interactions with physical health medications • adverse events (in particular, cardiotoxicity), including long-term adverse events • discontinuation problems • physical health medications that have depressive effects (for example tetrabenazine, reserpine, beta blockers [such as propranolol], calcium antagonists [verapamil], interferon, retinoids [such as isotretinoin]) 			
<p>2-year Evidence Update (2012) None identified</p> <p>3-year surveillance (2012) None identified</p>	None identified	<p>One member of the Guideline Committee member commented that the manufacturers of citalopram and escitalopram have issued guidance stating that these medications should be avoided in those at risk of QT interval prolongation (most cardiac patients) and those on other medications that can have the same effect</p> <p>Feedback also indicated that</p> <ul style="list-style-type: none"> • the MHRA have published a warning 	The new evidence is unlikely to impact on guideline recommendations which already note the need to consider side effects of antidepressants and potential interactions with other medications.

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
		<p>about the risk of fracture with antidepressants</p> <ul style="list-style-type: none"> • a European and UK safety review was undertaken for reboxetine. Overall it says the risk:benefit profile vs placebo is positive • the MHRA have issued a safety warning <ul style="list-style-type: none"> ○ of liver toxicity for agomelatine ○ of possible risk of psychiatric disorders for isotretinoin (Roaccutane) ○ risk of suicidal behaviour for roflumilast (Daxas) 	
091-9 In the pharmacological treatment of depression for people with a chronic physical health problem, what are the most effective strategies for treating patients experiencing side effects, for example sexual dysfunction and weight gain? (1.5.2)			
2-year Evidence Update (2012) None identified 3-year surveillance (2012) None identified	None identified	None identified relevant to this question.	No new evidence was identified that would affect recommendations.
091-10 In people with a chronic physical health problem whose depression does not respond, or responds inadequately, to treatment, which <ul style="list-style-type: none"> • strategies for switching antidepressants are effective? • strategies for sequencing antidepressants are effective? • strategies for switching between pharmacological treatment and psychological treatment are most effective and minimise adverse reactions? • augmentation strategies are safe and effective? (1.5.2) 			
2-year Evidence Update (2012) None identified 3-year surveillance (2012) None identified	None identified	None identified relevant to this question.	No new evidence was identified that would affect recommendations.

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
091-11 What are appropriate ways to promote adherence for depression and physical health medication? (1.5.2)			
2-year Evidence Update (2012) None identified 3-year surveillance (2012) None identified	None identified	None identified relevant to this question.	No new evidence was identified that would affect recommendations.
General			
091-12 Does the treatment of depression for people with a chronic physical health problem have an impact on physical health outcomes?			
2-year Evidence Update (2012) None identified 3-year surveillance (2012) None identified	A number of the identified studies reported on impact on physical health outcomes of the treatment of depression for people with a chronic physical health problem. ^{4,7,23,25,61,106} These have been included under the relevant questions above	None identified relevant to this question.	The new evidence is unlikely to impact on guideline recommendations.
Research recommendations			
RR-01 What is the clinical and cost effectiveness of combined medication and CBT compared with antidepressants or CBT alone for patients with moderate to severe depression and a chronic physical health problem?			
2-year Evidence Update (2012) None identified 3-year surveillance (2012) None identified	None identified	None identified relevant to this question.	No new evidence was identified that would affect recommendations.
RR-02 What is the clinical and cost effectiveness of group peer support and group-based exercise when compared with treatment as usual for patients with mild to moderate depression and a chronic physical health problem?			
2-year Evidence Update (2012) None identified 3-year surveillance (2012)	None identified	None identified relevant to this question.	No new evidence was identified that would affect recommendations.

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
None identified			
RR-03 What is the clinical and cost effectiveness of antidepressant medication compared with placebo in patients with depression and chronic obstructive pulmonary disease (COPD)?			
2-year Evidence Update (2012) None identified 3-year surveillance (2012) None identified	None identified	None identified relevant to this question.	No new evidence was identified that would affect recommendations.
RR-04 What is the clinical and cost effectiveness of behavioural activation compared with antidepressant medication in the treatment of moderate to severe depression in patients with a chronic physical health problem?			
2-year Evidence Update (2012) None identified 3-year surveillance (2012) None identified	None identified	None identified relevant to this question.	No new evidence was identified that would affect recommendations.
RR-05 What is the clinical and cost effectiveness of collaborative care with regard to physical health outcomes for people with moderate to severe depression and a chronic physical health problem?			
2-year Evidence Update (2012) None identified 3-year surveillance (2012) None identified	None identified	None identified relevant to this question.	No new evidence was identified that would affect recommendations.
RR-06 What is the effectiveness of rehabilitation programmes for patients with depression and a chronic physical health problem in terms of improved mood?			
2-year Evidence Update (2012) None identified 3-year surveillance (2012) None identified	None identified	None identified relevant to this question.	No new evidence was identified that would affect recommendations.

Summary of evidence from previous surveillance	Summary of new evidence from 6-year surveillance	Summary of new intelligence from 6-year surveillance	Impact
RR-07 What is the relative efficacy of counselling compared with low-intensity cognitive and behavioural interventions and treatment as usual in patients with depression and a chronic physical health problem?			
2-year Evidence Update (2012) None identified 3-year surveillance (2012) None identified	None identified	None identified relevant to this question.	No new evidence was identified that would affect recommendations.

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