National Institute for Health and Care Excellence

Depression in adults

[H] Access to services

NICE guideline CG90 (update)

Evidence review underpinning recommendations 1.15.1 to 1.15.6 and research recommendations in the NICE guideline

November 2021

NICE accredited
www.nice.org.uk/accreditation

Disclaimer

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or service users. The recommendations in this guideline are not mandatory and the guideline does not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Local commissioners and/or providers have a responsibility to enable the guideline to be applied when individual health professionals and their patients or service users wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with compliance with those duties.

NICE guidelines cover health and care in England. Decisions on how they apply in other UK countries are made by ministers in the Welsh Government, Scottish Government, and Northern Ireland Executive. All NICE guidance is subject to regular review and may be updated or withdrawn.

ISBN:

Contents

1 Access

2 Review question

3 For adults (18 years and older) at risk of depression (or anxiety disorders) from particular
4 vulnerable groups (older people, BME groups, LGBT groups and men) do service
5 developments and interventions which are specifically designed to promote access, increase
6 the proportion of people from the target group who access treatment, when compared with
7 standard care?

8 Introduction

9 Improving access to health and social care should enable people with depression to obtain
10 the help, treatment and support they need in order to preserve and improve their health and
11 wellbeing. Poor access to services may be a greater problem for some groups than others,
12 and equity of access is a particular concern for black minority ethnic (BME) groups, older
13 people, and men, with these groups known to access help less frequently. Lesbian, gay,
14 bisexual and transgender (LGBT) groups may also be more socially excluded and less likely
15 to access support or treatment.

16 The aim of this review is to determine if service developments which are specifically
17 designed to promote access for these groups, increase access to, and the uptake of,
18 treatments.

19 Summary of the protocol

20 See Table 1 for a summary of the Population, Intervention, Comparison and Outcome
21 (PICO) characteristics of this review.

22 **Table 1: Summary of the protocol (PICO table)**

Population	Adults (18 years and older) identified as at risk of depression (or anxiety disorders*) from the following vulnerable groups: • Older adults (mean age of 60 years or older) • BME groups • LGBT groups • Men *due to limited depression-specific evidence, a broader evidence base (including anxiety disorders) was used. An update of the review conducted for the Common Mental Health Disorders NICE guideline was undertaken.
Intervention	• Service developments or changes which are specifically designed to promote access. • Specific models of service delivery (that is, community-based outreach clinics, clinics or services in non-health settings). • Methods designed to remove barriers to access (including stigma, misinformation or cultural beliefs about the nature of mental disorder)
Comparison	Standard care
Outcomes	**Critical:** • Proportion of people from the target group who access treatment • Uptake of treatment **Important:** • Satisfaction, preference

	• Anxiety about treatment

1 *BME: black minority ethnic; LGBT: lesbian, gay, bisexual, transgender*
2

3 For further details see the review protocol in appendix A.

4 Methods and process

5 This evidence review was developed using the methods and process described in
6 Developing NICE guidelines: the manual. Methods specific to this review question are
7 described in the review protocol in appendix A.

8 Declarations of interest were recorded according to NICE's 2014 conflicts of interest policy
9 until 31 March 2018. From 1 April 2018, declarations of interest were recorded according to
10 NICE's 2018 conflicts of interest policy. Those interests declared until April 2018 were
11 reclassified according to NICE's 2018 conflicts of interest policy (see Register of Interests).

12 Clinical evidence

13 Included studies

14 Eighteen randomised controlled trials (RCTs) are included in this review.

15 Seven RCTs include interventions to promote access for older adults, with 3 comparisons:
16 • Tele-problem solving therapy versus in-person problem solving therapy (Choi 2014)
17 • Co-located services versus geographically separate service (Bartels 2004)
18 • Collaborative care versus standard care/enhanced standard care (Callahan 1994; Chen
19   2015; Ciechanowski 2004; Gilbody 2017; Unutzer 2002).

20 Six RCTs include interventions to promote access for BME groups, with 6 comparisons:
21 • Culturally sensitive telepsychiatry versus treatment as usual (Chong 2012)
22 • Culturally-adapted CBT versus treatment as usual (Naeem 2015)
23 • Culturally adapted motivational enhancement therapy for antidepressants versus usual
24   care (Interian 2013)
25 • Telephone CBT versus enhanced usual care (Dwight-Johnson 2011)
26 • Collaborative care versus enhanced standard care (Lagomasino 2017)
27 • Culturally sensitive collaborative care versus standard collaborative care (Cooper 2013).

28 No evidence was identified for interventions to promote access for LGBT groups.

29 Five RCTs included interventions to promote access for men, with 2 comparisons:
30 • Remote treatment versus face-to-face treatment (Luxton 2016; Yuen 2015)
31 • Collaborative care versus standard care/enhanced standard care (Dobscha 2006; Fortney
32   2007; Hedrick 2003).

33 The included studies are summarised in Table 2 to Table 12.

34 See the literature search strategy in appendix B and study selection flow chart in appendix C.

35 Excluded studies

36 Studies not included in this review with reasons for their exclusions are provided in appendix
37 K.

1 Summary of clinical studies included in the evidence review

2 Summaries of the studies that were included in this review are presented in Table 2 to Table
3 12.

4 **Table 2: Summary of included studies for Comparison 1: Tele-problem solving**
5 **therapy versus in-person problem solving therapy for older adults**

Study	Population	Intervention	Comparison	Comments
Choi 2014 RCT US	N=85 Targeted group: Older adults (inclusion criteria 50+ homebound) Disorder: Depression (HAMD score ≥15) Mean age (years): 65.2 Sex (% female): 22 Ethnicity (% BME): 59	Problem solving therapy delivered by telephone Intensity: 6x 1-hour sessions	Problem solving therapy delivered face-to-face (in participants' home)	Length of follow-up (in weeks): 12 Outcomes: • Satisfaction (scores obtained in a treatment acceptance tool)

6 *BME: black minority ethnic; HAMD: Hamilton depression rating scale; RCT: randomised controlled trial*

7 **Table 3: Summary of included studies for Comparison 2: Co-located services versus**
8 **geographically separate services for older adults**

Study	Population	Intervention	Comparison	Comments
Bartels 2004 RCT US	N=1309 (depression subgroup) Targeted group: Older adults (inclusion criteria ≥65 years) Disorder: Depression (primary mental health diagnosis) Mean age (years): NR (≥65) Sex (% female): 74 Ethnicity (% BME): 48	Integrated care model (mental health [& substance abuse] services co-located in primary care setting) Intensity: Variable	Enhanced referral model (referral in 2-4 weeks; treatment in separate location)	Length of follow-up (in weeks): 26 Outcomes: • Accessing treatment (number of participants who attended an appointment with a mental health provider following randomization at the index primary care visit) • Uptake of treatment (number of treatment visits)

9 *BME: black minority ethnic; NR: not reported; RCT: randomised controlled trial*

1   **Table 4:   Summary of included studies for Comparison 3: Collaborative care versus
2   standard care/enhanced standard care for older adults**

Study	Population	Intervention	Comparison	Comments
Callahan 1994 RCT US	N=175 Targeted group: Older adults (inclusion criteria ≥60 years) Disorder: Depression (above clinical threshold on CES-D and HAMD) Mean age (years): 65.1 Sex (% female): 76 Ethnicity (% BME): 51	Simple collaborative care Specialist advice (3 additional GP visits, with instructions on referral and suggested clinical actions including suggestions about providing basic psychoeducation to the patient in the intervention letter from the study team) Intensity: 3 sessions within 3 months	Standard care TAU (no additional visits or feedback on depression scores, referral pathways etc)	Length of follow-up (in weeks): 13 Outcomes: • Accessing treatment (number of patients using antidepressants) • Accessing treatment (number of patients for whom a psychiatric consultation was sought)
Chen 2015 RCT China	N=326 Targeted group: Older adults (inclusion criteria ≥60 years) Disorder: Depression (DSM-IV major depressive episode) Mean age (years): NR (median 70) Sex (% female): 37 Ethnicity (% BME): NR	Simple collaborative care Collaborative-care depression care management (included: training for physicians in use of treatment guidelines; medication algorithm; training for primary care nurses to function as care managers; consultation with psychiatrists as support) Intensity: 16 weekly sessions	Enhanced standard care	Length of follow-up (in weeks): 52 Outcomes: • Accessing treatment (number of patients for whom a psychiatric consultation was sought)
Ciechanowski 2004 RCT US	N=138 Targeted group: Older adults (inclusion criteria ≥60 years) Disorder: Depression	Simple collaborative care Program to Encourage Active, Rewarding Lives for Seniors (PEARLS).	Standard care	Length of follow-up (in weeks): 26 Outcomes: • Uptake of treatment (number of participants starting

Study	Population	Intervention	Comparison	Comments
	(DSM-IV minor depression or dysthymia) Mean age (years): 73 Sex (% female): 79 Ethnicity (% BME): 42	Intervention included problem-solving treatment, social and physical activation, and potential recommendations to patients' physicians regarding antidepressant medications. All intervention cases were reviewed weekly or biweekly by the study psychiatrist during depression management team sessions. Intensity: 8x 50-min problem-solving therapy sessions (+ depression management team meetings)		antidepressant treatment)
Gilbody 2017 RCT UK	N=705 Targeted group: Older adults (inclusion criteria ≥65 years) Disorder: Depression (DSM-IV subthreshold depression) Mean age (years): 77.3 Sex (% female): 42 Ethnicity (% BME): 1	Simple collaborative care Collaborative Care for Screen Positive Elders (care consisted of telephone support and session-by-session symptom monitoring to track treatment response; offer of BA; encouragement to continue medication [for participants already prescribed antidepressants]; primary care physicians encouraged to initiate medication only in response to increasing	Standard care	Length of follow-up (in weeks): 8 Outcomes: • Accessing treatment (number of patients using antidepressants)

Study	Population	Intervention	Comparison	Comments
		depressive symptoms) Intensity: 8 weekly sessions (first session delivered face-to-face and subsequent sessions delivered via telephone)		
Unutzer 2002 RCT US	N=1901 Targeted group: Older adults (inclusion criteria ≥60 years) Disorder: Depression (DSM-IV major depression or dysthymia) Mean age (years): 71.2 Sex (% female): 35 Ethnicity (% BME): 23	Complex collaborative care Improving Mood-Promoting Access to Collaborative Treatment (IMPACT) collaborative case management program (included: access to a depression care manager who was supervised by a psychiatrist and a primary care expert and who offered education, care management, and support of antidepressant management by the patient's primary care physician or PST-PC; individualized treatment plan including algorithm). Intensity: 15 contacts (mean 6.34 problem-solving sessions)	Standard care	Length of follow-up (in weeks): 52 Outcomes: • Accessing treatment (number of patients using antidepressants) • Satisfaction (number of patients rating depression care as 'excellent/very good')

1 *BA: behavioural activation; BME: black minority ethnic; CES-D: center for epidemiologic studies depression;*
2 *DSM: diagnostic statistical manual; HAMD: Hamilton depression rating scale; NR: not reported; PST-PC: problem*
3 *solving treatment in primary care; RCT: randomised controlled trial; TAU: treatment as usual*

1 **Table 5: Summary of included studies for Comparison 4: Culturally sensitive**
2 **telepsychiatry versus treatment as usual for a BME population**

Study	Population	Intervention	Comparison	Comments
Chong 2012 RCT US	N=197 Targeted group: BME (Hispanic) Disorder: Depression (inclusion criteria: PHQ-9≥10 & MINI diagnosis of MDD; Baseline mean PHQ-9 = 17.8) Mean age (years): 43 Sex (% female): 11 Ethnicity (% BME): 100	Culturally sensitive telepsychiatry Clinic-based telepsychiatry using an online virtual meeting programme (addressed following factors to target access: language and cultural concerns [Hispanic psychiatrists provided intervention]; cost [patients were not asked to pay for any MH services provided in the clinic]) Intensity: Monthly sessions for 6 months (4 hours [1 hour for intake + 6 x 30-min follow-ups])	TAU (care received from usual providers)	Length of follow-up (in weeks): 26 Outcomes: • Accessing treatment (number of patients who made a mental health appointment) • Accessing treatment (number of patients who made a primary care appointment) • Accessing treatment (number of patients who used antidepressants) • Uptake of treatment (mean number of completed mental health appointments) • Uptake of treatment (mean number of completed primary care appointments) • Satisfaction (Visit Specific Satisfaction Questionnaire [VSQ-9])

3 *BME: black minority ethnic; MDD: major depressive disorder; MH: mental health; MINI: mini-international*
4 *neuropsychiatric interview; NR: not reported; PHQ-9: patient health questionnaire-9 item; RCT: randomised*
5 *controlled trial; TAU: treatment as usual*

6 **Table 6: Summary of included studies for Comparison 5: Culturally-adapted CBT**
7 **versus treatment as usual for a BME population**

Study	Population	Intervention	Comparison	Comments
Naeem 2015 RCT Pakistan	N=137 Targeted group: BME (Pakistani)	Culturally-adapted CBT Cultural adaptations included family	TAU (typically medication and hospital visits)	Length of follow-up (in weeks): 13 Outcomes: • Satisfaction (number of

Study	Population	Intervention	Comparison	Comments
	Disorder: Depression (ICD-10 F32 or F33) Mean age (years): 31.7 Sex (% female): 40 Ethnicity (% BME): 100	member involvement, initial focus on physical symptoms, Urdu translations of jargon, culturally appropriate homework assignments, use of folk stories and examples relevant to local religious beliefs. Intensity: 6 individual sessions + 2 family session		participants 'very satisfied' with treatment)

1   *BME: black minority ethnic; ICD: international classification of diseases; NR: not reported; RCT: randomised*
2   *controlled trial; TAU: treatment as usual*

3   **Table 7: Summary of included studies for Comparison 6: Culturally adapted**
4   **motivational enhancement therapy for antidepressants versus usual care for**
5   **a BME population**

Study	Population	Intervention	Comparison	Comments
Interian 2013 RCT US	N=50 Targeted group: BME (Latino) Disorder: Depression (DSM-IV depression or dysthymia) Mean age (years): 40.6 Sex (% female): 24 Ethnicity (% BME): 94	Culturally adapted motivational enhancement therapy for antidepressants (META) Focus groups explored Latino antidepressant adherence issues and reasons for nonadherence, and META adapted to account for identified cultural values. Intensity: 3x 1-hour sessions	Usual care (delivered in community mental health centre, this approach included psychotherapy and pharmacotherapy in a naturalistic framework)	Length of follow-up (in weeks): 22 Outcomes: • Uptake of treatment (antidepressant adherence score on medication event monitoring system [MEMS])

6   *BME: black minority ethnic; DSM: diagnostic statistical manual; NR: not reported; RCT: randomised controlled*
7   *trial*

8   **Table 8: Summary of included studies for Comparison 7: Telephone CBT versus**
9   **enhanced usual care for a BME population (living in rural areas)**

Study	Population	Intervention	Comparison	Comments
Dwight-Johnson 2011	N=101	Telephone CBT	Enhanced usual care (any typically available	Length of follow-up (in weeks): 26

Study	Population	Intervention	Comparison	Comments
RCT US	Targeted group: BME (Latino patients living in rural areas) Disorder: Depression (PHQ-9 score ≥ 10) Mean age (years): 39.8 Sex (% female): 22 Ethnicity (% BME): 100	CBT, translated into the Spanish language and checked for relevance to the local Latino context and culture. Intensity: 8x 45-50min sessions	care for depression, patients were encouraged to talk with their primary care provider about depression)	Outcomes: • Satisfaction (number reporting they were satisfied with the treatment provided)

1 *BME: black minority ethnic; NR: not reported; PHQ-9: patient health questionnaire – 9 item; RCT: randomised*
2 *controlled trial*

3 **Table 9: Summary of included studies for Comparison 8: Collaborative care versus**
4 **enhanced standard care for BME population**

Study	Population	Intervention	Comparison	Comments
Lagomasino 2017 RCT US	N=400 Targeted group: BME (Latino) Disorder: Depression (PHQ-9 score ≥ 10) Mean age (years): 49.6 Sex (% female): 17 Ethnicity (% BME): 97	Tailored collaborative care intervention Includes: bilingual case managers; culturally-adapted CBT, available in Spanish, and uses simplified language and graphic depictions to help with low literacy; provided information about treatment that addressed culturally based misconceptions (as needed); elicited treatment preferences for antidepressants or psychotherapy Intensity: Variable	Enhanced usual care (patients received information about depression and primary care provider informed of diagnosis)	Length of follow-up (in weeks): 16 Outcomes: • Accessing treatment (number of patients receiving antidepressants) • Accessing treatment (number of patients receiving minimally adequate treatment [counselling or medications]) • Satisfaction (number of patients satisfied or very satisfied with emotional health care)

5 *BME: black minority ethnic; NR: not reported; PHQ-9: patient health questionnaire – 9 item; RCT: randomised*
6 *controlled trial*

7

1 **Table 10: Summary of included studies for Comparison 9: Culturally sensitive**
2 **collaborative care versus standard collaborative care for BME population**

Study	Population	Intervention	Comparison	Comments
Cooper 2013 RCT US	N=132 Targeted group: BME (African American) Disorder: Depression (DSM-IV MDD) Mean age (years): 46.5 Sex (% female): 21 Ethnicity (% BME): 100	Culturally sensitive collaborative care Patient-centred and culturally tailored collaborative care intervention for patients (care management focused on access barriers, social context, and patient–provider relationships) and clinicians (participatory communication skills training and mental health consultation) Intensity: Variable	Standard collaborative care intervention for patients (disease management) and clinicians (review of guidelines and mental health consultation) Intensity: Variable	Length of follow-up (in weeks): 52 Outcomes: • Accessing treatment (number of patients taking any antidepressant) • Accessing treatment (number of patients receiving any counselling) • Accessing treatment (number of patients receiving guideline-concordant depression treatment)

3 *BME: black minority ethnic; DSM: diagnostic statistical manual; MDD: major depressive disorder; NR: not*
4 *reported; RCT: randomised controlled trial*

5 **Table 11: Summary of included studies for Comparison 10: Remote treatment versus**
6 **face-to-face treatment for a predominantly male population**

Study	Population	Intervention	Comparison	Comments
Luxton 2016 RCT US	N=121 Targeted group: Men (veterans) Disorder: Depression (DSM-IV minor or major depressive disorder) Mean age (years): NR Sex (% female): 82 Ethnicity (% BME): 30	Behavioural activation in-home via videoconferencing Intensity: 8x 50-60-min weekly sessions	Behavioural activation in-person Intensity: 8x 50-60-min weekly sessions	Length of follow-up (in weeks): 8 Outcomes: • Satisfaction (Client Satisfaction Questionnaire [CSQ])
Yuen 2015 RCT	N=52	Prolonged exposure through home-based telehealth	Prolonged exposure through standard in-	Length of follow-up (in weeks): 12

Study	Population	Intervention	Comparison	Comments
US	Targeted group: Men (veterans) Disorder: PTSD & depression symptoms (inclusion criteria DSM-IV-TR PTSD; 42% comorbid depression diagnosis, and mean depression symptoms above clinical cut-off) Mean age (years): 44.0 Sex (% female): 98 Ethnicity (% BME): 46	Intensity: 8-12 sessions	person office-based care Intensity: 8-12 sessions	Outcomes: • Satisfaction (number of patients satisfied/very satisfied with treatment)

BME: black minority ethnic; DSM: diagnostic statistical manual; NR: not reported; PTSD: post-traumatic stress disorder; RCT: randomised controlled trial

Table 12: Summary of included studies for Comparison 11: Collaborative care versus standard care/enhanced standard care for a predominantly male population

Study	Population	Intervention	Comparison	Comments
Dobscha 2006 RCT US	N=375 Targeted group: Men (veterans) Disorder: Depression (inclusion criteria: PHQ-9 = 10-25 or SCL-20 score≥1.0; baseline mean PHQ-9 = 13.8; 49% MDD diagnosis criteria and 47% dysthymia) Mean age (years): 56.8 Sex (% female): 93 Ethnicity (% BME): 3	Collaborative care Depression decision support team (1 psychiatrist + 1 nurse care manager) provided 1 early patient educational contact and depression monitoring with feedback to clinicians (includes the following add-ons to usual care: care manager makes telephone call to patient and patient encouraged to attend depression education class;	Standard care	Length of follow-up (in weeks): 52 Outcomes: • Accessing treatment (number who attended ≥1 appointment with mental health specialist) • Accessing treatment (number of participants using antidepressants)

Study	Population	Intervention	Comparison	Comments
		review of patient progress by depression decision support team; feedback or suggestions to primary care clinician or nurse; psychiatrist consultation actively offered or suggested; facilitated referral to other mental health services when indicated) Intensity: Monitoring with feedback to clinicians over 12 months (1 psychiatrist assigned up to 4 hours/week and 1 nurse care manager assigned up to 8 hours/week)		
Fortney 2007 RCT US	N=395 Targeted group: Men (veterans) Disorder: Depression (PHQ 9 score ≥ 12) Mean age (years): 59.2 Sex (% female): 92 Ethnicity (% BME): 25	Collaborative care Telemedicine Enhanced Antidepressant Management (TEAM), a telemedicine-based collaborative care model adapted for small clinics without onsite psychiatrists. Included a stepped-care model of depression treatment. Intensity: 14 sessions (follow-up encounters to monitor symptoms, medication adherence, and side effects were scheduled every	Enhanced standard care	Length of follow-up (in weeks): 52 Outcomes: • Accessing treatment (number of participants using antidepressants) • Satisfaction (number of patients satisfied with care)

Study	Population	Intervention	Comparison	Comments
		2 weeks during acute treatment and every 4 weeks during watchful waiting or continuation treatment)		
Hedrick 2003 RCT US	N=354 Targeted group: Men (veterans) Disorder: Depression (DSM-IV current MDD episode, dysthymia or both) Mean age (years): 57.2 Sex (% female): 95 Ethnicity (% BME): 20	Collaborative care Mental health team: provided a treatment plan to the primary care provider; telephoned patients to support adherence to the plan; reviewed treatment results; suggested modifications to the provider. Intensity: 3-month study period (collaborative care team met weekly to develop treatment plans and to conduct a 6- and 12-week progress evaluation for each patient; patients were discussed in the team meeting on an average of 3 occasions)	Consultant-liaison care (study clinicians informed the primary care provider of the diagnosis and facilitated referrals to psychiatry residents practicing in the primary care clinic)	Length of follow-up (in weeks): 13 Outcomes: • Accessing treatment (number who attended ≥1 appointment with mental health specialist) • Accessing treatment (number who have had a depression-related primary care visit) • Accessing treatment (number of participants using antidepressants)

1 *BME: black minority ethnic; DSM: diagnostic statistical manual; MDD: major depressive disorder; NR: not*
2 *reported; PHQ-9: patient health questionnaire – 9 item; RCT: randomised controlled trial; SCL-20: symptom*
3 *checklist depression scale*

4

5 See the full evidence tables in appendix D and the forest plots in appendix E.

6 **Quality assessment of clinical outcomes included in the evidence review**

7 See the clinical evidence profiles in appendix F.

1 Economic evidence

2 Included studies

3 A single economic search was undertaken for all topics included in the scope of this
4 guideline but no economic studies were identified which were applicable to this review
5 question. See the literature search strategy in appendix B and economic study selection flow
6 chart in appendix G.

7 Excluded studies

8 A list of excluded economic and utility studies, with reasons for exclusion, is provided in
9 supplement 3 - Health economic included & excluded studies

10 Economic model

11 No economic modelling was undertaken for this review because the committee agreed that
12 other topics were higher priorities for economic evaluation.

13 Evidence statements

14 Clinical evidence statements

15 *Interventions to promote access for older adults*

16 *Comparison 1. Tele-problem solving therapy versus in-person problem solving therapy*
17 *for older adults*

18 Important outcomes

19 Satisfaction

20 • Low quality evidence from 1 RCT (N=85) shows a clinically important and statistically
21 significant benefit of tele-problem solving therapy, relative to in-person problem solving,
22 on treatment acceptance scores for older adults with depression.

23 *Comparison 2. Co-located services versus geographically separate services for older*
24 *adults*

25 Critical outcomes

26 Proportion of people from the target group who access treatment

27 • Moderate quality evidence from 1 RCT (N=1297) shows a clinically important and
28 statistically significant benefit of co-located services, relative to geographically separate
29 services, on the number of people who attended an appointment with a mental health
30 provider for older adults with depression.

31 Uptake of treatment

32 • Moderate quality evidence from 1 RCT (N=1390) shows a statistically significant but not
33 clinically important benefit of co-located services, relative to geographically separate
34 services, on the number of treatment visits for older adults with depression.

1 **Comparison 3. Collaborative care versus standard care/enhanced standard care for older**
2 **adults**

3 **Critical outcomes**

4 **Proportion of people from the target group who access treatment**
5 • Very low quality evidence from 3 RCTs (N=2449) shows a clinically important but not
6 statistically significant benefit of collaborative care, relative to standard care, on the
7 number of older adults with depression who were using antidepressants.
8 • Very low quality evidence from 2 RCTs (N=501) shows a clinically important but not
9 statistically significant benefit of collaborative care, relative to standard care or enhanced
10 standard care, on the number of older adults with depression for whom a psychiatric
11 consultation was sought.

12 **Uptake of treatment**
13 • Very low quality evidence from 1 RCT (N=138) shows a clinically important but not
14 statistically significant benefit of collaborative care, relative to standard care, on the
15 number of older adults with depression starting antidepressant treatment.

16 **Important outcomes**

17 **Satisfaction**
18 • Moderate quality evidence from 1 RCT (N=1364) shows a clinically important and
19 statistically significant benefit of collaborative care, relative to standard care, on the
20 number of older adults with depression who rated depression care as 'excellent/very
21 good'.
22

23 **_Interventions to promote access for BME groups_**

24 **Comparison 4. Culturally sensitive telepsychiatry versus treatment as usual for a BME**
25 **population**

26 **Critical outcomes**

27 **Proportion of people from the target group who access treatment**
28 • Moderate quality evidence from 1 RCT (N=167) shows a clinically important and
29 statistically significant benefit of culturally sensitive telepsychiatry, relative to treatment as
30 usual, on the number of Hispanic people with depression who made a mental health
31 appointment.
32 • Low quality evidence from 1 RCT (N=167) shows a clinically important and statistically
33 significant benefit of treatment as usual, relative to culturally sensitive telepsychiatry, on
34 the number of Hispanic people with depression who made a primary care appointment.
35 • Low quality evidence from 1 RCT (N=167) shows a clinically important and statistically
36 significant benefit of culturally sensitive telepsychiatry, relative to treatment as usual, on
37 the number of Hispanic people with depression who used antidepressants.

38 **Uptake of treatment**
39 • Low quality evidence from 1 RCT (N=106) shows neither a clinically important nor
40 statistically significant benefit of culturally sensitive telepsychiatry, relative to treatment as
41 usual, on the mean number of completed mental health appointments for Hispanic people
42 with depression.
43 • Moderate quality evidence from 1 RCT (N=132) shows neither a clinically important nor
44 statistically significant benefit of culturally sensitive telepsychiatry, relative to treatment as

1 usual, on the mean number of completed primary care appointments for Hispanic people
2 with depression.

3 **Important outcomes**

4 **Satisfaction**

5 • Moderate quality evidence from 1 RCT (N=167) shows neither a clinically important nor
6 statistically significant benefit of culturally sensitive telepsychiatry, relative to treatment as
7 usual, on satisfaction scores for Hispanic people with depression.

8 *Comparison 5. Culturally-adapted CBT versus treatment as usual for a BME population*

9 **Important outcomes**

10 **Satisfaction**

11 • Very low quality evidence from 1 RCT (N=137) shows a clinically important and
12 statistically significant benefit of culturally-adapted CBT, relative to treatment as usual, on
13 the number of Pakistani people with depression who were 'very satisfied' with treatment.

14 *Comparison 6. Culturally adapted motivational enhancement therapy for antidepressants*
15 *versus usual care for a BME population*

16 **Critical outcomes**

17 **Uptake of treatment**

18 • Moderate quality evidence from 1 RCT (N=50) shows a clinically important and statistically
19 significant benefit of culturally adapted motivational enhancement therapy for
20 antidepressants, relative to usual care, on the antidepressant adherence score for Latino
21 people with depression.

22 *Comparison 7. Telephone CBT versus enhanced usual care for a BME population (living*
23 *in rural areas)*

24 **Important outcomes**

25 **Satisfaction**

26 • Very low quality evidence from 1 RCT (N=101) shows a clinically important and
27 statistically significant benefit of telephone CBT, relative to enhanced usual care, on the
28 number of Latino people with depression (living in rural areas) who reported that they
29 were satisfied with the treatment provided.

30 *Comparison 8. Collaborative care versus enhanced standard care for BME population*

31 **Critical outcomes**

32 **Proportion of people from the target group who access treatment**

33 • Moderate quality evidence from 1 RCT (N=329) shows a clinically important and
34 statistically significant benefit of collaborative care, relative to enhanced standard care, on
35 the number of Hispanic people with depression who were receiving antidepressants.
36 • Moderate quality evidence from 1 RCT (N=327) shows a clinically important and
37 statistically significant benefit of collaborative care, relative to enhanced standard care, on
38 the number of Hispanic people with depression who were receiving minimally adequate
39 treatment (counselling or medications).

Important outcomes

Satisfaction

- Moderate quality evidence from 1 RCT (N=330) shows a clinically important and statistically significant benefit of collaborative care, relative to enhanced standard care, on the number of Hispanic people with depression who were satisfied or very satisfied with emotional health care.

Comparison 9. Culturally sensitive collaborative care versus standard collaborative care for BME population

Critical outcomes

Proportion of people from the target group who access treatment

- Very low quality evidence from 1 RCT (N=113) shows a clinically important but not statistically significant benefit of standard collaborative care, relative to culturally sensitive collaborative care, on the number of African American people with depression who were taking any antidepressant.

- Very low quality evidence from 1 RCT (N=113) shows a clinically important but not statistically significant benefit of standard collaborative care, relative to culturally sensitive collaborative care, on the number of African American people with depression who were receiving any counselling.

- Very low quality evidence from 1 RCT (N=113) shows a clinically important and statistically significant benefit of standard collaborative care, relative to culturally sensitive collaborative care, on the number of African American people with depression who were receiving guideline-concordant depression treatment.

__Interventions to promote access for LGBT groups__

No evidence was identified for interventions to promote access for LGBT groups.

__Interventions to promote access for men__

Comparison 10. Remote treatment versus face-to-face treatment for a predominantly male population

Important outcomes

Satisfaction

- Low quality evidence from 1 RCT (N=52) shows neither a clinically important nor statistically significant difference between remote and face-to-face prolonged exposure treatment on the number of people who were satisfied/very satisfied with treatment, amongst a predominantly male (veteran) population with PTSD and depression symptoms.

- Very low quality evidence from 1 RCT (N=87) shows neither a clinically important nor statistically significant difference between remote and face-to-face behavioural activation, on treatment satisfaction scores for a predominantly male (veteran) population with depression.

1 *Comparison 11. Collaborative care versus standard care/enhanced standard care for a*
2 *predominantly male population*

3 **Critical outcomes**

4 **Proportion of people from the target group who access treatment**

5 • Very low quality evidence from 2 RCTs (N=729) shows neither a clinically important nor
6 statistically significant benefit of collaborative care, relative to standard care or consultant-
7 liaison care, on the number of people who attended at least 1 appointment with a mental
8 health specialist for a predominantly male (veteran) population with depression.

9 • Very low quality evidence from 1 RCT (N=354) shows a clinically important and
10 statistically significant benefit of collaborative care, relative to consultant-liaison care, on
11 the number of people who had a depression-related primary care visit for a predominantly
12 male (veteran) population with depression.

13 • Very low quality evidence from 3 RCTs (N=868) shows a statistically significant but not
14 clinically important benefit of collaborative care, relative to standard care or enhanced
15 standard care, on the number of people using antidepressants for a predominantly male
16 (veteran) population with depression.

17 **Important outcomes**

18 **Satisfaction**

19 • Very low quality evidence from 1 RCT (N=325) shows neither a clinically important nor
20 statistically significant benefit of collaborative care, relative to enhanced standard care, on
21 the number of people satisfied with care for a predominantly male (veteran) population
22 with depression.

23

24 **Economic evidence statements**
25 No economic evidence was identified which was applicable to this review question.

26 **The committee's discussion of the evidence**

27 **Interpreting the evidence**

28 *The outcomes that matter most*

29 As this question was about improving access to services and treatment for certain groups of
30 people with depression, the committee identified that the proportion of people from the target
31 groups who access treatment, and the uptake of treatment were the critical outcomes. This
32 was measured in most studies as the number of people who attended appointments (either
33 any appointment, a minimum number, or if they completed a series of sessions), or who
34 commenced treatment such as antidepressants.

35 As satisfaction with treatment is likely to lead to improved uptake and adherence, satisfaction
36 with treatment (or preference), and anxiety about treatment were identified by the committee
37 as important outcomes.

38 *The quality of the evidence*

39 The quality of evidence for outcomes was assessed using GRADE and ranged from
40 moderate to very low.

41 The evidence for this review generally came from single RCTs, some of which had small
42 sample sizes. The evidence was generally directly applicable to the groups of interest (BME,

1 male, older people) with depression. Some of the evidence relevant to promoting access for
2 men was conducted in predominantly male veteran populations who have specific healthcare
3 provision, and issues relating to access may not be applicable to the UK setting, and this was
4 reflected in the indirectness ratings.

5 There was no evidence identified for interventions to promote access for LGBT groups.

6 ***Benefits and harms***

7 Although the subject of the review had been focused on improving access for specific groups
8 who may find obtaining treatment more difficult, the committee agreed that it was important
9 to ensure good access for all people with depression. The committee therefore drew on their
10 own knowledge and experience and the successes of the national roll out of the Improving
11 Access to Psychological Therapies (IAPT) programme. The IAPT programme had shown
12 that the development of accessible systems for the delivery of care are associated with
13 improved uptake of services. The committee therefore agreed that treatment pathways
14 should be accessible to people with depression, with multiple entry points (for example, self-
15 referral, GP referral), allow for prompt assessment and be integrated across primary and
16 secondary care, to share information and so provide a coordinated service.

17 The committee noted that such systems, based on models such as stepped care or
18 collaborative care, would promote effective access to and delivery of treatment for people
19 with depression and therefore developed recommendations that specified what the care
20 pathways should include and achieve. The committee were aware of work emanating from
21 the NHS long-term plan which suggested that care should be locality-based and integrated
22 across all aspects of health and social care and so made recommendations to advise this.
23 The committee also agreed that in order to ensure that these pathways worked as intended it
24 was necessary to monitor access, uptake and outcomes. The committee also recognised
25 that mental health services for people with depression were delivered by a wide range of
26 practitioners in a wide range of settings, but that integration between these services and
27 settings was essential, and so made a recommendation to state this.

28 There was no evidence from this review for stepped care, but the committee agreed that this
29 model was well accepted and understood and so included it as an option. There was,
30 however, evidence for the benefits of collaborative care in terms of uptake of treatment and
31 satisfaction with care for older adults, black, Asian and minority ethnic groups and men.
32 Based on this evidence, and the evidence for clinical benefits associated with collaborative
33 care (see Evidence review A), the committee recommended that services should be
34 delivered using a collaborative care model.

35 The committee were aware that access to services could be hindered by a lack of
36 appropriate and accessible information, and so, based on their own awareness of
37 accessibility issues, they made a separate recommendation to highlight that information to
38 help people access services should be available in a variety of formats, languages and
39 culturally adapted where necessary.

40 The committee agreed that the symptoms of depression itself and the impact of stigma can
41 make it difficult for people with depression to access mental health services or take up offers
42 of treatment, and recommended that steps are taken locally to reduce stigma and barriers to
43 access for individuals seeking help for depression. The committee agreed that this was such
44 an important principle that they included this in the amended recommendations at the very
45 beginning of the guideline which covers over-arching principles of care.

46 The committee discussed the evidence from this review and noted that a number of the
47 interventions reviewed may have clinical benefits both directly, in terms of increased uptake
48 of treatment, and indirectly in terms of greater satisfaction, which may in turn lead to better
49 ongoing engagement with services. There was evidence for benefits, in terms of uptake and
50 acceptance of treatment, associated with delivering interventions using different methods in

1   order to promote access, for example using telephone delivery of treatment or services to
2   older adults or black, Asian or minority ethnic groups. The committee discussed that, in
3   addition to the telephone, there is now an increased use of other methods of communication
4   in the NHS, particularly since the Covid-19 pandemic. This can include text messages,
5   emails or video consultations. While this is welcomed by many people, the committee also
6   discussed the importance of patient choice and problems associated with digital exclusion or
7   digital poverty: some people may prefer a face-to-face intervention either because they are
8   not comfortable using technology, because they lack the appropriate device or internet
9   connection, lack a private and confidential space, or because of wider issues associated with
10   difficulties in accessing services that intersect with the vulnerable groups identified in this
11   review. The committee therefore recommended interventions be available via a range of
12   different methods, and the methods of delivery should be guided by patient choice, with
13   remote consultations only being used for people who wish to access and are able to access
14   services in this way.

15   There were also benefits associated with culturally adapted interventions or services on
16   treatment uptake, engagement, and satisfaction for black, Asian and minority ethnic groups,
17   and the committee agreed to recommend that services be delivered in culturally appropriate
18   or culturally adapted language and formats, and that access to bilingual therapists or
19   independent translators is available. However, the committee noted the importance of not
20   being overly prescriptive in terms of the specific nature of adaptations so that the specific
21   access needs of the local population could be most appropriately identified and addressed.

22   The committee discussed the current drive within the NHS to provide services outside of
23   standard working hours. The committee noted the absence of evidence included in this
24   review for potential clinical benefits or cost-effectiveness of this modification, and were aware
25   that service-level data on uptake is mixed. However, practitioners have found evening
26   appointments to be popular with patients, and based on consensus opinion the committee
27   recommended that services should be available outside normal working hours in order to
28   promote access and increased uptake of services for people with depression.

29   For older people, there was evidence that co-locating mental health services with physical
30   health services in a primary care setting improved engagement with depression treatment.
31   Based on their knowledge and experience the committee also noted that providing services
32   at home or in community centres or care homes could promote access to services for older
33   adults and other groups of people with depression. The committee agreed that services
34   should be provided in community-based settings where appropriate, and integrated services
35   that are designed to meet the needs of the local population should be available.

36   The committee reflected on the limited evidence base for interventions to promote access for
37   the target groups identified in this review, particularly for LGBT groups, and highlighted the
38   importance of the third sector in promoting access. Based on their expert opinion, the
39   committee recommended that services be delivered jointly with charities or the voluntary
40   sector.

41   The committee discussed whether it was possible to make recommendations tailored
42   specifically to each of the target groups (identified in the review) that would improve access
43   to treatment and services for depression. However, given the limited evidence available and
44   the overarching themes and principles, the committee thought it more appropriate to make
45   general recommendations on what should be done to promote access and increased uptake
46   of services. The committee did, however, highlight particular groups who may have difficulty
47   in accessing, or face stigma when taking up, some or all mental health services including the
48   target groups from the evidence review (men; older people; LGBT people; people from Black,
49   Asian and minority ethnic communities) and other groups that the committee were aware
50   may face particular issues with access (people with learning disabilities or acquired cognitive
51   impairments; people with physical or sensory disabilities; people who have conditions which
52   compromise their ability to communicate; asylum seekers).

1 The committee noted, despite concerns about depression and suicide in younger men, that
2 no evidence had been identified for interventions to increase access for this particular group.
3 In the absence of evidence about what may be effective for this group the committee were
4 wary of making specific recommendations for practice using consensus. They agreed,
5 however, that the recommendations made should improve access for younger men too.

6 In light of the limited evidence the committee decided to make a research recommendation to
7 help identify the most effective and cost-effective methods to promote increased access to,
8 and uptake of, interventions for people with depression who are under-served and under-
9 represented in current services.

10 Cost effectiveness and resource use

11 No evidence on the cost-effectiveness of service developments and interventions that have
12 been specifically designed to promote access to services for vulnerable groups of adults
13 with, or at risk of, depression was identified and no further economic analysis was
14 undertaken.

15 The committee acknowledged that enhanced accessibility to services and integrated delivery
16 of services for people with depression across primary and secondary care are likely to have
17 considerable resource implications. The committee noted, however, that facilitating timely
18 access to effective and cost-effective NICE-recommended treatments for depression results
19 in more efficient use of resources and better outcomes for service users; moreover, there
20 may be significant cost-savings for the NHS and social care as delayed or poorly co-
21 ordinated treatment may negate the need for more costly intensive treatments for entrenched
22 or chronic depressive symptoms. The committee noted that availability of services outside
23 normal hours (evenings/weekends) is already established and would not entail significant
24 resource implications.

25 The committee also acknowledged that routine collection of data on access to, uptake of,
26 and outcomes of the interventions in the pathway is likely to have moderate resource
27 implications. However, they expressed the opinion that routine collection of such data will
28 allow more effective planning, delivery and evaluation of services, leading to more efficient
29 use of resources and enhanced equality within and across services.

30 Other factors the committee took into account

31 In developing the recommendations to promote access for these target groups, the
32 committee also took into account the qualitative evidence from the review on treatment
33 choice (Evidence review I). This increased the confidence in the recommendations as these
34 were supported by themes arising from the experiences of people with depression in terms of
35 accessing treatment and services.

36 Recommendations supported by this evidence review

37 This evidence review supports recommendations 1.15.1 to 1.15.6 and research
38 recommendations in the NICE guideline.

39 References

40 Bartels 2004

41 Bartels, S. J., Coakley, E. H., Zubritsky, C., Ware, J. H., Miles, K. M., Arean, P.
42 A.,Investigators, P.-E. (2004). Improving access to geriatric mental health services: a
43 randomized trial comparing treatment engagement with integrated versus enhanced referral
44 care for depression, anxiety, and at-risk alcohol use. Am J Psychiatry, 161(8), 1455-1462.

45 Callahan 1994

1   Callahan, C. M., Hendrie, H. C., Dittus, R. S., Brater, D. C., Hui, S. L., & Tierney, W. M.
2   (1994). Improving treatment of late life depression in primary care: a randomized clinical trial.
3   J Am Geriatr Soc, 42(8), 839-846.

4   **Chen 2015**

5   Chen S, Conwell Y, He J, Lu N, Wu J. Depression care management for adults older than 60
6   years in primary care clinics in urban China: a cluster-randomised trial. The Lancet
7   Psychiatry, 2:332-9.

8   **Choi 2014**

9   Choi NG , Hegel MT , Marti N , Marinucci ML , Sirrianni L , Bruce ML (2014). Telehealth
10 problem-solving therapy for depressed low-income homebound older adults. The American
11 Journal of Geriatric Psychiatry: Official Journal of the American Association for Geriatric
12 Psychiatry 22(3): 263-271

13 **Chong 2012**

14 Chong, J., & Moreno, F. (2012). Feasibility and acceptability of clinic-based telepsychiatry for
15 low-income Hispanic primary care patients. Telemedicine Journal and e-Health, 18(4), 297-
16 304.

17 **Ciechanowski 2004**

18 Ciechanowski, P., Wagner, E., Schmaling, K., Schwartz, S., Williams, B., Diehr, P., ... &
19 LoGerfo, J. (2004). Community-integrated home-based depression treatment in older adults:
20 a randomized controlled trial. JAMA, 291(13), 1569-1577.

21 **Cooper 2013**

22 Cooper, L. A., Ghods Dinoso, B. K., Ford, D. E., Roter, D. L., Primm, A. B., Larson, S. M., ...
23 & Wang, N. Y. (2013). Comparative effectiveness of standard versus patient-centered
24 collaborative care interventions for depression among african americans in primary care
25 settings: the BRIDGE study. Health Services Research, 48(1), 150-174.

26 **Dobscha 2006**

27 Dobscha, S. K., Corson, K., Hickam, D. H., Perrin, N. A., Kraemer, D. F., & Gerrity, M. S.
28 (2006). Depression decision support in primary care: a cluster randomized trial. Ann Intern
29 Med, 145(7), 477-487.

30 **Dwight-Johnson 2011**

31 Dwight-Johnson, M., Aisenberg, E., Golinelli, D., Hong, S., O'Brien, M., & Ludman, E. (2011).
32 Telephone-based cognitive-behavioral therapy for Latino patients living in rural areas: a
33 randomized pilot study. Psychiatric Services, 62(8), 936-942.

34 **Fortney 2007**

35 Fortney JC, Pyne JM, Edlund MJ, Williams DK, Robinson DE, Mittal D, et al. A randomized
36 trial of telemedicine-based collaborative care for depression. Journal of General Internal
37 Medicine, 22(8):1086-93.

38 **Gilbody 2017**

39 Gilbody S, Lewis H, Adamson J, Atherton K, Bailey D, Birtwistle J, et al. Effect of
40 Collaborative Care vs Usual Care on Depressive Symptoms in Older Adults With
41 Subthreshold Depression: The CASPER Randomized Clinical Trial. JAMA, 317(7):728-37

42 **Hedrick 2003**

1 Hedrick, S. C., Chaney, E. F., Felker, B., Liu, C. F., Hasenberg, N., Heagerty, P., Katon, W.
2 (2003). Effectiveness of collaborative care depression treatment in Veterans' Affairs primary
3 care. J Gen Intern Med, 18(1), 9-16.

4 **Interian 2013**

5 Interian A, Lewis-Fernández R, Gara MA, Escobar JI. A randomized-controlled trial of an
6 intervention to improve antidepressant adherence among Latinos with depression.
7 Depression and Anxiety, 30(7):688-96.

8 **Lagomasino 2017**

9 Isabel T Lagomasino, Megan Dwight-Johnson, Jennifer M Green, Lingqi Tang, Lily Zhang,
10 Naihua Duan, Jeanne Miranda. Effectiveness of Collaborative Care for Depression in Public-
11 Sector Primary Care Clinics Serving Latinos. Psychiatr Serv, 68(4):353-359.

12 **Luxton 2016**

13 Luxton, David D.,Pruitt, Larry D.,Wagner, Amy,Smolenski, Derek J.,Jenkins-Guarnieri,
14 Michael A.,Gahm, Gregory (2016). Home-based telebehavioral health for U.S. military
15 personnel and veterans with depression: A randomized controlled trial. Journal of Consulting
16 and Clinical Psychology, Vol 84(11), 923-934

17 **Naeem 2015**

18 Naeem, F., Gul, M., Irfan, M., Munshi, T., Asif, A., Rashid, S.,Aslam, M. (2015). Brief
19 culturally adapted CBT (CaCBT) for depression: a randomized controlled trial from Pakistan.
20 Journal of Affective Disorders, 177, 101-107.

21 **Unutzer 2002**

22 Unutzer J, Katon W, Callahan CM, Williams JW Jr, Hunkeler E, Harpole L, et al.
23 Collaborative care management of late-life depression in the primary care setting: a
24 randomized controlled trial. JAMA, 288(22):2836–45.

25 **Yuen 2015**

26 Erica K Yuen, Daniel F Gros, Matthew Price, Stephanie Zeigler, Peter W Tuerk, Edna B Foa,
27 Ron Acierno. Randomized Controlled Trial of Home-Based Telehealth Versus In-Person
28 Prolonged Exposure for Combat-Related PTSD in Veterans: Preliminary Results. J Clin
29 Psychol, 71(6):500-12.
30

31

1 Appendices

2 Appendix A – Review protocols

3 **Review protocol for review question: For adults at risk of depression (or anxiety disorders) from particular vulnerable**
4 **groups (older people, black minority ethnic groups, lesbian, gay bisexual, transgender groups and men) do service**
5 **developments and interventions which are specifically designed to promote access, increase the proportion of people**
6 **from the target group who access treatment, when compared with standard care?**

7 **Table 13: Review protocol for promoting access to services in vulnerable groups**

Field (based on PRISMA-P)	Content
Review question	RQ3.0 For adults (18 years and older) at risk of depression (or anxiety disorders) from particular vulnerable groups (older people, BME groups, LGBT groups and men) do service developments and interventions which are specifically designed to promote access, increase the proportion of people from the target group who access treatment, when compared with standard care?
Type of review question	Intervention review
Objective of the review	To identify the most effective service developments and interventions which are specifically designed to promote access
Population	Adults (18 years and older) identified as at risk of depression (or anxiety disorders*) from the following vulnerable groups • Older adults • BME groups • LGBT groups • Men *Note: due to limited depression specific evidence, a broader evidence base (including anxiety disorders) will be used. An update of the review conducted for the Common Mental Health Disorders NICE guideline will be undertaken
Exclude	• Trials of people with depression where the population does not fall into one of the particular vulnerable groups that are the focus of this review (older people, BME groups, LGBT groups and men)

Field (based on PRISMA-P)	Content
	• Trials of women with antenatal or postnatal depression • Trials of children and young people (mean age under 18 years) • Trials of people with learning disabilities • Trials of adults in contact with the criminal justice system (not solely as a result of being a witness or victim) • Trials that specifically recruit participants with a physical health condition in addition to depression (e.g. depression in people with diabetes)
Intervention	• Service developments or changes which are specifically designed to promote access. • Specific models of service delivery (that is, community-based outreach clinics, clinics or services in non-health settings). • Methods designed to remove barriers to access (including stigma, misinformation or cultural beliefs about the nature of mental disorder)
Comparison	Standard care
Outcomes and prioritisation	**Critical outcomes:** • Proportion of people from the target group who access treatment • Uptake of treatment **Important but not critical outcomes:** • Satisfaction, preference • Anxiety about treatment
Study design	• RCTs • Systematic reviews of RCTs
Include unpublished data?	Conference abstracts, dissertations and unpublished data will not be included unless the data can be extracted from elsewhere (for instance, from the Common Mental Health Disorders guideline)
Restriction by date	All relevant studies from existing reviews from the Common Mental Health Disorders guideline and from previous searches (pre-2016) will be carried forward. No restriction on date for the updated search (due to the addition of the LGBT groups since the original search was run), studies published between database inception and the date the searches are run will be sought.
Minimum sample size	N = 10 in each arm

Field (based on PRISMA-P)	Content
Study setting	Primary, secondary, tertiary and social care settings. Non-English-language papers will be excluded (unless data can be obtained from an existing review).
The review strategy	**Data Extraction (selection and coding)** Citations from each search will be downloaded into EndNote and duplicates removed. Titles and abstracts of identified studies will be screened by two reviewers for inclusion against criteria, until a good inter-rater reliability has been observed (percentage agreement =>90%). Initially 10% of references will be double-screened. If inter-rater agreement is good then the remaining references will be screened by one reviewer. All primary-level studies included after the first scan of citations will be acquired in full and re-evaluated for eligibility at the time they are being entered into a study database (standardised template created in Microsoft Excel). At least 10% of data extraction will be double-coded. Discrepancies or difficulties with coding will be resolved through discussion between reviewers or the opinion of a third reviewer will be sought. **Data Analysis** A meta-analysis using a random-effects model will be conducted to combine results from similar studies. An intention to treat (ITT) approach will be taken where possible. Risk of bias will be assessed at the study level using the Cochrane risk of bias tool. This assessment includes: adequacy of randomisation (sufficient description of randomisation method, allocation concealment and any baseline difference between groups); blinding (of participants, intervention administrators and outcome assessors); attrition ('at risk of attrition bias' defined as a dropout of more than 20% and completer analysis used, or a difference of >20% between the groups); selective reporting bias (is the protocol registered, are all outcomes reported); other bias (for instance, conflict of interest in funding). Risk of bias will also be assessed at the outcome level using GRADE. For heterogeneity, outcomes will be downgraded once if I^2>50%, twice if I^2 >80%. For imprecision, outcomes will be downgraded using rules of thumb. If the 95% CI is imprecise i.e. crosses the line of no effect and the threshold for clinical benefit/harm, 0.8 or 1.25 (dichotomous) or -0.5 or 0.5 SMD (for continuous), the outcome will be downgraded. Outcomes will be downgraded one or two levels depending on how many lines it crosses. If the 95% CI is not imprecise, we will consider whether the criterion for Optimal Information Size is met (for dichotomous outcomes, 300 events; for continuous outcomes, 400 participants), if not we will downgrade one level.
Heterogeneity	Where possible, the influence of the following subgroups will be considered:

Field (based on PRISMA-P)	Content
(sensitivity analysis and subgroups)	• Different subgroups within the LGBT category • Different subgroups within the BME category
Data management (software)	Endnote was used to sift through the references identified by the search, and Excel for data extraction Pairwise meta-analyses and production of forest plots was done using Cochrane Review Manager (RevMan5). 'GRADEpro' was used to assess the quality of evidence for each outcome.
Information sources – databases and dates	Databases: Embase 1980 to 2019 Week 13, Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily 1946 to April 02, 2019, PsycINFO 1806 to March Week 4 2019 The Cochrane Library: Cochrane Database of Systematic Reviews, Issue 4 of 12, April 2019; Cochrane Central Register of Controlled Trials, Issue 4 of 12, April 2019 HE - Database(s): Embase 1980 to 2019 Week 08, Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily 1946 to February 26, 2019, PsycINFO 1806 to February Week 1 2019 NIHR Centre for Reviews and Dissemination: Health Technology Assessment Database (HTA) CINAHL Plus (Cumulative Index to Nursing and Allied Health Literature) 1937-current, EBSCO Host
Identify if an update	Update of CG90 (2009)
Author contacts	For details please see the guideline in development web site.
Highlight if amendment to previous protocol	For details please see section 4.5 of Developing NICE guidelines: the manual 2014
Search strategy – for one database	For details please see appendix B.
Data collection process – forms/duplicate	A standardised evidence table format will be used, and published as appendix D (clinical evidence tables) or H (economic evidence tables).
Data items – define all variables to be collected	For details please see evidence tables in appendix D (clinical evidence tables) or H (economic evidence tables).
Methods for assessing bias at outcome/study level	Standard study checklists were used to critically appraise individual studies. For details please see section 6.2 of Developing NICE guidelines: the manual 2014. The risk of bias across all available evidence was evaluated for each outcome using an adaptation of the 'Grading of Recommendations Assessment, Development and Evaluation (GRADE) toolbox' developed by the international GRADE working group http://www.gradeworkinggroup.org/.
Criteria for quantitative synthesis	For details please see section 6.4 of Developing NICE guidelines: the manual 2014

Field (based on PRISMA-P)	Content
Methods for quantitative analysis – combining studies and exploring (in)consistency	For details please see the methods chapter
Meta-bias assessment – publication bias, selective reporting bias	For details please see section 6.2 of Developing NICE guidelines: the manual 2014.
Confidence in cumulative evidence	For details please see sections 6.4 and 9.1 of Developing NICE guidelines: the manual 2014
Rationale/context – what is known	For details please see the introduction to the evidence review.
Describe contributions of authors and guarantor	A multidisciplinary committee developed the evidence review. The committee was convened by the National Guideline Alliance (NGA) and chaired by Dr Navneet Kapur in line with section 3 of Developing NICE guidelines: the manual 2014. Staff from the NGA undertook systematic literature searches, appraised the evidence, conducted meta-analysis and cost effectiveness analysis where appropriate, and drafted the guideline in collaboration with the committee. For details please see the methods chapter.
Sources of funding/support	The NGA is funded by NICE and hosted by the Royal College of Obstetricians and Gynaecologists.
Name of sponsor	The NGA is funded by NICE and hosted by the Royal College of Obstetricians and Gynaecologists.
Roles of sponsor	NICE funds NGA to develop guidelines for those working in the NHS, public health and social care in England
PROSPERO registration number	Not applicable

1   *BAME/BME: black, Asian, minority, ethnic; CI: confidence interval; GRADE: Grading of Recommendations Assessment, Development and Evaluation; ITT: intention to treat;*
2   *LGBT: lesbian, gay, bisexual, transgender/transsexual; MID: minimally important difference; NGA: National Guideline Alliance; N: number of participants; NHS: National health*
3   *service; NICE: National Institute for Health and Care Excellence; RCT: randomised controlled trial; RoB: risk of bias; SD: standard deviation; SMD: standardised mean*
4   *difference*

5

6

7

8

Appendix B – Literature search strategies

Literature search strategies for review question: For adults at risk of depression (or anxiety disorders) from particular vulnerable groups (older people, black minority ethnic groups, lesbian, gay bisexual, transgender groups and men) do service developments and interventions which are specifically designed to promote access, increase the proportion of people from the target group who access treatment, when compared with standard care?

Clinical search

Database(s): Embase 1974 to 2019 Week 13, Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily 1946 to April 02, 2019, PsycINFO 1806 to March Week 4 2019

Date of search: 03/04/2019

Search updated: 03/03/2021

#	Searches
1	(exp anxiety disorders/ or body dysmorphic disorder/ or exp depression/ or mental stress/) use oemezd
2	(anxiety/ or exp anxiety disorders/ or body dysmorphic disorders/ or exp compulsive behavior/ or depression/ or exp depressive disorder/ or panic/ or stress, psychological/) use ppez
3	(anxiety/ or anxiety management/ or exp anxiety disorders/ or panic attack/ or performance anxiety/ or social anxiety/ or speech anxiety/ or test anxiety/ or body dysmorphic disorder/ or panic/ or exp depression/ or atypical depression/ or "depression (emotion)"/ or psychological stress/) use psyh
4	(anxiet* or anxious* or body dysmorphi* or dysmorphophobi* or (combat adj (disorder* or fatigue or neuros* or syndrome*)) or concentration camp syndrome or torture syndrome or war neuros* or (rape adj2 trauma*) or flash back* or flashback* or posttrauma* or post trauma* or ptsd or railway spine or re experienc* or reexperienc* or (trauma* and (avoidance or grief or horror or death* or nightmare* or night mare* or emotion*)) or depress* or dysphori* or dysthymi* or melanchol* or seasonal affective disorder* or clean response* or compulsi* or obsession* or obsessive* or ocd or recur* thought* or panic* or agoraphobi* or claustrophobi* or phobi* or ((extreme or trauma*) adj stress) or (trauma* adj (neuros* or stress*)) or acute stress or desnos or (psych* adj (stress or trauma*)) or psychotrauma* or stress disorder* or ((acute or chronic* or extreme or incessant* or intense* or persistent* or serious* or sever*) adj2 (apprehens* or doom or fear* or terror*)) or hypervigil*).tw.
5	(healthcare or health care or (mental adj (disorder* or health)) or primary care).tw.
6	or/1-5
7	(health care access/ or health disparity/ or health care utilization/) use oemezd or (health promotion/ use oemezd and (access* or barrier* or disparit* or equity or inequit* or inequalit*)).tw.
8	(health services accessibility/ or healthcare disparities/ or health status disparities/) use ppez or (exp health promotion/ use ppez and (access* or barrier* or disparit* or equity or inequit* or inequalit*).tw.) or (ut.fs. and (care or health care or healthcare or service*).hw.)
9	(health care delivery/ or treatment barriers/ or health care utilization/ or health disparities/) use psyh or (health promotion/ use psyh and (access* or barrier* or disparit* or equity or inequit* or inequalit*).tw.)
10	((access* or barrier* or disparit* or equity or inequit* or inequalit*) adj4 (care or clinical practice or detect* or diagnos* or health* or interven* or medication* or medicine* or program* or psychotherap* or recogni* or referral* or service* or therap* or treat*)).tw.
11	(((health adj (care or service)) or healthcare) adj2 (need*1 or use*1 or using or utilis* or utiliz*)).tw.
12	((barrier* or disparit* or equity or hinder* or hindran* or hurdle* or imped* or improv* or inequit* or inequalit* or obstacle* or obstruct* or prevent* or promot* or reluctan* or restrict* or uptake or utiliz* or utilis* or vulnerable) adj3 access*).tw.
13	((access or barrier) adj research*).tw.
14	((behavio?r* or helpseek* or help seek* or system*) adj2 barrier*).tw.
15	or/7-14
16	"translating (language)"/ use oemezd or translating/ use ppez or foreign language translation/ use psyh or (translate* or translating or translator*).tw.
17	15 or 16
18	(exp african/ or exp aged/ or ancestry group/ or exp asian/ or asian american/ or asian continental ancestry group/ or exp black person/ or british asian/ or exp *"caribbean (person)"/ or exp central american/ or cultural anthropology/ or cultural competence/ or cultural deprivation/ or exp elderly care/ or exp "ethnic or racial aspects"/ or exp ethnic group/ or ethnology/ or geriatric*.hw. or gerontology/ or exp hispanic/ or exp immigration/ or exp indigenous people/ or exp migrant/ or minority group/ or mongoloid/ or exp multiracial person/ or multilingualism/ or nursing home/ or exp oceanian/ or exp oceanic ancestry group/ or prejudice/ or exp religion/ or exp religious group/ or residential home/ or social problem/ or exp south american/ or superstition/ or *taboo/ or *"translating (language)"/) use oemezd
19	(exp african continental ancestry group/ or exp aged/ or exp american native continental/ or "emigration and immigration"/ or ancestry group/ or exp asian continental ancestry group/ or "emigrants and immigrants"/ or "health services for the aged"/ or "homes for the aged"/ or "transients and migrants"/ or cross-cultural comparison/ or cultural characteristics/ or cultural competency/ or cultural deprivation/ or cultural diversity/ or culture/ or exp ethnic groups/

#	Searches
	or ethnology/ or minority groups/ or multilingualism/ or nursing homes/ or oceanic ancestry group/ or exp prejudice/ or race relations/ or refugees/ or religion/ or exp superstitions/ or taboo/ or "transients and migrants"/ or translating/) use ppez or geriatric*.hw. or eh.fs.
20	(african culture groups/ or alaska natives/ or american indians/ or arabs/ or exp asians/ or asylum seeking/ or blacks/ or cross cultural communication/ or exp cross cultural treatment/ or cultural sensitivity/ or "culture (anthropological)"/ or ethnology/ or elder care/ or foreign language translation/ or geriatric patients/ or hawaii natives/ or human migration/ or immigration/ or exp indigenous populations/ or inuit/ or jews/ or exp "latinos/latinas"/ or minority groups/ or multilingualism/ or multiculturalism/ or nursing homes/ or exp pacific islanders/ or exp prejudice/ or "race and ethnic discrimination"/ or exp "racial and ethnic groups"/ or "race and ethnic relations"/ or "racial and ethnic differences"/ or refugees/ or religion/ or exp religious beliefs/ or exp religious practices/ or residential care institutions/ or retirement communities/ or romanies/ or social issues/ or exp sociocultural factors/ or superstitions/ or taboos/) use psyh or geriatric*.hw. or gerontology.tw.
21	((aged or ag?ism or ag?ing or elder* or ((frail or old or older) adj (adult* or men or people or person* or women)) or geriatric* or gerontology or nursing home* or residential care or african or asian* or bangladesh* or bengali or (black* adj2 (communit* or famil* or people or person*)) or blacks or (bme adj2 (communit* or group* or people or person*)) or caribbean* or (chinese adj2 (adult* or communit* or famil* or people or person*)) or cultur* or disadvantaged or disparity or disparities or ethnic* or ethno* or gujurati or hindu or hispanic* or im?igrant* or inequalit* or interpret* or latino* or migrant* or minorit* or multi lingual* or multicultur* or multilingual* or muslim* or pacific islander* or pakistan* or prejudic* or punjabi or race or races or racial or racism or romanies or translate*1 or translating or translator* or translation or urdu or vulnerable) and (access* or barrier* or disparit* or ((enter* or entry) adj2 service*) or equity or inequit* or inequalit* or (receipt adj2 service*) or utili?ation)).tw.
22	or/16-20
23	exp male/ use oemezd
24	(male/ or exp men/) use ppez
25	(exp human males/ or male attitudes/) use psyh
26	((boy or boys or brother* or father* or husband* or male* or man or men or son or sons or widower*) and (access* or barrier* or disparit* or equity or inequit* or inequalit*)).tw.
27	or/23-26
28	(exp "sexual and gender minority"/ or bisexuality/ or exp gender dysphoria/ or exp gender identity/ or exp homosexuality/) use oemezd
29	(exp "Sexual and Gender Minorities"/ or Gender Dysphoria/ or Gender Identity/ or Bisexuality/ or exp Homosexuality/ or Transsexualism/ or Health Services for Transgender Persons/) use ppez
30	(exp Gender Identity/ or Bisexuality/ or exp Homosexuality/ or exp Gender Identity Disorder/ or "Homosexuality (Attitudes Toward)"/ or Same Sex Couples/ or "Transgender (Attitudes Toward)"/) use psyh
31	(bigender* or bi-gender* or bisexual* or bi-sexual* or gay or gender minorit* or gender neurtral or glbt or glbtq* or lbg or lgbt or lgbtq* or homosexual* or homo-sexual* or lesbian* or lesbigay* or non-heterosexual* or nonheterosexual* or queer* or sexual dissident* or sexual minorit*).tw.
32	(transgender* or trans-gender* or gender diverse or gender varian* or genderqueer* or intersex* or non-binary or nonbinary or transexual* or transsexual* or trans-sexual* or transvestite*).tw.
33	or/28-32
34	(health education/ or health literacy/ or health promotion/ or patient education/ or patient information/ or reading/ or vulnerable population/) use oemezd
35	(communication barriers/ or health education/ or health literacy/ or health promotion/ or literacy/ or socioeconomic factors/ or "patient education as topic"/ or vocabulary/) use ppez
36	(at risk populations/ or client education/ or communication barriers/ or health education/ or health literacy/ or health promotion/ or literacy/ or low literacy/ or reading/ or reading education/ or socioeconomic status/ or vocabulary/) use psyh
37	((health adj2 (educat* or promot*)) or ((client* or patient*) adj2 (educat* or information)) or literac*).tw.
38	or/34-37
39	(attitude to computers/ or audiovisual aid/ or audiovisual equipment/ or communication software/ or computer assisted therapy/ or computer program/ or computer system/ or computer/ or decision support system/ or e-mail/ or human computer interaction/ or information technology/ or internet/ or mobile phone/ or multimedia/ or exp optical disk/ or personal digital assistant/ or social media/ or telecommunication/ or teleconsultation/ or exp telehealth/ or telemedicine/ or telemonitoring/ or telephone/ or telepsychiatry/ or teletherapy/ or text messaging/ or video disk/ or videotape/) use oemezd
40	(attitude to computers/ or audiovisual aids/ or exp cellular phone/ or computer-assisted instruction/ or communications media/ or computer literacy/ or computer user training/ or computing methodologies/ or exp computer systems/ or decision making, computer assisted/ or decision support systems, clinical/ or electronic mail/ or hotlines/ or multimedia/ or exp optical storage devices/ or exp programmed instruction as topic/ or social networking/ or exp software/ or telecommunications/ or exp telemedicine/ or exp telemetry/ or telephone/ or text messaging/ or therapy, computer assisted/ or exp videorecording/) use ppez
41	(audiotapes/ or audiovisual communications media/ or communications media/ or computer applications/ or exp computer assisted instruction/ or computer assisted therapy/ or computer attitudes/ or computer literacy/ or computer mediated communication/ or computer software/ or computer training/ or computers/ or digital video/ or educational audiovisual aids/ or electronic communication/ or exp human computer interaction/ or hot line services/ or human computer interaction/ or hypermedia/ or information technology/ or instructional media/ or internet/ or exp mobile devices/ or exp multimedia/ or online therapy/ or programmed instruction/ or exp social media/ or exp social networks/ or telecommunications media/ or telemedicine/ or telemetry/ or exp telephone systems/ or videotapes/) use psyh
42	(audio* or cd rom or cdrom or computer* or communication aid or cyber* or (digital adj (assistant* or divide)) or dvd or (e*1 adj (communicat* or consult* or mail* or portal* or visit*)) or email* or ecommunicat* or econsult* or email* or eportal* or etablet* or evisit* or (e*1 adj (communicat* or consult* or mail* or tablet* or visit*)) or facebook* or floppy or handheld or hand held or information technolog* or interactiv* or internet or iphone* or laptop* or multimedia or multi media or myspace* or my space* or online or palmtop or palm top or personal digital or portal*1 or reminder

#	Searches
	system* or remote consultation* or short messag* or skype or sms or (social adj (media or network*)) or texts or texting or video* or virtual or website).tw.
43	((cd or communication or digital or electronic* or mobile or net or pc*1 or pda or phone* or phoning or tablet* or technolog* or telephon* or web or www) adj3 (aid* or assist* or based or deliver* or diary or diaries)).tw.
44	((cd or communication or digital or electronic* or mobile or net or pc*1 or pda or phone* or phoning or tablet* or technolog* or telephon* or web or www) adj7 (advocacy or application* or approach* or coach* or educat* or exchang* or guide*1 or help* or instruct* or interact* or interven* or learn* or manag* or meeting* or module* or network* or package* or participat* or prevent* or program* or psychoanaly* or psychotherap* or rehab* or retrain* or re train* or self guide* or self help or selfguide* or selfhelp or session* or skill* or strateg* or support* or teach* or technique* or therap* or train* or treat* or work shop* or workshop*)).tw.
45	((vr or virtual reality) adj2 (advocacy or application* or approach* or coach* or educat* or exchang* or exposure or feedback* or guide*1 or help* or instruct* or interact* or interven* or learn* or manag* or meeting* or module* or network* or package* or participat* or prevent* or program* or psychoanaly* or psychotherap* or rehab* or retrain* or re train* or self guide* or self help or selfguide* or selfhelp or session* or skill* or strateg* or support* or teach* or technique* or therap* or train* or treat* or work shop* or workshop*)).tw.
46	(caccbt or ccbt or c cbt or call in or (caller*1 adj3 (interven* or program* or therap* or treat*)) or callline* or call line* or ediar* or ehealth or emediat* or elearn* or etherap* or (e adj (diar* or learn or health or mediat* or therap*)) or help line* or helpline* or hotline* or hot line* or outreach* or phone in or phonein or telecare or telecommunication or teleconsult* or telehealth or telemedicine or telement* or telepsychology or telepsychiatry or teletherap* or (tele adj (care or communication or consult* or health or medicine or mental* or psychology or psychiatry or therap*)) or videocam* or video cam* or webcam* or web cam*).tw.
47	(alles onder controle or autism xpress or autismexpress or avatars programme or (beating adj2 blues) or big white wall or blue pages or bluepages or (brave program and anxiet*) or (camp cope adj2 lot) or (catch it and depres*) or cool teens or coping cat or crufadschools or (e couch and depres*) or fearfighter or ff education or ffeducation or grip op je dip or internet psychiatri or internet psykiatri or leap project or linden method or (little prince and depres*) or (living life adj2 full) or mind your*1 mind or mood gym or mood helper or moodgym or moodhelper or my*1 body my*1 life or net ff or netcope or netff or oc fighter or ocfighter or online anxiety prevention or overcoming bulimia online or (overcoming depression and program*) or panic online or pix talk or pixtalk or (restoring adj2 balance) or sparx or standalone ff or standaloneff or student bodie or student bodies prevention program* or studentbodie or ((the*1 adj lowdown) and depres*) or the*1 journey or therapeutic learning program* or trouble on*1 the*1 tightrope or think feel do or whiz kid games or (youth mental health adj2 parent* guide)).tw.
48	(ecological momentary assessment* or mhealth or (mobile adj2 (app or apps or application*)) or virtual reality or wearable*).tw.
49	or/39-48
50	49 and (17 or (access* or barrier* or disparit* or equity or inequit* or inequalit*).tw.)
51	6 and (17 and (or/22,27,38) and 50)
52	limit 51 to dc=20160601-20190403 use oemezd [Limit not valid in PsycINFO; records were retained]
53	limit 51 to ed=20160601-20190403 use ppez [Limit not valid in Embase,PsycINFO; records were retained]
54	limit 51 to up=20160601-20190403 use psyh
55	or/52-54
56	6 and (17 and 33 and 50)
57	55 or 56
58	limit 57 to english language
59	Letter/ use ppez
60	letter.pt. or letter/ use oemezd
61	note.pt.
62	editorial.pt.
63	Editorial/ use ppez
64	News/ use ppez
65	exp Historical Article/ use ppez
66	Anecdotes as Topic/ use ppez
67	Comment/ use ppez
68	Case Report/
69	case study/ use oemezd
70	(letter or comment*).ti.
71	or/59-70
72	randomized controlled trial/
73	random*.ti,ab.
74	72 or 73
75	71 not 74
76	(animals/ not humans/) use ppez
77	(animal/ not human/) use oemezd
78	nonhuman/ use oemezd
79	exp animals/ use psyh
80	"primates (nonhuman)"/ use psyh
81	exp Animals, Laboratory/ use ppez
82	exp Animal Experimentation/ use ppez
83	exp animal experiment/ use oemezd
84	exp experimental animal/ use oemezd
85	exp Models, Animal/ use ppez
86	animal model/ use oemezd
87	animal models/ use psyh

#	Searches
88	animal research/ use psyh
89	exp Rodentia/ use ppez
90	exp rodent/ use oemezd
91	exp rodents/ use psyh
92	(rat or rats or mouse or mice).ti.
93	or/75-92
94	58 not 93
95	clinical Trials as topic.sh. or (controlled clinical trial or pragmatic clinical trial or randomized controlled trial).pt. or (placebo or randomi?ed or randomly).ab. or trial.ti.
96	95 use ppez
97	(controlled clinical trial or pragmatic clinical trial or randomized controlled trial).pt. or drug therapy.fs. or (groups or placebo or randomi?ed or randomly or trial).ab.
98	97 use ppez
99	crossover procedure/ or double blind procedure/ or randomized controlled trial/ or single blind procedure/ or (assign* or allocat* or crossover* or cross over* or ((doubl* or singl*) adj blind*) or factorial* or placebo* or random* or volunteer*).ti,ab.
100	99 use oemezd
101	clinical trials/ or (placebo or randomi?ed or randomly).ab. or trial.ti.
102	101 use psyh
103	96 or 98
104	100 or 102 or 103
105	Meta-Analysis/
106	exp Meta-Analysis as Topic/
107	systematic review/
108	meta-analysis/
109	(meta analy* or metanaly* or metaanaly*).ti,ab.
110	((systematic or evidence) adj2 (review* or overview*)).ti,ab.
111	((systematic* or evidence*) adj2 (review* or overview*)).ti,ab.
112	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
113	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
114	(search* adj4 literature).ab.
115	(medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
116	cochrane.jw.
117	((pool* or combined) adj2 (data or trials or studies or results)).ab.
118	(or/105-107,109,111-116) use ppez
119	(or/107-110,112-117) use oemezd
120	or/118-119
121	104 or 120
122	94 and 121
123	remove duplicates from 122

The Cochrane Library: Cochrane Database of Systematic Reviews, Issue 4 of 12, April 2019; Cochrane Central Register of Controlled Trials, Issue 4 of 12, April 2019

Date of search: 03/04/2019

Search updated: 09/03/2021

ID	Search
#1	MeSH descriptor: [Depression] this term only
#2	MeSH descriptor: [Depressive Disorder] explode all trees
#3	MeSH descriptor: [Anxiety] this term only
#4	MeSH descriptor: [Anxiety Disorders] explode all trees
#5	MeSH descriptor: [Body Dysmorphic Disorders] this term only
#6	MeSH descriptor: [Compulsive Behavior] this term only
#7	MeSH descriptor: [Panic] this term only
#8	(anxiet* or anxious* or "body dysmorphi*" or dysmorphophobi* or (combat near/1 (disorder* or fatigue or neuros* or syndrome*)) or "concentration camp syndrome" or "torture syndrome" or "war neuros*" or (rape near/2 trauma*) or "flash back*" or flashback* or posttrauma* or "post trauma*" or ptsd or "railway spine" or "re experienc*" or reexperienc* or (trauma* and (avoidance or grief or horror or death* or nightmare* or "night mare*" or emotion*)) or depress* or dysphori* or dysthymi* or melanchol* or "seasonal affective disorder*" or "clean response*" or compulsi* or obsession* or obsessive* or ocd or recur* thought* or panic* or agoraphobi* or claustrophobi* or phobi* or ((extreme or trauma*) near/1 stress) or (trauma* near/1 (neuros* or stress*)) or "acute stress" or desnos or (psych* near/1 (stress or trauma*)) or psychotrauma* or "stress disorder*" or ((acute or chronic* or extreme or incessant* or intense* or persistent* or serious* or sever*) near/2 (apprehens* or doom or fear* or terror*)) or hypervigil*):ti,ab
#9	(healthcare or "health care" or (mental near/1 (disorder* or health)) or "primary care"):ti,ab
#10	{or #1-#9}
#11	MeSH descriptor: [Health Services Accessibility] this term only
#12	MeSH descriptor: [Healthcare Disparities] this term only

ID	Search
#13	MeSH descriptor: [Health Status Disparities] this term only
#14	MeSH descriptor: [Health Promotion] this term only
#15	((access* or barrier* or disparit* or equity or inequit* or inequalit*) and (care or "clinical practice" or detect* or diagnos* or health* or interven* or medication* or medicine* or program* or psychotherap* or recogni* or referral* or service* or therap* or treat*)):ti,ab
#16	(((health near/1 (care or service)) or healthcare) near/2 (need* or use* or using or utilis* or utiliz*)):ti,ab
#17	((barrier* or disparit* or equity or hinder* or hindran* or hurdle* or imped* or improv* or inequit* or inequalit* or obstacle* or obstruct* or prevent* or promot* or reluctan* or restrict* or uptake or utiliz* or utilis* or vulnerable) and access*):ti,ab
#18	((access or barrier) near/1 research*):ti,ab
#19	((behavior* or behaviour* or helpseek* or "help seek*" or system*) and barrier*):ti,ab
#20	MeSH descriptor: [Translating] this term only
#21	(translate* or translating or translator*):ti,ab
#22	{or #11-#21}
#23	MeSH descriptor: [Communication Barriers] explode all trees
#24	MeSH descriptor: [Health Education] this term only
#25	MeSH descriptor: [Health Literacy] this term only
#26	MeSH descriptor: [Health Promotion] this term only
#27	MeSH descriptor: [Literacy] this term only
#28	MeSH descriptor: [Socioeconomic Factors] this term only
#29	((health near/2 (educat* or promot*)) or ((client* or patient*) near/2 (educat* or information)) or literac*):ti,ab
#30	((((computer* or electronic* or technolog*) near/2 (communication* or mediat*)) or etherap* or "e therap*" or (remote* near/2 (communic* or deliver* or therap*)) or ((distance or remote*) near/2 (communication* or technolog* or electronic*)) or internet or telecommunicat* or "tele communicat*" or telemedicine or "tele medicine" or telephone* or telepsychiatr* or videoconf* or "video conf*") and (access* or barrier* or disparit* or ((enter* or entry) near/2 service*) or equity or inequit* or inequalit* or (receipt near/2 service*) or utilisation or utilization) and (intervention* or etherap* or program* or psychotherap* or therap* or treat*)):ti,ab
#31	{or #23-#30}
#32	MeSH descriptor: [African Continental Ancestry Group] explode all trees
#33	MeSH descriptor: [Aged] explode all trees
#34	MeSH descriptor: [American Native Continental Ancestry Group] explode all trees
#35	MeSH descriptor: [Emigration and Immigration] this term only
#36	MeSH descriptor: [Asian Continental Ancestry Group] explode all trees
#37	MeSH descriptor: [Emigrants and Immigrants] explode all trees
#38	MeSH descriptor: [Health Services for the Aged] this term only
#39	MeSH descriptor: [Homes for the Aged] this term only
#40	MeSH descriptor: [Transients and Migrants] this term only
#41	MeSH descriptor: [Cross-Cultural Comparison] this term only
#42	MeSH descriptor: [Cultural Characteristics] this term only
#43	MeSH descriptor: [Cultural Competency] this term only
#44	MeSH descriptor: [Cultural Deprivation] this term only
#45	MeSH descriptor: [Cultural Diversity] this term only
#46	MeSH descriptor: [Culture] this term only
#47	MeSH descriptor: [Ethnic Groups] explode all trees
#48	MeSH descriptor: [Ethnology] this term only
#49	geriatric*:kw
#50	MeSH descriptor: [Minority Groups] this term only
#51	MeSH descriptor: [Multilingualism] this term only
#52	MeSH descriptor: [Nursing Homes] explode all trees
#53	MeSH descriptor: [Oceanic Ancestry Group] this term only
#54	MeSH descriptor: [Prejudice] this term only
#55	MeSH descriptor: [Race Relations] explode all trees
#56	MeSH descriptor: [Refugees] this term only
#57	MeSH descriptor: [Religion] explode all trees
#58	MeSH descriptor: [Superstitions] this term only
#59	MeSH descriptor: [Taboo] this term only
#60	MeSH descriptor: [Translating] this term only
#61	((aged or ageism or agism or aging or aging or elder* or ((frail or old or older) near/1 (adult* or men or people or person* or women)) or geriatric* or gerontology or "nursing home*" or "residential care" or african or asian* or bangladesh* or bengali or (black* near/2 (communit* or famil* or people or person*)) or blacks or (bme near/2 (communit* or group* or people or person*)) or caribbean* or (chinese near/2 (adult* or communit* or famil* or people or person*)) or cultur* or disadvantaged or disparity or disparities or ethnic* or ethno* or gujurati or hindu or hispanic* or imigrant* or immigrant* or inequalit* or interpret* or latino* or migrant* or minorit* or "multi lingual*" or multicultur* or multilingual* or muslim* or "pacific islander*" or pakistan* or prejudic* or punjabi or race or races or racial or racism or romanies or translate or translating or translator* or translation or urdu or vulnerable) and (access* or barrier* or disparit* or ((enter* or entry) near/2 service*) or equity or inequit* or inequalit* or (receipt near/2 service*) or utilisation or utilization)):ti,ab
#62	MeSH descriptor: [Male] explode all trees
#63	MeSH descriptor: [Men] explode all trees
#64	((boy or boys or brother* or father* or husband* or male* or men or son or sons or widower*) and (access* or barrier* or disparit* or equity or inequit* or inequalit*)):ti,ab
#65	{or #32-#64}

ID	Search
#66	MeSH descriptor: [Sexual and Gender Minorities] explode all trees
#67	MeSH descriptor: [Gender Dysphoria] this term only
#68	MeSH descriptor: [Gender Identity] explode all trees
#69	MeSH descriptor: [Bisexuality] this term only
#70	MeSH descriptor: [Homosexuality] explode all trees
#71	MeSH descriptor: [Transsexualism] this term only
#72	MeSH descriptor: [Health Services for Transgender Persons] this term only
#73	(bigender* or bi-gender* or bisexual* or bi-sexual* or gay or gender minorit* or gender neurtral or glbt or glbtq* or lbg or lgbt or lgbtq* or homosexual* or homo-sexual* or lesbian* or lesbigay* or non-heterosexual* or nonheterosexual* or queer* or sexual dissident* or sexual minorit*):ti,ab
#74	(transgender* or trans-gender* or gender diverse or gender varian* or genderqueer* or intersex* or non-binary or nonbinary or transexual* or transsexual* or trans-sexual* or transvestite*):ti,ab
#75	{or #66-#74}
#76	MeSH descriptor: [Attitude to Computers] this term only
#77	MeSH descriptor: [Audiovisual Aids] explode all trees
#78	MeSH descriptor: [Cell Phone] explode all trees
#79	MeSH descriptor: [Communications Media] this term only
#80	MeSH descriptor: [Computer Literacy] this term only
#81	MeSH descriptor: [Computer User Training] this term only
#82	MeSH descriptor: [Computing Methodologies] this term only
#83	MeSH descriptor: [Computer Systems] explode all trees
#84	MeSH descriptor: [Decision Making, Computer-Assisted] this term only
#85	MeSH descriptor: [Decision Support Systems, Clinical] this term only
#86	MeSH descriptor: [Electronic Mail] this term only
#87	MeSH descriptor: [Hotlines] this term only
#88	MeSH descriptor: [Multimedia] this term only
#89	MeSH descriptor: [Optical Storage Devices] explode all trees
#90	MeSH descriptor: [Programmed Instruction as Topic] explode all trees
#91	MeSH descriptor: [Social Networking] explode all trees
#92	MeSH descriptor: [Software] explode all trees
#93	MeSH descriptor: [Telecommunications] this term only
#94	MeSH descriptor: [Telemedicine] explode all trees
#95	MeSH descriptor: [Telemetry] this term only
#96	MeSH descriptor: [Telephone] explode all trees
#97	MeSH descriptor: [Therapy, Computer-Assisted] this term only
#98	MeSH descriptor: [Video Recording] explode all trees
#99	((cd or communication or digital or electronic* or mobile or net or pc or pda or phone* or phoning or tablet* or technolog* or telephon* or web or www) near/3 (aid* or assist* or based or deliver* or diary or diaries)):ti,ab
#100	((cd or communication or digital or electronic* or mobile or net or pc or pda or phone* or phoning or tablet* or technolog* or telephon* or web or www) near/7 (advocacy or application* or approach* or coach* or educat* or exchang* or guide* or help* or instruct* or interact* or interven* or learn* or manag* or meeting* or module* or network* or package* or participat* or prevent* or program* or psychoanaly* or psychotherap* or rehab* or retrain* or "re train*" or "self guide*" or "self help" or selfguide* or selfhelp or session* or skill* or strateg* or support* or teach* or technique* or therap* or train* or treat* or "work shop*" or workshop*)):ti,ab
#101	((vr or virtual reality) near/2 (advocacy or application* or approach* or coach* or educat* or exchang* or exposure or feedback* or guide* or help* or instruct* or interact* or interven* or learn* or manag* or meeting* or module* or network* or package* or participat* or prevent* or program* or psychoanaly* or psychotherap* or rehab* or retrain* or "re train*" or "self guide*" or "self help" or selfguide* or selfhelp or session* or skill* or strateg* or support* or teach* or technique* or therap* or train* or treat* or "work shop*" or workshop*)):ti,ab
#102	(caccbt or ccbt or "c cbt" or "call in" or (caller* near/3 (interven* or program* or therap* or treat*)) or callline* or "call line*" or ediar* or ehealth or emediat* or elearn* or etherap* or (e near/1 (diar* or learn or health or mediat* or therap*)) or "help line*" or helpline* or hotline* or "hot line*" or outreach* or "phone in" or phonein or telecare or telecommunication or teleconsult* or telehealth or telemedicine or telement* or telepsychology or telepsychiatry or teletherap* or (tele near/1 (care or communication or consult* or health or medicine or mental* or psychology or psychiatry or therap*)) or videocam* or "video cam*" or webcam* or "web cam*"):ti,ab
#103	("alles onder controle" or "autism xpress" or autismexpress or "avatars programme" or (beating near/2 blues) or "big white wall" or "blue pages" or bluepages or ("brave program" and anxiet*) or ("camp cope" near/2 lot) or ("catch it" and depres*) or "cool teens" or "coping cat" or crufadschools or ("e couch" and depres*) or fearfighter or "ff education" or ffeducation or "grip op je dip" or "internet psychiatri" or "internet psykiatri" or "leap project" or "linden method" or ("little prince" and depres*) or ("living life" near/2 full) or "mind your* mind" or "mood gym" or "mood helper" or moodgym or moodhelper or "my body my life" or "net ff" or netcope or netff or "oc fighter" or ocfighter or "online anxiety prevention" or "overcoming bulimia online" or ("overcoming depression" and program*) or "panic online" or "pix talk" or pixtalk or (restoring near/2 balance) or sparx or "standalone ff" or standaloneff or "student bodie" or "student bodies prevention program*" or studentbodie or ((the near/1 lowdown) and depres*) or "the journey" or "therapeutic learning program*" or "trouble on the tightrope" or "think feel do" or "whiz kid games" or ("youth mental health" near/2 parent* guide)):ti,ab
#104	("ecological momentary assessment*" or mhealth or (mobile near/2 (app or apps or application*)) or "virtual reality" or wearable*):ti,ab
#105	{or #76-#104}
#106	(access* or barrier* or disparit* or equity or inequit* or inequalit*):ti,ab
#107	#105 and (#22 or #106)
#108	(#10 and (#22 or #31 or #65) and #107) with Cochrane Library publication date Between Jun 2016 and Apr 2019

ID	Search
#109	#75 and (#22 or #31 or #106)
#110	#10 and #109
#111	#108 or #110

Health Economics search

Database(s): Embase 1974 to 2019 Week 08, Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily 1946 to February 26, 2019, PsycINFO 1806 to February Week 1 2019

Date of search: 27/02/2019

Search updated: 02/03/2021

#	Searches
1	(depression/ or agitated depression/ or atypical depression/ or depressive psychosis/ or dysphoria/ or dysthymia/ or endogenous depression/ or involutional depression/ or late life depression/ or major depression/ or masked depression/ or melancholia/ or "mixed anxiety and depression"/ or "mixed depression and dementia"/ or premenstrual dysphoric disorder/ or reactive depression/ or recurrent brief depression/ or seasonal affective disorder/ or treatment resistant depression/) use oemezd
2	((Depression/ or exp Depressive Disorder/ or Adjustment Disorders/ or Affective Disorders, Psychotic/ or Factitious Disorders/ or Premenstrual Dysphoric Disorder/) use ppez
3	("depression (emotion)"/ or exp major depression/ or affective disorders/ or atypical depression/ or premenstrual dysphoric disorder/ or seasonal affective disorder/) use psyh
4	(depress* or dysphori* or dysthym* or melanchol* or seasonal affective disorder* or ((affective or mood) adj disorder*)).tw.
5	or/1-4
6	Letter/ use ppez
7	letter.pt. or letter/ use oemezd
8	note.pt.
9	editorial.pt.
10	Editorial/ use ppez
11	News/ use ppez
12	exp Historical Article/ use ppez
13	Anecdotes as Topic/ use ppez
14	Comment/ use ppez
15	Case Report/
16	case study/ use oemezd
17	(letter or comment*).ti.
18	or/6-17
19	randomized controlled trial/
20	random*.ti,ab.
21	19 or 20
22	18 not 21
23	(animals/ not humans/) use ppez
24	(animal/ not human/) use oemezd
25	nonhuman/ use oemezd
26	exp animals/ use psyh
27	"primates (nonhuman)"/ use psyh
28	exp Animals, Laboratory/ use ppez
29	exp Animal Experimentation/ use ppez
30	exp animal experiment/ use oemezd
31	exp experimental animal/ use oemezd
32	exp Models, Animal/ use ppez
33	animal model/ use oemezd
34	animal models/ use psyh
35	animal research/ use psyh
36	exp Rodentia/ use ppez
37	exp rodent/ use oemezd
38	exp rodents/ use psyh
39	(rat or rats or mouse or mice).ti.
40	or/22-39
41	5 not 40
42	Economics/
43	Value of life/
44	exp "Costs and Cost Analysis"/
45	exp Economics, Hospital/
46	exp Economics, Medical/
47	Economics, Nursing/
48	Economics, Pharmaceutical/

#	Searches
49	exp "Fees and Charges"/
50	exp Budgets/
51	(or/42-50) use ppez
52	health economics/
53	exp economic evaluation/
54	exp health care cost/
55	exp fee/
56	budget/
57	funding/
58	(or/52-57) use oemezd
59	exp economics/
60	exp "costs and cost analysis"/
61	cost containment/
62	money/
63	resource allocation/
64	(or/59-63) use psyh
65	budget*.ti,ab.
66	cost*.ti.
67	(economic* or pharmaco?economic*).ti.
68	(price* or pricing*).ti,ab.
69	(cost* adj2 (effective* or utilit* or benefit* or minimi* or unit* or estimat* or variable*)).ab.
70	(financ* or fee or fees).ti,ab.
71	(value adj2 (money or monetary)).ti,ab.
72	or/65-70
73	51 or 58 or 64 or 72
74	Quality-Adjusted Life Years/ use ppez
75	Sickness Impact Profile/
76	quality adjusted life year/ use oemezd
77	"quality of life index"/ use oemezd
78	(quality adjusted or quality adjusted life year*).tw.
79	(qaly* or qal or qald* or qale* or qtime* or qwb* or daly).tw.
80	(illness state* or health state*).tw.
81	(hui or hui2 or hui3).tw.
82	(multiattibute* or multi attribute*).tw.
83	(utilit* adj3 (score*1 or valu* or health* or cost* or measur* or disease* or mean or gain or gains or index*)).tw.
84	utilities.tw.
85	(eq-5d* or eq5d* or eq-5* or eq5* or euroqual* or euro qual* or euroqual 5d* or euro qual 5d* or euro qol* or euroqol*or euro quol* or euroquol* or euro quol5d* or euroquol5d* or eur qol* or eurqol* or eur qol5d* or eurqol5d* or eur?qul* or eur?qul5d* or euro* quality of life or european qol).tw.
86	(euro* adj3 (5 d* or 5d* or 5 dimension* or 5dimension* or 5 domain* or 5domain*)).tw.
87	(sf36 or sf 36 or sf thirty six or sf thirtysix).tw.
88	(time trade off*1 or time tradeoff*1 or tto or timetradeoff*1).tw.
89	Quality of Life/ and ((quality of life or qol) adj (score*1 or measure*1)).tw.
90	Quality of Life/ and ec.fs.
91	Quality of Life/ and (health adj3 status).tw.
92	(quality of life or qol).tw. and Cost-Benefit Analysis/ use ppez
93	(quality of life or qol).tw. and cost benefit analysis/ use oemezd
94	(quality of life or qol).tw. and "costs and cost analysis"/ use psyh
95	((qol or hrqol or quality of life).tw. or *quality of life/) and ((qol or hrqol* or quality of life) adj2 (increas* or decreas* or improv* or declin* or reduc* or high* or low* or effect or effects or worse or score or scores or change*1 or impact*1 or impacted or deteriorat*)).ab.
96	Cost-Benefit Analysis/ use ppez and cost-effectiveness ratio*.tw. and (cost-effectiveness ratio* and (perspective* or life expectanc*)).tw.
97	cost benefit analysis/ use oemezd and cost-effectiveness ratio*.tw. and (cost-effectiveness ratio* and (perspective* or life expectanc*)).tw.
98	"costs and cost analysis"/ use psyh and cost-effectiveness ratio*.tw. and (cost-effectiveness ratio* and (perspective* or life expectanc*)).tw.
99	*quality of life/ and (quality of life or qol).ti.
100	quality of life/ and ((quality of life or qol) adj3 (improv* or chang*)).tw.
101	quality of life/ and health-related quality of life.tw.
102	Models, Economic/ use ppez
103	economic model/ use oemezd
104	or/74-101
105	73 or 104
106	41 and 105
107	limit 106 to english language
108	limit 107 to yr="2016 -Current"

Database(s): NIHR Centre for Reviews and Dissemination: Health Technology Assessment Database (HTA)

Date of search: 26/02/2019

#	Searches
#1	MESH DESCRIPTOR: depressive disorder EXPLODE ALL TREES
#2	((depres* or dysphori* or dysthymi* or melancholi* or seasonal affective disorder* or affective disorder* or mood disorder*))
#3	#1 or #2 IN HTA FROM 2016 TO 2019

Database(s): CINAHL Plus (Cumulative Index to Nursing and Allied Health Literature) 1937-current, EBSCO Host

Date of search: 26/02/2019

Search updated: 02/03/2021

#	Query	Limiters/Expanders
S31	S4 AND S30	Limiters - Publication Year: 2016-2019; Exclude MEDLINE records; Language: English Search modes - Boolean/Phrase
S30	S10 OR S29	Search modes - Boolean/Phrase
S29	S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28	Limiters - Exclude MEDLINE records; Language: English Search modes - Boolean/Phrase
S28	(MH "Quality of Life") AND TX (health-related quality of life)	Search modes - Boolean/Phrase
S27	(MH "Quality of Life") AND TI (quality of life or qol)	Search modes - Boolean/Phrase
S26	AB ((qol or hrqol or quality of life) AND ((qol or hrqol* or quality of life) N2 (increas* or decreas* or improv* or declin* or reduc* or high* or low* or effect or effects or worse or score or scores or change*1 or impact*1 or impacted or deteriorat*)))	Search modes - Boolean/Phrase
S25	(MH "Cost Benefit Analysis") AND TX ((quality of life or qol) or (cost-effectiveness ratio* and (perspective* or life expectanc*))	Search modes - Boolean/Phrase
S24	(MH "Quality of Life") TX (health N3 status)	Search modes - Boolean/Phrase
S23	(MH "Quality of Life") AND TX ((quality of life or qol) N (score*1 or measure*1))	Search modes - Boolean/Phrase
S22	TX (time trade off*1 or time tradeoff*1 or tto or timetradeoff*1)	Search modes - Boolean/Phrase
S21	TX (sf36 or sf 36 or sf thirty six or sf thirtysix)	Search modes - Boolean/Phrase
S20	TX (euro* N3 (5 d* or 5d* or 5 dimension* or 5dimension* or 5 domain* or 5domain*))	Search modes - Boolean/Phrase
S19	TX (eq-5d* or eq5d* or eq-5* or eq5* or euroqual* or euro qual* or euroqual 5d* or euro qual 5d* or euro qol* or euroqol*or euro quol* or euroquol* or euro quol5d* or euroquol5d* or eur qol* or eurqol* or eur qol5d* or eurqol5d* or eur?qul* or eur?qul5d* or euro* quality of life or european qol)	Search modes - Boolean/Phrase
S18	TI utilities	Search modes - Boolean/Phrase
S17	TX (utilit* N3 (score*1 or valu* or health* or cost* or measur* or disease* or mean or gain or gains or index*))	Search modes - Boolean/Phrase
S16	TX (multiattibute* or multi attribute*)	Search modes - Boolean/Phrase
S15	TX (hui or hui2 or hui3)	Search modes - Boolean/Phrase
S14	TX (illness state* or health state*)	Search modes - Boolean/Phrase
S13	TX (quality adjusted or quality adjusted life year*or qaly* or qal or qald* or qale* or qtime* or qwb* or daly)	Search modes - Boolean/Phrase
S12	(MH "Sickness Impact Profile")	Search modes - Boolean/Phrase
S11	(MH "Quality-Adjusted Life Years")	Search modes - Boolean/Phrase
S10	S5 OR S6 OR S7 OR S8 OR S9	Limiters - Exclude MEDLINE records; Language: English Search modes - Boolean/Phrase
S9	TX (value N2 (money or monetary))	Search modes - Boolean/Phrase
S8	TX (cost* N2 (effective* or utilit* or benefit* or minimi* or unit* or estimat* or variable*))	Search modes - Boolean/Phrase
S7	TI cost* or economic* or pharmaco?economic*	Search modes - Boolean/Phrase
S6	TX budget* or fee or fees or finance* or price* or pricing	Search modes - Boolean/Phrase
S5	(MH "Fees and Charges+") OR (MH "Costs and Cost Analysis+") OR (MH "Economics") OR (MH "Economic Value of Life") OR (MH "Economics, Pharmaceutical") OR (MH "Economic Aspects of Illness") OR (MH "Resource Allocation+")	Search modes - Boolean/Phrase
S4	S1 OR S2 OR S3	Limiters - Exclude MEDLINE records; Language: English Search modes - Boolean/Phrase
S3	TX (depress* or dysphori* or dysthym* or melanchol* or seasonal affective disorder)	Search modes - Boolean/Phrase
S2	(MH "Adjustment Disorders+") OR (MH "Factitious Disorders") OR (MH "Affective Disorders, Psychotic")	Search modes - Boolean/Phrase

#	Query	Limiters/Expanders
S1	(MH "Depression+") OR (MH "Premenstrual Dysphoric Disorder") OR (MH "Seasonal Affective Disorder")	Search modes - Boolean/Phrase

#	Query	Limiters/Expanders
S1	(MH "Depression+") OR (MH "Premenstrual Dysphoric Disorder") OR (MH "Seasonal Affective Disorder")	Search modes - Boolean/Phrase

Appendix C – Clinical evidence study selection

Clinical study selection for review question: For adults at risk of depression (or anxiety disorders) from particular vulnerable groups (older people, black minority ethnic groups, lesbian, gay bisexual, transgender groups and men) do service developments and interventions which are specifically designed to promote access, increase the proportion of people from the target group who access treatment, when compared with standard care?

Figure 1: Study selection flow chart

Depression in adults: Evidence review H DRAFT (November 2021)
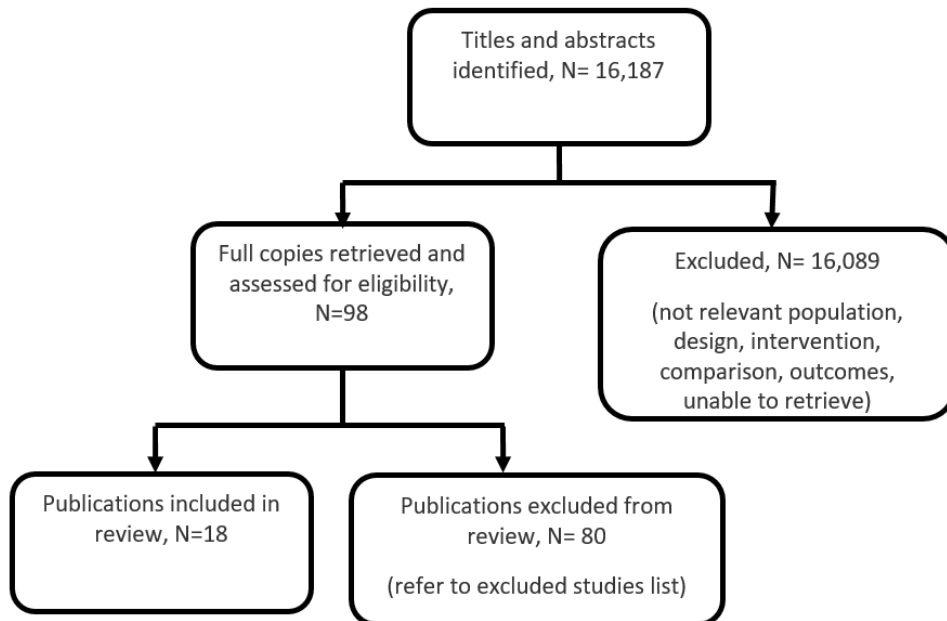
Appendix D – Clinical evidence tables

Clinical evidence tables for review question: For adults at risk of depression (or anxiety disorders) from particular vulnerable groups (older people, black minority ethnic groups, lesbian, gay bisexual, transgender groups and men) do service developments and interventions which are specifically designed to promote access, increase the proportion of people from the target group who access treatment, when compared with standard care?

Please refer to the clinical evidence tables in supplement H – Clinical evidence tables for review 3.0

Appendix E – Forest plots

Forest plots for review question: For adults at risk of depression (or anxiety disorders) from particular vulnerable groups (older people, black minority ethnic groups, lesbian, gay bisexual, transgender groups and men) do service developments and interventions which are specifically designed to promote access, increase the proportion of people from the target group who access treatment, when compared with standard care?

Interventions to promote access for older adults

Comparison 1. Tele-problem solving therapy versus in-person problem solving therapy for older adults

Figure 2: Satisfaction (scores obtained in a treatment acceptance tool)
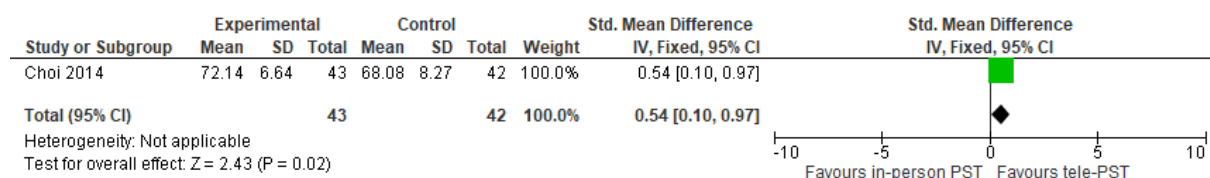
Study or Subgroup	Experimental			Control			Weight	Std. Mean Difference IV, Fixed, 95% CI	Std. Mean Difference IV, Fixed, 95% CI
	Mean	SD	Total	Mean	SD	Total			
Choi 2014	72.14	6.64	43	68.08	8.27	42	100.0%	0.54 [0.10, 0.97]	
Total (95% CI)			43			42	100.0%	0.54 [0.10, 0.97]	
Heterogeneity: Not applicable									
Test for overall effect: Z = 2.43 (P = 0.02)									

Favours in-person PST Favours tele-PST

Comparison 2. Co-located services versus geographically separate services for older adults

Figure 3: Accessing treatment (number of participants who attended an appointment with a mental health provider following randomization at the index primary care visit)

Study or Subgroup	Experimental		Control		Weight	Risk Ratio M-H, Fixed, 95% CI	Risk Ratio M-H, Fixed, 95% CI
	Events	Total	Events	Total			
Bartels 2004	481	640	338	657	100.0%	1.46 [1.34, 1.59]	
Total (95% CI)		640		657	100.0%	1.46 [1.34, 1.59]	
Total events	481		338				
Heterogeneity: Not applicable							
Test for overall effect: Z = 8.58 (P < 0.00001)							

Favours separate Favours co-located
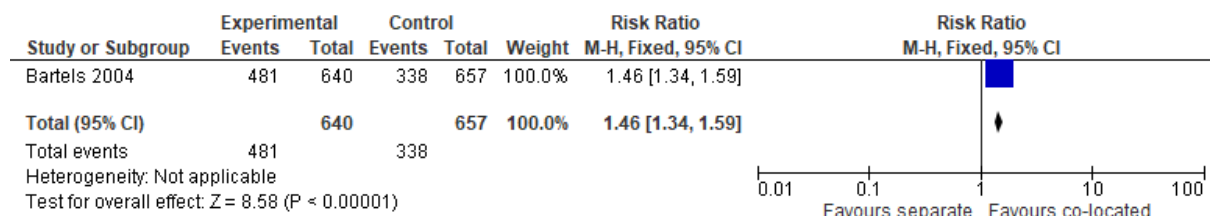
Figure 4: Uptake of treatment (number of treatment visits)
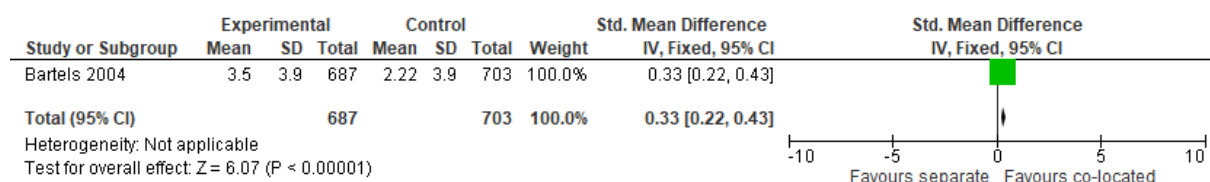
Study or Subgroup	Experimental			Control			Weight	Std. Mean Difference IV, Fixed, 95% CI	Std. Mean Difference IV, Fixed, 95% CI
	Mean	SD	Total	Mean	SD	Total			
Bartels 2004	3.5	3.9	687	2.22	3.9	703	100.0%	0.33 [0.22, 0.43]	
Total (95% CI)			687			703	100.0%	0.33 [0.22, 0.43]	
Heterogeneity: Not applicable									
Test for overall effect: Z = 6.07 (P < 0.00001)									

Favours separate Favours co-located

Comparison 3. Collaborative care versus standard care/enhanced standard care for older adults

Figure 5: Accessing treatment (number of patients using antidepressants)

Study or Subgroup	Experimental Events	Total	Control Events	Total	Weight	Risk Ratio M-H, Random, 95% CI
Callahan 1994	26	100	6	75	24.5%	3.25 [1.41, 7.50]
Gilbody 2017	23	234	44	281	34.0%	0.63 [0.39, 1.01]
Unutzer 2002	649	889	497	870	41.5%	1.28 [1.19, 1.37]
Total (95% CI)		**1223**		**1226**	**100.0%**	**1.26 [0.66, 2.40]**
Total events	698		547			

Heterogeneity: Tau² = 0.26; Chi² = 13.46, df = 2 (P = 0.001); I² = 85%
Test for overall effect: Z = 0.71 (P = 0.48)

Favours standard care   Favours CC
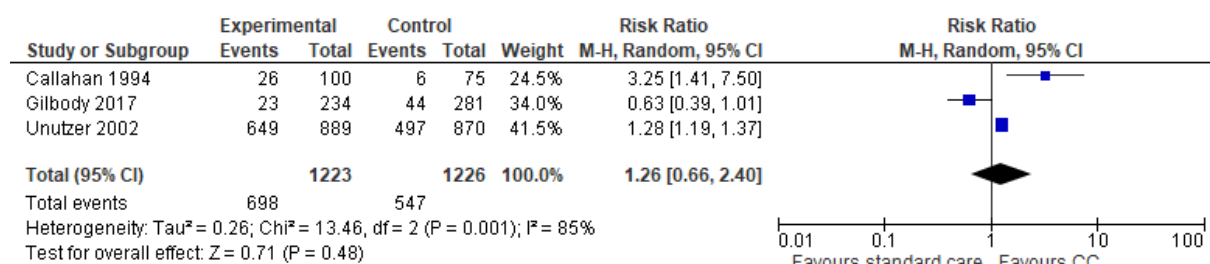
Figure 6: Accessing treatment (number of patients for whom a psychiatric consultation was sought)

Study or Subgroup	Experimental Events	Total	Control Events	Total	Weight	Risk Ratio M-H, Random, 95% CI
Callahan 1994	12	100	11	75	51.6%	0.82 [0.38, 1.75]
Chen 2015	17	164	7	162	48.4%	2.40 [1.02, 5.63]
Total (95% CI)		**264**		**237**	**100.0%**	**1.38 [0.48, 3.97]**
Total events	29		18			

Heterogeneity: Tau² = 0.41; Chi² = 3.43, df = 1 (P = 0.06); I² = 71%
Test for overall effect: Z = 0.59 (P = 0.55)

Favours standard care   Favours CC
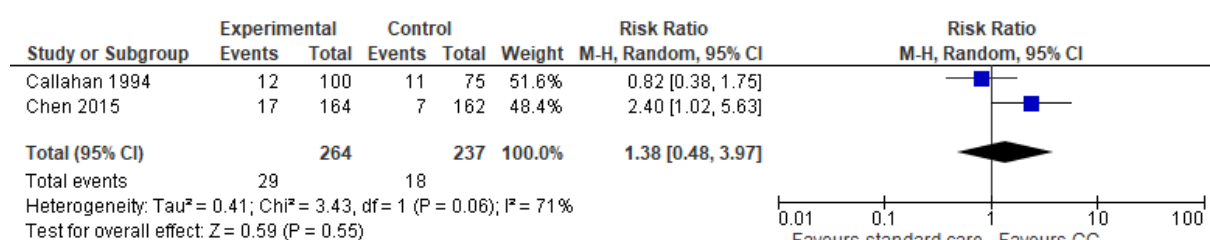
Figure 7: Uptake of treatment (number of participants starting antidepressant treatment)

Study or Subgroup	Experimental Events	Total	Control Events	Total	Weight	Risk Ratio M-H, Fixed, 95% CI
Ciechanowski 2004	7	72	4	66	100.0%	1.60 [0.49, 5.23]
Total (95% CI)		**72**		**66**	**100.0%**	**1.60 [0.49, 5.23]**
Total events	7		4			

Heterogeneity: Not applicable
Test for overall effect: Z = 0.78 (P = 0.43)

Favours standard care   Favours CC
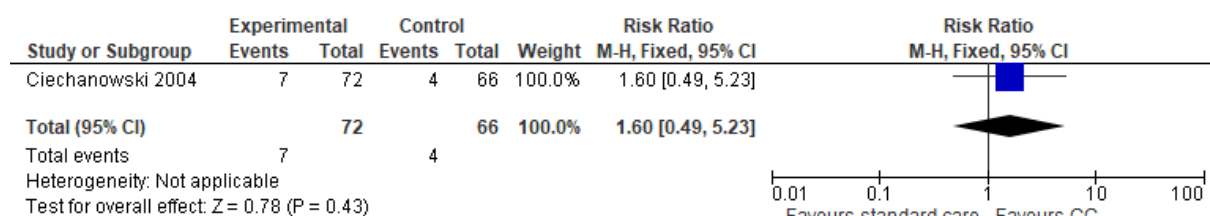
Figure 8: Satisfaction (number of patients rating depression care as 'excellent/very good')

Study or Subgroup	Experimental Events	Total	Control Events	Total	Weight	Risk Ratio M-H, Fixed, 95% CI
Unutzer 2002	597	790	272	574	100.0%	1.59 [1.45, 1.75]
Total (95% CI)		**790**		**574**	**100.0%**	**1.59 [1.45, 1.75]**
Total events	597		272			

Heterogeneity: Not applicable
Test for overall effect: Z = 9.64 (P < 0.00001)

Favours standard care   Favours CC
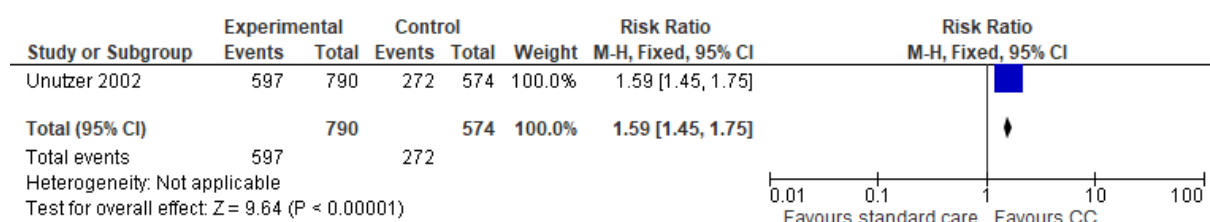
Interventions to promote access for BME groups

Comparison 4. Culturally sensitive telepsychiatry versus treatment as usual for a BME population

Figure 9: Accessing treatment (number of patients who made a mental health appointment)

Study or Subgroup	Experimental Events	Total	Control Events	Total	Weight	Risk Ratio M-H, Fixed, 95% CI
Chong 2012	77	80	29	87	100.0%	2.89 [2.14, 3.90]
Total (95% CI)		80		87	100.0%	**2.89 [2.14, 3.90]**
Total events	77		29			

Heterogeneity: Not applicable
Test for overall effect: Z = 6.92 (P < 0.00001)

Risk Ratio M-H, Fixed, 95% CI — 0.01 0.1 1 10 100 — Favours TAU Favours CS-telepsychiatry
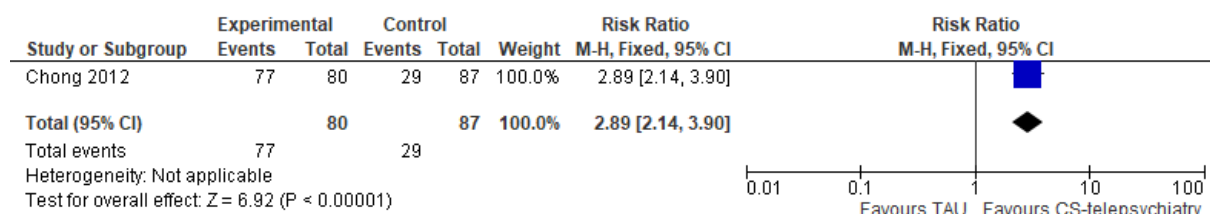
Figure 10: Accessing treatment (number of patients who made a primary care appointment)

Study or Subgroup	Experimental Events	Total	Control Events	Total	Weight	Risk Ratio M-H, Fixed, 95% CI
Chong 2012	56	80	76	87	100.0%	0.80 [0.68, 0.94]
Total (95% CI)		80		87	100.0%	**0.80 [0.68, 0.94]**
Total events	56		76			

Heterogeneity: Not applicable
Test for overall effect: Z = 2.64 (P = 0.008)

Risk Ratio M-H, Fixed, 95% CI — 0.01 0.1 1 10 100 — Favours TAU Favours CS-telepsychiatry

Figure 11: Accessing treatment (number of patients who used antidepressants)

Study or Subgroup	Experimental Events	Total	Control Events	Total	Weight	Risk Ratio M-H, Fixed, 95% CI
Chong 2012	56	80	40	87	100.0%	1.52 [1.16, 1.99]
Total (95% CI)		80		87	100.0%	**1.52 [1.16, 1.99]**
Total events	56		40			

Heterogeneity: Not applicable
Test for overall effect: Z = 3.06 (P = 0.002)

Risk Ratio M-H, Fixed, 95% CI — 0.01 0.1 1 10 100 — Favours TAU Favours CS-telepsychiatry
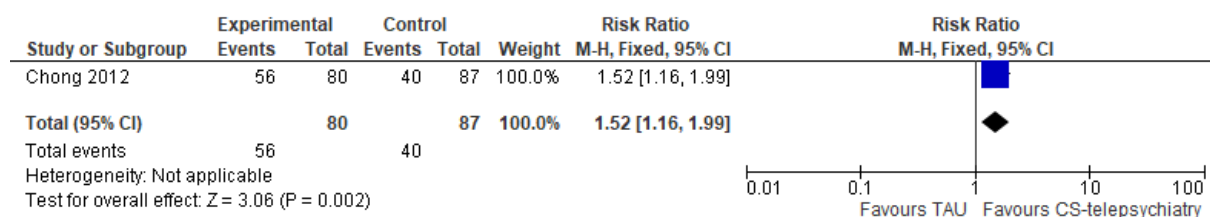
Figure 12: Uptake of treatment (mean number of completed mental health appointments)

Study or Subgroup	Experimental Mean	SD	Total	Control Mean	SD	Total	Weight	Std. Mean Difference IV, Fixed, 95% CI
Chong 2012	4.8	2.7	77	4.3	3.6	29	100.0%	0.17 [-0.26, 0.59]
Total (95% CI)			77			29	100.0%	**0.17 [-0.26, 0.59]**

Heterogeneity: Not applicable
Test for overall effect: Z = 0.77 (P = 0.44)

Std. Mean Difference IV, Fixed, 95% CI — -10 -5 0 5 10 — Favours TAU Favours CS-telepsychiatry
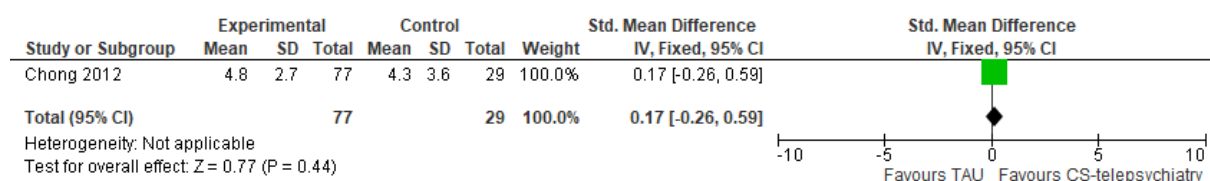
Figure 13: Uptake of treatment (mean number of completed primary care appointments)

Study or Subgroup	Experimental Mean	SD	Total	Control Mean	SD	Total	Weight	Std. Mean Difference IV, Fixed, 95% CI
Chong 2012	3.2	3.8	56	3.2	2.7	76	100.0%	0.00 [-0.35, 0.35]
Total (95% CI)			56			76	100.0%	**0.00 [-0.35, 0.35]**

Heterogeneity: Not applicable
Test for overall effect: Z = 0.00 (P = 1.00)

Std. Mean Difference IV, Fixed, 95% CI — -10 -5 0 5 10 — Favours TAU Favours CS-telepsychiatry

Figure 14: Satisfaction (Visit Specific Satisfaction Questionnaire [VSQ-9])
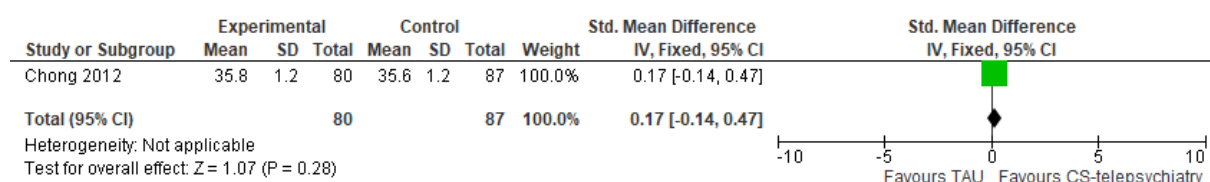
Study or Subgroup	Experimental Mean	SD	Total	Control Mean	SD	Total	Weight	Std. Mean Difference IV, Fixed, 95% CI
Chong 2012	35.8	1.2	80	35.6	1.2	87	100.0%	0.17 [-0.14, 0.47]
Total (95% CI)			80			87	100.0%	0.17 [-0.14, 0.47]

Heterogeneity: Not applicable
Test for overall effect: Z = 1.07 (P = 0.28)

Std. Mean Difference IV, Fixed, 95% CI
-10 -5 0 5 10
Favours TAU   Favours CS-telepsychiatry

Comparison 5. Culturally-adapted CBT versus treatment as usual for a BME population

Figure 15: Satisfaction (number of participants 'very satisfied' with treatment)

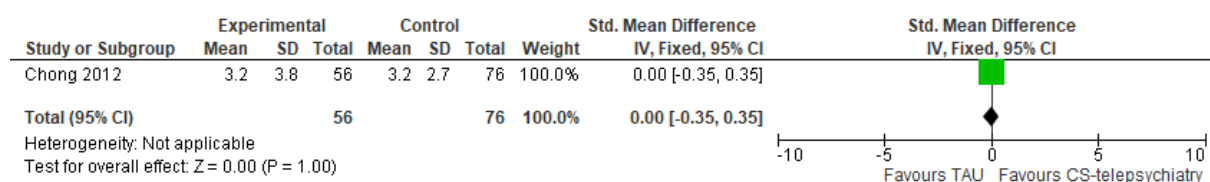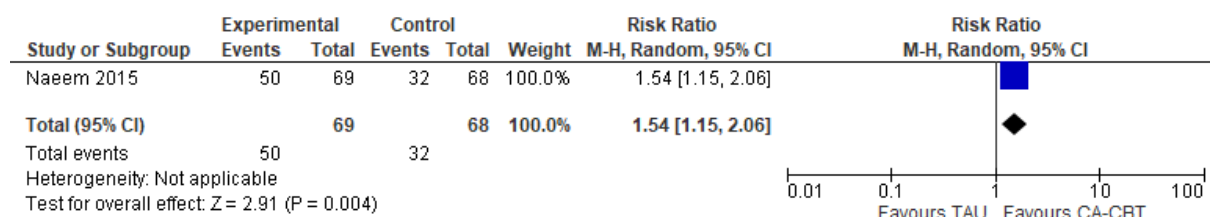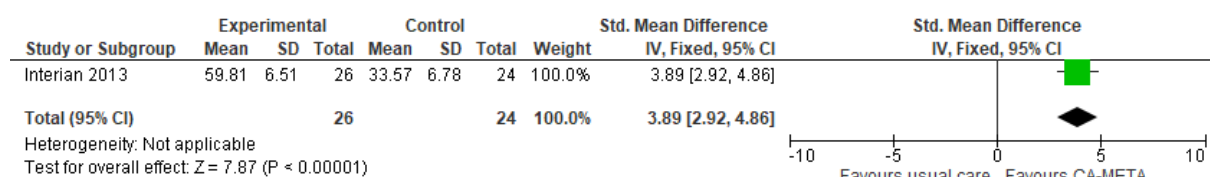| Study or Subgroup	Experimental Events	Total	Control Events	Total	Weight	Risk Ratio M-H, Random, 95% CI
Naeem 2015	50	69	32	68	100.0%	1.54 [1.15, 2.06]
Total (95% CI)		69		68	100.0%	1.54 [1.15, 2.06]
Total events	50		32			

Heterogeneity: Not applicable
Test for overall effect: Z = 2.91 (P = 0.004)

Risk Ratio M-H, Random, 95% CI
0.01 0.1 1 10 100
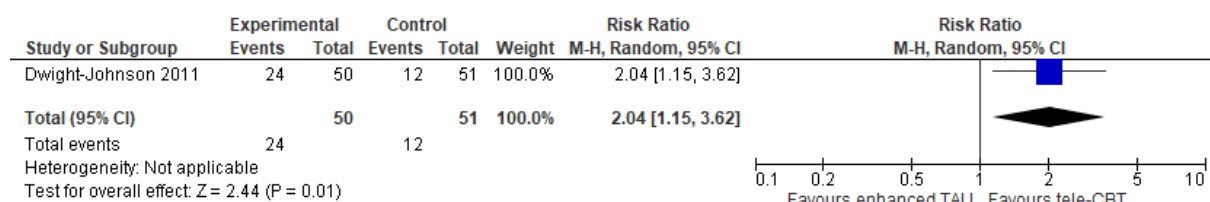Favours TAU   Favours CA-CBT

Comparison 6. Culturally adapted motivational enhancement therapy for antidepressants versus usual care for a BME population

Figure 16: Uptake of treatment (antidepressant adherence score on medication event monitoring system [MEMS])

Study or Subgroup	Experimental Mean	SD	Total	Control Mean	SD	Total	Weight	Std. Mean Difference IV, Fixed, 95% CI
Interian 2013	59.81	6.51	26	33.57	6.78	24	100.0%	3.89 [2.92, 4.86]
Total (95% CI)			26			24	100.0%	3.89 [2.92, 4.86]

Heterogeneity: Not applicable
Test for overall effect: Z = 7.87 (P < 0.00001)

Std. Mean Difference IV, Fixed, 95% CI
-10 -5 0 5 10
Favours usual care   Favours CA-META

Comparison 7. Telephone CBT versus enhanced usual care for a BME population (living in rural areas)

Figure 17: Satisfaction (number reporting they were satisfied with the treatment provided)

Study or Subgroup	Experimental Events	Total	Control Events	Total	Weight	Risk Ratio M-H, Random, 95% CI
Dwight-Johnson 2011	24	50	12	51	100.0%	2.04 [1.15, 3.62]
Total (95% CI)		50		51	100.0%	2.04 [1.15, 3.62]
Total events	24		12			

Heterogeneity: Not applicable
Test for overall effect: Z = 2.44 (P = 0.01)

Risk Ratio M-H, Random, 95% CI
0.1 0.2 0.5 1 2 5 10
Favours enhanced TAU   Favours tele-CBT

Comparison 8. Collaborative care versus enhanced standard care for BME population

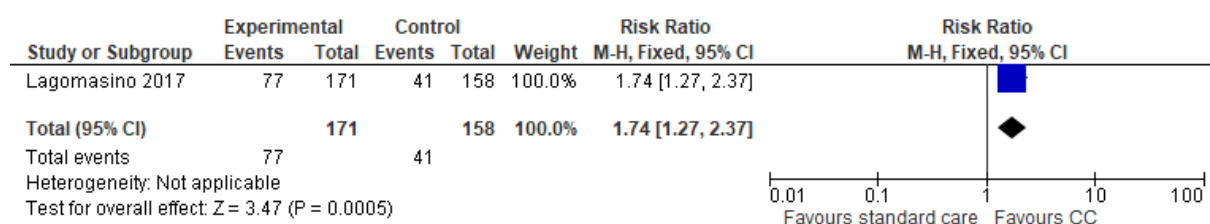### Figure 18: Accessing treatment (number of patients receiving antidepressants)

Study or Subgroup	Experimental Events	Total	Control Events	Total	Weight	Risk Ratio M-H, Fixed, 95% CI
Lagomasino 2017	77	171	41	158	100.0%	1.74 [1.27, 2.37]
Total (95% CI)		171		158	100.0%	1.74 [1.27, 2.37]
Total events	77		41			

Heterogeneity: Not applicable
Test for overall effect: Z = 3.47 (P = 0.0005)

Risk Ratio M-H, Fixed, 95% CI
0.01 0.1 1 10 100
Favours standard care   Favours CC

Figure 19: Accessing treatment (number of patients receiving minimally adequate treatment [counselling or medications])

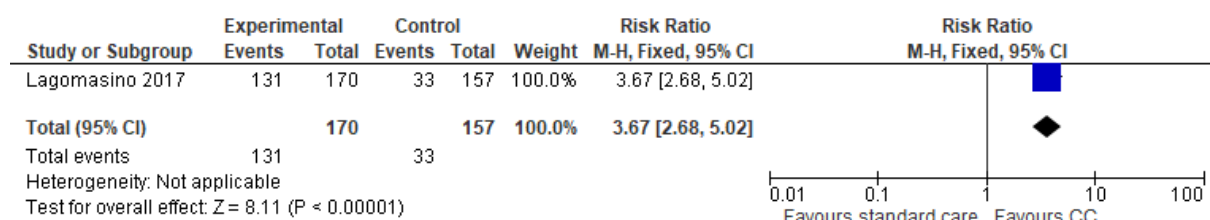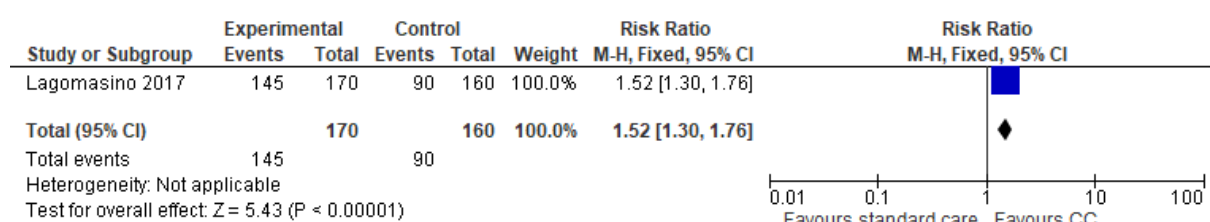|	Experimental		Control			Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M-H, Fixed, 95% CI
Lagomasino 2017	131	170	33	157	100.0%	3.67 [2.68, 5.02]	
Total (95% CI)		170		157	100.0%	3.67 [2.68, 5.02]	
Total events	131		33				
Heterogeneity: Not applicable							
Test for overall effect: Z = 8.11 (P < 0.00001)							

0.01 0.1 1 10 100
Favours standard care   Favours CC

Figure 20: Satisfaction (number of patients satisfied or very satisfied with emotional health care)

	Experimental		Control			Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M-H, Fixed, 95% CI
Lagomasino 2017	145	170	90	160	100.0%	1.52 [1.30, 1.76]	
Total (95% CI)		170		160	100.0%	1.52 [1.30, 1.76]	
Total events	145		90				
Heterogeneity: Not applicable							
Test for overall effect: Z = 5.43 (P < 0.00001)							

0.01 0.1 1 10 100
Favours standard care   Favours CC

Comparison 9. Culturally sensitive collaborative care versus standard collaborative care for BME population

Figure 21: Accessing treatment (number of patients taking any antidepressant)

	Experimental		Control			Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M-H, Fixed, 95% CI
Cooper 2013	17	59	25	54	100.0%	0.62 [0.38, 1.02]	
Total (95% CI)		59		54	100.0%	0.62 [0.38, 1.02]	
Total events	17		25				
Heterogeneity: Not applicable							
Test for overall effect: Z = 1.88 (P = 0.06)							

0.01 0.1 1 10 100
Favours standard CC   Favours cultural CC

Figure 22: Accessing treatment (number of patients receiving any counselling)

	Experimental		Control			Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M-H, Fixed, 95% CI
Cooper 2013	11	59	13	54	100.0%	0.77 [0.38, 1.58]	
Total (95% CI)		59		54	100.0%	0.77 [0.38, 1.58]	
Total events	11		13				
Heterogeneity: Not applicable							
Test for overall effect: Z = 0.70 (P = 0.48)							

0.01 0.1 1 10 100
Favours standard CC   Favours cultural CC

Figure 23: Accessing treatment (number of patients receiving guideline-concordant depression treatment)

	Experimental		Control			Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M-H, Fixed, 95% CI
Cooper 2013	17	59	28	54	100.0%	0.56 [0.35, 0.89]	
Total (95% CI)		59		54	100.0%	0.56 [0.35, 0.89]	
Total events	17		28				
Heterogeneity: Not applicable							
Test for overall effect: Z = 2.42 (P = 0.02)							

0.01 0.1 1 10 100
Favours standard CC   Favours cultural CC

Interventions to promote access for men

Comparison 10. Remote treatment versus face-to-face treatment for a predominantly male population

Figure 24: Satisfaction (number of patients satisfied/very satisfied with treatment)
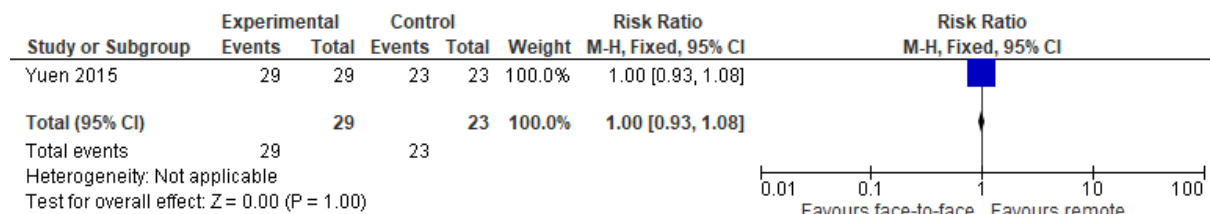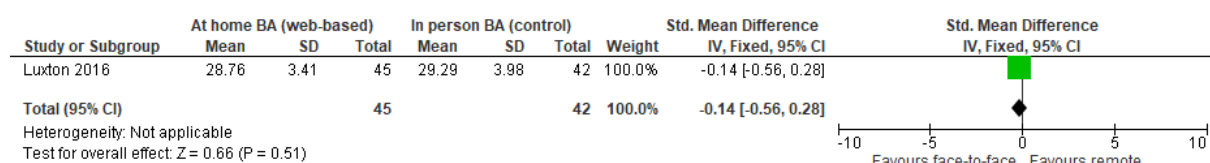

Figure 25: Satisfaction (Client Satisfaction Questionnaire [CSQ])

Comparison 11. Collaborative care versus standard care/enhanced standard care for a predominantly male population

Figure 26: Accessing treatment (number who attended ≥1 appointment with mental health specialist)
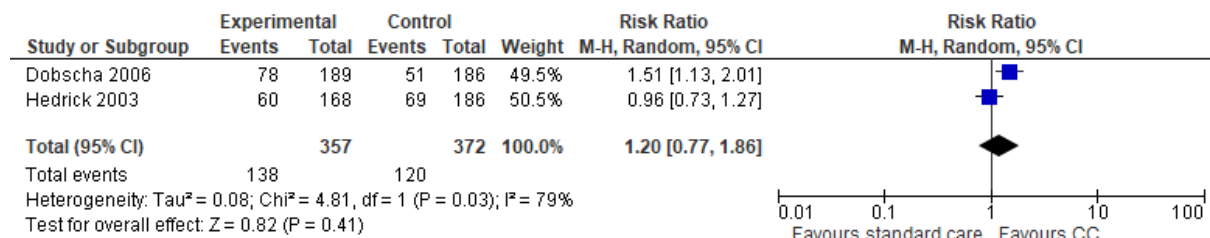
Figure 27: Accessing treatment (number who have had a depression-related primary care visit)
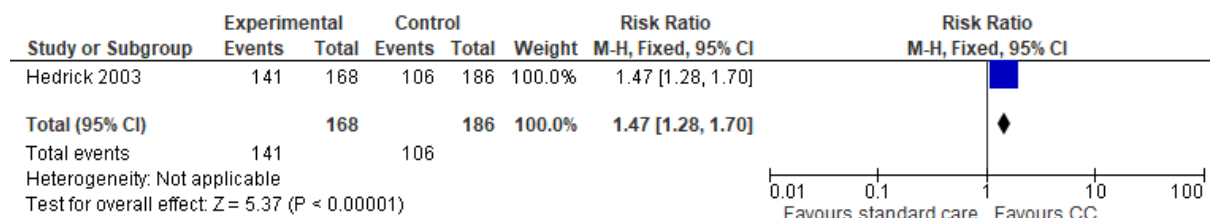
Figure 28: Accessing treatment (number of participants using antidepressants)

Study or Subgroup	Experimental Events	Total	Control Events	Total	Weight	Risk Ratio M-H, Random, 95% CI
Dobscha 2006	150	189	129	186	48.0%	1.14 [1.01, 1.29]
Fortney 2007	84	110	88	133	27.1%	1.15 [0.98, 1.35]
Hedrick 2003	108	135	71	115	24.9%	1.30 [1.10, 1.53]
Total (95% CI)		434		434	100.0%	1.18 [1.09, 1.29]
Total events	342		288			

Heterogeneity: Tau² = 0.00; Chi² = 1.54, df = 2 (P = 0.46); I² = 0%
Test for overall effect: Z = 3.96 (P < 0.0001)

Risk Ratio M-H, Random, 95% CI — Favours standard care   Favours CC

Figure 29: Satisfaction (number of patients satisfied with care)

Study or Subgroup	Experimental Events	Total	Control Events	Total	Weight	Risk Ratio M-H, Fixed, 95% CI
Fortney 2007	100	141	113	184	100.0%	1.15 [0.99, 1.35]
Total (95% CI)		141		184	100.0%	1.15 [0.99, 1.35]
Total events	100		113			

Heterogeneity: Not applicable
Test for overall effect: Z = 1.81 (P = 0.07)

Risk Ratio M-H, Fixed, 95% CI — Favours standard care   Favours CC
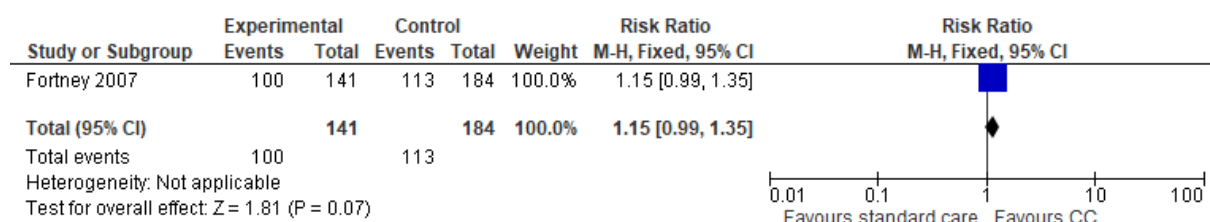
Appendix F – GRADE tables

GRADE tables for review question: For adults at risk of depression (or anxiety disorders) from particular vulnerable groups (older people, black minority ethnic groups, lesbian, gay bisexual, transgender groups and men) do service developments and interventions which are specifically designed to promote access, increase the proportion of people from the target group who access treatment, when compared with standard care?

__Interventions to promote access for older adults__

Table 14: Clinical evidence profile for Comparison 1. Tele-problem solving therapy versus in-person problem solving therapy for older adults

Quality assessment							Number of participants		Effect			
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Tele-problem solving	In-person problem solving	Relative (95% CI)	Absolute (95% CI)	Quality	Importance
Satisfaction (follow-up 3 months; measured with: Scores obtained in a treatment acceptance tool)												
1 (Choi 2014)	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	43	42	-	SMD 0.54 higher (0.1 to 0.97 higher)	LOW	IMPORTANT

CI: Confidence interval; SMD: standardised mean difference
1. Risk of bias is high or unclear across multiple domains
2. 95% CI crosses 1 clinical decision threshold

Table 15: Clinical evidence profile for Comparison 2. Co-located services versus geographically separate services for older adults

Quality assessment							Number of participants		Effect			
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Co-located services	Geographically separate services	Relative (95% CI)	Absolute (95% CI)	Quality	Importance
Accessing treatment (follow-up 6 months; measured with: Number of participants who attended an appointment with a mental health provider following randomization at the index primary care visit)												
1 (Bartels 2004)	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	481/640 (75.2%)	338/657 (51.4%)	RR 1.46 (1.34 to 1.59)	237 more per 1000 (from 175 more to 304 more)	MODERATE	CRITICAL
Uptake of treatment (follow-up 6 months; measured with: Number of treatment visits)												

Quality assessment							Number of participants		Effect			
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Co-located services	Geographically separate services	Relative (95% CI)	Absolute (95% CI)	Quality	Importance
1 (Bartels 2004)	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	687	703	-	SMD 0.33 higher (0.22 to 0.43 higher)	MODERATE	CRITICAL

CI: Confidence interval; RR: relative risk; SMD: standardised mean difference
1. Risk of bias is high or unclear across multiple domains

Table 16: Clinical evidence profile for Comparison 3. Collaborative care versus standard care/enhanced standard care for older adults

Quality assessment							Number of participants		Effect			
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Collaborative care	Standard care/enhanced standard care	Relative (95% CI)	Absolute (95% CI)	Quality	Importance
Accessing treatment (follow-up 3-12 months; measured with: Number of patients using antidepressants)												
3 (Callahan 1994; Gilbody 2017; Unutzer 2002)	randomised trials	serious[1]	very serious[2]	no serious indirectness	very serious[3]	none	698/1223 (57.1%)	547/1226 (44.6%)	RR 1.26 (0.66 to 2.4)	116 more per 1000 (from 152 fewer to 625 more)	VERY LOW	CRITICAL
Accessing treatment (follow-up 3-12 months; measured with: Number of patients for whom a psychiatric consultation was sought)												
2 (Callahan 1994; Chen 2015)	randomised trials	serious[1]	serious[4]	no serious indirectness	very serious[3]	none	29/264 (11%)	18/237 (7.6%)	RR 1.38 (0.48 to 3.97)	29 more per 1000 (from 39 fewer to 226 more)	VERY LOW	CRITICAL
Uptake of treatment (follow-up 6 months; measured with: Number of participants starting antidepressant treatment)												
1 (Ciechanowski 2004)	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[3]	none	7/72 (9.7%)	4/66 (6.1%)	RR 1.6 (0.49 to 5.23)	36 more per 1000 (from 31 fewer to 256 more)	VERY LOW	CRITICAL
Satisfaction (follow-up 12 months; measured with: Number of patients rating depression care as 'excellent/very good')												

Quality assessment							Number of participants		Effect			
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Collaborative care	Standard care/enhanced standard care	Relative (95% CI)	Absolute (95% CI)	Quality	Importance
1 (Unutzer 2002)	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	597/790 (75.6%)	272/574 (47.4%)	RR 1.59 (1.45 to 1.75)	280 more per 1000 (from 213 more to 355 more)	MODERATE	IMPORTANT

CI: Confidence interval; RR: relative risk
1. Risk of bias is high or unclear across multiple domains
2. I-squared>80%
3. 95% CI crosses 2 clinical decision thresholds
4. I-squared>50%

Interventions to promote access for BME groups

Table 17: Clinical evidence profile for Comparison 4. Culturally sensitive telepsychiatry versus treatment as usual for a BME population

Quality assessment							Number of participants		Effect			
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Culturally sensitive telepsychiatry	TAU	Relative (95% CI)	Absolute (95% CI)	Quality	Importance
Accessing treatment (follow-up 6 months; measured with: Number of patients who made a mental health appointment)												
1 (Chong 2012)	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	77/80 (96.3%)	29/87 (33.3%)	RR 2.89 (2.14 to 3.9)	630 more per 1000 (from 380 more to 697 more)	MODERATE	CRITICAL
Accessing treatment (follow-up 6 months; measured with: Number of patients who made a primary care appointment)												
1 (Chong 2012)	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	56/80 (70%)	76/87 (87.4%)	RR 0.8 (0.68 to 0.94)	175 fewer per 1000 (from 52 fewer to 280 fewer)	LOW	CRITICAL
Accessing treatment (follow-up 6 months; measured with: Number of patients who used antidepressants)												
1 (Chon	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	56/80 (70%)	40/87 (46%)	RR 1.52 (1.16 to 1.99)	239 more per 1000 (from 74	LOW	CRITICAL

Quality assessment							Number of participants		Effect			
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Culturally sensitive telepsychiatry	TAU	Relative (95% CI)	Absolute (95% CI)	Quality	Importance
g 2012)										more to 455 more)		
Uptake of treatment (follow-up 6 months; measured with: Mean number of completed mental health appointments)												
1 (Chong 2012)	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	77	29	-	SMD 0.17 higher (0.26 lower to 0.59 higher)	LOW	CRITICAL
Uptake of treatment (follow-up 6 months; measured with: Mean number of completed primary care appointments)												
1 (Chong 2012)	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	56	76	-	SMD 0 higher (0.35 lower to 0.35 higher)	MODERATE	CRITICAL
Satisfaction (follow-up 6 months; measured with: Visit specific satisfaction questionnaire (VSQ-9))												
1 (Chong 2012)	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	80	87	-	SMD 0.17 higher (0.14 lower to 0.47 higher)	MODERATE	IMPORTANT

BME: Black minority ethnic; CI: Confidence interval; RR: relative risk; SMD: standardised mean difference; TAU: treatment as usual
1. Risk of bias is high or unclear across multiple domains
2. 95% CI crosses 1 clinical decision threshold

Table 18: Clinical evidence profile for Comparison 5. Culturally-adapted CBT versus treatment as usual for a BME population

Quality assessment							Number of participants		Effect			
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Culturally-adapted CBT	TAU	Relative (95% CI)	Absolute (95% CI)	Quality	Importance
Satisfaction (follow-up 3 months; measured with: Number of participants 'very satisfied' with treatment)												
1 (Naeem 2015)	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	50/69 (72.5%)	32/68 (47.1%)	RR 1.54 (1.15 to 2.06)	254 more per 1000 (from 71 more to 499 more)	VERY LOW	IMPORTANT

BME: Black minority ethnic; CI: Confidence interval; RR: relative risk; TAU: treatment as usual
1. Risk of bias is high or unclear across multiple domains
2. 95% CI crosses 1 clinical decision threshold

Table 19: Clinical evidence profile for Comparison 6. Culturally adapted motivational enhancement therapy for antidepressants versus usual care for a BME population

Quality assessment							Number of participants		Effect			
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Culturally-adapted motivational enhancement therapy for antidepressants	Usual care	Relative (95% CI)	Absolute (95% CI)	Quality	Importance
Uptake of treatment (follow-up 5 months; measured with: Antidepressant adherence score on medication event monitoring system (MEMS))												
1 (Interian 2013)	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	26	24	-	SMD 3.89 higher (2.92 to 4.86 higher)	MODERATE	CRITICAL

BME: Black minority ethnic; CI: Confidence interval; SMD: standardised mean difference
1. Risk of bias is high or unclear across multiple domains

Table 20: Clinical evidence profile for Comparison 7. Telephone CBT versus enhanced usual care for a BME population (living in rural areas)

Quality assessment							Number of participants		Effect			
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Telephone CBT	Enhanced usual care	Relative (95% CI)	Absolute (95% CI)	Quality	Importance
Satisfaction (follow-up 6 months; measured with: Number reporting they were satisfied with the treatment provided)												
1 (Dwight-Johnson 2011)	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	24/50 (48%)	12/51 (23.5%)	RR 2.04 (1.15 to 3.62)	245 more per 1000 (from 35 more to 616 more)	VERY LOW	IMPORTANT

BME: Black minority ethnic; CI: Confidence interval; RR: relative risk
1. Risk of bias is high or unclear across multiple domains
2. 95% Ci crosses 1 clinical decision threshold

Table 21: Clinical evidence profile for Comparison 8. Collaborative care versus enhanced standard care for BME population

Quality assessment							Number of participants		Effect			
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Collaborative care	Enhanced standard care	Relative (95% CI)	Absolute (95% CI)	Quality	Importance
Accessing treatment (follow-up 4 months; measured with: Number of patients receiving antidepressants)												
1 (Lagomasino 2017)	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	77/171 (45%)	41/158 (25.9%)	RR 1.74 (1.27 to 2.37)	192 more per 1000 (from 70 more to 356 more)	MODERATE	CRITICAL
Accessing treatment (follow-up 4 months; measured with: Number of patients receiving minimally adequate treatment (counselling or medications))												
1 (Lagomasino 2017)	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	131/170 (77.1%)	33/157 (21%)	RR 3.67 (2.68 to 5.02)	561 more per 1000 (from 353 more to 845 more)	MODERATE	CRITICAL
Satisfaction (follow-up 4 months; measured with: Number of patients satisfied or very satisfied with emotional health care)												
1 (Lagomasino 2017)	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	145/170 (85.3%)	90/160 (56.3%)	RR 1.52 (1.3 to 1.76)	292 more per 1000 (from 169 more to 428 more)	MODERATE	IMPORTANT

BME: Black minority ethnic; CI: Confidence interval; RR: relative risk
1. Risk of bias is high or unclear across multiple domains

Table 22: Clinical evidence profile for Comparison 9. Culturally sensitive collaborative care versus standard collaborative care for BME population

Quality assessment							Number of participants		Effect			
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Culturally sensitive collaborative care	Standard collaborative care	Relative (95% CI)	Absolute (95% CI)	Quality	Importance
Accessing treatment (follow-up 12 months; measured with: Number of patients taking any antidepressant)												
1 (Cooper 2013)	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	17/59 (28.8%)	25/54 (46.3%)	RR 0.62 (0.38 to 1.02)	176 fewer per 1000 (from 287 fewer to 9 more)	VERY LOW	CRITICAL
Accessing treatment (follow-up 12 months; measured with: Number of patients receiving any counselling)												

Quality assessment							Number of participants		Effect			
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Culturally sensitive collaborative care	Standard collaborative care	Relative (95% CI)	Absolute (95% CI)	Quality	Importance
1 (Cooper 2013)	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[3]	none	11/59 (18.6%)	13/54 (24.1%)	RR 0.77 (0.38 to 1.58)	55 fewer per 1000 (from 149 fewer to 140 more)	VERY LOW	CRITICAL
Accessing treatment (follow-up 12 months; measured with: Number of patients receiving guideline-concordant depression treatment)												
1 (Cooper 2013)	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	17/59 (28.8%)	28/54 (51.9%)	RR 0.56 (0.35 to 0.89)	228 fewer per 1000 (from 57 fewer to 337 fewer)	VERY LOW	CRITICAL

BME: Black minority ethnic; CI: Confidence interval; RR: relative risk
1. Risk of bias is high or unclear across multiple domains
2. 95% CI crosses 1 clinical decision threshold
3. 95% CI crosses 2 clinical decision thresholds

Interventions to promote access for men

Table 23: Clinical evidence profile for Comparison 10. Remote treatment versus face-to-face treatment for a predominantly male population

Quality assessment							Number of participants		Effect			
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Remote treatment	Face-to-face treatment	Relative (95% CI)	Absolute (95% CI)	Quality	Importance
Satisfaction (follow-up 3 months; measured with: Number of patients satisfied/very satisfied with treatment)												
1 (Yuen 2015)	randomised trials	serious[1]	no serious inconsistency	serious[2]	no serious imprecision	none	29/29 (100%)	23/23 (100%)	RR 1 (0.93 to 1.08)	0 fewer per 1000 (from 70 fewer to 80 more)	LOW	IMPORTANT
Satisfaction (follow-up 2 months; measured with: Client Satisfaction Questionnaire (CSQ))												
1 (Luxton 2016)	randomised trials	serious[1]	no serious inconsistency	serious[2]	serious[3]	none	45	42	-	SMD 0.14 lower (0.56 lower to 0.28 higher)	VERY LOW	IMPORTANT

CI: Confidence interval; RR: relative risk; SMD: standardised mean difference
1. Risk of bias is high or unclear across multiple domains
2. Sample of veterans accessing treatment through Veteran Affairs services which may limit generalisability
3. 95% CI crosses 1 clinical decision threshold

Table 24: Clinical evidence profile for Comparison 11. Collaborative care versus standard care/enhanced standard care for a predominantly male population

| Quality assessment							Number of participants		Effect			
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Collaborative care	Standard care/enhanced standard care	Relative (95% CI)	Absolute (95% CI)	Quality	Importance
Accessing treatment (follow-up 3-12 months; measured with: Number who attended ≥1 appointment with mental health specialist)												
2 (Dobscha 2006; Hedrick 2003)	randomised trials	very serious[1]	serious[2]	serious[3]	very serious[4]	none	138/357 (38.7%)	120/372 (32.3%)	RR 1.2 (0.77 to 1.86)	65 more per 1000 (from 74 fewer to 277 more)	VERY LOW	CRITICAL
Accessing treatment (follow-up 3 months; measured with: Number who have had a depression-related primary care visit)												
1 (Hedrick 2003)	randomised trials	very serious[1]	no serious inconsistency	serious[3]	no serious imprecision	none	141/168 (83.9%)	106/186 (57%)	RR 1.47 (1.28 to 1.7)	268 more per 1000 (from 160 more to 399 more)	VERY LOW	CRITICAL
Accessing treatment (follow-up 3-12 months; measured with: Number of participants using antidepressants)												
3 (Dobscha 2006; Fortney 2007; Hedrick 2003)	randomised trials	very serious[1]	no serious inconsistency	serious[3]	serious[5]	none	342/434 (78.8%)	288/434 (66.4%)	RR 1.18 (1.09 to 1.29)	119 more per 1000 (from 60 more to 192 more)	VERY LOW	CRITICAL
Satisfaction (follow-up 12 months; measured with: Number of patients satisfied with care)												
1 (Fortney 2007)	randomised trials	very serious[1]	no serious inconsistency	serious[3]	serious[5]	none	100/141 (70.9%)	113/184 (61.4%)	RR 1.15 (0.99 to 1.35)	92 more per 1000 (from 6 fewer to 215 more)	VERY LOW	IMPORTANT

CI: Confidence interval; RR: relative risk

1. Risk of bias is high or unclear across multiple domains
2. I-squared>50%
3. Sample of veterans accessing treatment through Veteran Affairs services which may limit generalisability
4. 95% CI crosses 2 clinical decision thresholds
5. 95% CI crosses 1 clinical decision threshold

1 Appendix G – Economic evidence study selection

2 **Economic evidence study selection for review question: For adults at risk of**
3 **depression (or anxiety disorders) from particular vulnerable groups (older**
4 **people, black minority ethnic groups, lesbian, gay bisexual, transgender**
5 **groups and men) do service developments and interventions which are**
6 **specifically designed to promote access, increase the proportion of people**
7 **from the target group who access treatment, when compared with standard**
8 **care?**

9 A global health economics search was undertaken for all areas covered in the guideline.
10 Figure 30 shows the flow diagram of the selection process for economic evaluations of
11 interventions and strategies for adults with depression and studies reporting depression-
12 related health state utility data.

13 **Figure 30. Flow diagram of selection process for economic evaluations of**
14 **interventions and strategies for adults with depression and studies reporting**
15 **depression-related health state utility data.**
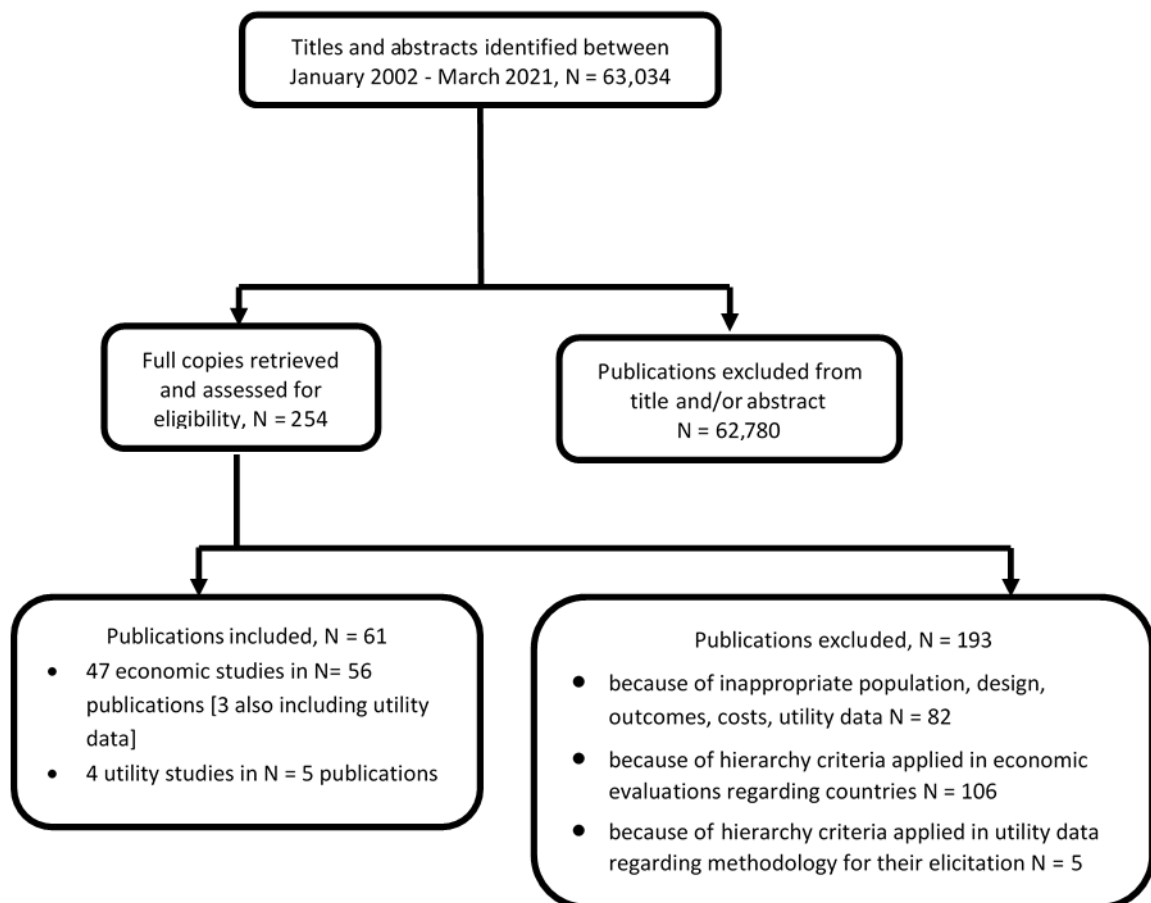
16

17

Appendix H – Economic evidence tables

Economic evidence tables for review question: For adults at risk of depression (or anxiety disorders) from particular vulnerable groups (older people, black minority ethnic groups, lesbian, gay bisexual, transgender groups and men) do service developments and interventions which are specifically designed to promote access, increase the proportion of people from the target group who access treatment, when compared with standard care?

No economic evidence was identified which was applicable to this review question.

Appendix I – Economic evidence profiles

Economic evidence profiles for review question: For adults at risk of depression (or anxiety disorders) from particular vulnerable groups (older people, black minority ethnic groups, lesbian, gay bisexual, transgender groups and men) do service developments and interventions which are specifically designed to promote access, increase the proportion of people from the target group who access treatment, when compared with standard care?

No economic evidence was identified which was applicable to this review question.

Appendix J – Economic analysis

Economic evidence analysis for review question: For adults at risk of depression (or anxiety disorders) from particular vulnerable groups (older people, black minority ethnic groups, lesbian, gay bisexual, transgender groups and men) do service developments and interventions which are specifically designed to promote access, increase the proportion of people from the target group who access treatment, when compared with standard care?

No economic analysis was conducted for this review question.

Appendix K – Excluded studies

Excluded clinical and economic studies for review question: For adults at risk of depression (or anxiety disorders) from particular vulnerable groups (older people, black minority ethnic groups, lesbian, gay bisexual, transgender groups and men) do service developments and interventions which are specifically designed to promote access, increase the proportion of people from the target group who access treatment, when compared with standard care?

Clinical studies

Please refer to the excluded studies in supplement H – Clinical evidence tables for review 3.0

Economic studies

Please refer to supplement 3 - Economic evidence included & excluded studies.

Appendix L – Research recommendations

Research recommendations for review question: For adults at risk of depression (or anxiety disorders) from particular vulnerable groups (older people, black minority ethnic groups, lesbian, gay bisexual, transgender groups and men) do service developments and interventions which are specifically designed to promote access, increase the proportion of people from the target group who access treatment, when compared with standard care?

Research question

What are the most effective and cost effective methods to promote increased access to, and uptake of, treatments for people with depression who are under-represented in current services?

Why this is important

There is general under-recognition of depression but the problem is more marked in certain populations. In addition, even where depression is recognised by the person with depression or by health professionals, access to treatment can still be difficult. A number of factors may relate to this limited access including a person's view of their problems, the information available on services and the location, design and systems for referral to services. The aim of this research would be to identify methods to increase access to and uptake of treatment in these hard-to-reach groups, and so improve outcomes.

Table 25: Research recommendation rationale

Research question	What are the most effective and cost effective methods to promote increased access to, and uptake of, treatments for people with depression who are under-represented in current services?
Importance to 'patients' or the population	There are groups within the population who find it more difficult than others to access treatment for depression, for example those from minority ethnic communities, those with disabilities or older people. Identifying how interventions can be targeted or adapted to meet the needs of these people and enable them to access services can lead to effective treatment of their depression, improved quality of life and improved functioning.
Relevance to NICE guidance	The NICE guideline on depression recommends treatments for first-line treatment, further-line treatment, relapse prevention and chronic depression, but these treatments will not be effective if they cannot be accessed. As there is evidence that certain sections of the population find it more difficult to access treatment for depression, it is important to improve access to ensure that the treatment recommendations are available all those who suffer from depression.
Relevance to the NHS	Failure to treat depression in marginalised groups may to lead to a greater impact on NHS resources in the long-term,
National priorities	The NHS Five Year Forward plan makes access to mental health services a key national priority
Current evidence base	A number of studies have addressed reduced access to treatment for depression, and a number of strategies have been developed to address it but no consistent picture has emerged from the research which can inform the design and delivery of services to promote access. Little is also known about how these systems might be tailored to the needs of particular groups such as older people, people from black, Asian and minority ethnic communities, and people with disabilities who may have additional difficulties in accessing services.
Equality	All sections of the population should have equal access to services for the treatment of depression

Table 26: Research recommendation modified PICO table

Criterion	Explanation
Population	Adults (18 years and older) identified with or at risk of depression from the following vulnerable groups: • BME groups • Older adults • LGBT groups • Men • People with disabilities
Intervention	• Service developments or changes which are specifically designed to promote access. • Specific models of service delivery (that is, community-based outreach clinics, clinics or services in non-health settings). Methods designed to remove barriers to access (including stigma, misinformation or cultural beliefs about the nature of mental disorder)
Comparator (without the risk factor)	Standard care
Outcome	**Critical:** • Proportion of people from the target group who access treatment • Uptake of treatment • Symptomatology, response, remission and relapse **Important:** • Satisfaction, preference • Anxiety about treatment Cost-effectiveness to be included as an outcome as well.
Study design	Randomised controlled trials
Timeframe	6 to 12 months; ideally follow-up study to assess remission/relapse