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How do healthcare professionals manage depression and refer older people to psychological therapies? A systematic review of qualitative studies.

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How do healthcare professionals manage depression and refer older people to psychological therapies? A systematic review of qualitative studies.

Rachael Frost* 1
Angela Beattie2
Cini Bhanu1
Kate Walters1
Yoav Ben-Shlomo2

1Department of Primary Care and Population Health, University College London, London, UK.
2Population Health Sciences, University of Bristol, Bristol, UK.

*Corresponding author: Rachael Frost, Department of Primary Care and Population Health, University College London, Royal Free Campus, Rowland Hill Street, London, NW3 2PF. Tel: 0207 8302881, Email: rachael.frost@ucl.ac.uk

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ABSTRACT

Background: Depressive symptoms are common in later life and increase risk of functional and cognitive decline and use of healthcare services. Despite older people expressing preferences for talking therapies, they are less likely to be referred than younger adults, particularly when aged over 80 years.

Aim: To explore how healthcare professionals manage older people in relation to depression and referrals to psychological therapies.

Design and Setting: Systematic review and thematic synthesis of qualitative studies.

Method: We searched MEDLINE, EMBASE, PsychINFO, CINAHL and SSCI (inception-March 2018) and included studies exploring healthcare professionals’ views regarding management of late life depression across all settings. We excluded studies of older people’s views or depression management across all ages.

Results: We included 27 studies, predominately focussing on general practitioners’ and primary and community care nurses’ views. Many healthcare professionals felt late life depression was primarily attributable to social isolation and functional decline, but treatments appropriate for this were limited. Clinicians perceived depression to have associated stigma for older adults, which required time to negotiate. Limited time and complexity of needs in later life meant physical health was often prioritised over mental health, particularly in frailer people. Good management of late life depression appeared to depend more on the skills and interest of individual GPs and nurses than a structured approach.

Conclusion: Mental health needs to be a more prominent concern within the care of older adults, with greater provision of psychological services tailored to later life. This may facilitate future identification and management of depression.

Keywords: Primary Health Care, General Practice, Review, Qualitative Research, Aged, Frail Elderly, Depression

Prospero registration: 42017055207

HOW THIS FITS IN

- Older people are often prescribed antidepressants and are less likely to be referred to psychological therapies, particularly when they are aged 80+
- We synthesised qualitative research to understand healthcare professionals’ management of late life depression, particularly regarding psychological therapy referrals
- Clinicians had little time to negotiate the complex issue of depression and so prioritised physical over mental health needs in older people.
- Healthcare professionals reported a lack of treatments that were both available and appropriate, and so management depended on individuals’ skills rather than a coherent structure
BACKGROUND

Late life depression is highly prevalent – estimates suggest 4.6-9.3% of adults aged 75+ have major depressive disorder and up to 37.4% have subthreshold depressive symptoms (1). Depressive symptoms are associated with poorer quality of life, increased mortality risk, cognitive and functional decline and greater healthcare service utilisation (2–4). Between 2014 and 2039, the number of people in the UK aged over 60 years is projected to increase from 14.9 to 21.9 million people (5) and so the appropriate management of late life depression will become increasingly important.

Late life depression is often managed in primary care, with 87.1% prescribed an antidepressant (6–8). Antidepressants have some limitations: increased age is associated with reduced efficacy (9) and potential adverse effects, and they have not been comprehensively studied in very old age groups (e.g. 85+ years), people with serious medical comorbidities or those with poor nutritional status (10,11). Older adults generally report a preference for talking therapies, especially for low-level symptoms, and a willingness to talk to mental health providers about their emotional health (12–15). However, within the UK, older adults’ access to Improving Access to Psychological Therapies (IAPT) services is low (16,17), despite its effectiveness (18). Recorded referrals are as low as 3.5% and this inequality increases with greater age – those aged 85+ are five times less likely to be referred for psychological therapies than those aged 55-59, and a third more likely to be prescribed an antidepressant (8). Qualitative studies can offer insights into reasons for these low referral rates (19,20). Two previous meta-syntheses explored depression management in the general adult population (21,22), but these did not comprehensively explore differences in management due to age. Within this systematic review we therefore aimed to scope the qualitative literature to investigate how health care professionals (HCPs) manage older people in relation to depression, particularly regarding psychological therapy referrals.

METHODS

We used a thematic synthesis approach from a constructivist perspective, which aims to produce outputs directly relevant to policymakers and practitioners and allows reviewers to look for differences in perspectives according to study characteristics, such as type of healthcare professional (23,24). The protocol was registered on PROSPERO (ID 42017055207).

We searched Ovid MEDLINE (1946-Mar 2018), EMBASE (1974-Mar 2018), PsychINFO (1806-Mar 2018), CINAHL (1937-Mar 2018) and Web of Science Social Sciences Citation Index (1900-Mar 2018) (see Appendix 1 for Medline search terms). We located grey literature through ETHOS searches (inception-April 2018). Studies were eligible for inclusion when:

- Most participants were primary or secondary healthcare professionals
- Qualitative methods were used to collect and analyse data in a substantial part of the study
- Views and experiences of the treatment and management of older people with depression

We excluded studies focussed upon:
• Depression management in younger/all age groups or in people with a specific medical condition e.g. post-stroke
• Exploring the effects or implementation of new interventions
• Later life mental health without specific depression data
• Social services, third sector or trainee staff views only
• Pharmacotherapy or suicide only
• Quantitative or non-empirical
• Studies published in a language other than English (due to lack of translation facilities).

Two reviewers (RF and CB) independently assessed 10% titles and abstracts (88% agreement, with disagreements resolved through discussion) and a further 10% (91% agreement). Each reviewer then screened half of the remaining records. Full texts were appraised independently by two reviewers (RF and CB), with disagreements resolved through discussion or consultation with the whole team.

Data extraction and synthesis
Data relating to study aims, location, participants, data collection, analysis, themes and author’s main implications were extracted into a Microsoft Word table by one reviewer (RF) and papers were imported into NVivo 12 (25) for synthesis. We appraised study quality using seven questions derived from the Critical Appraisal Skills Programme checklist and other checklists (26–28) (see Table 1). RF and AB or CB independently assessed study quality according to individual items and gave an overall subjective judgement of quality (very poor, poor, not very good, good, very good, excellent) and reporting quality (poor, acceptable, good). We assessed quality to provide an overall summary of the evidence base, but did not exclude studies or weight our findings within the synthesis on the basis of quality, as the role of quality assessment within qualitative systematic reviews has a number of associated debates (28).

We followed the thematic synthesis approach of coding text, developing descriptive themes and ‘going beyond’ the primary studies to develop analytical themes and answer the questions posed by the review (23). Relevant findings sections of included papers were coded line-by-line by RF, with independent analysis of one third of the papers by AB. These codes were aggregated to create descriptive themes that were summarised and discussed by all authors [see Appendix 2 for framework]. Finally, in order ‘to go beyond the data,’ analytical themes were developed by RF. Potential connections and groupings were modelled, with statements written out hypothesising links, connections and themes. These were compared to coded data within and across studies and HCPs and refined until subthemes and themes were constructed. The analytical themes were reviewed by all authors (a health services researcher, two academic GPs, a clinical epidemiologist/public health specialist and an academic nurse), refined and agreed.

RESULTS
Out of 1471 unique records, we screened 161 full texts and included 27 papers of 26 studies in our qualitative synthesis (Figure 1). The majority of studies were carried out in Western countries (8 UK, 8 USA, 5 Australasia, 3 Scandinavia, 1 Canada), with one each in Taiwan and India, and reflected both publicly-funded and insurance-based systems (see Table 2 (Appendix 3 for detailed study summaries)).
Qualitative data were mostly collected using interviews (19,20,29–44) and/or focus groups (36,41,45–48), with two ethnographic studies (49,50), one conference and nominal group technique (51), one mixed methods survey (52) and one multiple case study (53). Two thirds of studies were of good/very good overall quality, with most meeting each checklist criteria (see Tables 1 & 2). The vast majority were well reported.

Most HCPs were sampled from primary and community healthcare (e.g. GPs, practice nurses, home health nurses) (19,20,30,31,33,34,36,41–44,46,49,50,52), with six sampling both primary and secondary care professionals (29,37,47,48,51,53) and a small number studying HCPs in care settings (35,40,45) (Table 2). One study sampled community psychiatric nurses (CPNs) (38) and one included practice counsellors (19). As similar groups of professionals were often referred to under different names in different countries, we grouped each professional under UK headings (e.g. GPs for primary care physicians) in our thematic synthesis.

We found five themes relating to management: 1) Avoiding medicalisation of social circumstances, 2) Assumptions regarding older people and mental health, 3) Physical health is prioritised throughout healthcare, 4) Therapeutic options as a postcode lottery and 5) Variation in skills, training and approaches across all settings.

1. Avoiding medicalisation of social circumstances

Late life depression was felt to lack suitable therapeutic solutions as it was considered to mainly arise from ‘justifiable’ causes, many of which related to ageing. The majority of HCPs across all countries primarily attributed late life depression to difficult social circumstances, and in particular age-related social issues (e.g. loneliness, bereavements) and/or physical health issues, frailty and functional decline (19,20,34–36,39,41–46,53). Many GPs and nurses therefore felt there was a definite difference between sadness/distress that ‘understandably’ related to these issues, and a ‘clinical’ depression, but rarely defined where this border lay (19,20,33,34,41,45).

“GPs described depression as part of a spectrum including loneliness, lack of social network, reduction in function and very much saw depression as ‘understandable’ and ‘justifiable’” (20 p.371)

Consequently, across all studies discussing this there was a clear tension as to whether medical treatment (particularly antidepressants) could be beneficial or represented a medicalisation of social issues, further complicated by widespread views from GPs and nurses that addressing depression in some way was essential (19,20,29,33,34,41–43,45).

“GPs tended to acknowledge social and emotional causes that required non-drug interventions they could not always provide, and although antidepressants offered a solution to some patient’s
problems, there appeared to be sense of unease about prescribing a medical intervention for a social cause” (33 p.e147)

‘Social solutions’ (43) (e.g. day centres) were considered the most appropriate approach (20,36,37,41,43,46,47), however although these addressed the perceived cause they were not always regarded as effective, leading to therapeutic pessimism.

“’a man who is clearly isolated ... taking him out to the day centre, that'll be good for him won't it, sit in a room with other demented, depressed people & make your mood lift. It's not gonna happen’ (G3, psychologist, 97-100).” (53 p.120)

Where depression was conceptualised as a response to physical illness and/or disability (19,20,34–36,39,42–44,53), even fewer solutions were identified, with the person’s future regarded as negative (53). Physical health problems were deemed a barrier to psychological treatments by psychologists and CPNs (38,53) and psychological approaches were seen as inappropriate by some GPs (42). A minority of home care nurses and GPs reported using clinician support to encourage adaptation to disability (34,36). Otherwise, in response to disability, medicalisation (and subsequent antidepressant prescribing) was seen as a better alternative to doing nothing (33,42).

“usually because they’re bloody sick, and is a psychologist going to help that? I don’t think so.” (D6) (42 p.1061)

2. Assumptions regarding older people and mental health

Healthcare professionals held a number of assumptions regarding older people’s attitudes to depression. The most pervasive assumption was that older people normalised depression as part of ageing, isolation and decline and felt it to be stigmatising (19,20,33,36,39,40,42–44,48,53). Few discussed the idea that older people may have early or mid-life experiences of depression. HCPs consequently assumed that late life depression was likely to be hidden – that older people were resistant to articulating depression or distress, instead ‘sprucing up’ for the GP or presenting somatically (29,30,33–36,39,41–44,51,53).

“Older people were reported to attribute symptoms differently, and to have more rigid and strongly held beliefs about stigma, the desirability of coping unsupported, and the implications of failure to do so.” (43 p.158)

GPs and district nurses therefore felt that depression took time, effort and skill to actively seek out, through indirectly focussing on symptoms and related concepts such as loneliness or homesickness, using screening tools or medicalising language (e.g. ‘clinical depression’ or ‘neurobiology’) to reduce stigma (20,29,32,34,39). This assumption of stigma and hidden depression did not translate to home and residential care settings - observational and HCP-reported data suggested overt symptoms, such as crying, reporting feeling sad and poor self-care (35,41,49), were displayed, although this did not increase the likelihood of treatment (see Theme 3).

[observation] “A patient says “I’m feeling sad today,” while the nurse comments on a blood pressure reading.” (49 p.135)
Although individual treatment preference was considered more important than age in some papers (34,36,41), there were widespread assumptions that older adults disliked and were reluctant to engage with any mental health-related treatment. Psychiatry was considered particularly stigmatised, and so psychiatry referrals were a last resort (43).

“Attaching depression to mental illness was also reported as a barrier to older adults’ seeking mental healthcare services[…] “They will not accept seeing a psychiatrist because in general, people believe that psychiatry is for treating crazy people”” (39 p. 1668)

Decision-making power in late life depression rested chiefly with professionals. Some HCPs (mainly GPs) assumed that older adults were uninterested in talking therapies or that they would be ineffective (20,33,34,37,39,48), particularly if computer-based (44) and so were unlikely to dismiss these as an option (37). This did not always preclude referrals if other treatments were ineffective, but ageist stereotypes were also evident in psychological therapists and CPNs, who regarded felt that older people were unwilling to change, and discharged themselves more quickly (38,53).

“‘It would not be obvious to me at 76 what would improve’ (G3, psychologist, 612).” (53 p.114)

Some HCPs felt older adults conceptualised antidepressants as having a stigma or being addictive, and so required persuasion (30,33,39,42). Despite GPs feeling they had greater influence upon older than younger people (36,43), because they assumed older people were resistant, they felt it was easier to circumvent ‘depression’ during treatment through using GP support or prescribing antidepressants for ‘insomnia’ or ‘pain’ (34,39).

“‘I would say that even seeing someone and talking a bit in the GP surgery is a treatment in a sense although they might not think of it like that, they might just think it’s a chat.” (GP9, p.3)” (34 p.172)

3. Physical health is prioritised across healthcare settings

Implicitly and explicitly, physical health issues were prioritised over mental health (20,29,30,34–39,41,43,44,48,49,53). Severe depressive symptoms could prompt action, but severity was usually defined in terms of physical impact (e.g. suicidal ideation, impact on discharge planning) (36,43,48). Depression was therefore sometimes avoided completely, despite some recognition that physical and mental health interacted (34,36,47).

[observation] “A patient says “I just want to die,” and the nurse nods head without verbal response and asks if the patient has had a recurrence of a bothersome physical symptom” (49 p.135)

This also depended on organisational time pressures. Non-psychiatric secondary care was considered a poor place for depression management, due to multiple assessments from varied professionals, the acute focus and the lack of an identified responsible person and follow-up (48). The widespread view that late life depression was best managed in primary care in many UK, Australian, US and Taiwanese studies (20,39,41–43,48), with mental health services as consultative support (43), was however at odds with the time available to GPs.

“[they are] commonly complaining of not having enough time to address the many complex issues surrounding depression in later life. “In 10 minutes there is a lack of time as to what you can do with somebody …sometimes you don’t get to the nitty gritty.” (GP5, p.4)” (34 p.176)
In the US, home nursing visits were only eligible for insurance reimbursement where the older person had a documented need for physical health care (36,38), whilst UK district nurses’ time was limited more implicitly (41). Mental health was viewed by many HCPs as outside of their role, reflected in their lack of mental health training (20,31,34–36,41,42). In this case mental health was addressed only if they had time or outside of appointments (e.g. GPs with extended consultation times (34), home care nurses scheduling evening appointments (36,39,41)).

“The district nurses described strategies to provide the time they felt people needed but they were unable to provide as an accepted part of their role. This involved logistical approaches such as leaving certain visits until the end of the day or scheduling a visit at weekends.” (41 p.107)

Addressing psychological issues as a key part of physical healthcare for a condition (e.g. cancer) were viewed as more accessible for older people (44). Some GPs justified a physical focus as older people were at higher risk of illnesses such as dementia or cancer, which could have a similar presentation (34,39). However many felt that despite the commonality of depression in frail and housebound people across primary, community and acute settings, it was much more likely to be overlooked (33,34,43,48).

“Paradoxically, as old age and ill-health became more integrally associated with depression and its treatment, the latter was less often mentioned in consultations” (33 p.e149)

Conversely to this prioritisation of physical health, few concerns were expressed across papers regarding how antidepressants might impact upon physical health issues (e.g. falls risk) (20,42). A sense of therapeutic inertia seemed to occur once frail patients were taking antidepressants, as clinicians feared upsetting a delicate equilibrium or leading to care problems (33,35,45).

4. Therapeutic options as a postcode lottery

Whilst services such as psychological therapies, psychiatric services, social workers or social activities were considered appropriate to the perceived causes of late life depression, they were constrained by wide differences in provision across localities (20,30,33–37,39,41–44,46,48,50,52). Long waiting times, narrow eligibility criteria, poor integration with other care, being inappropriate to needs/preferences, financial constraints and limited duration of support were key issues (33,36,41–43,45,48,52). This led to an automatic discounting of psychological therapies or social approaches as an option.

“‘You’ve got to be pretty sick or mad to get any extra help.’” (20 p.374)

As GPs and nurses felt that depression did need to be addressed when raised, having solutions that were both appropriate and available led to a greater inclination to identify late life depression, regardless of other factors, particularly if they were less confident to manage it themselves. However, the reverse was true when services were not available (20,34,44).

“The majority of health care professionals described a reluctance to make the diagnosis of depression in an elderly person because of a feeling that they had nothing to offer the patient” (20 p.373)

When nothing else could be offered GPs and community nurses tended to provide support themselves to the older person in various ways (see Theme 5) or prescribe antidepressants (33,45). This was not
always related solely to provision, however – some clinicians reported needing further local service knowledge (35,48,51).

5. Variation in skills, training and approaches across all settings

Differences in healthcare professionals’ skills, interest and perceived role in depression management were reported across all settings. Those with greater confidence in depression (usually GPs) were more likely to raise the topic (20,32,34,36,42–44,47). Confidence related to training and experience, which non-psychiatric nurses and acute care professionals expressed a need for (20,31,36,37,41,44,48). Personal interest also influenced individual GP approaches, for which a number of studies developed typologies (30,34,50). For many GPs, active listening and using the therapeutic relationship to change views about depression was seen as an effective and sufficient treatment strategy, especially for mild symptoms (20,34,39,41–43,46,47,50), and so they were reluctant to refer on. The minority that felt untrained for this (20,43) or that their remit was only to refer or prescribe medication (30,34,53) were more likely to refer when these services were available. These different approaches and attitudes were clearly a pivotal factor with clear effects upon patients’ and teams’ experiences:

“Residential aged care services that had positive experiences with GPs found the referral process to other external services for depression and subsequent outcomes for residents far more positive and beneficial. On the other hand, an equal number of participants expressed disappointment at the services provided by GPs.” (35 p.20)

Some nurses felt confident they had a role in depression identification and management through reporting concerns to the GP and coaching patients on broaching depression (29,32), emotionally connecting with patients (49), referring to local services (35) or counselling regarding physical loss and disability (30). However, some nurses and many GPs felt it was outside of nurses’ role and that they lacked skills and/or training to manage it (20,31,35,41,44,45).

“Nurse: We are not skilled in differentiating between these conditions. If they cry, we call it depression and give them antidepressants. And that’s it.” (45 p.253)

Inter-professional communication played a key role in home nursing and residential care settings (30,39,41,44,45,49). The greater number of communication channels required to refer to primary care and the associated hierarchical issues meant that concerns could be lost or dismissed even if depression was adequately identified (35,40,41,45).

Other relevant professionals were thought to include social workers (US and Australia) (29,48), psychiatrists (47) and multi-purpose community health workers (India) (46). Psychologists and psychiatrists were considered skilled in late life depression management, but little further information regarding psychiatrists’ views was found. Nevertheless, strong mental health service collaborations were considered important and increased other HCPs’ confidence in managing depression, although these collaborations appeared to be incidental, arising from interested individuals rather than a clear structure (34,43,44,51).
most participants emphasized that their best collaborations evolved on a case by case basis as they found health professionals on mental health teams with whom they could readily consult, solve problem, and share information.” (51 p.5)

DISCUSSION

Summary
We systematically reviewed 27 qualitative studies of healthcare professionals’ management of older people with depression. We found that decisions regarding the identification and management of depression in later life were underpinned by strong assumptions across all settings that older people were resistant to discussing depression and its treatment, compounded by prioritisation of physical over mental health and high variation in skills and training, particularly for nurses. Beliefs about the causes of depression and its social origins underpinned decisions regarding when and what treatment was appropriate, particularly for GPs, which further depended upon a postcode lottery regarding which treatments were available for consideration.

Strengths and limitations
We systematically identified studies and drew upon views from a range of professionals, countries and settings, different socioeconomic statuses and ethnicities. This provided a more complete picture of managing depression in older adults, including in those with frailty or multimorbidity. We took a constructivist approach to the review to identify and contrast multiple conceptualisations of late life depression. Other reviews have focussed mainly upon GPs (22,54), whereas our review included the views of nurses and other HCPs. However, most studies were carried out in high-income Western countries and only English studies could be included due to a lack of resources for translation, although one excluded study reported in German found themes almost identical to our review (55). Similar themes were found in studies from Taiwan and India, although family played a larger role, so our findings may have some transferability to these settings. We did not use meta-ethnography, which may have offered greater conceptual integration, but the ability to compare across healthcare professionals was considered a key advantage for this review (24). Included studies had were mostly good quality. Theses provided a richer source of data than papers, however we could mainly only access UK theses, suggesting further qualitative evidence may exist from other countries.

Comparison with existing literature
Whilst similar themes of regarding depression as a normal response to challenging social circumstances, cautions with medicalising social issues and a lack of psychological therapies have been found in HCPs’ views of depression in adults (22,54), ideas such as ‘secondary gains’ to a depression diagnosis (e.g. avoiding social problems, feelings of powerlessness or work) or overtly negative attitudes were not discussed regarding late life depression (22,54), possibly as it was felt to be more justifiable. Other elements not discussed in this review include taking a short-term view for older adults (e.g. GPs’ reduced concern around addiction to benzodiazepines as people were unlikely to live much longer (56)) and involving family and/or supporting carers in depression management (57,58). Social workers and family carers expressed similar views around late life depression, a lack of priority for mental health and...
low availability of resources (59,60) and poor psychological therapy access for older adults has been documented (8). This may be compounded by ageist views and a lack of motivation to work in the sector by psychological trainees (61). Older adults similarly normalise depression, although some suggested they were more likely to raise depression in emotional than somatic terms and lacked awareness of psychological treatments (62), despite reporting preferences for them over antidepressants in other studies (12,13,15).

Implications for research and practice
This review suggests that primary care services for older people do not currently prioritise older adults’ mental health to the same extent as physical health, compounded by a lack of referral options suitable to older people’s needs. Further investment in psychological and social resources is needed to enable mental health in later life to achieve equitable priority with physical health, particularly if older adults are to be encouraged to use psychological services. UK guidelines recommend planning partnerships between local authorities, NHS, community organisations and voluntary sector providers to improve mental wellbeing and promote independence in older adults (63). Examples of successful management within this review suggest that older people can also be supported better with adequate staff training and better links to other services. Within all services, roles and responsibilities of healthcare professionals, particularly for nurses, need to be more clearly outlined. Most GPs in this review felt late life depression was within their remit. Patient views have suggested that some people feel that GPs would not be receptive to discussing mood and that having a person outside of the GP consultation was beneficial (20,64).

Research into GPs’ views of late-life depression has received substantial coverage and replicating this further in high income countries is likely to be unnecessary. There was a notable paucity of views of psychological therapists or psychiatrists in this review despite their role in treating late life depression, which remains an area for further qualitative research. Internet or ‘bibliotherapy’ (book-based) psychological approaches were also rarely discussed, and though depression in frailer populations was considered common, fewer solutions were identified for this subpopulation. Further research into effective and equitable treatments for late-life depression is needed.

CONCLUSION
This systematic review of qualitative studies suggests that depression in later life can be managed within primary care, but needs to be given greater priority when addressing the complex needs of older adults and sufficient staff training and clarity of staff roles is required. Investment in psychological therapies suitable for older adults and other social referral options are needed to facilitate the identification and treatment of late-life depression.

CONTRIBUTORSHIP STATEMENT
YBS, AB and KW conceptualised the idea for the review. RF developed and carried out searches and screened titles and abstracts. RF and CB screened full texts. RF and CB or AB assessed study quality. RF carried out the thematic synthesis, with AB undertaking blind coding on some papers, and input from
KW, CB and YBS. RF drafted the manuscript and AB, CB, KW and YBS provided feedback. All authors have
read and approved the final manuscript.

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The authors declare no competing interests.

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had no role in the study design, nor in data collection, analysis, or interpretation, nor in the writing of
the report or the decision to submit the article for publication.

DATA SHARING STATEMENT
The NVivo database used for thematic synthesis is available from the authors upon request.
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### Table 2. Study characteristics

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<th>Professionals (n, )</th>
<th>Data collection</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aakhus 2014 (37)</td>
<td>Norway</td>
<td>GPs, nurses (primary and secondary health care), psychiatrists, researchers (n=26 total)</td>
<td>Interviews</td>
<td>*</td>
</tr>
<tr>
<td>Apesoa-Varano 2011 (30)</td>
<td>USA</td>
<td>Primary care physicians (n=9) and depression care managers (n=9 nurses, n=2 psychologists)</td>
<td>Interviews</td>
<td>***</td>
</tr>
<tr>
<td>Bao 2015 (32)</td>
<td>USA</td>
<td>Nurses (n=9), nurse supervisors (n=5), clinical or medical directors (n=6)</td>
<td>Interviews</td>
<td>**</td>
</tr>
<tr>
<td>Bao 2016 (31)</td>
<td>USA</td>
<td>Nurses (n=9), nurse supervisors (n=5), clinical or medical directors (n=6)</td>
<td>Interviews</td>
<td>*</td>
</tr>
<tr>
<td>Burroughs 2006 (20)</td>
<td>UK</td>
<td>GPs (n=9), practice nurses (n=3), district nurses (n=2), community nurses (n=3)</td>
<td>Interviews</td>
<td>***</td>
</tr>
<tr>
<td>Dickinson 2010 (33)</td>
<td>UK</td>
<td>GPs (n=10)</td>
<td>Interviews</td>
<td>**</td>
</tr>
<tr>
<td>Gordon 2013 (34)</td>
<td>UK</td>
<td>GPs (n=14)</td>
<td>Interviews</td>
<td>***</td>
</tr>
<tr>
<td>Hassall 2008 (35)</td>
<td>Australia</td>
<td>Care staff (n=17), including Directors of Nursing, Clinical Nurse Consultants, Registered Nurses, Respite coordinators and Social Workers.</td>
<td>Interviews</td>
<td>**</td>
</tr>
<tr>
<td>Iden 2011 (45)</td>
<td>Norway</td>
<td>Full and part time nursing home doctors (n=16), registered nurses (n=8)</td>
<td>3 focus groups</td>
<td>**</td>
</tr>
<tr>
<td>Liebel 2013 (36)</td>
<td>USA</td>
<td>Home Health Care Nurses (n=16)</td>
<td>Individual interviews and 2 focus groups</td>
<td>***</td>
</tr>
<tr>
<td>Liebel 2015 (49)</td>
<td>USA</td>
<td>Home Health Care Nurses (n=4)</td>
<td>Observation of 25 home visits, with moderate participation</td>
<td>***</td>
</tr>
<tr>
<td>Lin 2005 (38)</td>
<td>USA</td>
<td>Psychiatric home care nurses (n=9), team director (n=1)</td>
<td>Interviews</td>
<td>*</td>
</tr>
<tr>
<td>Lu 2015 (39)</td>
<td>Taiwan</td>
<td>Public health nurses (n = 12), home care nurses (n = 5), long-term care nurses (n = 2), social workers (n=5) and dietitian (n=1)</td>
<td>Interviews</td>
<td>***</td>
</tr>
<tr>
<td>McCabe 2009 (40)</td>
<td>Australia</td>
<td>Professional care assistants (n=21) from different aged settings, registered nurses (n=2), trainee nurses (n=2), GPs (n=10), senior aged care managers (n=7)</td>
<td>Interviews</td>
<td>*</td>
</tr>
<tr>
<td>Murray 2006 (19)</td>
<td>UK</td>
<td>GPs (n=18), practice nurses (n=7), practice counsellors (n=5)</td>
<td>Interviews</td>
<td>***</td>
</tr>
<tr>
<td>Patel 2001 (46)</td>
<td>India</td>
<td>Primary health centre doctors (n=3), multi-purpose health workers (n=17)</td>
<td>3 focus groups, including a vignette on depression</td>
<td>*</td>
</tr>
<tr>
<td>Pusey 2009 (41)</td>
<td>UK</td>
<td>District nurses (n=11)</td>
<td>3 focus groups, 1 individual interview</td>
<td>***</td>
</tr>
<tr>
<td>Saarela 2003 (47)</td>
<td>Finland</td>
<td>Primary care physicians (n=25), psychiatrists (n=11)</td>
<td>7 focus groups and individual management plans, using two vignettes</td>
<td>*</td>
</tr>
<tr>
<td>Stanners 2012 (42)</td>
<td>Australia</td>
<td>GPs (n=8)</td>
<td>Interviews</td>
<td>***</td>
</tr>
<tr>
<td>Strachan 2015 (43)</td>
<td>UK</td>
<td>GPs (n=9)</td>
<td>3 group interviews</td>
<td>**</td>
</tr>
<tr>
<td>Sussman 2011 (51)</td>
<td>Canada</td>
<td>Family physicians (n=3), psychiatrists (n=2), nurse practitioners (n=3), social workers (n=3), decision-makers (n=1)</td>
<td>Small group discussions, with nominal group technique ranking of proposed solutions</td>
<td>**</td>
</tr>
<tr>
<td>Tai-Seale 2007 (50)</td>
<td>USA</td>
<td>Physicians (n=35)</td>
<td>Observations of 385 videotaped consultations between physicians and older people</td>
<td>*</td>
</tr>
<tr>
<td>Todman 2010 (52)</td>
<td>UK</td>
<td>GPs (n=119)</td>
<td>Mixed methods questionnaire survey</td>
<td>*</td>
</tr>
<tr>
<td>ID</td>
<td>Country</td>
<td>Professionals (n,)</td>
<td>Data collection</td>
<td>Quality</td>
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<tr>
<td></td>
<td></td>
<td>Referring agents (GPs, n=4), referred-to psychologists (n=4), wider members of case groups (n=13, including older adults, family member, community psychiatric nurse and sometimes a psychiatrist)</td>
<td>Multiple case study of four depressed older adults and professionals around them</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Waterworth 2015 (44) Primary health care nurses, district nurses, heart failure nurses (n not reported)</td>
<td>Interviews</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>White 2017 (48) Healthcare professionals from acute settings (n=7), subacute (geriatric assessment and rehabilitation, n=20) and community care (n=27), including medical officers, physiotherapists, occupational therapists, social workers, neuropsychologists, registered nurses, podiatrists, speech pathologists, music therapists</td>
<td>11 focus groups</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wittink 2011 (29) Internists (internal medicine physicians, with focus on adult medicine, n=9), family doctors (n=4), geriatric medicine physicians (n=2)</td>
<td>Interviews</td>
<td>***</td>
</tr>
</tbody>
</table>

Quality ***=very good, **good, *not very good
Figure 1 Flow Diagram search and appraisal process

Records identified through database searching (n=2105)

Additional records identified (n=27): reference list screening (n=12), citation tracking (n=9), ETHOS (n=6), previous review (n=1)

Records after duplicates removed (n=1471)

Titles and abstracts screened (n=1471)

Records excluded (n=1310)

Full-text articles assessed for eligibility (n=161)

Full-text articles excluded (n=134)

Studies included in qualitative synthesis (n=27)

43 not qualitative
31 intervention evaluation
11 not healthcare professionals
10 conference abstracts
10 not mood-related
10 not specific to older people
4 reviews
3 not in English
3 unable to obtain
3 includes other mental illnesses
3 role of family/carers
1 retention of older people in mental health services
1 focussed on benzodiazepines
1 hierarchical relations between HCPs
Appendix 1 – Medline search terms

1. older adult.ti,ab.
2. older people.ti,ab.
3. elder*.ti,ab.
4. senior*.ti,ab.
5. geriatri*.ti,ab.
6. old age.ti,ab.
7. late* life.ti,ab,kw.
8. Aged/
9. Geriatrics/
10. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9
11. primary care.ti,ab.
12. secondary care.ti,ab.
13. general practi*.ti,ab.
14. GP*.ti,ab.
15. family practi*.ti,ab.
16. Primary Health Care/
17. Secondary care/
18. nurs*.ti,ab.
19. psychiatr*.ti,ab.
20. psycholog*.ti,ab.
21. (clinician* OR therapist*).ti,ab,kw.
22. (professional* OR staff).ti,ab.
24. 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23
25. interview*.ti.
26. Focus group*.ti,ab.
27. qualitative.ti,ab,kw.
28. attitude*.ti.
29. opinion*.ti.
30. perspective*.ti.
31. view*.ti.
32. perception*.ti.
33. qualitative research/
34. 25 or 26 or 27 or 28 or 29 or 30 or 31
35. manag*.ti,ab.
36. treat*.ti,ab.
37. diagnos*.ti,ab.
38. refer*.ti,ab.
39. prescri*.ti,ab.
40. 33 or 34 or 35 or 36 or 37
41. DEPRESSION/
42. Depress*.ti,ab.
43. depressive disorder/
44. mood adj1 (low OR disorder).ti,ab
45. 39 or 40 or 41 or 42
46. 10 and 24 and 32 and 38 and 43
Appendix 2: Coding structure

- Models of depression
  - Commonality of late life depression
  - Depression as biomedical
  - Depression as individual
  - Depression as response to life (social, economic issues etc)
  - Depression with reduced functioning
  - Recognising and diagnosing
    - Questionnaires
    - Therapeutic relationship and knowledge
  - Severity of depression, risk and consequences
- Patient factors affecting management
  - Age-specific management factors
  - Ethnicity and cultural factors
  - Gender
  - Individual factors
  - Negotiating the diagnosis
  - Patient views of causes
  - Presentation
  - Stigma
  - Treatment motivation and preferences
- Mental and physical health
  - Complexity
  - Maintenance
  - Prioritisation
  - Severity of depression, risk and consequences
  - Treatment as part of other LTC treatment
- Treatments
  - Antidepressants
  - Avoidance
  - Caregiver support
  - Family involvement
  - Multiple treatments
  - Other
  - Social and community interventions
    - Voluntary services for social activities
  - Social work referrals
  - Talking therapies
- Settings and setting-specific management
  - Acute setting
  - AHP informal
  - Confidence
  - Continuity
- CPNs
- Informal – GPs
- Informal - medical officers
- Informal – multipurpose health workers
- Informal – nurses
- Local mental health service
- Nursing home management
- Opportunity to screen
- Referring on
- Responsibility and fit with wider role
- Service communication
- Time
- Training, experience and confidence

- Service availability
  - Doing something
  - Follow up
  - Last resort
  - Service availability
    - Informal networks
### Appendix 3: Study details

<table>
<thead>
<tr>
<th>ID</th>
<th>Aims</th>
<th>Professionals (n, sampling type)</th>
<th>Data collection and analysis</th>
<th>Main themes (subthemes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aakhus 2014 Norway</td>
<td>Identify determinants of practice for the six prioritised recommendations for the management of depressed elderly patients (using the TICD checklist to help identify and categorise)</td>
<td>GPs, nurses (primary and secondary health care), psychiatrists, researchers (n=26 total) HCPs available from public list and recommendations, with urban and rural groups. [also n=4 patients]</td>
<td>Unstructured and structured group interviews, individual interviews (randomised to each). Asked for feedback on recommendations. [also included a survey] Framework analysis</td>
<td>Analysis structured by recommendations: Recommendation 1. Social contact Recommendation 2. Collaborative care plan Recommendation 3. Depression care manager Recommendation 4. Counselling. Recommendation 5. Antidepressants in mild depression Recommendation 6. Severe depression, recurrent and chronic depression, dysthymia General determinants</td>
</tr>
<tr>
<td>Apesoa-Varano 2011 USA</td>
<td>To move beyond an account of barriers to focus specifically on identifying approaches that PCPs and depression care managers (DCMs) treating depressed older adults use to engage older men in depression care</td>
<td>Primary care physicians (n=9), all depression care managers from the IMPACT study (9 nurses, 2 psychologists) (n=11) Convenience sampling of providers involved in the IMPACT study.</td>
<td>Individual semi-structured interviews Thematic analysis</td>
<td>Clinicians’ Approaches to Engaging Older Men (Graduate Approach: Building Up to Depression, Direct Approach: Shock and Awe) Strategies for Managing Depression (Treat Somatic Symptoms, Medicalize Depression, Enlist the Family)</td>
</tr>
<tr>
<td>Bao 2015 &amp; 2016 USA</td>
<td>To assess gaps between published best practice and real-world practices of treating depression home health care and barriers to closing any gaps (Bao 2015) To capture home health administrators’ and nurses’ views on how well current Medicare policies are aligned with depression care quality improvement in home health care (Bao 2016)</td>
<td>Nurses (n=9), nurse supervisors (n=5), clinical or medical directors (n=6) Sample of key informants from 5 home health agencies who had participated in CAREPATH trial. Sampled according to nurses and nurse supervisors working in CAREPATH team, nurses working in a usual care team and directors involved in CAREPATH participation. Those who were likely to speak authoritatively on the topic were identified by an organisational liaison.</td>
<td>Semi-structured interviews (n=20) Thematic analysis using grounded theory. Coded by two investigators independently, with one further investigator coding a sample and negotiating consensus.</td>
<td>Bao 2015 Screening Assessment Case coordination Antidepressant management Patient education and goal setting Bao 2016: Home health eligibility requirements are at odds with depression care Incentives of home health prospective payment system are misaligned with depression care Current design of OASIS provides limited support for depression care</td>
</tr>
<tr>
<td>Burroughs 2006 UK</td>
<td>Explores the ways that primary care professionals frame their ideas about depression in their elderly patients Current management strategies used and barriers to the effective management of late life depression from both health professional and patient perspective</td>
<td>GPs (n=9), practice nurses (n=3), district nurses (n=2), Community nurses (n=3) Purposive sampling within one Primary Care Trust of a variety of practices and nursing teams, and those who did or did not refer patients for a depression trial. [also n=20 patients]</td>
<td>Semi-structured interviews (n=15) Constant comparison by two authors</td>
<td>Aetiology of depression Making the diagnosis Management of late life depression in primary care Primary care relationships</td>
</tr>
<tr>
<td>Dickinson 2010</td>
<td>Explores the beliefs and behaviours of patients and GPs who have</td>
<td>GPs (n=10)</td>
<td>Semi-structured interviews (n=10)</td>
<td>The benefits of antidepressants Ambiguities and dissonances in the understanding of</td>
</tr>
<tr>
<td>ID</td>
<td>Aims</td>
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<td>Main themes (subthemes)</td>
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<td></td>
<td>experience of long-term (≥2 years) antidepressant prescription</td>
<td>Older patients recruited from GP practices in one primary care trust and were doctors whose patients participated in the study. [also n=36 older people]</td>
<td>Framework analysis involving three authors.</td>
<td>depression and its treatment Barriers to the discontinuation of antidepressants</td>
</tr>
<tr>
<td>Gordon 2013</td>
<td>To explore how older people’s and GPs’ different positions and situations influence the ways they perceive depression, particularly influences reported by older people over ways they talk about depression and influences reported by GPs over ways they respond</td>
<td>GPs (n=14) Theoretical sample of GPs interested in mental health, from a range of practice sizes, urban/rural, deprived/affluent and GP age and gender (recruited in three stages) [also older adults]</td>
<td>Semi-structured interviews (n=14) Situational analysis, with project maps and thick analysis to compare GP and older adult views, with input from supervisory team discussions.</td>
<td>Skills in managing older people with depression Recognising depression Starting a dialogue about depression Changing ways of thinking Developing the doctor-patient relationship Sharing experiences Referring older patients to mental health services Managing older adults with depression Challenges Balancing personal and professional “selves” Seeking advice from colleagues Typology of GPs Analyst Active Listener Problem solver Moving between different styles of working</td>
</tr>
<tr>
<td>Hassall 2008</td>
<td>To seek the views and perspectives of staff in relation to depression in the clients and residents they provide care to</td>
<td>Care staff (n=17), including Directors of Nursing, Clinical Nurse Consultants, Registered Nurses, Respite coordinators and Social Workers. Convenience sampling from all community nursing services, residential aged care services and respite services in regions</td>
<td>Semi-structured interviews (n=17) Content analysis with two independent coders analysing and discussing themes.</td>
<td>The extent to which depression is an issue for clients and residents Staff understanding of depression and the ability to recognize when a client or resident is depressed Discussing depression with general practitioners (GPs) and other healthcare professionals Processes and procedures for treating and addressing depression Education and training on depression for staff.</td>
</tr>
<tr>
<td>Iden 2011</td>
<td>To examine decision-making among doctors and nurses in nursing homes on the treatment of patients with depression using antidepressants</td>
<td>Full time nursing home doctors (n=8), registered nurses (n=8) and part-time nursing home doctors (n=8) Purposeful sample according to age, gender, profession, clinical experience and position</td>
<td>Semi-structured focus groups (n=3) of 8 participants each Systematic text condensation by three authors to produce themes</td>
<td>Depressed or just tired of life? To treat or not to treat with antidepressants? Who determines the treatment?</td>
</tr>
<tr>
<td>Liebel 2013</td>
<td>Describe Home Health Care nurses’ perceptions of depression and disability care management</td>
<td>Home Health Care Nurses (n=16) Purposeful, criterion-based sampling.</td>
<td>Individual interviews (n=16) and 2 focus groups (same 16) plus observation of interactions between nurses and five consenting patients (25 visits) at home [observation more]</td>
<td>Balancing system and patient care (Time constraints and financially driven priorities, New depression screening tool, Access to specialised mental health care/providers) Knowing how to manage depression (Nature of depression, Self-confidence, Building knowledge) Encouraging disability maintenance/improvement</td>
</tr>
</tbody>
</table>

For Review Only
<table>
<thead>
<tr>
<th>ID</th>
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<th>Main themes (subthemes)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Liebel 2015</strong></td>
<td><strong>Home Health Care Nurses (n=4)</strong> delivering care to five geriatric patients experiencing current depression</td>
<td>Observation of 25 home visits, with moderate participation (primarily observation but with socially appropriate involvement in conversation) using a structured guide.</td>
<td>(Nature of disability, Self-confidence, Building knowledge)</td>
</tr>
<tr>
<td></td>
<td>USA</td>
<td>Convenience sample of four volunteers</td>
<td>Content analysis guided by Peplau’s perspectives on therapeutic nurse interactions, using triangulation with interview data (Liebel 2013), peer debriefing, prolonged engagement, rich data and audit trail.</td>
<td>Meeting patients where they are (Engaging with patients in their homes, Establishing a therapeutic relationship, Integrating depression care and overall health care management) Therapeutic nurse-patient relationships (a view from the field)</td>
</tr>
<tr>
<td></td>
<td><strong>Lin 2005</strong></td>
<td>Psychiatric home care nurses (n=9), team director (n=1)</td>
<td>Semi-structured interviews (n=10)</td>
<td>Establishing connections between patient and nurse (Connecting and reconnecting with each visit, Using the HHC visit to establish connections with patients) Communications promoting productive interactions: therapeutic interactions Communications disconnecting nurse and patient Missed opportunities for making connections</td>
</tr>
<tr>
<td></td>
<td>USA</td>
<td>Purposeful sampling (details not reported) from one home care agency</td>
<td>Content analysis using a list of 24 foci based on established criteria, with input from supervisory committee</td>
<td>Assessment Management/supervision Communication Interventions Regulation</td>
</tr>
<tr>
<td></td>
<td><strong>Lu 2015</strong></td>
<td>Public health nurses (n = 12), home care nurses (n = 5), long-term care nurses (n = 2), social workers (n=5) and dietitian (n=1)</td>
<td>Interviews (n=25)</td>
<td>Lack of children’s support Maladaptation to distressing circumstances in later life Innate vulnerability in the individuals Being unaware of or reluctant to accept an illness</td>
</tr>
<tr>
<td></td>
<td>Taiwan</td>
<td>Purposive sampling according to variety of healthcare teams and practice locations</td>
<td>Thematic analysis with independent coding by two researchers, with discussion. Participants were phoned to discuss and refine initial interpretations.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>McCabe 2009</strong></td>
<td>Professional care assistants (n=21) from different aged settings, registered nurses (n=2), trainee nurses (n=2), GPs (n=10), senior aged care</td>
<td>Individual semi-structured interviews</td>
<td>Workplace factors (Communication in aged care settings Staff resources, Staff roles) Factors related to older care recipients</td>
</tr>
</tbody>
</table>
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<tbody>
<tr>
<td>Murray 2006 UK</td>
<td>Explore primary care professionals’ perceptions of depression in older people.</td>
<td>GPs (n=18), Practice nurses (n=7), practice counsellors (n=5) Purposive sample to include professionals in different settings in varying SES areas with different ethnicities.</td>
<td>Interviews (n=30) Grounded theory (2 researchers, independent coding)</td>
<td>Presenting complaints Distinguishing between depression and physical illness Depression as normal in old age Avoidance of psychosocial problems Stigma and shame Gender differences Ethnic and cultural differences The family as help or hindrance</td>
</tr>
<tr>
<td>Patel 2001 India</td>
<td>Investigate the understanding and opinions of Goan people regarding health experiences of older people, particularly dementia and depression</td>
<td>Primary health centre doctors (n=3), multi-purpose health workers (n=17) [other focus groups also held with older people (N=5, n=37), village councillors (N=1, n=5) and caregivers (N=4, n=26)] Purposive sampling from a range of settings around Goa</td>
<td>Focus groups (n=3), including a vignette on depression Thematic analysis using constant comparison. Two authors analysed the data independently and compared their results.</td>
<td>The health status of older persons (Health conditions, Mental health conditions (Depression, dementia)) General issues related to ageing in Goa (The status of older persons in Goan society, Dependency, Economic factors in family care and support, Admission to old age homes, Roles and activities, Community resources)</td>
</tr>
<tr>
<td>Pusey 2009 UK</td>
<td>To explore district nurses’ views of current practice in the detection and management of depression in older people</td>
<td>District nurses (n=11) Convenience sample of district nurses from teams participating in a survey</td>
<td>Focus groups (n=3), individual interview (n=1) Thematic content analysis</td>
<td>Social isolation Time The Role of the District Nurse Availability of support Knowledge and skill of district nurse</td>
</tr>
<tr>
<td>Saarela 2003 Finland</td>
<td>To improve the management of geriatric depression Explore the reasoning underlying treatment strategies and clinical decision-making Identify training needs of primary care physicians and psychiatrists</td>
<td>Primary care physicians (n=25), psychiatrists (n=11) Group sessions at a geriatric psychiatry training event, with primary care physicians from five health centres and psychiatrists from two community health centres</td>
<td>Focus group discussions (n=7) and individual management plans, using two vignettes Content analysis of plans by two researchers, grounded theory</td>
<td>1. Both professional groups seemed to highlight somatic assessment and the need to address coexisting physical problems. A difference was found in the specificity and number of presented psychosocial and psychopharmacological treatment ideas between the primary care and psychiatry groups. 2. Assessment of the stage of old age depression differed between primary care physicians and psychiatrists. 3. The primary care physicians tended to rely on their previous experience of similar cases and to emphasize the establishment of a good counselling relationship, while the psychiatrists were more active in asking about the patient’s personal situation when forming the management plan.</td>
</tr>
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<tbody>
<tr>
<td>Stanners 2012 Australia</td>
<td>To develop a grounded theory model around the impact that multimorbidity has on GP practice.</td>
<td>GPs (n=8) Convenience sample who had referred &gt;5 patients to one multidisciplinary outpatient clinic</td>
<td>Semi-structured interviews (n=8) Thematic analysis using grounded theory (constructivist epistemology, interpretivist theoretical perspective), with an experienced researcher coding two interviews independently</td>
<td>1. Detection/diagnosis 2. Treatment (guideline prescribing, social prescribing)</td>
</tr>
<tr>
<td>Strachan 2015 UK</td>
<td>Exploration of GPs’ assessment and treatment of common mental disorders in older people. Their expectations and experience of referral to the mental health for older adults’ team.</td>
<td>GPs (n=9) Convenience sample of GPs in one geographical area.</td>
<td>Group interviews (n=3) Thematic analysis with member checking (no response)</td>
<td>Cohort effects  GP role Assessment Decision making Intervention Role of secondary care More than a health issue (Social problems, Social solutions)</td>
</tr>
<tr>
<td>Sussman 2011 Canada</td>
<td>To elicit Canadian health professionals’ views on the barriers to identifying and treating late-life depression in primary care settings and on the solutions felt to be most important and feasible to implement.</td>
<td>Family physicians (n=3), psychiatrists (n=2), nurse practitioners (n=3), social workers (n=3), decision-makers (n=1) Snowball sample of practitioners from 2 Canadian provinces with an interested in late life depression from a variety of health disciplines</td>
<td>Conference including small group discussions, with nominal group technique ranking of proposed solutions afterwards Thematic analysis of small group discussion (two coders working independently and discussing)</td>
<td>Comorbidity Silo mentality Developing collaboration through case-specific support Case-specific support offered “just in time”</td>
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<td>Tai-Seale 2007 USA</td>
<td>To assess, using quantitative and qualitative methods and in naturalistic settings between elderly patients and physicians, the time spent on mental health, and second, how that time is used.</td>
<td>Physicians (n=35) Convenience sample of office-based physicians</td>
<td>Videotaped consultations (n=385) between physicians (n=35) and older people (aged 65+) visiting for any reason. Videotapes purposively analysed on the basis of time spent on mental health discussion until saturation (n=53 consultations). Coded topics, how the discussion began and verbal and non-verbal behaviour</td>
<td>Took the Time to Investigate the Disease, the Person, and the Lived Life Allocated Time to Gathering Information, Recognized Mental Disorder, Gave Inadequate Treatment Patient Indicated Emotional Distress, but Physician Did Not Follow Up</td>
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## Appendix 3: Study details

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<th>ID</th>
<th>Aims</th>
<th>Professionals (n, sampling type)</th>
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| Todman 2010 Scotland | To elicit GP suggestions in regards to improvements to psychological services for older people in the area | GPs (n=119)  
Practice managers were sent a letter explaining the project and a pack of questionnaires to distribute to GPs. | Mixed methods questionnaire survey including an open qualitative question regarding further improvements that could be made  
The topic and action taken. Discussed between two authors. | Long waiting times  
Local input  
A specialist older adult service  
Increased Community Psychiatric Nurse availability |
| Timson 2013 UK | To investigate the under-referral of older adults for psychological intervention, by potential referral agents, via the constructions they held about older adults | Referring agents (GPs, n=4), referred-to psychologists (n=4), wider members of case groups (n=13, inc older adults, family member, community psychiatric nurse and sometimes a psychiatrist) | Multiple case study of four depressed older adults aged 75+ (with professionals around them), using semi-structured interviews  
Pattern matching and explanation-building, triangulating multiple perspectives, and including discussions about constructions with a psychologist | Constructions of the older adult as having negative identity  
Construed as ill-fitting socially  
Construed as being irresponsible  
Construed as resistive to care  
Construed as meriting limited care  
Construed as childlike (infantilised)  
Construed as stigmatised  
Construed as having bleak future expectations  
[the older adults hold negative constructions of themselves]  
Constructions of the older adults as depersonalised  
Construed as an object of care  
Construed as seen in the ‘third person’  
Construed as being misunderstood  
Construed as having unmet needs  
Construed as having needs prescribed by others  
Miscellaneous additional constructions  
Constructions of referrals to psychological services  
Psychological constructions held of the older adult |
| Waterworth 2015 New Zealand | How nurses working with older people with multiple LTCs recognise and assess older patients for depression  
The strategies they use to support the patient | Primary health care nurses, district nurses, heart failure nurses (n not reported)  
Approached key individuals in national networks and nurses with a postgraduate qualification in long term condition management as key informants from primary, district and heart failure nursing | Telephone interviews (n=40)  
Constructivist grounded theory approach | Being alert  
Knowing the patient over a period of time  
Asking questions  
Offering options  
Providing time to listen |
| White 2017 | To explore clinician attitudes of Healthcare professionals from acute settings | Focus groups (n=11) | 1. Clinician decision-making towards psychological |
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<td>patient management and factors associated with decision making and referral to services for older adults with psychological morbidity pre and post hospitalisation.</td>
<td>(n=7), subacute (geriatric assessment and rehabilitation, n=20) and community care (n=27), including medical officers, physiotherapists, occupational therapists, social workers, neuropsychologists, registered nurses, podiatrists, speech pathologists, music therapists Convenience sample of interested clinicians employed by one service provider</td>
<td>Inductive analysis with constant comparison Two researchers conducted analysis independently and resolved disagreements through discussion</td>
<td>morbidity (existing process doesn’t systematically identify psychological morbidity, dealing with competing priorities) 2. Supply of people with specialised skills dealing with psychological morbidity (workload) 3. Confidence and capability 4. Facilitating continuity of care 5. Perception of depression and ageing</td>
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<td>Australia</td>
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<td>Wittink 2011</td>
<td>To explore the ways in which primary care providers describe the processes related to depression management for older adults</td>
<td>Internists (internal medicine physicians, with focus on adult medicine, n=9), family doctors (n=4), geriatric medicine physicians (n=2) Convenience sample of primary care providers involved in one of two trials of late-life depression care (relatively more experience of caring for older adults with depression)</td>
<td>Semi-structured telephone interviews (n=15) Thematic analysis with constant comparison (codes and data reviewed by interdisciplinary team), results reviewed by primary care providers.</td>
<td>Convincing patients that depression is a medical illness Treating depression in the context of ageing</td>
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