COLLABORATIVE MODELS BETWEEN PRIMARY CARE AND SPECIALIST SERVICES IN THE MANAGEMENT OF COMMON MENTAL HEALTH PROBLEMS

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Abstract

Common mental health problems such as depression are an increasing source of disability worldwide. One key policy recommendation of the World Health Organisation is that treatment for mental health problems such as depression should be based in primary care However, there is less agreement about the best way to achieve effective collaboration between primary care and specialist services to meet key policy goals such as access, equity, cost effectiveness and patient-centredness. This paper describes the main models of collaborative working for depression, and examines evidence concerning the effectiveness of these different collaborative models in meeting policy goals.

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Mental health in primary care

Managing depression is a major challenge for patients, professionals and policy makers worldwide. There is consensus that primary care is the best location to treat depression. The recent World Health Organisation report 'Integrating mental health into primary care: a global perspective' (WHO 2008) stated seven reasons for this policy (see **box 1**).

Primary health care was defined by the Alma Ata declaration as:

'essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination' (www.who.int/hpr/NPH/docs/declaration_almaata.pdf)

Mental health care in primary care is defined as:

'the provision of basic preventive and curative mental health care at the first point of contact of entry into the health care system'.

Usually this means that care is provided by a primary care clinician, such as a general practitioner or nurse, who can refer complex cases to a specialist when required. Nearly two thirds of European countries reported training facilities in primary care in 2001 (WHO 2001).

Pathways to care in primary care

Key to understanding how patients receive care for common mental health problems is an understanding of the ways in which patients enter treatment and the barriers they face. An influential approach is the 'pathways to care' model first described by Goldberg and Huxley (Goldberg, Huxley 1980, Gater et al. 1991). The pathways to care model has five 'levels' and three 'filters'. In community settings, patients who consult in primary care with common mental health problems are said to pass the first filter ('the decision to consult'). Some of these patients will have their problem recognised (so-called 'conspicuous psychiatric morbidity') and pass the second filter ('recognition by the primary care professional'). Passing the third and fourth filter involves a decision within primary care to refer to specialist mental health services or to admit to a specialist psychiatric unit or hospital. There are alternative routes (i.e. through emergency services) (Gater et al. 1991), but the 'pathways to care' model is a good description for many purposes and in many contexts.

Policy goals in primary care mental health

Although there is agreement that depression care should be located in primary care, what is such care supposed to achieve? The World Health Organisation (2001) suggests that all mental health policies are anchored by four goals: access; equity; effectiveness and efficiency. Policy makers are increasingly interested in a fifth: patient-centredness. These goals are outlined in **box 2**.

There are tensions between these goals. For

Box 1. *Reasons for treating mental health in primary care[1]*

1. The burden of mental disorders is great. Mental disorders are prevalent in all societies. They create a substantial personal burden for affected individuals and their families, and they produce significant economic and social hardships that affect society as a whole.
2. Mental and physical health problems are interwoven. Many people suffer from both physical and mental health problems. Integrated primary care services help ensure that people are treated in a holistic manner, meeting the mental health needs of people with physical disorders, as well as the physical health needs of people with mental disorders.
3. The treatment gap for mental disorders is enormous. In all countries, there is a significant gap between the prevalence of mental disorders, on the one hand, and the number of people receiving treatment and care, on the other hand. Primary care for mental health helps close this gap.
4. Primary care for mental health enhances access. When mental health is integrated into primary care, people can access mental health services closer to their homes, thus keeping their families together and maintaining their daily activities. Primary care for mental health also facilitates community outreach and mental health promotion, as well as long-term monitoring and management of affected individuals.
5. Primary care for mental health promotes respect of human rights. Mental health services delivered in primary care minimize stigma and discrimination. They also remove the risk of human rights violations that can occur in psychiatric hospitals.
6. Primary care for mental health is affordable and cost effective. Primary care services for mental health are less expensive than psychiatric hospitals, for patients, communities and governments alike. In addition, patients and families avoid indirect costs associated with seeking specialist care in distant locations. Treatment of common mental disorders is cost effective, and investments by governments can bring important benefits.
7. Primary care for mental health generates good health outcomes. The majority of people with mental disorders treated in primary care have good outcomes, particularly when linked to a network of services at secondary level and in the community.

example, planners working at the level of the population may have a focus on access and equity, and may wish to ensure that treatments are provided and money is spent to maximise performance on these goals. However, this may clash with goals relating to the treatment of an individual patient (where effectiveness and patient-centredness are key). For example, access and equity issues are the impetus behind the use of innovations designed to provide new and cheaper ways of accessing care (such as treatment delivered via the internet) for depression, but these may have a negative effect on patient-centredness (as many patients would choose a longer treatment delivered face to face with a therapist) and may attenuate effectiveness, at least in some patients.

Models of quality improvement in primary care mental health

Once the goals of care have been identified, the next challenge is to identify ways of achieving those goals. Research has identified four main ways of organising depression services in primary care. Each has implications for the way that services are delivered and the relationship between primary care and specialist mental health professionals (Bower, Gilbody 2010).

Education and training model

Over forty years ago it was argued that:

Administrative and medical logic alike therefore suggest that the cardinal requirement for improvement of the mental health services . . . is not a large expansion and proliferation of psychiatric agencies, but rather a strengthening of the family doctor in his therapeutic role (Shephedr et al. 1966).

Many problems with delivery of care for depression in primary care relate to the knowledge, skills and attitudes of primary care professionals. Deficits in these areas mean that access to care can be

Box 2. *Goals in primary care mental health*

1. *Access*: Service provision should meet the need for services in the community, irrespective of ability to pay or location.
2. *Equity*: Resources should be distributed equitably across the population, with:
   a. 'horizontal equity' (patients with similar problems receive similar services)
   b. 'vertical equity' (patients with more severe problems receive more care)
3. *Effectiveness*: Services should improve health and wellbeing.
4. *Efficiency*: Limited resources should be distributed to maximize health gains to society.
5. *Patient-centredness*: Services are aligned with and responsive to patient preferences and experience.

blocked at a very early stage of the 'pathways to care' model. Even if patients are recognised, deficiencies in the skills of primary care professionals can still lead to problems with quality of care i.e. provision of antidepressant medication which does not meet the standards of current clinical guidelines (Katon et al. 1992, 1997).

Training and education has been defined as 'the provision of essential knowledge and skills in the identification, prevention and care of mental disorders to primary health care personnel' (WHO 2001). There are a number of methods to achieve this. It may involve large-scale campaigns designed to change professional attitudes towards the management of disorders. For example, the UK Defeat Depression campaign used 'an extensive program of general practice education… consensus conferences and statements, recognition and management guidelines, training videotapes, and other publications' (Priest 1991). A second model is the dissemination of evidence-based guidelines such as those developed by organisations such as AHRQ (http://www.ahrq.gov/) and NICE (http://www.nice.org.uk/) (Cornwall, Scott 2000). Guidelines are 'systematically developed statement to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances' (Institute of Medicine 1992) and are designed to summarise high quality evidence on the provision of treatments and present that in a form useful for clinical decision-making. However, their impact has often been disappointing (Grimshaw et al. 2004).

More intensive methods of training and education use brief educational formats (Thompson et al. 2000). An example is the Hampshire Depression Project (Thompson et al. 1996), which sought to improve the recognition and management of depression through practice-based education. This was delivered by a team including primary-care doctors, practice nurses, and community mental health nurses. Education was provided in two parts. Seminars were held at the beginning of the year for all members of the primary health care team and involved 4 hours of teaching, supplemented by videotapes to demonstrate interview and counselling skills, small-group discussion, and role play. The team remained available to the practices for additional assistance.

The most complex training and education involves teaching primary care professionals to adopt advanced counselling and psychological therapy methods such as problem-solving and cognitive-behavioural therapy (Huibers et al. 2007). Although potentially effective, such methods are likely to be attractive to only a proportion of primary care professionals with interests in and enthusiasm for primary care mental health.

Consultation-liaison model

Consultation-liaison is a variant of education and training, designed to improve the skills of primary care professionals. In consultation-liaison, mental health specialists (such as psychiatrists and psychologists) support primary care professionals in caring for depressed patients who are currently undergoing care. This is achieved through an ongoing educational relationship (Gask et al. 1997; Bower, Gask 2002), rather than providing one-off education and training characteristic of the previous model.

In the United States, consultation-liaison most commonly involves psychiatric work in inpatient general hospital settings and has been defined as 'any clinical or educational intervention provided for general medical personnel by mental health specialists, usually clinicians' (Gonzales, Norquist 1994), or as a role that 'entails collaborative problem solving between a mental health specialist (the consultant) and one or more persons (the consultees) who are responsible for providing some form of psychological assistance to another (the client)' (Medway, Updyke 1985). In the United Kingdom, consultation-liaison is defined by regular face-to-face contact between psychiatrist and primary health care team, with most cases managed by the primary health care team following consultation-liaison discussions. Referral only takes place after consultation-liaison and is followed by feedback to the primary health care team (Gask 1997). A recent study in Taiwan used a model where a psychiatrist assisted non-specialist colleagues with a clinical assessment, medication prescription and maintenance of treatment until remission. This included forwarding a report to the primary care professional including their recommendations for further treatment (Liu et al. 2007).

Effective consultation-liaison may lead to more efficient use of specialist time, as their efforts are focussed on improving the skills of primary care professionals and providing expert assistance for patients most likely to benefit from specialist help. The focus on improving the skills of primary care professionals has the potential to improve care for *all* patients with depression, even those who are not the specific subject of discussions with a specialist.

Collaborative care model

Recent years have seen the emergence of 'collaborative care'. This complex model has elements of both the educational and consultation-liaison model (Bower, Gask 2002), but adds fundamental changes to the system of care, in line with its basis in the Chronic Care Model (http://www.improvingchroniccare.org) and other models of improving care for long-term conditions.

In line with many modern models of quality improvement, collaborative care involves changes at a number of levels including the community, organisation, professional and patient level. The exact mix of methods used in any particular collaborative care intervention varies, and research is only beginning to delineate the necessary and sufficient factors for effective delivery (Bower et al. 2006).

Generally, collaborative care requires input from 3 professionals: primary care provider, mental health specialist, and case manager (although their relative importance is unclear) (Katon et al. 2001). In collaborative care, the roles of the primary care provider and the specialist are similar to those in the education and training and consultation-liaison models, with the primary care professional responsible for diagnosis and

assessment and generalist care, while the specialist provides support and consultation. The major innovation is the introduction of the care manager. This professional is responsible for much of the direct care provided to patients, including ongoing assessment of health status, helping patients change behaviour and improve self-care and the co-ordination of care across multiple providers. This co-ordination usually involves feeding back information on patient progress to the primary care professional and the specialist, to allow them to make any changes to patient care that are required. Their role may include helping patients make choices between treatment alternatives (such as medication and psychological therapy, or their combination) and considering alternatives when first line treatments fail (Unützer et al. 2003).

Collaborative care is based less on principles underlying traditional psychological therapy, and more on the systems of chronic disease care that have been found to be effective for non-mental health conditions (Wagner et al. 1996, Bodenheimer et al. 2002). These systems are designed to provide care for the entire population of patients with a particular condition (through the use of registers and a systematic, population-based approach to care). Ongoing care and follow up of patients is proactive (often delivered via the telephone to maximise efficiency) and follows carefully designed protocols. Other components of collaborative care include regular assessment of outcomes; adjusting treatment plans when patients fail to improve; and consultation with specialists when necessary to overcome treatment failure or therapeutic impasse. Collaborative care generally includes education of primary care staff, and may involve dissemination of guidelines, screening to recognize cases of depression, and enhanced patient education (Von Korff, Goldberg 2001). All this may involve profound changes in practice routines and developments in information technology (Wagner et al. 1996).

Referral model

Primary care clinicians always have overall clinical responsibility for patients being managed in that setting, but in the referral model the management of mental health problems may be passed to a mental health professional for the duration of the treatment (Bower 2002). Treatment within this model usually involves psychological therapies. There are many varieties of psychological therapy which have been provided in primary care, including cognitive-behavioural therapy (Scott, Freeman 1992), problem-solving (Mynors-Wallis et al. 1997), counselling (Ward et al. 2000) and interpersonal therapy (Schulberg et al. 1996). There are major and ongoing debates about their relative effectiveness and cost-effectiveness, and whether it is better to focus on a few well proven treatments, or to allow more flexibility and choice by increasing the range of treatments that are provided (Tarrier 2002, Bolsover 2002, Hinshelwood 2002, Holmes 2002).

A key difference in this model is that the link between the specialist mental health professional and the primary care professional may not be clear. Although they may interact informally (through what are called 'corridor consults'), links are not built into the model as they are with other models such as consultation-liaison and collaborative care.

In the United Kingdom, the provision of psychological therapies for depression in primary care received a major boost through the work of the economist Richard Layard (2006), who convinced the government to increase access to cognitive-behaviour therapy. The argument was that this would pay for itself as people returned to work following successful treatment of depression (so called cost-offset) (Fiedler, Wright 1989). The United Kingdom government made a major financial investment in these services to train and employ many new psychological therapists offering evidence-based psychological therapies, which in turn led to a programme of 'demonstration' sites to explore how to increase the availability of effective treatments for patients with depression (Richards 2010, Clark et al. 2009).

The other major innovation in this model has been the development of self-help or minimal interventions which are designed to provide the benefits of psychological therapy with limited therapist input, using platforms such as books and websites to teach patients relevant skills in managing their problems (Scogin et al. 2003, Proudfoot et al. 2004).

The relationships between models and policy goals

Clearly, these models differ in many important ways. Each model involves different numbers and types of professionals who collaborate in different ways, and the costs and the challenges associated with their implementation vary. A key dimension differentiating the models is the importance of the primary care professional and the degree to which the model focuses on improving their skills and confidence. This focus is greatest in the education and training model, because it is expected that primary care professionals will deal with the bulk of mental health issues after education and training, with only a small proportion referred for specialist care. The involvement of the primary care professional is still significant in consultation-liaison, although the involvement of the specialist increases as they develop long-term relationships with primary care staff to improve the quality of care. In collaborative care models, case managers take on a significant proportion of the work which was originally the responsibility of the primary care professional. Finally, in the referral model, the transfer of workload and responsibility from generalist to specialist is most significant.

Assuming equivalent effectiveness, models which focus on increasing the abilities of primary care professionals have the greatest potential impact on access and equity. Where treatment delivery needs more specialist involvement (such as case managers and psychological therapists), the impact on access may be limited to the proportion of patients who are referred for more specialised assistance.

What is the evidence?

As noted in the previous section, different models have different effects on policy goals. Planners and policy makers are most interested in the training and education model because it has the potential to achieve more of the key goals at a sustainable cost. However, we need to test the assumption of equivalent effectiveness across different models. A full systematic evidence review is beyond the scope of this article, but we will draw on published reviews of the evidence to test this assumption.

In terms of training and education, despite initial enthusiasm, evidence of effectiveness has proved hard to come by. A systematic review suggested that guidelines and education are generally of limited effectiveness in improving patient outcomes in depression (Gilbody et al. 2003). Intensive training of primary care staff (i.e. teaching them skills in problem solving) may be effective (Huibers et al. 2007), but the prevailing view is that feasible training which can be delivered widely through routine professional education is ineffective, while the sort of intensive training which has demonstrated effectiveness is probably not feasible, either because it is too costly, or because it will simply not be acceptable or attractive to the vast bulk of primary care professionals who may not have a specialist interest in mental health.

Our recent review of consultation-liaison found only a limited evidence base, but the evidence that has been published is generally unsupportive. Five studies met the inclusion criteria, but when meta-analysed they demonstrated no significant effects on antidepressant use or depression outcomes in the short or long term. The evidence concerning consultation-liaison remains limited and more studies may be required for a definitive answer, but the existing studies do not suggest it is more effective than usual care, at least in depression (Cape et al. 2010), although other problems may be more amenable to this approach.

There are a large number of reviews of collaborative care, which differ in their exact inclusion criteria and thus involve different studies (Gilbody et al. 2003, Gensichen et al. 2005, Badamgarav et al. 2003). However, most report that collaborative care is reliably more effective than usual care. A large recent review found 37 randomized studies including 12,355 patients with depression receiving primary care and found significant improvements in depression outcomes at 6 months, which endured over the longer term (Gilbody et al. 2006). However, it should be noted that the effects on depression (as least as assessed in meta-analysis) are relatively modest – the review discussed above reported an effect size at 6 months of 0.25, which is relatively small by current convention (Lipsey 1990). Whether this reflects the lack of potency of the treatment, or the difficulties in achieving major benefits in this population is unclear.

Three recent reviews of the provision of psychological therapies in primary care also reported significant benefits (Bortolotti et al. 2008, Cape et al. 2010, Cuijpers et al. 2009). For example, a recent review found 10 trials in various psychological therapies (including problem solving, interpersonal therapy, cognitive behaviour therapy and counselling) in patients with major depression, and demonstrated effect sizes of 0.42 in the short-term and 0.30 in the long-term (Bortolotti et al. 2008). However, the evidence base is less impressive as there are far fewer trials and many of the trials are relatively small, at least compared to those being conducted in collaborative care in the United States

Comparing the results of such reviews is complicated, because there may be other differences between the studies which might account for differences in effect. For example, the studies included in different reviews may differ in methodological quality. Equally, different models may recruit and manage patients who vary in severity and complexity. Finally, studies may be of different types, with 'pragmatic' designs seeking to provide a more externally valid assessment of a treatment that can result in weaker effects (Gilbody, Whitty 2002; Schwartz, Lellouch 1967). Some evidence reviews (such as those conducted by the National Institute of Health and Clinical Excellence in the United Kingdom) also complicate matters by including studies from outside primary care in their deliberations (National Institute for Health and Clinical Excellence 2009a), despite evidence that such studies can show different patterns of results (Churchill et al. 2002, Raine et al. 2002). It would be preferable to conduct further 'head to head' trials directly comparing the effectiveness of the different models in the primary care setting, to see if the differences found between reviews endure in a direct randomised comparison. Some of the models are beginning to be compared in this way (Hendrick et al. 2003), but such trials are expensive as they often have to involve large sample sizes to detect small differences between 'active' treatments.

There is also limited cost-effectiveness evidence available. The importance of formal cost-effectiveness analyses has only been acknowledged in depression care relatively recently, and most of the studies relate to collaborative care. Generally, collaborative care is associated with increases in costs as well as effectiveness (Gilbody et al. 2006), and the limited evidence in relation to the referral model suggests the same pattern of results (Bower et al. 2003). At present, the evidence on cost-effectiveness is not a strong basis for favouring one model over another.

Although it was highlighted earlier that certain ways of delivering care should be associated with improvements in access, the actual evidence that this is the case is very limited, partly because research questions about access are not so amenable to randomised trials as questions of effectiveness. In addition, although many studies explore issues of patient satisfaction and the acceptability of treatment, there is very limited data comparing different ways of delivering treatment, whether patient preferences impact on outcome (King et al. 2005), or how important the process of treatment is compared to the outcome.

Why do certain models show larger and more consistent effects? The education and training model assumes that problems in the attitudes and skills of primary care professionals is the key determinant of poor outcomes (Schulberg, McClelland 1987). Professional behaviour is complex and influenced by many factors (Grol 1997; Grol, Grimshaw 2003), and

primary care is designed to deliver high volume care quickly and efficiently (Rost et al. 2000). These situational issues, combined with the presence of competing demands relating to other conditions, prevention and non-medical factors can make it difficult to put training and education into practice.

In consultation-liaison, wider evidence from the professional behaviour change literature suggests that meetings between professionals and feedback of written reports are not particularly effective (Jamtvedt et al. 2006, O'Brien et al. 2007). Consultation-liaison is also dependent on effective interprofessional relationships, which may be difficult to develop in many cases. This may dilute the impact of the model.

The collaborative care model has had most attention paid to the factors that drive effectiveness (Bower et al. 2006, Gilbody et al. 2006), using techniques such as meta-regression to explore relationships between the components of treatment and outcomes. The most important factor is the degree to which intervention encourage anti-depressant use among patients. Other important factors are the supervision of the case manager and the use of case managers with a mental health background. Interestingly, although evidence alluded to earlier suggests that psychological therapy is generally effective, the addition of psychological therapy to collaborative care is not related to improved outcome.

Implementing collaborative models between primary care and specialist services

Having outlined the evidence base concerning different models of depression care in primary care, we now move to issues of implementation. Translating evidence into routine clinical practice is an enormous challenge. As stated by the Institute of Medicine, 'between the health care we have and the care we could have lies not just a gap but a chasm' (Institute of Medicine 2001).

A classic example of this gap is the use of streptokinase in heart attacks. The evidence that streptokinase was effective was robust by the early 1970s, but it did not become routine until 1986. Similarly, data would suggest that sufficient evidence was available concerning the effectiveness of collaborative care in 2000 (Gilbody et al. 2006). However, collaborative care in practice is still relatively rare even today.

Why does such a gap exist between research and clinical practice? Barriers to effective depression care exist at a number of levels (Katon 2003). Among individual patients, they include issues of mental health literacy (Jorm 2000) and attitudes towards mental health (Prior et al. 2006, Jorm et al. 2000). For example, patients may struggle to articulate their depressive symptoms in the context of busy primary care practices, and may not engage with services which do not meet their 'explanatory models' concerning mental health and depression (McCrone 2004). Among professionals, barriers relate to lack of awareness or familiarity with mental health, lack of confidence in skills or in the effectiveness of treatments, and the inertia of previous practice which may make the innovation problematic

(Cabana et al. 2002). Systems of care may be designed around acute problems or physical illness, exacerbated by lack of technology and other resources, and the ever present barrier of limited time (Von Korff, Goldberg 2001). Within health organisations, there will be variation in the priority given to quality improvement, and quality of leadership (Katon 2003). Finally, in the wider environment, regulations (such as professional validation) and payment systems, such as the financial incentives in the United Kingdom, are critical (Dowrick et al. 2009, Kendrick et al. 2009).

The impact of financial incentives is being watched closely in the United Kingdom. The Quality and Outcomes Framework introduced financial rewards for quality indicators. Although depression was not included at first, GPs are now paid to screen for depression in those with long-term conditions and to use routine outcome measures. Although these financial incentives have had a major impact, there is evidence that actual delivery of these screening interventions may not always be optimal. Depression measures may not have a major impact on clinical decision making (Kendrick et al. 2009) and professionals may use screening without any great faith in its utility (Dowrick et al. 2009).

An additional factor in implementation is standardization. Consultation-liaison or collaborative care might be delivered differently in rural and urban settings, with greater use of telepsychiatry interventions (i.e. delivery of mental health using telephone or other technologies) in the rural areas to facilitate meetings between staff. However, planners must consider issues of *fidelity* (i.e. the degree to which an intervention delivered in routine settings is similar to the way it was delivered in trials to develop the evidence base). If fidelity predicts outcome, this argues against excessive amounts of customization. Although telepsychiatry may be more feasible and acceptable for arranging liaison meetings, the technology may mean that the benefits of the meetings are attenuated. This loss of effectiveness related to customisation has been characterised as a 'voltage drop' (Oxman et al. 2003). However, a failure to standardize may lead to poor implementation. This reflects the traditional tension between internal and external validity, and between efficacy and effectiveness research.

Future research

Developments in information and communication technology are likely to have a profound impact on the delivery of depression care in the future. Researchers have tested how depression care can be delivered remotely (i.e. via the internet) and with limited therapist contact (Proudfoot et al. 2004, Kantenthaler et al. 2006). There is a need to ensure that access to such treatments is not limited by inequitable access to technology, and that the relational needs of patients with depression are met (Pilgrim et al. 2009). However, the therapeutic use of these new communication technologies is only just being realised.

Multimorbidity is the presence of more than one long-term condition. It is prevalent (Valderas et al. 2009), and patients with diabetes, arthritis and coronary

heart disease have higher rates of anxiety (Grigsby et al. 2002) and depression (Anderson et al. 2001). Patients with multimorbidity of diabetes and depression are less active (Van Korff et al. 2005), less compliant (Piette et al. 2004), and suffer greater numbers of complications (Lustman et al. 2000). The combination of depression and long-term physical conditions results in worse health than other combinations of conditions (Moussavi et al. 2007).

The United Kingdom guidelines on depression care for patients with long-term conditions recommended the use of collaborative care in patients with long-term conditions and depression, but not depression alone, as the evidence in patients with a co-morbid long-term condition was seen to be stronger (National Institute for Health and Clinical Excellence 2009b). However, it is not clear whether patients with depression and a long-term physical condition should have their depression treated in the same way as patients with depression alone, or whether new treatments need to be developed specifically to meet those needs. Managing depression in such patients should potentially improve self-management, which could have benefits in terms of physical outcomes such as HbA1c. However, different conditions (and their management) can clash. For example, depression treatment may improve appetite, which may then clash with effective diabetes care (Detweiler-Bedell et al. 2008). At present, there are few examples of psychological interventions that can improve depression *and* physical outcomes (Harkness et al. 2010).

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