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A Systematic Review Investigating the Comparative Effectiveness and Efficiency of a Multi Clinician Stepped Care Workforce Vs. a Single Clinician Stepped Care Workforce for Delivering Psychological Treatments

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Abstract

Background: Stepped care has been promoted as one solution to improving access to psychological services. In the United Kingdom (UK) and Australia a new workforce has been established for the implementation of stepped care. Thus, there are two different models of stepped care: Multi clinician stepped care (MCSC) and single clinician stepped care (SCSC). Given that the MCSC improving access to psychological therapies initiative in the UK was initially economically motivated, it was of interest to discover whether or not an MCSC workforce is more effective and efficient than an SCSC workforce. The objective of this review was to answer the research question "Is an MCSC workforce more effective and efficient than an SCSC workforce?"

Methods: A comprehensive systematic review was conducted to identify studies comparing the effectiveness and efficiency of MCSC with SCSC programs in terms of patient outcomes, patient satisfaction, waiting times, and cost-effectiveness.

Results: The systematic review revealed that there are no studies comparing MCSC with SCSC.

Conclusion: The rationale for an MCSC workforce is not clear. The findings of this systematic review are discussed in terms of the way in which treatments are conceptualised and delivered including adopting a patient-led approach to appointment scheduling and a patient-perspective attitude towards treatment provision and recovery.

Keywords: Stepped care; Psychological treatment; Workforce; Patient-led; Patient perspective

Abbreviations: MCSC: Multi Clinician Stepped Care; SCSC: Single Clinician Stepped Care; NICE: National Institute of Clinical Excellence; CBT: Cognitive Behaviour Therapy; RCT: Randomised Controlled Trial; LOCF: Last Observation Carried Forward; IAPT: Improving Access to Psychological Therapies; PWP: Psychological Wellbeing Practitioner; GP: General Practitioner; PHQ-9: Patient Health Questionnaire-9; RI: Reliable Improvement; CSC: Clinically Significant Change; PCT: Perceptual Control Theory; GEL: Good Enough Level

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Introduction

Improving access to effective and efficient psychological

treatments is an urgent international public health imperative. In developing countries, psychological disorders are major

contributors to the burden of disease and, even in developed countries; the contribution of these disorders to the burden of disease continues to rise [1]. It is widely recognised that psychological disorders are associated with high economic and social costs [2]. Gasper, for example, reports that the cost of psychological problems to society is estimated to be £105 billion per year and is expected to double in the next 20 years [3].

Clearly, psychological treatments will be a necessary component of any large-scale, coordinated effort to address the prevalence and impact of psychological problems. In terms of gaining benefit from treatment, Marshall et al. argue that attendance is one of the most important processes in psychological therapy required to achieve good outcomes [4].

Improving access to services by reducing waiting times, therefore, could be considered an essential component of treatment effectiveness. Waiting times for therapy, however, are an ongoing public health problem with Cooper claiming that the long waiting times for therapy in the United Kingdom (UK) are a political embarrassment [2]. Even with common psychological problems such as depression, although effective treatments exist, problems of accessibility contribute to making depression one of the most debilitating disorders in Western countries [5].

Literature Review

It was in the context of the increasing prevalence of psychological problems, as well as the rising demand for services, that the concept of a stepped care approach to treatment delivery was adopted. Internationally, many health systems are seeking to both reduce costs and improve quality [6] and stepped care approaches may be able to assist in this regard by the optimisation of resource allocation [7]. While the logic of stepped care may be clinically sound, its implementation with regard to psychological problems has been much less straightforward.

Stepped care

At its most basic, stepped care is the acknowledgement that different people benefit from different “intensities” of treatment. Not everyone needs the same level of support [8]. Even people who may appear to have the same kind of problem do not need the same amount of treatment. Some people resolve their problems using a relatively small number of sessions while other people require a much greater level of support in order to achieve the outcomes they desire.

Principles of stepped care: Sobell and Sobell are widely cited authors with regard to the principles of stepped care. In their early work, three fundamental principles of stepped care were articulated in terms of providing treatment: individualised; consistent with contemporary literature; and the least restrictive that is still likely to be effective [9]. It is more common now, however, for stepped care to be discussed in terms of two principles. The first fundamental principle of stepped care is that people should initially have access to the least restrictive intervention that has been demonstrated to be effective for their presenting problem. The second fundamental principle is that the process should be self-correcting in that progress is continually monitored and the data from the monitoring are used to inform

decisions about stepping up to more intensive treatments [6,10-12]. Marshall et al. refer to these principles as the principle of “Least Burden” and the principle of “Self-Correction” [4]. In many ways, it could be argued that these two principles should be routine aspects of sound clinical practice. Curiously, however, it appears that this is not the case. In general, it seems that people presenting for treatment are offered a full treatment protocol regardless of problem severity. National guidelines, in fact, endorse this approach. The NICE (National Institute of Clinical Excellence) Guidelines in the United Kingdom, for example, recommend that “For all people with depression having individual CBT, the duration of treatment should typically be in the range of 16 to 20 sessions over three to four months” [13]. This is a crucial point to which we will return later and discuss in greater detail. In terms of outcome monitoring, Richards reports a “reluctance of many mental health professionals to collect outcome measures routinely from patients” [6].

Perhaps, therefore, an important benefit of a stepped care approach has been to highlight clinical decision making and procedural flaws that have become standard practice. It appears to be the case generally, that clinicians do not titrate the intensity of treatment based on patient need and nor do they routinely collect outcome data. These are serious clinical problems that may significantly contribute to difficulties in accessing services as well as the increasing expense of services. These weaknesses are epitomised by relatively recent statements in the literature suggesting that treatment will be enhanced when it is individualised [14]. There is certainly no quarrel with this position but it is difficult to understand how a non-individualised approach to treating psychological problems could have ever become standard practice. Moreover, it is unclear as to whether stepped care is the only way or, indeed, even the most effective way of addressing the problems of adjusting treatment intensity to individual need and routinely monitoring outcomes. This lack of clarity becomes more apparent when the implementation of stepped care is considered.

Implementation of stepped care: Richards claims that there has been a significant degree of implementation diversity with the widespread introduction of a stepped care approach in the UK [6]. Considerable challenges occur in delivering psychological treatments according to a stepped care design in which the two fundamental stepped care principles inform service provision decisions. Furthermore, Firth et al. note from their systematic review that, in the studies they reviewed, many of the stepping decisions were not grounded in evidence [11]. Such clear differences were observed in interpretation and delivery that Firth et al. were left questioning what a stepped care system actually involves. In fact, considerable diversity in the number and duration of steps, the treatments that are offered, the professionals involved, and the criteria used for stepping patients up has been noted generally with stepped care services [15,16]. Although governing bodies endorse stepped care as a way “to promote effectiveness and efficiency by allocating resources in accordance with population need” [17], the implementation problems may ultimately be insurmountable barriers unless they are acknowledged and addressed. The implementation of stepped care has been so problematic that, despite the rhetoric

of individualised treatment, McQueen and Smith maintain that stepped care approaches actually deprive patients of professional expertise, individualised treatment, and choice [18]. In general there seem to be three key decisions to be made when implementing a stepped care approach: how many clinicians should be involved?; when should people be stepped up?; and who should conduct the initial assessment?

How many clinicians? The way in which a stepped care service will be staffed is perhaps one of the most important decisions that can be made in terms of establishing an effective and efficient service. Van Straten et al. maintain that determining which health professionals will contribute to the stepped care service is the first determination that needs to be made [5]. Surprisingly, this is a decision that appears to be rarely discussed explicitly. In broad terms, some services use more than one clinician to deliver the different steps of the service and other services use the same clinician at each of the different steps. These two different ways of staffing a stepped care service could be described as multi clinician stepped care (MCSC) and single clinician stepped care (SCSC). In MCSC, different clinicians with different training backgrounds are used at the different steps of stepped care, whereas with SCSC, the one clinician provides the different treatments available at the different steps. In MCSC, for example, a minimally trained therapist might provide guided self-help with a clinical psychologist providing a full treatment protocol of Cognitive Behaviour Therapy (CBT) if required. In SCSC, however, the same clinician works with the patient for both the guided self-help and the CBT treatment. While it has been demonstrated to be the case that paraprofessionals can be effective in delivering CBT [19], this does not necessarily mean that paraprofessionals should be the first therapists who patients encounter when they enter a stepped care service if issues such as continuity of care and assessment of patient problem complexity are considered.

Continuity of care has been identified as an important aspect of improving health systems generally [20] and a specific feature of stepped care approaches [21]. Some stepped care services explicitly identify one person who is responsible for continuity of care, monitoring of progress, and decisions about when to step up to the next treatment [5]. Van der Weele et al. explain the finding of a lack of a beneficial effect for stepped care over usual care in their study as being due to a breach in continuity of care [22].

It might be expected that there would be advantages and disadvantages to both MCSC and SCSC yet, in the literature, the balance in terms of the number of publications is heavily weighted towards MCSC. Van Straten et al. included 14 studies in their systematic review of stepped care services and, of these, 12 studies used more than one clinician [16]. Despite this imbalance, there is evidence of effective SCSC services. Brooks et al., for example, describe a stepped care service in Scotland in which the same clinicians provided guided self-help or CBT and Interpersonal Therapy. They report significant improvements on standardised questionnaires, high patient satisfaction, and a saving of more than 50% on their antidepressant drug budget [23]. Similarly, nurse care managers in a pain management stepped care service delivered all the steps (analgesic treatment, self-management strategies, and CBT) and obtained significant

reductions in pain-related disability, pain interference, and pain severity [24,25]. Finally, Nordgreen et al. describe a stepped care service comprising three steps (psychoeducation, internet guided CBT, face-to-face CBT) in which the same clinicians delivered all three steps [15].

While there is some evidence for the effectiveness of SCSC, the majority of stepped care services use MCSC. In fact, as will be explained in greater detail below, initiatives in both the UK and Australia have established entirely new workforces to deliver the initial steps of stepped care services. These developments have occurred despite there being no clear evidence as to the qualifications necessary to be able to deliver self-help treatments effectively [14]. Given the expense involved in creating new training programs, providing supervision, and recruiting and training a completely new workforce juxtaposed against the stepped care imperatives of efficiency and cost-effectiveness, it was of interest to assess the evidence for MCSC compared to SCSC. Even if the new workforce is considerably less expensive than existing workforce options, it is not immediately obvious how having multiple clinicians deliver different psychological treatments would be more effective and efficient than having one clinician delivering different psychological treatments as required.

When should people be stepped up? Although “stepping” is the hallmark of a stepped care system it is, somewhat ironically, also one of the most contentious aspects of the system. Even as stepped care approaches were first being considered for psychological services, how decisions should be made about whether or not a patient should be stepped up was described as a “key challenge” (p. 21) and a “pressing issue” (p. 23) [26]. It was recognised, even prior to implementation efforts, that there existed little guidance regarding these decisions, although regular outcome monitoring was already considered important [26].

Part of the difficulty in initial deliberations about how people should be stepped up may have resulted from a clash between population and individual perspectives [26]. Although government policy increasingly highlights the importance of patient choice and patient involvement in decision making, including shared decision making, operationalising patient choice within a stepped care approach is potentially problematic [26]. Bower et al. suggest that normative methods used to define treatment outcomes can be insensitive to individual patient characteristics [26]. Some services have attempted to combine population and individual perspectives by making a decision about stepping after assessing outcome data, discussing options with the patient, and consulting with a supervisor [27]. It is not clear, however, as to the way in which the options are discussed with the patient or the relative weighting given to each of the components of the decision making process. As mentioned earlier, Firth et al. claim that many of the stepping decisions in the studies they reviewed are not based on any evidence and they recommend further consideration of the patient’s role in stepping decisions [11]. In much earlier work, Breslin et al. make the point that even when outcome data indicate that patients have responded to treatment, the patients themselves might perceive a need for greater care and seek out that care elsewhere [28].

Uncertainty in decision making with regard to who should be stepped up may account for the low and variable rates of stepping that actually occur in practice. Richards reports that rates of stepping varied from 0% to 55% across 31 sites in the first year of operation of a stepped care service in the UK [6]. In another study, Richards et al. report that rates of stepping up to high intensity treatments were less than 10% in all four sites in their study [29]. Clark et al., found that stepping up to CBT rarely occurred in their study even when patients' outcome data indicated that they still required treatment [30]. These low rates of stepping up are concerning given that one study reports that services with higher step up rates also have higher rates of reliable recovery [31]. Perhaps of greatest concern, however, is what happens to patients during the stepping. Although the *raison d'être* of stepped care services is to improve access to services through the optimisation of resources, a high proportion of patients are lost to treatment during the stepping process. Such high dropout rates have been identified as an area that needs to be addressed [15]. Richards and Borglin found that, "at every point in the patient flow 27% of patients either don't turn up, don't come back, or drop out" (p. 58) [27].

Another factor that may contribute to the difficulties in establishing an efficient stepped care process is a lack of confidence in what the treatments should be at each step. It is common, for example, for guided self-help or internet delivered CBT to be offered as one of the initial steps in a stepped care service. Due to the high dropout rates observed with internet delivered treatments, however, some researchers argue that these treatments are best offered as additional or complementary treatment options rather than stand-alone treatments [32]. Furthermore, questions have been raised as to why more intensive therapist contact should be of benefit when minimal contact was not beneficial [33]. Particularly when the low-intensity treatment is based on the same principles as the high-intensity treatment, patients might experience the high-intensity treatment as simply more of what they had previously been introduced to [5]. Although stepped care presumes that a more expensive treatment of equal effectiveness should be made available if the least intensive and expensive treatment fails [34], it is not clear why the more expensive treatment should be successful.

Suggestions have also been made that a lack of benefit with the low-intensity treatment may discourage patients and compromise their motivation to engage in further, more intense treatment [5,11,35].

Who does the initial assessment? Given the difficulties surrounding the stepping procedure, the initial assessment and decision-making process that determines at which step a patient enters the stepped care service is particularly important. As with other aspects of stepped care systems, however, there is little guidance regarding who should conduct this assessment. A lack of clarity regarding who should conduct the initial assessment is problematic from both the perspective of the service, in terms of the most efficient use of resources, and from the perspective of the patient, in terms of their experience of the service.

As described earlier, one of the fundamental principles of stepped care is that patients are offered the least restrictive

treatment that is likely to be effective for their problem. This should not be interpreted as all patients being initially offered the least restrictive treatment of the service. Although even on this fundamental point there is disagreement which is, perhaps, one of the reasons for the implementation difficulties that are encountered. Firth et al. maintain that a pure stepped care approach involves starting all patients at the lowest step and then stepping up as required [11]. This attitude, however, seems inconsistent with the stepped care principle of Least Burden.

A stepped care service that optimises resources would assess the patient and make a decision regarding which of the available treatments is the least restrictive and is likely to be effective for the problem. It appears to have become standard practice, however, to provide the low-intensity treatment first. Van Straten et al. describe starting patients at the first step as the "default position" (p. 231) [16] and Richards and Borglin report that patients would only be offered a high-intensity treatment as the first step "on very rare occasions" (p. 53) after a patient had specifically requested it and after consultation with a supervisor [27].

So it seems that, commonly with MCSC services, the therapist at the first step, or sometimes a case manager or duty manager, conducts the initial assessment and makes decisions about the most appropriate step for any given individual to commence treatment. It is not clear, however, that this is the most appropriate therapist to be making these decisions. Clark et al. report that a Duty Manager made decisions about which step a patient would initially be offered but only about 6% of referrals were offered a high intensity treatment [30]. These decisions were made when the referral was first received and prior to the patient seeing a case manager. Richard and Borglin describe case managers undertaking assessments and offering patients telephone appointments even though face-to-face appointments were available [27]. In other services, initial assessments are usually conducted via telephone, they are structured and brief, and they are conducted by junior members of staff [36].

Haug et al., however, stress the importance of a thorough pre-treatment investigation to identify factors such as low social functioning and comorbid personality disorders that may influence the way in which a patient responds to treatment [37]. Furthermore, Richards and Suckling recommend that a risk assessment should be included at the first appointment which further compounds the complexity of the initial assessment [12]. Mander points out that the absence of a comprehensive assessment may result in an inappropriate treatment being offered, a failure to engage patients, and a failure to identify important risk-related information [38]. Importantly, Salloum et al. emphasise that the first step that is offered must provide active mechanisms such that patients are likely to improve [39]. In fact, the effectiveness of stepped care requires that the initial treatment allocation is titrated against the assessed clinical needs of the patients [6].

Given the importance of the initial assessment being thorough and having the capacity to accommodate complex considerations, there would appear to be a strong argument for these assessments to be conducted by more qualified and experienced clinicians

rather than less qualified and less experienced clinicians. Nevertheless, the situation in practice appears to be the reverse. Binnie reports that, in practice, inexperienced staff members who have insufficient training or psychological knowledge have the responsibility of assessing complex patients [36]. In fact, there seems to be a marked absence of sound evidence-based decision making for the three key decisions involved in implementing an effective and efficient stepped care service: how many clinicians should be involved?; when should people be stepped up?; and who should conduct the initial assessment?. Perhaps this lack of certainty regarding the three key decisions of a stepped care service explains why the current evidence for the effectiveness of stepped care is equivocal at best.

Evidence for stepped care: Despite the enthusiasm with which stepped care services are being endorsed and implemented, currently, there is only limited evidence to suggest that a stepped care approach to organising services should be the dominant model [16]. In fact, as early as 1997 it was suggested that before we steer treatment policies towards briefer interventions, we need a better understanding of the important mechanisms and effective ingredients of successful treatment [40]. Yet these mechanisms and ingredients have still not been articulated in a form that is clear, unambiguous, and to which most clinicians and researchers would agree.

Although some patients experience benefits in being stepped up to a higher intensity treatment, others experience no benefits [41]. One study investigating a relapse prevention programme for depression in older adults found that patients in the stepped care condition were twice as likely to relapse as patients in the care as usual condition [42]. Firth et al. report that there is currently insufficient evidence to make firm conclusions regarding the superiority of stepped care approaches [11]. Both the Van Straten and Firth systematic reviews were based on stepped care services for depression [11,16], so it could be argued that these results might not apply more generally. While this argument certainly needs to be considered, it would seem unlikely that the evidence for stepped care services for depression would be limited but there would be robust evidence for stepped care services for other disorders. Reviewing the literature in preparation for this systematic review did not identify any systematic reviews or meta-analyses providing this information. To support the conclusion that the findings from the systematic reviews and meta-analyses of stepped care for depression are applicable in a general sense, Richards advises that, although stepped care makes sense intuitively, “little specific evidence has been produced to demonstrate that it is equivalent in effectiveness to more intensive treatments, more efficient, or, at least, equally acceptable to patients” (p. 212) [6]. With regard to treatments for alcohol misuse, for example, some studies find no evidence for the efficacy of stepped care approaches [7,28] while other studies report more favourable results for stepped care [43]. Furthermore, stepped care did not produce beneficial effects with Hong Kong Chinese patients for both depression and anxiety [44].

The literature about stepped care services for psychological treatments is voluminous and expanding. Nevertheless,

when considering the evidence, at least three broad areas are discernible. The first area concerns methodological problems with the way stepped care research is conceptualised and conducted. The second area concerns the issue of cost-effectiveness, which is a main driver of stepped care approaches. The third area focuses on the extent to which stepped care services have satisfactorily addressed problems of access to treatment which is another main driver of these services.

Methodological problems in concept and conduct

A large number of randomised controlled trials (RCTs) have been conducted on stepped care services. These studies purport to compare stepped care with a comparison group. One might expect that in a straightforward comparison, a group of participants who complete the full stepped care program would be compared with a group of participants who complete the comparison treatment. A thorough examination of the papers that informed this systematic review, however, was unable to locate any studies with this design. Typically, the participants in the stepped care group stop their treatment once they have reached a pre-specified criterion. This often results in a large proportion of the stepped care group completing the study without receiving all the steps in the stepped care program. In one study 60% of participants in the stepped care group completed their treatment at the first step [14]. In another study comparing stepped care with direct face-to-face CBT, only 28 participants in the stepped care group received direct face-to-face CBT compared with 84 participants in the comparison group. In the stepped care group, 57 participants either completed treatment or were lost to treatment before being offered direct face-to-face CBT [15].

Essentially then, what is typically being compared within RCTs of stepped care, is one group of participants who are able to complete treatment whenever they reach a predetermined criterion, with another group of participants who are retained in treatment for a specified number of sessions. This is a crucial distinction, because there is a significant and enduring disconnect between the number of sessions treatments are designed to be and the number of sessions patients typically access in routine clinical settings [45,46]. Although numerous RCTs have demonstrated that various arbitrarily chosen numbers of sessions can be effective in helping to ameliorate psychological distress, these RCTs have *never* been a demonstration that a particular number of sessions is *necessary* for the amelioration of psychological distress. The change process in psychotherapy is nonlinear and unpredictable [46-48] which implies that therapies need to be delivered flexibly and responsively.

An attitude of flexible and responsive treatments is very consistent with the emphasis on individually tailored treatments in stepped care. Tolin, Diefenbach, and Gilliam, in fact, suggest that a flexible approach to overall treatment discontinuation could be another way of further reducing costs [49]. While financial considerations are certainly important, perhaps an even more important factor (which could also have financial implications) is the suggestion that it can be just as harmful to overtreat as to undertreat [12]. Perhaps, then, what existing stepped care RCTs demonstrate most clearly is that we have been overtreating many patients. Stepped care RCTs provide evidence that a substantial number of

patients benefit from far fewer sessions than those suggested in guidelines and protocols such as the NICE guidelines mentioned earlier. Identifying that stepped care studies provide evidence to justify a flexible approach to treatment discontinuation raises the very important question of whether or not stepped care services are the only way or even the most appropriate way of facilitating this flexibility. Consideration of an alternative approach to treatment flexibility will be returned to in the Discussion.

Apart from conceptual and methodological problems, numerous problems in the conduct of the stepped care RCTs can be identified. Van Straten et al. are dissatisfied with the extent to which “care as usual” groups are used as the comparison group and they recommend that high-intensity interventions should be the standard [16]. It is important to remember that this meta-analysis was for depression only. Some RCTs have been conducted comparing stepped care with high intensity treatment. For example Bischof et al. [43] compared stepped care to full care in a study evaluating treatments for alcohol-related disorders and Haug et al. [37] compared stepped care with face-to-face CBT for panic disorder and social anxiety disorders. Nevertheless, van Straten et al.'s. comments about the difficulty in drawing firm conclusions from studies using a “care as usual” comparator group are relevant whenever RCTs are being designed. Van Straten et al. also highlight a problem with the evidence for self-help studies, which is important given the key role self-help treatments play in the initial steps of a stepped care service. The problem is that the majority of self-help trials have been conducted with population samples rather than clinical samples. Other methodological difficulties include the approaches used with missing data.

Some studies, for example, used the Last Observation Carried Forward (LOCF) method [15,50]. Trial guidelines, however, advise that the LOCF procedure only produces unbiased estimates of the treatment effect under certain restrictive assumptions [51] and that in almost all cases there are better alternatives to LOCF [52]. Use of the LOCF is not justified in the stepped care studies within which it is used. Moreover equivalence and noninferiority are conclusions that have been drawn within the stepped care literature and yet the designs from which these conclusions are drawn are not equivalence or noninferiority designs. Equivalence and noninferiority designs have a number of features that distinguish them from conventional designs. Their null and alternative hypotheses are expressed differently, they require an a-priori equivalence margin to be expressed, and they require both intention to treat and per protocol analyses to be conducted [53,54]. Tummers, Knoop, and Bleijenbergh, for example, describe their study as a noninferiority study, however, the hypotheses are not expressed explicitly, an equivalence margin is not specified, and only an intention to treat analysis is conducted [54].

Cost-effectiveness is questionable: It may be the existing methodological difficulties that make definitive conclusions about the cost-effectiveness of stepped care problematic. Tolin et al., for example, report equivalent outcomes but significantly lower treatments costs for stepped care compared to standard clinical CBT for the treatment of obsessive compulsive disorder [49]. The point made earlier about flexible treatment discontinuation is relevant here. Reduced costs for stepped care programs in these studies are actually evidence of the cost-effectiveness of

flexible treatment discontinuation not the cost-effectiveness of stepped care services. Diefenbach and Tolin recognise this point when they suggest that the reason stepped care is less costly is because of approximately one third of patients who respond to lower intensity treatment [55]. Thus, the expense of current services could largely be considered an iatrogenic problem created by the recommendations of guidelines and the insistence of practitioners for all patients to receive the full protocol of treatment despite the fact that many patients do not need or want that much treatment.

Apart from the important methodological considerations which influence the way in which cost savings are interpreted, the findings from the stepped care literature are mixed with regard to cost-effectiveness. Bosmans et al. report that stepped care in their study was not cost-effectiveness compared to usual care [56]. Van der Weele et al. also found that stepped care was not cost-effective compared to usual care but argued that this may have been because of the low uptake of the stepped care program [22]. Bischof et al., on the other hand, maintain that a stepped care approach for individuals with at-risk drinking can be expected to increase cost-effectiveness [43]. In some of the earlier work, Bower and Gilbody warned that the demonstrated increased efficiency of some stepped care models may be illusory if significant cost-shifting occurs [57]. McCrone re-analysed data from the Improving Access to Psychological Therapies (IAPT) program in the UK and concluded that IAPT is probably not cost-effective [58]. Van Straten et al. report that final conclusions about the cost-effectiveness of stepped care cannot be made because the necessary studies have not yet been conducted [16]. Tolin et al. provide a slightly different perspective when they argue that starting with the lower-cost treatment option might not always be the most cost-effective option [49]. To illustrate their case they refer to a study in which a lower cost generic antidepressant medication was used first in a stepped care approach to pharmacotherapy for depression but the delay in effective treatment led to increased inpatient and emergency department use which resulted in higher overall costs [49]. The message delivered by Tolin et al., therefore, seems to be another important comment on the requirement of a thorough assessment and matching treatment to patient need rather than starting all patients at the first step as the default position.

Access is still a problem

Although stepped care approaches have been developed with the explicit intention of improving access to services, it is far from clear that this important goal has been achieved. It appears to be the case that stepped care services have had the effect of increasing referral to services but it is not apparent that there has been a greater uptake of services by patients. Cooper, for example, reports that 40% of the 5,000 referrals that were received in one year were either deemed to be unsuitable, declined therapy, or stopped attending after a single session [2]. High rates of attrition appear to be standard in stepped care approaches. Nordgreen et al. report attrition rates of 41.2% in the stepped care condition of their study compared to 27.3% in the direct face-to-face group [15]. Similarly, Richards and Borglin report an attrition rate of 47% of referrals who either did not attend for an assessment or

received an assessment only [27]. Richards reports that no more than 38% of patients completed treatment during a two-year period [6]. Similarly, across the three sites in the Richards et al. study, between 21% and 34% of patients referred to the service did not maintain contact with the service between referral and assessment [29].

Perhaps the clearest demonstration of the complexities involved in understanding the way in which access should be improved is provided by Clark et al. [30]. In their data, 4451 patients were referred to the programme. After referral, various factors such as, patients being judged unsuitable, or not contacting the service, or being unable to be contacted by the service, resulted in only 1654 patients (37.2%) receiving at least two sessions including an assessment session. Of these patients, only 44 (2.7%) received any sessions of face-to-face CBT from a specialist therapist (a high-intensity worker). It is difficult to understand the way in which access to psychological therapies has been improved when less than 1% (0.99%) of those people who are referred actually receive sessions of face-to-face CBT.

Specific stepped care programs: Given the lack of clarity regarding stepped care effectiveness and efficiency along with the serious implications of creating an entirely new workforce to implement a stepped care service, it seems important to briefly highlight the systems in the UK and Australia where these workforce decisions have already been made. IAPT is the initiative in the UK and, in Australia, the newer initiative is named New Access. These programmes are both MCSC services. It was the decision of the political systems in these countries to create new workforces to implement stepped care that provided the motivation for this systematic review.

Improving Access to Psychological Therapies (IAPT): IAPT has been controversial since its inception [59] with widespread public and academic criticism [60]. The Department of Health in England developed the IAPT initiative ostensibly based on the information provided in The Depression Report led by Lord Richard Layard [2,60], however, the form of IAPT is quite unlike what was recommended in The Depression Report [61]. According to the report, one in six people could be diagnosed with depression or anxiety but only one in four of the people who could be diagnosed are receiving treatment. The argument, from the outset, was clearly an economic one. The lack of available treatment *is a waste of people's lives. It is also costing a lot of money. For depression and anxiety make it difficult or impossible to work, and drive people onto Incapacity Benefits. We now have a million people on Incapacity Benefits because of mental illness [bold in the original] – more than the total number of unemployed people receiving unemployment benefits* (p. 1) [61].

The report estimated that the total loss of output due to depression and anxiety is approximately £12 billion a year. To address this problem, mental health reform was recommended with the central task being to implement the NICE guidelines such as those described earlier. A solution was proposed to achieve a more widespread implementation of the NICE guidelines that had three key elements: 10,000 more therapists; the therapists work in teams; the solution develops as a seven-year plan that is centrally funded and commissioned [61].

Furthermore, the report specified the types of therapists who should be included in the solution. The attitude was expressed that “Therapy is not like anti-depressants: It differs according to who provides it” (p. 8) [61]. The report advised that therapy can work well if it is provided by properly qualified people but is much less effective if provided by less qualified people. Therefore, the report recommends that teams should comprise senior therapists and junior therapists and, of the 10,000 new therapists, approximately 5,000 should be clinical psychologists with the remaining 5,000 therapists coming from existing nurses, social workers, occupational therapists, and counsellors [61]. It would appear then, that The Depression Report was recommending a service more aligned with an SCSC model than an MCSC model.

Based on these recommendations, IAPT was created with a budget of £173 million between 2008 and 2011 [62]. The stated aim of IAPT was the same as the central task in The Depression Report: to implement the NICE guidelines [63] yet their plan for implementation diverged markedly from the recommendations of the report. Rather than 10,000 more therapists, 3,600 new therapists were planned [2]. The main difference, however, is not so much in the number but in the type of therapist. A decision was made to create an entirely new workforce of “low-intensity” therapists (psychological wellbeing practitioners or PWWPs) despite the creation of this workforce being described as the “greatest challenge of the programme” [62]. The new workforce required a one-year training course involving one day a week of off-site training, a new national curriculum, and the creation of a new qualification. Moreover, the £173 million was used to pay for the training of both the low-intensity therapists as well as high-intensity therapists [62].

Despite the obvious departure from the recommendations in The Depression Report it is unclear what the justification was for creating a completely new workforce. It may be the new workforce element of IAPT that is the most controversial and has led to equivocal results. IAPT has been described as ill-designed and unsuitable as a model for treatment [2]. Perhaps the two most important results for IAPT are in its cost-effectiveness and the extent to which it has improved access to treatments recommended in the NICE guidelines. As mentioned earlier, McCrone reports that IAPT is probably not cost-effective [58]. Generally, recovery rates are consistent with desired targets [38] although rates varying from 7% to 63% are reported [64] and the recovery rates only include people who have had two or more sessions of treatment and do not include the very substantial number of people who do not engage. When the total population of patients referred to the IAPT programme is considered, the recovery rate is only 12% [1]. In a national IAPT audit, for example, 10,500 of 32,382 (32.4%) patients had no evidence of more than one contact with their IAPT site [38]. In another report covering the period April 2011 to June 2011, only 2% of people estimated to have depression or anxiety entered the IAPT programme [64]. Moreover, although the ethos of stepped care is purportedly concerned with individualising treatment, the rigidity of services and a lack of flexibility in managing individual needs and preferences have been identified as major barriers to attendance [4]. These difficulties have been evident from the early stages of IAPT. Clark et al. report in their evaluation

of the two demonstration IAPT sites that, of the 650 patients who still required treatment at the completion of their low-intensity programme, only 3.8% subsequently had high-intensity treatment [30].

It does not appear, therefore, that IAPT is achieving its stated aims in any sort of comprehensive, consistent, or conclusive manner. Although IAPT was designed to address unemployment rates among patients, for example, these rates remain unchanged [65]. Of most interest for this study, however, is the justification for the creation of a new workforce which was not part of the original recommendations and presented one of the greatest challenges to the programme. Interestingly, it is this aspect of IAPT which has been adopted in Australia.

New access: The New Access initiative in Australia was developed in 2013 and has adopted some, but not all, of the features of IAPT. New Access is based on a stepped care model in which contact with a General Practitioner (GP) is step 1, low-intensity CBT with a New Access “coach” is step 2, high-intensity CBT is step 3, and secondary mental health services is step 4 [66]. The model is designed to maximise benefits from available resources but only introduces step 2 of the service. Because of the different health system operating in Australia, for patients to access step 3, they must be referred back to their GP before being stepped up to a mental health care plan [66].

The New Access coaches are the newly created workforce equivalent of PWP in the UK [66]. As distinct from the UK, however, the term “coach” has been adopted and non-graduates are able to become coaches whereas in the UK all PWPs must be graduates [66]. Similar to the UK model, depression and anxiety scores are routinely obtained at every appointment.

The pilot study was funded with a budget of \$13.25 million and a recovery rate of almost 70% is reported [66]. While this recovery rate is impressive and higher than recovery rates in the UK, there are many questions that cannot be answered from the published information. Although a “very large reduction” in anxiety and depression scores was reported [66], only the t scores and the effect size are provided. Pre and post scores are not available. Without access to average questionnaire scores it is difficult to make sense of statements such as: “of the 948 patients who entered the program with moderate or severe depression scores, 69.8% had mild or better scores by discharge” (p. 491) [66]. The mild range for depression on the Patient Health Questionnaire – 9 (PHQ-9) is 10 to 14 and the moderate range is 15 to 19. A patient, therefore, could score 15 at the first appointment and 14 at the last appointment and have moved from the moderate to the mild range of depression. The IAPT programme, however, calculates reliable improvement (RI) and clinically significant change (CSC) statistics in order to assess their outcomes [27]. The RI and CSC statistics are exacting assessments of change so it would be of interest to know what these statistics are for the New Access pilot.

Furthermore, while numbers of patients at intake or who entered the programme are available, there is no information about the number of patients who were referred to the service. There are also no data regarding the number of sessions that patients attended. Given the high attrition rates reported throughout the

stepped care literature, it would be useful to know how many of those who were referred actually engaged in two or more sessions. It would also be valuable to understand how many patients were referred back to their GP for stepping up to a high-intensity treatment and, of those, how many subsequently entered high-intensity treatment. Given the lack of information about the programme’s success, it is not clear that the recommendation to scale the programme up nationally [66] is justified. Moreover, as with the IAPT programme, there appears to be no rationale for creating an entirely new workforce. While Cromarty et al. maintain that their results with coaches, many of whom are non-graduates, challenge traditional service provision models, that challenge can most confidently be made from RCTs comparing MCSC with SCSC services. Cromarty et al. do not provide this evidence and, thus, a systematic review is necessary to obtain the required evidence from the available RCTs.

Summary and research question

The core of stepped care is varying treatment intensity according to individual patient need and regularly and routinely monitoring outcomes. It might seem as though these fundamental principles would be standard and routine clinical practice yet despite the enthusiasm with which policy makers, researchers, and service managers appear to have embraced stepped care services for psychological treatments, the available evidence is not as positive. Implementation difficulties have persisted in terms of consistency of service provision, the maintenance of regular outcome monitoring, and the individualisation of treatment. It is not clear that stepped care services are unequivocally more effective and efficient than other services, and they do not always seem to improve access to services. Their cost-effectiveness is still in doubt and the attrition rates from these services is concerning. Many apparent RCTs of stepped care services are actually evaluations of programmes that facilitate the flexible discontinuation of services. Methodological problems are also apparent in stepped care RCTs in terms of their design and analysis. Perhaps the most important lesson from stepped care services so far is that we have been overtreating too many patients. It seems that a large proportion of people referred for treatment do not want or need a full treatment protocol. Services, however, appear to still be unclear as to the most appropriate way to accommodate this variability in treatment need. Clear answers to questions that are crucial to the effective and efficient implementation of stepped care services remain elusive. It is not apparent how patients should be stepped up to higher intensity treatments and who should best make that decision is not universally agreed. Perhaps most fundamentally, it is not clear how many clinicians are required. Is an MCSC service more effective and efficient than an SCSC service? This would seem to be a question that would provide essential information to politicians, policy and other key decision makers, as well as health service managers. Perhaps an answer to this question is one of the keys to solving some of the enduring problems of stepped care implementation. It is this question that has formed the research question for this systematic review: *“Is an MCSC workforce more effective and efficient than a SCSC workforce in providing psychological interventions in terms of patient outcomes, patient satisfaction, waiting times, and cost-effectiveness?”*

Method

Eligibility criteria

Eligible studies were original, peer-reviewed reports of randomised controlled trials that directly compared MCSC programs with SCSC programs. Only stepped care psychological treatments were considered, to the exclusion of interventions for treating physical conditions or alleviating social issues. In order to make meaningful comparisons between health systems, the review focused solely on countries defined by the World Bank as “high-income economies” [67]. Outcomes of interest included: Patient outcomes, in terms of whether or not patients improved more with an MCSC workforce than an SCSC workforce; patient satisfaction, in terms of whether or not patients preferred an MCSC workforce to an SCSC workforce; waiting times, in terms of whether or not waiting times were reduced more with an MCSC workforce than an SCSC workforce; and cost-effectiveness, in terms of whether an MCSC workforce is more cost-effective than an SCSC workforce.

Search strategy

The systematic review was conducted according to PRISMA guidelines [68]. We first undertook preliminary scoping searches of the Medline (Ovid) and CINAHL (EBSCOhost) databases to create a comprehensive set of indexing terms and textwords (i.e. author natural language terms) describing the concept of stepped care. RAD then developed the search strategy in consultation with TAC. This was drafted and tested in Ovid Medline and then accurately translated across a wide range of appropriate databases. These included PubMed, PsycINFO (Ovid), Psyc Articles (Ovid), CINAHL (EBSCOhost), Scopus, Web of Science Core Collection, Cochrane Library, and Informit (Health and Social Sciences subsets). We also searched a range of ProQuest databases and journal collections: Health & Medical Complete, ProQuest Sociology, Applied Social Sciences Index and Abstracts, International Bibliography of the Social Sciences, ProQuest Psychology Journals, ProQuest Social Science Journals, PAIS International, PILOTS, Social Services Abstracts, Sociological Abstracts, and Worldwide Political Science Abstracts.

The search was restricted to articles published since 1980; this date marking the decade in which stepped care psychological treatments first began to appear in the literature. Searches were limited to English language primarily because the largest MCSC workforce initiatives are in English speaking countries (UK and Australia). All searches were conducted on 16 April 2016.

Screening, study selection, and quality appraisal

One author [TAC] screened the entire set of citation titles and abstracts and categorised each citation as either relevant or irrelevant to the research question based on the eligibility criteria. The second author [RAD] screened 50% of the excluded citations to ensure eligibility criteria had been interpreted consistently. Full papers were obtained and assessed for all citations in the relevant group, as well as for citations where relevance could not be determined from the title and abstract alone. Eligible studies were to be assessed for quality using the Jahad Scale [69].

Results

The database searches yielded a total of 4459 citations. Once duplicates were removed, 1733 citations remained to be checked for relevance to the review question according to the eligibility criteria. As **Figure 1** indicates, we found no papers describing a comparison between MCSC and SCSC. Given the financial investment in establishing new workforces in both the UK and Australia, finding no studies comparing MCSC and SCSC was a startling result. It had been assumed that there would be strong evidence for the benefits of MCSC over SCSC as the rationale for establishing a new workforce. Surprisingly this is not the case. The implications of this situation are explored in the discussion.

Discussion

A systematic review was conducted to better understand the rationale for developing a new workforce for assisting in the delivery of a stepped care system of psychological treatments. For this review, studies comparing MCSC with SCSC were sought. Surprisingly, these studies are yet to be conducted. The systematic review located zero studies. Despite the substantial financial investment in creating a new workforce, it appears that there is no empirical evidence to suggest that an MCSC workforce is more effective and efficient than an SCSC workforce. Given that the stepped care system emphasises collecting data and making decisions based on the available current evidence, it is ironic that the MCSC system itself is not based on the best available current evidence.

While the principles of stepped care are sound, the difficulties with implementation suggest there is scope to consider different models of service delivery. The stepped care model is currently the most widespread model to be adopted but there is little compelling evidence to suggest that it should be the dominant or only model. Other models may be able to improve access to services beyond what the stepped care model has been able to achieve and they may be more efficient.

The framework within which models exist

Perhaps it is also necessary to consider the framework within which any particular model of service delivery is nested. The IAPT framework and the current approach to stepped care services are based on a medical model of psychological therapy [36]. Indeed, it is reported that the NICE guidelines have explicitly adopted a biomedical approach and that this approach, in combination with the IAPT system of service delivery, has seriously reduced patient choice [70]. What might be described as a blinkered reliance on the medical approach has led some to call for an overhaul of IAPT practices [36].

Perceived need

The importance of the framework within which services are developed and delivered was illustrated by research assessing the perceived need for psychological treatment. Meadows and Burgess asked people about their perceived need for psychological treatment and found that, while 20% of survey respondents met the criteria for a psychological disorder in a 12 month period, only 2% of survey respondents met the criteria for a psychological

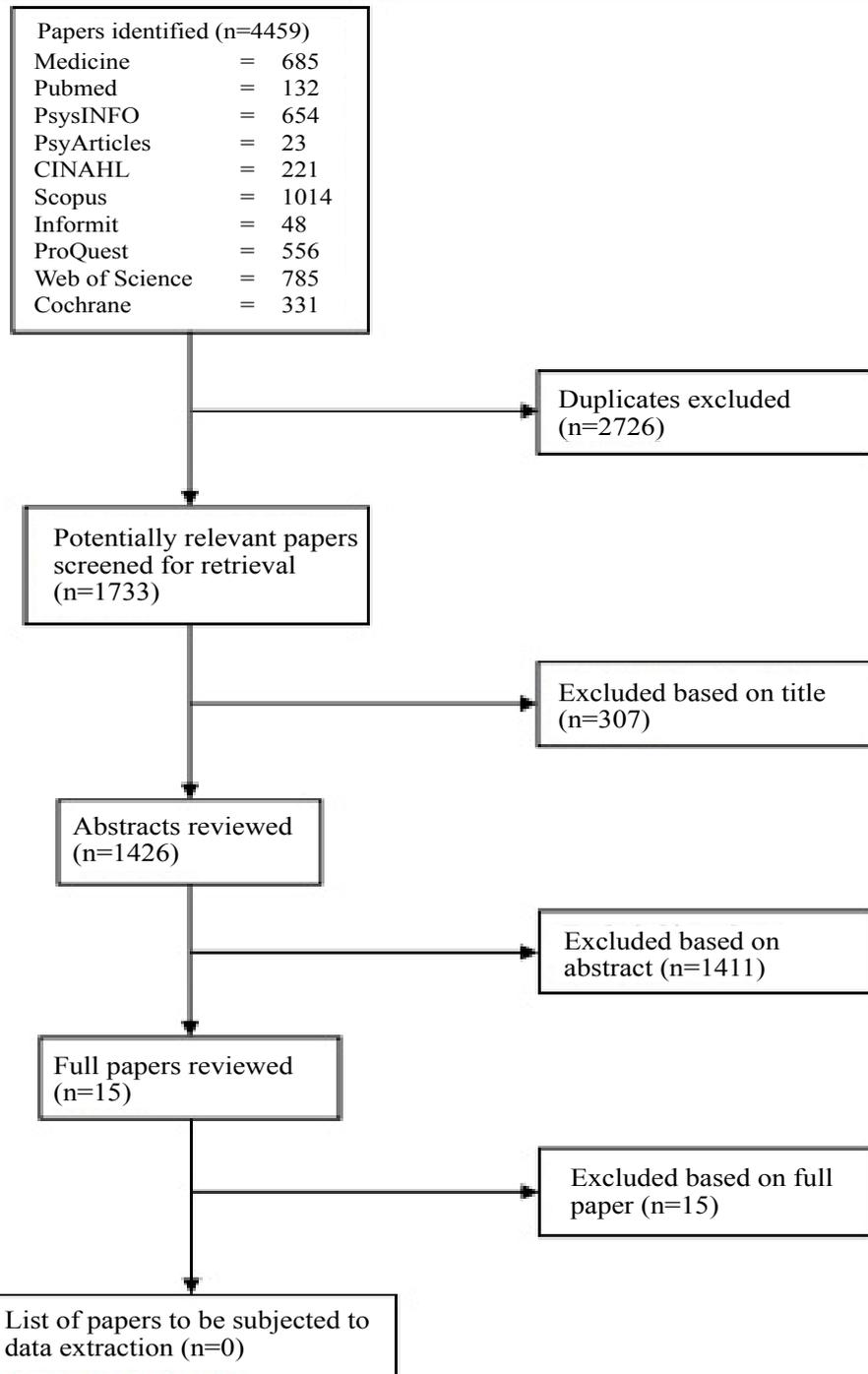


Figure 1 PRISMA flow diagram of screening and selection process.

disorder in a 12 month period, had a perceived need for treatment, and were not accessing services [71]. Furthermore, 11% of survey respondents met the criteria for a psychological disorder in a 12 month period, were not accessing services, and had no perceived need for treatment [71]. Whether or not decisions are made to allocate resources to the 20% of people who meet the diagnostic criteria for a mental health disorder or to the 2% of people who meet criteria, have a perceived need for treatment, and are not accessing services, may have to do with how closely aligned

decision makers are to the biomedical model. Similarly, how one responds to the 11% of people who have no perceived need for treatment but meet criteria for a mental health disorder may also depend on the particular model to which one subscribes. Health professionals who understand people to be autonomous, self-regulating agents may be comfortable with a person's right to determine how they address the difficulties they experience. Health professionals with other beliefs, however, may address the problem differently and may, for example, direct resources to engaging these people in treatment.

Moving beyond patient-centred care: Patient-perspective care

Although the patient-centred model is now generally endorsed, the acceptance of this model does not appear to have guaranteed that patient preferences are routinely sought and accommodated. Within the stepped care model, for example, decisions about when treatment ends appear to be often based on an arbitrarily defined number of treatment sessions and decisions about whether or not a patient should be stepped up to a higher intensity treatment are generally made on the basis of questionnaire scores rather than patient preference. Recently there has been a call to move beyond patient-centred care to adopt a patient-perspective approach to treatment design and delivery [72]. Within a patient-perspective framework it is the viewpoint of the patient that guides treatment decisions. Thus, decisions about which treatment, how much of it, and even whether treatment is offered, would all be based on the preferences of the patient.

Stratified care

By adopting different frameworks for understanding psychological distress and its resolution it may become easier to consider alternative systems of service delivery. For example, Bower et al. discuss stratified care rather than stepped care in which patients' preferences are used to determine which treatment option is initially offered [26]. While the implementation of stepped care has resulted in patients routinely being offered the lowest step first, stratified care would mean that some patients would be routinely offered a higher intensity treatment first [11]. Of course, the successful implementation of stratified care would still depend very much on the framework or model from which a patient's functioning was understood. In many ways the fundamental principles of stepped care seem to describe an approach that is akin to stratified care. The first principle of stepped care is that patients should receive the least restrictive intervention that is likely to be effective for their problem. Ideally, this would entail a careful consideration of the individualised nature of each patients' manifestation of psychological distress, however, when heuristics such as diagnostic categories are used to describe peoples' difficulties the individuality inherent in the experience of psychological distress can be lost.

Patient-led appointment scheduling

One system of service delivery that embodies the patient perspective ethos is the patient-led model of appointment scheduling [73]. Patient-led appointment scheduling was established and evaluated in routine clinical practice and has been demonstrated to be an effective and efficient means of optimising resource allocation in both the UK and Australia [46,74-76]. With patient-led appointment scheduling, systems are established so that patients, rather than clinicians, determine the frequency and number of treatment sessions. In one study, a seven-month waiting list was eliminated and the referral capacity increased from 52 to 93 with the only change being the way in which appointments were scheduled. Two experienced clinicians (one clinical psychologist and one CBT therapist) changed from a conventional model of appointment scheduling in which

clinicians recommended when patients should return for subsequent appointments, to a patient-led model of appointment scheduling in which patients scheduled appointments as and when they required them in the same way that they would make appointments to see a GP [76].

The very attractive feature of patient-led appointment scheduling from a financial perspective is that it requires no additional resources. It does not require a completely new workforce and it does not require that clinicians undergo additional training. The only requirement is that patients' preferences are sought and respected. It is patients who vary the intensity of the treatment they receive by booking more appointments if they require greater intensity or fewer appointments if they are seeking a lower intensity.

Patient-led appointment scheduling is based on Perceptual Control Theory (PCT) [77]; and is consistent with the responsive regulation model [78]. It contrasts with stepped care in that it is a self-regulated approach to varying treatment intensity. It is compatible with a flexible approach to treatment discontinuation [49] as well as the Good Enough Level (GEL) model of treatment attendance [79]. The patient-led approach also accommodates an understanding of psychological change as non-linear and unpredictable [47].

While the RCTs that have been used to establish the efficacy of various treatment protocols can show what is possible when patients are retained in therapy for various arbitrarily selected numbers of sessions, they have never demonstrated that a particular number of sessions is necessary for satisfactory treatment outcomes from the patient's perspective. Essentially, these RCTs have been a form of limit testing. Demonstrating what is possible, however, is not a demonstration of what is required or desired.

Consequently, we have guidelines such as the NICE guidelines for depression that recommend overtreating a substantial proportion of patients. While it is certainly the case that a small percentage of patients require extended programmes of treatment, the vast majority of patients do not. Although the NICE guidelines, for example, recommend 16 to 20 sessions of CBT for people experiencing depression, the first year evaluation of IAPT reported that the "number of treatment sessions were surprisingly low" (p. 23) [80] with only 1.38% of the 7,825 patients for whom data were available attending 16 or more treatment sessions and the median number of appointments being less than 10 [80].

The current situation with how treatment length is conceptualised is akin to teaching dolphins to jump through flaming hoops at Seaworld. It is certainly possible to accomplish this, but achieving this feat teaches us nothing about how dolphins behave outside the Seaworld environment and reveals very little about what dolphins want or need. Demonstrating that 16 sessions of CBT (or some other therapy), yields a greater reduction in symptom questionnaire scores than a comparison group is not a demonstration that 16 sessions of CBT (or some other therapy) are required for satisfactory treatment outcomes from the patient's perspective. Non-attendance of appointments by patients is a frequent and expensive phenomenon [38]. Appointment non-

attendance is also a demonstration every day in routine clinical practice that many patients do not agree with our treatment recommendations.

One of the reasons that the patient-led approach to appointment scheduling leads to increased service capacity and reduced waiting times is because of the very low rates of missed or cancelled appointments. The median missed appointments is generally zero across the evaluations that have been conducted in routine clinical practice [45]. Given that patient-led appointment scheduling requires no additional resourcing other than the services of a competent clinician who is able to vary service intensity according to patient need, it may be an important service reform alternative to consider in contrast to stepped care.

Rethinking roles and responsibilities

At the core of the patient-perspective approach to health care is recognition of the fact that “help” can only ever be defined by the helpee *not* the helper [72]. If what is being provided does not assist someone to make sense of their world and to live life as they would wish, then what is being provided is not helpful *from their perspective*. We simply do not know what the right number of sessions is for any particular patient or what intensity of treatment they will need. Fundamentally, these are not our questions to answer. The patient-perspective model advances the position that we need to establish systems so that patients have the freedom to choose the resources they need to make changes they desire. We need to move away from thinking of patients as “treatment drop-outs” or “non-responders” and we can even absolve ourselves of the responsibility of “engaging” patients in treatment. We can recognise patients as autonomous agents who have their own goals and preferences. Rather than continuing to pursue an answer to Paul’s (1967) question: “What treatment, by whom, is most effective for this individual with that specific problem, and under which set of circumstances?”, we can ask a new question. It is not our responsibility to make people better or to change them in anyway. The patient-perspective attitude maintains that it is our responsibility to make resources available so that patients can create the outcomes they desire in the time-frames that are appropriate for them. Our guiding question needs to be “What resources do people need to create the outcomes they seek so that they can live life as they wish?” For some people, these resources will be safe housing or stable employment. For others it will be two or three sessions of guided self-help CBT. For still others it will be an extended program of psychological treatment.

Workforce implications

The workforce implications of seeking to answer the patient-perspective question are that we need well-trained clinicians in primary care services where patients can readily access the services offered by these clinicians. Rather than having multiple workforces that include minimally trained therapists, patients have a right to access skilled clinicians who are able to respond flexibly and responsively according to patient need. These clinicians would have expertise in health promotion and prevention as well as providing treatments of varying

intensities. Rather than having a role as coach or guide with the responsibility of determining what and how much treatment is necessary, the patient-perspective primary care clinician’s role is to act as a resource which patients can use to make their lives be the way they want them to be. As a resource, the clinician’s responsibility is to be guided by the patient, not to be the guide. By basing treatment decisions and resource provision on what patients want rather than on what clinicians think they need, we will achieve more effective and efficient services and a far greater optimisation of resources through a more systematic approach to resource allocation.

Limitations

As with any study that defines boundaries, the boundaries necessarily limit the scope of the available data. We did not, for example, include studies that were published in languages other than English and we did not include studies from low and middle-income countries. We also only searched established databases and did not include the “grey” literature in our searching. We are confident that we have searched comprehensively and will have uncovered the majority of the relevant literature, there is always the possibility, however, that an important study has been missed.

Future Research

The current state of the stepped care literature suggests different avenues for valuable research. The research that was the main motivation for this systematic review has yet to be conducted so RCTs that compare MCSC services with SCSC services would be of value. The cost-effectiveness of stepped care services is still in question and this important area justifies further research attention. As mentioned in the introduction, there have been no studies comparing a complete program of stepped care (where all participants receive all the steps) with the full treatment protocol and research of this nature may help to further clarify the value of stepped care. Considering alternative models of service delivery provides the opportunity for still further research projects. Research could compare, for example, a stepped care service with a stratified care service or a patient-led service. By acknowledging and investigating the broad range of research opportunities that are available, there might be the opportunity to make substantial progress in improving access to psychological treatments for those people who need it, in the way that they want it.

Conclusion

It is clearly important to develop increasingly effective and efficient ways to assist in the amelioration of psychological distress. It is not clear, however, that stepped care services are the ideal way to pursue this and it is even less clear that an MCSC service should be prioritised ahead of an SCSC service. By considering more carefully the patient’s perspective regarding the way in which psychological treatments are designed and delivered it might be possible to make significant progress in the potency of these treatments and to arrest the growth of psychological problems as contributors to the global burden of disease.

Authors' Contributions

TAC conceived the concept for the paper, reviewed the titles,

abstracts, and papers, and developed the first draft of the manuscript. RAD constructed the search strategy, conducted the searches, and contributed to the final version of the manuscript.

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