

## DISCUSSION PAPER

# Managing chronic fatigue syndrome in UK primary care: challenges and opportunities

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*Received 3 May 2006, Accepted 10 May 2006*

Calls for the treatment of chronic fatigue syndrome (CFS) in primary care have been based largely on considerations of the availability and accessibility of resources rather than with reference to a firm evidence base. Treatments such as cognitive-behavioural therapy and graded exercise therapy, which have proven effective for CFS in secondary and specialist care settings, have not been adequately tested in primary care. There are several factors that may affect the generalizability of such treatments. Patients seen in primary care may differ from those seen in secondary care, in terms of both illness beliefs and social characteristics, and these factors need to be taken into account when developing and adapting treatments for primary care. While some primary care physicians experience difficulties in the diagnosis of CFS, we argue that early and authoritative diagnosis and the provision of a tangible explanation for patients' symptoms are likely to be beneficial. Because of the scarcity of qualified specialist therapists, we need to train primary care practitioners to deliver treatments, and we need more research into the feasibility and effectiveness of doing this. Finally, the primary care setting offers opportunities for the guided development of patient self-help approaches.

**Keywords:** Chronic fatigue syndrome, Medically unexplained symptoms, Primary care, Treatment

## INTRODUCTION

In 2002, an independent working party commissioned by the UK Department of Health to consider how the health service should best provide for patients with chronic fatigue syndrome (CFS; also known as myalgic encephalomyelitis, or ME)<sup>1</sup> recommended that CFS should be managed wherever possible in the community, by general practitioners (GPs) supported by local multi-disciplinary teams. In the absence of a firm evidence base for treatment of CFS in

primary care, this recommendation was made largely on the basis of considerations such as the scarcity of resources in secondary and tertiary care and problems with patient access to specialist care settings. The purpose of this paper is to review current knowledge about the treatment of adults with chronic fatigue and CFS in primary care and to consider the particular challenges that arise when treating patients with this complex condition in the primary care setting. In order to provide some background information for the general reader, the paper starts with a brief introduction to CFS, its relation to chronic fatigue and other medically unexplained conditions, and its presentation in primary care.

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## CHRONIC FATIGUE AND CHRONIC FATIGUE SYNDROME

CFS is a condition in which sufferers experience severe and long-lasting fatigue that substantially impairs their functioning. While fatigue is a common symptom,<sup>2,3</sup> associated with many medical and psychiatric conditions, in patients with CFS there is no obvious medical or psychiatric cause for the fatigue; the diagnosis is made after other possible causes for fatigue have been excluded. Over the past 25 years, several different diagnostic criteria have been developed to aid the diagnosis of CFS, and to define the patient population for research purposes. The two most widely used sets of criteria are those of the Centers for Disease Control (CDC) in the USA,<sup>4</sup> which require the concurrent presence of four from a list of eight additional symptoms, and the UK criteria,<sup>5</sup> which require that fatigue is the principal symptom and that it affects both physical and mental functioning. In practice, patients with CFS usually experience multiple symptoms in addition to fatigue,<sup>6</sup> among them muscle and joint pain, sleep disturbance, mood disturbance, and problems with concentration or memory. Patients with chronic fatigue in general, and those with CFS, have high rates of co-morbid psychiatric disorders, particularly depression and anxiety disorders.<sup>7-9</sup> CFS is reported to have a poor prognosis,<sup>10,11</sup> and severely impairs quality of life.<sup>12</sup> It is also costly in economic terms, as patients with chronic fatigue and CFS are high users of healthcare services, and more likely than similar non-fatigued patients to be out of work.<sup>13-15</sup>

The aetiology of CFS has been and continues to be widely debated, with various potential aetiological factors having been investigated over the years,<sup>16</sup> and the condition remains particularly controversial.<sup>17</sup> While some patients recall a viral infection at the start of their illness, and while some types of infection are known to predispose towards the development of fatigue syndromes,<sup>18,19</sup> there is no convincing evidence

of persistent infection, or indeed of marked immune dysfunction.<sup>20</sup> One fairly consistent finding is that patients with CFS suffer from mild hypocortisolism,<sup>21-23</sup> but it is difficult to tell whether alterations in the functioning of the hypothalamus-pituitary-adrenal axis can be considered the cause of CFS or are a consequence of the illness. Many commentators today subscribe to the view that CFS is multifactorial in origin, and distinguish between factors that predispose, precipitate and perpetuate the condition.<sup>16</sup>

There have been several attempts to estimate the prevalence of CFS in the community, primary care and secondary care in a number of countries.<sup>24</sup> The use of different criteria to detect cases has led to widely differing estimates. For example, in one study, estimates of the prevalence of CFS in UK primary care ranged from 0.1% to 2.6%, depending on the criteria applied and whether or not psychological disorders were excluded.<sup>8</sup> The UK population prevalence is often cited as 0.2-0.4%.<sup>1</sup> CFS is more commonly seen in women than in men,<sup>24</sup> and there is a popular view that it is a condition that affects the upper and middle classes. Community surveys, however, show that fatigue is more common among members of the lower socio-economic classes,<sup>25,26</sup> and a recent population-based study of CFS in the USA suggested that CFS is more common in people with lower levels of education and lower occupational status.<sup>27</sup>

A substantial proportion of patients with CFS (up to 70% in some studies) fulfil diagnostic criteria for other medically unexplained syndromes such as fibromyalgia, multiple chemical sensitivity, unexplained headache and irritable bowel syndrome.<sup>28</sup> The observation that various medically unexplained syndromes share many features in common, in terms of symptomatology, epidemiological features, associated disability and high levels of healthcare use,<sup>28,29</sup> has led to a proposal that there is a general functional somatic syndrome.<sup>29</sup> There has been a lively debate in the literature as to the

relative merits of approaches emphasizing the similarities or the differences between different syndromes as currently defined.<sup>30</sup> For the purposes of the present discussion paper, we take the view that useful information may be obtained from studies of the treatment of medically unexplained symptoms and syndromes in primary care. However, specific problems may be encountered when treating CFS, some of which derive from the contested nature of the condition.<sup>17</sup>

We know that there is a continuum of fatigue in the community, and that fatigue is associated with distress.<sup>3,31</sup> Some commentators consider that CFS can be understood as the extreme end of the continuum of fatigue, with somewhat arbitrary boundaries drawn between different fatigue states.<sup>32</sup> Medically unexplained fatigue of sufficient duration and severity to fulfil diagnostic criteria for CFS is less common than medically unexplained fatigue more broadly defined.<sup>8</sup> In a recent treatment trial study in UK primary care, 69% of patients presenting to their GPs with a complaint of unexplained fatigue, while significantly impaired, did not fulfil CDC criteria for CFS.<sup>33</sup> Those who did fulfil CFS criteria had not been fatigued for longer than chronically fatigued patients, but were more functionally impaired, were more depressed and anxious, and were more likely to have been referred for psychiatric assessment in the past. Patients with chronic fatigue generally have a better prognosis and respond better to treatment than those who fulfil diagnostic criteria for CFS.<sup>11,34</sup> In an international study of the 1-year outcome of unexplained fatigue syndromes in primary care, between two-thirds and four-fifths of patients recovered, depending on how fatigue was defined.<sup>35</sup> On the other hand, a review of 14 studies of the course of CFS in mixed settings reported a median full recovery rate of 5%, although a greater proportion of patients showed improvements in symptoms.<sup>10</sup>

There is some evidence that the population of CFS patients who are referred on to specialist care differs from that seen in

primary care. A small study comparing the characteristics of CFS patients in primary and tertiary care found that cases seen in primary care were much less likely to belong to social class 1 than hospital cases (3% *v.* 36%), had more psychological problems, had fewer somatic symptoms, and were more likely to attribute their illness to psychological or psychosocial problems. Women were over-represented in both samples (82% in primary care *v.* 68% in this hospital sample).<sup>36</sup> There are indications that many chronically and severely fatigued patients in primary care would fulfil criteria for CFS but have not sought or been given such a diagnosis,<sup>3,8</sup> whereas the majority (94%) of the patients seen in the hospital setting in the study described above said that they had a diagnosis of CFS, ME or post-viral fatigue syndrome.<sup>36</sup> We shall return to the issue of the role of diagnosis of CFS below.

## MANAGEMENT OF PATIENTS WITH CHRONIC FATIGUE SYNDROME

Several different approaches to treatment of CFS have been tried clinically, reflecting the diversity of views about the possible aetiology of CFS and factors contributing to the chronicity of the condition. Some of these treatments have been tested in randomized controlled trials. Two systematic reviews of such trials classified the treatment approaches into: behavioural; treatments aimed at enhancing immune responses; pharmacological; antiviral; supplements; and complementary treatments such as homeopathy.<sup>37,38</sup> Behavioural treatments include cognitive-behavioural therapy (CBT), graded exercise therapy (GET), and pragmatic rehabilitation (PR), while pharmacological treatments include antidepressant therapy and corticosteroid treatments.

A review of the effectiveness of each of these treatments is beyond the scope of this paper. Because CFS is a condition in which

sufferers experience a variety of symptoms alongside the fatigue, and in which considerable functional impairment may be seen in various aspects of life (e.g. work, social, domestic, leisure, education), many different outcomes have been evaluated in treatment studies. It is therefore difficult to compare and synthesize studies and to draw firm conclusions as to which are the most effective treatments. However, two systematic reviews of treatment trials for CFS concluded that, to date, the treatments for which there is the most consistent evidence of effectiveness are CBT and GET.<sup>37,38</sup> This conclusion is supported by systematic reviews focusing on these treatments separately.<sup>39,40</sup> On the other hand, antidepressant therapy, a treatment that is likely to be tried for patients in primary care, is generally not found to be beneficial, and findings with respect to various dietary supplements are predominantly negative.<sup>37,41</sup>

The treatments that have been shown to be most effective in secondary care treatment trials, CBT,<sup>42–44</sup> GET<sup>45–47</sup> and pragmatic rehabilitation (PR),<sup>48</sup> have some features in common. All three treatments are based on a model of CFS that recognizes a role for physiological deconditioning in the experience of symptoms, and all three include a programme of gradually increasing activity levels. CBT is usually delivered by trained cognitive-behavioural therapists, and GET by physiotherapists or exercise physiologists. PR, on the other hand, may be deliverable by non-specialist therapists, such as nurse practitioners, given suitable training. Of the three treatments, CBT is most likely to start with an individualized formulation, and gives most emphasis to patients' beliefs about their CFS. It has been shown that for many patients, successful treatment with CBT involves changes in beliefs not so much about the initial cause of the illness as about the meaning of ongoing symptoms, so that patients who respond well to treatment no longer interpret symptom fluctuations as evidence of damage to their bodies, and no longer believe that activity is harmful to

them.<sup>50</sup> A particular feature of PR is the explicit and early provision by the therapist to the patient of a detailed explanation of symptoms, based on a physiological dysregulation model. There then flows a rationale for treatment that includes gradual increases in activity, regularization of sleep patterns, and appropriate rest and relaxation.<sup>48,50</sup> GET also provides patients with a rationale for their symptoms, and treatment focuses on a graded activity programme tailored to the patient's starting fitness levels. All three treatments are thought to produce changes in behaviours, cognitions and physiology, but differ in the extent to which these components are emphasized in the treatment. A recent trial of GET suggested that one of the mechanisms for change was the fact that during exercise therapy patients learned to focus less on their symptoms.<sup>47</sup>

Most of the treatment trials to date have been carried out on populations of patients drawn from specialist care settings. There are several reasons why findings from randomized controlled treatment trials carried out in specialist settings may not generalize to day-to-day management of CFS in primary care. First, treatment trials are usually set up to test a treatment in a carefully defined group of patients under controlled conditions, thus limiting their generalizability.<sup>51</sup> Second, over and above the issue of selection of patients for inclusion in treatment trials, as we noted above, there is some evidence that the patients seen in primary and secondary or tertiary care may differ — in particular, those seen in primary care may be less socially advantaged and may hold different illness beliefs from those seen in hospital settings. Third, the healthcare professionals treating patients in primary and secondary care are likely to have different levels of training and expertise in therapeutic interventions, and also differing levels of specialist knowledge about fatigue and CFS. Some treatments that can feasibly be delivered in secondary care may not therefore be practicable in primary care. A review

of psychological and behavioural interventions for CFS, irritable bowel syndrome and chronic back pain concluded that, in general, these treatments have been shown to be more effective when delivered in secondary care than in primary care, but recognized that there are few high-quality data from the primary care setting on which to base this conclusion.<sup>51</sup>

To date, compared with the literature on treating CFS in secondary care, there have been few reports of the treatment of CFS, or indeed other medically unexplained conditions, in primary care.<sup>52</sup> There are few published data on how GPs usually treat CFS patients, although we do know that service use is high, and even higher in patients with CFS than in patients with chronic fatigue who do not fulfil CFS criteria.<sup>13</sup> While information about the usual treatment of CFS in primary care is lacking, we do have some information about how fatigue more generally is dealt with. One Dutch primary care study reported that family practitioners' main interventions with patients with a diagnosis of 'tiredness' were to test, to perform physical examinations and to advise, with few referrals on to specialist services occurring.<sup>53</sup> The fourth most common intervention was prescription of medication, although the authors of this study do not say which types of medication were prescribed. Similarly, a study primarily designed to identify how patients with medically unexplained symptoms presented their problems to GPs found that in 34 of 36 cases, somatic interventions occurred, including the prescription of drugs, investigation and referral.<sup>54</sup>

If we know little about how chronic fatigue is usually treated in primary care, we know even less about treatments given for CFS. We have little reliable information about how often CFS patients are typically seen, which drugs they are prescribed, and how and when decisions are made to refer. Similarly, there are a few reports of treatment trials for CFS patients in primary care. However, a small number of studies treating patients

with chronic fatigue have included some patients who fulfilled (or probably fulfilled) CFS criteria, and these studies provide us with some information about treatments that may or may not be successful for CFS patients in primary care.

A UK primary care study comparing six sessions of CBT with six sessions of non-directive, client-centred counselling for patients with chronic fatigue of at least 3 months in duration found both treatments to be equally effective in reducing fatigue.<sup>55</sup> The interventions were delivered in the GP practices by qualified CBT therapists and counsellors. A subsequent economic evaluation showed no cost-effectiveness advantage for either form of therapy.<sup>56</sup> The study did not have a usual care control arm, and so was unable to determine whether these treatments were more effective than usual care, or to evaluate the non-specific effect of interaction with a supportive therapist. Twenty-eight per cent of the patients in this study fulfilled criteria for CFS, but there was no significant difference in treatment effectiveness between the chronic fatigue and CFS patients. A subsequent analysis suggested that a range of psychosocial factors (including poor social adjustment at baseline, and the beliefs that the illness had a physical cause and would last a long time) predicted poor outcome in these patients.<sup>57</sup> Additionally, patients who said that they had never seen their GP for an emotional reason did less well, possibly because they were less accepting of psychologically based treatments.<sup>57</sup>

A second study by the same group compared CBT with GET delivered by National Health Service physiotherapists for patients with chronic fatigue in UK primary care.<sup>34</sup> Again, improvements in fatigue scores were seen in both groups, with no significant difference in improvement between the two treatments. CBT was, however, more effective than GET in reducing anxiety. In this trial, patients with CFS, who formed 27% of the sample, were less likely to have recovered at the end of the treatment period than were

patients with chronic fatigue only. Additionally, more functional impairment at baseline and a belief that the consequences of the illness were severe were associated with poorer outcomes at 8-month follow up.<sup>33</sup>

The absence of a usual treatment control group in both of the above studies makes it difficult to draw firm conclusions about the effectiveness of these treatments for chronic fatigue, and it is still uncertain how the findings would extrapolate to CFS. Rates of drop-out from therapy were greater than those seen in some secondary care trials,<sup>43–45</sup> with about one-third of patients dropping out of CBT and counselling, and 40% dropping out of GET. Reasons for drop-out may have been different from those commonly encountered in secondary care. In the CBT *v.* GET study, 66% of patients were working full-time or part-time, a figure higher than is usually seen in secondary care studies,<sup>43</sup> and some patients cited being unable to spare the time for treatment as a reason for withdrawing. Both of the above studies employed specialist therapists to deliver treatments to primary care patients. Such therapists may not routinely be available to most primary care patients.

While both of the UK primary care treatment trials described above employed specialist therapists to treat patients, a recent study from Holland reported on the efficacy of five to seven sessions of CBT delivered by the patients' own GPs at their practices.<sup>58</sup> The participants in this trial were employees on sick leave with unexplained, severe fatigue 4 months or more in duration, and with no previous psychiatric history. At baseline, 44% of the patients recruited to the trial fulfilled diagnostic criteria for CFS, and were designated CFS-like cases, although only one patient reported that she believed herself to be suffering from CFS. The GPs received 10 h of training in CBT techniques, plus ongoing supervision by experienced cognitive-behavioural therapists, and the treatment was manualized. CBT was compared with usual treatment, but patients in this study were randomized to treatment

before consent was sought,<sup>59</sup> and were unaware of the existence of the other treatment group. In an intention-to-treat analysis, there were no significant differences between the CBT and control group on any of the outcomes measured, including fatigue, return to work and clinical recovery; a subsequent per-protocol analysis also failed to show a significant effect of treatment. Severity of impairment at baseline did not predict response to treatment. However, an analysis of predictors of outcome at 12 months showed different predictors for two forms of recovery, namely fatigue caseness and work resumption.<sup>60</sup> Furthermore, different factors predicted the two types of recovery in CFS-like cases (44%) and non-CFS cases. Two findings of note were that CFS-like caseness at baseline was associated with non-recovery at follow-up, and that the likelihood of returning to work decreased markedly once the patient had been on sick leave for 4 months or more. A qualitative study, carried out in an attempt to determine the reasons why CBT treatment delivered by GPs was ineffective, suggested that rather than the treatment being poorly implemented, the intervention itself may have been inadequate.

To summarize, at present we have some evidence that patients with CFS seen in hospital or other specialist settings can be successfully treated with therapies such as CBT, GET and PR, but the evidence that such treatments can be successfully transferred to the primary care setting is lacking. A recent review noted that we need more trials of treatments for conditions such as CFS carried out in primary care, and that these trials should be pragmatic trials, with unselected samples of patients, a range of outcomes measured and long-term follow-up.<sup>51</sup> More research is also needed into who delivers therapies, and whether conditions such as CFS can be successfully treated by non-specialist practitioners. We are at present conducting just such a trial of nurse-led PR treatment for patients with CFS in primary care.<sup>61</sup>

While we await the results of this study, however, there are several issues that may have a bearing on the success of treatment for CFS in primary care, which are considered in the remainder of this paper. These issues centre on the provision of a diagnosis and explanatory model to patients with CFS, the characteristics of CFS patients in primary care, and the particular opportunities that exist for developing nurse- and patient-led treatments.

## CHALLENGES AND OPPORTUNITIES

Currently, treatment for CFS patients in the UK takes place in a number of settings. There are a small number of tertiary care clinics specializing in CFS and similar conditions, which may be accessed by patients who can get referred to them and are able to travel to them. Other patients are seen in clinics in secondary care where there are physicians with an interest in the illness (these are typically immunology, rheumatology and neurology clinics). Alternatively, patients may be treated in primary care, and may be able to access the services of recently constituted multidisciplinary teams that have been set up across the country. Clearly, healthcare professionals working in tertiary care settings will have particular expertise in the diagnosis and management of CFS, and secondary care physicians may also have considerably more experience of dealing with CFS than do primary care physicians. GPs, on the other hand, may be less certain about their ability to diagnose and treat CFS.

Surveys and qualitative studies of GPs' beliefs about and management of CFS show that, as with other patients with medically unexplained symptoms,<sup>62</sup> GPs find patients with CFS difficult and disproportionately time-consuming to manage.<sup>63</sup> While previous studies suggest that the majority of GPs will make a diagnosis of CFS,<sup>64</sup> many GPs are not happy about doing so, and doubt whether diagnosis will be helpful.<sup>65</sup> In a

recent UK primary care study, 48% of GPs lacked confidence in making a diagnosis, and 41% lacked confidence in providing treatment.<sup>66</sup> Furthermore, there is evidence that some GPs have negative attitudes towards CFS patients in general.<sup>67</sup>

The reluctance of some GPs to make a diagnosis of CFS appears to be influenced by the scientific uncertainties surrounding the condition. Some GPs do not want to diagnose a condition that they do not understand, and where they feel that the diagnosis does not lead into an obvious treatment. Another issue for some GPs is that they do not wish to provide a label that might then become a self-fulfilling prophecy, by over-pathologizing what they see as 'normal' symptoms.<sup>65</sup> On the other hand, patients with CFS suffer from not having a diagnosis or a coherent explanation for their problems, with 90% of patients in one study saying that receiving a diagnosis was the single most helpful event in the course of the illness.<sup>68</sup> The difficulties that patients with medically unexplained symptoms in general have when consulting their doctor are well documented, with many feeling that they are suffering without recognition, and some left fearing that there is an underlying disease that is as yet unidentified.<sup>69-71</sup> Aronowitz<sup>69</sup> writes how such patients have 'lost their symptom-based and clinically based diagnosis and become "medical orphans."' Such patients may feel marginalized from medicine and report feeling that the doctor cannot help them — even, at times, expressing a degree of sympathy for the doctor.

The importance of providing an adequate explanation for patients with medically unexplained symptoms has been emphasized in a number of recent studies. Patients are not satisfied with explanations that deny the reality of their symptoms, or that merely collude with their characterization of the problem.<sup>72</sup> Patients provided with such explanations may disengage from primary care, and the role of the GP may simply become that of legitimizing absence from work or medical incapacity, or alternatively,

the GP may be left to manage what has been termed 'chronic intractability', with increasingly negative consequences for the patient and the GP.<sup>73,74</sup> However, it is possible for doctors to provide acceptable explanations for patients with CFS and similar conditions. Explanations that provide tangible mechanisms for symptoms, that are linked to patients' concerns and that imply a management strategy are accepted by patients. Such explanations often link psychological and physiological factors.<sup>75</sup> If GPs can provide a timely and authoritative diagnosis for patients with CFS, and can accompany this with a tangible explanation for the patient's symptoms, some of the problems of conflict between patients and doctors, which have been described on several occasions,<sup>17,76</sup> may be avoided.

Those treatments which have proved effective for CFS in secondary and tertiary care settings may need to be adapted somewhat for provision in primary care. First, we have noted that patients in primary care are more likely to be working than those seen in hospital or clinic settings, and this may affect the timing and delivery of treatment. In general, the maintenance of work or return to work is regarded as a desirable outcome and an indicator of better functioning,<sup>10</sup> but patients may need additional help and guidance to incorporate work commitments into a rehabilitative programme. There are some indications that patients seen in primary care are less likely to come from social classes I and II,<sup>24</sup> and they may have a higher incidence of social problems. In some cases, therapy for CFS may need to be adapted to accommodate social issues such as problems with parenting and caring roles, poor living conditions or the experience of harassment or bullying at work. On the other hand, patients in primary care may be more ready to consider the role of psychosocial factors in their illness<sup>36</sup> and may therefore be more amenable to holistic approaches to treatment, which take into account psychosocial as well as physiological aspects of the illness. The need for closer working partnerships between primary care health and social

services has been recognized, for example, in the provision of services to older people.<sup>77</sup> Increasingly, members of the primary care team may have greater access to and familiarity with other services (such as social services) than would be the case in secondary care, and may be better placed to help patients to seek and receive appropriate help.

Recent studies have shown that medical work in primary care has been transformed by a more complex division of labour that seeks to reduce the burden of routine and highly determinate work on doctors by sharing it or delegating it to other healthcare professionals, particularly nurse practitioners.<sup>78,79</sup> There are indications from two recent treatment trials, one in the UK and the other in the USA, that nurses can be trained to successfully treat patients with medically unexplained symptoms,<sup>80,81</sup> and our ongoing treatment trial will provide information about the effectiveness of this approach for CFS.<sup>61</sup> Other initiatives that may complement an integrated nurse practitioner approach include the policy imperative of 'self-care',<sup>82,83</sup> which encourages patients to take control of the management of their chronic health problems and empowers them in their interactions with healthcare professionals. CFS is a condition that is by definition chronic and that needs to be managed over the long term — indeed, one treatment trial of CBT in secondary care suggested that improvements continue to take place after treatment has ended.<sup>43</sup> While it is recognized that patients with this complex condition will need expert input and guidance at the start of treatment, we believe that a goal of treatment should be to provide the patient with the information and tools necessary to continue to manage their own rehabilitation after formal therapy has ended. One possibility would be the setting up of self-help groups, with ongoing input from healthcare and other professionals, for patients who have improved with treatment and who would appreciate the support of others in maintaining these improvements.

We conclude with a call for more research into the treatment of CFS in primary care — into the adaptation of treatments that have been shown to be effective in secondary care, and particularly into the feasibility of training non-specialist personnel to deliver these treatments. There will be challenges to be overcome if the goal of treating CFS in primary care is to be successfully achieved, but with these challenges come opportunities for primary care to play an important role in the management of this group of patients.

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