Understanding barriers to patient access of primary care mental health care services in England

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Abstract

Common mental health problems affect individuals, communities, societies, and economies worldwide. There are psychological treatments which have been shown to effectively support people to reduce mental health symptoms; in England these are offered by NHS Improving Access to Psychological Therapy (IAPT) services. This thesis presents mixed-methods research focused on understanding the barriers to accessing these psychological treatments for people in England who seek support for common mental health problems. Barriers to access these treatments are considered to affect over 60% of referrals made. A mixed-methods systematic review of the international literature was completed to identify factors which affect attendance to initial appointments at primary care mental health services offering similar treatments to those offered by IAPT services. Following this, an analysis of 97,020 referrals made to five IAPT services in the North of England identified characteristics associated with increased risk of non-attendance at initial IAPT appointments. Finally, an interview study explored the experiences of the IAPT referral-to-treatment pathway from three perspectives: referrers, IAPT practitioners, and people who had been referred but not attended initial IAPT appointments. Findings from the three components of this thesis demonstrate that the mental health problem experienced by people seeking support, and the ways people reflect upon their mental health influence decisions around initial appointment attendance. The experiences people have with services offering support are important, particularly in relation to communication and waiting times. Differences between services, and the source of referrals are significantly associated with initial appointment non-attendance at IAPT services. There is a need for IAPT services to provide consistency in the reporting of referral data, and address the volume of missing data from referrals, to fully investigate the level of non-attendance to IAPT assessment appointments.

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Declaration

I declare that this thesis is a presentation of original work and I am the sole author. This work has not previously been presented for an award at this, or any other, University. All sources are acknowledged as References.

Part of this thesis (the systematic review reported in Chapter 2) has been submitted for publication in the Journal of Affective Disorders; currently this work is under peer review.

1 Chapter 1: Common Mental Health Problems in the UK

The health and wellbeing of individuals is crucial to the success of a population; for people to work together and contribute to a community, economy, and society at large. This theme is central to this thesis which considers mental health problems that affect large proportions of populations worldwide. This group of problems are termed common mental health problems (CMHPs) and include depression and anxiety disorders which cause considerable distress and interfere with the normal functioning of individuals, in addition to affecting the lives of family members and friends. CMHPs are considered here as a distinct group which does not include other serious mental health problems such as psychosis, bipolar disorder, eating disorders, personality disorders, substance dependence and dementia which also detrimentally affect the lives of individuals. This decision matches the service provision for CMHPs where recommended treatments are similar for this group and in England are delivered by National Health Service (NHS) Improving Access to Psychological Therapy (IAPT) services; a different treatment pathway is recommended for those with other serious mental health problems. Similarly, although CMHPs can occur throughout the lifespan this work will concentrate on those problems recognised in adults. This allows consistency with the recommended treatment approaches and ensures the findings and conclusions from this research are relevant to services offering treatments in England.

This initial chapter will discuss features of CMHPs such as the range of diagnoses included in this group, prevalence rates, comorbidities, and the recommended treatment options available. IAPT services were introduced in England to increase the availability of recommended psychological therapies for CMHPs. These services will be described with attention being paid to the number of individuals referred, but not attending and subsequently not accessing the recommended psychological treatments. This thesis aims to increase our understanding of the barriers to accessing treatments for CMHPs in the UK primary care setting. This will be achieved by undertaking a series of linked studies which will enhance knowledge in this area, such as:

What do we already know about why people do not attend CMHPs treatment appointments?

What type of person is referred to IAPT services for CMHPs, and which of them does and does not attend for assessments, and for treatment appointments?

What are people's experiences of a) making referrals into IAPT services (both GP referrals and individuals making self-referrals), b) supporting people from within these services, and c) accessing IAPT treatments?

When considered together, the findings from these linked studies have the potential to support informed decision-making about changes which could be made to increase attendance in IAPT services or make recommendations about how these services could be altered to increase the likelihood of supporting more people with CMHPs.

1.1 Common Mental Health Problems (CMHPs)

The number of people with mental health problems in the UK was estimated in 2007; depression affected 1.24 million and anxiety affected 2.28 million (McCrone et al., 2008). This section discusses the available diagnostic classification systems for mental health problems and describes the diagnoses which are considered as common mental health problems within this thesis.

1.1.1 Classifying CMHPs

There are two major systems for classifying mental health problems including CMHPs: the International Classification of Diseases, 10th revision (ICD-10), and the Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5) (WHO, 1992; American Psychiatric Association, 2013). These systems differ in their aims and development methods. The ICD-10 is the product of international collaboration aiming to classify all diseases including mental health problems and has been adopted by World Health Organization member states, being used widely in healthcare systems worldwide. The DSM-5 was developed by the American Psychiatric Association, is specific to mental health problems and is used internationally in research and clinically in the USA. Despite these developmental differences, the two systems produce similar diagnostic classifications across many CMHPs.

Comparisons have been made between the ICD-10 and the previous edition of the DSM, DSM-IV, with moderate to high levels of diagnostic concordance evident in many mental health categories (Andrews, Slade and Peters, 1999). High levels of concordance between classification systems were evidenced for depression, dysthymia, and generalised anxiety disorder, with moderate levels shown for social phobia, obsessive-compulsive disorder, and panic disorder. Specific differences between the diagnostic manuals have been identified for post-traumatic stress disorder, considered to be due to variations in specific criteria between classification systems. For example, DSM-IV requires people to display a 'numbing of general responsiveness' and a disability criterion, which are not required in ICD-10. Consequently, a diagnosis of post-traumatic stress disorder is more likely when using ICD-10 than DSM-IV criteria (Andrews et al., 1999; Stein et al., 2014). In 2013, a revised edition of the DSM was published (DSM-5) (American Psychiatric Association, 2013). Comparisons have also been made between the currently used ICD-10 and the updated DSM-5, with attention being focused on somatic symptom disorders. Research suggests that DSM-5 may be less restrictive than ICD-10, and DSM-5 use captures individuals with somatic symptom disorders who have high levels of impairment more frequently than ICD-10. These differences have consequences for reporting prevalence rates, and treatment decisions (Hüsing, Löwe and Toussaint, 2018). The 11th revision of the ICD was introduced in 2018 and is scheduled to be adopted by healthcare organisations internationally in 2022. The preview of ICD-11 has indicated changes to the way mental health problems are described which are reported to improve simplicity around diagnosis and consequently enable more appropriate access to treatments (The Lancet, 2019). Specific differences to the categorisation of post-traumatic stress disorder (PTSD) have been included in both ICD-11 and DSM-5. A review of these changes which considers the consequences for identification of PTSD suggested that the prevalence of PTSD using ICD-11 criteria will be lower than rates based on ICD-10, DSM-IV or DSM-5 criteria (Brewin et al., 2017).

The main classification system referenced within this work to describe CMHPs is ICD-10 as this is the adopted classification system used within the UK healthcare system at the time of writing this thesis. In line with the disorders treated in English IAPT services, CMHPs are considered to include diagnoses of: depression, dysthymia or persistent depressive disorder, general anxiety disorder, health anxiety, obsessive compulsive disorders, post-traumatic stress disorder, social phobia or social anxiety disorder, specific phobia, agoraphobia, and panic disorder.

1.1.2 Depression

As outlined in ICD-10, symptoms of depression include low mood, loss of interest in previously pleasurable activities, reduced energy and activity, and increased fatigue (WHO, 1992). With little variation in mood within and between days, depression is usually diagnosed if symptoms persist for at least two weeks; however, symptoms can last for years (NICE, 2009b). Depression is reported to be the fourth leading cause of disease burden in Western Europe and is globally ranked eleventh (Murray et al., 2013); research has indicated that the burden of depression is increasing (Liu et al., 2020). Historically, lifetime prevalence of depression has been reported as ranging between 4.4% and 18% (Angst, 1992) with consistent evidence that women are more likely to experience depression than men (Kuehner, 2003). A 2004 European survey indicated lifetime prevalence rates of 12.8% (Alonso et al., 2004); however, the United States 2005 replication of the National Comorbidity survey indicated a lifetime prevalence of 16.6% for major depressive disorder (Kessler et al., 2005a). Both these surveys used DSM-IV criteria to define depression. The cost of depression in England in 2000, accounting for treatment, morbidity and mortality costs has been estimated at over £9 billion. Of this, £370 million was attributed to treatment costs (Thomas and Morris, 2003).

1.1.3 Dysthymia / persistent depressive disorder

This is described as chronic depression of mood with characteristics of fatigue, feeling inadequate and poor sleep. In contrast to depression, individuals with dysthymia are likely to be able to function at a basic level on a day-to-day basis (WHO, 1992). While this is considered a mild depressive disorder, sufferers may experience significant distress or negative impairment of social, occupational or other activities (Ishizaki and Mimura, 2011). It is thought that dysthymia increases the risk of developing a major depressive disorder (Griffiths et al., 2000). Research evidence from Finland suggests that 12-month prevalence of dysthymia is between 2% and 4.5% of the population, with differences attributed to contrasting methods used to account for missing data (Markkula et al., 2015). Estimates of lifetime prevalence for dysthymia are thought to range between 2.5% (Kessler et al., 2005a) and 4.1% (Alonso et al., 2004) using DSM-IV criteria. The cost of dysthymia in England has been examined in a sample which also included individuals with other depressive and anxiety disorders. Estimates were reported that individual costs per year averaged at approximately £621; individuals with a diagnosis of dysthymia were associated with the highest costs for care (Knerer et al., 2005). In a randomised controlled trial comparing the cost of different forms of treatment for dysthymia, interpersonal therapy was compared and combined with Sertraline. No difference in costs (including healthcare use) were found at 6 months, however after 2 years costs associated with interpersonal therapy were reported to be significantly lower than for Sertraline or combined Sertraline and interpersonal therapy (Browne et al., 2002).

1.1.4 General anxiety disorder

General anxiety disorder (GAD) is characterised by persistent uncontrollable worry which is attributed to various concerns and which occurs on more days than not (Behar et al., 2009). Individuals experiencing GAD commonly report feeling apprehensive and tense alongside physical symptoms such as sweating, dry mouth, dizziness, and palpitations. These feelings of anxiety occur on most days for a period of several weeks or months and a diagnosis can be made following a period of 6-months persistent worry (WHO, 1992). More common in women than men, GAD is estimated to have a lifetime prevalence rate of between 2.8% (Alonso et al., 2004) and 5.7% (Kessler et al., 2005a). A review of community sample research studies indicated that the 1-year prevalence of GAD is around 2.6%, with a lifetime prevalence estimate from the same selection of studies reported to be 6.2% (Somers et al., 2006). The costs associated with GAD span societal, healthcare and economic domains (Wittchen, 2002). Associations with reductions in productivity and increased use of healthcare services create a significant societal burden. In addition, there are substantial economic costs associated with treatment (Tyrer and Baldwin, 2006) and days lost from work (Bereza, Machado and Einarson, 2009).

1.1.5 Health Anxiety

In this somatoform disorder, individuals are preoccupied with worry associated with the belief that they are experiencing serious health problems without shared concern from a medical professional (Weck, Richtberg and MB Neng, 2014). Individuals do not accept medical advice or reassurance and seek investigations to confirm worries about serious medical problems. Worries must have been present for at least two years and have a detrimental effect on an individual’s family or social functioning for a diagnosis of health anxiety (WHO, 1992). Prevalence is difficult to estimate as a result of heterogonous definitions of health anxiety; however, a review of studies suggests prevalence rates to be between 2.1% and 13.1% (Weck et al., 2014). It is worth noting that in addition to differing definitions of included studies, this review combined reports of 1-year and lifetime prevalence figures. Individuals experiencing health anxiety have been recorded as claiming sickness benefits significantly more often than those from the general population in a study investigating the long-term consequences of health anxiety in Denmark (Eilenberg et al., 2015). When considering the UK population specifically, research has indicated that high levels of health anxiety are associated with increased healthcare service use (Tomenson et al., 2012). Published literature suggests that this common mental health problem is affecting larger proportions of society over time, with substantial personal and societal economic costs (Kosic et al., 2020).

1.1.6 Obsessive compulsive disorders (OCD)

Characterised by obsessional thoughts and compulsive acts, these problems are either distressing to the person experiencing them and/or they interfere with everyday activities. Obsessive thoughts are the individual's own ideas or impulses which may not be pleasant, and compulsions are repetitive behaviours performed without enjoyment or apparent purpose. OCD can be predominantly obsessional thoughts or compulsive behaviours or can be an equal mixture of both elements (WHO, 1992). There are difficulties estimating the true prevalence of OCD due to differences in classifications systems used and the use of survey methods that have obtained lay responses rather than clinical diagnoses. One survey conducted in the United States reported a lifetime estimate of OCD 2.3% (as diagnosed using DSM-IV) with 28.2% of survey respondents reporting having experienced obsessions or compulsions at some point in their lives but without necessarily having a diagnosis of OCD (Ruscio et al., 2010). An earlier estimate, also from the United States indicated lifetime prevalence as 1.6% (Kessler et al., 2005a). The costs of OCD have not been widely reported but are considered to be varied, and significant for individuals and family members due to the impact this mental health problem has on the ability of sufferers to work, and consequently provide an income (Knapp, Henderson and Patel, 2000).

1.1.7 Post-traumatic stress disorder

Symptoms follow a traumatic life event and may be considered unusual due to a delay after the traumatic event before the onset of symptoms, or symptoms lasting longer than would be expected for the trauma experienced. Intrusive memories accompanied by symptoms such as 'numbness', detachment, and avoidance of situations that have similarities with the trauma are characteristic (WHO, 1992). Lifetime prevalence has been reported as 1.3% (Davidson et al., 1991) and 6.8% (Kessler et al., 2005a) in the United States. Differences in rates may be attributed to differences in the diagnostic criteria between DSM-III and DSM IV, and potentially to geographical differences in prevalence. A 2004 European survey using DMS-IV criteria reported lifetime prevalence rates of PTSD as 1.9% (Alonso et al., 2004). More recently, a US survey compared lifetime prevalence of PTSD using DSM-IV and DSM-5 criteria (n= 2,953). Results indicated lower prevalence rates using

DSM-5 criteria which were attributed to: a) changes made to the traumatic event criterion in DSM-5, and b) not having at least one active avoidance symptom; however, the use of online sampling methods do not allow results to be interpreted as an accurate estimate of national prevalence (Kilpatrick et al., 2013). The costs associated with PTSD affect people who have been diagnosed, their family members and friends, employers, healthcare systems and wider society (Solomon and Davidson, 1997). A study investigating the cost of PTSD (including direct and indirect costs) in Northern Ireland (population 1.8 million) in 2008 estimated that the total cost was £172 million; this population was considered to have a high level of PTSD due to previous decades of civil unrest (Ferry et al., 2015). Data relating to the cost of PTSD in the UK was not found in the research literature at the time of writing this thesis.

1.1.8 Social phobia / Social anxiety disorder

In social phobia (also known as social anxiety disorder), anxiety is caused by the fear of scrutiny from other people in social settings, leading to avoidance of social environments and potential isolation (WHO, 1992). Often developing early in life, social phobia is considered a potential risk factor for developing other mental health problems (Ruscio et al., 2008). Previous evidence using DSM-IV criteria has reported lifetime prevalence rates as 2.4% in Europe (Alonso et al., 2004) and 12.1% in the United States of America (Kessler et al., 2005a; Ruscio et al., 2008). Social phobia has costs to the individual, health services and the economy; though the economic costs of this mental health problem have not been widely documented, estimates suggest that the costs associated with mental health services are significantly higher for those with social phobia than for people with no mental health problem (Acarturk et al., 2009).

1.1.9 Specific phobia

Specific phobia is associated with specific stimuli such as a particular type of animal, object, darkness, flying, enclosed space. Individuals with specific phobias attempt to avoid the situations which trigger anxieties (WHO, 1992). Fears are marked and persistent; developing specific phobias at a young age is thought to predict later onset of depression and/or substance misuse problems (Becker et al., 2007). Survey evidence has indicated lifetime prevalence as 7.7% in Europe (Alonso et al., 2004) and 12.5% in USA (Kessler et al., 2005a). Specific phobias are considered more prevalent in women compared to men with lifetime prevalence estimates of 12.4% for women compared to

6.2% for men (n=4030) (Stinson et al., 2007). Published estimates of the cost of specific phobia are limited (Stinson et al., 2007); however, one study reported approximate costs per annum in the USA as $11 billion (Eaton et al., 2008) based on estimates from a European survey conducted in 1998/99 (Andlin-Sobocki and Wittchen, 2005).

1.1.10 Agoraphobia

A fear of open spaces, crowds, being unable to get to a safe space and other interrelated phobias. Individuals with agoraphobia commonly avoid situations which involve travelling from their home, especially alone and some become completely housebound (WHO, 1992). Agoraphobia and panic disorder are frequently seen together in clinical settings, with international debate about the primary disorder when symptoms of both are present. ICD-10 indicates that the severity of agoraphobia can sometimes be indicated by the presence of panic attacks (WHO, 1992). A European review of epidemiological studies indicated that 12-month prevalence for agoraphobia without panic disorder is 1.3% (Goodwin et al., 2005); lifetime prevalence of panic disorder with agoraphobia has been estimated as 1.1% (Kessler et al., 2006). The total annual costs associated with agoraphobia in Europe in 2010 were estimated at €9634 million (Olesen et al., 2012); where agoraphobia was investigated in relation to panic disorder, comorbid agoraphobia significantly increased the estimates cost of panic disorder (Batelaan et al., 2007).

1.1.11 Panic disorder

Panic disorder is characterised as recurrent, unexpected panic attacks (WHO, 1992). Individuals experience intense fear and anxiety symptoms during recurrent panic attacks, and a persistent concern about recurrence. These attacks do not appear to be linked to specific personal or environmental triggers (WHO, 1992). Lifetime prevalence has been reported as 2.1% in Europe (n=21,425) (Alonso et al., 2004) and 4.7% in USA (n= 9,282) (Kessler et al., 2005a) when using DSM-IV criteria. In an Italian community survey, lifetime prevalence was reported to be higher in females than males (4.4% and 2.5% respectively) (Carta et al., 2015). Within the same study and accounting for age and sex, people with panic disorder reported significantly poorer quality of life scores than individuals from a community sample. Panic disorder has been associated with high rates of health service use (Greenberg et al., 1999), loss of working days (Wittchen and Jacobi, 2005) and high levels of self-reported disability (Kessler et al., 2009; Merikangas et al., 2007). The total annual costs associated with panic disorder in Europe in 2010 were estimated at €11,894 million (Olesen et al., 2012).

These ten diagnostic categories represent the group of CMHPs which are the focus of this thesis. While effective treatments have been identified for these problems, there is a significant issue in terms of individuals completing offered treatments (Edlund et al., 2002). Additionally, people living with a CMHP may not have one diagnosis in isolation. The next section will provide a brief overview of the main comorbidities reported in the literature which may be relevant in terms of whether an individual with a CMHP attends for treatment.

1.2 Comorbidities

A substantial body of research has considered whether common mental health problems occur in isolation or are comorbid with other mental and/or physical health problems. In this section, research findings will be presented for common mental health problems and comorbidities with other mental health problems, followed by comorbidities with physical health problems. In the context of this thesis, it is considered important to be aware of these comorbidities and their potential relevance for accessing the available CMHPs treatments.

In 1994, Ormel and colleagues considered data collected as part of the World Health Organization study on psychological problems in General Health Care. This study collected data from primary care settings in 14 countries with mental health assessments conducted using both ICD-10 and DSM-III-R criteria. Findings from this study indicate that where a CMPH is present, comorbidities with other CMHPs are common with 13% of respondents having one comorbid diagnoses, 5.4% having two comorbid diagnoses and 2.7% having three or more comorbid diagnoses (Ormel et al., 1994). More recently, strong comorbidities have been indicated for depression and dysthymia, depression and general anxiety disorder, panic disorder and agoraphobia, social phobia and agoraphobia (Kessler et al., 2005b).

For specific problems there is evidence suggesting high rates of comorbidity between generalised anxiety disorder and other mental health disorders (12-month comorbidity rates of 59.1% (depression) and 55.9% (anxiety)) (Carter et al., 2001). Social phobia is reported to have strong associations with other anxiety disorders (Ruscio et al., 2008) in addition to the development of mood disorders such as depression, dysthymia and bipolar disorder (Kessler et al., 1999). Individuals living with OCD have been described as reporting additional symptoms of depression and other anxiety disorders. In a study of 147 people with a diagnosis of OCD, authors reported at least one comorbid depression or anxiety disorder in 68.7% of participants with the most common being major depressive disorder (39.5%) followed by dysthymia (20.4%), simple phobia (17.7%), GAD (12.2%) and panic disorder (9.5%) (Tükel et al., 2002). These comorbidities within the CMHPs group suggest that treatments for CMHPs may be complex, needing to address more than one problem for many individuals referred to treatment services.

In addition to comorbidities creating complex treatment needs, the literature suggests that CMHPs may have a negative impact on recovery in other conditions (Prince et al., 2007). In studies concentrating on older adults, evidence suggests that the presence of depression predicts decline in physical health and usual activity performance (Penninx et al., 1998; Bruce et al., 1994), and has been linked to increased mortality rates (Saz and Dewey, 2001; Mogga et al., 2006). Depression and anxiety have been associated with the onset of coronary heart disease (Hemingway and Marmot, 1999) and hypertension (Jonas, Franks and Ingram, 1996). Initial Myocardial Infarction (MI) has not been strongly associated with subsequent depression, or depression with help-seeking behaviour following a MI in a small European study (Strik et al., 2004); however, depression has been linked to low adherence to health advice following a MI, which has been suggested as an explanation for long-term prognosis in this group (Ziegelstein et al., 2000). Anxiety has been suggested to be an independent predictor of cardiac events and subsequent healthcare consumption (Strik et al., 2003). There is evidence to suggest that depression is a predictive factor for stroke (Jonas and Mussolino, 2000) and increases the risk of stroke mortality (Everson et al., 1998), while stroke survival is associated with an increased risk of depression (Whyte et al., 2004). Depression, anxiety and panic disorder have also been associated with obesity (Simon et al., 2006), with the likelihood of mood or anxiety disorder increasing by 25% in obese individuals.

There is some suggestion that CMHPs are linked to poor compliance with treatments for physical health problems; for example, depression and anxiety in asthma treatment (Bosley, Fosbury and Cochrane, 1995), depression in chronic obstructive pulmonary disease treatment (Bosley et al., 1996), and lower depression scores (therefore reduced likelihood of depression) have been linked to increased adherence to treatment in human immunodeficiency virus treatment (Singh et al., 1996). Where depression is evident in those receiving treatment for multiple sclerosis, treatment for depression has been associated with continued treatment adherence for multiple sclerosis (Mohr et al., 1997).

It is apparent that CMHPs frequently co-occur with other CMHPs and physical health problems. In terms of treating CMHPs, these comorbidities provide an additional level of complexity when considering appropriate treatments to offer people. Added to this, the increased likelihood of people having treatment appointments relating to other conditions may mean that an individual's availability to attend mental health treatment appointments become important to consider for attendance rates. While the consequences of CMHPs have been mentioned briefly in terms of costs in section 1.1, the following section will provide more detail about the impact of these problems for individuals, family members and wider society.

1.3 Consequences of CMHPs

At a societal level CMHPs are associated with costs of mental health treatment, increased health service use, and loss of working days which affect the economy (Doran and Kinchin, 2019). These societal effects are significant; diagnoses such as PTSD and GAD related to more partial disability days than physical health conditions such as back/neck pain, cardiovascular disease, and respiratory problems (Bruffaerts et al., 2012). In addition, people with these diagnoses face issues such as embarrassment, discrimination and stigma as a result of having a mental health problem. In a survey of people with CMHPs, those who had also experienced stigma were more likely to have a higher number of days off work than people without CMHPS (Alonso et al., 2009). Mental health diagnoses have also been related to employment in other ways; in a review of the economic impact of mental health having a mental health problem has been associated with higher levels of unemployment, lower levels of productivity in those who are employed, increased risk of sickness absence from work, and earlier retirement than those without mental health problems (Doran and Kinchin, 2019). In an analysis of World Mental Health Surveys data, PTSD and depression were among the diagnoses associated with the highest levels of individual effects from partial disability days (Bruffaerts et al., 2012). People with CMHPs have also been found to have lower quality of life scores than people without CMHPs (Alonso et al., 2009). This effect has also been found in people with sub-threshold symptoms of common mental health problems who attend primary care settings for support (Spitzer et al., 1995).

Since the recognition and treatment of common mental health problems has benefits to the individual and wider society, the next section of this chapter will explore treatment options for people with common mental health problems in the UK.

1.4 UK treatments for CMHPs

The National Health Service (NHS), established in 1948, is the public healthcare system in the UK (Department of Health, 2009). This system of providing free healthcare for all is funded by the UK government Department of Health; care services are commissioned locally through Clinical Commissioning Groups. Most services provided by the NHS have been delivered by NHS Trusts or NHS Foundation Trusts since 2004 following the Health and Social Care Act 2003 (Parliament, 2003); however, some organisations outside the NHS may be commissioned to provide NHS services. NHS Trusts and NHS Foundation Trusts provide care to people in the local area, with NHS Foundation Trusts having the ability to be more responsive to local needs by including local stakeholders (patients, staff, public and others) as members who elect representatives to their Trust Board of Governors. Trusts have specialisms related to the services they deliver, for example Primary Care, Acute Care and Mental Health.

In the UK, people who have symptoms of common mental health problems often discuss these initially with their GP who then advises them of the options for treatment which can include psychological therapies, pharmacological treatments, or a combination of both. While this initial step is shared across England, Scotland, Wales and Northern Ireland, the delivery of psychological therapies within each of these countries is configured differently (Health and Social Care Board, 2020; Welsh Government, 2011; Scottish Government, 2017; Mental Health Taskforce, 2016). The remainder of this thesis will focus on the English model of delivering psychological therapies for common mental health problems.

Previous research has identified treatments that are considered to be effective in reducing symptoms of common mental health problems (Clark, 2011; Kohn et al., 2004; Dowrick et al., 2000; Richards and Richardson, 2012; Hofmann and Smits, 2008; Baldwin et al., 2011; BMJ, 2011; Pampallona et al., 2004; Jónsson and Hougaard, 2009; Olatunji, Cisler and Deacon, 2010; Maher et al., 2011; Seidler and Wagner, 2006). In England, the organisation responsible for researching and determining clinically effective and cost-effective treatments in health and social care is the National

Institute for Health and Care Excellence (NICE). This organisation was established in 1999 and assists health and social care organisations to provide consistent, good quality effective and cost-effective treatments in an effort to improve the overall health and care outcomes for individuals (NICE, 2017). NICE offer guidelines to care providers for a wide range of health and social care circumstances including CMHPs (Kendrick and Pilling, 2012).

NICE guidelines for CMHPs focusing on identification and pathways to care, have been created drawing on information from condition-specific guidelines (Kendrick and Pilling, 2012). These condition-specific guidelines form the basis of the CMHPs guideline which relates to depression (NICE, 2009a), GAD and panic disorder (NICE, 2011), OCD and body dysmorphic disorder (NICE, 2005a), and PTSD (NICE, 2005b). These guidelines encourage local commissioners and services to establish multiple points of referral into the service to improve access for local communities. Treatments offered first should be the most effective, least invasive treatments, with the preferences of people referred to these services being considered in the decision process. A stepped-care approach to treatment encourages the use of low intensity options initially, which can be followed by higher intensity treatments if required. Research evidence considering stepped-care for mental health treatment suggested that although this might be an efficient method for offering treatments, the acceptability of minimal interventions to people who had been referred needed to be established to ensure the approach was successful (Bower and Gilbody, 2005). An overview of the recommended treatments for CMHPs of differing levels of severity and persistence is presented in Table 1 (Kendrick and Pilling, 2012).

Table 1: Recommended stepped-care interventions for CMHPs outlined in NICE guidelines

Focus of the intervention	**Nature of the intervention**
Step 3: Persistent subthreshold depressive symptoms or mild to moderate depression that has not responded to a low-intensity intervention; initial presentation of moderate or severe depression; GAD with marked functional impairment or that has not responded to a low-intensity intervention; moderate to severe panic disorder; OCD with moderate or severe functional impairment; PTSD.	Depression: Cognitive behavioural therapy (CBT), Interpersonal therapy (IPT), behavioural activation, behavioural couples therapy, counselling*, short-term psychodynamic psychotherapy*, antidepressants, combined interventions, collaborative care**, self-help groups. GAD: CBT, applied relaxation, drug treatment, combined interventions, self-help groups. Panic disorder: CBT, antidepressants, self-help groups. OCD: CBT (including exposure and response prevention (ERP)), antidepressants, combined interventions and case management, self-help groups. PTSD: Trauma-focused CBT, eye movement desensitisation and reprocessing (EMDR), drug treatment. All disorders: Support groups, befriending, rehabilitation programmes, educational and employment support services; referral for further assessment and interventions.
Step 2: Persistent subthreshold depressive symptoms or mild to moderate depression; GAD; mild to moderate panic disorder; mild to moderate OCD; PTSD (including people with mild to moderate PTSD).	Depression: Individual facilitated self-help, computerised CBT, structured physical activity, group-based peer support (self-help) programmes**, non-directive counselling delivered at home†, antidepressants, self-help groups. GAD and panic disorder: Individual non-facilitated and facilitated self-help, psychoeducational groups, self-help groups. OCD: Individual or group CBT (including ERP), self-help groups. PTSD: Trauma-focused CBT or EMDR. All disorders: Support groups, educational and employment support services; referral for further assessment and interventions.
Step 1: All disorders – known and suspected presentations of common mental health disorders.	All disorders: Identification, assessment, psychoeducation, active monitoring; referral for further assessment and interventions.

* Discuss with the person the uncertainty of the effectiveness of counselling and psychodynamic psychotherapy in treating depression.
** For people with depression and a chronic physical health problem.
† For women during pregnancy or the postnatal period.

Primary care clinicians are encouraged to consider possible depression and anxiety during routine consultations; NICE advocates asking individuals about their mood and experiences of anxiety if there are indications of potential problems such as personal history of depression or anxiety, or recent trauma (Kendrick and Pilling, 2012). It is recommended that a person competent in completing a mental health assessment uses validated instruments to gather holistic information to inform care decisions. One method for ensuring this happens is to refer individuals with possible CMHPs to an appropriate healthcare professional. Where more than one CMHP is present, the guidance is to ascertain the primary problem and select a treatment which targets the primary problem in the first instance (Kendrick and Pilling, 2012). Treatments should be discussed with people who have been referred to incorporate their preferences into care planning; however, the stepped approach is encouraged whereby recommendations from step 1 are offered first, and only if problems persist then options included in step 2 should be offered. Likewise, step 3 treatments are only considered appropriate to offer once step 2 has proved to be ineffective, unless a person is assessed as having moderate or severe CMHPs (Kendrick and Pilling, 2012).

By understanding the current framework for treating CMHPs in the UK it is possible to anticipate some of the potential barriers that individuals may face when attempting to access these services and treatments. This is important in the context of this thesis to ensure that appropriate consideration can be made to the UK systems when looking to the wider literature on potential barriers. The next section focuses on the main care pathway for people seeking support for common mental health problems in England.

1.5 Providing treatments for CMHPs in England

Individuals experiencing common mental health problems in England can look for support in a variety of places such as a GP, NHS primary care mental health services (NHS, 2017), mental health charities (Time to Change, 2017) and private mental health practitioners (Mind, 2013). While these options are available, a GP working within the NHS is likely to be the initial contact made when seeking help (Bebbington et al., 2000).

Between 2004 and 2006 changes in the governmental support for psychological therapies to treat CMHPs was evident (Clark, 2013). This was in line with international concern that large proportions of people living with mental health problems were not receiving treatment for these problems

(LGMH Group, 2007). Specifically, in Europe it was estimated that 27% of people were experiencing mental health problems each year; however, 74% of these people received no treatment. This reinforced global efforts to introduce evidence-based services able to meet the needs of those experiencing mental health problems (Group, 2007). Following recommendations from NICE that psychological therapies such as CBT have been shown to be effective in treating common mental health problems (Clark et al., 2009; Clark, 2011; Clark, 2013; Gyani et al., 2013), and after economic reports suggested that the cost of investing in psychological therapies could be balanced against the expected reduction in benefit claims and taxes from people able to return to work (Laynard et al., 2007), two demonstration sites were established to ascertain the impacts of a programme to Improve Access to Psychological Therapies (Clark, 2013).

An evaluation of the two demonstration sites indicated that the purposes of services differed; one service focused on low-intensity interventions such as pure and guided self-help, and computerised CBT (Doncaster) and the other focused on high-intensity, face-to-face interventions (Newham) (Clark et al., 2009). The demographics of the populations referred to these two services were different but were considered representative of each local area, with the majority of those referred to the Doncaster site being female (65%), of white ethnicity (99.5%) and aged between 25 and 44 years (52%). People referred to the Newham site were mostly female (60%), from black and ethnic minority groups (49%) and aged between 25 and 44 years (58%). Data from post-treatment outcome measures was collected at very high levels (99.6% Doncaster, 88.3% Newham) which indicated a successful session by session outcome measurement approach. Referrals for these two services came mainly from GPs, along with a diagnosis which remained unaltered during contact with the demonstration sites. The evaluation of the demonstration sites stated that the validity of GP diagnoses of CMHPs is unknown (Clark et al., 2009). Stepped care approaches to treatment were adopted, where it was reported to be clinically appropriate. People referred to the services were offered telephone or computerised contacts; face-to-face therapy sessions were considered if the telephone treatment intervention was ineffective. Referrals over the initial 13 months of service delivery showed that 4,661 people were referred to the Doncaster site and 1,043 to the Newham site. Of these at least two sessions (including assessment) were received by 37% (Doncaster) and 24% (Newham) of those referred. From the individuals who received at least two sessions, 91% and 90% were classified as clinical cases that met the threshold for treatment using one or both of the pre-treatment measures (PHQ-9 and GAD-7). 56% and 55% of people who had initially met the threshold for classification as a clinical case were considered to have recovered at the point of leaving the service (treatment thresholds were no longer met on either the PHQ-9 or GAD-7). A survey was carried out to determine longer-term impacts of the treatments delivered by practitioners at the demonstration sites. Of those who completed this survey, follow-up took place at an average of 42 weeks post-treatment with reported recovery rates of 50% and 42% respectively (Clark et al., 2009).

Following the results of the demonstration sites, a national Improving Access to Psychological Therapy (IAPT) service was implemented. In 2008/09, 35 IAPT services were established. The outcomes from these services were evaluated by Gyani and colleagues (2013) who considered data available for people who had completed treatment, were considered to be clinical cases at assessment, and who had attended at least two appointments (assuming the first appointment was usually an assessment) (Gyani et al., 2013). Findings from this paper indicated that NICE recommended treatments were more successful in achieving reliable improvement and reliable recovery and in minimising reliable deterioration than non-recommended treatments. Specifically, the authors highlighted the advantages of a guided self-help intervention rather than pure self-help for depression, anxiety and mixed anxiety and depressive disorders; however, reliable recovery was most strongly associated with high intensity, face-to-face interventions. Some interesting findings indicated that service-level differences (such as the use of stepped care treatments, higher numbers of people treated by a service and more sessions offered) were associated with higher reliable recovery rates in people who had been referred to IAPT services. One notable omission from this published evaluation was any data concerning individuals who had been referred to the services but who did not subsequently attend appointments, or who only attended an assessment appointment. This information could be an important indication of the acceptability of the services and treatments being offered. Within their paper, Gyani and colleagues did not mention the overall number of people referred to IAPT services within the timeframe of their analysis. The paper states that 79,310 individuals received an assessment, and a large proportion of those individuals did not have a treatment end marker at the point of the analysis (n=37,586) indicating that they may have still been receiving treatment. However, the data presented for the main analysis included up to 19,395 of a possible 41,724 people referred to determine the success of the treatments offered (Gyani et al., 2013). Of the 79,310 people assessed, 1,905 reportedly did not receive any treatment (it is unclear whether these people were classed as clinical cases at assessment or not). Of those who received an assessment, 7,437 were not considered a clinical case but did receive some treatment. From those assessed as a clinical case (n=32,382) and having received some treatment, 10,500 people were recorded as having no more than one contact. This may reflect service-level differences in the content of initial appointments, with some initial appointments being dedicated to assessment where other services may have also incorporated an element of treatment within the assessment appointment. This information was not presented in the paper. Authors suggested that among individuals assessed as clinical cases, those who received some treatment but who were recorded as having only one contact with IAPT services may have been signposted elsewhere for treatment. No details were provided in relation to the type of services individuals may have been signposted to, or the proportion of those who had one contact with IAPT services and were subsequently referred on to other services (Gyani et al., 2013). In terms of assessing the acceptability of the treatments offered to people referred and assessed in IAPT services, it is important to consider in more detail these groups of people who have been omitted from the published evaluation.

Findings from the initial phases of IAPT implementation indicated that the treatments offered were relatively successful in alleviating symptoms of CMHPs; however, there is little information about the people who were referred to these services and who did not maintain engagement through to treatment. This is the group of individuals which will form the focus of this thesis, to explore the barriers to accessing treatment for CMHPs in these primary care mental health services.

1.6 Non-attendance for CMHP treatments

To ascertain the extent to which non-attendance to CMHP treatment appointments can be linked to culture and service structure in England, it is first important to consider the wider literature on non-attendance for CMHP treatments. This section will focus on the potential barriers to accessing mental health treatments which have been widely documented in the research literature.

A major international issue in the treatment of CMHPs is engaging individuals in effective treatments (Wang et al., 2007) with stigma and embarrassment, ethnicity, level of social deprivation, knowledge about mental health problems and services, cost associated with treatment, and confidence in treatment effectiveness considered to be contributing factors (Conner et al., 2010a; Dennis and Chung-Lee, 2006; Olfson et al., 2000; Marques et al., 2010; Goodwin et al., 2002; Clement et al., 2015; Gulliver, Griffiths and Christensen, 2010; Grant et al., 2012; Delgadillo et al., 2016). Some of these demographic factors have been associated with low referral rates for IAPT services with evidence from the first year of IAPT service rollout (comprising data from 137,285 referrals across 32 sites) suggesting that individuals with demographic characteristics such as being male, from a minority white ethnic group, aged over 65 years, from Asian or Black ethnic group, and/or with a disability are underrepresented in service referrals (Glover, Webb and Evison, 2010). Some clinical factors have been linked to non-attendance for IAPT services specifically; research which focussed on the predictors of non-attendance at the two pilot IAPT sites concluded that clinical characteristics such as risk to self, and duration of illness prior to IAPT referral (with those being unwell from less than one month, or for more than two years before a referral being less likely to attend an appointment) accounted for more of the variance in IAPT non-attendance than social-demographic characteristics (Di Bona et al., 2014). This study used questionnaire responses from people referred, matched with IAPT service data, to ascertain variables that were important in determining non-attendance (not attending at least one IAPT appointment after a referral); these characteristics are not routinely captured by IAPT services. It is worth noting that whilst they were not attributed to non-attendance for IAPT treatments within the study, variation in waiting times for IAPT services impacted on the data collection for this study (Di Bona et al., 2014). Practical factors such as waiting times have been found to be relevant to service engagement for IAPT services (Mander, 2014) and are thought to be important for mental health appointment attendance in general (Gallucci, Swartz and Hackerman, 2005; Williams, Latta and Conversano, 2008; Mireau and Inch, 2009). While the reasons people choose to seek support for mental health problems are less well researched, there are suggestions from the wider literature that social support and encouragement, positive attitudes about health professionals, education about available support and confidence in treatment effectiveness, accompanied by mental health symptoms may be important (Gulliver et al., 2010; Komiti, Judd and Jackson, 2006; Oliver et al., 2005a).

Historically there have been concerns about the identification of some CMHPs in order that appropriate treatment can be recommended to individuals. Using data from the World Health Organization study on Psychological Problems in General Health Care, Weiller and colleagues considered the recognition of anxiety disorders in five European settings. Conclusions indicated that identification and treatment of anxiety problems by GPs was low (Weiller et al., 1997). More recent research has also indicated that anxiety disorders are often undetected and consequently under-treated in primary care (Kroenke et al., 2007; Combs and Markman, 2014). Likewise, OCD is reportedly often undetected and therefore not treated (Wahl et al., 2010). It is therefore logical that screening methods should be sensitive and reliable in order to initiate the treatment care pathway.

For those individuals who are identified as needing support in the UK, the English IAPT programme has been praised for attempting to make evidence-based psychological therapies more widely available (Fonagy and Clark, 2015); however, it has also been criticised for encouraging a medical model of manualised psychological therapies based on a diagnosis, resulting in restrictions to the choices available for people referred and clinician flexibility (Timimi, 2015). The NICE guidelines for CMHPs encourage clinicians to discuss treatment preferences with people who have been referred prior to selecting an appropriate service (Kendrick and Pilling, 2012). If this process is effective, the preference of people seeking support should influence initial referral choices rather than affecting attendance rates at services where a referral has been made.

IAPT service recovery outcomes have received attention due to ambiguities around interpretation. Data gathered from the National Information Centre has been used to determine the percentage of people who had 'moved to recovery' following various levels of contact with IAPT centres (Griffiths and Steen, 2013); authors suggested that recovery rates could be reported as 12% (including all people referred to IAPT), 24% (including only those who started psychological therapies), or 44% (including only those who completed treatment). Service outcome reporting in IAPT papers describes people who have 'completed treatment' as those who have attended a minimum of two treatment sessions (Clark, 2011; Gyani et al., 2013; Layard and Clark, 2014); the first session is often reported to be an initial service assessment (Radhakrishnan et al., 2013). This suggests there may be a degree of discrepancy in reporting between those individuals who receive treatment from IAPT as opposed to all individuals who have been referred but not attended appointments, and those who have been assessed by IAPT services but not attended subsequent sessions. The definition of treatment completion is another area which lacks clarity; the number of treatment sessions attended has been associated with recovery rates, with a suggested minimum of eight sessions required to achieve 50% recovery rates (Layard and Clark, 2014). Improving transparency around these figures would support better understanding of the current situation when considering early interactions between people seeking support for CMHPs and IAPT services.

Self-referrals for IAPT services provide an opportunity for individuals who consider themselves to have a CMHP to access psychological therapies directly, without needing to make a GP appointment. Although there may have been concerns about the appropriateness of these referrals, research evidence has suggested that individuals who made self-referrals had high levels of psychological morbidity and were more representative of the general population than those referred by GPs (Brown et al., 2010). It would be interesting to investigate the attendance rates of those who have self-referred in comparison to those who have been referred by a GP to ascertain whether the additional appointment and/or conversation with a GP prior to a referral is associated with any pattern in attendance rates for IAPT services.

It is well documented that non-attendance rates for mental health appointments are high (Delgadillo et al., 2016; Mitchell and Selmes, 2007; Grant et al., 2012). One UK report suggested that 35% of people with depression, and 51% of people with anxiety disorders were not in contact with services to receive support for these problems (McCrone et al., 2008). One of the initial aims of the IAPT programme was to improve access to NICE-recommended treatments with services accepting both professional and self-referrals (Kendrick and Pilling, 2012; Clark, 2011). In the evaluation of the initial 13 months of two IAPT demonstration sites, it appears that 63% (Doncaster) and 76% (Newham) of those referred to services did not receive the two sessions (assessment and one other session) required to be considered as having completed treatment (Clark et al., 2009). This appears to be an issue which has been maintained through the IAPT national roll-out, with a more recent study indicating that 62% of people referred to IAPT services between July and September 2014 did not receive these initial two sessions (Delgadillo et al., 2016). It is important to understand the barriers to accessing these recommended treatments, in order to better support people with CMHPs. This will be the focus of this thesis and will be achieved through completing three research studies which focus on different aspects of this problem.

1.7 Aim

The main aim of this thesis is to increase our understanding of the barriers for people with common mental health problems when accessing primary care mental health service in England.

1.8 Objectives

The aim of this thesis will be met through compiling the findings of three research studies which focus on different aspects of this problem:

- A systematic review will provide a detailed overview of the research literature on why people do not attend initial treatment appointments for CMHPs.
- An investigation of a practice research network dataset for the north of England will provide information about who is referred to IAPT services for CMHPs, and who does and does not attend for 1) assessments, and 2) treatment appointments.

- Interview studies will explore in detail people's experiences of a) making referrals into IAPT services, b) supporting people from within these services, and c) accessing IAPT treatments.

Findings from these three research studies will be interpreted independently before being considered in the context of the primary aim of this thesis. Combined, this work has the potential to support changes to the IAPT referral pathway to enable greater initial engagement with people living with CMHPs in the UK.

2 Chapter 2: Barriers to attending initial psychological therapy service appointments for common mental health problems

2.1 Introduction

This chapter reports a systematic literature review which focuses on identifying and synthesising the available published research on barriers to initial attendance at psychological therapy service appointments for people experiencing common mental health problems. While the thesis focuses on English IAPT services, this review includes global research considering initial non-attendances to psychological therapy for common mental health problems. This information will be used to provide insights into what may be affecting initial attendance to initial IAPT service appointments. Findings from this review will also help to inform the subsequent quantitative and qualitative primary data studies that follow.

Barriers which affect attendance at the initial IAPT service appointments are the main focus of this thesis. In line with this, within this review initial appointments are the first and second appointments offered by a service; for IAPT services the first appointment offered is usually a comprehensive assessment appointment following which eligible people are offered treatment appointments (Clark, 2011; Gyani et al., 2013). The second appointment offered by an IAPT service is therefore generally the first treatment appointment. Although these appointments have been described in published research, annual IAPT reporting considers attendance at these two initial appointments to constitute treatment completion (NHS Digital, 2019a). This definition of treatment completion, used for outcome reporting, differs from research describing the length of treatments which are offered by IAPT services (Richards and Richardson, 2012; Coull and Morris, 2011; Newby et al., 2015; Carlbring et al., 2018), and also from the average length of treatment recorded by IAPT services throughout England which in 2018-19 was reported to be an average of 6.9 sessions (NHS Digital, 2019b). Individuals who do not attend an assessment appointment are rarely referenced within national reporting outcomes, and those who are assessed but do not attend an initial treatment appointment are included briefly within reports. Together the people within these two groups constitute over 50% of all IAPT referrals (NHS Digital, 2019b).

Barriers to initial attendance will be captured by including information about non-attendance reported by included studies. This includes circumstances where people have been referred to services, booked an appointment (or received an appointment date and time offered by a service and not requested for the appointment details to be changed) and subsequently not attended the appointment. Non-attendance does not include appointments that have been cancelled ahead of the planned date and time of the appointment. While it is recognised that this does happen in mental health services, there is a lesser impact on services when appointment slots can be refilled following a cancellation. Drop-outs are also not generally considered to relate to initial non-attendances; drop-out implies people have started a course of treatment sessions which they subsequently stop attending. This is unlikely to be the case for people who are not attending the initial sessions offered by a service. Where studies recorded attendance at assessment and categorised subsequent non-attendance as ‘drop-out’ then factors influencing this drop-out from initial appointments were considered relevant to this review.

This review focused on the types of barriers identified by included papers to complement the other components of this thesis. While there is a vast quantity of research considering the demographic characteristics of those who do not attend initial appointments following referrals to similar services, it was beyond the scope of this review to capture this additional data. These studies were not included in the review because an exploration of demographic information specifically obtained from IAPT service referrals is the focus of the next chapter. The overall aim of this thesis is to provide information that may support changes to the English IAPT referral pathway to reduce non-attendance at initial appointments. International studies which highlighted barriers to initial non-attendance at similar mental health services, which could be altered relatively quickly or easily either by service changes or people referred, were the focus of this review.

No restrictions were placed on the design of studies included in this review to maximise the likelihood of identifying barriers to initial attendance that could be altered by services. Combining evidence from different study designs is a relatively recent development in systematic review methodology (Shepherd et al., 2005) with the aim of producing reports which will be more relevant to healthcare policy and practice than traditional systematic reviews (Harden, 2010).

2.1.1 Aim

The purpose of this systematic review is to identify and synthesise the available literature on factors, which can be modified either by individuals seeking support or by services, and which could influence early attrition to services offering psychological support for common mental health problems.

2.2 Methods

The processes undertaken in this mixed-methods systematic review were informed by guidance from the Cochrane Collaboration (Higgins and Green, 2008) and the Centre for Reviews and Dissemination (Deeks, Glanville and Sheldon, 1996). Reporting was informed by the PRISMA statement (Liberati et al., 2009; Moher et al., 2009). A protocol for this review was developed (Sweetman et al., 2017) and is available at: www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42017055667.

2.2.1 Searches

Searches were run in January 2017 and updated in October 2019 in five databases: MEDLINE 1946-present, Cumulative Index to Nursing and Allied Health Literature (CINAHL Plus), Excerpta Medica Database (EMBASE), Cochrane Library and PsycINFO 1987-present. These databases were selected to maximise the likelihood of identifying relevant articles for this review. MEDLINE and EMBASE cover medical literature, CINAHL catalogues nursing and allied health articles, PsycINFO specialises in psychological and psychiatric publications and the Cochrane Library provides a comprehensive selection of medical literature. Thesaurus terms and keywords relating to common mental health disorders and non-attendance were included in search strategies to identify additional relevant articles for consideration. These were initially developed for MEDLINE searches before being adapted for other databases. Full search strategies are included in Appendix 1. Completed searches were imported into Endnote X8 (Ray, 2008) for duplicate removal. Following duplicate removal, references were exported to MS Excel (2016) for screening.

2.2.2 Criteria for studies

To be included in this review studies needed to include participants aged 16 years or older with a common mental health problem. For the purposes of this review common mental health problems included depression, depressive disorder, dysthymia, obsessive compulsive disorder, anxiety, general anxiety disorder, social anxiety, health anxiety, post-traumatic stress disorder, acute stress disorder, phobia, social phobia, panic disorder and agoraphobia in line with ICD-10 criteria (WHO, 1992). Included studies considered psychological therapies for the treatment of common mental health problems with a focus on appointment attendance at the first or second service appointment. An additional inclusion criterion, added following title and abstract screening, required abstracts to explicitly discuss factors which could be modified either by individuals seeking support or by services, and which were related to initial assessment/treatment appointment attendance such as relevant practical, service-related, social or environmental factors. It was necessary to refine the studies at this point due to the volume of references considered relevant under the initial criteria. It was not within the scope of this work to include all studies; factors which could not quickly or easily be modified by people who have been referred or services, such as socio-demographic characteristics of people referred, were not included within this review but are explored in relation to IAPT services in chapter 3.

Studies were excluded if participants were younger than 16 years or had a serious mental health problem. For the purposes of this review serious mental health problems included dementia, substance dependence, schizophrenia, delusional disorders, psychotic disorders, mania, bipolar, dissociative disorders, somatoform disorders, eating disorders, personality disorders and learning disabilities. Studies focusing on medical treatment appointments or trialling the effectiveness of treatments were excluded.

2.2.3 Screening

Screening occurred in three stages: title screening was conducted followed by title and abstract screening. Once these stages had been completed articles were obtained for full-text screening. Screening for both the initial searches and the update searches followed the same procedures.

Two reviewers were involved in the screening processes so that the reliability of eligibility criteria could be assessed. This process aimed to reduce the chance of selection bias by ensuring that all articles included in the review met the pre-specified criteria, and that no articles identified during searches were screened out in error. Each stage of screening started by selecting a sample of references for inclusion in a pilot screen to establish reliability. Reliability between reviewers was assessed using Cohen's kappa, which provides a measure of agreement between reviewers taking account of differences due to chance. For the purposes of this review, a kappa of <0.5 indicated poor agreement, 0.5 indicated satisfactory agreement, 0.6 good agreement, and >0.7 suggested strong agreement (Higgins and Green, 2008). The minimum level of reviewer agreement accepted for this review was kappa ≥0.5. Where satisfactory reliability was not achieved, reviewers discussed discrepancies before independently screening another pilot sample of references. Once reliability was achieved reviewers screened all references included at that stage of the review.

Title screening was conducted independently by two reviewers with one reviewer screening all titles and a second reviewer screening a random 10% sample. A pilot sample of 200 titles was used at this stage to establish reliability. Following this, 10% of references were randomly selected using the RAND function in MS Excel (2016) for the second reviewer, and independent screening of titles was undertaken. Agreement about screening outcome was assessed following title screening. In the first instance any references about which there was disagreement were re-screened. Those references where differences in screening outcome were evident a second time were included for abstract screening, enabling reviewers to access additional information.

Attempts were made to obtain all abstracts for references included in abstract screening. Reviewers made multiple attempts to identify all abstracts; however, where this was not possible and no additional information could be found, references were excluded. Title and abstract screening was conducted independently by two reviewers with one reviewer screening all titles and a second reviewer screening a random 10% sample. A pilot sample of 70 references was included at this stage to establish reliability. Following this a sample of 10% was randomly selected using the RAND function in MS EXCEL (2016). Agreement about inclusion was assessed following title and abstract screening with discrepancies included for full text screening to enable reviewers to access additional information.

Full text article screening was conducted independently by two reviewers who screened all articles. Reliability was assessed, and differences in opinion were resolved through discussion.

2.2.4 Data extraction

A data extraction tool was developed for this review informed by CRD guidelines for conducting systematic reviews (Deeks et al., 1996). Items were chosen based on recommendations which were likely to inform the review. The tool was designed to be flexible enough to capture data from articles reporting different study designs and included general study details, the context of the research, population, problem type(s) of participants, the nature of any interventions, attendance rates where relevant and factors associated with attendance. Two reviewers independently extracted data from articles selected for inclusion. The data extraction tool was piloted with one of the review articles; differences in extraction were resolved through discussion. An iterative process guided the development of the tool, after which extraction was completed for all articles.

2.2.5 Quality appraisal

Study design-specific appraisal tools were considered to be appropriate for this review as opposed to a single all-purpose tool in order to more carefully examine the details of studies; comparisons between studies were not relevant to the focus of this review. Alternative design-specific tools were considered for use such as the widely used CASP tools. These were not selected due to the broad nature of questions being considered likely to lead to reviewer discrepancies, and the lack of a CASP checklist for cross-sectional studies being available at the time that quality appraisal was being undertaken. Joanna Briggs Institute quality appraisal tools were used in this review as they include a study-specific range of appraisal tools which have been systematically developed and validated for use in systematic reviews (Zeng et al., 2015). Two reviewers independently appraised the quality of all included studies with differences resolved through discussion. Quality criteria were not used to select studies for this review, rather to inform a discussion of the review findings.

2.2.6 Analysis

Data were synthesised in three stages in line with recommendations from previous mixed-method systematic reviews (Oliver et al., 2005b). Initially data extracted from quantitative studies was synthesised using narrative synthesis methods (Popay et al., 2006). Headline factors considered to affect attendance at early appointments for common mental health problems were extracted from each of the cohort and cross-sectional studies and similar factors grouped together. The reviewer considered factors in the context of the studies reporting them to ensure consistencies within groups. Groups of factors were then considered in relation to each other in order to understand the nature of this dataset further and describe quantitative findings. This narrative synthesis of quantitative data was followed by a separate synthesis of data from qualitative studies using thematic analysis methods (Braun and Clarke, 2006). The reviewer considered the themes and sub-themes reported in each of the qualitative studies and considered them in relation to the findings of other qualitative studies. Common findings were described, and interpretations of the complete qualitative dataset were developed. Finally, findings from the two independent syntheses were compared to produce a combined synthesis (Thomas et al., 2004). Similarities and differences were described in the context of the study designs included, overlaps and gaps in evidence were identified and described.

2.3 Results

Initial database searches identified 23,088 records for review, with an additional 1,011 articles being identified through hand-searching. Of these, 8,539 were duplicate records and therefore 15,560 references were screened. Of these, titles were screened with 11,492 not meeting inclusion criteria for this review. This left 4,068 abstracts to be screened, of which 3,999 were subsequently excluded. 69 full text articles were screened, and from these 31 were selected for inclusion in this review. During update searches a further 7,659 records were identified of which 2,096 were duplicates. Following title screening of the 5,563 unique references, 5,450 did not meet inclusion criteria for this review. Therefore 113 abstracts were screened, from which 103 were excluded. The remaining 10 references were considered during full text screening and three were included in the review, giving an overall total of 34 included studies. Reasons for exclusion at full text screening are listed in the PRISMA diagram (Moher et al., 2015) outlined in Figure 1.

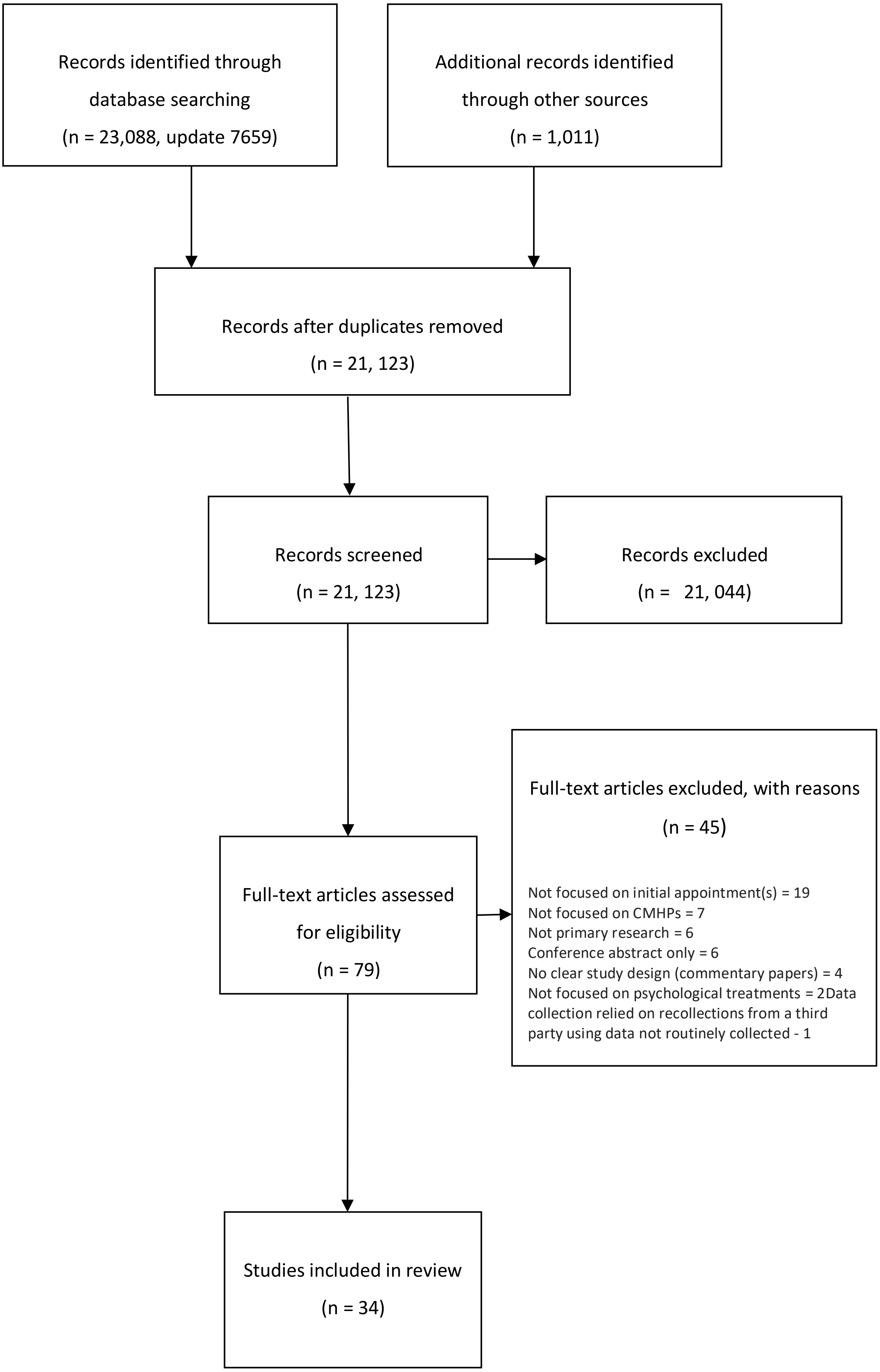

Figure 1: Systematic review Prisma diagram

Included studies used observational and qualitative designs. Observational studies were divided into cohort and cross-sectional designs. Within this review studies considered to be cohort studies tended to measure attendance at a specified mental health service over a given time period. Studies gathered data about people referred and concentrated on the socio-demographic factors, diagnoses, and time from referral to offered appointments in relation to non-attendance as recorded by the service. Studies categorised as cross-sectional in design generally involved participants providing responses to a survey about their mental health, referrals to mental health services (in general) or attendance to offered appointments during a specified period before the survey was conducted. Data were not collected at a service level and did not usually target participants who had been offered appointments at a specific mental health service. These were often national surveys considering information over a previous year. Qualitative studies used interviews to collect data and tended to include people who had made contact with a specific service, that is, a GP practice, mental health service or research study offering mental health treatments.

Of the 34 studies included in this review 15 were categorised as cohort studies, 9 cross-sectional, 9 qualitative and one mixed methods study, which reported cohort and qualitative components (Anderson et al., 2006; Andrade et al., 2014; Ayres et al., 2019; Bados, Balaguer and Saldana, 2007; Barnes et al., 2013; Britt et al., 2015a; Bruwer et al., 2011; Caplan and Whittemore, 2013; Conner et al., 2010b; Elliott et al., 2015; Farid and Alapont, 1993; Flynn et al., 2010; Greeno et al., 1999; Horevitz, 2014; Hundt et al., 2018; Levy et al., 2019; Lewy, Oliver and McFarland, 2014; Lichtenthal et al., 2015; Lincoln et al., 2005; Mohr et al., 2006; Mojtabai et al., 2011; Mokrue et al., 2011; Murphy et al., 2013; Murphy et al., 2016; O'Mahen et al., 2015; Reece, 2003; Reust, Thomlinson and Lattie, 1999; Shepardson and Funderburk, 2016; Skuse, 1975; Sloan, 2014; Sparks, Daniels and Johnson, 2003; Terrell and Terrell, 1984; Trepka, 1986; Wells et al., 2013). Most studies were conducted between 2011 and 2019 and described participants from high income countries. Further details of studies are described in Tables 2 and 3.

Table 2: Characteristics of included studies

	Cohort	**Cross-sectional**	**Qualitative**	**Total**
Year of Publication				
Pre-2000	5	-	1	6
2001-2010	4	1	3	8
2011-2019	7*	8	6*	20
Study Location				
Europe	7	-	2	9
North America	7*	8	8*	20
Africa	-	1	-	1
Australia	-	1	-	1
Multiple continents	-	1	-	1
Setting				
Routine care	11	1	1	13
Research	5*	5	9*	18
National survey	-	3	-	3
Size of study sample				
<25	-	-	5*	5*
25-50	1	-	4	5
51-100	4	-	-	4
101-500	10*	4	1	15*
501-1000	-	1	-	1
>1000	1	4	-	5
CMHPs in sample				
Depression	12*	7	7*	25*
Anxiety disorders	13	4	1	18
Somatoform disorders	2	-	-	2
PTSD	3	1	1	5
Other	9	3	-	12
Not clearly reported	3	2	1	6
Total	15*	10	10*	34

* One mixed methods paper included data related to a cohort study and a qualitative study.

Table 3: Summary of included studies

Author	**Aim**	**Service type(s) included**	**Method of data collection**	**Main factor(s) identified as affecting attendance**
Anderson et al., 2006	To gain a better understanding of mothers' perceptions of their own distress and their children's problems, their treatment experiences, and their views of the formal mental health service delivery system.	Community mental health centres	Interviews	Four areas were identified as relevant to understanding a mother's reluctance or refusal to accept mental health treatment: acceptance of a diagnosis; perceptions of the causes of her distress; reactions to being referred for mental health treatment; and perceptions of their child's and other mental health services.
Andrade et al., 2014	To examine barriers to initiation and continuation of mental health treatment among individuals with common mental disorders	None	Survey / Face to face interview	Barriers were grouped into structural and attitudinal. Structural barriers included finances, availability, transport, and inconvenience. Attitudinal barriers included wanting to handle problems on their own, perceived ineffectiveness of treatment, stigma, thought they would get better, problem was not severe.
Ayres et al., 2019	To increase engagement with perinatal mental health services by identifying modifiable barriers and facilitators to women accessing this service following a referral from their antenatal obstetric service.	Maternity services	Electronic questionnaire	Participants reporting previously being treated for anxiety or depression, were more likely than those who had never received treatment to plan to attend the appointment. For women that did not attend an offered perinatal mental health service appointment a lack of time, no one to look after children, and encouragement by family and HCP were identified as the primary factors that influenced their decision to not engage.
Bados, Balaguer and Saldana, 2007	To provide further information about a number of key aspects of CBT dropouts: percentage of dropouts, the point at which they occur, reasons given by patients for stopping treatment, and differences between patients who drop out and those who complete treatment.	Behavioural Therapy Unit (UTC) of the University of Barcelona	Questionnaire	Patients who dropped out were more likely to present diagnoses other than anxiety disorders or other conditions that may be a focus of clinical attention. The main reasons were grouped into three categories in line with previous studies: low motivation and/or dissatisfaction with the treatment or the therapist, external difficulties such as transport problems, moving house, timetables, illness, new responsibilities, and finally because they believed they had improved.

Barnes et al., 2013	To explore participants' views and experiences of CBT focusing on what participants found challenging and how this impacted on their experience and willingness to engage with treatment.	Primary care (GP practice recruitment)	Telephone questionnaires and qualitative interviews	People who didn't attend any appointments stated reasons as being other commitments, the time place or location was inconvenient, did not have time to attend, decided they did not want to receive CBT other. People who attended at least one session stated attendance decisions were affected by ideas about CBT, emotional difficulties with processes involved in CBT, relating to the therapist and homework.
Britt et al., 2015	The purpose of this study was to more fully investigate the role of different stigma perceptions as correlates of treatment seeking and dropout among a large sample of active duty military personnel.	Military	Survey, self-report	Individuals screening positive for mental health problems consistently indicated more perceived stigma than those without mental health problems. Stigma related to career, stigma related to differential treatment, stigmatizing perceptions of others and self-stigmatizing from treatment seeking were assessed.
Bruwer et al., 2011	To examine structural and attitudinal barriers to treatment initiation among individuals with a mental disorder as well as demographic and clinical predictors of treatment dropout	None	National probability survey	Structural and attitudinal barriers were reported. Structural barriers included financial, availability and transportation. Attitudinal barriers included low perceived ned for treatment, wanting to handle the problem on their own, perceived ineffectiveness, stigma, thought it would get better, and problem was not severe. Those with mild clinical severity were significantly more likely than those with moderate severity to endorse a low perceived need.
Caplan, 2013	To examine barriers to treatment engagement and how experiences of childhood adversity and gender-based violence influenced perceived support for treatment among Latinas with elevated depressive symptoms who were at high risk for diabetes.	Community health team	Semi-structured interviews	Barriers related to treatment engagement and perceived lack of support for the decision to seek help were predominantly driven by gender-based violence and adverse childhood experiences, which engendered stigma and fear of disclosure. Cultural values and religiosity, personal values, and perceptions of the effectiveness of treatment for depression took on different meaning in the context of gender-based violence and adverse childhood experiences. Other barriers to treatment engagement included treatment issues, which included negative experiences with therapy, fears about medication, and denial of illness severity.

Conner et al., 2010	To examine: (1) their experience with depression; (2) their process of determining whether or not to seek professional mental health treatment for their depression; (3) any barriers they experienced when attempting to seek professional mental health treatment; and (4) culturally sanctioned strategies they engaged in to cope with their depressive symptoms.	None	Interviews	Beliefs about depression among older African Americans included cultural beliefs, fear, multiple stigma and lack of information. Barriers to seeking treatment included experiences of stigma, lack of faith in treatment, lack of access to treatment, mistrust, ageism and lack of recognition. Cultural coping strategies included self-reliance strategies, frontin' (participant's decision to hide depressive symptoms from family and friends), denial, language and 'Let Go and Let God' (beliefs that prayer and a relationship with God is the first line of defence in the treatment).
Elliott et al., 2015	To examine the duration and difficulty of steps in the therapy-seeking process, the longitudinal course of clients' expectations of difficulty in working on their problems in therapy and their commitment to therapy, and whether the duration and difficulty of seeking therapy predicted clients' expectations of how difficult therapy would be and how committed they were to therapy.	University clinical psychology training clinic	Structured telephone interview	Participants took the longest amount of time to decide that therapy might help. A pairwise comparison indicated that deciding to seek therapy took significantly less time than deciding that therapy might help. Once participants had decided to seek therapy, a pairwise comparison indicated that it reportedly took them less time to contact the clinic. Most participants reported contacting the clinic within a month of deciding to seek therapy. Taking the first step by deciding that therapy might help was described as being more difficult than deciding to seek therapy; contacting the clinic was reported to be easier than deciding to seek therapy. Participants' self-reported distress was significantly positively associated with the first two decisions: difficulty in deciding that therapy might help and deciding to seek therapy. Reported distress level was not significantly related to reported difficulty contacting the clinic. Mean self-reported duration of seeking therapy was positively associated with expectations of therapy difficulty measured before treatment. No significant associations were found between mean reported duration of seeking therapy and commitment to therapy at pre-treatment. Mean reported difficulty in the process of seeking psychotherapy was positively associated with pre-treatment expectations of difficulty in the therapy process. No significant associations were found between mean reported difficulty in the process of seeking therapy and reported commitment to therapy at pre-treatment.
Farid and Alapont, 1993	To assess the impact of quality of referral letter on attendance at a psychiatric out-patient clinic	Psychiatric out-patient clinic	Referral letters	There were significant differences in the quality rating given to the letter of referral for those who attended and those who did not. Non-attenders had lower quality referral letters which dd not contain adequate history or specific description of their problems. There were no notable

				differences between the waiting period for attenders and non-attenders. Non-attenders were likely to have previously not attended for medical or psychiatric out-patient appointments.
Flynn et al., 2010	Identify factors that influence the likelihood of seeking and participating in perinatal depression treatment among un-treated depressed women to begin to inform strategies to better address depression in the obstetrics setting.	Two University hospital-affiliated obstetric clinics	Semi-structured interviews	Practical and psychological factors were highlighted as affecting attendance. A strong overarching theme was the need and preference for an individualized approach. That is, women showed varying and individual specific influences (both practical and psychological) on reactions to depression treatment referral and follow through. Practical factors included treatment location, proactive and timely connections with referrals and flexible options. Psychological factors included information about depression and treatment and concerns about stigma associated with treatment for depression.
Greeno et al., 1999	To determine whether patient, system, and illness characteristics predicted patients' return for at least one treatment visit after an assessment appointment.	Rural community mental health centre	Chart review	Patients seen for assessment within one week of the initial phone call were more likely to attend. Where referrals came from an agency of social control patients were less likely to attend. Non-attenders were more likely to present with issues related to criminal activity, whereas attenders were more likely to present with psychotic or serious cognitive disorders. The distribution of other disorders such as substance abuse, anxiety, and depression was similar. Attenders were assessed as experiencing more severe symptoms at assessment. A significantly higher proportion of attenders had previously received treatment.
Horevitz, 2014	To examine psychosocial and contextual factors in the referral process that predict follow-up with mental health services.	Community Health Clinic	Face-to-face interviews	Warm hand-offs were significantly more likely to lead to attendance, especially where English was the preferred language. Interviews highlighted the following as being important to patient experiences during the referral process: participants' understanding of the root causes and treatment preferences for depression; participants' overall experience at the service (i.e., sense of

				connection to the clinic and their primary care provider) as well as their experience of the referral to behavioural health; readiness to engage in recommended treatment for depression; and everyday barriers such as poverty, scheduling issues, and adequate understanding of the services being offered. Issues relating to level of acculturation (language) and gender were also important.
Hundt et al., 2018	To understand the attitudes, experiences, and barriers and facilitators to treatment for veterans who enrolled in a Veterans Association PTSD specialty clinic and were offered prolonged exposure or cognitive processing therapy, but who did not engage in any sessions of either treatment.	VA medical centre	Medical records Qualitative interviews	Barriers categorised as practical, knowledge, emotional, therapy-related and VA-system-related barriers. To facilitators were noted, the thought that treatment had been selected correctly and had positive experiences with the therapist.
Levy et al., 2019	To compare the characteristics of Veterans with PTSD who did and did not initiate an evidence-based psychotherapy after participating in a treatment information session.	VA medical centre	Electronic medical record data collection	Veterans in the No-Initiation group had a longer period of time between the referral and information session than Veterans in the Initiation group. Most Veterans in the No-Initiation group had more than 10 days between the referral and information session.
Lewy and McFarland, 2014	To describe barriers to mental health care perceived by wives of military service members and to compare barriers for military wives with those experienced by similar women in the general population.	None	Web-based screening questions and health status measures.	Feeling unable to get away during the day, confidentiality, negative opinions in the community, worries about being committed or forced to take medication, concerns mental health providers would not understand military spouses, trust and not knowing where to go for mental health services were all barriers for military wives attending for mental health support. Cost was a more commonly reported barrier in the general population which didn't feature as prominently with military wives. General population barriers included not knowing where to go for mental health services and being unable to get away during the day, however these were less pertinent than for military wives.

Lichtenthal et al., 2015	To examine bereavement mental health service use, barriers to use, and factors associated with use in parents bereaved by cancer.	Cancer and Paediatric Oncology services	Survey	Parents reported finding it too painful to speak about their loss, and it was difficult to find help. Increased prolonged grief was associated with it being too painful to discuss their child's death and feeling like no-one can help with coping with the loss.
Lincoln et al., 2005	To search for promising predictors of treatment acceptance, attrition, effectiveness, and relapses after treatment in a field treatment outcome study for social phobia and to compare these with variables identified as predictors in the context of controlled efficacy studies.	Outpatient clinical psychology clinics	Questionnaire/ assessment interview sessions	Finances, accessing treatment elsewhere, doubts about the treatment concept and organisational difficulties were reported to affect attendance for treatment following assessment (assessments took between 4 and 6 50-minute sessions). Where individuals attended for a next session following assessment (cognitive preparation) but did not return, finances, difficulties with treatment and feeling sceptical of the treatment rationale were reported to influence decisions not to attend.
Mohr et al., 2006	To investigate perceived barriers to psychotherapy in a sample of primary care patients and to test the hypothesis that these barriers would be more common among patients with depression.	University based primary care clinic	Postal survey	Barriers identified were grouped into practical and emotional categories. Practical barriers included cost, time, transport and other responsibilities. Emotional barriers included discomfort talking about personal issues, concerns about being seen while emotional, talking about private topics with someone not known, and concerns about what others (family, friends) would think. More practical and total barriers were reported by women, and more practical, emotional, and total barriers were reported by ethnic minority patients. Poorer perceived health status was associated with increased barriers in all categories. The majority of patients reported at least one perceived barrier that would make it very difficult or impossible to participate in psychotherapy. Depression was associated with increased frequency of perceived barriers. Depression predicted several individual practical barrier items, including cost and transportation difficulties. History of psychotherapy was associated with lower perceived emotional barriers.

Mojtabai et al., 2011	To examine barriers to initiation and continuation of treatment among individuals with common mental disorders in the US general population.	None	Survey and face-to-face interviews	Among respondents who recognized a need for treatment, the desire to handle the problem on one's own was the most commonly reported reason for not seeking treatment. Attitudinal/evaluative barriers (such as wanted to handle on own, perceived ineffectiveness, stigma, negative experience with provider, the problem got better) were much more commonly reported than structural barriers (such as financial, availability, inconvenient or transportation). Reported reasons for not seeking treatment varied significantly across severity levels, with low perceived need more commonly reported by respondents with mild than moderate or severe disorders. Most attitudinal/evaluative barriers were reported by a higher proportion of respondents with perceived need who had severe or moderate than mild conditions.
Mokrue et al., 2011	To assess the attitudes, perceptions, and obstacles reported by physically injured patients in response to offers of free, brief cognitive-behavioural therapy (CBT) after commonly cited structural obstacles were removed.	Hospital trauma centre	Semi-structured interview and assessment.	The two most common reasons why participants refused treatment were that they believed that they did not need treatment, and concern about friends or family members involved in the trauma took precedence.
Murphy et al., 2013	Trial a method of gathering measures at the point of referral, observe the completion rate of the study measures, and to explore whether it was possible to identify attitudes towards therapy that predicted first point attendance, to inform the design of a larger study.	Primary care	Questionnaire	Endorsing the statement "Talking to a therapist will help me understand better how my mind works" was associated with increased likelihood of attendance.
Murphy et al., 2016	To identify positive and negative attitudes towards therapy that predicted initial attendance.	Primary care	Questionnaire	Endorsement of an item measuring concern about self-disclosure predicted non-attendance. Positive attitudes towards therapy, particularly those measuring motives for self-reflection, predicted increased attendance among less depressed individuals.
O'Mahen et al., 2015	To gain patient perspectives on engagement and barriers to the Netmums' "Helping with Depression" treatment.	None	Telephone interviews.	Relevance to lifestyle, unrealistic expectations of motherhood, a feeling of double stigma, hopeless mentality, negative experience with previous treatment, inadequate support network were all included as barriers to attending for mental health support.

Reece, 2003	To identify predictors of dropout and assist in developing interventions to retain clients in care.	Community-based mental health clinic	Questionnaires	The most significant predictor of mental health care dropout was the perceived barriers construct of the health belief model, and this was the case after controlling for demographics, physical and psychological health status, and alcohol and other drug use characteristics. It was anticipated that clients would perceive themselves to have a high level of barriers to maintaining appointments for mental health care given the low resource nature of the clinic's client population.
Reust and Lattie, 1999	To explore individual motivations and reasons for appointment-keeping or appointment missing behaviour.	A satellite clinic of a community mental health centre	Telephone interviews.	Reasons why patients did not keep appointments included financial issues or transportation difficulties, illness-related reasons, motivation, previous negative experience(s), administrative issues. Those who did not attend appointments were less likely than those who attended to identify an external person who motivated them to attend, or acknowledge that they had a problem which required support.
Shepardson and Funderburk, 2016	To describe primary care patients' likelihood of attending anxiety treatment featuring various options for different treatment attributes	Primary care clinics at a Veteran's Affairs Medical Centre	Telephone survey followed by a postal/online survey	Participants indicated preferences for monthly, face-to-face individual treatment at a veteran's health administration primary care clinic for 45–60 or 30–45 min with a plan for more than 1–2 visits in total. Appointments with the primary care provider was preferred. Having a symptom focused treatment was rated as more important than whether treatment was face-to-face, over the phone, internet or via an app; the location; or whether treatment was individual, in a group or in a class setting.
Skuse, 1975	To discover patients' feelings about the prospect of seeing a psychiatrist and the attitudes of their friends and relatives to the referral. The study also aimed to find the effect that correcting patients' misconceptions would have on the likelihood of their subsequently attending the clinic.	Psychiatric outpatient clinic	Interview based on questionnaire responses	Findings indicated that knowledge about treatment, fear and stigma related to mental health and knowledge about the reason for referral were important to those referred to the clinic.
Sloan, 2014	To describe the findings from a retrospective review of patient charts suggesting some reasons for low adherence	Hospital psychiatry clinic	Clinic chart review	Being an immigrant or having refugee status, not living with a partner, having children living in the same country and having emotional or social support were all associated with low adherence to treatment in this population.

	with treatment relevant to women, particularly recent immigrants or those who have refugee status.			
Sparks et al., 2003	To assess the relationship between referral source (self vs. other), race, and wait time, and whether the client showed up for the intake appointment.	A large urban community mental health centre	Archive data and telephone logs	The results indicated that individuals who referred themselves for services were more likely to attend an initial intake appointment than those who were referred by others. Conversely, neither race nor wait time was significantly related to pre-intake attrition.
Terrell and Terrell, 1984	To examine whether a relation exists between race of counsellor, client sex, cultural mistrust level, and pre-mature termination rates among black clients.	Outpatient mental health clinic	Clinic records	The results of this study indicate that black clients are more likely to terminate counselling prematurely when seen by a white counsellor than when seen by a black counsellor. One unexpected finding was a significant relation between the simple main effect of trust level and termination rates for all clients and counsellor categories. In addition, Black clients with a high level of mistrust who were seen by a white counsellor had a higher rate of premature termination from counselling than did highly mistrustful black clients seen by a black counsellor.
Trepka, 1986	To establish the extent of attrition from a British out-patient psychology clinic, and to identify factors associated with it.	Outpatient psychology clinic	Clinic appointment attendance	Past psychiatric contact was significantly different between attenders and non-attenders; non-attenders were significantly more likely to have had previous psychiatric contact. Non-engagers were more likely to have been referred by physicians with whom the psychologist had poorer contact.
Wells et al., 2013	To examine reasons for dropping out of depression treatment and barriers to depression treatment among predominantly Latino ED patients, and to identify facilitators to depression treatment engagement in this population.	Emergency department at a State and University Medical Centre	Retrospective telephone interviews	Patients identified a number of barriers that contributed to early non-attendance: transportation problems, cost concerns, employment/unemployment concerns, patient-provider dissatisfaction and issues, and immigrant documentation worries.

2.4 Quality Appraisal

Joanna Briggs Institute quality appraisal assessment tools were used to assess the quality of the included studies (Zeng et al., 2015). This package of tools covers a wide spectrum of study designs and includes assessments for cohort studies, cross-sectional studies and qualitative studies providing a level of consistency across this review in the style of quality appraisal. Joanna Briggs Institute quality appraisal tools are developed using a standardised approach starting with detailed searches for pre-existing study design quality appraisal tools, identification of weaknesses in identified tools, development of a complete tool addressing weaknesses identified in others, and pilot testing to establish face validity, ease of use, acceptability and feasibility in the assessment of sample papers (Munn et al., 2014).

2.4.1 Cohort Studies

Within this review studies considered to be cohort designs were those where attendance was measured at the time of a referral being made until treatment was offered. Data were collected from service records, and socio-demographic factors were included as variables that might affect attendance.

People within included studies were from the general population and groups were defined by the study. Each study identified potential factors such as socio-demographic characteristics which were considered by study authors to be potentially influential to attendance; details of these were recorded. At the time of being referred to a service, individuals were not in receipt of other treatment for the common mental health problems they were experiencing; attendance was recorded for each of the services in the review.

Three items included in the quality appraisal assessment for cohort studies were considered not applicable: one referred to the similarity of the groups and the populations from which they were drawn. This was not considered applicable to the review since no groups were pre-defined, rather they were described in relation to the outcome. The other two items related to follow-up and data collection which were considered inappropriate since non-attendance was the outcome of interest. There were four aspects of the quality appraisal which varied for the cohort studies reviewed, these are detailed in Table 4.

When considering the item about service information provided to people being the same for those who attended and those who did not, reviewers coded ‘yes’ where information provision was standardised for all people referred, ‘no’ was coded where there was no standardisation to the process of providing information, and ‘unclear’ was used where the description within the report was vague. Related to this was the item about whether this information was recorded in a valid and reliable way. In this item reviewers coded ‘yes’ where studies used a standardised process of providing information and there was no contradictory information within the publication (such as reports from individuals indicating that they were not provided with detail about the service before an appointment was offered). If the process of providing the information was not standardised, then this was not considered a valid and reliable process. If there was insufficient detail in the paper to assess whether the information provision was standardised, then ‘unclear’ was recorded. Strategies to deal with confounding factors were assessed as being present where the analysis plan and results took account of the potential confounders identified in the study. Statistical analyses were considered appropriate where they enabled the researchers to address the aim(s) of the study, taking appropriate account of the variables of interest. Where the analysis did not enable the authors to address their research questions or did not appropriately deal with the variables of interest then the reviewer response to this item was ‘no’. Vague descriptions of the analysis, or results that did not match the analysis plan resulted in an unclear assessment.

Table 4: Quality appraisal questions with variation in assessment for cohort studies

	Were the two groups similar and recruited from the same population?	Was the information given to people about the service similar for those who attended and did not attend appointments?	Was information given to people about the service recorded in a valid and reliable way?	Were confounding factors identified?	Were strategies to deal with confounding factors (such as socio-demographic characteristics considered to influence attendance) stated?	Were the groups/participants free of the outcome (non-attendance) at the start of the study (or when information about the service was given)?	Were the outcomes measured in a valid and reliable way?	Was the follow up time reported and sufficient to be long enough for outcomes to occur?	Was follow up complete, and if not, were the reasons to loss to follow up described and explored?	Were strategies to address incomplete follow up utilized?	Was appropriate statistical analysis used?
(Bados et al., 2007)	N/A	Yes	Yes	Yes	No	Yes	Yes	Yes	N/A	N/A	Yes
(Elliott et al., 2015)	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Yes
(Farid and Alapont, 1993)	N/A	Unclear	No	Yes	No	Yes	Yes	Yes	N/A	N/A	Unclear
(Greeno et al., 1999)	N/A	Yes	No	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Unclear
(Horevitz, 2014)*	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Yes
(Levy et al., 2019)	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Yes
(Lincoln et al., 2005)	N/A	Unclear	No	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Yes
(Mokrue et al., 2011)	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Unclear
(Murphy et al., 2013)	N/A	Yes	Yes	Yes	Unclear	Yes	Yes	Yes	N/A	N/A	Yes
(Murphy et al., 2016)	N/A	Yes	Yes	Yes	No	Yes	Yes	Yes	N/A	N/A	Yes
(Reece, 2003)	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Yes

(Skuse, 1975)	N/A	Unclear	Yes	Yes	Unclear	Yes	Yes	Yes	N/A	N/A	Unclear
(Sloan, 2014)	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Yes
(Sparks et al., 2003)	N/A	Unclear	Yes	Yes	Unclear	Yes	Yes	Yes	N/A	N/A	Yes
(Terrell and Terrell, 1984)	N/A	Yes	Yes	Yes	Unclear	Yes	Yes	Yes	N/A	N/A	Unclear
(Trepka, 1986)	N/A	Unclear	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Yes

2.4.2 Cross-sectional Studies

Within this review cross-sectional studies comprised surveys with participants responding to questions about their mental health, referrals to mental health services and attendance to offered appointments retrospectively.

Assessment of the cross-sectional studies showed that all articles included a clearly defined sample with clearly defined criteria for inclusion. Standardised criteria were used to identify common mental health problems within all studies, and socio-demographic characteristics considered influential to attendance were identified. Attendance was measured in all papers, and statistical analysis methods that matched the study aims and objectives were used to understand the data in all cases. There were, however three questions within the cross-sectional study appraisal tool where variation was noted between studies. These items have been included in Table 5.

Reviewers considered descriptions of study subjects and settings to have been described in detail where it was clearly included in the report. A response of ‘no’ for this item was given where these details were either not included or were vague. Where information about the service was reportedly given to participants in a standardised way then reviewers recorded a response of ‘yes’ to this item. If there was no standardisation reported then reviewers coded ‘no’. Where information about this was vague or not included in the report then ‘unclear’ was recorded. Strategies to deal with other factors considered to influence attendance were assessed using details in the analysis plans and results reported. Strategies to deal with other factors considered to influence attendance were assessed using the analysis plan and results included in the report. Responses reflect whether the analysis plan and results took account of these potential confounders identified in the study.

Table 5: Quality appraisal with variation in assessment for cross-sectional studies

	Were the criteria for inclusion in the sample clearly defined?	Were the study subjects and the setting described in detail?	Was information given to people about the service recorded in a valid and reliable way?	Were objective, standard criteria used for measurement of the condition?	Were confounding factors identified?	Were strategies to deal with other factors (such as socio-demographic characteristics considered to influence attendance) stated?	Were the outcomes measured in a valid and reliable way?	Was appropriate statistical analysis used?
(Andrade et al., 2014)	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
(Ayres et al., 2019)	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
(Britt et al., 2015a)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
(Bruwer et al., 2011)	Yes	Yes	N/A	Yes	Yes	Yes	Yes	Yes
(Lewy et al., 2014)	Yes	Yes	N/A	Yes	Yes	Unclear	Yes	Yes
(Lichtenthal et al., 2015)	Yes	Yes	N/A	Yes	Yes	Yes	Yes	Yes
(Mohr et al., 2006)	Yes	Yes	Unclear	Yes	Yes	Yes	Yes	Yes
(Mojtabai et al., 2011)	Yes	Unclear	Yes	Yes	Yes	Yes	Yes	Yes
(Shepardson and Funderburk, 2016)	Yes	Yes	N/A	Yes	Yes	Unclear	Yes	Yes

2.4.3 Qualitative Studies

The reporting of qualitative studies included in this review was notably more varied than for the quantitative studies. For all studies reporting included descriptions of methodological approaches appropriate to answer the stated research question(s) or objective(s). Additionally, the methods used to collect data were in line with the methodology described. Nearly all studies reported conclusions that were clearly linked to the analysis undertaken, with one study being assessed as unclear for this question (Reust et al., 1999). None of the studies within this review included a statement that described the researcher's cultural or theoretical position, and no study clearly indicated the influence of the researcher on the research (or the research on the researcher). There were five further aspects of the quality appraisal that varied for the qualitative studies reviewed; these are detailed in Table 6.

For items considering whether one aspect of the paper followed appropriately from the preceding section, responses of 'unclear' were given where reports did not state information about a component expected in the quality appraisal, for example a philosophical perspective was not always stated. 'Unclear' was also used where studies provided information about both components but when the presentation of information was not considered typical for the design which had been used. Adequate representation of participant voices was assessed using the findings section; where interpretations of the data were clearly supported by participant quotes, reviewers coded 'yes'. Where quotes were used but there was insufficient detail in the quotes to allow reviewers to assess whether they were supportive of researcher interpretations then reviewers coded 'unclear'. Where there were insufficient quotes included to support the researcher interpretations a code of 'no' was given.

Table 6: Quality appraisal questions with variation in assessment for qualitative studies

	Is there congruity between the stated philosophical perspective and the research methodology?	**Is there congruity between the research methodology and the research question or objectives?**	**Is there congruity between the research methodology and the methods used to collect data?**	**Is there congruity between the research methodology and the representation and analysis of data?**	**Is there congruity between the research methodology and the interpretation of results?**	**Is there a statement locating the researcher culturally or theoretically?**	**Is the influence of the researcher on the research, and vice-versa, addressed?**	**Are participants, and their voices, adequately represented?**	**Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?**	**Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?**
(Anderson et al., 2006)	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
(Barnes et al., 2013)	Unclear	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
(Caplan and Whittemore, 2013)	Unclear	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
(Conner et al., 2010b)	Unclear	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
(Flynn et al., 2010)	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
(Horevitz, 2014)*	Unclear	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
(Hundt et al., 2018)	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
(O'Mahen et al., 2015)	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
(Reust et al., 1999)	No	Yes	Yes	Unclear	Unclear	No	No	Unclear	No	Unclear
(Wells et al., 2013)	Yes	Yes	Yes	No	Unclear	No	No	Unclear	Yes	Yes

2.5 Data syntheses

2.5.1 Quantitative analysis

A narrative synthesis of the headline factors identified as being important to consider in relation to early attendance for psychological therapy appointments was conducted for the 25 observational quantitative studies included in this review. Using guidance for conducting narrative syntheses in systematic reviews (Popay et al., 2006), the findings from individual studies were organised into four themes relating to the common mental health problem for which individuals were seeking support, individual beliefs about treatment, practical challenges which would be necessary to overcome before attendance would be possible, and the support participants received from others.

2.5.1.1 Presenting problem

The common mental health problem and associated severity of symptoms were considered important to early attendance using data collected from primary studies. Two articles included in this review discussed specific diagnoses in relation to early attendance with one presenting data from a clinical sample where initial non-attendance was significantly more common in people with diagnoses other than anxiety disorders or 'other conditions that may be the focus of clinical attention.' Data captured individuals with affective disorders, eating disorders, adaptive disorders, impulse control disorders, somatoform disorders, personality disorders, sexual dysfunction and nicotine dependence (Bados et al., 2007). A second study surveying people referred to primary care suggested that a diagnosis of depression was associated with reporting more perceived barriers to treatment attendance (Mohr et al., 2006).

Three studies considered severity of mental health symptoms in relation to attendance. Reece (2003) reported that individuals with severe OCD symptoms were more likely to attend for treatment than individuals with severe symptoms relating to other diagnoses (Reece, 2003). Another study found that participants with more severe symptoms were more likely to attend than individuals reporting less severe symptoms (Greeno et al., 1999). Upon examining the level of distress people felt at the point of deciding to refer to a mental health service, Elliot and colleagues (2015) reported a positive correlation between level of symptom distress and two other variables: difficulty deciding that therapy might help and making a decision to seek therapy (Elliott et al., 2015). Where individuals believed they had improved or considered they would recover without additional support, they were less likely to attend for treatment (Bados et al., 2007; Bruwer et al., 2011).

2.5.1.2 Beliefs about treatment

Many studies reported attitudinal barriers as important to initial non-attendance due to participants believing that their problem was not severe and that they did not need treatment (Andrade et al., 2014; Bruwer et al., 2011; Mojtabai et al., 2011; Mokrue et al., 2011). Three of these studies used the WHO CIDI (Kessler and Üstün, 2004) to collect and interpret reasons for non-attendance, the fourth asked an open question and developed a coding system for interpretation (Mokrue et al., 2011). Another study found 'the decision that therapy would be helpful' was more difficult than 'deciding to seek help', with 'contacting services' considered to be the least difficult decision (Elliott et al., 2015). Attitudinal factors were more influential than symptom recognition in two studies that gathered retrospective data about mental health service use in national surveys. Both studies found that individuals who accepted a need for treatment reported not having attended mental health services due to a desire to handle their mental health on their own (Andrade et al., 2014; Mojtabai et al., 2011). Similarly, motivation to attend treatment was considered to influence attendance with one study directly reporting a lack of motivation being associated with non-attendance at early treatment appointments (Bados et al., 2007). Within this study people who did not attend early appointments provided three main reasons for non-attendance: low motivation and/or dissatisfaction with the treatment or therapist; external difficulties such as practical difficulties with appointments or other responsibilities; and the belief that they had improved.

Concerns about perceived stigma for attending mental health treatment were identified in three studies (Britt et al., 2015; Lewy et al., 2014; Skuse, 1975). One study specifically investigated stigma for accessing mental health services in military personnel, indicating that individuals with mental health problems were more likely than those without mental health problems to: 1. stigmatise their own thoughts about seeking treatment, 2. stigmatise others who seek mental health treatment, 3. believe that others would stigmatise them if they accessed treatment and 4. believe that receiving mental health treatment would negatively affect their career (Britt et al., 2015). Another study described participants with HIV who were referred for mental health treatment and found that increased perceived stigma related to HIV diagnosis was related to non-attendance for mental health treatment (Reece, 2003).

Investigations into beliefs about treatment, using an unpublished initial appointment questionnaire (Mansell, 2010) to examine beliefs, goals and attitudes towards therapy, found that participant endorsement of positive beliefs about therapy such as the statement “talking to a therapist will help me understand better how my mind works” was associated with increased initial appointment attendance (Murphy et al., 2016; Murphy et al., 2013). Conversely, difficulties or fears associated with talking about individual circumstances were considered to be a barrier to early attendance (Lichtenthal et al., 2015; Mohr et al., 2006; Murphy et al., 2016). Perceptions of mental health services themselves were reported to influence initial appointment attendance with individuals who lacked trust and confidence in mental health services and providers being less likely to attend (Terrell and Terrell, 1984). In an online survey for military wives and the general population (Lewy et al., 2014), options of potential barriers to mental health service attendance were informed by previous qualitative work and combined with items from the National Survey on Drug Use and Health (Mojtabai, 2009). Concerns about confidentiality were included as potential barriers to attending early appointments and were reported as a barrier more frequently by military wives than in the general population (Lewy et al., 2014).

2.5.1.3 Contact with Services

Referrals made by “agencies of social control” (Greeno et al., 1999), and those considered low quality (i.e. omitting information about medication, family history, main symptoms, reason for referral or psychiatric history) were seen as ‘key items’ by Pullen and Yellowless (1985), were associated with non-attendance (Farid and Alapont, 1993). Knowledge and awareness of a referral for mental health appointments were considered important to attendance with two studies indicating that self-referrals were more likely to result in early appointment attendance (Sparks et al., 2003; Trepka, 1986). Recommendations for mental health care by a primary care provider was associated with initial attendance for psychological therapy in one study (Reece, 2003). Contact between the referrer, the person referred and psychological treatment provider was investigated in another study; findings suggested that individuals are more likely to attend for treatment following in-person introduction to the therapy provider and details about the service (Horevitz, 2014). Two studies indicated that the time between a referral and the appointment did not affect attendance (Farid and Alapont, 1993; Sparks et al., 2003); however, another two studies reported that prompt appointments were more likely to increase attendance (Greeno et al., 1999; Levy et al., 2019).

Having knowledge of the treatments being offered was important to attendance, with a lack of understanding considered a barrier to treatment (Skuse, 1975). Where participants were aware of the referred treatment, those who reported perceived barriers to treatment, concerns about non-voluntary treatments or requirements to take medications, and who held doubts about the treatment concepts, were more likely not to attend (Lewy et al., 2014; Lincoln et al., 2005; Reece, 2003).

Previous experience with mental health services was also important; however, evidence was mixed for whether previous experience of mental health services was associated with current attendance (Farid and Alapont, 1993; Greeno et al., 1999; Reece, 2003; Trepka, 1986).

2.5.1.4 Practical challenges

Finances affected attendance within many included studies (Andrade et al., 2014; Bruwer et al., 2011; Lincoln et al., 2005; Mohr et al., 2006); however, a study comparing military wives to similar women from a national survey found that finances were less important than other variables in determining initial appointment attendance for military wives (Lewy et al., 2014). Access to transport and the location of treatment appointments affected attendance (Bados et al., 2007; Mohr et al., 2006; Reece, 2003). Other commitments and responsibilities reportedly affected initial attendance (Ayres et al., 2019; Bados et al., 2007; Lewy et al., 2014; Mokrue et al., 2011; Reece, 2003; Sloan, 2014), as did physical health problems (Bados et al., 2007). Difficulties associated with finding time to attend appointments or finding appropriate support services were also reported as barriers to attendance (Ayres et al., 2019; Bados et al., 2007; Lichtenthal et al., 2015).

2.5.1.5 Social support

Having social support was important to initial attendance in one study of women who had recently migrated from countries in which HIV and mental health problems were highly stigmatised (Sloan, 2014). The authors suggest women with social support may be less likely to attend for formal mental health treatment as they felt sufficiently supported in the community, with an alternative commentary linking a potential fear of stigma from the source of social support, if women disclosed having mental health problems (Sloan, 2014).

2.5.2 Qualitative analysis

Findings from the ten qualitative papers were analysed using thematic synthesis methods (Thomas and Harden, 2008). NVivo version 11 (Edhlund and McDougall, 2016) was used to code information and organise the codes into themes. The resultant analysis has been organised into four themes: individual perceptions of mental health, the social and cultural influences affecting attendance, service characteristics and experiences of people referred to these services, and notable logistical issues relating to initial attendance.

2.5.2.1 Individual Perceptions

This theme relates to the participants' reflections of their lives and their views of mental health problems. Individual beliefs about whether personal experiences represent a mental health problem, how this reflects on them and their beliefs about the cause of the problem, all have consequences for treatment appointment attendance. In addition, intrinsic beliefs about people who experience mental health problems and perceived consequences for immediate family members, physical health and employment appear to contribute to decision making about accessing support.

For many individuals within included studies, recognising a need for support with mental health problems was considered fundamental for early appointment attendance. For those individuals who did not consider their problems to constitute a true mental health problem, and whose feelings of mental ill-health were normalised or minimised, decisions about attendance at initial appointments were negatively affected:

> *Well, they say, ''Well, you're just getting old.'' Yeah, you're supposed to feel this way, or just because you get older you're supposed to feel [depressed]. (Conner et al., 2010b).*

> *I don't never consider what I go through far as depression. I just--I consider it a high level of stress, and maybe that's just how I label it because of the word 'depression'. (Flynn et al., 2010).*

Not feeling ready for treatment, or having concerns about the emotional consequences of attending treatment appointments, was also reportedly influential in decisions to not attend for some participants in included studies:

> *The only thing that's been holding me back is me and my insecurity, my fear. Because like you just mentioning it right now, my heart is beating fast... it's nothing that I would want to do, but I know that I need to do something.*
>
> *I'd get suicidal again, worse than I already am. I already know that. (Hundt et al., 2018)*

The reasons for experiencing common mental health problems were reportedly influential in whether psychological treatments were considered relevant to improving mental health. For example, individuals who considered their mental health problem to be caused by environmental stressors such as losing a job, indicated that appropriate support for them would focus on finding a new job (Horevitz, 2014). Participants who described their mental health problem as stemming from an abusive relationship, raised concerns about the possible consequences of attending mental health treatment which they believed would focus on their mental health rather than recognising their partner as the underlying cause (Anderson et al., 2006). Consequently, where individuals' perceptions about service treatments did not match their beliefs about the cause of the problem, they were less likely to consider treatment worthwhile and less likely to attend appointments as a result.

Prioritising their own needs above others who they have a responsibility to care for, was reportedly a factor which influenced early attendance. This was particularly evident where individuals had children, viewing their family commitments as more important than addressing their own mental health (Caplan and Whittemore, 2013). Constraints related to physical health problems also took precedence over mental health in some cases, with some individuals feeling too unwell physically to attend appointments for their mental health (Reust et al., 1999).

Internal motivation to access treatment was low for many individuals, despite acknowledging they were experiencing a mental health problem and being encouraged to seek support (Wells et al., 2013). In some instances, the specific feeling of needing support for common mental health problems proved a barrier for individuals who considered mental health problems to be a sign of personal weakness. The dissonance created by holding the belief that they need support for a mental health problem at the same time as feeling that mental ill-health is a sign of weakness may have influenced appointment attendance:

> *I think [of depression] as a weakness. I want to just beat myself up and cuss myself out and everything like that, you know. I just down rate myself. (Conner et al., 2010b).*

The anticipation of attending was another factor highlighted in one study with a participant commenting on the impact that travelling by public transport had on their mental health symptoms and their subsequent ability to consider engaging with appointments:

> *Having to deal with public transportation, it's kind of hard for me so it kind of takes a little motivation like, "[Exasperated] Okay I've got to get myself ready" like (laugh). You know and then once I get there, I'm not very in my full mental capability. I'm still stressed so when I get to the [appointment location] I'm like, "Alright, I just want to go. I don't want to be here." (Hundt et al., 2018)*

Related to self-perceptions, many individuals also indicated that they held beliefs about other people which caused them to worry about attending initial mental health support appointments. Where individuals were aware of needing mental health support, a fear of disclosing information related to historical experiences reduced attendance at early treatment appointments in some cases:

> *Very few people know about it [sexual abuse]—my partner, my psychiatrist, and now you. [Until recently] I never dared to tell my therapists, because I was afraid, because I was embarrassed, and because I was afraid that they were not going to understand me. (Caplan and Whittemore, 2013).*

Participants also described concerns about consequences for family members if they sought support. Most commonly, mothers worried that acknowledging having mental health problems would result in them being considered an unfit parent with the possibility that their child(ren) may be removed from their care (Anderson et al., 2006). If the perception of therapists is that they have the ability to remove children from parents, then those individuals who consider mental health problems to be associated with poor parenting are less likely to attend for support. This may be linked to an individual's ideas about what others think of mental health problems. Where this specific question was asked of participants, responses were largely negative, contributing to the likelihood of non-attendance at initial treatment appointments:

> *They're dangerous. They can get violent. They pass on their genes to their children. That, they're completely ... they're crazy ... When a person's depressed, they're crazy (Conner et al., 2010b).*

Perceptions about the consequences of mental health problems on employment was another issue raised. In addition to practical issues such as conflicts in working hours and appointment times, concerns were raised about the perceived consequences of attendance on future employability with fears that attending mental health appointments would be recorded somewhere which could be linked with future job applications (Conner et al., 2010b). Although not the case in all studies, a lack of employment was considered a major contributing factor in the development of common mental health problems for participants in one study where unemployment and consequent poverty were considered to be stressors triggering depression, especially in male participants (Horevitz, 2014).

In contrast to an individual's perceptions of mental health, other people's opinions and behaviours were also considered to be important to whether an appointment for support was attended. These influences, external to the individual being referred for treatment are discussed in the next theme.

2.5.2.2 Social and cultural influences

The culture an individual identified with, and the people whose opinions they valued and respected, were both factors that were discussed as being crucial to understanding initial non-attendance. Individuals identifying with specific ethnic groups were considered less likely to attend for support appointments due to the understanding that mental health problems were not openly discussed within their communities:

> *I don't think we discuss it that much, Black people. If you're depressed, nobody knows. You don't tell people, you know. They just look at you, figuring you might*

> *have a problem, but you don’t talk about it, you don’t discuss it (Conner et al., 2010b).*

The experiences of belonging to some community groups was associated with increased levels of stigma from wider society. Members of these groups who also considered themselves to have a mental health problem believed that they faced an additional level of stigma as a result (Conner et al., 2010b). This experience of a perceived additional level of stigma in comparison to peers created an additional barrier to attendance for mental health support. This belief about additional levels of stigma was not specific to cultural groups. Women who were experiencing post-natal depression also perceived higher levels of judgement from others if they accessed mental health treatments. This was described in addition to the feelings of being judged as a mother:

> *In society, anything postpartum is oh, you’re crazy, oh boy, you should be careful because you’re going to go home and drown your children. You know, I mean it’s such a stigma in the media and everything else. It’s a total lack of education, you know. (Flynn et al., 2010).*

In addition to social and cultural groups, differences in whether individuals attended initial appointments were also associated with support from a specific person. In many instances participants who described having family, peer or professional support for treatment were more likely to attend treatment appointments than those who had not discussed their mental health problem with others (Reust et al., 1999; Horevitz, 2014). However, this was not the case for all participants. For some, family members were influenced by the reputation of services and encouraged individuals to seek support elsewhere (Hundt et al., 2018); for other participants family members or community groups had minimised or normalised their experiences. Where this was evident individuals were less likely to attend for treatment despite attempting to obtain social support:

> *My wife...she was one of those that always heard that you don’t get the best quality of care there and so she encouraged me to just to go outside the [mental health support organisation]. (Hundt et al., 2018).*

> *Maybe I could ask my doctor about it, or something...if I should still be feeling this way, because everyone says, like when I mention it to my mom, she's just like "Oh... you're just going through the emotions. You're pregnant. (Flynn et al., 2010).*

Religious influences were also highlighted by participants in two studies as important to decisions to attend for mental health support. Although many participants reportedly did not consider their religious leaders a potential source of support for mental health problems, religion was associated with non-attendance at initial treatment appointments where individuals felt encouraged to trust in their religion to resolve issues within their personal lives. Participants described the belief that their faith would heal them and that their mental health problem was a test of their faith (Conner et al., 2010b; Caplan and Whittemore, 2013).

While these influences were considered to have a substantial impact on decision-making related to early appointment attendance for mental health problems, the experiences and perceptions that individuals had of the services offering support for common mental health problems also contributed to their attendance.

2.5.2.3 Experiences with services

Many studies reported that having previous experiences of mental health services affected attendance for initial treatment appointments for a current referral. While there was one instance of a positive past experience increasing the likelihood of attendance at a current referral, the majority of studies described negative past experiences as providing a barrier to accessing treatment for a current referral (Reust et al., 1999). Concerns based on previous experiences of being rushed, not listened to or believed, or offered medication rather than a therapeutic approach, were considered important to non-attendance (Hundt et al., 2018; Wells et al., 2013). Additionally, individuals described issues with staff other than therapists as being influential in their decision to not attend:

> *Every time I go to the [appointment location], somebody will ask me at the front desk, "Oh, is your husband in the [organisation]?" No sister. No sister, I was. So that irritates me. Like I couldn't do that job too....I would rather not go to an appointment just because I don't wanna experience that. (Hundt et al., 2018).*

Some studies also reported that participants considering mental health services to be ineffective and individuals having lost faith in services, were factors likely to contribute to non-attendance (Conner et al., 2010b). This could be related to a lack of knowledge about the benefits of the treatments available for individuals seeking support for common mental health problems, with some participants stating they were unaware of how treatment could help them:

> *I don't know what it [treatment for depression] would do, but, if it would help me, then I would definitely consider it. (Flynn et al., 2010).*

> *It just doesn't make [sense]; I don't understand the value of it. Nobody's ever been able to tell me why it's valuable. (Hundt et al., 2018).*

In relation to current referrals, experiences of the referral process varied greatly. The timeliness of contact by mental health services was considered influential to initial engagement with services with participants expressing a desire for immediate support for common mental health problems. Where referral processes occurred over days or weeks individuals reported feeling unimportant (O'Mahen et al., 2015) and did not subsequently attend appointments:

> *I came in here and spoke to my doctor about it, back in May...she was, okay, I can give you a referral to see a social worker. No, I don't think that I should have to wait for a referral to see a social worker. And then she called like three or four days later and I think the turnaround was too long and when she called I didn't even want to be bothered, so I was like, oh no, nothing's wrong. (Flynn et al., 2010).*

In addition to the length of time for a referral to be processed, the length of time offered for treatment was considered as influential to initial attendance. Participants indicated that the length of treatment needed to be proportionate to their perceptions of their common mental health problem. Where individuals perceived their problem to be complex and likely to take longer to resolve than the treatment being offered by services, they were less likely to consider treatment worthwhile:

> *I think there's different levels of depression, you know what I mean? I just have a lot of problems, you know? I just don't think three to six visits is enough. (Horevitz, 2014).*

Individual perceptions of the cause and severity of their mental health problems have been discussed previously, however this concept also overlaps with the communication that individuals had with services during the referral process. In order to facilitate attendance, individuals described the importance of services listening to them and their ideas about treatment in order to match the treatment offered to these perceptions and tailor a support plan which was considered relevant to them (Horevitz, 2014). Where individuals did not feel their needs could be met by the treatment offered, participants were less likely to attend appointments:

> *"… the online course, it was tailored to my needs at the time and I think that's how it helped so much." (O'Mahen et al., 2015).*

When asked about treatment preferences, studies identified psychological treatments as being favourable to medical treatments (Conner et al., 2010b; Wells et al., 2013). Some participants in included studies indicated a wider choice of treatments would be more appealing; relatedly the idea of doing homework as part of treatment reportedly felt childish and off-putting to some individuals (Hundt et al., 2018; Barnes et al., 2013). However, beliefs about the experience of therapists offering psychological treatments was also viewed as critical to decisions about attendance. Where therapists were not considered to have relevant real-world experience, individuals reported that they felt less inclined to attend for support:

> *I, myself, wouldn't go there because I don't think their advice is good… because a lot of these people you get have not even been through [a situation like mine] and don't even know.... And here you have people who don't have kids, never been molested in their life, and never had children that have been molested.... She's real young, and I believe that wisdom comes with age. And me sitting there talking to this girl would be like talking to my daughter. (Anderson et al., 2006).*

Another aspect of services which participants reported as important when considering accessing treatment was the potential for treatment to be delivered by different therapists. Individuals in the included studies reported that inconsistencies in treatment providers resulted in having to cover the same topics repeatedly rather than moving forwards with their recovery. This process commonly started before the initial contact with service providers as participants reported having to share their information before a referral was made, then again at assessment, and again before treatment was started. When therapists offering treatment were subsequently changed this resulted in an additional need for people to share the same information. Consistency of treatment provider was therefore endorsed as important to initial treatment engagement:

> *They switch you out constantly and ... you have to go back to the beginning again. ... I don't want to go over it again, I don't want to relive it again, I want to leave the past there. (Caplan and Whittemore, 2013).*

This was especially important when the therapist was considered by participants to be instrumental to them receiving treatment which they viewed as relevant. Individuals described difficulties relating to or trusting therapists (Barnes et al., 2013; Hundt et al., 2018). Where a positive connection was not made with the therapist, individuals were less inclined to attend.

With services offering appointments for common mental health problems, individuals have experiences and perceptions of these specific services in addition to the practical issues related to appointment attendance which could be attributed to any service. While practical barriers may arise in other services it is important to consider them in the context of accessing support for common mental health problems since the number of individuals not attending early appointments is so high. This is discussed in the fourth and final theme.

2.5.2.4 Logistical issues

Administrative issues were reported by participants as justification for not attending for treatment. When appointments were cancelled, some were not rescheduled. Additionally, when appointments were not offered directly following a referral or when there was a perception of too many steps involved to access treatment, individuals indicated they lost interest in support offered:

> *… they cancelled it on me. Because I apparently, she wasn't gonna make it. So um, they never rescheduled another one with me. Uh they said they were, but they never did. They just cancelled it, so I never came to talk to her. (Horevitz, 2014).*

> *Someone is gonna call you back. Someone is gonna call you back. Nobody ever calls back. Nobody ever does anything. (Hundt et al., 2018).*

Some reports of non-attendance appeared to be related to the convenience of appointment dates/times and locations. For working participants, the ability to access support outside of working hours was not always offered routinely; where this was an option, individuals reported the idea of repeating their information again to someone offering convenient appointments was off-putting (Hundt et al., 2018). For others, the location impacted attendance in a different way; negative experiences of being in the appointment setting reportedly fed into symptoms of mental health problems such as hypervigilance for this participant seeking support for PTSD:

> *I despise going to the [appointment location] like with every fiber of my being.... There are people everywhere, just hordes of people everywhere...I think that I was the only female in there, and I was just, I almost left... some crazy person, excuse my French, how do I say? Will come up and bother me.... People talking and coughing on you and touching you and asking you questions.... Usually I sit there with my purse clutched like I'm at the subway station in New York or something. (Hundt et al., 2018).*

Participants in some studies with caring responsibilities had mixed views about the location of treatment; some individuals indicated that home-based appointments were preferable due to not needing to arrange transport or childcare while others suggested that home-based treatments would cause increased anxiety around preparing their home for visits (Flynn et al., 2010).

Problems with documentation and insurance provided barriers to initial attendance for participants in some studies. Those without appropriate identification or a method of financing treatment felt unable to engage with offered support:

> *I did go once, but they did not see me because one time a lady told me she needed my social security number and other paper work. I don't have a social security, so I just left. I would have liked to see her, but because of that, I did not. (Wells et al., 2013).*

> *I didn't have the money to pay for the appointment. I have insurance and I couldn't afford the co-payment fee. (Reust et al., 1999).*

Related to this, the method of paying for mental health treatment affected the specific options available to some participants. Where this was the case and choices were restricted, individuals described finding it difficult to engage with the treatment offered:

> *I had a hard time opening up to him and feeling comfortable with him (social worker). A lot of it was because I was on Medicaid, and there were not many choices. (Flynn et al., 2010).*

Participants from ethnic minority groups with a preference to communicate in a language other than the one offered at the service were less likely to attend due to perceived or previously experienced communication barriers. For older participants and those with financial concerns, transport was also cited as a reason for non-attendance:

> *I could not go because of transportation – the bus. Tokens were not provided. I think even though I was feeling really bad, I would have shown up if someone would have gone to pick me up at my house. (Wells et al., 2013).*

Overall, this analysis indicates that individuals within the included qualitative studies were influenced by many internal factors such as their ideas about their mental health problem, the severity and underlying cause of this, and the impact they perceived for themselves and immediate family members if they attended treatment for support. In addition, the community groups that individuals identified with and the views of their family and peers, both influenced decision-making. Contact with services appeared to be highly influential to attendance with services needing to match treatments offered to an individual’s mental health narrative in order to be considered relevant and worthwhile. Individuals described valuing prompt contact from services with minimal need to repeat information before accessing treatment; they also highlighted consistency of practitioners providing treatments as crucial to engagement. Practical barriers such as administrative issues with booking appointments, financing treatment and accessing treatments through language, location issues and transport difficulties were also viewed as being influential to attendance for participants in these studies.

2.5.3 Combined synthesis

There were many areas of overlap between the quantitative and qualitative analyses. Both syntheses highlighted the type of mental health problem as affecting attendance; however, this was described in different ways. Within the quantitative studies, associations between specific diagnoses and levels of severity were described as influencing non-attendance rates. Differences in attendance between individuals with contrasting diagnoses were not presented within qualitative studies; however, participants indicated that the underlying cause of the problem was important in the context of attendance. Ideas about needing or accessing treatment for common mental health problems were also included in both syntheses, with internal reflections of the need for treatment and thoughts about other people's views of mental health being consistent across differing study designs. Concerns about talking with professionals about their presenting mental health problem or information connected to the presenting problem were discussed in both syntheses. As was a lack of confidence in mental health services. The possible impacts that attending appointments could have, both at the time the research was undertaken and in the future, were also relevant to quantitative and qualitative studies.

It was clear from participants included in both analyses that timeliness of contact following a referral and having sufficient understanding of the treatments being offered were important to attendance. Where this was lacking, individuals did not attend offered appointments. Concerns about treatments, such as whether the treatment offered would be sufficient to resolve the presenting problem, and the perceived abilities of therapists to provide effective treatments, were noted in both analyses. Mixed findings were presented for previous experiences with mental health services; however, studies consistently described past experiences as being influential to attendance for current referrals.

Having support from others was mentioned in both analyses, although this was explored more within qualitative studies. Having others who are supportive of treatment was considered to improve the likelihood of attendance; however, having family members or participants who identified with cultural or peer groups that did not support treatment was associated with early non-attendance.

Many overlaps were noted for the practical barriers to attending initial appointments, such as finances, transport, the location of treatment, having other responsibilities, having physical health problems and finding time to attend offered appointments. In addition to these, qualitative studies also highlighted language barriers and administrative issues with booking appointments as influences on attendance at early treatment appointments.

In addition to the factors highlighted as important across analyses, there were also four areas that were not reported as influential across study designs. The quality of referrals for mental health support, and the referrer was not explored within qualitative studies. These were included within the theme considering contact with services in the quantitative analysis, with low quality referrals and those made by "agencies of social control" found to be associated with higher levels of non-attendance at initial appointments. Similarly, quantitative studies did not include data about the religious beliefs of participants, which was included as part of the social and cultural influences theme within the qualitative analysis. Qualitative studies also described the need for participants to consider treatments relevant to their problem to make attendance worthwhile; however, the relevance to participants of the treatment offered for their presenting problem was not assessed in quantitative studies.

2.6 Discussion

This mixed methods systematic review found that initial non-attendance to services offering psychological therapies for CMHPs was associated with a perceived mismatch between treatments offered and an individual's perception about the cause or severity of their problem, concerns about the consequences of engaging with mental health services, and a lack of confidence in the service or therapist offering treatment. Additionally, failing to provide a prompt response to referral, sufficient information about offered treatments, or flexibility to accommodate individual circumstances and issues with the service administrative processes, were also related to initial non-attendance in a number of included studies. Individual perceptions about other people's views of mental health were frequently discussed within included references, indicating further work is needed to reduce the perceived stigma around mental health in the wider community. There is evidence that work to design interventions which improve initial attendance at mental health appointments is underway (Lefforge et al., 2007), with results suggesting that where time and resources are available using a combination of evidence-based strategies (such as prompt initial appointments, use of letters/telephone reminders, discussing obstacles which may affect attendance and solutions to overcome them, video or leaflets about the service) are most likely to improve initial attendance rates. Opt-in approaches to appointments (Hawker, 2007; Schauman et al., 2013) have also been investigated with positive results for initial attendance; however, evidence of interventions which attempt to account for an individual's perceptions of mental health at treatment decision-making is lacking in the research literature.

This review benefits from a broad focus which has enabled the factors which affect initial non-attendance for this group of people and are likely to be modifiable by services or people referred for support, to be considered together. Many of the methods used within this review were selected to reduce the chance of bias in reported findings: searching multiple databases, independent screening using two reviewers, independent data extraction and quality appraisal using systematically developed and validated design-specific tools. The quality of included studies was not used as a criterion for exclusion within this review, rather as additional information to inform the interpretation of study findings. These findings incorporate the experiences of 12,148 people from across the globe who have been referred for psychological treatment for common mental health problems within various settings, with data collection spanning both healthcare and research environments.

The mixed methods approach used in this review enabled the inclusion of both observational and qualitative research. While the quantitative study designs did not generally reflect typical cohort or cross-sectional studies, they demonstrate a pragmatic approach to a real-world issue. Most findings from cohort studies were based on routine healthcare settings with individual self-selection, service data collection methods and definitions of non-attendance varying between studies. Conclusions drawn from cross-sectional studies should be made with consideration to the inevitable differences in length of time between offered appointments and survey completion; contrasting tools were also used to define mental health problems, making comparisons between studies difficult. Qualitative studies lacked information about how researchers approached the work from a theoretical perspective, and none acknowledged the influence of the researcher on the research findings, making it difficult to confidently draw conclusions about the issues emphasized within research interpretations. Despite these drawbacks, included studies described similar issues as being important to early non-attendance. The consistencies across study designs support the conclusion that these are factors which are influential to initial non-attendance and could potentially be modified either by individuals seeking support or by services. Consideration of early non-attendance from different perspectives is possible due to the mixed methods approach used and has enabled an increased level of understanding about why some issues arise so frequently, such as difficulty with finances and transport. This approach has enabled insight into complexities around social support which highlight that having social support is not necessarily enough to reduce the risk of non-attendance; those providing social support also need to be perceived by the person seeking support as accepting of mental health issues and promoting attendance to services. Contrasting findings between qualitative and quantitative studies highlight another benefit of this mixed methods review; factors such as the quality of referral made to mental health services would be unlikely to appear in qualitative studies conducted with people who had non-attended; likewise, an individual's perception about relevance of treatment offered for the presenting problem was not included in any quantitative study focusing on early non-attendance to these appointments.

Some of the studies included in this review reported findings from specific sub-groups of the population such as pregnant women, military personnel, individuals with immigrant or refugee status, people with HIV, and parents bereaved by cancer; findings from these populations may not apply to wider community samples. This review did not attempt to ascertain the effects of pre-specified barriers on appointment attendance, rather the aim was to consolidate previously documented barriers to attendance for people with common mental health problems who had been referred for psychological support. This limits the application of the findings and services interested in improving initial attendance rates would need to decide which, if any, of the factors could be addressed to reduce the likelihood of early non-attendance. Future research to ascertain the effect on early attrition of each of the factors identified within this review would enable clinical teams to make a more informed decision when considering making changes to their referral to treatment pathway. Additionally, research developing interventions which address these factors successfully to improve attendance is needed to support clinical changes. Factors which could not easily be modified by individuals seeking support, or by services, were not included in this review. A separate review of this nature would complement the current review and support services in identifying groups of people who may be at higher risk of not attending initial appointments for support.

To complement the findings from this review, it is important to consider whether there are any socio-demographic factors which relate to initial non-attendances to IAPT services. While it was not within the scope of the review to consider this alongside the factors which could be modified by services or people referred, the following chapter explores referral data from IAPT services to investigate whether there are any individual characteristics which may be associated with initial appointment non-attendance.

3 Chapter 3: Risk factors for non-attendance at Improving Access to Psychological Therapy treatment appointments

3.1 Introduction

In the UK estimates of the number of people with mental health problems are that over 5 million people were recorded as experiencing depression in 2018/19; estimates from 2012 suggest that over 1.7 million people experienced generalised anxiety disorder; and nearly 3.5 million people had mixed anxiety and depression disorders (Public Health England, 2020). Public Health England reporting from 2018/19 shows that 19.7% of the population had self-reported high levels of anxiety (Public Health England, 2020).

NICE guidelines for common mental health disorders have been created drawing on information from condition-specific guidelines (Kendrick and Pilling, 2012). Primary Care Mental Health services in England for common mental health problems are delivered by Improving Access to Psychological Therapy (IAPT) services (Department of Health, 2012). Guidelines encourage local commissioners and services to establish multiple points of referral into the service, such as referrals from health and social care professionals and self-referrals from people with CMHPs, to improve access for local communities. Treatments offered first should be the most effective and least invasive treatments, with individual preferences being considered in the choice of treatment (National Collaborating Centre for Mental Health, 2011). While effective treatments have been identified, such as guided self-help and CBT (Barlow et al., 2000; Price et al., 2007; Foa et al., 2008; Gilbody et al., 2003; Cuijpers et al., 2010), there are significant problems relating to individuals not initiating (Bijl et al., 2003) or not completing offered mental health treatments (Edlund et al., 2002).

Attrition early in the IAPT treatment process appears to be common with evidence suggesting that 62% of those referred across England during a three-month period in 2014 discontinued involvement prior to an initial treatment appointment (Delgadillo et al., 2016). Annual reporting on IAPT services also demonstrates this problem; in the year 2018/19 1.6 million referrals were received by IAPT services in England, from these the individuals in only 582,556 cases (approximately 36%) attended both an assessment and an initial treatment appointment (NHS Digital, 2019c). Factors which may contribute to attrition early and later during a course of treatment are considered to be different (Barrett et al., 2008); therefore, this research focuses on the initial two contacts with IAPT services: an assessment appointment, and the first treatment session offered. Additional considerations for early non-attendance include whether sub-groups of a population such as ethnic minority groups, have different approaches to mental health support (Bhui et al., 2003). Recent research has also suggested that there may be socio-economic factors which affect attendance at mental health support appointments (Firth et al., 2019); level of education has also been considered important in understanding early non-attendance in mental health settings (Self et al., 2005).

In order to examine the factors associated with an increased risk of non-attendance at the IAPT initial assessment or first treatment session, a dataset was obtained from a Practice Research Network (PRN) based in the north of England (Northern IAPT Practice Research Network, 2016). The PRN represents 16 IAPT services; however, the dataset obtained contains information from five of these. The current analysis uses this historical clinical referral data from the Northern IAPT PRN (Lucock et al., 2017) which has previously been analysed in relation to other research questions (Delgadillo, et al., 2016). The aim of this analysis is to use the available dataset to identify characteristics associated with a) being referred to an IAPT service but not completing an assessment, and b) being referred to an IAPT service and completing an assessment but not subsequently attending any treatment sessions. This has been separated into two parts to account for the different data available at each stage.

3.1.1 Aims

Primary aim: To ascertain whether, and which, characteristics increase the risk of early non-attendance (between referral and assessment) in five IAPT services in the north of England.
Secondary aim: To ascertain whether, and which, characteristics increase the risk of non-attendance at a first treatment appointment (following assessment) in five IAPT services in the north of England.

3.2 Methods

3.2.1 Dataset information

The dataset included individual data representing approximately 97,000 referrals to five IAPT services in the north of England between January 2010 and December 2014. Variables included those routinely collected by the service for reporting, such as the method of referral to the IAPT service, the service that people were referred to, gender, age, ethnicity, employment status, and Index of Multiple Deprivation (IMD) of their home address (this variable describes deprivation and was pre-coded in the dataset). Deprivation is characterised by seven domains: income, employment, health and disability, education, skills and training, barriers to housing services, living environment, and crime (Public Health England, 2020). IMD is derived from an individual's home postcode and national data about the small geographical areas around the postcode location (neighbourhoods) called the lower-layer super output area. These areas are designed to have similarly sized populations (between 1,000 and 3,000 people, and between 400 and 1,200 households) (ONS, 2011). IMD data are included here in two forms: a scale variable where higher numbers represent higher levels of deprivation and as deciles. The IMD decile variable ranks geographical areas across England into ten categories, where 1 represents the 10% most deprived areas, and 10 the 10% least deprived (Delgadillo, et al., 2016). Variables identifying those who did or did not attend each appointment offered by the service were captured, and additional information was recorded at each contact with the service. For those people who attended an initial assessment appointment, information about their presenting problem, severity of symptoms as indicated using PHQ-9 and GAD-7 scales and whether they were considered appropriate for IAPT treatments was recorded. The primary outcome was whether a person attended an initial assessment appointment; the secondary outcome was whether a person who had attended an initial assessment and had been offered a treatment appointment, had then attended that treatment appointment.

3.2.2 Ethical approvals

An application to complete this work was included within a larger substantial amendment to a project considering improvements to the effectiveness and efficacy of stress control classes within IAPT services. This amendment application was reviewed by North East - Newcastle & North Tyneside 2 Research Ethics Committee and approved on 17th March 2017 (Research Ethics

Committee reference: 15/NE/0062). This work was also reviewed and approved by the chair of the University of York Department of Health Sciences Research Governance Committee.

3.2.3 Data preparation

All analysis was conducted in Stata v16 (StataCorp, 2019).

3.2.4 Outcome variables

The outcome variable used in the Primary analysis was whether an individual attended an assessment appointment (binary, Yes/ No). The Secondary analysis outcome was whether an individual attended a treatment appointment after an assessment (binary, Yes/ No).

3.2.5 Explanatory Variables

The variables in the dataset which were included in these analyses were: the services from which data was collected; the gender of people referred where this was known; the age of participants at referral; self-reported ethnicity; socioeconomic deprivation using the Index of Multiple Deprivation (Smith et al., 2015) (both the IMD score and the IMD decile were included in these analyses); the source of the referral; description of the problem as recorded by the assessing IAPT practitioner; and self-reported symptom severity using PHQ-9 (Kroenke, Spitzer and Williams, 2001) and GAD-7 (Spitzer et al., 2006).

3.2.5.1 Variables – all referrals

Since data from five IAPT services were included in the dataset, the service a person was referred to was included as a categorical variable (A/ B/ C/ D/ E). The gender of people referred was recorded and included as a categorical variable. In the original dataset, 6 people had gender data recorded as ‘Not known’ or ‘Not specified’. For the purposes of reporting and analysis these data were treated as missing. The age of people was recorded at the time of their referral and included in the analysis as a continuous variable.

Self-reported ethnicity was recorded in the dataset in two variables: IAPT ethnicity and ONS ethnicity. The IAPT ethnicity variable included many detailed categories whereas the ONS variable had reduced this to six categories. Owing to the number of categories in each, the ONS ethnicity variable was preferred for these analyses. Categories included in the IAPT Ethnicity variable were: White British, White Irish, White other, White and Black Caribbean, White and Black African, White and Asian, Mixed (other), Indian, Pakistani, Bangladeshi, Asian (other), Black Caribbean, Black African, Black (other), Chinese, Other, and 'Not stated'. For the purposes of reporting and analysis, IAPT Ethnicity recoded as 'Not stated was treated as missing (n= 16,909 people). Categories included in the ONS Ethnicity variable were: White, Mixed, Asian, Black, Chinese, and Other.

Social deprivation data was collected using the Index of Multiple Deprivation. This variable is based on postcode information and was included as both continuous variable (IMD score) and a categorical variable (IMD decile) in order to allow comparisons between different geographical regions to be made (Smith et al., 2015). Finally, the source of the referral was recoded in the dataset and included in these analyses as a categorical variable (GP/ Self/ Other).

3.2.5.2 Variables – available only for those who had attended an initial assessment:

The CMHP which was identified and recorded by an IAPT professional during an assessment appointment was included in the dataset. This information is used by IAPT practitioners to inform treatment selection options offered by IAPT services and was therefore used in this analysis to inform decisions about whether a person who was assessed was likely to have been offered a subsequent treatment appointment. There were many categories of problem within the original problem descriptor variable of this dataset and therefore these were recoded in line with ICD-10 categorisations (WHO, 1992): depressive disorder, persistent depressive disorder, phobic anxiety disorder, other anxiety disorder, obsessive compulsive disorder, stress or adjustment disorder, somatoform disorder, other disorder. There were instances in the dataset where the identified problem did not meet the ICD-10 criteria for a CMHP, but appointment attendance following an assessment was recorded by services; an additional category was included in this variable to reflect this.

Severity of depression symptoms were recorded using PHQ-9. This is a standardised scale with clinical cut-offs to assess whether individuals are likely to require treatment for these problems (Kroenke et al., 2001). Within this dataset people were categorised as 'case-level' if they self-reported symptoms at a severity which was likely to benefit from treatment. Scores of 0-9 indicated sub-threshold symptoms, 10-27 indicated case-level symptoms.

Severity of anxiety symptoms were recorded using GAD-7. This is a standardised scale with clinical cut-offs to assess whether individuals are likely to require treatment for these problems (Spitzer et al., 2006). Within this dataset people were categorised as ‘case-level’ if they self-reported symptoms at a severity which was likely to benefit from treatment. Scores of 0-7 indicated sub-threshold symptoms, 8-21 indicated case-level symptoms.

3.2.6 Populations for analysis

The population for the primary analysis was initially planned to include all people in the dataset to evaluate factors associated with attending the initial assessment. Only those who attended an assessment appointment and were deemed suitable for treatment at the point of assessment, were included in the secondary analysis to evaluate factors associated with attending treatment. However, after examining the data, it became clear that for three of the five IAPT services (hereafter labelled B, D and E) all people included in the dataset had attended the initial assessment appointment. Since it is very unlikely these three services all had a 100% attendance record, we can assume that data were only collected for those who had attended the initial assessment, and not for referrals who had not. This has the following implications: i) it is not possible to know how many people were referred into these three services, only that the number of people attending the initial assessment is an underestimate of this value; and ii) these three services could not be included in the analysis of the primary variable (attendance).

3.2.7 Descriptive analysis

Data are summarised descriptively for all five IAPT services. Two sets of comparisons are made: i) between services A and C; and ii) between services B, D, and E.

3.2.8 Primary analysis

All referrals from the two IAPT services that included data on all referred individuals, regardless of whether or not they attended for initial assessment, were included in the primary analysis. Logistic regression analysis using backwards selection (Nathanson and Higgins, 2008; Peng, Lee and Ingersoll, 2002), adjusting for individual variables (gender, age, ethnicity, IMD decile, IAPT service, and referral source) as fixed effects, was run to ascertain which factors were associated with an increased risk of non-attendance at the assessment appointment. A significance level of p=0.1 was used to determine the categories and variables to be removed from the model during backward selection. The decision was made to include service identity as a fixed, rather than a random, effect due to the small number of services included and because these were not randomly sampled from the wider set of national IAPT services. Therefore, interpretations of findings will necessarily be limited to the services within this dataset (Allison, 2009). Employment status was not included in this model since information about it was not commonly captured for individuals who did not attend for assessment. The overall effect of each categorical variable was tested; those with a p value greater than 0.05 were not considered to be a significant predictor of the outcome. The Hosmer-Lemeshow Chi-squared test was used to assess goodness of fit between the observed and predicted outcomes.

3.2.9 Secondary analysis

The secondary analysis phase assessed risk factors for non-attendance to an initial treatment appointment for those who had attended an assessment appointment. Cases where people had not attended for an assessment or had a problem that was not considered appropriate for the services (and therefore had associated discharge codes) were removed from the secondary analysis. Eligible people from all five IAPT services were included in this analysis. Logistic regression analysis using backwards selection was run, adjusting for individual variables included in the primary analysis (gender, age, ethnicity, IMD decile, IAPT service, referral source) and a further five covariates: employment status, problem descriptor, and symptom severity measures PHQ-9 and GAD-7, all as fixed effects. A significance level of p=0.1 was used to determine the categories and variables to be removed from the model during backward selection. Diagnostic methods described for the primary analysis were also used in this analysis.

3.2.10 Missing data

Clinical datasets frequently feature missing data points which require exploration (Dinov, 2016; Rubin, 1976; Ababneh, 2010). Patterns of missing data were explored by variable. Pearson's Chi squared test of independence was used to ascertain whether missing data points within each variable were different to values present for the same variable when compared to the outcomes of attendance at assessment and initial treatment appointments. The number of missing data points per case was also evaluated to assess whether the number of missing values within cases were associated with different outcomes for attendance at assessment or initial treatment appointments. Thirdly, missing data were considered by service to assess differences in reporting. Finally, after ‘missingness’ within the original dataset had been explored, missing values were replaced through multiple imputation (Rubin, 1976) by chained equation (White, Royston and Wood, 2011). This method was used to create predicted values for missing data by performing a series of regression analyses using existing data from complete variables. The number of imputations matched the highest percentage of missing data in an included variable (White et al., 2011). The results of these regression analyses were then pooled to create the imputed values which were used to inform subsequent regressions of less complete variables. This method created a complete dataset which enabled comparison with the primary and secondary analyses of complete cases (Sinharay, Stern and Russell, 2001; Graham, 2009; Rubin, 1996).

3.3 Results

3.3.1 Description of the dataset

Table 7: Description of people included in the dataset stratified by IAPT service

	Service A	Service B	Service C	Service D	Service E
Number of referrals received	33,562	22,993	11,770	11,560	17,135
Referral source, n (%)					
GP	10,626 (32)	19,308 (84)	8,044 (68)	6,105 (53)	4,500 (26)
Self-referral	20,694 (62)	2,680 (12)	1,554 (13)	1,945 (17)	11,733 (68)
Other	2,242 (7)	1,005 (4)	2,019 (17)	3,510 (30)	832 (5)
Missing	0 (0)	0 (0)	153 (1)	0 (0)	0 (0)
Gender, n (%)					
Male	12,520 (37)	8,314 (36)	4,412 (37)	3,972 (34)	6,305 (37)
Female	21,038 (63)	14,679 (64)	7,357 (63)	7,586 (66)	10,830 (63)
Missing	4 (0.01)	0 (0)	1 (0.01)	2 (0.02)	0 (0)
Age, years*					
Mean (SD)	39 (14)	42 (15)	38 (14)	40 (14)	44 (15)
Ethnicity ONS categories, n (%)					
White	22,552 (67)	17,653 (77)	5,417 (46)	9,114 (79)	16,915 (99)
Mixed	801 (2)	395 (2)	10 (0.1)	215 (2)	55 (0.3)
Asian	1,165 (3)	855 (4)	13 (0.1)	941 (8)	34 (0.2)
Black	687 (2)	537 (2)	15 (0.1)	157 (1)	28 (0.2)
Chinese	86 (0.3)	37 (0.2)	0 (0)	14 (0.1)	0 (0)
Other	348 (1)	243 (1)	19 (0.2)	112 (1)	39 (0.2)
Missing	7,923 (24)	3,273 (14)	6,296 (53)	1,007 (9)	64 (0.4)
IMD decile, n (%)					
1 (Most deprived 10%)	8,615 (26)	6,200 (27)	2,940 (25)	1,059 (9)	2,105 (12)
2	3,572 (11)	3,019 (13)	2,032 (17)	1,858 (16)	1,605 (9)
3	3,731 (11)	1,730 (8)	1,853 (16)	1,597 (14)	1,891 (11)
4	2,435 (7)	1,224 (5)	1,524 (13)	1,275 (11)	1,765 (10)
5	2,563 (8)	1,856 (8)	537 (5)	1,199 (10)	2,045 (12)
6	2,733 (8)	1,837 (8)	998 (8)	953 (8)	2,280 (13)
7	2,988 (9)	1,648 (7)	640 (5)	1,116 (10)	1,658 (10)
8	2,386 (7)	1,709 (7)	510 (4)	1,358 (12)	1,564 (9)
9	2,166 (6)	1,645 (7)	389 (3)	724 (6)	1,337 (8)
10 (Least deprived 10%)	1,830 (5)	1,931 (8)	71 (0.6)	287 (2)	610 (4)
Missing	543 (2)	194 (0.8)	276 (2)	134 (1)	275 (2)
IMD Score					

Mean (SD)	29.84 (19.63)	29.59 (20.20)	32.40 (15.92)	24.39 (14.09)	24.08 (16.17)
Employment status, n (%)					
Employed	7,823 (23)	8,634 (38)	3,760 (32)	6,218 (54)	9,460 (55)
Unemployed job seeker	3,853 (11)	4,561 (20)	345 (3)	1,256 (11)	2,997 (17)
Student	1,795 (5)	1,329 (6)	376 (3)	432 (4)	706 (4)
Long-term sick or disabled	4,695 (14)	74 (0.3)	1,057 (9)	1,363 (12)	1,071 (6)
Homemaker / carer	1,412 (4)	1,061 (5)	475 (4)	691 (6)	896 (5)
Unemployed, not seeking work	816 (2)	5 (0.02)	1,093 (9)	28 (0.2)	34 (0.2)
Voluntary work	234 (1)	2 (0.009)	10 (0.08)	48 (0.4)	38 (0.2)
Retired	896 (3)	1,374 (6)	527 (0.4)	679 (6)	1,676 (10)
Missing	12,038 (36)	5,953 (26)	4,127 (35)	845 (7)	257 (1)
Problem descriptor, n (%)					
Depressive disorder	4,670 (14)	1,146 (5)	1,057 (9)	1,400 (12)	7,008 (41)
Phobic anxiety disorder	549 (2)	397 (2)	85 (<1)	385 (3)	698 (4)
Other anxiety disorder	8,362 (25)	9,836 (43)	1,418 (12)	7,864 (68)	4,042 (24)
Obsessive compulsive disorder	385 (1)	270 (1)	60 (1)	198 (2)	252 (1)
Stress or adjustment disorder	638 (2)	1,036 (5)	228 (2)	228 (2)	1,029 (6)
Somatoform disorder	100 (<1)	35 (<1)	8 (<1)	33 (<1)	150 (1)
Other	5,290 (16)	10,266 (45)	646 (5)	40 (<1)	496 (3)
Does not meet diagnostic criteria	742 (2)	0 (0)	0 (0)	0 (0)	0 (0)
Missing	12,826 (38)	7 (<1)	8,268 (70)	1,412 (12)	3,460 (20)
PHQ-9, n (%)					
Sub-threshold score (0-9)	4,305 (13)	4,414 (19)	1,431 (12)	2,250 (19)	3,481 (20)
Case-level score (10-27)	17,263 (51)	15,432 (67)	6,249 (53)	8,547 (74)	12,734 (74)
Missing	11,994 (36)	3,147 (14)	4,090 (35)	763 (7)	920 (5)
GAD-7, n (%)					
Sub-threshold score (0-7)	3,358 (10)	3,666 (16)	1,232 (10)	1,711 (15)	2,694 (16)
Case-level score (8-21)	18,189 (54)	15,930 (69)	6,448 (55)	9,086 (79)	13,464 (79)
Missing	12,015 (36)	3,397 (15)	4,090 (35)	763 (7)	977 (6)
Attended for assessment, n (% of service referrals)					
Attended assessment	21,910 (65)	22,993 (100)	7,869 (67)	11,550 (100)	17,135 (100)
Assessed but not offered treatment, n (% of service referrals)					
Assessed, not eligible	854 (3)	1,467 (6)	268 (2)	4,359 (38)	34 (0.2)
Attended for treatment, n (% of service referrals)					
Accessed treatment	12,940 (39)	12,474 (54)	4,580 (39)	4,598 (40)	12,149 (71)

* The ages of individuals ranged between 14 and 101 years

As shown in Table 7, data were available for 33,562 and 11,770 people in services A and C, respectively. These were the services that contained data for both people who did and did not attend for assessment. Data were available for 22,993, 11,560 and 17,135 people in services B, D and E, respectively. Since these people all appeared to attend their initial assessment, we can only assume these figures are an underestimate of the actual number of referrals.

3.3.2 Services A and C

Self-referrals were the most common referral method recorded for service A (62%) with GP referrals accounting for a further 32% of referrals. For service C, GP referrals were most commonly reported (68%) with referrals from other professionals (17%) occurring more frequently than self-referrals (13%). For both services, 63% of referrals were for females and 37% for males. The average age reported for services A and C was similar, 39 and 38 years respectively. The majority of referrals for both services were for White individuals (67% service A and 46% service C); however, a large proportion of data was missing for this variable for both services (24% and 53%). Social deprivation was similar for referrals to services A and C, with more people living in the most deprived areas and fewer referrals recorded as the level of deprivation reduced. On average, individuals referred to service C were living in more deprived areas than those referred to service A (mean IMD score for service C = 32.40, SD 15.92, mean IMD score for service A = 29.84, SD 19.63). A large proportion of data were missing for employment status for both services; however, the majority of referrals for both services were for employed individuals. There were a substantial number of referrals from people who were categorised as long-term sick or disabled in both services. Unemployment was relatively high for both services; however, individuals referred to service A more frequently reported being unemployed but seeking work (11%) and individuals referred to service C more frequently reported being unemployed and not seeking work (9%).

Depressive disorder (including depressive episode and recurrent depression), other anxiety disorder (including general anxiety disorder, panic disorder and mixed anxiety and depression in line with ICD-10 groupings (WHO, 1992) and ‘other’ (eating disorders, alcohol related mental or behavioural disorder, bipolar affective disorder, non-organic sleep disorders, and not specified) were recorded as the presenting problem frequently by both services; however, a large proportion of data were missing for this variable, especially for referrals to service C (70% missing). Over half of all referrals to each of these services had depression and anxiety severity scores which indicated that the people referred would benefit from treatment. Service A reported that 51% of referrals showed depression severity at case level and 54% had case-level anxiety symptoms, service C showed 53% referrals had case-level depression symptoms and 55% had case-level anxiety symptoms. Similar proportions of appointment attendance and eligibility were noted between these services. Assessment attendance was recorded for 65% of referrals to service A and 67% to service C. Of those assessed, only a small proportion of people were considered ineligible for treatment (service A = 3%, service C = 2%). For both services, 39% of all referrals resulting in attendance to at least one treatment appointment.

3.3.3 Services B, D and E

GP referrals were the most common referral method recorded for services B (84%) and D (53%) whereas self-referrals were the most common method of referral to service E (68%). Referrals were predominantly for females (Service B reported 64%, service D 66% and Service E 63%). The average age of individuals referred to services B, D and E was slightly older than those referred to services A and C (Service B mean age = 42 years, service D = 40 years and service E = 44 years. Referrals to each of these services were mostly for White individuals, with a proportion of referrals to services D (8%) and B (4%) being for Asian individuals. There was limited ethnic diversity in the referrals reported by service E. A smaller proportion of ethnicity data were missing in these services compared to services A and C; however, missing data were recorded in 14% of referrals to service B and 9% of referrals to service D. Social deprivation for referrals to service B was similar to those for services A and C. Despite referrals to services D and E being more evenly distributed across areas with different levels of deprivation, the smallest proportion of referrals were for people living in the least deprived areas. The average IMD decile score for each of these services was similar (service B = 4.47, service D = 4.76 and service E = 4.99). A large proportion of missing data were recorded for employment status in service B (26%). The majority of referrals made to services B, D and E were for employed individuals (service B = 38%, service D = 54% and service E = 55%). High levels of unemployment and individuals categorised as long-term sick or disabled were also recorded for these services. 20% of referrals to service B, 11% to service D and 17% to service E were for people who were unemployed and seeking work. 12% of referrals to service D and 6% to service E were for people who were long-term sick or disabled.

The presenting problem most frequently recorded for individuals referred to service B was ‘other’ (45%), with other anxiety disorder also frequently recorded for this service (43%). Other anxiety disorder was the most commonly recorded problem for referrals received by service D (68%), depressive disorder and missing data were each recorded in 12% of referrals to this service.

Depressive disorder was the most commonly recorded presenting problem for service E, with other anxiety disorder (24%) and missing data (20%) also frequently reported. The majority of all referrals to each of these services had depression and anxiety severity scores which indicated that the people referred would benefit from treatment. Service B reported that 67% of referrals showed depression severity at case level and 69% had case-level anxiety symptoms, service D and E showed 74% referrals had case-level depression symptoms and 79% had case-level anxiety symptoms. It has been assumed that data collection for these services started at an assessment appointment. The number of individuals considered eligible for treatment varied across services with service B reporting 6% of those assessed were not eligible, service D reporting 38% were ineligible and service E reporting 0.2% of referrals were not eligible. Attendance to at least one treatment appointment also varied between services. The greatest proportion of people referred who subsequently attended a treatment appointment was reported by service E (71%), 54% of referrals resulted in treatment attendance at service B, and only 40% of people referred subsequently attended at least one treatment session at service D.

3.3.4 Local area information

When considering the wider populations these people are from, women outnumbered men in most age categories for each of the five localities included in this analysis although the difference in the local populations was less pronounced than those referred to the IAPT services in this dataset (percentage of males/females reported in 2018: Service A 49/51, Service B 50/50, Service C 49/51, Service D 50/50, Service E 49/51) (Public Health England, 2020). Data from 2016 indicated low levels of ethnic minorities (Mixed/multiple, Asian/Asian British, Black/African/Caribbean/Black British, or other) in two of the five areas (1.1% and 1.8%) with a higher proportion of ethnic minorities reported for the other three areas (12.7%, 13.2% and 17.9%) (Public Health England, 2020). Given the extent to which data were missing for this variable, it is not possible to draw conclusions about whether the proportions of people from different ethnic groups who were referred to each of the services were similar to those observed in the local populations. Information about deprivation for each of the five were published in 2015 by quintiles; 0-10 indicated the least deprivation and 40-50 indicated the most deprivation. With the average for England reported to be 21.8, deprivation was higher than the average for England in four of the areas included in this analysis (24.0, 26.6, 27.6, and 29.6). The reported level of deprivation for the fifth area was slightly less than the national average at 21.3 (Public Health England, 2020). Recorded employment for the more general area data for each locality showed that the percentage employment for individuals aged 16-64 years during this period was between 63.9% and 75.9% (Public Health England, 2020), substantially higher than recorded employment for people referred to any of the services in the dataset.

3.3.5 Eligibility of people referred to IAPT

The eligibility of individuals to receive IAPT services was recorded at the point their care ended. Table 8 incudes information about the eligibility of people to receive IAPT care and the point in the referral to treatment pathway that this was recorded. Of the 97,020 individuals in this dataset, 16% of individuals were recorded as not having attended any appointments. Given the differences in reporting evident for three of the five services within this dataset, this is likely to be an underestimate of the number of people who were referred to these services and did not attend any appointments. Of those recorded, 94% were considered to be eligible for IAPT support. 31,598 individuals (33% of those referred) were recorded as having been assessed but not continuing in the service to receive treatment; 82% of these individuals were considered to be eligible for IAPT support. Overall, 50% of the people in this dataset were assessed and subsequently attended a first treatment appointment.

Table 8: Eligibility of people referred to IAPT services

	Not eligible (n=7,980)	**Eligible** (n=87,272)	**Total** (n=97,020)
Not assessed (%)	998 (6)	14,557 (94)	15,555
Assessed only (%)	5,624 (18)	25,974 (82)	31,598
Entered treatment (%)	1,358 (3)	46,741 (97)	48,099
Missing	-	-	1,768

3.3.6 Primary analyses

3.3.6.1 Data summaries

In total, 29,779 (66%) individuals were recorded as having attended for an assessment appointment. Characteristics of people referred to services A and C, presented by whether or not they attended for their initial assessment, are shown in Table 9.

Table 9: Characteristics of people referred to IAPT services A and C stratified by whether they did or did not attend for assessment

Explanatory Variables (% shown by row)	**Attended assessment** n= 29,779	**Did not attend assessment** n= 15,553	**Total** n= 45,332
Service, n (%)			
A	21,910 (65)	11,652 (35)	33,562
C	7,869 (67)	3,901 (33)	11,770
Gender, n (%)			
Male	11,038 (65)	5,894 (35)	16,932
Female	18,738 (66)	9,657 (34)	28,395
Missing	3 (60)	2 (40)	5
Age,			
Mean (SD)	40 (14)	37 (14)	39 (14)
Min/ Max	16/97	15/97	15/97
Ethnicity ONS, n (%)			
White	21,681 (78)	6,288 (22)	27,969
Mixed	574 (71)	237 (29)	811
Asian	886 (75)	292 (25)	1,178
Black	516 (74)	186 (26)	702
Chinese	67 (78)	19 (22)	86
Other	250 (68)	117 (32)	367
Missing	5,805 (41)	8,414 (59)	14,219
IMD decile, n (%)			
1 (Most deprived 10%)	6,936 (60)	4,619 (40)	11,555
2	3,549 (63)	2,055 (37)	5,604
3	3,622 (65)	1,962 (35)	5,584
4	2,676 (68)	1,283 (32)	3,959
5	2,118 (68)	982 (32)	3,100
6	2,596 (70)	1,135 (30)	3,731
7	2,581 (71)	1,047 (29)	3,628
8	2,011 (69)	885 (31)	2,896
9	1,839 (72)	716 (28)	2,555

10 (Least deprived 10%)	1,342 (71)	559 (29)	1,901
Missing	509 (62)	310 (38)	819
IMD Score			
Mean (SD)	29.29 (18.49)	32.83 (19.10)	30.50 (18.77)
Employment status, n (%)			
Employed	11,578 (>99)	5 (<1)	11,583
Unemployed job seeker	4,196 (>99)	2 (<1)	4,198
Student	2,170 (>99)	1 (<1)	2,171
Long-term sick or disabled	5,751 (>99)	1 (<1)	5,752
Homemaker / carer	1,885 (>99)	2 (<1)	1,887
Unemployed, not seeking work	1,907 (>99)	2 (<1)	1,909
Voluntary work	243 (>99)	1 (<1)	244
Retired	1,421 (>99)	2 (<1)	1,423
Missing	628 (4)	15,537 (96)	16,165
Referral source, n (%)			
GP	10,253 (55)	8,417 (45)	18,670
Self	17,062 (77)	5,186 (23)	22,248
Other	2,381 (56)	1,880 (44)	4,261
Missing	83 (54)	70 (46)	153

The level of attendance at assessment for males and females within this sample were very similar (65% and 66% respectively). People who attended an assessment appointment were, on average, slightly older than those who did not attend this appointment (mean for those who attended: 40 years, mean for those who did not attend: 37 years). The majority of people from each ethnic group attended an assessment appointment (ranging between 68% and 78%); however, only 41% of those who did not report their ethnicity attended this appointment. Level of deprivation showed varying levels of attendance at assessment with those in the most deprived group, or those with missing data being most likely to not attend their appointment (40% did not attend an assessment appointment for the most deprived group and 38% with missing data for IMD did not attend). Those who self-referred to an IAPT service attended an assessment more frequently than those referred by professionals (77%), with those referred by other professionals, GPs and those with missing data for referral attending less frequently (56% other professionals, 55% GP referrals, 54% missing referral data).

3.3.6.2 Modelling

A full regression model was run initially to assess the association between all variables entered and whether individuals attended an assessment appointment. As discussed previously data from services A and C were included in this analysis. Table 10 displays the results of the full regression model and indicates that referral source may be important to consider when assessing risk of non-attendance to assessment appointments. Age, ethnicity, and IMD score were also significantly associated with assessment attendance; however, with odds ratios close to 1 these are unlikely to be important to assessment attendance within IAPT services. In this model, the method of referral showed significant differences between those who self-referred and those referred by a GP (odds ratio (OR) 3.44, 95% CI 3.24 to 3.65, p<0.001). The odds of attending an assessment appointment were more than three times higher for people who self-referred than for those who had been referred by a GP. No significant differences were noted in assessment attendance between people who were referred by a GP and those who were referred by another professional. People who attended tended to be older than those who did not attend assessment appointments (OR 1.017, 95% CI 1.015 to 1.019, p<0.001). When compared with White people, individuals from Mixed, Black and Other ethnic groups were significantly less likely to attend assessment appointments (OR for Mixed 0.70, 95% CI 0.60 to 0.83, p<0.001, Asian OR 0.87, 95% CI 0.75 to 1.00, p=0.06, Black OR 0.80, 95% CI 0.66 to 0.95, p=0.01, Chinese OR 0.80, 95% CI 0.46 to 1.39, p=0.42, Other OR 0.63, 95% CI 0.50 to 0.80, p<0.001). Reductions in IMD score (indicating lower levels of area deprivation) were significantly associated with assessment appointment attendance (OR 0.990, 95% CI 0.989 to 0.992, p<0.001). Service was not included in this model.

Table 10: Full logistic regression of those who attended an assessment appointment following a referral to either IAPT service A or C

Accessed Assessment	Coefficient	Std. Err.	Odds Ratio	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Gender								
Female	-0.0120	0.0296	0.9881	0.0293	-0.4000	0.6860	0.9324	1.0471
Age	0.0165	0.0011	1.0166	0.0011	15.3200	0.0000	1.0145	1.0188
Ethnicity ONS (White)								
Mixed	-0.3540	0.0836	0.7019	0.0587	-4.2300	0.0000	0.5958	0.8269
Asian	-0.1404	0.0735	0.8690	0.0638	-1.9100	0.0560	0.7525	1.0035
Black	-0.2282	0.0925	0.7960	0.0736	-2.4700	0.0140	0.6640	0.9541
Chinese	-0.2253	0.2818	0.7983	0.2250	-0.8000	0.4240	0.4595	1.3869
Other	-0.4593	0.1211	0.6317	0.0765	-3.7900	0.0000	0.4982	0.8010
IMD Score	-0.0100	0.0008	0.9901	0.0007	-13.2600	0.0000	0.9886	0.9916
Referral Source (GP)								
Self	1.2348	0.0308	3.4377	0.1057	40.1400	0.0000	3.2365	3.6513
Other	-0.0330	0.0452	0.9675	0.0438	-0.7300	0.4650	0.8854	1.0572
Constant	0.3447	0.0574	1.4115	0.0810	6.0000	0.0000	1.2613	1.5796

Number of observations = 30,501, Log likelihood = -15141.287, LR chi2(10) = 2477.89, Prob > chi2 = 0.0000, Pseudo R2 = 0.0756

Post-estimation tests indicated that the model shown in Table 10 was specified correctly for the data (linktest: hat = 1.08, p<0.001, hatsq = -0.03, p=0.32); gender was not a significant predictor of assessment attendance; however, ethnicity and referral source were found to be significant predictors of assessment attendance (Wald: Gender Chi^2(1) = 0.16, p=0.69, Ethnicity Chi^2(5) = 39.3, p<0.001, Referral Source Chi^2(2) = 1803.84, p<0.001). The regression model was considered to be acceptable; the observed data was not significantly different to the outcomes predicted by the regression model (Hosmer-Lemeshow: Chi^2(8) = 12.34, p=0.14). Collinearity was not considered to be a problem in this model (Gender VIF=1.00, tolerance=1.00, Age VIF=1.01, tolerance=0.99, Ethnicity ONS VIF=1.01, tolerance=0.99, IMD Score VIF=1.02, tolerance=0.98, Referral source VIF=1.00, tolerance=1.00). Full tables showing post-estimation test results from the Primary analysis are displayed in Appendix 2. Graphs showing the change in Pearson chi-square statistic when an observation is deleted (Pregibon dbeta), and the change in the deviance statistic when an observation is deleted were investigated to identify potentially influential observations (see Appendix 3). None of the observations investigated contained unusual values. Graphs showing Pearson's residuals, standardised Pearson's residuals and deviance residuals were also investigated to ascertain whether there were any outliers in the dataset (see Appendix 3). None of the observations investigated contained unusual values.

Following the full regression analysis, a stepwise regression using backward selection was run to remove the categories and variables which were not found to be associated with non-attendance at assessment. As in the full model, there were 30,501 observations included in the stepwise logistic regression model which included people referred to services A and C, shown in Table 11. During the backwards selection process gender was removed from the model first as no significant differences were found between male and female attendance at initial assessment appointments (p=0.69). Following this, no difference was found between those who were referred by a GP and those referred by another professional and so this category was also removed from the model (0.47). Finally, no difference was found for assessment attendance between Chinese individuals and the reference group (White); therefore, this category was also removed (0.41).

The final model indicated that the method of referral was important to assessment attendance. Statistically significant differences were found between those who self-referred and those referred by a GP (OR 3.46, 95% CI 3.27 to 3.66, p<0.001); that is, the odds of attending an assessment appointment were more than 3 times higher for people who self-referred than for those who had been referred by a GP. Ethnicity, age and IMD score were also found to be significantly associated with assessment attendance; however, with odds ratios close to 1 these are unlikely to be important to assessment attendance within IAPT services. Individuals in all other ethnic groups were less likely to attend assessment appointments than White people; this difference was not statistically significant for Asian individuals but was significant for other ethnic groups (odds ratio (OR) for Mixed 0.70, 95% CI 0.60 to 0.83, p=<0.001, Asian OR 0.87, 95% CI 0.75 to 1.00, p=0.06, Black OR 0.80, 95% CI 0.66 to 0.95, p=0.01, Other OR 0.63, 95% CI 0.50 to 0.80, p=<0.001). Increases in age (OR 1.017, 95% CI 1.015 to 1.018, p<0.001), and reductions in IMD score (indicating lower levels of deprivation) were also associated with assessment appointment attendance (OR for IMD score 0.99, 95% CI 0.989 to 0.991, p<0.001). Service was not included in this model.

Table 11: Stepwise logistic regression of those who attended an assessment appointment following a referral to either IAPT service A or C

Accessed Assessment	**Coefficient**	**Std. Err.**	**Odds Ratio**	**Std. Err.**	**z**	**P>|z|**	**[95% Conf. Interval]**	
Referral Source (GP)								
Self	1.2415	0.0292	3.4607	0.1012	42.4600	0.0000	3.2680	3.6648
Age	0.0165	0.0011	1.0167	0.0011	15.3900	0.0000	1.0145	1.0188
Ethnicity ONS (White)								
Mixed	-0.3532	0.0836	0.7025	0.0587	-4.2200	0.0000	0.5963	0.8275
Asian	-0.1400	0.0734	0.8693	0.0638	-1.9100	0.0570	0.7528	1.0039
Black	-0.2292	0.0924	0.7951	0.0735	-2.4800	0.0130	0.6634	0.9531
Other	-0.4568	0.1211	0.6333	0.0767	-3.7700	0.0000	0.4995	0.8030
IMD Score	-0.0100	0.0007	0.9901	0.0007	-13.3000	0.0000	0.9886	0.9915
Constant	0.3283	0.0524	1.3887	0.0728	6.2600	0.0000	1.2530	1.5390

Number of observations = 30,501, Log likelihood = -15141.958, LR chi2(7) = 2476.55, Prob > chi2 = 0.0000, Pseudo R2 = 0.0756. Categories removed: Gender Female, p=0.69, Referral Other professional, p=0.47, Ethnicity Chinese, p=0.41

Post-estimation tests indicated that the model shown in Table 11 was specified correctly for the data (linktest: hat = 1.08, p<0.001, hatsq = -0.03, p=0.32); gender was not a significant predictor of assessment attendance; however, ethnicity and referral source were found to be significant predictors of assessment attendance (Wald: Gender Chi^2(1) = 0.16, p=0.69, Ethnicity Chi^2(5) = 39.3, p<0.001, Referral Source Chi^2(2) = 1803.84, p<0.001). The regression model was considered to be acceptable; the observed data was not significantly different to the outcomes predicted by the regression model (Hosmer-Lemeshow: Chi^2(8) = 12.34, p=0.14). Collinearity was not considered to be a problem in this model (Gender VIF=1.00, tolerance=1.00, Age VIF=1.01, tolerance=0.99, Ethnicity ONS VIF=1.01, tolerance=0.99, IMD Score VIF=1.02, tolerance=0.98, Referral source VIF=1.00, tolerance=1.00). Full tables showing post-estimation test results from the primary analysis are displayed in Appendix 4. Graphs showing the change in Pearson Chi-square statistic when an observation is deleted (Pregibon dbeta), and the change in the deviance statistic when an observation is deleted, were investigated to identify potentially influential observations (see Appendix 5). None of the investigated observations contained unusual values. Graphs showing Pearson's residuals, standardised Pearson's residuals and deviance residuals were also investigated to ascertain whether there were any outliers in the dataset (see Appendix 5). None of the investigated observations contained unusual values.

3.3.7 Secondary analyses

3.3.7.1 Data summaries

Characteristics of individuals are presented in Table 12, stratified by whether or not they did not attend any appointments, attended only an assessment appointment, or attended an offered treatment appointment following an assessment. This table shows that overall, very few people were assessed and considered ineligible for IAPT services. When considering only the people who were assessed and considered eligible for IAPT services, those who did not attend for an initial treatment appointment represented between 21 and 39 percent of people across the different services. Although there were many more females than males referred to services, gender differences at treatment were minimal with 27%/27% of all individuals referred (male/female), and 36%/34% of those eligible for treatment (male/female) not attending for an initial treatment appointment. Those who did attend for at least one treatment appointment (mean = 42 years) were slightly older than those who did not attend for an assessment (mean = 37 years), or those that only attended for an assessment appointment (mean = 40 years).

While most referrals were for individuals identifying as White, the proportion of people in different ethnic groups attending for assessment and those subsequently attending for an initial treatment appointment were close to 50% for all groups. Those assessed as ineligible for IAPT services represented between 3% and 13% of those referred to IAPT services with Asian people most commonly being considered ineligible for IAPT support. Those assessed and considered eligible for treatment, but who did not attend a treatment appointment represented between 28% and 45% of those assessed. Chinese people were the ethnic group which attended treatment most commonly, and those with missing data for ethnicity were the most common group to not attend for treatment despite being considered eligible at assessment (45%). The proportion of people who attended for treatment within IMD deciles ranged between 42% and 56% of all individuals referred. Of those assessed and eligible to attend IAPT services, between 28% and 39% of those in different IMD decile categories did not attend; a higher rate of non-attendance at treatment was noted for referrals from individuals living in more deprived areas. Only 3% of those who self-referred to IAPT services were considered ineligible for IAPT treatment at assessment compared to 8% of those referred by GPs and 9% of those referred by other professionals. Differences in attendance at an initial treatment appointment were also evident, with 53% of those who self-referred attending at least one treatment appointment compared to 47% of GP referrals and 49% of those referred by other professionals.

Interpreting data from different services about treatment appointment attendance is challenging due to the different start points for data collection. When considering the overall number of assessments provided by each service, the number of people considered ineligible for treatment was low for most services with the exception of Service D where 32% of those assessed were considered ineligible. It is worth noting that 83% of referrals to Service D were made by professionals (see Table 7). Of those considered eligible at assessment, treatment appointment attendance ranged between 59% and 79% across services.

Data on the employment status of referred individuals was included in the secondary analysis. Most referred people reported being employed. The proportion of those not attending treatment following an assessment ranged between 27% and 39%, with those reported to be unemployed and not seeking employment being the group that most commonly did not attend for treatment following an assessment. Additional variables describing the problem a person was seeking support for and the level of symptom severity were also included in this stage of analysis. Of those assessed, the most common presenting problem was 'other anxiety disorder' which included general anxiety disorder, panic disorder and mixed anxiety and depression in line with ICD-10 groupings (WHO, 1992). 'Other' (eating disorders, alcohol related mental or behavioural disorder, bipolar affective disorder, non-organic sleep disorders, and not specified) and 'depressive disorder' (including depressive episode and recurrent depression) categories were also commonly reported within this dataset. People with a problem that did not meet diagnostic criteria were the group most commonly considered ineligible for IAPT treatment following assessment. Of those assessed and considered eligible for treatment, those with problems that did not meet diagnostic criteria and those with 'other' problems were most likely to not attend for an offered treatment appointment. People seeking support for somatoform disorder, phobic anxiety disorder or obsessive-compulsive disorder most commonly attended a treatment appointment following an assessment.

Many more people were assessed as having higher severity symptoms than lower severity symptoms using both PHQ-9 and GAD-7 scales. Of these, people with lower severity symptoms were more likely to not attend for a treatment appointment following assessment attendance. This effect was evident with both symptom measures (PHQ-9: low severity 33% compared with 30% high severity, GAD-7: 35% compared with 29% high severity). The subsequent secondary analysis considers whether the explanatory variables shown in Table 12 affected initial treatment appointment attendance for those individuals who had been assessed and were considered eligible for treatment (those included in the Assessed only and Attended treatment columns in Table 12).

Table 12: Characteristics of people referred to IAPT services stratified by whether they did or did not attend for an offered treatment appointment

Explanatory Variables (% by row)	**Not Assessed** (n=15,555)	**Assessed, not eligible** (n=5,624)	**Assessed only** (n=25,974)	**Attended treatment** (n= 48,099)	**Missing** (n=1,768)	**Total** (n=97,020)
Service, n(%)						
A	11,652 (35)	661 (2)	8,116 (24)	13,133 (39)	0 (0)	33,562
B	0 (0)	1,062 (5)	9,052 (39)	12,879 (56)	0 (0)	22,993
C	3,901 (33)	173 (1)	3,021 (26)	4,675 (40)	0 (0)	11,770
D	2 (<1)	3,705 (32)	2,593 (22)	5,252 (45)	8 (<1)	11,560
E	0 (0)	23 (<1)	3,192 (19)	12,160 (71)	1,760 (10)	17,135
Gender, n (%)						
Male	5,895 (17)	2,189 (6)	9,656 (27)	17,060 (48)	723 (2)	35,523
Female	9,658 (16)	3,434 (6)	16,316 (27)	31,037 (50)	1,045 (2)	61,490
Missing	2 (29)	1 (14)	2 (29)	2 (29)	0 (0)	7
Age						
Mean (SD)	37 (14)	40 (14)	40 (15)	42 (15)	47(16)	40 (15)
Min/ Max	15/97	16/92	16/98	14/101	17/91	14/101
Ethnicity ONS categories, n (%)						
White	6,289 (9)	4,428 (6)	19,315 (27)	39,874 (56)	1,745 (2)	71,651
Mixed	237 (16)	117 (8)	444 (30)	674 (46)	4 (<1)	1,476
Asian	293 (10)	392 (13)	938 (31)	1,382 (46)	3 (<1)	3,008
Black	186 (13)	121 (8)	430 (30)	685 (48)	2 (<1)	1,424
Chinese	19 (14)	10 (7)	33 (24)	75 (55)	0 (0)	137
Other	117 (15)	62 (8)	216 (28)	360 (47)	6 (1)	761
Missing	8,414 (45)	494 (3)	4,598 (25)	5,049 (27)	8 (<1)	18,563
IMD decile, n (%)						
1 (Most deprived 10%)	4,620 (22)	1,021 (5)	6,338 (30)	8,694 (42)	246 (1)	20,919

2	2,055 (17)	963 (8)	3,367 (28)	5,556 (46)	145 (1)	12,086
3	1,962 (18)	731 (7)	2,801 (26)	5,119 (47)	189 (2)	10,802
4	1,283 (16)	514 (6)	2,143 (26)	4,116 (50)	167 (2)	8,223
5	983 (12)	504 (6)	2,092 (26)	4,402 (54)	219 (3)	8,200
6	1,135 (13)	376 (4)	2,121 (24)	4,922 (56)	247 (3)	8,801
7	1,047 (13)	439 (5)	1,966 (24)	4,417 (55)	181 (2)	8,050
8	885 (12)	491 (7)	1,846 (25)	4,163 (55)	142 (2)	7,527
9	716 (11)	336 (5)	1,612 (26)	3,471 (55)	126 (2)	6,261
10 (Least deprived 10%)	559 (12)	169 (4)	1,333 (28)	2,588 (54)	80 (2)	4,729
Missing	310 (21)	80 (6)	355 (25)	651 (46)	26 (2)	1,422
IMD Score						
Mean (SD)	32.83 (19.10)	28.52 (17.07)	29.71 (18.92)	26.45 (17.79)	24.33 (16.52)	28.42 (18.41)
Employment status, n (%)						
Employed	7 (0.002)	2,409 (7)	10,452 (29)	22,222 (62)	805 (2)	35,895
Unemployed job seeker	2 (0.02)	797 (6)	4,249 (33)	7,633 (59)	331 (3)	13,012
Student	1 (0.02)	287 (6)	1,561 (34)	2,715 (59)	74 (2)	4,638
Long-term sick or disabled	1 (0.01)	691 (8)	2,994 (36)	4,437 (54)	137 (2)	8,260
Homemaker / carer	2 (0.04)	340 (7)	1,416 (31)	2,711 (60)	66 (1)	4,535
Unemployed, not seeking work	2 (0.1)	56 (3)	769 (39)	1,147 (58)	2 (0.1)	1,976
Voluntary work	1 (0.3)	20 (6)	112 (34)	197 (59)	2 (0.6)	332
Retired	2 (0.04)	304 (6)	1,396 (27)	3,186 (62)	264 (5)	5,152
Missing	15,537 (67)	720 (3)	3,025 (13)	3,851 (17)	87 (0.3)	23,220
Referral source, n (%)						
GP	8,417 (17)	3,790 (8)	13,138 (27)	22,895 (47)	413 (1)	48,653
Self	5,187 (13)	967 (3)	10,740 (28)	20,443 (53)	1,269 (3)	38,606
Other	1,881 (20)	865 (9)	2,057 (21)	4,719 (49)	86 (1)	9,608

Missing	70 (46)	2 (1)	39 (25)	42 (27)	0 (0)	153
Problem descriptor, n (%)						
Depressive disorder	291 (2)	589 (4)	3,400 (22)	10,507 (69)	494 (3)	15,281
Phobic anxiety disorder	18 (1)	126 (6)	375 (18)	1,560 (74)	35 (2)	2,114
Other anxiety disorder	305 (1)	2,921 (9)	8,706 (28)	19,326 (61)	264 (1)	31,522
Obsessive compulsive disorder	7 (1)	72 (6)	211 (18)	862 (74)	13 (1)	1,165
Stress or adjustment disorder	24 (1)	154 (5)	799 (25)	2,086 (66)	96 (3)	3,159
Somatoform disorder	2 (1)	7 (2)	45 (14)	268 (82)	4 (1)	326
Other	1,739 (10)	784 (5)	6,403 (38)	7,765 (46)	47 (<1)	16,738
Does not meet diagnostic criteria	21 (2)	93 (13)	376 (51)	252 (34)	0 (0)	742
Missing	13,148 (51)	878 (3)	5,659 (22)	5,473 (21)	815 (3)	25,973
PHQ-9, n (%)						
Sub-threshold score (0-9)	6 (0.4)	842 (5)	5,220 (33)	9,316 (59)	497 (3)	15,881
Case-level score (9-27)	15 (0.02)	4,216 (7)	18,055 (30)	36,889 (61)	1,050 (2)	60,225
Missing	15,534 (74)	566 (3)	2,699 (13)	1,894 (9)	221 (1)	20,914
GAD-7, n (%)						
Sub-threshold score (0-7)	7 (0.6)	785 (6)	4,489 (35)	6,914 (55)	466 (4)	12,661
Case-level score (8-21)	12 (0.02)	4,240 (7)	18,576 (29)	39,222 (62)	1,067 (2)	63,117
Missing	15,536 (73)	599 (3)	2,909 (14)	1,963 (9)	235 (1)	21,242

3.3.7.2 Modelling

A full regression model was run initially to assess the association between all variables entered and whether individuals attended an initial treatment appointment. Table 13 displays the results of the full regression model and indicates that the service people were referred to, the method of referral, the presenting problem and severity of anxiety may be important to consider when assessing risk of non-attendance to treatment appointments. Ethnicity and severity of depression were not found to be associated with treatment attendance. In this model people referred to service A were significantly more likely to attend a treatment appointment following an assessment than people referred to services B or D (OR for service B vs A 0.79, 95% CI 0.74 to 0.84, OR for service D vs A 0.40, 95% CI 0.37 to 0.42). Individuals referred to services C and E were significantly more likely to attend treatment than those referred to service A (OR for service C vs A 1.39, 95% CI 1.25 to 1.54, OR for service E vs A 2.52, 95% CI 2.37 to 2.69). This indicates that the odds of attending a treatment appointment were substantially lower (60%) for people referred to service D, and 2.5 times higher for people who were referred to service E, compared to those referred to service A.

Individuals who were referred by another professional were significantly more likely to attend a treatment appointment than those referred by a GP (OR 1.63, 95% CI 1.52 to 1.75, p<0.001). This indicates that the odds of attending a treatment appointment were 63% higher for those who had been referred by another professional compared to people who had been referred by a GP. Within this analysis, no significant difference in treatment attendance was noted between those who self-referred to IAPT service and those referred by a GP.

Individuals referred for treatment for phobic anxiety disorder, obsessive compulsive disorder and somatoform disorder were significantly more likely than those with depressive disorder to attend for treatment (OR for those with phobic anxiety disorder 1.58, 95% CI 1.40 to 1.78, p<0.001, OR for those with obsessive compulsive disorder 1.62, 95% CI 1.39 to 1.90, p<0.001, and OR for somatoform disorder 1.91, 95% CI 1.38 to 2.64, p<0.001). The odds of attending a treatment appointment were 90% higher for people with somatoform disorder, 62% for people with OCD, and 58% for people with phobic anxiety disorder, compared to people with a depressive disorder. Those with a problem classed as ‘other’ in this analysis, and individuals who did not meet criteria for a common mental health problem were significantly less likely to attend a treatment appointment than those with a depressive disorder (OR those with another disorder 0.64, 95% CI 0.60 to 0.68, p<0.001, OR those that did not meet criteria 0.32, 95% CI 0.27 to 0.38, p<0.001). This suggests that for people with a problem which did not meet ICD-10 criteria for a CMHP the odds of attending a treatment appointment decreased by 68% compared to those with depressive disorder. The odds of attending a treatment appointment decreased by 36% for people with a diagnosis classed as 'other' compared to people with depressive disorder. Compared to individuals referred for treatment of depressive disorder, those categorised as having other anxiety disorders and stress or adjustment disorders did not differ significantly in terms of treatment attendance. People who reported more severe anxiety symptoms using the GAD-7 scale were significantly more likely to attend for treatment than those reporting less severe anxiety symptoms (OR 1.36, 95% CI 1.28 to 1.44, $p<0.001$). The odds of attending a treatment appointment increased by 36% for those with case-level anxiety symptoms compared to those with mild anxiety symptoms.

Statistically significant differences in treatment attendance were also noted for gender, age, IMD and some categories of employment status; however, with odds ratios close to 1 these are unlikely to be important to treatment attendance within IAPT services. Taking account of the other variables within the model, females were more likely to attend treatment appointments following assessment than males (OR 1.09, 95% CI 1.05 to 1.13, $p<0.001$). Increases in age were associated with treatment appointment attendance (OR 1.009, 95% CI 1.008 to 1.01, $p<0.001$). Lower IMD scores (indicating less deprivation) were associated with treatment appointment attendance (OR for IMD score 0.992, 95% CI 0.991 to 0.993, $p<0.001$). Individuals who were unemployed and seeking work, long term sick or disabled, homemakers or carers, and those who were retired were significantly less likely to attend treatment appointments than those who were employed. No significant differences were found between those who were employed, students and people engaged in voluntary work. In addition, no significant differences in treatment attendance were found between White people and those from any other ethnic group. The severity of depression symptoms reported at assessment was not associated with treatment appointment attendance.

Table 13: Full logistic regression of those who attended a treatment appointment following an assessment at an IAPT service

Accessed Treatment	**Coefficient**	**Std. Err.**	**Odds Ratio**	**Std. Err.**	**z**	**P>|z|**	**[95% Conf. Interval]**	
Service (A)								
B	-0.2328	0.0322	0.7923	0.0255	-7.2300	0.0000	0.7439	0.8439
C	0.3261	0.0524	1.3855	0.0726	6.2200	0.0000	1.2503	1.5354
D	-0.9272	0.0336	0.3957	0.0133	-27.6000	0.0000	0.3704	0.4226
E	0.9246	0.0324	2.5209	0.0817	28.5400	0.0000	2.3658	2.6862
Gender								
Female	0.0861	0.0196	1.0899	0.0214	4.3900	0.0000	1.0488	1.1326
Age	0.0089	0.0007	1.0089	0.0007	12.3900	0.0000	1.0075	1.0103
Ethnicity ONS (White)								
Mixed	-0.0689	0.0670	0.9334	0.0625	-1.0300	0.3030	0.8186	1.0643
Asian	-0.0177	0.0475	0.9824	0.0467	-0.3700	0.7090	0.8951	1.0783
Black	-0.0147	0.0699	0.9854	0.0689	-0.2100	0.8330	0.8592	1.1301
Chinese	0.1823	0.2403	1.2000	0.2884	0.7600	0.4480	0.7492	1.9219
Other	0.0342	0.0976	1.0348	0.1010	0.3500	0.7260	0.8547	1.2528
IMD Score	-0.0077	0.0005	0.9923	0.0005	-14.5400	0.0000	0.9913	0.9933
Employment Status (Employed)								
Unemployed job seeker	-0.1044	0.0259	0.9009	0.0233	-4.0400	0.0000	0.8563	0.9477
Student	-0.0381	0.0398	0.9626	0.0384	-0.9600	0.3390	0.8903	1.0408
Long-term sick or disabled	-0.3105	0.0321	0.7331	0.0235	-9.6700	0.0000	0.6884	0.7807
Homemaker / carer	-0.1830	0.0406	0.8328	0.0338	-4.5100	0.0000	0.7691	0.9017
Voluntary work	-0.0645	0.1406	0.9375	0.1318	-0.4600	0.6460	0.7117	1.2349
Retired	-0.1305	0.0419	0.8777	0.0367	-3.1200	0.0020	0.8085	0.9528
Referral Source (GP)								
Self	-0.0269	0.0271	0.9735	0.0264	-0.9900	0.3220	0.9230	1.0267
Other	0.4903	0.0361	1.6328	0.0589	13.5900	0.0000	1.5214	1.7524
Problem (Depressive disorder)								
Phobic anxiety disorder	0.4546	0.0617	1.5755	0.0972	7.3700	0.0000	1.3960	1.7780
Other anxiety disorder	0.0083	0.0266	1.0083	0.0268	0.3100	0.7550	0.9571	1.0623
Obsessive compulsive disorder	0.4850	0.0790	1.6241	0.1283	6.1400	0.0000	1.3912	1.8961
Stress or adjustment disorder	-0.0353	0.0498	0.9653	0.0480	-0.7100	0.4790	0.8756	1.0643
Somatoform disorder	0.6458	0.1663	1.9075	0.3173	3.8800	0.0000	1.3768	2.6427
Other	-0.4525	0.0325	0.6360	0.0207	-13.9300	0.0000	0.5968	0.6778
Does not meet diagnostic criteria for CMD	-1.1491	0.0863	0.3169	0.0274	-13.3100	0.0000	0.2676	0.3753
PHQ-9 (Sub-threshold score)								
Case-level	-0.0114	0.0273	0.9886	0.0270	-0.4200	0.6750	0.9372	1.0429
GAD-7 (Sub-threshold score)								
Case-level	0.3050	0.0292	1.3567	0.0396	10.4500	0.0000	1.2812	1.4366
Constant	0.3415	0.0549	1.4070	0.0772	6.2200	0.0000	1.2635	1.5668

Number of observations = 55,159, Log likelihood = -33159.061, LR chi2(30) = 5056.44, Prob > chi2 = 0.0000, Pseudo R2 = 0.0708

Post-estimation tests indicated that the model shown in Table 13 was specified correctly for the data (linktest: hat = 0.99, $p<0.001$, hatsq = 0.005, p = 0.81), all independent variables with the exception of ethnicity and PHQ-9 were significant predictors of treatment attendance (Wald: Service $Chi^2(4)$ = 2312.83, $p<0.001$, Gender $Chi^2(1)$ = 19.24, $p<0.001$, Employment status $Chi^2(7)$ = 107.79, $p<0.001$, Referral Source $Chi^2(2)$ = 201.42, $p<0.001$, Presenting Problem $Chi^2(7)$ = 639.26, $p<0.001$, GAD-7 $Chi^2(1)$ = 109.12, $p<0.001$). The predicted outcomes from this model were different to the observed outcomes and therefore there are likely to be other variables which were not included that could improve this model (Hosmer-Lemeshow: $Chi^2(8)$ = 17.61, p=0.02). Collinearity was not considered to be a problem for most variables in this model; VIF and tolerance for PHQ-9 and GAD-7 suggest potential collinearity issues (Service VIF = 1.13, tolerance = 0.89, Gender VIF = 1.01, tolerance = 0.99, Age VIF = 1.12, tolerance = 0.89, Ethnicity ONS VIF = 1.03, tolerance = 0.98, IMD score VIF = 1.05, tolerance = 0.95, Employment status VIF = 1.11, tolerance = 0.90, Referral source VIF = 1.02, tolerance = 0.98, Presenting Problem VIF = 1.13, tolerance = 0.88, PHQ-9 VIF = 1.33, tolerance = 0.75, GAD-7 VIF = 1.30, tolerance 0.77). Full tables showing post-estimation test results from the secondary analysis are displayed in Appendix 6. Graphs showing the change in Pearson chi-square statistic when an observation is deleted (Pregibon dbeta) and the change in the deviance statistic when an observation is deleted, were investigated to identify potentially influential observations (see Appendix 7). None of the observations investigated contained unusual values. Graphs showing Pearson's residuals, standardised Pearson's residuals and deviance residuals were also investigated to ascertain whether there were any outliers in the dataset (see Appendix 7). None of the observations investigated contained unusual values.

Following the full regression analysis, a stepwise regression using backward selection was run to remove the categories and variables which were not found to be associated with non-attendance at an initial treatment appointment. As in the full model, there were 55,159 observations included in the logistic regression model for initial treatment appointment attendance shown in Table 14. During the backwards selection process a number of categories of the included variables were removed as no significant differences were found when comparing to the variable reference category. Initially, Black ethnicity was removed from the ethnicity variable as no significant difference was noted for treatment attendance for people in Black and White ethnic groups (p=0.83). Following this, other anxiety disorder was removed from the analysis as no differences were found between people in this category and those with depressive disorder (p=0.75). The next two categories which were removed from the analysis were other (p=0.72) and Asian (p=0.71) ethnic categories. Following this the employment status category for voluntary work was removed as no significant differences in treatment attendance were noted between people in this group and people who were employed (p=0.64). PHQ-9 was removed next as no significant differences were noted between those with mild symptoms and those with more severe depression symptoms (p=0.63). The next category which was removed from the analysis was the Chinese ethnicity group as no significant differences were observed between this group and White people (p=0.45). This was followed by the presenting problem category for stress or adjustment disorder; no significant difference in treatment attendance was identified between this group and those with depressive disorder (p=0.38). The category for students in the employment status variable was removed next as no significant difference was noted between people in this group and employed people (p=0.34). Following this, the referral source category for self-referrals was removed from the analysis as no significant difference was observed for treatment attendance between people who self-referred and those referred by a GP (p=0.34). The final ethnicity category was removed next as people with mixed ethnicity were not found to attend treatment appointments differently to White people (p=0.30). The final category to be removed from the analysis was the employment status category for people who were unemployed and not seeking work. No significant difference in treatment appointment attendance was observed between this group and people who were employed (p=0.17). The final model indicated that service, referral source, presenting problem, and anxiety symptom severity were important to treatment appointment attendance following an assessment.

The final model, shown in Table 14, indicated that individuals referred to service A were significantly more likely to attend a treatment appointment following an assessment than people referred to services B or D (OR for service B vs A 0.81, 95% CI 0.77 to 0.85, OR for service D vs A 0.40, 95% CI 0.38 to 0.43). Individuals referred to services C and E were significantly more likely to attend treatment than those referred to service A (OR for service C vs A 1.39, CI 1.27 to 1.54, OR for service E vs A 2.54, 95% CI 2.38 to 2.70). This indicates that the odds of attending a treatment appointment were 2.5 times higher for people referred to service E compared to those referred to service A. The odds of attending treatment decreased by 60% for people referred to service D compared to those referred to service A.

Individuals who were referred by another professional were significantly more likely to attend a treatment appointment than those referred by a GP (OR 1.64, 95% CI 1.53 to 1.76, p<0.001). The odds of attending a treatment appointment increased by 64% for people referred by another professional compared to those referred by a GP. No significant difference in treatment attendance was noted between those who self-referred to IAPT service and those referred by a GP; self-referral was not included in the final model.

Individuals referred for treatment of phobic anxiety disorder, obsessive compulsive disorder and somatoform disorder were more likely than those with depressive disorder to attend for treatment (OR for those with phobic anxiety disorder 1.6, 95% CI 1.4 to 1.8, p<0.001, OR for those with obsessive compulsive disorder 1.62, 95% CI 1.40 to 1.88, p<0.001, and OR for somatoform disorder 1.90, 95% CI 1.38 to 2.63, p<0.001). The odds of attending a treatment appointment increased by 90% for people with somatoform disorder, 62% for people with OCD, and 60% for people with phobic anxiety disorder, compared to people with a depressive disorder. Those who did not meet criteria for a common mental health problem and those included in the 'other disorder' group were significantly less likely to attend than those with a depressive disorder (OR those with another disorder 0.63, 95% CI 0.60 to 0.67, p<0.001, OR those that didn't meet criteria 0.32, 95% I 0.27 to 0.37, p<0.001). This suggests that for people with a problem which did not meet ICD-10 criteria for a CMHP the odds of attending a treatment appointment decreased by 68% compared to those with depressive disorder. The odds of attending a treatment appointment decreased by 37% for people with a diagnosis classed as 'other' compared to people with depressive disorder. Compared to individuals referred for treatment of depressive disorder, those categorised as having other anxiety disorders and stress or adjustment disorders did not differ significantly in terms of treatment attendance and were therefore not included in the final analysis. Individuals reporting more severe anxiety symptoms using the GAD-7 scale were significantly more likely to attend for treatment than those reporting less severe anxiety symptoms (OR 1.35, 95% CI 1.28 to 1.42, p<0.001). The odds of attending a treatment appointment increased by 35% for those with case-level anxiety symptoms compared to those with mild anxiety symptoms.

Statistically significant differences in treatment attendance were also noted for gender, age, IMD and some categories of employment status; however, with odds ratios close to 1 these are unlikely to be important to treatment attendance within IAPT services. Taking account of the other variables within the model, females were more likely to attend treatment appointments following assessment, than males (OR 1.09, 95% CI 1.05 to 1.13, p<0.001). Increases in age (OR for age 1.009, 95% CI 1.008 to 1.010, p<0.001), and reduced IMD scores (indicating lesser deprivation) were associated with assessment appointment attendance (OR for IMD decile 0.992, 95% CI 0.991 to 0.993, p<0.001). Treatment attendance did not differ significantly between employed people and students, those who were unemployed but not seeking work, and people engaged in voluntary work and therefore these categories were not included in the final model. Individuals who were employed were significantly more likely to attend treatment appointments than those who were unemployed but seeking work, individuals who considered themselves to be either long term sick or disabled, homemakers/carers and retired individuals (OR for those who were unemployed but seeking work 0.91, 95% CI 0.86 to 0.95, p<0.001, OR for those considered long-term sick or disabled 0.74, 95% CI 0.70 to 0.79, p<0.001, OR for homemaker/carer 0.84, 95% CI 0.78 to 0.91, p<0.001, OR for retired individuals 0.88, 95% CI 0.81 to 0.96, p<0.001).

Table 14: Stepwise logistic regression of those who attended a treatment appointment following an assessment at an IAPT service

Accessed Treatment	Coefficient	Std. Err.	Odds Ratio	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Service (A)								
B	-0.2071	0.0249	0.8130	0.0202	-8.3200	0.0000	0.7743	0.8536
C	0.3322	0.0493	1.3940	0.0687	6.7400	0.0000	1.2656	1.5355
D	-0.9043	0.0296	0.4048	0.0120	-30.5100	0.0000	0.3820	0.4290
E	0.9304	0.0313	2.5355	0.0793	29.7300	0.0000	2.3847	2.6959
Gender								
Female	0.0849	0.0196	1.0886	0.0213	4.3400	0.0000	1.0476	1.1312
Age	0.0090	0.0007	1.0090	0.0007	12.7100	0.0000	1.0076	1.0104
Referral Source (GP)								
Other	0.4958	0.0351	1.6418	0.0577	14.1200	0.0000	1.5326	1.7588
Problem (Depressive disorder)								
Phobic anxiety disorder	0.4524	0.0585	1.5721	0.0919	7.7400	0.0000	1.4019	1.7630
Obsessive compulsive disorder	0.4830	0.0763	1.6209	0.1236	6.3300	0.0000	1.3958	1.8822
Somatoform disorder	0.6430	0.1652	1.9021	0.3143	3.8900	0.0000	1.3759	2.6296
Other	-0.4559	0.0253	0.6339	0.0161	-18.0000	0.0000	0.6032	0.6661
Does not meet diagnostic criteria for CMD	-1.1520	0.0842	0.3160	0.0266	-13.6800	0.0000	0.2679	0.3727
GAD-7 (Sub-threshold score)								
Case-level	0.2989	0.0256	1.3484	0.0345	11.6900	0.0000	1.2825	1.4177
IMD Score	-0.0079	0.0005	0.9922	0.0005	-14.9900	0.0000	0.9912	0.9932
Employment Status (Employed)								
Unemployed job seeker	-0.0971	0.0252	0.9074	0.0228	-3.8600	0.0000	0.8638	0.9533
Long-term sick or disabled	-0.3000	0.0313	0.7408	0.0232	-9.6000	0.0000	0.6968	0.7876
Homemaker / carer	-0.1746	0.0402	0.8398	0.0338	-4.3400	0.0000	0.7761	0.9087
Retired	-0.1247	0.0417	0.8828	0.0368	-2.9900	0.0030	0.8136	0.9579
Constant	0.3066	0.0453	1.3588	0.0616	6.7600	0.0000	1.2433	1.4850

Number of observations = 55,159, Log likelihood = -33162.539, LR chi2(18) = 5049.48, Prob > chi2 = 0.0000, Pseudo R2 = 0.07. Categories removed: Ethnicity Black, p=0.83, Problem Other anxiety disorder, p=0.75, Ethnicity Other, p=0.72, Ethnicity Asian, p=0.71, Employment Voluntary work, p=0.64, PHQ-9 Sub-threshold score, p=0.63, Ethnicity Chinese, p=0.45, Problem Stress or adjustment disorder, p=0.38, Employment Student, p=0.34, Referral Source Self, p=0.34, Ethnicity Mixed, p=0.30, Employment Unemployed, not seeking work, p=0.17

Post-estimation tests indicated that the model shown in Table 14 was specified correctly for the data (linktest: hat = 0.99, p<0.001, hatsq = 0.004, p = 0.81), all independent variables with the exception of ethnicity and PHQ-9 were significant predictors of treatment attendance (Wald: Service Chi^2(4) = 2312.83, p<0.001, Gender Chi^2(1) = 19.24, p<0.001, Employment status Chi^2(7) = 107.79, p<0.001, Referral Source Chi^2(2) = 201.42, p<0.001, Presenting Problem Chi^2(7) = 639.26, p<0.001, GAD-7 Chi^2(1) = 109.12, p<0.001). The predicted outcomes from this model were different to the observed outcomes and therefore there are likely to be other variables which were not included that could improve this model (Hosmer-Lemeshow: Chi^2(8) = 17.61, p=0.02). Collinearity was not considered to be a problem for most variables in this model; VIF and tolerance for PHQ-9 and GAD-7 suggest potential collinearity issues (Service VIF = 1.13, tolerance = 0.89, Gender VIF = 1.01, tolerance = 0.99, Age VIF = 1.12, tolerance = 0.89, Ethnicity ONS VIF = 1.03, tolerance = 0.98, IMD score VIF = 1.05, tolerance = 0.95, Employment status VIF = 1.11, tolerance = 0.90, Referral source VIF = 1.02, tolerance = 0.98, Presenting Problem VIF = 1.13, tolerance = 0.88, PHQ-9 VIF = 1.33, tolerance = 0.75, GAD-7 VIF = 1.30, tolerance 0.77). Full tables showing post-estimation test results from the secondary analysis are displayed in Appendix 8. Graphs showing the change in Pearson chi-square statistic when an observation is deleted (Pregibon dbeta) and the change in the deviance statistic when an observation is deleted, were investigated to identify potentially influential observations (see Appendix 9). None of the observations investigated contained unusual values. Graphs showing Pearson's residuals, standardised Pearson's residuals and deviance residuals were also investigated to ascertain whether there were any outliers in the dataset (see Appendix 9). None of the observations investigated contained unusual values.

3.3.8 Missing data

3.3.8.1 Missing values by variables

As outlined in the methods section this phase of work aimed to explore the missing values within the dataset to ascertain any potential bias within the analysis. A breakdown of missing values within each of the variables of interest was run initially to identify which variables to focus on for this phase of work.

Table 15: Missing data in regression covariates with Chi^2 for missing data in both outcomes

	Valid (%)	Missing (%)	Total	**Accessed Assessment** Chi^2(df), P	**Accessed Treatment** Chi^2(df), P
Service	97,020 (100)	0(0)	97,020	-	-
Gender	97,013 (>99)	7 (<1)	97,020	0.8173 (1), 0.366	0.8656 (1), 0.352
Age	97,020 (100)	0(0)	97,020	-	-
Ethnicity ONS	78,457 (81)	18,563 (19)	97,020	15000 (1), 0.000	541.9530 (1), 0.000
IMD decile	95,598 (99)	1,422 (1)	97,020	35.9695 (1), 0.000	0.0764 (1), 0.782
Referral Source	96,867 (>99)	153 (<1)	97,020	100.5206 (1), 0.000	3.3008 (1), 0.069
Employment status	73,800 (76)	23,220 (24)	97,020	-	327.0713 (1), 0.000
Presenting Problem	71,047 (73)	25,973 (27)	97,020	-	1300 (1), 0.000
PHQ-9	76,106 (78)	20,914 (22)	97,020	-	1300 (1), 0.000
GAD-7	75,778 (78)	21,242 (22)	97,020	-	1500 (1), 0.000

Table 15 details the quantity of missing data within each of the covariates included in the primary and secondary analyses. The presenting problem was missing for more people than other variables (27% missing), and employment status was missing in 24% of the sample; both may partially be due to individuals not having been assessed. Ethnicity was the next most frequently missing variable, affecting 19% people in the dataset and missingness of PHQ-9 and GAD-7 was apparent in 22% of the dataset. Minimal missingness was also noted for IMD, referral source and gender. Chi-square tests indicate that missing datapoints for gender were not related to attendance at assessment; however, missing data for ethnicity, IMD and referral source were related to assessment outcomes. Higher levels of missingness were noted in each of these variables for individuals who did not attend an assessment appointment. This was especially apparent for ethnicity, where 54% of those who did not attend an assessment appointment had missing data for ethnicity compared with 12% missingness for those who did attend an assessment. Treatment attendance was assessed and missingness within gender, IMD decile and referral source were not found to be related to attendance or non-attendance; however, missingness within ethnicity, employment status, presenting problem, PHQ-9 and GAD-7 variables were related to initial treatment appointment attendance: 16% of people that did not attend for treatment had a missing value for ethnicity compared with 10% missingness for those who did attend the initial treatment appointment, 12% of those who did not attend were missing data for employment status compared to 8% missing data for those who attended treatment. 21% of people who did not attend for treatment had a missing value for their presenting problem compared with 11% missingness for those who did attend the initial treatment appointment. Missingness for PHQ-9 and GAD-7 were similar with 10% (PHQ-9) and 11% (GAD-7) of people who did not attend treatment having missing data, compared to 4% missing for those who did attend (both PHQ-9 and GAD-7).

3.3.8.2 Missing values by case

Patterns of missing data per case were explored for potential bias. For those that were included in the primary analysis most cases (n=77,296) included valid datapoints for the variables included in the analysis. Variables included in the analysis with missing data included gender, referral source, IMD decile and ethnicity. The most common single variable in the analysis with a missing datapoint was ethnicity, affecting 18,146 cases. The second most common missing variable was IMD, with 1,069 cases missing this information. 349 cases were missing data for both IMD and ethnicity. Combined missingness in IMD and ethnicity variables was investigated further; the number of cases where individuals did and did not attend assessments in those cases was similar (attended assessment = 182, did not attend assessment = 169. Fewer than 100 cases within this sample (n=97,020) contained missingness in other patterns.

Missingness in the secondary analysis (n=79,697) included gender, referral source, IMD, PHQ-9, GAD-7, employment status, ethnicity and presenting problem. The majority of cases had datapoints for these variables (n=55,159). The most common single variable to have missing data was presenting problem, affecting 6,183 cases. The second most frequently missing single variable was ethnicity, affecting 3, 879 cases. Employment (n=3,003) and IMD (n=702) were the two other variables included in the secondary analysis with more than 100 occurrences for single variables. Missingness in combinations of variables was also investigated and results are shown in Table 16. In all combinations of variables, missing datapoints were evident for people who only attended for assessment more frequently than for those who attended for treatment. Other patterns of missingness in this sample (n=79,697) contained fewer than 100 observations.

Table 16: Missingness in combinations of variables included in the secondary analysis

	Missing together (this combination only)	Attended assessment only	Attended treatment
Presenting problem and ethnicity	4, 678 (4,169)	2,443	2,235
Employment status, PHQ-9 and GAD-7	3,574 (2,406)	2,242	1,332
Ethnicity, employment status, PHQ-9 and GAD-7	1,020 (894)	574	446
Presenting problem, PHQ-9 and GAD-7	1,175 (719)	1,058	117
PHQ-9 and GAD-7	5,138 (590)	3,251	1,887
Ethnicity and employment status	1,664 (552)	856	808
Employment status and GAD-7	3,813 (203)	2,442	1,371
Presenting problem, ethnicity, PHQ-9 and GAD-7	313 (196)	300	13
Presenting problem, employment status, PHQ-9 and GAD-7	239 (127)	222	17
Presenting problem and employment status	420 (112)	298	122
Presenting problem, ethnicity, employment status, PHQ-9 and GAD-7	109 (107)	105	4
Presenting problem and IMD	230 (102)	124	106

3.3.8.3 *Missing values by service*

With the exception of gender, significant differences in missing data within each variable included in the primary and secondary analysis were observed. Table 17 shows the differences in missing data for each variable, stratified by service.

Table 17: Missing data for each variable in the Primary and Secondary analyses stratified by Service

	Primary analysis			**Secondary analysis**						
	Ethnicity missing (%)	**IMD missing (%)**	**Referral Source missing (%)**	**Ethnicity missing (%)**	**IMD missing (%)**	**Employment status missing (%)**	**Referral source missing (%)**	**Presenting problem missing (%)**	**PHQ-9 missing (%)**	**GAD-7 missing (%)**
Service A	7,923 (24)	543 (2)	0(0)	2,039 (9)	338 (2)	397 (2)	0 (0)	2,949 (13)	356 (2)	375 (2)
Service B	3,273 (14)	194 (1)	0 (0)	3,273 (14)	194 (1)	5,953 (26)	0 (0)	7 (0.0003)	3,147 (14)	3,397 (15)
Service C	6,296 (53)	276 (2)	153 (1)	3,766 (48)	171 (2)	231 (3)	83 (1)	4,998 (64)	195 (2)	195 (2)
Service D	1,007 (9)	134 (1)	0 (0)	1,005 (9)	132 (1)	844 (7)	0 (0)	1,410 (12)	762 (7)	762 (7)
Service E	64 (0.004)	275 (2)	0 (0)	58 (0.004)	251 (2)	171 (1)	0 (0)	2,646 (17)	699 (5)	742 (5)
Chi^2	14000, p<0.05	139.8, p<0.05	1100, p<0.05	11000, p<0.05	102.3, p<0.05	10000, p<0.05	758.4, p<0.05	19000, p<0.05	3100, p<0.05	3500, p<0.05

* Differences between services reporting missing values for Gender were not significant for primary (Chi^2 = 5.5813 P>0.05) or secondary (Chi^2 = 5.4561 P>0.05) analyses.

As can be seen in Table 17, Service A reported 24% missing values for ethnicity in the primary analysis, reducing to 9% missingness in the secondary analysis for the same variable. Presenting problem was missing in 13% of cases included in the secondary analysis from this service. Otherwise, low levels of missing data were observed for this service. Service B reported 14% missing data for ethnicity and 26% missingness in employment status for the secondary analysis was significantly higher than reported for other services. In addition, high levels of missing data for PHQ-9 and GAD-7 were also observed from this service. Service C reported the highest levels of missing data for ethnicity of all services (53% missing in the primary analysis; 48% missing in the secondary analysis). Missingness for presenting problem in the secondary analysis was significantly higher than for all other services at 64% missing; low levels of missing data were included for all other variables which may indicate a systemic issue in data collection for this variable since it is based on IAPT staff interpretation of individual difficulties. Missingness observed for Service D was relatively low for all variables. The highest percentage missingness for this service was 12% reported for presenting problem. Less than 10% missingness was observed for all other variables. Service E had the least missing data of all services for most variables. The exception to this was for presenting problem where 17% missingness was reported. 5% or fewer missing data was recorded from this service for all other variables.

3.3.8.4 Multiple Imputation

Multiple imputation by chained equation was used to replace missing values within the explanatory variables ethnicity, employment status, a condensed version of the presenting problem variable (phobic anxiety disorder, other anxiety disorder, obsessive compulsive disorder, stress or adjustment disorder and somatoform disorder were collapsed into one category labelled neurotic, stress-related and somatoform disorders), PHQ-9 and GAD-7 using the logit function, and IMD using the regress function. The presenting problem variable was collapsed to reduce the number of categories within the imputation modelling as large numbers of categories caused problems with convergence. Age and Service were included in the imputation command to provide additional information which would support predictions of missing values.

The variable with the highest percentage missing values was Presenting problem (27% missing), therefore 30 iterations were initially planned to reduce uncertainty in the estimated values produced (White et al., 2011). Unfortunately, this imputation model did not converge and therefore the number of iterations was reduced to 10. The number of iterations performed before the model converged (burn-in) was 10. A summary of the variables using a selection of the imputed datasets are shown in Table 18; variable characteristics are proportionally the same across different imputed datasets and reflect the original data.

Table 18: Comparison of explanatory variables using 1st, 5th and 10th imputed datasets

Explanatory Variables	**Original data 97,020 (%)**	**1st Imputation 97,020 (%)**	**5th Imputation 97,020 (%)**	**10th Imputation 97,020 (%)**
Ethnicity				
White	71,651 (74)	88,233 (91)	88,359 (91)	88,330 (91)
Mixed	1,476 (2)	1,965 (2)	1,879 (2)	1,902 (2)
Asian	3,008 (3)	3,851 (4)	3,833 (4)	3,793 (4)
Black	1,424 (1)	1,816 (2)	1,808 (2)	1,824 (2)
Chinese	137 (<1)	189 (<1)	178 (<1)	188 (<1)
Other	761 (1)	966 (1)	963 (1)	983 (1)
Missing	18,563 (19)	0 (0)	0 (0)	0 (0)
IMD score				
mean (sd)	28.42 (18.41)	28.42 (18.41)	28.43 (18.41)	28.43 (18.42)
Employment status				
Employed	35, 895 (37)	45,739 (47)	45,976 (47)	45,801 (47)
Unemployed job seeker	13,012 (13)	17,601 (18)	17,753 (18)	17,690 (18)
Student	4,638 (5)	6,689 (7)	6,511 (7)	6,595 (7)
Long-term sick or disabled	8,260 (9)	11,265 (12)	11,163 (12)	11,337 (12)
Homemaker/carer	4,535 (5)	5,999 (6)	5,975 (6)	5,978 (6)
Unemployed, not seeking work	1,976 (2)	2,851 (3)	2,791 (3)	2,764 (3)
Voluntary work	332 (<1)	444 (<1)	451 (<1)	462 (<1)
Retired	5,152 (5)	6,432 (7)	6,400 (7)	6,393 (7)
Missing	23,220 (24)	0 (0)	0 (0)	0 (0)
Presenting Problem				
Depressive disorder				
Neurotic, stress-related and somatoform	15,281 (16)	20,449 (21)	20,398 (21)	20,549 (21)
disorders	38,286 (39)	52,063 (54)	51,946 (54)	51,933 (54)
Other	16,738 (17)	23,296 (24)	23,502 (24)	23,343 (24)
Does not meet diagnostic criteria for CMD	742 (1)	1,212 (1)	1,174 (1)	1,197 (1)
Missing	25,973 (27)	0 (0)	0 (0)	0 (0)
PHQ-9				
Sub-threshold	15,881 (16)	20,311 (21)	20,238 (21)	20,290 (21)
Case-level	60,225 (62)	76,709 (79)	76,782 (79)	76,730 (79)
missing	20,914 (22)	0 (0)	0 (0)	0 (0)
GAD-7				
Sub-threshold	12,661 (13)	16,409 (17)	16,178 (17)	16,339 (17)
Case-level	63,117 (65)	80,611 (83)	80,842 (83)	80,681 (83)
missing	21,242 (22)	0 (0)	0 (0)	0 (0)

3.3.8.5 Primary analysis replication after MI

Following multiple imputation, regression models replicating the primary and secondary analyses were run with imputed values replacing previously missing values. The result of the primary analysis with imputed values is shown in Table 19. Stepwise regression was not performed as part of this analysis since Stata does not support the use of imputed data with this function (StataCorp, 2005).

Table 19: Logistic regression of those who attended an assessment appointment following a referral to IAPT service A or C using imputed data to replace missing values

Accessed Assessment	**Coefficient**	**Std. Err.**	**Odds Ratio**	**Std. Err.**	**z**	**P>|z|**	**[95% Conf. Interval]**	
Gender (Male)								
Female	0.0306	0.0212	1.0311	0.0219	1.4400	0.1490	0.9891	1.0748
Age	0.0168	0.0008	1.0169	0.0008	22.0900	0.0000	1.0154	1.0184
Ethnicity ONS (White)								
Mixed	-0.2877	0.0780	0.7500	0.0585	-3.6900	0.0000	0.6420	0.8761
Asian	-0.1729	0.0601	0.8412	0.0505	-2.8800	0.0050	0.7469	0.9475
Black	-0.2430	0.0784	0.7842	0.0615	-3.1000	0.0020	0.6716	0.9158
Chinese	-0.2578	0.2828	0.7728	0.2185	-0.9100	0.3680	0.4352	1.3722
Other	-0.3500	0.1059	0.7047	0.0746	-3.3000	0.0010	0.5715	0.8690
IMD score	-0.0072	0.0006	0.9928	0.0006	-12.9000	0.0000	0.9917	0.9939
Referral Source (GP)								
Self	1.0032	0.0219	2.7270	0.0598	45.7200	0.0000	2.6122	2.8468
Other	0.1047	0.0348	1.1104	0.0386	3.0100	0.0030	1.0372	1.1888
Constant	-0.2240	0.0406	0.7993	0.0325	-5.5200	0.0000	0.7381	0.8655

Number of Imputations = 10, Number of observations = 45,327, Average RVI = 0.2456, Largest FMI = 0.5345, F (101840.2) = 232.25, Prob>F = 0.0000

There were 45,327 observations included in this logistic regression model for assessment attendance, increased from 30,501 for the primary analysis where missing values were excluded (Table 11). Within this model statistically significant covariates were age, ethnicity, IMD score and referral source. The source of referrals was considered important to assessment appointment attendance in this model; those who self-referred and those referred by other professionals were significantly more likely to attend an assessment appointment than those referred by a GP (OR for self-referrals 2.73, CI 2.61 to 2.85, OR for other professional referrals 1.11, 95% CI 1.04 to 1.19). This indicates that the odds of attending an assessment appointment were 2.7 times higher for those who self-referred than those who were referred by a GP.

As in the primary analysis, increases in age, and a reduction in IMD score (indicating lower levels of social deprivation) were associated with increased attendance at assessment appointments; however, with odds ratio values close to 1 these are unlikely to be important to assessment attendance within IAPT services. When ethnicity categories were compared, no significant difference was noted between Chinese and White individuals. Individuals in all other ethnic groups were significantly less likely than White individuals to attend for an assessment appointment; this finding is also unlikely to be important for assessment attendance within IAPT services. Differences between male and female attendance at assessment appointments were not significant within this model.

3.3.8.6 Secondary analysis replication after MI

The secondary analysis with missing values replaced using multiple imputation is shown in Table 20. Stepwise regression was not performed for this analysis as Stata does not support the use of imputed data with this function (StataCorp, 2005). There were 79,692 observations included in this model for initial treatment appointment attendance, compared with the 55,159 included in the secondary analysis where missing values were excluded. As with the secondary analysis shown in Table 14, within this model ethnicity and depression symptom severity were not considered important to treatment attendance.

Table 20: Logistic regression of those who attended a treatment appointment following an assessment at an IAPT service using imputed data to replace missing values

Accessed Treatment	**Coefficient**	**Std. Err.**	**Odds Ratio**	**Std. Err**	**z**	**P>|z|**	**[95% Conf. Interval]**	
Service (A)								
B	-0.1824	0.0246	0.8332	0.0205	-7.4000	0.0000	0.7940	0.8745
C	-0.1475	0.0303	0.8628	0.0261	-4.8700	0.0000	0.8131	0.9156
D	-0.9275	0.0274	0.3955	0.0108	-33.8800	0.0000	0.3749	0.4173
E	0.7075	0.0260	2.0290	0.0527	27.2500	0.0000	1.9283	2.1349
Gender (Male)								
Female	0.0910	0.0157	1.0953	0.0172	5.7900	0.0000	1.0621	1.1295
Age	0.0072	0.0006	1.0072	0.0006	12.5100	0.0000	1.0061	1.0083
Ethnicity ONS (White)								
Mixed	-0.0674	0.0637	0.9348	0.0595	-1.0600	0.2920	0.8242	1.0602
Asian	-0.0803	0.0407	0.9228	0.0376	-1.9700	0.0490	0.8519	0.9997
Black	-0.0112	0.0576	0.9889	0.0570	-0.1900	0.8460	0.8832	1.1072
Chinese	0.1815	0.1926	1.1990	0.2309	0.9400	0.3460	0.8216	1.7498
Other	-0.0064	0.0823	0.9937	0.0818	-0.0800	0.9380	0.8453	1.1681
IMD Score	-0.0078	0.0004	0.9922	0.0004	-18.0800	0.0000	0.9914	0.9931
Employment Status (Employed)								
Unemployed job seeker	-0.0996	0.0226	0.9052	0.0204	-4.4100	0.0000	0.8660	0.9462
Student	-0.0568	0.0334	0.9448	0.0316	-1.7000	0.0900	0.8848	1.0089
Long-term sick or disabled	-0.2732	0.0263	0.7609	0.0200	-10.3900	0.0000	0.7227	0.8012
Homemaker / carer	-0.1334	0.0342	0.8751	0.0300	-3.9000	0.0000	0.8182	0.9359
Unemployed, not seeking work	-0.1670	0.0494	0.8462	0.0418	-3.3800	0.0010	0.7680	0.9323
Voluntary work	-0.0636	0.1164	0.9384	0.1092	-0.5500	0.5850	0.7468	1.1790
Retired	-0.1098	0.0351	0.8960	0.0314	-3.1300	0.0020	0.8364	0.9599
Referral Source (GP)								
Self	-0.0537	0.0199	0.9477	0.0188	-2.7000	0.0070	0.9115	0.9854
Other	0.3917	0.0279	1.4795	0.0413	14.0400	0.0000	1.4007	1.5626
Problem (Depressive disorder)								
Neurotic, stress-related and somatoform disorders	0.0179	0.0220	1.0180	0.0224	0.8100	0.4180	0.9749	1.0630
Other	-0.4191	0.0264	0.6576	0.0174	-15.8700	0.0000	0.6244	0.6926
Does not meet diagnostic criteria for CMD	-1.0844	0.0793	0.3381	0.0268	-13.6700	0.0000	0.2894	0.3950
PHQ-9 (Sub-threshold score)								
Case-level	-0.0426	0.0227	0.9583	0.0218	-1.8800	0.0610	0.9165	1.0019
GAD-7 (Sub-threshold score)								
Case-level	0.2926	0.0253	1.3398	0.0339	11.5500	0.0000	1.2748	1.4082
Constant	0.3285	0.0445	1.3889	0.0618	7.3800	0.0000	1.2729	1.5155

Number of Imputations = 10, Number of observations = 79,692, Average RVI = 0.08, Largest FMI = 0.26, F (26,37853.7) = 178.05, Prob>F = 0.0000

Within this model the service people were referred to, the source of the referral and the problem people were referred for were considered important to treatment attendance. People referred to service A were significantly more likely to attend a treatment appointment following an assessment than those referred to services B, C or D, however those referred to service E were significantly more likely to attend treatment than those referred to service A (OR for service B 0.83, 95% CI 0.79 to 0.87, OR for service C 0.86, 95% CI 0.81 to 0.92, OR for service D 0.40, 95% CI 0.37 to 0.42, OR for service E 2.03, 95% CI 1.93 to 2.13). This suggests that the odds of attending a treatment appointment more than doubled for those referred to service E compared to those referred to service A.

In line with the secondary analysis, those referred by a GP were also less likely to attend a treatment appointment than those referred by another professional (OR 1.48, 95% CI 1.40 to 1.56); the odds of attending treatment increased by 48% for those who were referred by another professional compared to those referred by a GP. In contrast to the secondary analysis where no significant differences were observed in treatment attendance for those who self-referred as opposed to those referred by a GP, in this model individuals who self-referred were significantly less likely to attend for treatment than those referred by a GP.

Individuals referred with another disorder and those who did not meet criteria for a common mental health problem were significantly less likely to attend for treatment than those with a depressive disorder (OR for other disorder 0.66, 95% CI 0.62 to 0.69, OR for those who did not meet the criteria for a CMHP 0.34, 95% CI 0.29 to 0.40). This indicates that the odds of attending treatment decreased by 66% for those who did not meet criteria for a CMHP, and by 44% for those with another disorder, compared to individuals with a depressive disorder. No significant difference in attendance for treatment was found between individuals referred for neurotic, stress-related and somatoform disorders compared to those referred for depressive disorder.

Statistically significant differences were also observed within this model for gender, age, IMD, some categories of employment status and anxiety symptom severity; however, with odds ratios close to 1 these are unlikely to be important to treatment attendance within IAPT services. Taking account of the other variables within the model, females were significantly more likely to attend treatment appointments than males following assessment. In line with other analyses, increases in age, and a reduction in IMD score (indicating lower levels of deprivation) were associated with increased attendance at treatment. As in the secondary analysis, no significant differences in treatment attendance were noted between people who were employed, students, and those engaged in voluntary work. Individuals who were employed were significantly more likely to attend for treatment than those who were unemployed, people who had a long-term illness or were disabled, homemakers/carers, or people who were retired. Individuals with more severe anxiety symptoms were significantly more likely than those with milder anxiety symptoms to attend for treatment following assessment within this and the secondary analysis.

3.4 Discussion

This analysis describes a dataset of 97,020 referrals made to five IAPT services based in the North of England between 2010 and 2014. Differences were noted in the way services were recording information about assessment attendance, and employment status of people referred. The proportion of missing values in variables of interest also differed between services. 50% of all referrals resulted in attendance at an initial treatment appointment. Within this dataset most people referred to services A, B and C tended to be from areas of deprivation with substantially fewer referrals made for individuals living in the least deprived areas. This was different to referrals for services D and E where referrals were for people living in areas which were more evenly distributed across deprivation deciles. High levels of missing data were observed for ethnicity, with differences in interpretation between the initial primary analysis model excluding missing data and the replication using multiple imputation to replace missing values. When considered in detail, 56% of individuals who did not attend an assessment appointment had missing data for ethnicity compared to the 12% of people who had missing data and did attend an assessment appointment.

Logistic regression using backward selection was performed to identify characteristics which were important to initial assessment and treatment appointment attendance. The objective was to produce a risk model rather than a model which would be able to predict non-attendance (Bursac et al., 2008). There are limitations to a stepwise variable selection approach which relate to the inclusion of noise variables in the final model, and issues with collinearity (Derksen and Keselman, 1992). The risks of these issues have been minimised within this analysis; searches of the research literature informed the selection of variables included in the analysis, and collinearity was assessed and found not to be an issue in this case. Within this work statistical significance has been reported for categories and variables with a p-value of 0.1 or lower. Variables with odds ratios which were statistically significant but close to 1 were not considered to be important to appointment attendance; making changes in response to these variables is unlikely to result in meaningful improvements in attendance at assessment or treatment appointments in IAPT services (Andrade, 2015).

This work draws on clinical data from five IAPT services offering treatments to people with CMHPs in the North of England; findings cannot necessarily be generalised to other IAPT services with different individual and socio-economic characteristics (Davis et al., 2020). Differences were identified in the start point for data collection between services during the analysis which resulted in three services not being included in the primary analysis. Identifying this issue was important to perform an appropriate investigation of the factors affecting initial attendance at the two specified time-points. In addition to this, it has highlighted an area for services to improve consistency in data collection which will enable future analyses to provide a more robust investigation of assessment appointment non-attendance (Clark et al., 2018). Although the data presented in this chapter are not current, they provide important information about the characteristics which may be related to increased risk of non-attendances to these initial IAPT appointments.

The statistical analysis methods used to understand this dataset have enabled the identification of specific characteristics which are considered to affect non-attendances at two distinct time-points. This information can be used by services to select appropriate strategies which could be used to reduce non-attendances; services which identify non-attendance to assessment appointments as problematic may decide to pilot new methods to promote self-referrals, services which report high levels of non-attendance to treatment appointments may consider alternative strategies employed by other IAPT services to ascertain whether there are organisational strategies which could help to improve this. Multiple imputation was used in these analyses to replace missing values rather than excluding cases from the dataset. While it is unlikely that missingness within the dataset could be considered missing at random, the approach undertaken provides the opportunity to compare the findings from data with missing values removed with the imputed dataset. This provides both the opportunity to increase the sample size within the analysis, and the confidence in findings which remain consistent when missing values are treated differently. Findings which differed between complete case and imputed datasets should be regarded with a degree of uncertainty since the assumption of data being missing at random was not met (Graham, 2009).

The source of referrals was found to be important to assessment attendance with the odds of attending an assessment 2.7 times higher for people who had self-referred compared to those who were referred by a GP. Other characteristics of referred people which showed statistically significant differences to assessment attendance included ethnicity, age, and level of social deprivation; making changes in response to these variables is unlikely to result in meaningful improvements in attendance since the odds ratios remained close to 1. People reporting their ethnicity as Mixed, Black, or Other were significantly less likely to attend assessment than White people. Being young or living in a more deprived area were also associated with increased risk of non-attendance at assessment. These findings were consistent when missing data were imputed, with additional categories for ethnicity (Asian) and referral (other professional) showing significant differences to the reference groups.

Of those who were assessed and considered eligible for IAPT treatments, the service a person was referred to, the method of referral, and the presenting problem were considered to be important to treatment appointment attendance. The odds of attending a treatment appointment increased by 100% for people who were referred to service E compared to those referred to service A. Where people were referred by another professional, the odds of attending a treatment appointment increased by 48% compared to people who had been referred by a GP; no difference was found between GP referrals and self-referrals for treatment appointment attendance in the secondary analysis. The odds of attending treatment decreased by 66% for those who did not meet criteria for a CMHP, and by 44% for those with another disorder analysis (eating disorder, alcohol related mental or behavioural disorder, bipolar affective disorder, non-organic sleep disorder, and not specified), compared to individuals with a depressive disorder.

Many of the other characteristics included in the analysis showed statistically significant differences in relation to attendance at an initial treatment appointment. The gender, age, anxiety symptom severity, level of social deprivation and employment status of the person referred were found to be statistically significantly associated with increased risk of non-attendance to treatment; however, making changes in response to this is unlikely to result in meaningful improvements in attendance. The individual characteristics associated with increased risk of non-attendance to treatment included being male, young, or living in a deprived area. People who reported mild symptoms of anxiety, those who were unemployed and seeking work, people with a long-term illness or disability, those who reported being a homemaker or carer, and people who were retired were also more likely to not attend treatment appointments following an assessment.

Following imputation of missing values, additional categories were found to be significantly different to the reference categories for two of the included variables: service (C), referral source (self-referral). In this replication of the secondary analysis, people living in the referral area for service C were also significantly less likely to attend for treatment than those living in the area near to service A. Once missing values had been replaced by imputation, people who had self-referred were considered less likely than those referred by a GP to attend a treatment appointment following an IAPT assessment. Possible interactions between the variable included in these analyses were not identified in published literature prior to starting the analysis and therefore none were explored to minimise the chances of incorrectly identifying combinations of characteristics as important.

Findings indicate that the source of a referral to IAPT services, and the services people are referred to can be considered important to attendance at initial appointments at IAPT services. It was not possible to assess whether there were differences in assessment attendance for services using this dataset; however, the secondary analysis showed significant differences in treatment appointment attendance between services. Possible reasons for this variation are explored in the following chapter. Some strategies aiming to reduce initial non-attendance have been explored in individual IAPT services: varying the method of inviting people to an assessment appointment (face-to-face, telephone or telephone call with a reminder), trialling telephone assessments, examining and following-up patterns of non-attendance to workshop appointments to improve booking systems and reviewing the suitability of venues (Pennington and Hodgson, 2012; Jones, Bale and Morera, 2013; Lilley et al., 2010). The longer-term impact of these strategies on initial attendance for this group of people is currently unknown.

Differences relating to the method of referral were also found between the analysis of assessment and initial treatment attendance data. In the primary analysis self-referrals were associated with increased assessment attendance compared to GP referrals whereas in the secondary analysis referrals from other professionals were associated with increased treatment attendance compared to GP referrals. Further research is needed to ascertain the cause of these differences: however, strategies are needed to improve the referral pathway between GPs and IAPT services. This will be explored more fully in the next chapter which focuses on the stakeholder experiences of the referral to treatment pathway for four of the five IAPT services which were included in this dataset.

Findings from the analysis of treatment appointment attendance following an assessment highlighted that people who did not meet the ICD-10 criteria for a CMHP, and those with a problem which was categorised as ‘other’ were less likely to attend for treatment. This may relate to individual perceptions of their mental health problem and expectations for treatment, highlighted in the systematic review (chapter 2). It would be helpful for IAPT services to collect information about treatment expectations and preferences for people with problems in these categories during assessment appointments to better understand why these groups are at increased risk of treatment non-attendance.

Across both primary and secondary analyses, age, and social deprivation were found to be associated with non-attendance at initial IAPT appointments. Younger people and those living in the most deprived areas are considered at increased risk of not attending either an assessment appointment, or an initial treatment appointment following assessment. While the effect of these variables on attendance is unlikely to be important to appointment attendance in IAPT services, these findings are consistent with other research in this field (Davis et al., 2020; Binnie and Boden, 2016). While other variables were identified as associated with either assessment attendance or treatment attendance, these were the only individual characteristics identified which were found to be consistently associated with increased risk of non-attendance at both time-points and when missing values were either excluded or imputed. It would be useful to compare the current analysis with an analysis of more recent initial attendance data across England to ascertain whether these are consistent characteristics which are related to early non-attendance irrespective of time and place.

Findings within the secondary analysis and replication following imputation of missing values identified unemployed individuals, those self-reporting as long-term sick or disabled, homemakers, carers and retired individuals as more at risk of not attending for treatment than those who were employed, following an assessment appointment. While data concerning reasons for non-attendance in relation to employment were highlighted in the systematic review (chapter 2), factors relating to people who were not employed were not featured. It is possible that some of the other factors identified in the review, such as having other commitments or responsibilities, may affect the people in these employment status categories; however, further work to explore the reasons for non-attendance to treatment in these groups is required.

The results from this chapter showed differences in attendance at treatment appointments between services, and also indicated that the method of referral was important to attendance at assessment and treatment appointments. As a result of these findings, it was important to gain a better understanding of the referral to treatment pathway for the IAPT services included in this dataset. The next chapter presents a qualitative exploration of the referral to treatment pathway for IAPT, informed by findings from this chapter and the systematic review (chapter 2).

4 Chapter 4: Stakeholder experiences of Improving Access to Psychological Therapy referral processes

4.1 Introduction

A significant portion of mental health research relating to treatment uptake has concentrated on prevalence rates and quantitative understandings of the barriers to accessing mental health care. This was reflected in the systematic review (chapter 2) which included 24 quantitative, nine qualitative and one mixed method study. Qualitative studies have offered a broader understanding of experiences related to accessing support services (Lincoln, Harrigan and McGorry, 1998; Gilbert, Gilbert and Sanghera, 2004; Lester, Tritter and Sorohan, 2005; Gilburt, Rose and Slade, 2008; Pinfold, 2000). While IAPT services are reasonably new, research to date has focussed mainly on treatment outcomes (Clark, 2011; Gyani et al., 2013; Clarke et al., 2009). There has been some published research which considers the experiences of treatments delivered by IAPT services (Newbold, Hardy and Byng, 2013); however, to date no papers have reported details about the initial stages of service uptake. It is therefore important to understand the processes involved between referral and treatment appointments to better understand the factors which affect initial non-attendance in IAPT services. Within this chapter, a qualitative exploration of the referral-to-treatment pathway for UK IAPT services was undertaken. Three stakeholder groups contributed to this work: those making referrals to IAPT services, those receiving and processing referrals before offering appointments for assessment and treatment, and people who had been referred and were offered appointments for assessment or treatment. The experiences of individuals drawn from these three groups are the focus of this chapter.

Findings discussed in the previous chapter indicate that there is variation among IAPT services in the main source of referrals, with some reporting the majority of referrals coming from GPs and others reporting the majority from self-referrals (chapter 3). In addition, the process of making referrals to services offering treatments to people with CMHPs was highlighted as important to non-attendance at initial appointments within the systematic review (chapter 2). Within this investigation experiences of people who have self-referred and GP experiences of making referrals were both explored.

4.1.1 Aims

- To describe the processes involved between referral and treatment appointments in UK IAPT services.
- To explore factors affecting initial non-attendance to IAPT services with referrers, service practitioners and people who have not attended one of the initial appointments offered after seeking help for common mental health problems.

4.2 Methods

4.2.1 Methodology

A pragmatic, interpretative descriptive approach (Sandelowski, 2000; Thorne, 2016) was used to outline stakeholder experiences related to the referral to treatment pathway for four IAPT services in the North of England. This approach was selected to enable the researcher to explore and characterise the experiences of participants to highlight the aspects of this process which are considered to influence non-attendance at initial appointments. This approach has previously been adopted in applied health research, specifically in several studies considering barriers to care for those with mental health problems (Gutierrez et al., 2013; Saver et al., 2007; Sullivan-Bolyai, Bova and Harper, 2005).

4.2.2 Method

One-to-one interviews (DiCicco-Bloom and Crabtree, 2006) were conducted with representatives from three stakeholder groups: 1) referrers such as general practitioners (GPs); 2) service professionals working within UK IAPT services; and 3) people who had been referred but not attended for a) an assessment appointment, or b) a treatment appointment. Interviews focussed on gathering experiences of the referral to treatment pathway. Where appropriate, interviews also discussed participant perceptions of early non-attendance at IAPT services. While focus groups could have been used to explore stakeholder experiences for this study, this approach was considered less flexible than individual interviews which could be organised at a time and place which was convenient for participants to minimise the impact of the research. Face-to-face and telephone interviews were undertaken, dependent on participant preferences, to maximise the likelihood of gathering rich accounts of individual experiences (DiCicco-Bloom and Crabtree, 2006; Novick, 2008).

4.2.3 Sample

Participants were a convenience sample of GPs, IAPT practitioners, and people referred to IAPT services drawn from four IAPT services based in the North of England. These localities had previously been included within the quantitative analysis reported in Chapter 3 which identified characteristics of people most at risk of not attending initial appointments. Commitments to other research projects and a lack of available resources to support this study resulted in one of the services which had been included in the referral dataset analysis not participating in this study. The same localities were selected for this study to enable a broader understanding of the experiences of referrals to those services in the context of a case study (Robinson, 2014; Palinkas et al., 2015). A maximum variation approach was adopted to incorporate the views of individuals from different stakeholder groups, service localities and roles (Marshall, 1996). Additionally, as it was expected that there would be more variation in the accounts of people referred for support compared with professional experiences of the service pathways, recruitment of a larger sample of people who had been referred for support than professionals was intended.

4.2.4 Recruitment

Recruitment was undertaken in two phases, with additional strategies included in the second phase to further support the recruitment of people who had been referred to IAPT services. Initial plans to stop recruitment once code saturation had been achieved (O'Reilly and Parker, 2013) proved to be unrealistic and the final sample size was ultimately determined by participant engagement in conjunction with study timescales.

4.2.4.1 IAPT staff recruitment

Information from participating IAPT services was shared with staff members by their service manager. Individual staff members interested in participating, contacted the researcher directly.

4.2.4.2 GP recruitment

Participating IAPT service managers were asked to provide a list of GP practices that routinely made referrals to their service. Where this information was provided, the researcher liaised with the practice managers from referring GP practices to share study information with individual GPs. Other GP practices within the geographical areas surrounding each participating IAPT service were also contacted about sharing study information with GPs in their practice. The researcher also attended a regional GP networking event to share study information with attending GPs. Interested GPs contacted the researcher directly about involvement in the study.

4.2.4.3 Recruitment of people referred to IAPT services

Participating IAPT services sent study information to potential participants with their standard service letters following a non-attendance at an assessment or initial treatment appointment for the duration of the recruitment period. Study information was shared in GP practices, community, research, and peer support groups. After a period of low levels of interest in the study from this group, information was also shared online using social media platforms and mental health organisations. At this stage, a gesture of thanks for time given to the research (a voucher for £10) was added to study information for people who had been referred to IAPT services, with participants recruited earlier in the study being offered the voucher retrospectively. Individuals interested in participating contacted the researcher directly.

4.2.5 Data Collection

Interviews were audio-recorded and transcribed verbatim with consent from participants. This enabled accurate accounts of experiences to be reviewed throughout the analysis process (DiCicco-Bloom and Crabtree, 2006). Interviews were conducted over the telephone or in person at NHS premises familiar to participants in order to avoid outside interruption, distractions and 'stage fright' (Britten, 1995).

A topic guide was developed using data from the findings of the systematic review of factors affecting initial attendance to similar services (reported in Chapter 2). This guide covered four main areas for discussion: i) the problem (diagnosis, beliefs about the problem, perceived stigma, awareness of the referral, discomfort discussing the problem); ii) treatment (motivation for treatment, current and historical contact with mental health services, the treatments being offered); iii) practical barriers to attending appointments; iv) support from others (see Appendix 10).

Semi-structured interviews were conducted to enable the researcher to direct the discussion using this guide before using probing techniques to explore in detail the experiences of the IAPT referral to treatment pathway which were highlighted as important to individual participants (Brinkmann, 2014).

4.2.6 Analysis

Thematic analysis techniques as described by Braun and Clarke (2006) were accompanied by an inductive approach to organising and interpreting study data (Braun and Clarke, 2006). Initial plans were to analyse stakeholder groups separately before combining latent themes; however, owing to low levels of recruitment for people who had been referred to IAPT services, the decision was made to undertake a single, combined analysis incorporating data from all stakeholder groups. NVivo software was used to support data analysis (Richards, 1999).

Explicit and latent themes in the data (Boyatzis, 1998) were considered from different stakeholder perspectives to provide enhanced understanding of the referral pathway and related processes prior to individuals accessing IAPT treatments. Following an initial analysis, a summary of findings was sent to consenting participants for feedback. This process of respondent validation was included to ensure that study conclusions appropriately reflected the views and experiences of participants (Mays and Pope, 2000). Feedback from participants was incorporated into the final analysis. The main themes identified were also discussed with members of a local mental health patient and carer research group to support the interpretation of findings.

4.2.7 Reflexivity and credibility

The lead researcher (JS) collected and analysed data from all participants in this project. JS is a white female university student, not affiliated with the services included in this research and with prior experience of conducting clinical research in mental health services. JS discussed and reflected on interview processes and the data analysis (coding, organisation data into themes and interpretation) with three male members of staff working as senior academics within the Department of Health

Sciences at the same university with experience in qualitative research, and research into mental health and patient access of health services.

This research represents one section of a doctoral thesis which is supported by a local group of people who have experience of mental health services and are interested in supporting research. This group is linked to the UK National Health Service and has provided advice connected with the initial research proposal, funding application and earlier stages of the project. The group was consulted to advise on the development of study materials including the participant information leaflet, the topic guide for interviews and again during the analysis phase of this study, to ensure that findings were grounded in, and relevant to, experiences of people who had been referred for mental health support. The draft analysis was shared with the individuals involved in recruitment to gain feedback and ensure findings reflected individuals' experiences before being finalised.

4.2.8 Ethical approval

NHS Health Research Authority approvals for this project were granted by the NHS East of England – Cambridgeshire and Hertfordshire Research Ethics Committee, reference 18/EE/0219. This work was also reviewed and approved by the University of York, Department of Health Sciences Research Governance Committee.

4.3 Findings

4.3.1 Participants

Seventeen individuals were interviewed between September 2018 and February 2020: eight IAPT professionals, six GPs and three people who had been referred to IAPT for support. As can be seen in Table 21, the majority of participants in all groups were white females. Ages bands have been reported to help retain anonymity; the youngest participant was aged between 20 and 29, and the eldest participant aged between 70 and 79 years. Each person who had been referred to an IAPT service lived in a different geographical area; two in areas considered to have low levels of deprivation, and one in an area with more deprivation. Two of these individuals self-referred while one was referred by a GP. Of the people who had been referred for support, two did not attend an assessment appointment, and the third attended an assessment appointment but did not subsequently attend a treatment appointment. All four IAPT services were represented in the dataset by IAPT professionals working in different roles: screening referrals, as psychological wellbeing practitioners (PWPs) and as high intensity therapists. To retain anonymity, services have been listed A-D by the date of the first consent from each area. Interviews were conducted with IAPT professionals from each of the four services, GPs from the areas around Services A and D, and people referred to Services A and D.

Table 21: Characteristics of participants

Participant Group	Gender	Age band	Ethnicity	IMD Decile*	Referral source	Reason for referral
IAPT clinician	Female	40-49	White	N/A	N/A	N/A
	Female	30-39	White	N/A	N/A	N/A
	Female	20-29	White	N/A	N/A	N/A
	Female	30-39	White	N/A	N/A	N/A
	Female	20-29	White	N/A	N/A	N/A
	Female	50-59	White	N/A	N/A	N/A
	Male	30-39	White	N/A	N/A	N/A
	Male	20-29	Black	N/A	N/A	N/A
GP	Female	50-59	White	N/A	N/A	N/A
	Female	40-49	White	N/A	N/A	N/A
	Female	30-39	White	N/A	N/A	N/A
	Male	50-59	White	N/A	N/A	N/A
	Male	40-49	White	N/A	N/A	N/A
	Male	50-59	White	N/A	N/A	N/A
Person referred for support	Female	60-69	White	4	Self-referral	Panic attacks/ depression
	Female	70-79	White	8	GP	Depression
	Female	30-39	White	7	Self-referral	Anxiety

*IMD deciles use post code information to indicate the level of local deprivation based on national averages with 1 indicating the 10% most deprived areas and 10 the 10% least deprived (Noble et al., 2019).

4.3.2 Interviews

Of the seventeen interviews conducted, fifteen were telephone interviews and two were face-to-face. Face-to-face interviews were conducted on NHS premises that participants were familiar with. Interviews differed in length between stakeholder groups with GP interviews being the shortest (average approximately 11 minutes) and both IAPT professional interviews and interviews with people who had been referred to IAPT averaging approximately 35 minutes.

4.3.3 Structure of findings

Study findings were organised into three main themes: communication, waiting times, and service processes. The full coding structure is displayed in Table 22. A summary of each of the main themes and associated categories is described in Table 35 which can be found in Appendix 11. The participant interviews which contributed to each of the main themes and categories are shown in Table 36. The written analyses are presented in relation to the stages of the referral to treatment pathway; the relationship between the main themes and the service structure presentation is illustrated in Table 37. The participant interviews which contributed to the analysis for each phase of the referral to treatment pathway are shown in Table 38. Tables 36, 37 and 38 can be found in Appendix 12.

The way in which individuals from each of the stakeholder groups communicated information to those in other stakeholder groups was highlighted consistently across the sample. Within the analysis data relating to communication were organised into three main categories: defining treatments, establishing expectations and sharing information. Defining treatments related to the assessment and treatment phases of the referral to treatment pathway and described the individuals involved in this process and the ways in which decisions about treatments were made. In most cases IAPT professionals took the lead in deciding which treatment would be most appropriate to support the person who had been referred to their service. Individuals referred provided the information on which this decision was based, including personal goals for treatment. Once an offer of treatment had been made, adjustments were considered if objections were received from the person referred. Establishing expectations was referenced in connection with the early stages of the referral to treatment pathway, pre-referral and referral, in addition to the later stage where treatment was the main focus. Expectations about the service and how to access it, the problems people would present with, and the treatments which might be offered, were discussed. Challenges were faced by those aiming to set realistic expectations for people wanting support for mental health problems, and those offering treatments. Individuals seeking support from IAPT services held expectations about these services on the basis of previous experiences, information received from professionals involved in the referral, and others such as family members and other healthcare providers. Sharing information included the approaches undertaken to provide and gather relevant information at two points: pre-referral where information about the problem and service were discussed, and at the point of treatment being considered. Participants described the process of sharing information as being inadequate, with little communication about the progress of referrals between IAPT and GP services after a referral had been made. Consequently, GPs felt detached from IAPT services and unable to provide people with the continuity of care which could support the efforts being made by IAPT services. GPs reported wanting to create a more integrated approach to mental health care with IAPT services included in the primary care service offering.

The second theme identified within this analysis related to the waiting times people experienced during the referral to treatment pathway in these services. This theme was split into two categories: demand from people who had been referred and service configuration. Demand for support from IAPT services was reported by IAPT professionals and GPs to be high, with services reporting approximately 1,000 referrals per month and GPs suggesting that they discussed IAPT with people most days. IAPT professionals reported this demand varying slightly over the course of a year, with one participant describing an additional treatment option which was offered during especially busy times. The number of people referred was reported within interviews to directly affect waiting times for both assessment and treatment. Similarly, the way services were configured had an impact on the waiting times for appointments with all services opting for a waiting list approach to appointment allocations rather than attempting to offer therapist consistency for people seeking support. Referrals were screened and appointments offered to people as soon as a bookable time became available with a member of staff who was associated with the appointment type (assessment, step 2 treatment, step 3 treatment). Waiting lists were organised in a manner which matched the specific services, for example for a service covering a large geographical area waiting lists were for portions of the area, and these were split by appointment type. In other services, IAPT professionals described waiting lists as being for each appointment type. There were a number of challenges associated with this method of organisation. The experience of people referred to these services was affected by having to repeat information to different professionals before being able to receive support, and therapeutic relationships were not formed with the people referred until they had made a number of contacts with the IAPT service. IAPT professionals at some services described having insufficient staff members to provide the service they would like to offer, including keeping in touch with people while they were on waiting lists and following up non-attending clients to find out whether support was still wanted and if there were things which might assist people to access offered support.

The third main theme which was identified during the analysis process described the processes which formed the referral to treatment pathway for the included IAPT services, and the ideas which participants suggested to improve these processes in the future. The following analysis has been organised by stages in the referral to treatment pathway, with findings related to the main themes highlighted at each stage.

Table 22: Full coding structure for interview study

Themes	Sub-themes / Categories	Categories / Codes	Codes	Codes
Communication*	Defining treatments	Flexibility	Other options available	
			Individual's availability for treatment	
		Practitioners lead treatment decisions	Decisions about treatments under supervision	
			Ideas about the views of people referred for treatment	Treatments may be daunting
			Input from people referred into offered treatments	
	Establishing expectations	Expectations about referral	Commitment from people referred	
		Expectations about treatment	Expectations between sessions	
			Treatments are time limited	
		Influence of others		
		Introducing IAPT to people	GP directed referrals	
			Process of referring to IAPT	
			Self-referrals	
			Signpost online	
			Who is appropriate	
	Sharing information	Communication with other relevant services		
		Contact between GPs and IAPT services		
		Information given about treatments	IAPT treatments	Face to face treatments
				Online treatments
				Options for people on waiting list
				Telephone treatments
		Methods of contact with people who had been referred		
Consequences of treatment attendance	Concerns about consequences of accessing support			
	Elements of treatment may make MH problems worse			
	Previous experience of mental health services			
Other	Changes that could reduce non-attendance			
	Discussion with GP about IAPT			

	Health issues make things difficult			
	Individual's thoughts about referral			
	Types of referrals			
Service Processes**	Admin	Admin after assessment		
		Appointment cancellations		
		Booking appointments		
		Dealing with lack of contact		
		Screening opt-in		
		Screening referrals		
		What happens to referrals		
	Initial contacts	Content of assessment		
		First contact with IAPT		
		first treatment session		
		Length of assessments		
		Mode of assessment		
		Treatment length and frequency		
	Refining access	More direct routes of access could eliminate the need for GP input		
		Risk changes service response		
		Time targets		
Waiting times*	Demand for support	GP directs to IAPT frequently		
		Referrals per month		
		Treatments offered when service is busy		
	Service configuration	Individual experiences of contacts	Feelings about non-attendance	
			Relationship is important	
			Therapist consistency	
		Repeating information	Who delivers treatment session	
			Who offers assessments	
		Staff numbers	Capacity issues	
			Follow up non-attendance	
			Waiting for assessment	
			Waiting for treatment	
ZZ Unrelated to IAPT pathway	Trigger for referral	Wish to stop anti-depressants		

* latent theme ** explicit theme

4.3.4 Analysis

4.3.4.1 Pre-referral

The time period when a mental health problem was recognised as an issue but before a referral to IAPT services had been made was discussed in many interviews with GPs and people who had been referred. These groups highlighted that people often have a discussion with their GP about the issues they face and the options available to deal with them. During these conversations GPs reported introducing IAPT therapies as part of a wider conversation about approaches to treating mental health problems:

> *Well my usual approach to somebody with anxiety and depression severe enough to be impacting on daily life is that IAPT is likely to be helpful to them. So I usually have a conversation about three overlapping areas of treatment, life style stuff, talking therapy stuff and medication and… So I would always, at an initial consultation, raise the availability of IAPT and give patients information.*
> *(Service D, GP 5)*

During these conversations, personal preferences for one of the approaches to treatment as opposed to other forms of treatment were mentioned by some GPs, and previous experiences of mental health treatment were also covered as part of these conversations:

> *They'll often have a preconceived idea about whether that's something they want or not. I find people are either medication types of people or talking therapies kind of people. (Service D, GP 2)*

> *I did tell the doctor at the time that I was a little bit dubious about counselling. I don't think I am dubious about counselling because I do think, you know, watching things and listening to people that it probably has moved on from my experience.*
> *(Service A, Person referred 1)*

Despite GP interviews highlighting that previous negative experiences can make efforts to promote re-engagement difficult for many people, the two people interviewed who had previous experiences of IAPT services, suggested that they did not have concerns about accessing IAPT treatments prior to referrals being made:

> *Like when I was seeing them before they were pretty quick at getting me a counsellor. I think within 2 weeks I got a counsellor, so I know they give a good*

> *service on that, so I know that they would have probably got me in pretty quick again to see somebody. (Service A, Person referred 2)*

> *When I actually had IAPT the first time, the therapist I didn't hugely benefit from it in terms of my mental health but they certainly had good people skills and certainly didn't harm me and I just thought maybe I'd not had enough sessions, you know, I had 12. I'll go back and have another 12 and that will help. (Service D, Person referred 1)*

Expectations about the referral process start during the conversation with a GP with many GPs suggesting that they promote self-referral methods to establish individual commitment to attending, in addition to including some details about the contacts that people will experience after the referral has been made:

> *I get them to ring themselves, because I think if they don't do that bit then they're probably, then they're not that interested. If they do, do that bit then they're probably more likely to follow through and do it because actually it's giving them some responsibility and giving them ownership of it. (Service A, GP 1)*

> *What I tell them is, that they're going, they do a telephone contact or an email contact and they'll either be called back or emailed back for an initial assessment appointment to last about 45 minutes. (Service D, GP 1)*

Of the three people interviewed who had been referred to IAPT services, two self-referred using the online referral form and one was referred by a GP. Experiences varied between people with the online form considered convenient where physical health restrictions were not an issue, however this method of referral was more problematic for a person who was also experiencing difficulties with their vision following a recent illness:

> *It didn't want your life history like some of these forms you get. It was just like basic information but it was just the fact, like I said, with my vision being bad that was the only difficulty. Like I said if I had the telephone number I could have rung and I would have been alright. (Service A, Person referred 2)*

> *I think the form, I think that's really good and that's what is good about IAPT, you don't have to kind of have to go to your GP. You can just think, okay I'm at a point I need help now and you start looking into it and you can start referring yourself there and then. Not having to wait for a time to phone people, you know, because*

> *you're at work busy, so I just remember doing it on the bus (Service D, Person referred 1)*

While those who self-referred had clear knowledge of the service they wanted support from, being referred by a professional enabled another person to be referred to IAPT without fully understanding what the service offered. Another person had discussed their mental health at a GP appointment prior to their GP making a referral. In this instance the person referred did not recall being given information about their local IAPT service by their GP:

> *I was surprised because I didn't know what I was going to or what I was expecting and I don't think that was the doctor's fault. I think if I'd been [laugh] in a more rational state by the time I was leaving um…he would have probably told me because he's very good like that (Service A, Person referred 1)*

The level of distress this person experienced during the discussion with their GP was considered to have impacted on their awareness about the referral made on their behalf:

> *I mean it was just counselling as far as I was concerned. I didn't realise that it had a name or anything. I mean he did actually say at the time something about [local IAPT service] I think but I was in an awful state by the time he was talking about this and it didn't really gel that it was a particular thing (Service A, Person referred 1)*

Regular and meaningful communication between IAPT services, and services regularly making referrals or talking to people about IAPT service such as GPs, was highlighted as important in relation to helping to set realistic expectations of what services offer and clarify the processes which people experience to enable the effective management of any uncertainties about attendance as they arose:

> *I think this is an on-going problem with mental health, they're re-designing it and they're altering the processes and the clinics we should be referring to so often that half the world, like myself, haven't got a clue what's available to be honest. (Service D, GP 1)*

> *I think broadening the service to include mental health workers working at a practice or locality level would be really helpful, um…and just linking everything together so if you could link in your sort of primary care mental health workers,*

> *IAPT and community mental health that would be so helpful, because people can just ping around the system and that's really hard. (Service D, GP 5)*

4.3.4.2 Referrals

Following a decision to try psychological therapies, GPs and IAPT professionals discussed referrals to IAPT services as being mainly self-referrals made by people seeking support, many of which were considered to have been GP directed. This process was considered to occur frequently: "*in terms of giving patients the number for IAPT and encouraging people to ring that would be a daily occurrence" (Service D GP 3).* As part of this process, GPs provided information in the form of leaflets or website information for IAPT services and suggested that if the person wanted to access the service they should either call or complete the electronic form which was available on their local IAPT website:

> *So you suggest it in the context of, "I think that might be a service that you would benefit from" and the reasons why, and then quite often they can go away and decide and have a think about it. Maybe not even decide there and then. Give them the number and say, well, you know, that's them, if you decide and you can get in touch with them yourself. (Service A, GP 1)*

> *Yeah so the leaflets that I give them have both um…a website and a phone number, so I say it's up to them which one they want to do (Service D, GP 5)*

IAPT professionals also listed a number of other routes to refer into services including letters, telephone calls and online referral forms from GPs, referrals from other healthcare professionals such as Midwives, Health Visitors, Neurologists, inter-departmental referrals from other mental health and nursing teams, and referrals from education settings such as local colleges. Estimates from IAPT practitioners about the number of referrals received by their service per month varied slightly but most reported that the services they worked in were processing approximately 1,000 referrals per month.

Appropriateness of referrals was mentioned in both GP and IAPT professional interviews. GP conversations indicated that "*it's people who come with the new stuff and unresolved issues"*

(Service 1, GP 1). Individuals reporting mental health problems that impact daily life but are not considered severe enough to require input from the community mental health teams would be appropriate to refer:

> *Essentially it's patients with a mental health problems that, um…appear to have an underlying, some sort of psychological problem that would benefit from a talking therapy essentially, not the people, I mean we do refer them to IAPT but then they get passed onto the psychology service. But I think just as, low grade depression due to um…life situations and things that have happened to them that the patient and myself feel would benefit from a talking therapy in either, instead of or in addition to any other sort of pharmacological treatment we might be giving them. (Service D, GP 1)*

While many referrals received by services were considered appropriate by IAPT professionals, examples of people being referred for problems outside of the IAPT remit were also noted:

> *We get a lot of people coming through with bereavement stuff even though we really don't offer anything to do with that. Or, what else would there be, so if someone's just broken up with their boyfriend, again similar again we don't work with relationship related issues. (Service A, IAPT 1)*

> *PWPs and the CBTs are seeing a lot more complex and enduring mental health problems than we would have done because we would have referred them to nursing or psychology to deal with but that option is no longer available. (Service C, IAPT 3)*

Referrals were typically received by administrators within IAPT services who passed referral information to clinical team members. These clinicians screened referral information to assess whether the referral appeared appropriate for the IAPT team prior to any contact being made with the person referred:

> *The referrals get passed on, all of them go through our screening team who like screen all the referrals to check they're suitable for us. (Service A, IAPT 1)*

Opting in to IAPT services was a process which many IAPT professionals referred to in their interviews. This involved people who had been referred (both self-referrals and professional referrals) needing to confirm that they wanted to be referred to the IAPT service before an appointment would be offered. IAPT professionals discussed this as a way to reduce the chance of people not attending appointments due to low levels of awareness about the referral or motivation to access support:

> *So basically I think the idea of it is that, like a patient's motivation and engagement with treatment is likely to be higher if like they've spontaneously made the decision they need help from a service say on a Monday and then still by the Wednesday Thursday if they're still in the same mindset, yes I wanna do this, then they'll take the next steps, then they ring us up and that's when they get the phone assessment booked in by the admin team. (Service A, IAPT 1)*

For one of the four services included in this study, a time target had been imposed to ensure that people were offered an initial appointment following a referral within two days of the referral being received by the service. Within this service, screening for appropriateness was incorporated into the initial service appointment:

> *So there's been some recent changes where I worked specifically the [Service name], so now from the point of referral, so when we receive it or we physically get it either in post and we stamp to say that we've received it that day or we've spoken to that person that day, we have to offer someone an assessment appointment within 2 days. (Service C, IAPT 2)*

> *So that is an initial screening session err which is essentially to assess suitability to the service, um and assess suitability for which therapeutic intervention. (Service C, IAPT 1)*

This change in pace for booking initial service appointments was regarded as a positive change which reduced the numbers of people not attending the initial appointment:

> *I think this new system that we've got is much better. We have much less DNAs than we used to because people are being contacted and being seen very, very quickly and also we're making physical contact with them to get them to choose their appointment. (Service C, IAPT 1)*

IAPT professionals working in other services reported that people were waiting much longer for initial service appointments following a referral:

> *So currently it's about 4.5 weeks, um…so it would, it all depends on the level of demands and resources that we've got. (Service D, IAPT 2)*

> *So say for example someone did an online referral today, it would then go through the screening team, so pretty much immediately as soon as it goes through it would be on their list to go through and then, they then have to wait three days and then they can opt in and that's the point they book their telephone assessment in. So between referral and that point, three days and then it can be anything between a day and two weeks or whatever for when they get the phone assessment depending on which slot they book in for and when they can do and when the therapist's availability to do the phone assessment. (Service A, IAPT 1)*

4.3.4.3 Assessment

Where referrals were considered appropriate for IAPT services, and after opt-in processes had been completed if relevant, individuals were offered initial service appointments. These appointments, called screening or assessment appointments, were an opportunity for services to check details from the referral and gather additional information from people about their mental health and current circumstances. Discussions about the options available for treatment were included and tended to be led by IAPT professionals with knowledge of the treatments offered by their service, and whether other services might be better placed to offer support to some individuals. During these appointments, information about risk was also collected and used to inform decisions about whether people would be able to wait for treatment, or required another service offering more intense support. These initial assessment appointments were described by IAPT professionals as being approximately 45 minutes long and there was variation between services about whether these were conducted over the telephone or face-to-face. IAPT professionals working in services which predominantly offered these appointments over the telephone also stated that there was flexibility to offer face-to-face appointments if individuals were unable to participate in telephone assessments:

> *They're predominantly telephone, um we can do face to face which is no problem, so um if somebody wants a face to face we can do that. If they want it for reasons of, um they have an interpreter or, um they struggle with using the phone or it would just be better for them to have a face to face, then we can organise that but they are usually done over the telephone.(Service B, IAPT 1)*

IAPT professionals indicated that initial assessment appointments were mostly conducted by clinicians working as Psychological Wellbeing Practitioners. These individuals were described as also offering treatment interventions at the IAPT Step 2 level, including supporting online and telephone Cognitive Behavioural Therapy (CBT) treatment interventions and psychoeducational groups for people with less complex mental health issues. Clinicians offering Step 3 IAPT treatments such as face-to-face CBT, Interpersonal Therapy, Counselling, Eye Movement Desensitisation and Reprocessing and therapy groups to people with more complex mental health issues also offered assessment appointments across all services. Assessments by Step 3 clinicians were described as being offered less frequently and were generally reserved for individuals with more complex circumstances based on the referral information, or those who required face-to-face assessments within services mainly offering telephone assessments.

Discussions relating to available treatments typically occurred towards the end of assessment appointments. These included IAPT treatment options which were considered by IAPT professionals as potentially beneficial, in addition to considering whether other local services may be better placed to meet the needs of the person referred:

> *So at the end of an assessment if we can identify the right treatment based on the information we're given, then we can discuss that with the client. The client can then decide if this is something that they're happy to engage with and based on that if it's treatment within our service, we can then following the client being amiable to the option given, we then put them on a waiting list for that (Service D, IAPT 2)*

> *Quite often there's usually more than one thing. It might be that we fit in with some of it and then we sign-post to other services as well and provide them with some information. So, for instance, I'm making reference to like someone that comes and they might mention that they've got financial difficulties or debt might be a problem. At that point a lot of us would give them information around Citizen Advice or debt charities, things like that, so something that we can use, you know, in the immediate if they need it. (Service C, IAPT 2)*

Establishing a relationship from the first contact was considered important to one of the people interviewed who had been assessed and subsequently not attended for treatment. This person referred to the assessment appointment as gathering information which they would have felt more comfortable revealing over a longer period of time. This reportedly left them feeling vulnerable, without the impression that the practitioner cared about them as an individual, and with no commitment from the practitioner for ongoing support:

> *The first person you speak to and just doing assessments all day, that's what I feel like they're doing. I don't feel like they're right, like you're on their caseload, they're going to assess you and if you're suitable we're going to see you. So maybe some continuity in that in terms that people should take people kind onto their caseload and assess them and then if they are going to see them say, okay I'll meet you in 4 weeks' time and we'll look a bit more about this…feel like you've just told your story in a small nutshell to somebody and then you're going to be seeing somebody else. (Service D, Person referred 1)*

Consistency of IAPT practitioners was not something which was reported to be prioritised by the participating IAPT services. The system of waiting lists and offering treatment appointments as soon as one became available was valued more highly by services than matching individuals to an IAPT practitioner who would assess them and subsequently offer treatment. This resulted in people having to repeat information to different professionals before any treatment was received:

> *One thing I've always identified is that if a patient rings to duty on self-refer, I don't quite get why we can't make a decision from treatment based on that information that was presented there and then. I don't know why they would then tell us everything that's going on with them, then go to face to face to tell somebody else what's all going on with them. They then wait 2 months to get a treatment appointment and then tell somebody else what's going on with them. So they're telling the same story with some nuances in it maybe 3 or 4 times before they get to treatment. I think, for me, if I was a patient I'd want to tell my story once, now I'd like treatment. Now for me that was what I would see as the best kind of outcome from a patient's interaction with an IAPT service. (Service C, IAPT 3)*

4.3.4.4 Treatment

IAPT professionals typically held an expectation that they would lead the decision about treatment options. IAPT staff members reported that services had protocols which supported appropriate treatment decision-making; options to seek guidance from more experienced colleagues were available if individuals were unsure about which treatment would be most appropriate to offer to people. Many IAPT professionals suggested they would generally start by making a suggestion for treatment which could be revised if the person was opposed to the treatment which had been offered:

> *Essentially it's collaborative but I think the assessor, you know, that's why they're there and it's about listening to what the client is presenting with. The assessor knows what we've got on offer, they're the expert in what we're offering. So I would be expecting them to suggest, you know, given what you've told me is your issue at the moment, I'm thinking this might be helpful for you. I can give you little bit of information about it. How does that sound? And then have a discussion around that. I mean if the client says, no, I absolutely don't want to do that, then we look at what other options are available. (Service B, IAPT 1)*

> *So we've got written guidance if someone is presenting with this then they need to go to a, b or c. It is quite clear. If there is ones that we struggle with, then we…if there's anyone around that we can run the assessment by we do that, um…if our line manager is around or we've got senior psychotherapists as well. If it's a bit unclear about what we should do, there's always kind of somebody to talk to. (Service A, IAPT 2)*

One person had attended an assessment appointment and considered it important that an individual's views be considered before the point of decision making. Where some IAPT practitioners described a way of achieving this, it appeared this was not a common approach taken:

> *So then the final thing tends to be determined by their goals, so the last question I always ask is what they wanna get out of therapy and their goals and stuff. So when it comes to treatment what I'll do is, I will talk through what I feel from what they've said is going to be most beneficial and then I'll ask them how they feel about that and does that seem ok. And if they were to say well no I don't really want to do that then we'll maybe look at other options. (Service A, IAPT 1)*

> *It wasn't really explained to me what CBT was, what it could provide, what I could hope from it, what might be good about it, what might be of benefit, what my other options were. They were just like, do you want to come into the service? Answer these questions? I'll get back to you. (Service D, Person referred 1)*

This approach of gathering information from people during the assessment appointment before seeking advice about which treatment to offer and then contacting the person later to discuss the treatment offer in detail, was reported by many IAPT professionals. There was a suggestion that this related to practitioner confidence in offering a treatment which was most likely to be of benefit to the person referred:

> *A lot of the time sometimes PWPs, especially quite new PWPs, feel the need to go away and talk to their supervisor before having that discussion with clients there and then, um and it's a confidence thing I think. I've found as I've been doing it longer, as a PWP, I had um, I was like yeah I know what's going to be helpful for this person. (Service C, IAPT 1)*

The characteristics of treatments being offered to people referred was mentioned by practitioners who stated that they would include information about the nature of treatment, the length and number of sessions people could expect to experience and the anticipated waiting period before treatment would begin. These practical characteristics were considered by IAPT professionals as the information people would need to have prior to making a decision to accept an offer of treatment; however, the idea of highlighting the relevance of the treatment offered to people referred by discussing how it might help them to achieve their treatment goals was not included in most of these interviews:

> *Move onto maybe kind of what the treatment options will be and kind of run them through maybe what options might be on the table and which ones are likely to be kind of effective for them. So saying, you know, this is PWP it's, you know, 6 to 8 sessions, 35 minutes each, we do CBT, you know, we have a nursing team, with another team which we can refer you to, to kind of help stabilise you or do a bit of risk management stuff and depending kind of what their presentation is like, and then kind of give them some psychoeducation stuff to take away with them. Offer out workshops, [stress management workshop] as a kind of standalone treatment option that they can access. (Service C, IAPT 3)*

Depending on the treatment offered, the waiting period between assessment and an initial treatment appointment varied substantially within and between services. While some services were able to offer treatment appointments within days of a referral being received, others reported waiting times of many months between referral and treatment. Differences were attributed to changes in the number of referrals received by services, and attempts by services to offer appointments in line with individual availability:

> *The on-line treatment, I think is very, even the waiting list is probably only 2 to 3 weeks unless you take them on directly, in which case there's no wait. Guided self-help, so low intensity the Step Two in clinic, I think that's probably about 3 months at the moment and the Step Three is about, oh counselling for depression and DIT (dynamic interpersonal therapy) I think that's about 4 months and Step Three CBT is about 8 months. (Service D, IAPT 1)*

Some IAPT professionals described an approach that their service had adopted to reduce the waiting times for people referred without increasing staffing levels. This involved offering treatment appointments on a fortnightly basis rather than weekly for individuals with less complex presentations. Reflecting on this, one IAPT professional reported a positive effect on individuals' learning between sessions:

> *So for the majority of us, we see patients fortnightly. That was one of the things that we put into place that reduced the waiting list in terms of we can then see more people quicker because obviously it increases our capacity in a way and, I mean personally, I found that's worked quite well with patients giving them a bit more time as well to kind of consolidate the learning on therapy, which is good. (Service C, IAPT 2)*

Differences in approaches to an individual's availability for treatment were highlighted during interviews. Where some services found it challenging to offer appointments at appropriate times to suit people with limited availability, other interviews highlighted the importance of IAPT services retaining flexibility when offering appointments to support this group of people:

> *We offer them three chances of an appointment. So based on, so when we offer them in the first attempt we just offer them an appointment based on who is available. If the client is okay to attend that appointment then great, if not, so we try to make adjustments to offer the best appointment, most convenient appointment to the client and we do that over three attempts because that's 3 reasonable attempts and after that if we can't meet their needs then the client has the option of either wait to re-refer or taking which of the appointments that we can offer basically. (Service D, IAPT 2)*

> *As PWPs what we try and do when we um do the follow-up calls or things with people or when we know that we're going to be putting them forward for PWP, we ask around if anyone has any requirements. So, you know, certain times of day, certain clinics because people have different needs in terms of like childcare or maybe physical health needs, mobility and things like that, so we know that obviously then if we were to offer someone an appointment at 3 o'clock when they have got a school run to do, it's not realistic for them to attend. (Service C, IAPT 2)*

Service interactions with people that were waiting for treatment differed within the sample interviewed. Some IAPT professionals reported contacting people once treatment appointments became available but otherwise individuals were not contacted while they waited for treatment. Approaches described by professionals working in other IAPT services aimed to offer some form of intervention while people waited for an appointment of the agreed treatment to become available, or IAPT professionals routinely contacting people while they were waiting to check whether they still required treatment:

> *While they're on that waiting list they might get a phone call from our treatment team to offer them an appointment and if they accept that appointment they'll then be sent out a letter confirming that appointment and hopefully they'll then attend. If they decline that appointment because it doesn't fit around work or childcare they'll just go back onto the waiting list. (Service C, IAPT 3)*

> *There might be some self-help material, so say it was anxiety or something like that, you could send that information that the client could read up. A get self-help website or um, we've got our own website with tips and things on, so I suppose it would be very unusual. We wouldn't want that somebody is just sat there with nothing. There is always something that they can be accessing really to learn more about their condition or, you know, what they can do to kick start their recovery journey. (Service B, IAPT 1)*

4.3.4.5 Perspectives on non-attendance

Feedback from GPs who referred people who did not attend following a referral to IAPT indicated that long waiting times were an influential factor. This was supported by many IAPT professionals, in particular one who had received feedback after offering treatment appointment to people on the waiting list. One of the people interviewed also discussed how waiting times influenced their decision to not attend an IAPT treatment appointment following assessment:

> *An important factor in this whole decision process for me was whilst I was waiting for this IAPT referral, I started my own personal therapy with a private therapist that I paid for. So I'd just started seeing them and then I had the assessment for IAPT, so I thought I'll just see what they can offer because I can't really afford to pay for personal therapy sessions. I'd have the assessment and then decide. So because I had the assessment compared to my relationship that I'm developing with the counsellor and my experience there it made it quite easy for me to say, no this isn't what I want, I'll stick with the counsellor. (Service D, Person referred 1)*

> *Some people do say, "well actually I've started seeing a private therapist because it's taken me so long to get seen" and so they don't need treatment any more. (Service C, IAPT 1)*

> *A lot of the reasons people don't engage is that the moments gone err because it's taken several weeks for them to get the appointment. Even though I try to encourage them that actually in the long-term this is really good and you'll learn some skills and all the rest of it, once they're feeling a bit better they probably won't go because it takes too long. (Service D, GP 5)*

Communicating with people before and between appointments, and reducing the waiting times for treatment were mentioned by IAPT professionals as potential ways to support more people to access mental health support:

> *We are low on PWPs definitely. We're constantly sort of advertising for staff and probably if we were up to full capacity with staff, it might be, in an ideal world maybe engagement calls, you know, so someone who hasn't spoken to anyone yet, it might be that that is highlighted on the practitioners calendar that this person hasn't been spoken to and maybe given them an engagement call prior to the first appointment but of course that's in an ideal world. (Service D, IAPT 1)*

> *In terms of initial treatment, I think the big thing is the wait, the lack of communication in between when they have that initial appointment, the wait then to that first appointment. (Service C, IAPT 1)*

> *If we can reduce wait times that could potentially mean that we get clients at the point where they're still motivated to engagement with treatment. (Service D, IAPT 2)*

Professionals who were interviewed, anticipated that non-attendance at an initial treatment appointment following assessment may relate to a variety of other factors, such as general anxieties around attending, specific worries about attending for a particular treatment such as a group treatment, individuals having changed their minds, or that individual mental health issues may have improved or resolved:

> *But for first treatment appointments and treatment appointments in general I think it's just with so many different reasons why people don't, like for example they might be anxious about it or just they might, they just might not want it any more. (Service A, IAPT 1)*

> *Don't get me wrong, I think some people work really, really well in a group setting but others really don't um…and I think if you're feeling in a really bad place and*

> *you're quite introverted anyway, to try and do a group is really quite daunting. (Service D, GP 5)*

> *There's an awful lot of low level mental health out here. It's recurrent. It gets better, worse, better, worse, so it's not…people have got this linear concept of mental health is bad and then it gets better and then that's it, but you can have good weeks and bad weeks, they leave here and they feel fine the following week and the week before that they feel bad again, so it's a complex system and we tend to be intervening at exacerbation points whereas it's a, you know, varying condition, so you give it 3 or 4 weeks patients revert back to mood. (Service D, GP 4)*

Discussions with people referred about non-attendance differed from professional views. GPs discussed previous experiences of services as important during pre-referral discussions with people seeking mental health support. These experiences were considered to influence the person's feelings toward the service. Despite this impression, past experiences with IAPT services were not the main reasons given by people who had been referred to IAPT for not attending initial assessment appointments. Being in control was important to one GP-referred person who decided not to attend an assessment appointment. This person considered their mental health problem to be mild, and non-attendance was due to concerns that mental health professionals might not share this view:

> *I never actually phoned up. I think partly because the inference of this letter was that this was just a first stage and that depending on somebody else they were going to decide how bad you were and whether you would get onto a further stage and I wasn't sure whether I really wanted to commit myself, perhaps I was a bit afraid of finding out that somebody thought I was in a serious state. (Service A, Person referred 1)*

Physical health issues heavily influenced the decision for another person not to attend; the person was keen to resume treatment with their local IAPT service but decided not to attend an assessment appointment until either their physical health issues had resolved to the point that they could participate fully in the treatments, or IAPT professionals had confirmed that there would be options to adapt treatments to accommodate the individual's physical health issues:

> *Yeah and lastly get in touch and say, we've read your email and we can help you this way you know, I would consider going back sooner if they could understand, well they're aware of it now but if they can come up with something that could help*

> *me, then yeah it would help because, you know, I'd made progress. (Service A, Person referred 2)*

The third person referred was assessed prior to making a decision not to attend. In this case, the decision not to attend related to the manner in which the assessment appointment was conducted, and uncertainties about whether they would be considered appropriate to receive treatment:

> *They'd known I'd had a course of CBT before, so they were like okay I need to speak to my supervisor and I'll give you a call back to see what we can offer you, and again that wasn't done in a very warm way, you know, I didn't feel like okay there's somebody here to help, you know, this is going to be okay now. I felt oh god do I meet this criteria now? And now and I'm get assessed further. (Service D, Person referred 1)*

These reasons for not attending were unique to each individual; however, communication was a common issue which influenced all three individuals' decisions.

4.3.4.6 Responses to non-attendance

At each stage of the referral to treatment pathway, IAPT professionals described the ways in which their service responded to a lack of contact from people who had been referred. While the time periods given by services varied, at each contact with IAPT people were informed that should they not contact the service within a set number of days then the service would assume that they no longer required support and discharge. This message was sent to people following a referral as part of the opt-in process, when an assessment appointment was offered by letter or email, if a person missed an assessment appointment and when a treatment appointment was offered by letter or email. Service protocols for the number of missed or cancelled appointments which could be rebooked before discharge also differed. When considering people who may feel uncertain about attending for support, one IAPT professional discussed the impact of this response to missed appointments:

> *I do wonder if the system is slightly stacked against those people that struggle with motivation and do struggle with engaging in therapies because what's the message for somebody that DNAs a couple of times because they can't face going to the appointment because they're slight agoraphobic or socially anxious or just dreading actually speaking to someone they don't know about their personal life. You know, they get a letter saying, I'm really sorry you've been discharged. That*

> *message is really, we can't really help you. I wonder, you know, is there middle ground there somewhere where we're reaching out to these people that are struggling to engage with therapy or feel that, you know, could do with a little bit of help but don't know how to go about it. (Service C, IAPT 3)*

Providing the option for people to access support from IAPT services in the future was included in the discharge letter sent to people referred, and a copy sent to the GP, following a lack of contact or repeated missed appointments. This letter was regarded positively by one of the people referred as it provided assurance that support was still available, and that they could contact the service directly if they felt they wanted support in the future:

> *I think if I can access it without having to go back again, that's good, and it's comfortable because I personally, it's another hurdle to go back to the doctors again, and it's another step that you've got to take. So the fact that I can get a piece of paper out and phone up and say look I've already been referred, I would like to take it up. That's quite reassuring. (Service A, Person referred 1)*

Professional interviews with both IAPT staff and GPs gave the impression that IAPT services were under pressure without necessarily having the staffing levels or time available to allow for a more personal approach to care. Many IAPT professionals stated that they would like to follow-up non-attendances with a phone call to check-in with people and see whether there were issues which could be resolved to support appointment attendance. While some IAPT professionals did describe this within their service, it was not something which was offered by all services:

> *For me if you ever want anyone to attend something you have to contact them. That face to, not face to face but, you know, just a letter through the post isn't really going to cut it. Someone just might put that on the side. If they're depressed, for example, they're not opening their mail, that will just go on the side and they'll miss it and they'll be back at square one. For me I always think that, kind of like a motivational telephone conversation with somebody, um…especially if you've identified that they've got a history of DNAs, might be worth it in terms of just getting them to engage with the service. (Service C, IAPT 3)*

> *The other thing that we do in the screening team is if we notice that we've got a bit of a cluster, someone who has referred themselves to us 3 times in a fairly short space of time, we try and give them a ring and just ask them what are the barriers for you ringing in? Would it be helpful now if I was able just to pass you through to one of our admin team and we can get your appointment booked for you? And*

> *people are usually really grateful for that and it does help people to get into the service. So we continue to do that. (Service A, IAPT 2)*

4.4 Discussion

This interview study highlighted that communication and waiting times affected stakeholder experiences of the referral to treatment pathway in four IAPT services in the North of England. Participants suggested that closer relationships between IAPT services and local GPs would benefit both groups by reducing inappropriate referrals and enabling more integrated care to be offered to people who were referred for support. Differences in service approaches indicated that dramatically reducing waiting times before initial assessments had benefits to those working within services, and an individual who had been referred for care suggested that having to wait a long time to be contacted had affected their perception of the care the service could offer. Contact with people who had been referred while they waited for an appointment was inconsistent between services, with some IAPT professionals describing the services they worked in as having insufficient staff to allow for engagement calls and follow-ups after non-attendance which they felt might benefit people who needed additional support to engage. Within services that offered engagement calls, these were conducted by administrative staff or clinicians on duty since individuals on waiting lists were not allocated to a specific member of staff until an appointment (or series of treatment sessions) had been booked. This resulted in an inability to build relationships with people who had been referred, and information about the CMHP which had prompted the referral needed to be repeated to different clinicians before any treatment was received. The idea of clinician continuity was valued by two people who had previous experiences of accessing IAPT services.

The services included in this study were also included in the quantitative dataset analysis presented in chapter 3. This has allowed additional information about these services to be explored using a qualitative approach to enhance understanding about some of the risk factors identified in the dataset such as the differences in approaches taken by services, and how variations in the sources of referral are processed in practice. This research benefited from including multiple stakeholder perspectives of the IAPT referral to treatment pathway. These accounts enabled a more comprehensive impression of this initial phase of IAPT care, and highlighted processes which could be improved for the wider benefit of each of the parties involved. Collecting data through interviews allowed individuals to participate in this research at a convenient place and time, and the systematic, pragmatic approach to analysis has identified strengths and limitations in the current organisational structure which could be useful both for clinicians and commissioners to consider. This study explored factors which were identified as important to non-attendance at initial appointments in the systematic review (chapter 2). These factors were included in the topic guide for interviews to explore their relevance within the context of IAPT services and the people who are referred to them. This was important to ensure that any future strategies to address non-attendance to initial IAPT appointments are prioritised appropriately for these services. The topic guide for people who had been referred to IAPT services was discussed with members of a service user and carer group; feedback from group members informed the order topics were introduced within interviews. Topic guides for all stakeholder groups were found to be helpful; participants were happy to discuss the topics introduced and the nature of participant responses met the objectives for this study. When offered the opportunity to raise additional topics at the end of interviews, many participants extended discussions around topics which had already been raised earlier in the interview. Participants who had been referred to IAPT services discussed previous experiences of mental health services during interviews; this topic had not been included in the topic guide.

Recruitment for this study was challenging; despite attempts to improve this situation the recruitment of people who had been referred to IAPT services and not attended initial appointments was especially difficult. This resulted in insufficient people being interviewed for code saturation to be achieved, or for data to be analysed by stakeholder groups as had originally been planned. It is possible that an alternative method of data collection, such as focus groups, might have been more successful with this group as individuals may have felt supported by others in a similar situation to themselves and willing to engage in a discussion (Gibbs, 1997). While there were many elements of the referral to treatment pathway which were similar for the included IAPT services, there were also notable differences in the approaches taken to screening referrals, the timescales for booking appointments, and the approach to contact with people who were on waiting lists. This supports and expands upon the findings from the data analysis presented in chapter 3 which suggested that there were significant differences in non-attendance at treatment appointments that were associated with the service a person had been referred to. Despite the many similarities which are likely to be found between the services in this sample and IAPT services that were not included in this study, the notable variations in the referral to treatment pathway between the services described in this sample indicate that these findings are not able to generalised more widely to other IAPT services.

This study provides insights into the referral processes for four IAPT services in the North of England and highlights challenges faced at different points by the three relevant stakeholder groups. These findings add to the growing literature focused on better understanding the referral pathway for IAPT services and the improvements which might support a reduction in initial non-attendances (Thomas et al., 2019; Jonker, Thwaites and Fisher, 2020; Collins and Corna, 2018; Marshall et al., 2016). A number of issues were highlighted in this study which are also reported in the wider qualitative research literature describing the experiences of people accessing mental health services. Improving relationships between healthcare professionals and services offering support for CMHPs (Lincoln et al., 1998), developing positive therapeutic relationships with professionals offering mental health support, and being involved in decision-making (Gilburt et al., 2008) were all highlighted within this study. Preference to consult a GP rather than access mental health support directly (Lester et al., 2005) was discussed, and the importance of raising awareness about services offering mental health support both in relation to people seeking support (Lincoln et al., 1998) and other professionals who may direct people to appropriate services (Lincoln et al., 1998; Gilbert et al., 2004) were highlighted. Waiting times before treatment appointments were offered (Lincoln et al., 1998; Lester et al., 2005), and the influence of others in the community (Pinfold, 2000; Newbold et al., 2013) were also important in this study. Issues relating to culture and coercion which influence the experiences of people accessing other mental health services (Gilbert et al., 2004; Gilburt et al., 2008) were not included in this research.

On the basis of this research, further work is needed to improve communication between GPs and IAPT services in order to increase GP confidence about the treatment options offered by IAPT services, and to allow GPs to support the therapeutic work which IAPT offers to people. This conclusion is in line with other evidence which suggests that improvements in the relationship between GP and IAPT services are necessary (Marshall et al., 2016). Additionally, research is needed to identify a process which allows services to consistently reduce the waiting times for assessment and treatment appointments while recognising the high demand for this service. Recent research has been published which reinforces the need to address waiting times; long waiting periods for IAPT services negatively affect recovery rates (Clark et al., 2018). Finally, it would be beneficial to investigate options to provide therapist consistency for people who are referred. Previous research has highlighted the need to build empathic, flexible therapeutic relationships with individuals who are more likely to avoid care (Schout, De Jong and Zeelen, 2010). This is not possible to achieve with the current IAPT referral structure. Adopting an approach to provide more therapist consistency would remove the need for people to repeat information, increase the likelihood of building rapport during early interactions with the service, and enable clinicians to maintain contact with those individuals who are waiting to begin treatment with them. Offering routine follow-up calls has been documented previously as being important when waiting lists are in place (Brown, Parker and Godding, 2002; Mitchell and Selmes, 2007); however, findings from this research indicate that these recommendations have not been consistently adopted by all of the IAPT services included in this sample.

The need to consider how IAPT interacts with other healthcare professionals and the people seeking support is evident from the work presented in this chapter. It is important to consider these findings in relation to the other components of this work, and the wider research literature, before making recommendations for next steps. The final chapter of this thesis will review the key points raised in this and earlier chapters to inform overall conclusions and future recommendations.

5 Chapter 5: Discussion

5.1 Introduction

The aim of this thesis was to improve our understanding of the factors which affected attendance at initial IAPT service appointments for those people with common mental health problems who were seeking support through psychological therapies. The methods used to achieve this aim have been presented in the main chapters of this thesis. Original objectives will be restated in the following section accompanied by summary findings from each phase of this work.

5.2 Overview of findings

5.2.1 Objective 1: To systematically review the evidence about why people do not attend initial treatment appointments for CMHPs.

Findings from this work highlighted that communication between mental health services and the person seeking support was relevant to non-attendance at initial service appointments in many ways, such as: gathering appropriate information from people being referred, offering appointments in a prompt manner, and identifying treatments which were perceived by individuals as being relevant to their problem. Providing information about the service, treatments available and the benefits of attending were also reported by included studies as relating to attendance decisions early in the treatment pathway. Convenience to people being referred was important, with a flexible approach to offering appointment times, locations and costs of treatment identified by included studies as factors which affected initial non-attendances. Identifying the social support available to the person prior to the referral for formal support was considered relevant to whether people would subsequently attend initial appointments.

5.2.2 Objective 2: To investigate a practice research network dataset for the North of England and provide information about who is referred to IAPT services for CMHPs, and who does and does not attend for 1) assessments, and 2) treatment appointments.

Differences were identified in the way services reported attendance in this dataset, resulting in a limited ability to analyse data about attendance at assessment appointments. Of the 97, 020 referrals reported, 50% resulted in attendance to at least one treatment appointment. A large quantity of data was missing for users' ethnicity; over 50% of people who did not attend an assessment appointment also had missing data for ethnicity, whereas only 12% of those who attended an assessment appointment had missing data for this variable.

Risk of non-attendance at assessment was higher for people who had been referred by a GP than those who had self-referred. The odds of attending assessment appointments were 2.7 times higher for people who self-referred than those referred by a GP. Risk of non-attendance at treatment appointments was related to the IAPT service people were referred to, the method of referral and the presenting problem. The odds of attending a treatment appointment increased by 100% for people who were referred to service E compared to those referred to service A. Differences related to IAPT service could not be explained by the analysis of this dataset as insufficient services were included to enable a multi-level analysis to be completed. Where people were referred by another professional, the odds of attending a treatment appointment increased by 48% compared to people who had been referred by a GP; no difference was found between GP referrals and self-referrals for treatment appointment attendance in the secondary analysis. The odds of attending treatment decreased by 66% for those who did not meet criteria for a CMHP, and by 44% for those with another disorder analysis (eating disorder, alcohol related mental or behavioural disorder, bipolar affective disorder, non-organic sleep disorder, and not specified), compared to individuals with a depressive disorder. Although making changes is considered unlikely to be meaningful to improving appointment attendance in IAPT services, consistent findings relating to non-attendance at assessment (primary analysis) and the first treatment appointment (secondary analysis) indicate that age factors and issues relating to social deprivation merit further attention.

5.2.3 Objective 3: To explore people’s experiences of a) making referrals into IAPT services, b) supporting people from within these services, and c) accessing IAPT treatments.

Stakeholder experiences of the IAPT referral to treatment pathway suggested that communication between services and those referred were important factors which affected decisions about attending initial IAPT service appointments, as were waiting times between the referral and initial service appointments. This is consistent with findings from the systematic review reported in Chapter 2. Fostering close working relationships between IAPT services and those who frequently referred or directed referrals to IAPT was perceived to have mutual benefits in improving the relevance of referrals received, confidence in the services that IAPT practitioners would offer people, and knowledge about the processes involved which could then be shared with people considering accessing IAPT support. Initiatives to reduce waiting times in some of the IAPT services included in this study showed signs of benefits to IAPT professionals working within the services; reports suggested that people referred to services were put off by lengthy waits before initial appointments. Communication with people while they were on waiting lists was inconsistent between services with staff capacity issues highlighted as a factor which limited the options to offer engagement calls and also to follow up after missed appointments. Where engagement calls were offered, individuals on waiting lists had not been assigned to clinical caseloads and therefore these calls were conducted by administrative staff or duty clinicians. This limited the options to establish a therapeutic alliance with people seeking support early in the treatment pathway and created a need for people to repeat information about their referral and updates to this information with different members of staff before treatment was offered.

5.3 Strengths and Limitations of the research

5.3.1 Strengths

A mixed methods approach was taken to gathering information about why people may not attend initial appointments for common mental health problems. Conducted sequentially, this allowed information from early phases of work to be fed into subsequent elements of the project. Data drawn from the systematic review and IAPT quantitative data analysis were complementary and informed the planning stages of the qualitative interview study. Specific findings from the systematic review were included in the topic guide for interviews, and the initial plans for participant recruitment were informed by the groups considered most at risk of not attending initial appointments based on the IAPT referral data analysis. In addition, the initial plan for recruitment at the interview stage was to ensure the inclusion of individuals who shared the characteristics identified during the data analysis of people at increased risk of non-attendance. This approach was considered important to present a comprehensive account of the issues affecting initial appointment attendance in these services (Creswell, Fetters and Ivankova, 2004). Involving the same services in the interview study as had been included in the analysis of referral data enabled further investigation of some of the risk factors identified in the referral analysis, such as the noted differences between services and the variation in sources of referral. This enhanced understanding about some of the service factors which might have contributed to the statistical differences which were identified during the referral dataset analysis (chapter 3). When considered together, the findings which have been highlighted across this thesis can be regarded as core factors which influence non-attendance to initial IAPT appointments; these factors have been identified as important using different methods of data collection and analysis, across IAPT services and other similar services internationally, and are not restricted to a specified period of time.

The strengths of individual components of this thesis have been discussed in the relevant chapters; however, they will also be collectively reviewed here. The systematic review of the international research literature, presented in chapter 2, adopted a broad approach to study selection, enabling different study designs to be included which increased the opportunity to review relevant research on this topic. Bias relating to study identification was reduced by conducting searches in multiple databases, and reviewer selection biases when screening studies were reduced by applying strict inclusion and exclusion criteria and performing dual screening at each stage. Reliability checks for screening were also conducted at each stage to reduce the chances of missing relevant papers. The dual data extraction and quality appraisal of included papers ensured the accuracy and relevance of data included in the analyses and synthesis. The conclusions drawn took account of the quality of papers included in the review, enabling informed interpretations of the presented findings to be discussed. When considering the strengths of the referral dataset analysis, presented in chapter 3, clinical data from multiple IAPT services detailing 97,020 referrals were used to assess the characteristics which were associated with increased risk of non-attendance to initial appointments. Separate analyses were conducted to appropriately account for the different data available for people who were offered an assessment appointment and those who were offered a treatment appointment. Differences in the start of data collected by the services included in the dataset were reflected in the decision to only include services with appropriate data about all referrals received in the primary analysis of assessment appointment attendance. In response to the high levels of missingness in some variables, analyses were conducted with missing values excluded, and repeated with imputed values replacing those which had been missing. Comparisons between these analyses increased confidence about the variables which had been associated with increased risk of non-attendance.

The interview study, presented in chapter 4, was conducted with services that had been included in the dataset analysis presented in chapter 3 allowing variables which could not be fully explored in the dataset such as differences between services to be explored in more detail using qualitative methods. The inclusion of a service user and carer group with the preparation of materials and content of topic guides for analyses improved the quality and anticipated acceptability of this study for people who had been referred to IAPT services but had not attended initial appointments. The inclusion of experiences from multiple stakeholders created a more comprehensive impression of the referral to treatment pathway for the included services and offered the opportunity to explore similarities and differences in interpretations of each stages in the pathway from the three relevant perspectives. Incorporating factors identified in the systematic review (chapter 2) into the topic guide used for interviews enabled the research to consider whether, and how the factors important in the wider research literature influenced initial non-attendance in IAPT services. The use of thematic analysis allowed a pragmatic, interpretative approach to the analysis of interview data to be adopted which resulted in findings and conclusions being presented which could be used by services to inform future initiatives to reduce the issue of non-attendance at initial appointments.

Incorporating clinical data from UK IAPT services into this project enabled a pragmatic exploration of some characteristics which might increase the risk of non-attendance at early appointments. This, rather than findings from a wider systematic review of similar services, is more focused on the particular group of people referred and therefore findings are directly relevant to IAPT services wishing to address initial non-attendances in the future. Acknowledging the different stakeholders involved with the IAPT referral to treatment pathway and integrating these perspectives into the interview study allowed conclusions to be drawn which affected all stakeholder groups. Related to this, the interview study included the experiences of individuals who were referred but did not attend initial IAPT service appointments, enabling a more informed approach to be taken when clinical teams attempt to address this issue in the future. Featuring data from services and individuals with direct links to the problem under investigation has allowed the findings of this thesis to remain focussed on the specific issues around initial non-attendance at primary care mental health services in England.

The involvement of a relevant, supportive service user and carer research group from inception to completion of this thesis is considered to be a strength. The input from this group increased confidence that the research was important to those with experience of mental health problems and the UK primary care services offering support for CMHPs. In addition, the group provided alternative perspectives on each stage of the work, offered feedback to ensure that documents which potential participants would receive were tailored appropriately, and findings were interpreted with the additional perspective of individuals who have direct experiences and could be affected by this work (Boivin et al., 2018). This is considered to have improved the quality and relevance of the work and subsequent conclusions.

5.3.2 Limitations

When considering the wider literature which informed later elements of this thesis, characteristics of individuals who did not attend initial appointments at services offering psychological therapy were not included within the systematic review. This information could have been used to inform the data analysis of IAPT referral data, specifically regarding any interactions between potential risk factors. Since this was not explored within this thesis, and no potential interactions were identified in the literature before the analysis was run, no possible interactions were explored within the data analysis. This analysis was also limited by the number of included services, removing the possibility of exploring hierarchical factors which may have influenced non-attendance (Greenland, 2000).

While most of the variables included in the referral data analyses were objective, the recording of a presenting problem is more subjective as it relies on the experience of individual practitioners and service protocols to determine the focus for support. This variable was recorded by the assessing IAPT practitioner and therefore may vary both by practitioner and by IAPT service if protocols for making these decisions are not shared between services. Consequently, interpretation of data relating to the presenting problem reported within this thesis should be regarded with caution.

Historical data were used for the statistical analyses presented in Chapter 3 and the recruitment element of the interview study highlighted how quickly structural changes are implemented within IAPT services. It is possible that the conclusions drawn from the historical dataset may not be relevant to current IAPT non-attendances (Saunders et al., 2020). Despite the likely differences in approaches taken over time and by different services, other research findings have also indicated that age (Davis et al., 2020) and level of deprivation (Binnie and Boden, 2016) may be important when considering the risk of non-attendance to initial appointments. This suggests that despite the limitations of the data used, these variables are worth considering in the context of risk of non-attendance to initial IAPT service appointments.

It was not possible to explore the risk factors for non-attendance at assessment appointments fully during the data analysis phase of this work since the services within the dataset did not all capture information relating to referrals prior to assessment appointments taking place. This reduces certainty about the factors identified since they rely on data from only two services and also highlighted that differences exist between services which relate to data collection and reporting. As this research presents referral data from only a small selection of IAPT services based in the North of England, and the noted differences have affected the analysis and interpretation of findings within this project, it can be assumed that this may be a wider issue affecting other IAPT services and related research which reports data on initial non-attendance. This not only limits the confidence in findings here, but the comparable research which has previously been published on this issue. At present it is advisable to regard evidence pertaining to risk factors of initial attendance with a degree of caution until consistency in the collection and reporting of data about IAPT service referrals has been resolved.

Including services which were located only in the North of England limits the interpretation of information on social deprivation. Variation in social deprivation and associated health outcomes across different regions in England have been widely researched (Townsend, 1987; Townsend, 1979;

Wildman, 2003). Recent research evidence and government data suggests that health inequalities and deprivation in the North of England remain problematic (Corris et al., 2020; Ministry of Housing, 2019). The results from chapter 3 indicated that people living in more deprived areas were statistically significantly more likely to not attend initial IAPT appointments (both assessment and initial treatment appointments) than people living in less deprived areas; making changes in response to this was considered unlikely to result in meaningful improvements in attendance. Given the location of the sample included in the analysis, it is unlikely that these findings would be relevant to other regions in England where deprivation and health inequalities may be different. Further research including referral data from other regions in England would be useful to determine whether this finding is relevant to other areas.

Within the interview study reported in Chapter 4, in-depth exploration of common factors which had contributed to non-attendance decisions was not possible because it was only possible to recruit a small sample to the interview study. Code saturation was not achieved and though individuals who attended and did not attend assessment appointments were represented in the sample, it was not possible to identify any real consistencies in experiences about attendance decision-making. Recruitment of this group was anticipated to be challenging; however, the additional measures implemented to increase the number of people willing to engage with this study had limited effect. Although the experiences of people who did not attend initial IAPT appointments were included in the analysis, there remains a lack of understanding about why so many people do not attend these initial appointments. Conclusions can be drawn from other elements of this thesis such as the systematic review described in Chapter 2; however, further research work is required to provide a comprehensive account from the perspective of those who have been referred to IAPT services.

Delays between initial recruitment and the analysis of the interview data may have affected the response to invitations for respondent validation. It is generally anticipated that validation by providing a summary of the synthesised analysis may occur months after the initial interview (Birt et al., 2016); in this case some participants experienced a gap of approximately two years due to researcher maternity leave and the second round of recruitment. During the recruitment process, eight people indicated that they would like to provide feedback about the initial analysis; however, only three people responded to the summary which was shared. Of these, only one person provided comments which challenged the researcher interpretation of interview data. It is possible that some of the people who indicated interest in respondent validation would not have replied to contact about this regardless of the time period between recruitment and an initial analysis being presented;

however, the length of time between recruitment and respondent validation was much longer than expected and potentially influenced engagement with the analysis phase of this work.

5.4 Reflections

Exploring initial non-attendance at primary care mental health appointments for people experiencing common mental health problems has created many opportunities and challenges for my personal development. This work benefited from having the involvement of a local service user and carer research group from the early stages when I was considering the overall research aim prior to making an application for funding. Regular contact was kept with the group throughout the duration of this PhD which enabled me to keep in mind the priorities expressed by people with lived experience of mental health problems and who had accessed relevant support services. Specifically, the group members offered personal insights into how different research questions might affect people seeking support for common mental health problems, and how future service provision could improve the experiences of those accessing support. In addition, group members provided advice and guidance on the materials produced for recruitment and data collection during the interview study and commented on the wider implications of findings from this phase of work. Having contact with the members of the group provided opportunities to better understand the experiences of individuals who are invited to take part in research, from the perspective of people who have personal experience of mental health diagnoses and treatment. This experience has been invaluable in highlighting the variation between academics and individuals with lived experience of mental health problems in terms of priorities for, and within the conduct of, research projects.

Many challenges arose during the course of this PhD, including identifying and acquiring sufficient knowledge about mixed-methods systematic review approaches to undertake a review of this nature, dealing with uncertainties about appropriate ways to deal with missing data in clinical datasets, learning to use new computer software in order to complete planned data analysis work, and developing the necessary project management skills to coordinate a multi-site primary research study. Additionally, the length of time taken to complete this work meant that it was necessary to update the systematic review search. This provided additional work which was not accounted for within the initial project timescales. The guidance of more experienced researchers for the duration of this project created an environment where these challenges could be addressed in a systematic way and ensured that they did not detract from the focus of the project.

Several specific challenges were faced during the interview phase of this project. During the set-up phase the initial contacts made with the five services about participating were mostly positive; however, one of the services which had been included in the referral dataset analysis was unable to contribute to the interview study due to prior commitments to other research projects. It was not possible within the context of this PhD to plan sufficiently far ahead to avoid this issue; however, it highlighted the need to involve services in the planning and preparatory stages of research projects to improve the chances of them investing the time and resources necessary to support the planned work. Following the set-up and approvals for this study, the recruitment of people who had been referred to IAPT services was low and I also took a period of maternity leave at the end of the initial recruitment. These delays resulted in extensions to ethical permissions being required to increase recruitment and revealed additional challenges for some participating services. These services had experienced many structural changes between recruitment periods such as changes to the NHS trusts managing the services, funding levels, staffing numbers and the referral to treatment pathway configuration. A consequence was the inability of some services to engage fully with the second period of recruitment. This was despite service managers supporting the project and my attempts to reduce the burden of participating. Establishing and maintaining positive relationships with the people, services, departments and approval bodies involved in this phase of work allowed the project to be completed; however, keeping in more regular contact with services and participants might have enabled more services to engage with the second phase of recruitment and improved the chances of people providing feedback on the initial analysis.

5.5 Contributions to knowledge

The three elements of this thesis provide additional information or reinforce current knowledge about non-attendance to initial primary care mental health service appointments in a number of ways. These contributions have been organised into six categories: issues relating to the presenting problem, an individual's thoughts about their mental health problem, the experiences people have with services when seeking support, factors related specifically to appointments offered by primary care mental health services, sources of support, and socio-demographic characteristics of people at risk of not attending initial appointments.

5.5.1 Presenting problem

The problem experienced by the person referred to primary care mental health services was found to be important to initial attendance within both the systematic review and the IAPT referral data analysis. Within the systematic review reported in Chapter 2, findings relating to the diagnosis and severity of symptoms experienced by people indicated that these factors may be related to initial non-attendance (Bados et al., 2007; Mohr et al., 2006; Reece, 2003; Greeno et al., 1999; Elliott et al., 2015). Some of these included studies reported a direct relationship between diagnosis or symptom severity and non-attendance (Bados et al., 2007; Reece, 2003; Greeno et al., 1999; Elliott et al., 2015) while others suggested that having a particular diagnosis might affect an individual's perception of barriers to attending appointments which then had consequences for attendance decisions (Mohr et al., 2006). Presenting problems were associated with differences in treatment appointment attendance in the data analysis reported in chapter 3. In particular, people who did not have a problem which met the criteria for an ICD-10 CMHP, and those with a problem categorised as 'other' (eating disorder, alcohol related mental or behavioural disorder, bipolar affective disorder, non-organic sleep disorder, and not specified) were significantly less likely to attend treatment appointments than those with a depressive disorder. The finding that increased symptom severity, or distress caused by symptoms were associated with attendance at initial appointments within the reviewed studies was also reflected in the findings of the IAPT referral data analysis where increased severity of anxiety symptoms was associated with reduced levels of non-attendance at treatment appointments. Within the review, studies reported that where symptoms of common mental health problems were less severe, or individuals believed they would improve without additional support, appointments were less likely to be attended (Bados et al., 2007; Bruwer et al., 2011). Within the wider research literature researchers have explored whether there are psychosocial factors which relate to attendance to appointments in various healthcare settings. Although many identified studies collected data about common mental health problems, findings did not indicate that specific common mental health diagnoses were related to non-attendance at healthcare appointments generally (Aro et al., 1999; Sockalingam et al., 2013; Farley, Wade and Birchmore, 2003; Catz et al., 1999; Fischer et al., 2009). The evidence presented in this thesis reinforces the idea that the presenting problem, specifically the presence of a problem which is not categorised in ICD-10 as a CMHP, and the severity of symptoms experienced by the person seeking support, are associated with treatment attendance and non-attendance.

5.5.2 Thoughts about the problem

The way individuals thought about their mental health was explored as part of both the systematic review and the interview study. Findings from the review indicated that when people expressed thoughts about wanting to deal with their mental health problem themselves then non-attendances at initial appointments were recorded (Andrade et al., 2014; Bruwer et al., 2011; Mokrue et al., 2011; Mojtabai et al., 2011). This may be connected to feelings that mental health symptoms did not amount to a true mental health problem, or where an individual's beliefs about mental health were normalised or minimised by others; these beliefs were highlighted by qualitative studies included in the systematic review (Conner et al., 2010b; Flynn et al., 2010). This idea was explored further within the interview study reported in Chapter 4, where thoughts about their mental health problem was important to one individual. This person had been referred for support through IAPT services but described the decision not to attend an initial appointment which was offered by the IAPT service because they believed that accepting support was an indication of losing control of their mental health. This adds to current knowledge about why people may choose to not attend initial treatment appointments, and points to the need to explore an individual's perception of their mental health prior to making a referral for support. This will be discussed in more detail in the Implications and Recommendations section of this chapter.

Following on from the idea of exploring people's perceptions of their mental health prior to referring for support, offering treatments which were considered relevant to the people being referred was included in the findings of the systematic review and subsequently covered within the interview study. Individuals expressed the importance of tailoring both the nature and length of treatments in line with the perceived complexity of the problem experienced by the person who had been referred for support (O'Mahen et al., 2015; Horevitz, 2014). Studies reviewed which discussed the association between this perception of the problem and the treatment offered suggested that where individuals considered their problems to be complex, they viewed brief treatments as inadequate and were consequently less inclined to attend appointments.

Shared decision making in mental healthcare is not new (Adams and Drake, 2006), and data from the interview study described in Chapter 4 suggest that aspects of decision making within IAPT services are shared to some extent. Approaches to guide shared decision making in mental health settings encourage collaborative communication and the development of decision aids to enable people seeking support to more equally contribute to the decision-making process (Harding et al., 2011).

From the interviews conducted, IAPT practitioners discussed gathering information from individuals, presenting the treatment which they felt would be most beneficial in light of the person's individual circumstances, and checking whether the treatment offer matched individual ideas for mental health support. Individual goals for treatment were included in the information gathering portion of the initial assessment undertaken by some IAPT practitioners, which enabled treatment offers to be tailored to the person's identified objectives. However, findings from the systematic review indicate that decision making could also benefit from the inclusion of information about the perceived cause and complexity of the mental health problem from the perspective of the individual referred. Including this perspective would allow practitioners to offer treatment which could be considered relevant to people referred both in terms of the type and length of treatment. Considering the findings from this work there is demand from individuals seeking support for tailored approaches to treatment decisions which could potentially be facilitated through a shared decision-making approach. There is insufficient evidence available from mental health research at present to determine the most appropriate interventions to meet this objective (Duncan, Best and Hagen, 2010); however, the findings reinforce the need for shared decision-making. Specifically, this research suggests that clinicians could improve the current assessment approach by focusing attention on the way individuals perceive their problem, and discussing options for treatment prior to making a final treatment offer. This would allow practitioners to gauge whether the recommended treatment is likely to match the expectations of the person referred, and tailor the treatment offer appropriately to increase the likelihood of subsequent treatment attendance.

5.5.3 Experiences with services

The process of referring to primary care mental health services was highlighted as important in all aspects of this project. Information gathered during the systematic review suggested that both the quality of the referral and the person making the referral may affect non-attendance to initial appointments (Farid and Alapont, 1993; Sparks et al., 2003; Trepka, 1986; Reece, 2003). The IAPT services referrals were made to and the source of referrals was explored further during the dataset analysis. Findings suggested that there were significant differences in treatment appointment attendance between services, and that the method of referral was significantly associated with increased risk of non-attendance, though the specific referral source associated with non-attendance differed between the analysis of assessment and initial treatment appointments (chapter 3).

Despite the majority of referrals being recorded as GP referrals in the dataset analysis, findings from the interview study suggested that the majority of referrals made to the included services were self-referrals, with many considered to be GP-directed. It is unclear whether this difference reflects a lack of clarity in the referral data recorded by services and self-referrals which have been directed by GPs were recorded as GP referrals, or whether this is a change in the main method of referral to these IAPT services over time. The appropriateness of referrals made to IAPT services was also explored in both the referral dataset analysis and the interview study (chapter 4). Findings indicated that although there was a very small proportion of referrals which were reported as inappropriate in the analysis, IAPT practitioners who were interviewed commonly commented on the need to establish better communication with GPs to reduce the number of inappropriate referrals. The process of making referrals differed slightly between IAPT services included in the interview study. Where many participants reported that individuals self-referred to IAPT services, the mode of referral differed with telephone or online referrals being the most common across the sample. After referrals were received by services, the initial contact with individuals seeking support was either to gather additional information relating to the referral, to offer an assessment appointment, or to ask individuals to confirm that they were aware of the referral and wanted to engage with the IAPT service. Despite the variations in these initial steps of the pathway, establishing effective communication between the person being referred, the IAPT service and the GP at the beginning of the referral to treatment pathway was highlighted as important by individuals from all stakeholder groups. An example of attempts to establish positive communication between stakeholders was described in one study that was included in the review where comparisons were made around the introduction to mental health care. This study compared attendance for people who had been given an in-person introduction during a primary care appointment with those who had not experienced an in-person introduction to the mental health care provider at the point of referral. Conclusions from this study indicated complexities around access to language within the population studied and that further work is needed to objectively assess the impact on initial attendance when direct communication between stakeholders is established at the point of referral (Horevitz, 2014). This research describes differences between service data and practitioner reflection about the level of inappropriate referrals to IAPT; the findings also reinforce the need to develop positive, accessible, and informative strategies for managing referrals to primary care mental health services.

The length of time between a referral being made and an initial appointment being conducted was considered within the systematic review. Findings relating to this were mixed, with some studies suggesting that prompt appointments increased initial attendance (Greeno et al., 1999; Levy et al., 2019), and others reporting that the time between referral and initial appointment did not make a difference (Farid and Alapont, 1993; Sparks et al., 2003). Qualitative studies in the review supported the idea that prompt appointments were more likely to be attended as individuals reported wanting support directly following a referral (O'Mahen et al., 2015; Flynn et al., 2010). It was not possible to investigate this during the IAPT referral dataset analysis since there were differences in the recording of referral data between services. However, within the interview study references were made to waiting times with strong suggestions that reducing waiting times had benefits both for people seeking support, and for IAPT practitioners. In addition to the impacts on initial attendance, waiting times have also been associated with fewer successful clinical outcomes (Clark et al., 2018); this could therefore be considered a priority for clinical services and future research to address.

Strategies to reduce waiting times for mental health services have been described relating to individual services in the research literature (Pomerantz et al., 2008; Williams et al., 2008). These included providing open access to mental health services, operating within primary care clinics, and meeting an individual’s needs during the initial appointment. This final strategy involved initial appointments being conducted by two professionals with different training (such as a therapist and a psychiatrist) and removed the need for individuals seeking support to repeat their information multiple times. Treatment was generally considered as completed after the initial appointment and no follow-up sessions were planned with the exception of those individuals with complex mental health needs who were offered a follow-up appointment at a more specialist mental health service. Individuals who were not referred to the more specialist service were informed that they could contact the primary care service again if they felt they needed additional support and would again be seen on the same day (Pomerantz et al., 2008). This work suggests that although the impact of waiting times on attendance reported in the wider literature is mixed, data concerning IAPT services suggest that reducing waiting times could benefit both individuals being referred and IAPT service practitioners.

A lack of knowledge about the treatment options available, or perceived barriers relating to the treatments considered likely to be offered, were associated with non-attendances at initial appointments in studies reviewed (Flynn et al., 2010; Hundt et al., 2018; Skuse, 1975). In addition to knowledge of the treatment options, having a choice of treatments available was considered important with some elements of specific treatments not appealing to certain people (for example homework was viewed as childish by some individuals) (Hundt et al., 2018; Barnes et al., 2013). Prior knowledge of available treatments was discussed with two individuals in the interview study who had previously received support from IAPT services; however, the person who had been referred to IAPT by their GP had no previous experience of IAPT services and reported being unsure about what treatments might be offered. This, coupled with previous negative experiences of other mental health services, contributed to a decision not to attend an assessment appointment. There is currently a lack of research which focuses on how individuals seeking support for common mental health problems interpret descriptions of the available psychological treatments when they are initially introduced.

Beliefs about the experience level of staff offering treatments was important to individuals who had considered attending for mental health support (Anderson et al., 2006). Since the focus of this work is the initial interactions between services and individuals seeking support, this finding may indicate a need to establish a therapeutic alliance from the early stages of the referral to treatment pathway, rather than considering it at the point of treatment. A review of therapist characteristics which positively contribute to the therapeutic alliance found that flexibility, honesty, respectfulness, trustworthiness, confidence, warmth, interest and openness were positive attributes (Ackerman and Hilsenroth, 2003). The configuration of IAPT services included in the interview study suggested that the scope to establish a positive therapeutic alliance early in the current referral pathway would be minimal. Establishing a trusting relationship with a therapist was valued by those seeking support for common mental health problems (Barnes et al., 2013; Hundt et al., 2018). However, individuals who were referred to IAPT were described as not being allocated to a clinical caseload until an assessment appointment had been conducted and they had reached the top of the waiting list for the appropriate treatment. In addition, reports from most of the services included in the interview study indicated that insufficient information was obtained from the referral to assess which treatment was likely to be most beneficial. It is therefore considered to be unrealistic at present to consider strategies for clinician allocation which would match individuals at assessment appointments with practitioners who could then deliver an anticipated treatment. Connected to this, both the review and interview study highlighted the impact to non-attendance when individuals needed to repeat information to different members of staff during the referral to treatment process (Caplan and Whittemore, 2013). These findings suggest that it would be sensible to review methods for recording information about the problem gathered at referral and assessment to reduce the need for repetition and shift the focus of conversations to changes noted between appointments.

Previous experience with mental health services was reported as influential in a number of studies reviewed; however, the findings relating this to initial appointment attendance were mixed (Farid and Alapont, 1993; Greeno et al., 1999; Reece, 2003; Trepka, 1986; Reust et al., 1999; Hundt et al., 2018; Wells et al., 2013). Qualitative studies indicated that interactions with staff members, the relevance and acceptability of offered treatments, and having previously benefited from psychological therapies were related to decisions about attendance at subsequent referrals (Conner et al., 2010b; Hundt et al., 2018; Wells et al., 2013; Flynn et al., 2010; Horevitz, 2014). This was supported by the interview study where individuals who had previous positive and neutral experiences with IAPT services reported initially feeling positive about their referral; however, the individual who had negative experiences with other mental health services described feeling sceptical about IAPT at the point of being referred. GP interviews also supported the idea that having previous negative experiences with IAPT or other mental health services affected subsequent conversations about options for mental health support. These findings have implications for future research which will be discussed further in section 5.6.2.3 of this chapter.

5.5.4 Factors linked to appointments

The practical aspects of appointment attendance such as finances, transport and location of appointments were cited as important factors affecting decisions to attend for treatment or not within the systematic review (Andrade et al., 2014; Bruwer et al., 2011; Lincoln et al., 2005; Mohr et al., 2006; Bados et al., 2007; Reece, 2003; Lewy et al., 2014; Wells et al., 2013; Reust et al., 1999). Administrative challenges, such as cancelled appointments not being rebooked, were also discussed in relation to non-attendance (Horevitz, 2014; Hundt et al., 2018). Qualitative findings from studies reviewed indicated that in some instance this may be related to specific stressors felt when having to use public transport prior to an appointment, or when needing to attend appointments at specific locations (Hundt et al., 2018). These practical factors which have been found to be associated with initial non-attendance are not unique to individuals with common mental health problems seeking psychological support. In other areas of healthcare these issues are also highlighted as influencing decisions about appointment attendance (Akhter, Dockray and Simmons, 2012; Waller et al., 2012; De Angelis, Bunker and Schoo, 2008). The role these generic practical factors have in influencing attendance decisions for mental health support is currently unclear and this thesis highlights the need for further research in this area.

Other commitments and responsibilities which affect the time available for individuals to attend appointments are also unlikely to be unique to individuals with common mental health problems. Issues with having other commitments and responsibilities, finding time to attend appointments, and identifying support services considered to be appropriate were mentioned as relevant to initial attendance within observational studies included in the systematic review described in Chapter 2 (Bados et al., 2007; Reece, 2003; Sloan, 2014; Lewy et al., 2014; Mokrue et al., 2011; Ayres et al., 2019). Within the qualitative studies reviewed, these issues were related to the idea that individuals did not prioritise their mental health over their caring responsibilities, particularly where the responsibilities involved children (Flynn et al., 2010). Mental health was also not prioritised over physical health issues which affected mental health treatment appointment attendance (Bados et al., 2007). In addition, consequences which related to employment were also raised, both with having to take time out of work to attend appointments, and concerns about whether mental health problems which required professional support would negatively affect future employment prospects were included in reviewed studies (Wells et al., 2013; Horevitz, 2014; Conner et al., 2010b). This topic was not discussed by participants during the interview study, reported in Chapter 4, possibly due to the small number of participants recruited; however, this thesis has emphasised the need for further investigation into the extent to which individuals prioritise commitments and responsibilities in relation to accessing mental health support.

5.5.5 Sources of support

Openness to talk about mental health and attendance at treatment appointments was found to be linked with the social contacts that individuals felt were able to provide support. Within the review, the effects of culture were associated with initial appointment attendance decision-making (Conner et al., 2010b; Flynn et al., 2010; Hundt et al., 2018). Within this thesis, culture was considered to be relevant to initial attendance. Reviewed studies reported that individuals from minority social and ethnic groups felt stigmatised within the wider community, and the experience of mental health symptoms created the perception of a double stigma to individuals who considered attending for mental health support (see Chapter 2). Within the analysis of IAPT referral data, there was some evidence to suggest that ethnic minority groups (with the exception of people of Chinese ethnicity), were less likely to attend initial assessment appointments. In contrast, no evidence was found to indicate that individuals from different ethnic groups were more or less likely to attend for initial treatment appointments. These differences in findings may in part be a result of the differences in the number of services included in each analysis. Difficulties also arise in drawing conclusions about whether the rates of referrals to IAPT services reflected the proportions of individuals from different ethnic backgrounds within the service localities due to high levels of missing data for this variable.

This is problematic on a larger scale than within IAPT services; UK-wide focus has been placed on appropriately completing ethnicity data within healthcare databases to enable research to assess the degree of inequalities in access to healthcare services across different portions of the population (Mathur et al., 2014). The role of culture in decisions about non-attendance to initial IAPT appointments was not able to be explored during the interview study since the people who had been referred for IAPT support that participated were all of White ethnicity. This thesis has consolidated the existing available research concerning the influence of culture on initial appointment attendance at primary care mental health services; these challenges have highlighted a need for changes to clinical data recording which were not previously recognised.

Social support was highlighted within the review and explored further in interviews with people who had been referred for IAPT support (Reust et al., 1999; Horevitz, 2014; Flynn et al., 2010; Sloan, 2014). Research evidence indicates that social support is associated with mental wellbeing, although there are differences in interpretations. Some authors suggest that social support may be a moderating factor for those individuals experiencing stress (stress-buffer) while others describe social support as having a generally positive effect on mental wellbeing regardless of stress (main effect) (Kessler and McLeod, 1985; Turner and Brown, 2010; Lakey and Orehek, 2011). The role of social support in accessing formal mental health services suggests that illness severity and culture may influence the nature of support toward services (Thoits, 2011; McConnell, 2017). Findings from the systematic review conducted as part of this thesis provide some support for this idea, though the perceptions held by supportive network members about the severity of the referred individual's illness, were not captured within this thesis. Having sources of social support who are supportive of mental health treatments is important to appointment attendance. Where sources of social support did not rate services highly this affected individual decisions to attend for mental health service appointments (Sloan, 2014; Hundt et al., 2018). This was explored during two interviews with people referred to IAPT but who had decided not to attend at different points prior to initial treatment appointments. Both individuals described having a source of social support who had been aware of the referral for support from IAPT services. In both cases descriptions of the individual offering social support indicated a neutral stance in regard to IAPT services; both people referred to IAPT suggested that they would have been supported whether or not they decided to attend service appointments and that their decisions not to attend were autonomous. Overall, findings from this thesis suggest that having support from people who view primary care mental health services in a neutral or negative way may influence a person's decisions to attend initial appointments for mental health support with these services.

The influence of faith on initial attendance was highlighted in the systematic review (chapter 2); however, data collected as part of the referral dataset analysis did not include religion, and this topic was not covered with the interview study (chapter 4). Faith was highlighted within the systematic review as a factor which affected treatment appointment attendance; individuals believed that mental health problems may be a test of their faith and that additional support was unnecessary (Conner et al., 2010b; Caplan and Whittemore, 2013). Although there is evidence from the wider research literature which suggests that access to mental health treatments are associated with weakening levels of faith (Fontana and Rosenheck, 2004), there is currently a lack of available literature determining the role of religion on attendance for mental health treatments. One published longitudinal study examined the effects of attending religious services on depression found a correlation between religious service attendance and depression symptoms with individuals attending religious services regularly reporting fewer symptoms of depression (Zou et al., 2014). This element of the thesis contributes to knowledge in two areas: first, this confirms that faith has been found to be a factor influencing initial attendance at primary care mental health service appointments as reported in the systematic review (chapter 2), and secondly that data captured by IAPT services does not include information about faith.

Stigma was another concern reported by individuals included in reviewed studies described in chapter 2 (Britt et al., 2015b; Lewy et al., 2014; Skuse, 1975). These papers reported that an individual's worries about stigma were related to non-attendance to initial treatment appointments. Descriptions relating to difficulties and fears around talking about mental health problems were also reported. Stigma relating to mental health has been well researched and is considered to affect individuals worldwide (Thornicroft, 2008). Work to reduce the stigma of mental illness and attending for mental health support has been documented (Shim and Rust, 2013). In line with this, shifts in the offer of support to primary care services have been implemented in the UK through IAPT (Clark, 2011) and there is evidence that this is becoming more common internationally (Leung et al., 2018; Dos Santos et al., 2016; Buttorff et al., 2012; Funk, 2008). Despite the finding that stigma affected initial attendance in the studies reviewed, this idea did not feature as important within the interview study. This may suggest that insufficient focus was placed on stigma within interviews or could point to a change in the experience of stigma connected to common mental health problems in the UK. Further research is required to confirm which of these possible explanations is true; this will be discussed further in section 5.6.2.8.

5.5.6 Characteristics of people at risk of not attending

Age and social deprivation were found to be statistically significant when examining the risk of non-attendance at IAPT assessment appointments and initial treatment appointments (chapter 3). As discussed in section 5.3.2, papers reporting the characteristics of individuals who did not attend initial appointments at primary care mental health services were not included in the systematic review. In addition, the interview study design did not include individuals who had attended initial IAPT appointments, which would have allowed comparisons to be made. The findings from the referral data analysis are, however, in line with other research into characteristics of those who have not attended initial mental health appointments (Munasinghe et al., 2020; Fenger et al., 2011; Grant et al., 2012; Self et al., 2005). Studies specifically investigating determinants of initial non-attendance in IAPT services have reported mixed findings in comparison to those reported in this thesis. A study examining the predictors of attendance at the initial IAPT appointment (assessment) in two IAPT services found that age and level of deprivation were not significantly different in people who attended assessment appointments compared with those who did not (Di Bona et al., 2014). A more recent study considering the characteristics of individuals referred to IAPT reported that individuals who attended an initial appointment did not differ in terms of age from those who did not attend; level of social deprivation was not included within this analysis due to missing values in the data (Jonker et al., 2020). Within this study age was included as a categorical rather than a continuous variable, which may contribute to the difference in findings reported in this thesis. Another paper reporting factors predictive of attendance using data from 19 IAPT services highlighted that increased age is associated with IAPT attendance; level of social deprivation was not included in the analysis (Davis et al., 2020). The contrasting findings could reflect the different sample populations and analytic techniques used. This research reinforces the idea that age and social deprivation may be important to initial appointment attendance at IAPT services; further research requirements are discussed in the next section of this chapter.

Although many contributions to knowledge have been highlighted in this section, further research is still required to fully understand and address the issues connected with non-attendance to initial appointments in primary care mental health services. The implications of the findings reported in this thesis and recommendations for future research will be the focus of the next section.

5.6 Implications and Recommendations

The findings from this work have implications which relate specifically to IAPT services, and research which addresses problems connected with non-attendance to mental health services more generally. This section will consider these separately.

5.6.1 Implications relating to IAPT services

5.6.1.1 Data collection and reporting

Routine collection of service data is a strength of IAPT services and has enabled researchers to provide feedback about some of the strengths and weaknesses of approaches adopted by IAPT from the point these services were established. This thesis has highlighted two main issues with the data collected in IAPT services: referral data is not reported consistently across different services, and there is a large proportion of missing data for ethnicity. This is unlikely to be an issue which only affects the five services included in this dataset and therefore data reported in the wider research literature may also be affected by these issues. An additional implication is the inability to make informed comments about the people who may be most at risk of not attending initial appointments. With non-attendances accounting for poor use of staff time, treatment room availability and longer waiting times for appointments this is a problem which services are likely to prioritise. The indirect costs of non-attendances to these initial appointments and consequent increased waiting times for appointments will also necessarily affect the number of people who could be reported by services as having successfully completed treatment within a specified time period. This may have further implications for service configuration and funding allocation. Accurate and complete data collection is therefore vital for assessing the impact of the services and treatments offered; addressing the issues with data collection and reporting would allow researchers to provide more helpful feedback to services which are looking to better understand the risk factors for non-attendance to initial appointments. At present it is advisable to regard evidence pertaining to risk factors of initial attendance with a degree of caution until consistency in the collection and reporting of data about IAPT service referrals has been resolved.

5.6.1.2 The relationship between IAPT services and GPs

Despite IAPT services being part of the primary care offering, findings from the interview study highlighted a need for closer working relationships between referrers, specifically GPs, and IAPT practitioners. Integrating mental health support into the primary care offering has been shown to have benefits for referrer confidence about the treatments offered by mental health services, waiting times between referrals and treatment, reducing stigma felt by individuals needing support, and issues with the location of treatments have been mitigated by conducting appointments in primary care settings. Methods of integration both within physical primary care settings and within individual appointments have been considered within this thesis. Research trialling the acceptability and feasibility of options, such as basing IAPT practitioners within GP settings or other approaches to increase service integration such as identifying liaison workers or establishing routine check-in contacts with GPs, are necessary to ensure appropriate, informative and timely referrals are made to increase the likelihood of attendance at initial IAPT appointments. Enabling and maintaining regular contact between services during the course of an IAPT referral would also improve the relationship between services and having more frequent communication with IAPT practitioners would allow GPs to feel more confident about responding to specific queries relating to IAPT services during routine GP appointments.

5.6.1.3 Source of referral

The source of referral was found to be significantly related to attendance at initial IAPT appointments within the referral dataset analysis (chapter 3). Self-referrals were associated with increased attendance at assessment appointments, and referrals from professionals other than GPs were associated with increased attendance at an initial treatment appointment following assessment. In addition to considering strategies to improve the referral pathway from GPs, it may be beneficial for IAPT services to encourage self-referrals from people seeking support for CMHPs. Findings from the interview study (chapter 4) provided additional support for self-referrals; GPs indicated that encouraging people to make referrals themselves increased the level of responsibility placed on people seeking support to address their mental health problem and the referrals made showed a commitment to attendance.

5.6.1.4 Assessment appointments

The methods to collect information from people wanting support at the referral stage could be usefully adapted to anticipate which treatment options may be most beneficial, prior to assessment. This could be used to provide different options for caseload allocation systems, mitigating issues relating to the development of positive relationships with those seeking support from the initial interactions and reduce the need for people to repeat information. New research into machine learning techniques, which could support this matching of individuals to practitioners for assessment, would reduce the need for services to manually screen referrals as they are received, and enable more resources to be dedicated to other aspects of service provision (Shatte, Hutchinson and Teague, 2019). This would enable assessment appointments to be offered by practitioners who may subsequently be able to take people onto their caseloads, rather than the current waiting list system which leaves the allocation of practitioners to chance.

Evidence from this thesis suggests that there are changes which could be made to the content of assessment appointments which may positively influence decisions about treatment attendance. This research found that people attending IAPT services expected to be involved in treatment decisions and therefore a greater shared approach to treatment decision-making may improve attendance at initial treatment appointments. Similarly, discussing the available options for treatment would allow IAPT practitioners to understand which of the recommended treatments would be considered relevant to the person's perception of their mental health problem. This additional information could be helpful in supporting IAPT practitioners to offer treatments perceived as appropriate by the person seeking support. In addition, including discussions about individual circumstances (such as responsibilities and commitments) and where support for their mental health fits into their priorities, would enable practitioners to understand more about the level of flexibility required and discuss the practicalities of treatment offers to limit the effects of any time constraints on attendance at offered treatment appointments.

5.6.2 Research addressing initial non-attendance to services treating common mental health problems

5.6.2.1 Analysis of referral data

Equality in access to mental health support is a public priority (Makurah, 2018); however, an additional consequence of the data issues mentioned in the previous section is that currently it is not possible to assess whether individuals from different ethnic groups are accessing IAPT services equally. Once these data issues have been resolved, research in this area could also provide an insight into the level of stigma affecting community groups when considering accessing mental health support in England. This information would be useful in targeting future interventions to further reduce stigma around mental health. Enabling researchers to have access to current data collected by services would allow challenges such as missing ethnicity data to be identified quickly, and any inequalities in access to IAPT support subsequently addressed (Clark et al., 2018; Moller et al., 2019).

The impact of waiting times on initial attendance was highlighted in both the systematic review and interview elements of this project; however, as a direct consequence of the inconsistencies found in the referral dataset, it was not possible to explore the impact of waiting time on initial attendance to assessment or treatment appointments. Future research is therefore needed to explore the influence of waiting time on attendance at assessment and initial treatment appointments in IAPT services.

5.6.2.2 Strategies to engage non-attenders in research

While this thesis provided additional understanding about non-attendance to initial appointments offered by primary care mental health services in England, it was challenging to recruit individuals who had been referred and decided not to attend offered appointments. There is a need to identify recruitment strategies which are successful in engaging this hard-to-reach group in future research to usefully support developments which can benefit services and those who wish to attend them in the future. Working with GPs to develop strategies to engage people through primary care practices may support more successful recruitment of this hard-to-reach group in the future.

5.6.2.3 Refining the initial conversation about IAPT

Introducing the idea of receiving support from mental health services to individuals experiencing symptoms of common mental health problems is something which happens frequently. At present, there is a lack of research about how this information is communicated to individuals, and how those individuals interpret that information ahead of referrals being made to primary care mental health services. Findings from the interview study suggested that individuals in a state of distress may not retain the necessary information about services to make an informed choice about whether they wish to attend. It is therefore important to focus attention on this interaction, when mental health services are first considered, to assess whether changes to the provision of information might impact on non-attendance rates for services offering support. Research exploring the differences between introductions to IAPT services which are made by GPs and other professionals would help to better understand the differences identified in the referral data analysis (chapter 3).

Previous experiences with mental health services have been shown to be important to current referrals; however, the association between previous and current referrals is unclear. Mixed findings about the influence of previous experience with mental health services on non-attendance to initial appointments were reported by papers included in the systematic review (chapter 2). Previous experiences with mental health services were also highlighted within the interview study both by a person who had previous negative experience with mental health services, and by GPs who found conversations about IAPT more challenging with people who had previous negative experiences of mental health services (chapter 4). Further work is needed to establish the impact of past experiences on current referrals for mental health support, and how best to support individuals to consider the psychological treatments offered by primary care providers when previous experiences have been negative.

5.6.2.4 Motivation for mental health support

The level of motivation to receive support for common mental health problems was highlighted in both the review and interview studies. Articles included in the review indicated that low levels of motivation for treatment, and feelings about not being ready for treatment were associated with non-attendance (Hundt et al., 2018; Bados et al., 2007). This was sometimes raised in relation to self-perceptions of mental health problems being a sign of personal weakness and influenced some decisions to not attend appointments (Conner et al., 2010b). In contrast, findings from the interview study indicated that individuals can be motivated to attend for treatment; however, other factors such as physical health issues and waiting times were more influential to attendance decisions despite motivation for mental health support. From these findings the role of motivation in initial appointment non-attendance remains unclear. Further research in this area is required to ascertain how motivation affects attendance decisions in people seeking support for common mental health problems.

Exploring an individual's beliefs about their mental health problem, and how they prioritise improving their mental health in relation to other aspects of their life has been found to be important to initial non-attendance. Future research concentrating on understanding these beliefs and priorities with people who have discussed concerns about mental health with a GP, but before an initial IAPT appointment has been made, would enable comparisons to be made between people who subsequently attend and those who do not attend initial appointments to primary care mental health services. Having a deeper understanding of personal perceptions of mental health may inform the development of tools to assess readiness for mental health support.

5.6.2.5 Community support

Social support was referenced in both the systematic review and interview elements of this thesis; however, the influence of this support on mental health service attendance remains an area for future investigation. The experiences of network members in relation to mental health services use has been discussed in the research literature in relation to the nature of support offered to those experiencing mental health problems (Vogel et al., 2007). This was not explored within this thesis. Future research which identifies the IAPT attendance outcomes of people with and without social support would be helpful to assess whether it may be necessary for services to offer additional contact to encourage service engagement for those who lack social support. Investigations about the nature of social support offered in relation to mental health service attendance (potentially mitigating some of the previously discussed factors which are associated with non-attendance such as providing transport or childcare) would also support appropriate service-led interventions for people lacking social support.

Information about faith was not captured within the routine IAPT referral data analysed in this project and was not explored within the interview study; however, faith was identified in the systematic review as important to initial non-attendance. Further research in this area would enable informed conclusions to be drawn about how faith influences the experience of mental health problems, and decisions about seeking support from formal mental health services. This work could be important to future service initiatives which aim to build positive relationships with any religious groups that may be associated with non-attendance to initial appointments.

5.6.2.6 Practical challenges of attendance

Practical issues relating to appointment attendance such as the location of appointments, the times appointments are offered at, transport issues, and physical health limitations have been highlighted in the systematic review and interview study. At present these issues have not been explored in a systematic way to determine whether they are related to non-attendance in individuals with and without mental health/service-specific reasons for not attending initial mental health appointments. This information could support services to prioritise the factors to address in an appropriate way to try to influence attendance. Suggestions for addressing some of these practical factors may also resolve other issues associated with initial non-attendance. For example, in addition to the benefits to waiting times mentioned previously, locating services for common mental health problems within primary care has been found to improve initial attendance (Kessler, 2012; Pomerantz et al., 2008; Williams et al., 2008). Options for offering services remotely have been adopted by services similar to IAPT, which are based in Australia (Cromarty, Gallagher and Watson, 2020). Research evidence has indicated that using remote service delivery methods may provide opportunities to offer these evidence-based treatments in an alternative way (Mullin et al., 2015; Richards et al., 2015a; Richards et al., 2015b; Cromarty, 2016; Battersby, Baigent and Redpath, 2020). Changes have recently been made to the delivery of care offered by IAPT in response to the global COVID-19 pandemic (Skilbeck, Spanton and Roylance, 2020; ELFT, 2020). Research evaluating the impact of these changes is needed, alongside work to assess the acceptability and accessibility of remote delivery approaches for people with CMHPs in England.

5.6.2.7 Risk factors for initial non-attendance

Research evidence from this thesis and the wider literature has suggested that age and social deprivation may affect decisions about attendance to initial primary care mental health appointments. The suggestion from this work is that young adults and those who live in socially deprived areas are less likely to attend initial appointments for mental health support; however, as previously noted, these findings are unlikely to be meaningful in relation to appointment attendance in IAPT services. A systematic review considering the characteristics of individuals who do not attend initial appointments for psychological therapies to treat CMHPs would complement the review conducted within this thesis and provide a wider framework to compare non-attendance rates reported from IAPT referral data. In addition to this, an analysis of current IAPT referral data from a wider sample of services would allow researchers to determine whether these individual characteristics merit further attention in the context of IAPT services.

5.6.2.8 Stigma

While stigma was reported in some of the papers reviewed in chapter 2, it was not discussed as a problem during the interviews conducted (reported in chapter 4). Previous research has shown that integrating mental health service into primary care can reduce perceived stigma for mental health treatment, with some evidence that joint consultation appointments between primary care practitioners and psychiatrists improves primary care practitioner confidence about working with individuals experiencing symptoms of mental health problems (Saillant et al., 2016). Other interventions to reduce stigma around mental health which have been found to be effective include education and contact with individuals who have mental health diagnoses (Pinto-Foltz and Logsdon, 2009). Strategies to assess the effectiveness of these intervention types within the UK have been documented, with educational sessions in schools found to improve attitudes to mental illness (Pinfold et al., 2003). The Time to Change initiative in England aimed to improve public awareness about mental health, knowledge of discrimination and provide opportunities for contact with people who had experience of mental illness. This initiative has been evaluated and reports suggest that there have been improvements in attitudes about mental illness and those individuals accessing mental health services reported lower levels of discrimination than had previously been documented (Henderson and Thornicroft, 2013; Evans-Lacko et al., 2013). Since stigma was not highlighted within the interview study, and the papers which discussed this issue in the review were conducted in other countries or prior to the aforementioned interventions being implemented, it would be useful to examine the extent to which stigma currently affects decisions about initial attendance to mental health treatment appointments in the UK.

5.7 Conclusions

This mixed methods research project has shown that non-attendance at initial primary care mental health appointments is an issue which has previously been explored through both observational and qualitative research studies. Many of the factors which have been reported as affecting decisions to not attend these appointments internationally have also been found to be relevant to individuals referred to IAPT services in the North of England. Rates of non-attendance at initial IAPT appointments are high, though it is difficult to draw confident conclusions about the level of non-attendance at assessment appointments due to differences in the way referral data has been recorded by services. Results from IAPT referral data suggest that the method of referral, service factors, and the presenting problem are relevant to attendance at initial appointments. Self-referrals are associated with increased attendance at assessment appointments. Communication between the stakeholders involved in the IAPT referral-to-treatment pathway and lengthy waiting times for initial appointments appear to be key factors affecting decisions about attendance. Steps need to be taken to improve the consistency and availability of IAPT referral data across services to enable researchers to provide prompt, accurate feedback about the initial contacts made with people seeking support. Work to establish better communication between IAPT services, GPs and people being referred is also needed in addition to refinements of the IAPT referral and assessment processes. Reducing waiting times, both between referral and assessment appointments, and between referral and initial treatment appointments is considered to have benefits for people seeking support and for IAPT practitioners. Future research exploring people’s experiences of common mental health problems, their previous experiences with mental health services, and how information about primary care mental health services is understood following an introductory conversation with a primary care practitioner, would be beneficial.

6 Appendices

6.1 *Appendix 1: Search strategy used in MEDLINE*

1.	(Common adj3 mental health problem$).ti,ab.
2.	(Common adj3 mental illness$).ti,ab.
3.	(Common adj3 mental adj2 disorder$).ti,ab.
4.	Exp Depression/
5.	Depression.ti,ab.
6.	Exp Depressive disorder/
7.	Depressive disorder$.ti,ab.
8.	Dysthymic disorder/
9.	Dysthymia.ti,ab.
10.	Dysthymic disorder$.ti,ab.
11.	Obsessive compulsive disorder/
12.	(Obsessive compulsive adj3 disorder$).ti,ab.
13.	OCD.ti,ab.
14.	(Obsessive compulsive adj2 spectrum adj2 disorder$).ti,ab.
15.	Exp Anxiety/
16.	Anxiety.ti,ab.
17.	Exp Anxiety disorder/
18.	GAD.ti,ab.
19.	Social anxiety.ti,ab.
20.	Health anxiety.ti,ab.
21.	Post traumatic stress disorder$.ti,ab.

22.	PTSD.ti,ab.
23.	Acute stress disorder/
24.	Acute stress disorders/
25.	Acute stress disorder$.ti,ab.
26.	Phobia/
27.	Phobia$.ti,ab.
28.	Phobic$.ti,ab.
29.	Panic disorder/
30.	Panic disorders/
31.	Panic disorder$.ti,ab.
32.	Agoraphobia/
33.	Agoraphobias/
34.	Agoraphobi$.ti,ab.
35.	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34
36.	No-Show Patients/
37.	(No-show or no-shows).ti,ab.
38.	*Appointments/ and schedules/
39.	(Nonattend$ or non-attend$).ti,ab.
40.	Did 'not' attend.ti,ab.
41.	((dropout$ or drop out$ or dropped out or cancel$ or withdraw$ or withdrew or non-engage$ or engage$) adj3 (psychotherapy or therap$ or treatment$ or care or program$ or service$)).ti,ab.
42.	((Failure$ or failed or miss$ or keep$ or kept) adj3 attend$).ti,ab.
43.	((Failure$ or failed or miss$ or keep$ or kept or utili#e$ or utili#ation or cancel$ or withdraw$ or withdrew or non-engage$ or engage$) adj3 (appointment$ or session$ or visit$ or clinic$ or follow-up)).ti,ab.
44.	(attend adj3 (appointment$ or session$ or visit$ or clinic$ or follow-up)).ti,ab.

45.	(attend adj3 (outpatient$ or out-patient$ or inpatient$ or in-patient$ or hospital$)).ti,ab.
46.	(attend adj3 (psychotherapy or therap$ or treatment$ or care or program$ or service$)).ti,ab.
47.	((Patient$ or client$ or user or users or person or persons or people) adj3 attend$).ti,ab.
48.	36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47
49.	35 and 48
50.	(attend$ adj6 psychotherapy).ti.
51.	49 or 50

6.2 *Appendix 2: Post estimation test results from Primary analysis full regression*

Table 23: Post-estimation Link Test from primary analysis full regression

Accessed assessment	Coefficient	Standard Error	z	P>[z]	95% Confidence Interval	
hat	1.0821	0.0852	12.7000	0.0000	0.9151	1.2491
hatsq	-0.0342	0.0344	-1.0000	0.3200	-0.1017	0.0332
Constant	-0.0332	0.0430	-0.7700	0.4400	-0.1176	0.0511

Number of observations = 30,501, Log likelihood = -15140.793, LR Chi2 (2) = 2478.88, p = 0.00, Pseudo R2 = 0.0757

Table 24: Wald tests of Global significance

	Chi2 (df)	Prob>chi2
Gender	0.16 (1)	0.69
Ethnicity	39.30 (5)	0.00
Referral Source	1803.84 (2)	0.00

Table 25: Collinearity diagnostics

	VIF	VIF	Tolerance	Squared
Gender	1.00	1.00	0.9986	0.0014
Age	1.01	1.00	0.9912	0.0088
Ethnicity ONS	1.01	1.01	0.9859	0.0141
IMD Score	1.02	1.01	0.9821	0.0179
Referral Source	1.00	1.00	0.9973	0.0027
Mean VIF	1.01			

6.3 *Appendix 3: Graphs from Primary analysis full regression*

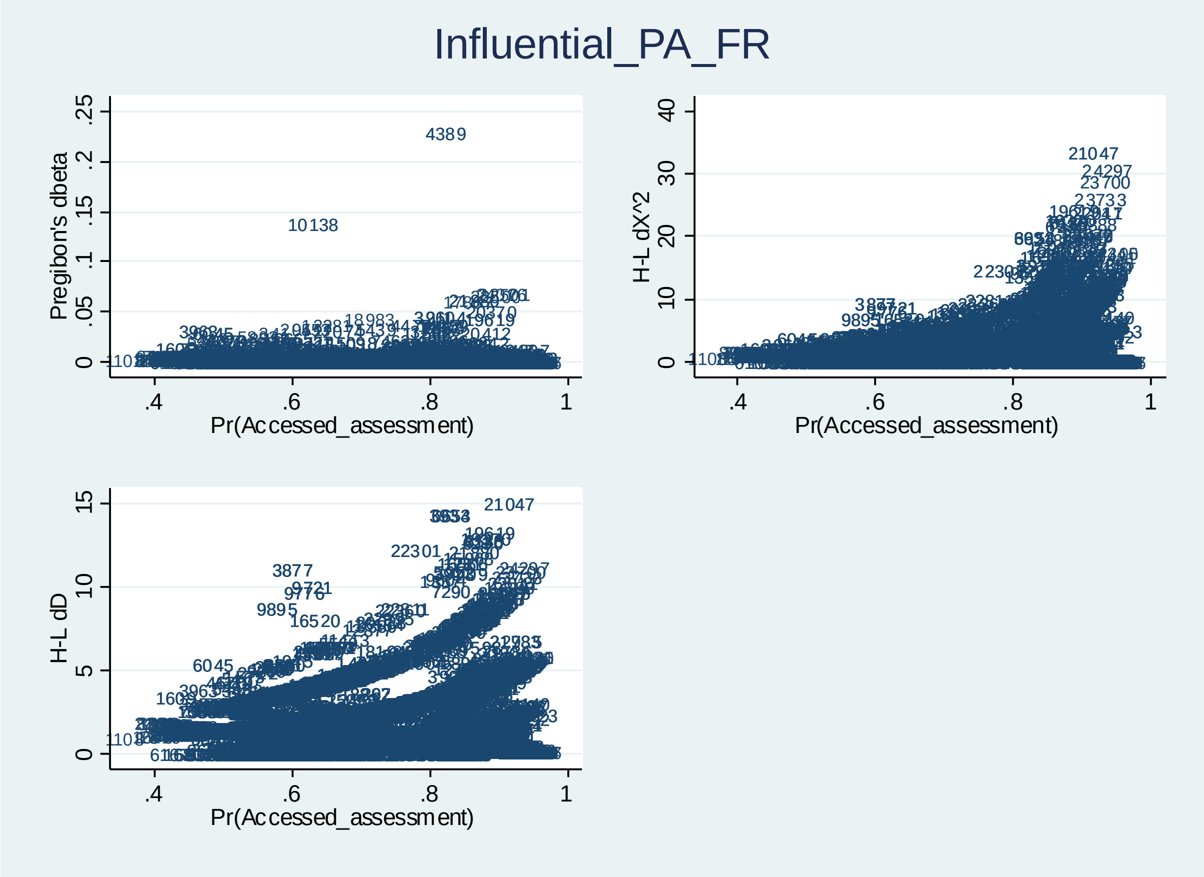

Figure 2: Graphs investigating influential cases in Primary analysis full regression

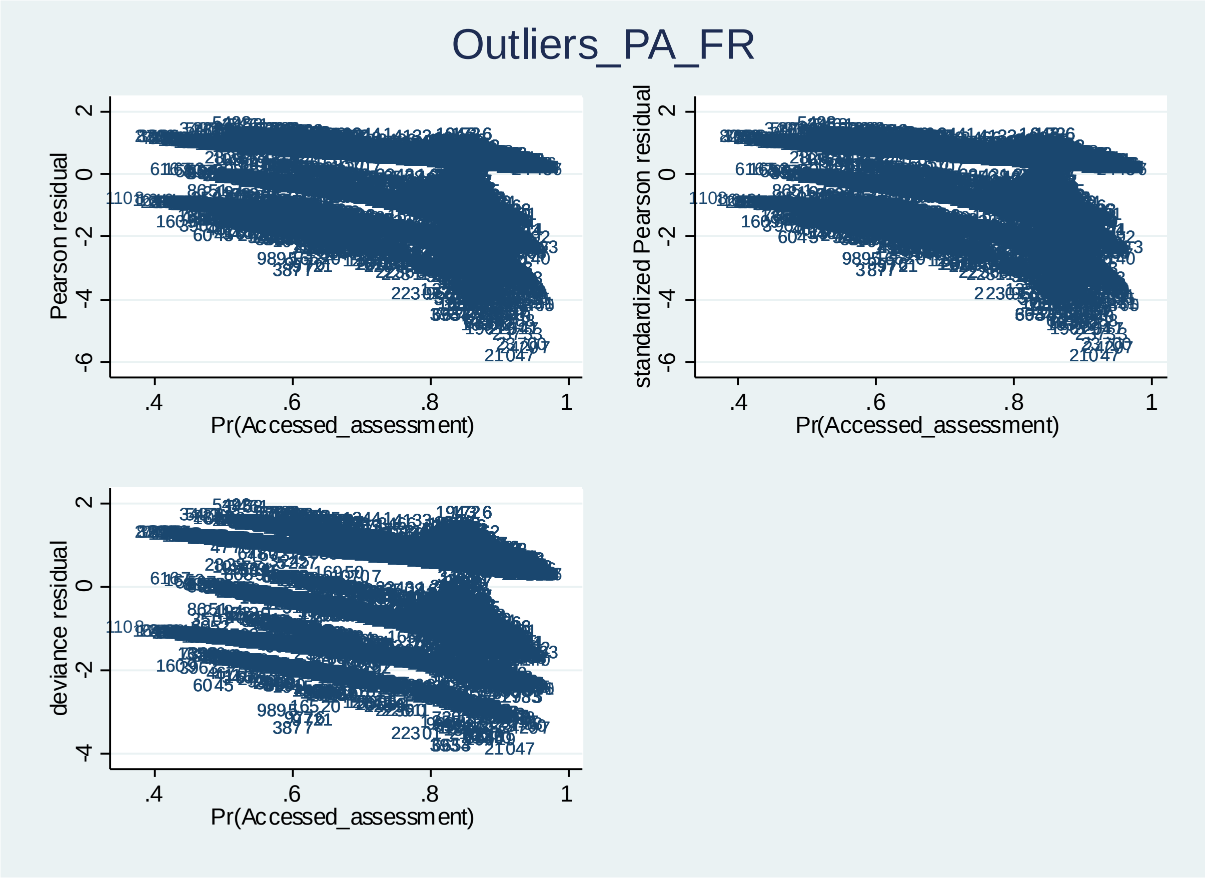

Figure 3: Graphs investigating outliers in Primary analysis full regression

6.4 *Appendix 4: Post estimation test results from Primary analysis stepwise regression*

Table 26: Post-estimation Link Test from primary analysis stepwise regression

Accessed assessment	Coefficient	Standard Error	z	P>[z]	95% Confidence Interval	
hat	1.0821	0.0852	12.7000	0.0000	0.9151	1.2491
hatsq	-0.0342	0.0344	-1.0000	0.3200	-0.1017	0.0332
Constant	-0.0332	0.0430	-0.7700	0.4400	-0.1176	0.0511

Number of observations = 30,501, Log likelihood = -15140.793, LR Chi2 (2) = 2478.88, p = 0.00, Pseudo R2 = 0.0757

Table 27: Wald tests of global significance

	Chi2 (df)	Prob>chi2
Gender	0.16 (1)	0.69
Ethnicity	39.30 (5)	0.00
Referral Source	1803.84 (2)	0.00

Table 28: Collinearity diagnostics

	VIF	VIF	Tolerance	Squared
Gender	1.00	1.00	0.9986	0.0014
Age	1.01	1.00	0.9912	0.0088
Ethnicity ONS	1.01	1.01	0.9859	0.0141
IMD Score	1.02	1.01	0.9821	0.0179
Referral Source	1.00	1.00	0.9973	0.0027
Mean VIF	1.01			

6.5 *Appendix 5: Graphs from Primary analysis stepwise regression*

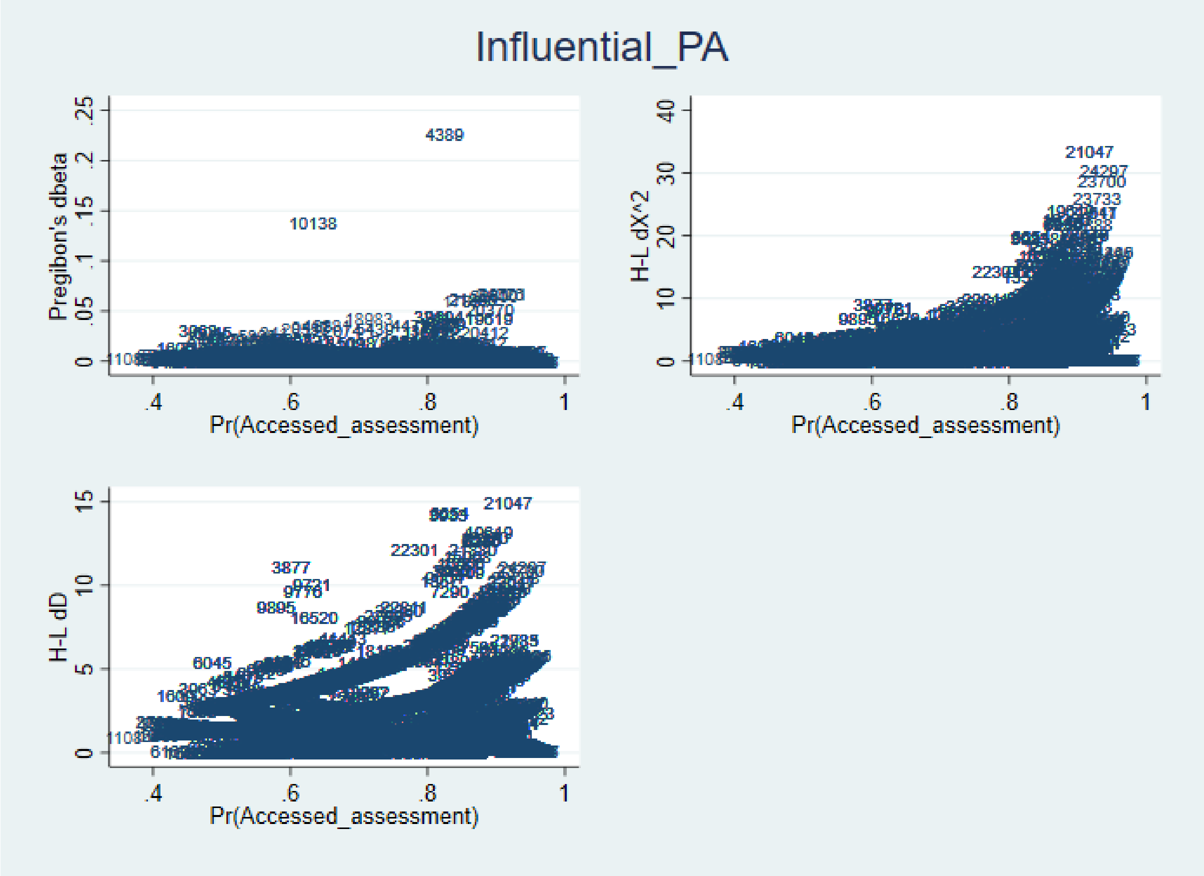

Figure 4: Graphs investigating influential cases in Primary analysis stepwise regression

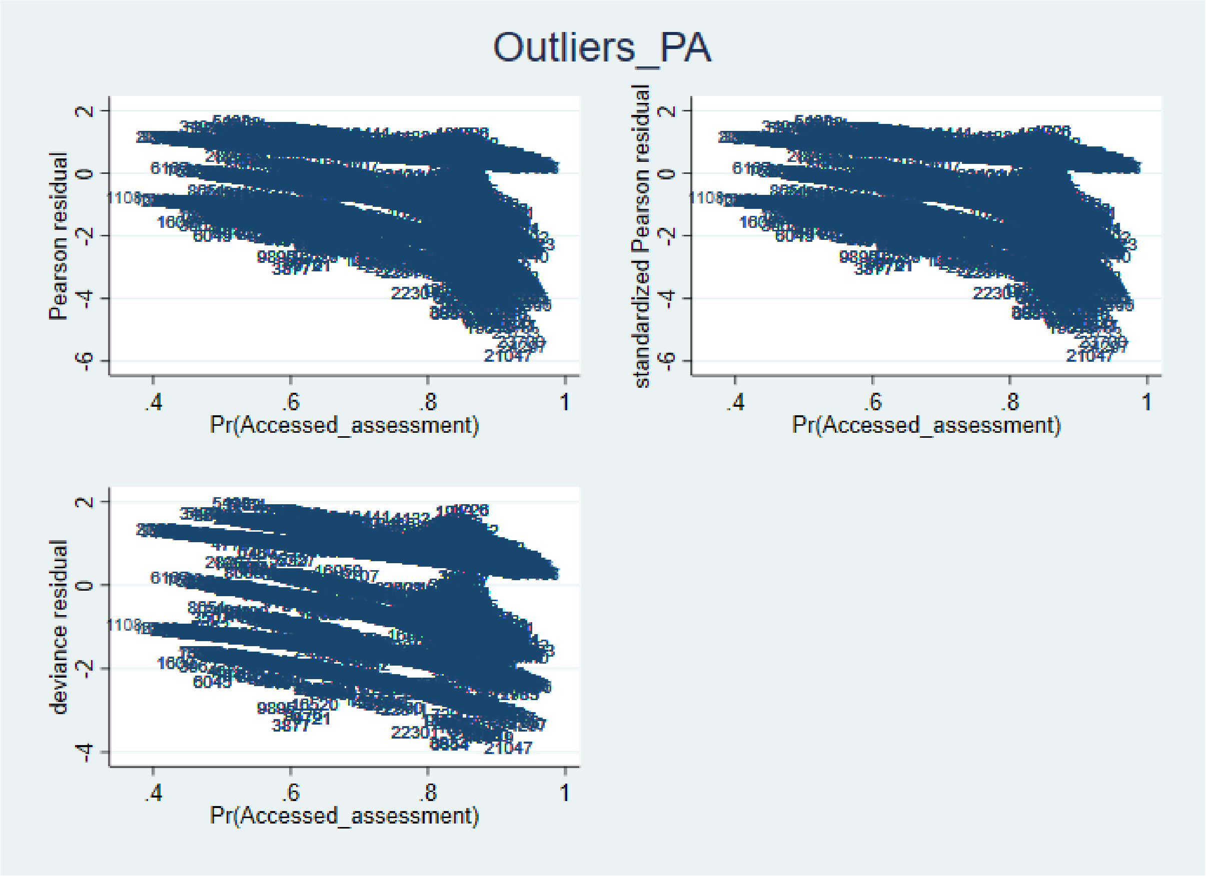

Figure 5: Graphs investigating outliers in Primary analysis stepwise regression

6.6 Appendix 6: Post estimation test results from Secondary analysis full regression

Table 29: Post-estimation Link Test for Secondary analysis full regression

Accessed treatment	Coefficient	Standard Error	z	P>[z]	95% Confidence Interval	
hat	0.9935	0.0310	32.0600	0.0000	0.9328	1.0542
hatsq	0.0045	0.0187	0.2400	0.8100	-0.0321	0.0411
Constant	0.0005	0.0127	0.0400	0.9680	-0.0244	0.0254

Number of observations = 55,159, Log likelihood = -33159.032, LR Chi2 (2) = 5056.49, p>chi2 = 0.0000, Pseudo R2 = 0.0708

Table 30: Wald tests of global significance

	Chi2 (df)	Prob>chi2
Service	2312.83 (4)	0.0000
Gender	19.24 (1)	0.0000
Ethnicity	1.94 (5)	0.8580
Employment status	107.79 (7)	0.0000
Referral Source	201.42 (2)	0.0000
Presenting Problem	639.26 (7)	0.0000
PHQ-9	0.18 (1)	0.6746
GAD-7	109.12 (1)	0.0000

Table 31: Collinearity diagnostics

	VIF	VIF	Tolerance	Squared
Service	1.13	1.06	0.8851	0.1149
Gender	1.01	1.00	0.9942	0.0058
Age	1.12	1.06	0.8912	0.1088
Ethnicity ONS	1.03	1.01	0.9755	0.0245
IMD score	1.05	1.03	0.9491	0.0509
Employment status	1.11	1.05	0.9008	0.0992
Referral Source	1.02	1.01	0.9777	0.0223
Presenting Problem	1.13	1.06	0.8825	0.1175
PHQ-9	1.33	1.15	0.752	0.2480
GAD-7	1.30	1.14	0.7664	0.2336
Mean VIF	1.12			

6.7 *Appendix 7: Graphs from Secondary analysis full regression*

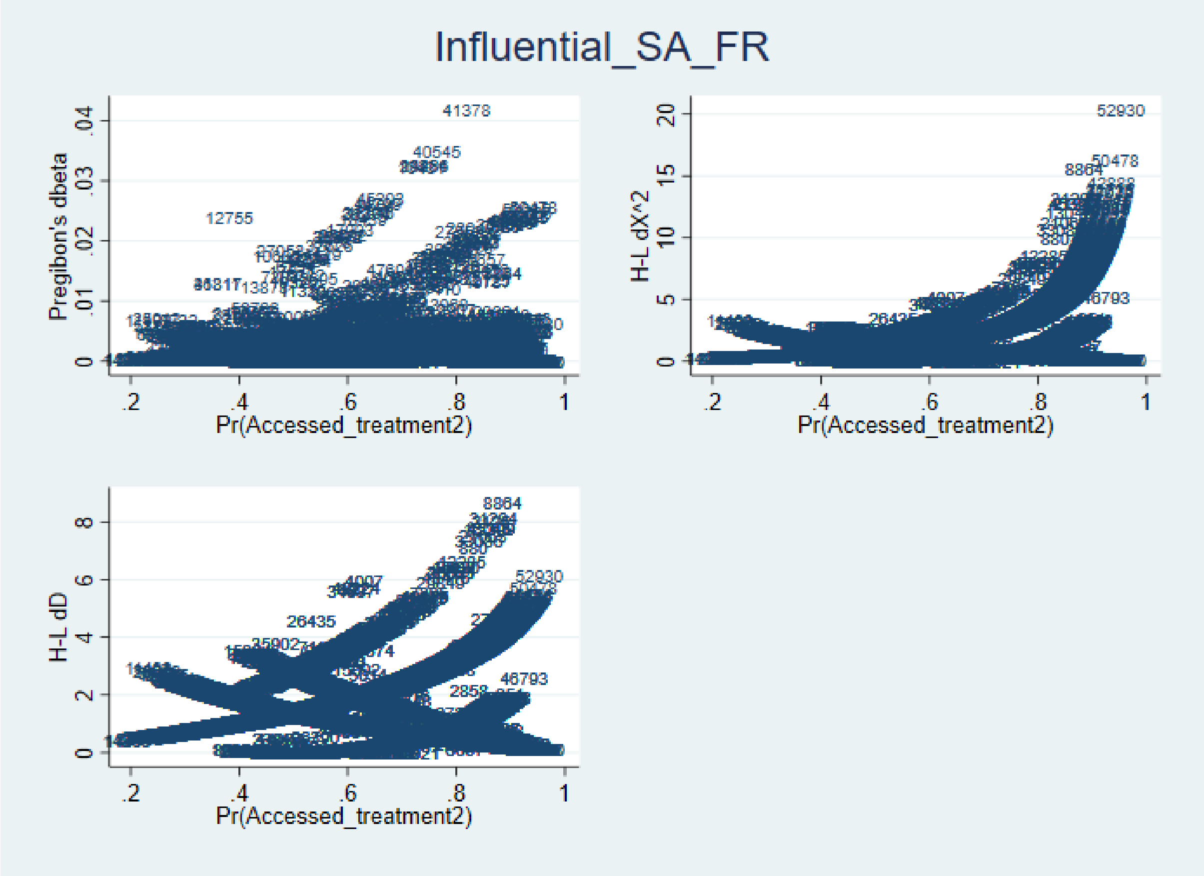

Figure 6: Graphs investigating influential cases in Secondary analysis full regression

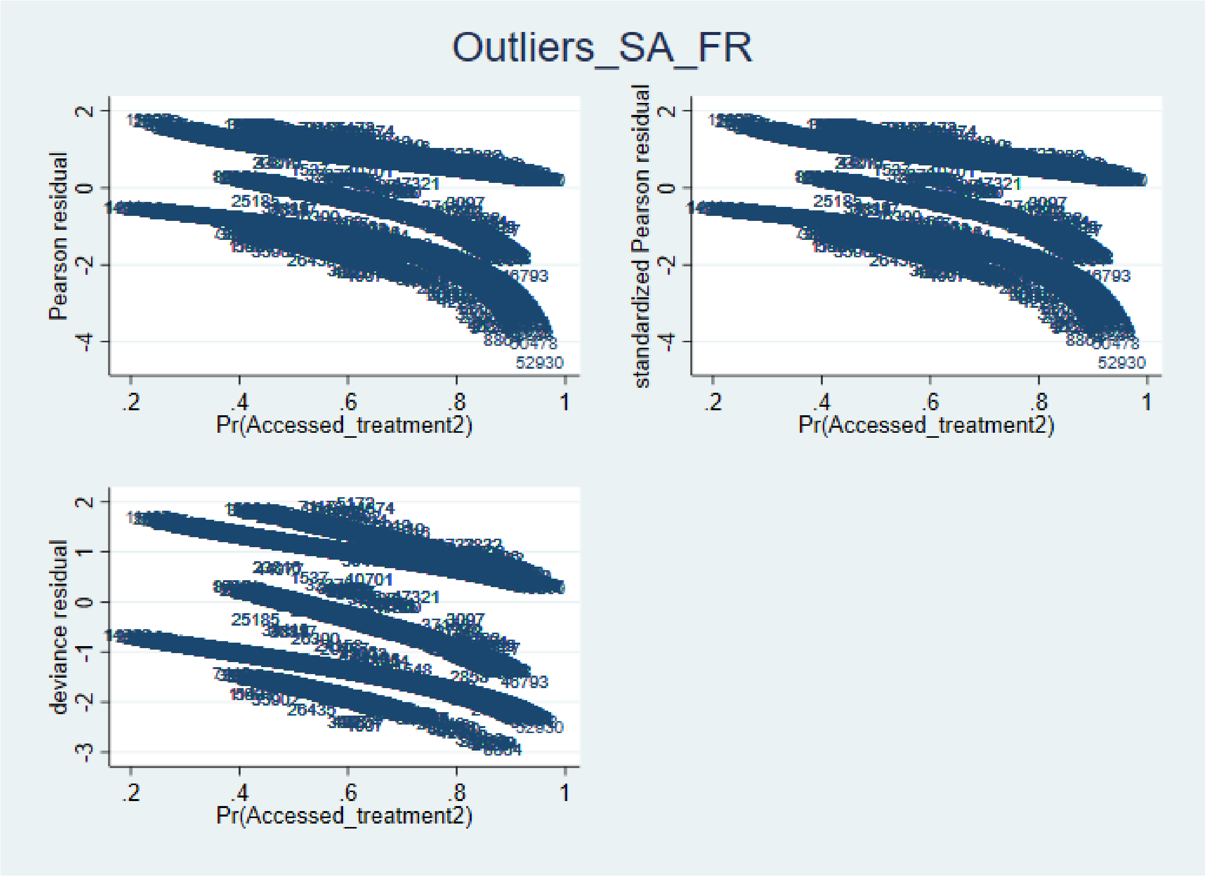

Figure 7: Graphs investigating outliers in Secondary analysis full regression

6.8 Appendix 8: Post estimation test results from Secondary analysis stepwise regression

Table 32: Post-estimation Link Test for Secondary analysis stepwise regression

Accessed treatment	Coefficient	Standard Error	z	P>[z]	95% Confidence Interval	
hat	0.9935	0.0310	32.0600	0.0000	0.9328	1.0542
hatsq	0.0045	0.0187	0.2400	0.8100	-0.0321	0.0411
Constant	0.0005	0.0127	0.0400	0.9680	-0.0244	0.0254

Number of observations = 55,159, Log likelihood = -33159.032, LR Chi2 (2) = 5056.49, p>chi2 = 0.0000, Pseudo R2 = 0.0708

Table 33: Wald tests of global significance

	Chi2 (df)	Prob>chi2
Service	2312.83 (4)	0.0000
Gender	19.24 (1)	0.0000
Ethnicity	1.94 (5)	0.8580
Employment status	107.79 (7)	0.0000
Referral Source	201.42 (2)	0.0000
Presenting Problem	639.26 (7)	0.0000
PHQ-9	0.18 (1)	0.6746
GAD-7	109.12 (1)	0.0000

Table 34: Collinearity diagnostics

	VIF	VIF	Tolerance	Squared
Service	1.13	1.06	0.8851	0.1149
Gender	1.01	1.00	0.9942	0.0058
Age	1.12	1.06	0.8912	0.1088
Ethnicity ONS	1.03	1.01	0.9755	0.0245
IMD score	1.05	1.03	0.9491	0.0509
Employment status	1.11	1.05	0.9008	0.0992
Referral Source	1.02	1.01	0.9777	0.0223
Presenting Problem	1.13	1.06	0.8825	0.1175
PHQ-9	1.33	1.15	0.752	0.248
GAD-7	1.30	1.14	0.7664	0.2336
Mean VIF	1.12			

6.9 Appendix 9: Graphs from Secondary analysis stepwise regression

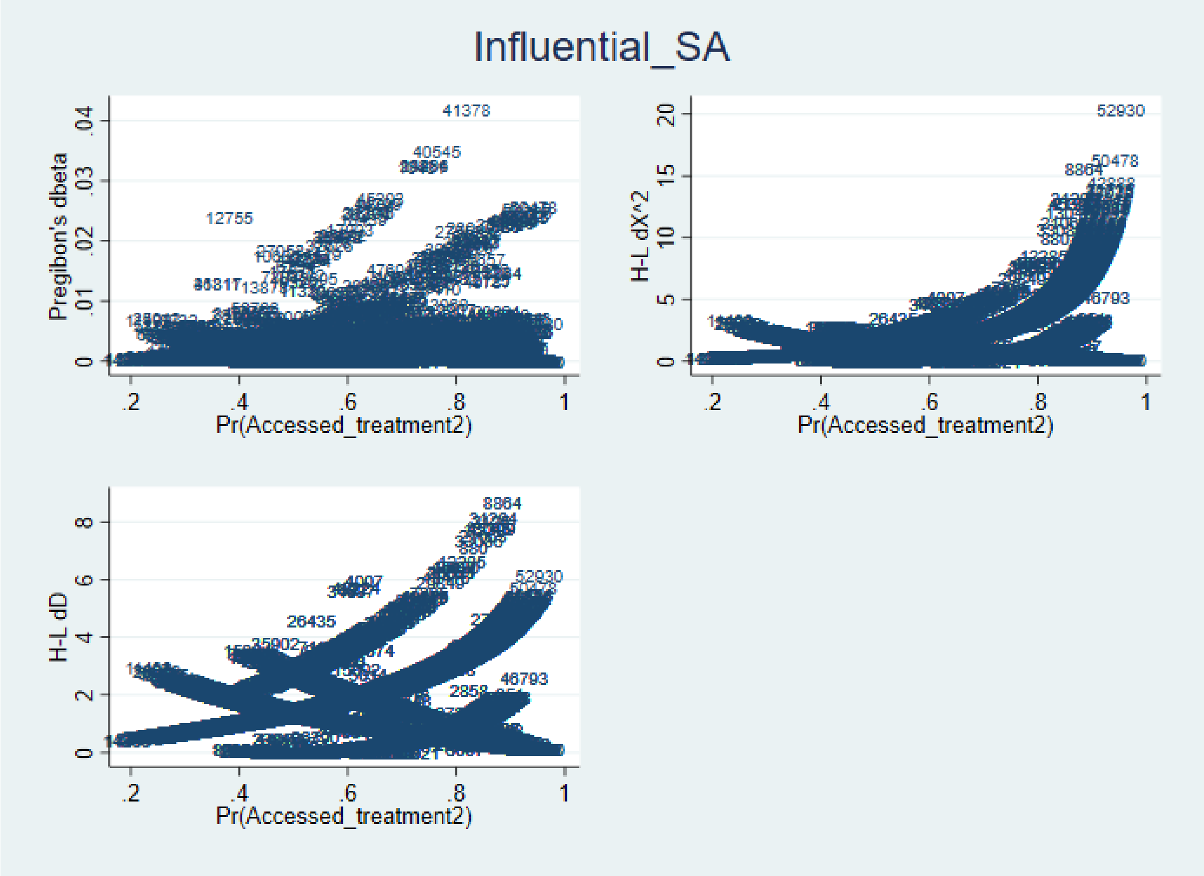

Figure 8: Graphs investigating influential cases in Secondary analysis stepwise regression

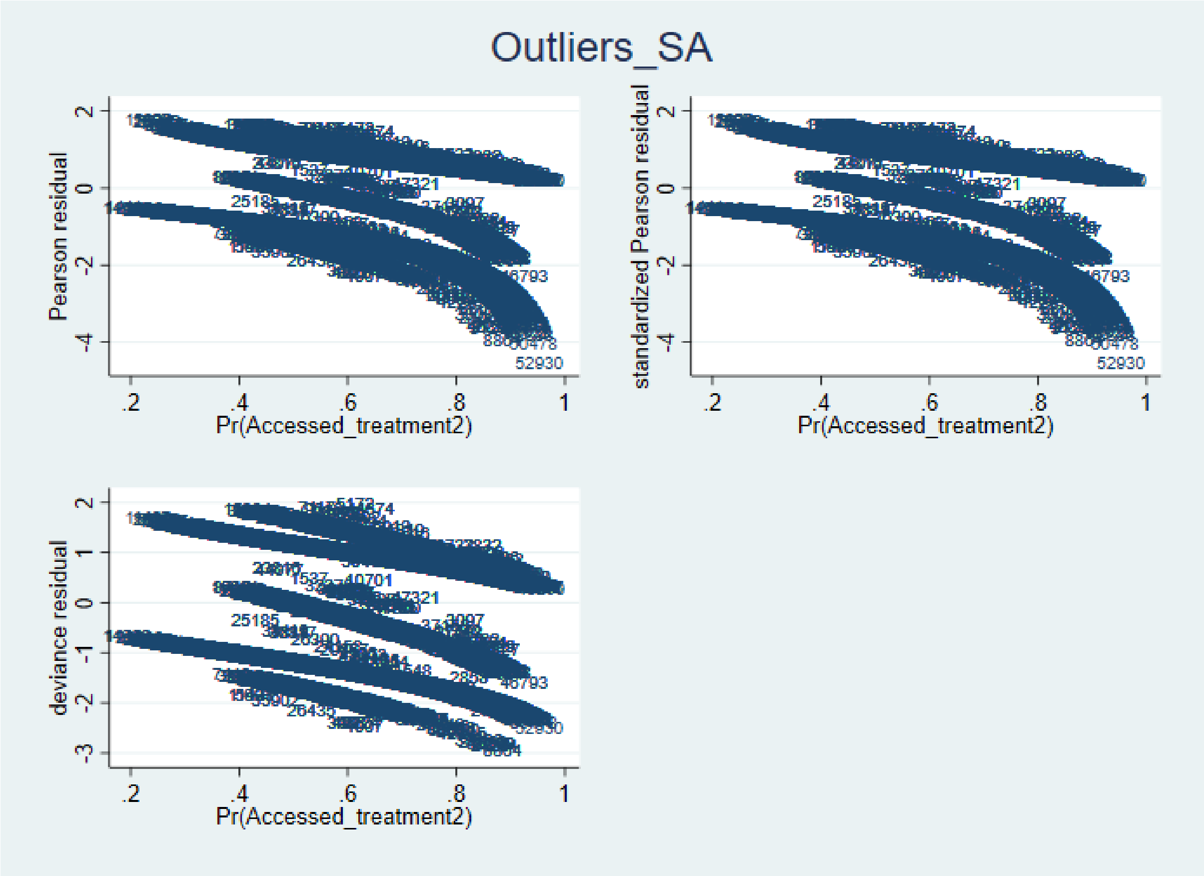

Figure 9: Graphs investigating outliers in Secondary analysis stepwise regression

6.10 Appendix 10: Topic guides for interviews

6.10.1 Topic guide for interviews with IAPT professionals

UNIVERSITY of York
The Department of Health Sciences

White Rose
Social Science DTC
Universities of Leeds, Sheffield & York

Experiences of Improving Access to Psychological Therapies (IAPT) service referrals:

Patients, GPs and IAPT services

Topic Guide – IAPT professionals

General introduction to the research

We are interested in listening to your experiences of referrals for the IAPT service you work in.

We would like to know how things could be improved to help more people in the future.

Referral to assessment processes

Where are referrals received?

How are they processed?

When is a patient contacted about an assessment? How long does this normally take? How are patients normally contacted?

Assessment

How are assessments carried out? Face-to-face, over the telephone, another method?

What happens during an assessment?

How long do assessments normally take?

What happens at the end of an assessment?

What happens if a patient doesn't attend an assessment appointment?

Assessment to treatment

What contact is normally made with a patient after an assessment?

How are patients normally contacted?

If a patient is considered eligible for IAPT treatments what happens?

What are the service processes that move patients from an assessment to treatment?

How are decisions made about which treatment to offer? Who is involved in this decision?

How/when are treatment appointments offered?

Who offers treatment appointments?

What information is given to patients about the treatment(s) offered?

How long are treatments expected to last? How often to patients need to attend?

Treatment

How are treatment appointments carried out? Face-to-face, over the telephone, another method?

What happens during an initial treatment session?

How long do treatment sessions normally take?

What happens at the end of a treatment session?

What happens if a patient doesn’t attend the first treatment session?

IAPT general practices

How does your service manage cancelled appointments?

How does your service manage DNAs?

What happens to a patient who is assessed and considered not eligible for IAPT treatment?

What contact do you make with patients’ GPs?

Changes

What changes would be helpful to make to the referral processes in the future?

What do you think will improve the levels of non-attendance at early IAPT appointments?

6.10.2 Topic guide for interviews with GPs

UNIVERSITY of York
The Department of Health Sciences

White Rose
Social Science DTC
Universities of Leeds, Sheffield & York

Experiences of Improving Access to Psychological Therapies (IAPT) service referrals:

Patients, GPs and IAPT services

Topic Guide – GPs

General introduction to the research

We are interested in listening to your experiences of making referrals to IAPT services

We would like to know how things could be improved to help more people in the future.

Who to refer

How often do you make referrals to IAPT services?

How do you decide which patients would benefit from IAPT treatments?

Information for patients

What conversations do you have with patients about IAPT services?

Do you have any information for patients to take home and read? Or other ways of signposting them to IAPT information?

Who is involved in a decision to make a referral to IAPT?

Referring

What does a referral entail?

Who is involved in making the referral?

How long does it normally take for a referral to be made?

What happens next?

Contact with IAPT services

What contact do you have with IAPT services about a referral you've made?

What information to you receive about whether patients have been assessed as eligible / have engaged with the service?

Changes

What changes would be helpful to make to the referral processes in the future?

What do you think will improve the levels of non-attendance at early IAPT appointments?

6.10.3 Topic guide for interviews with people who had been referred to IAPT services

UNIVERSITY of York
The Department of Health Sciences

White Rose
Social Science DTC
Universities of Leeds, Sheffield & York

Experiences of Improving Access to Psychological Therapies (IAPT) service referrals:

Patients, GPs and IAPT services

Topic Guide – Patients

General introduction to the research

We are interested in listening to your experiences of being referred to IAPT services and the things that influenced your decision to not attend.

We would like to know how things could be improved to help more people in the future.

We don't need to know about the reasons why you were looking for support unless you feel these are related to your decision to not attend IAPT appointments.

You may have had experiences with mental health services in the past, we don't need to know about these past experiences unless you feel they are related to your decision to not attend IAPT appointments for your recent referral.

The referral process

Tell me about your recent IAPT referral.

Did you contact the service yourself? Tell me what it was like to approach the service? What was involved?

What was it like to be referred to the service? What did you know about the service?

Problem

How did you feel about being offered support? Did you think it was important for you?

How did you feel about the idea of talking to someone at an IAPT service about your ‘problem’?

Treatment

What contact did you have from the IAPT service?

What kind of appointments were you offered? What were you expecting? What happened?

What did you know about the support IAPT services can offer people? What do you think about the support they offer?

Practical barriers

Many people find that things get in the way of them being able to attend healthcare appointments.

Things like ‘where the building is’, ‘having other commitments’ and ‘the cost of travelling to appointments’ often influence whether people attend or not.

Support from others

What do your friends and family think about your referral? What have they said about IAPT services?

6.11 Appendix 11: Description of the main themes and categories

Table 35: Description of the main themes and categories

Name	Description
Communication	Communication between professionals, and with people being referred to IAPT services featured heavily in this analysis, including individuals from all stakeholder groups and comments related to most stages of the referral to treatment pathway. Information within this theme was organised into three main categories: defining treatments, establishing expectations, and sharing information.
Defining treatments	The support which was offered to individuals referred to the four IAPT services included in this analysis was influenced by two main factors, the practitioner and their views about which treatment option was likely to be most helpful for the person that was referred, and the amount of flexibility offered to the person referred. Within the four services included in this analysis, IAPT practitioners led treatment decisions, frequently under the supervision of more experienced colleagues. Information was collected from the person referred during the assessment which fed into this decision-making process, and often their views about the offered treatment were considered after the offer of treatment had been proposed. In some services IAPT practitioners reported having guidelines to follow when selecting a treatment to offer people, others discussed using their knowledge and experience of the treatments offered by their service to propose the treatment they considered would be most beneficial for the person referred. After agreeing on a treatment, IAPT practitioners discussed establishing preferences from the person referred about convenient days and times for attending treatment appointments. This information was then included in IAPT systems to try and offer appointments which would be convenient for people who had been referred and assessed.
Establishing expectations	Ensuring that information about problems, services and possible treatments were communicated appropriately affected individuals from all stakeholder groups interviewed. Challenges identified, particularly by GPs related to confidence about what IAPT services were able to offer people who wanted support. There was an expectation that most people who wanted support from IAPT services would refer themselves to services to show commitment, and consequently would be more likely to attend offered appointments. Alternative methods of referral were described and were reported by GPs and IAPT professionals as being used less frequently than self-referral options. People who were referred to IAPT services had expectations about what treatment they might be offered and how that would affect them. IAPT service professionals held expectations about the problems people would be presenting with and discussed how they handled making proposals for treatments which had not been considered by the people attending assessment appointments. In addition, people who were not connected with the IAPT referral to treatment pathway were reported to have influenced decision-making about attendance.
Sharing information	Communication between services working with people who had been referred for mental health support through IAPT was described as minimal. Information about IAPT services in other healthcare departments were lacking, even where there was reportedly a clear link between the specialist discipline and common mental health problems. Following a referral being received, contact was reported to be made after an assessment and /or at the point of discharge. GPs reported receiving little contact from IAPT services about the person who had been referred and described the information they did receive to be standardised and not particularly helpful for ongoing care. In line with this, IAPT professionals described routinely sending copies of assessment summaries and discharge letters to GPs. These were based on standardised templates which were modified to provide details specific to each person who had been assessed. Infrequently professionals described additional contact having been made if an individual was considered to be at increased risk of harm. Methods of contact between

Name	Description
	professionals used letters, however contact between IAPT services and the people who had been referred was more frequently over the telephone. If telephone contact was not successful, IAPT professionals described sending letters or emails to people. The difference in method of contact with people who had been referred appeared to be related to the need for a response and wanting to gather this information promptly. Information shared with people during assessment appointments about treatment options was reported to be focused on the proposed treatment which the IAPT professional considered to be most appropriate to resolve the issues which had been discussed.
Waiting times	Waiting times were acknowledged as a contributing factor for initial non-attendance by individuals from all stakeholder groups. Waiting times of note occurred between a referral and an assessment appointment, and again between the assessment appointment and an initial treatment appointment. Two main factors affected variability in these waiting times: demand from people referred and the service configuration.
Demand for support	IAPT professionals and GPs interviewed reported that demand for support was high, with staff working at the included IAPT services reporting around a thousand referrals per month being processed at each of the IAPT services involved in this study. This was supported by GP statements about discussing IAPT with individuals attending their surgeries most days. IAPT professionals described some months of the year as being typically busier than others, and at extremely busy times additional treatment options were included in their service offering.
Service configuration	Professionals within IAPT services who offered appointments to people referred were categorised as Step 2 (low intensity) and Step 3 (high intensity) practitioners. These two groups of clinicians offered assessments and treatments, but for individuals with levels of complexity. People referred to IAPT services with less complex issues were more likely to be assessed by a Step 2 practitioner at many of the services included in this analysis. Individuals were typically assessed by Step 3 practitioners where they presented with more complex mental health problems or reported physical health needs which indicated a face-to-face appointment was required in services generally offering telephone assessments. IAPT services prioritised timeliness of appointments and therefore waiting lists for assessment and treatment pathways were used to offer individuals the next available appointment which meant that people had to repeat their information to each new practitioner they had contact with. This set-up did not allow IAPT professionals to build a relationship with individuals who had been referred for support, something which was particularly important to an individual who was referred. Waiting times (both for assessment and treatment appointments) varied between services and between treatment pathways within services. While some IAPT professionals described offering information which was designed to support those waiting for treatment, others reported their service having no contact with people while they were on waiting lists until appointments became available. Staffing levels were also reported to be variable within the services included. Some IAPT professionals reported difficulties faced by their service in filling vacancies for clinical staff, other professionals described very small numbers of individuals screening all of the referrals received by their service which did not allow individuals to make additional contacts with people who had been referred to services, or follow-up with individuals who had been referred to the service but not attended an assessment appointment.
Service Processes	To understand the experiences of individuals involved in the IAPT referral to treatment pathway it was important to describe the main stages of this pathway and the similarities and differences between services. This information was categorised in relation to: administrative processes, initial contacts, and ways to refine service access.

Name	Description
Admin	Similar systems were in place to manage referrals coming into the IAPT services within this study. Each referral was received and reviewed by a small team of people to determine whether the person referred was likely to be offered support by the service or whether another service might be better placed to offer support. Following this process, some services required individuals who had been referred by a professional to confirm they wanted to receive support from IAPT before they would be offered an assessment appointment. Assessment appointments were generally booked by non-clinical member of the IAPT team using a waiting list system to offer individuals who had been waiting the longest the next available appointment. Once an assessment appointment had been completed a risk assessment was carried out and a letter was sent to the person and their GP to confirm whether a treatment had been offered by IAPT, or whether another service was considered to be more appropriate. If a treatment had been agreed, the individual's details were placed on a waiting list for the agreed treatment stream offered by the service. Once an appointment became available the individual would be contacted (either by a non-clinical member of the team or by the clinician with a free appointment) to check whether the person referred was able to attend the treatment sessions available. If the offered sessions (a block of appointments at the same time each week or fortnight for a specified period of time) were convenient then these were allocated to the referred person, if not then that person remained on the waiting list and the available appointments were offered to the next person on the waiting list. At each point of contact with the service a referred individual was informed that if they did not attend an appointment or contact the service to cancel then they had a specified time-period to make contact before it would be assumed that they no longer wished to receive support and would be discharged. At some service, up to three cancelled appointments at any point while a person was involved with the service, would result in that person being discharged. Discharge letters were sent to the person and their GP to confirm that they could contact the service at a later date if they wished to receive support in the future.
Initial contacts	The initial contact reported by most IAPT professionals was a phone call to check whether the person who had been referred wanted to receive support from the service, determine whether the service was likely to be the best source of support for that person, or possibly booked the assessment appointment. For most services, the assessment appointment was conducted either face-to-face or over the telephone with some services using one of these predominantly. Appointments were described as lasting approximately 45 minutes and covered the problem that the person was dealing with, standardised questionnaires to determine symptom severity and the impact on the person's life and an assessment of risk including: a history of mental health issues, risk of self-harm or suicidal ideation, and any physical health issues. Goals an individual had for treatment were discussed prior to the IAPT professional either offering a specific treatment or ending the assessment to consult a colleague about treatment options. Once a treatment was identified (either during the initial assessment appointment or in a follow-up appointment) IAPT professionals described gathering details about individual preferences for days and times of treatment sessions. Treatment length and appointment frequency differed depending on the type of treatment and the service. Generally, Step 2 interventions were offered less frequently and for fewer sessions than Step 3 treatments. Online treatments were available for individuals to access in their own time and were monitored by IAPT professionals, and the workshops and groups offered by services were planned and were described as being offered regularly throughout the year. The initial session of a treatment was reported to focus on clarifying the service position on confidentiality and appointment attendance, the problem the person was presenting with and how that may have changed since their referral and assessment, and what the treatment sessions would involve.
Refining access	Consideration was made to the ways in which people gain access to IAPT services and how they could be altered. A suggestion was made that GPs were fulfilling a 'gatekeeper' role unnecessarily and that removing the need for people to see a GP before referring to IAPT

Name	Description
	services may improve access by reducing the waiting time to see a GP before being referred. Additionally, signposting to IAPT by a nominated person (such as a GP receptionist or an IAPT link worked based in a GP practice) was discussed as potentially improving the consistency in approach to common mental health problems; the traditional GP approach was regarded as variable. IAPT professionals described changes to access for individuals that presented with increased risk, such as women in the pre- or post-natal period, veterans, and individuals with a history of self-harm or suicidal ideation. For specific groups of people referred to IAPT services, such as women in the pre- or post-natal period and veterans, IAPT services were required to ensure that appointments were offered within set timescales following a referral. Where standard waiting lists exceeded these timescales, those individuals were still offered appointments within the set times. Other forms of increased risk did not affect the timescale for appointments being offered but increased the contact that IAPT professionals made with other professionals involved with the person referred. Timescales for offering appointments varied between services with IAPT professionals from one service indicating that recent changes had been made to introduce a target for assessment appointments being offered within two days of a referral being received. Professionals from that service described this is a positive change which seemed to have reduced the non-attendances at assessment.
Consequences of treatment attendance	Thoughts about accessing IAPT support for common mental health problems was not always described positively by individuals who had been referred. Previous experiences of mental health support influenced thoughts about the most recent referral for the three individuals who had been referred and were interviewed. One individual who had previously had negative experiences of mental health support was concerned about whether their experiences would be repeated if they accessed IAPT support. An individual with previously positive experiences of IAPT service support talked about concerns relating to the treatment which they believed they would be offered, and feelings that they would not be able to fully engage with all aspects of treatment due to physical health issues. These concerns were raised with the service; however, no response was received by the person referred about how things could be adapted. The third person who had been referred to IAPT talked about a previous referral for mental health support which was not described as beneficial or detrimental. Instead, they reported feeling that they might have needed more sessions and were open-minded about the more recent referral at the point of contacting IAPT. GPs described difficulties when trying to offer support to those with previous negative experience of mental health services, highlighting the need to match people with practitioners
Other	During interviews, IAPT professionals and GPs discussed options for improving the referral to treatment pathway to reduce non-attendances to initial appointments. For the most part individuals reported feeling unsure about why these initial non-attendances occurred and reiterated the many ways that people can refer into services including online, telephone or written referrals from individuals wanting support or professionals involved in their care. Timescales were discussed as a possible reason for non-attendance, especially in relation to initial treatment appointments where the waiting time for some treatments were many months. Other suggestions included a lack of direct contact with services during waiting periods; IAPT professionals talked about wanting to be able to make engagement calls to people who had been waiting for either an assessment or a treatment appointment to become available. Changes made by one service to improve efficiency in the referral pathway included offering treatments online following an online self-referral. Where sufficient information was included in the referral form, no additional contact was considered necessary prior to an initial treatment appointment being offered. Individuals referred to this service using this online process were reported as having no direct contact with an IAPT professional prior to an initial treatment appointment. Acknowledgement about the need for flexibility with the people seeking support from IAPT was made and related to the idea that those referred to IAPT were often working and many had caring responsibilities which affected their ability to attend appointments at times convenient to service practitioners. Where individuals have had conversations with a GP before a referral, many GPs described introducing IAPT within the

Name	Description
	context of other treatment options such as medication. One GP indicated that many people appear to be focused on the treatment which will help them the fastest, and this is often medication. Where medication and IAPT services are offered together, the GP considered that once the person has started to feel better after taking medication, they may be less likely to attend IAPT appointments despite framing these treatments as having longer-term benefits than medication. A mismatch between expectations about the treatment offer and the reality was considered a potential reason for non-attendance to treatment after assessment. IAPT professionals talked about the possibility that individuals had sometimes formed an idea about what treatment might be offered following a conversation with their GP, and although IAPT professionals confirmed people were happy to proceed with the offered treatment during the assessment appointment, there was a chance that once they had more time to think about it they may change their mind about wanting to receive a different form of support. Health issues experienced by one of the people who was referred for IAPT support caused additional challenges both for the self-referral process and affected their perception about whether they would be able to benefit from treatment.
Unrelated to IAPT pathway	Information relating to triggers for referrals, approaches to improve motivation for change in people who had started treatment, and improvements considered necessary to the wider mental health service offering were included within this category. This information was not featured as part of this analysis but was acknowledged as important for those individuals who were interviewed as part of this study.

6.12 Appendix 12: Coding structure

Table 36: The number of references made by participants for each of the main themes and categories

	Communication	Defining treatments	Establishing expectations	Sharing information	**Waiting times**	Demand for support	Service configuration	**Service Processes**	Admin	Initial contacts	Refining access	**Consequences of treatment attendance**	**Other**	**Unrelated to IAPT pathway**
P01	17	2	13	2	2	2	0	10	0	1	9	0	2	0
P02	18	7	3	9	7	1	6	18	9	8	3	0	4	0
P03	25	12	3	11	8	2	6	22	16	8	0	0	3	0
P04	16	7	4	8	6	2	4	17	10	11	4	0	3	0
P05	18	10	2	11	6	0	6	17	12	4	5	0	2	0
P06	27	8	7	19	8	1	7	20	15	7	2	0	5	0
P07	16	7	5	6	13	1	12	16	9	7	2	0	7	1
P08	7	1	5	2	5	1	4	1	0	1	0	0	3	2
P09	10	2	6	3	5	0	5	11	3	7	3	5	11	2
P10	10	4	1	5	7	1	6	24	16	8	3	0	2	0
P11	15	2	10	4	4	1	3	3	1	2	0	1	2	0
P12	20	7	8	7	9	1	8	29	24	5	1	0	9	0
P13	12	2	10	2	2	1	1	1	1	0	0	0	4	0
P14	12	0	7	6	3	0	3	0	0	0	0	11	15	1
P15	7	0	5	2	3	1	2	1	0	0	1	0	3	0
P16	10	1	6	4	5	0	5	0	0	0	0	0	4	0
P17	16	10	7	3	12	0	12	7	0	6	1	3	7	0

Table 37: The relationship between the identified themes and categories, and the different stages of the service referral-to-treatment structure

	Pre-referral	Referrals	Assessment	Treatment	Perspectives on non-attendance	Response to non-attendance	Miscellaneous	Unrelated to IAPT pathway
Communication	**x**	**x**	**x**	**x**	**x**			
Defining treatments			x	x	x			
Establishing expectations	x	x		x	x			
Sharing information	x			x	x			
Waiting times		**x**	**x**	**x**	**x**	**x**		
Demand for support		x		x				
Service configuration			x	x	x	x		
Service Processes		**x**	**x**	**x**		**x**	**x**	
Admin		x				x	x	
Initial contacts		x	x	x				
Refining access		x				x		
Consequences of treatment attendance	**x**			**x**	**x**			
Other	**x**	**x**			**x**			
Unrelated to IAPT pathway								**x**

Table 38: The number of references made by participants for each stage in the service referral-to-treatment pathway

	Pre-referral	Referrals	Assessment	Treatment	Perspectives on non-attendance	Response to non-attendance	Miscellaneous	Unrelated to IAPT pathway
P01	8	12	2	2	0	9	0	0
P02	2	10	7	15	5	10	1	0
P03	5	8	6	17	7	3	8	0
P04	2	10	8	10	5	12	4	0
P05	6	4	6	13	3	9	6	0
P06	2	16	10	19	6	8	7	0
P07	3	7	7	11	6	9	3	1
P08	8	6	2	1	1	3	0	2
P09	9	11	0	5	11	5	0	0
P10	1	9	9	9	1	9	7	0
P11	10	9	3	3	1	3	0	0
P12	3	11	4	15	6	9	14	0
P13	8	11	2	0	1	1	1	0
P14	14	9	0	2	14	3	0	0
P15	6	5	1	0	0	2	0	0
P16	8	5	0	2	2	3	0	0
P17	4	7	12	7	15	3	0	0

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