What are the barriers/ facilitators to physiotherapy within forensic mental health?

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Abstract

Background: Forensic mental health (FMH) refers to the specialist management of individuals that have offended and are suffering from mental health disorders and severe mental illness (SMI). Current research highlights that individuals with SMI are at risk of dying 15-20 years younger than the general population as a result of poor physical health, which warrants the need for physiotherapeutic interventions. however, the lack of research highlights that physiotherapy within FMH is unclear. ***Aim:*** To explore the perceived barriers and facilitators to physiotherapy within forensic mental health. ***Methods:*** Qualitative online semi structured interviews were carried out using FMH physiotherapist and nurses. Data was analysed through the use of thematic analysis. ***Results:*** 8 Participants took part in the study (6 physiotherapist and 2 nurses). The perceived facilitators to physiotherapy within FMH were education of physiotherapy, adapting conventional physiotherapy and the presence of physiotherapy. The barriers were the patient population, the Mental Health Act law and a lack of knowledge of physiotherapy. ***Conclusions:*** The findings highlight that physiotherapy within FMH is not well understood and further research and guidelines are needed to help clarify and promote the profession within FMH.

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List of abbreviations

CPMH= Chartered Physiotherapists in Mental Health

CSP= Chartered Society of Physiotherapy

FMH= Forensic mental health

IOPTMH= International Organisation of Physical Therapy within Mental Health

MOJ= Ministry of Justice

NHS= National Health Service

SMI= Severe mental illness

Section One: Literature review

1.1 Introduction

In recent years statistics suggest that mental health is on the rise, affecting up to 15% of the UK population at one time (NICE, 2011). In 2017 there were 4,487 suicides in the UK, meaning that more than 15 people took their own life every day in Great Britain alone (Office for National Statistics, 2017). Arsenault-Lapierre et al (2004) found that 80-90% of all attempts/ deaths by suicide were associated with mental health disorders. Mental health disorders are defined as "disturbances to mental health that can cause troubled thoughts, emotions, behaviours and relationships" (WHO, 2019). NHS England (2020) reports that mental health disorders are the leading cause of disability in the UK, with one in four adults suffering from at least one mental health disorder at one point throughout the year. Although the majority of these mental health disorders are common, there are classifications (portrayed in table 1) of severe mental health disorders, which can cause long lasting disability (WHO, 2016)

Table 1: Common and severe mental disorders as defined by WHO (2016).

Common mental health disorder	*Post-traumatic stress disorder, eating disorders, substance related and addictive disorders, depression, anxiety.*
Severe mental health disorders	*Schizophrenia, bipolar.*

Severe mental illness (SMI) is often so debilitating it impairs an individual to engage in functional and occupational activities within the community (Heller et al, 1997). Because of this people with SMI are at risk of poor physical health, Chesney et al (2014), states that in England, people with SMI on average die 15-20 years younger than that of the general population. Two in three of these deaths are from physical health conditions that can be prevented (NHS, 2016).

Not only are people with SMI at greater risk of physical health problems, they also present an increased risk of violence and offending behaviour (Vollm et al, 2018). Within the United States a cross sectional retrospective survey found that there was a lifetime prevalence of violence of 16.1% in those with SMI, which rose to 43.6% in individuals with SMI and substance misuse, compared to 7.3% in those with no mental health disorders (Swanson, 1994). Although these figures cannot be generalised to UK populations, the findings are comparable. In 2016/17 there were 84,674 adults in prison within the UK, 39-90% of these were experiencing a mental health condition (House of Commons, 2017). Mental health disorders within the judicial system

refers to forensic mental health (FMH), which can be defined as “the care and treatment of mentally disordered offenders, requiring risk assessments and specialist management” (Gunn and McKay, 2014). FMH is on the rise, as it was reported that in 2016 there were 40,181 records of self-harm and 120 self-inflicted deaths in the UK prison population, which was the highest recorded up to this date (House of Commons, 2017).

1.2 Forensic mental health

As it is challenging to provide the appropriate mental health support to individuals inside prison, the Mental Health Act (1983) allows for people with mental health disorders to be formally detained and transferred to specialist secure hospitals (also known as secure units) that can provide psychiatric and physical help to FMH patients. There were 25,577 people subject to detention under the Mental Health Act (1983) in 2016, 20,151 of these were detained in a forensic hospital, the others being treated within the community (NHS, 2018). At present, there is an estimated 6,000 patients detained in 3 high, 65 medium and 150 low secure FMH units within the UK (NHS, 2018). These secure forensic units account for 10% of the mental health budget, and 1% of the total NHS budget (Vollm, Bartlett and McDonals, 2016).

Patients within FMH units are detained in the interest of public safety and also to minimise the risk posed to themselves (Vollm et al, 2018), understandably this detention poses restrictions to their liberty. Under the Mental Health Act (1983) restrictions include access to the public, ligatures, and mobile phones, dependent on the section issued by the ministry of justice (MOJ).

In modern times there has been a shift towards de-institutionalisation and community rehabilitation to forensic patients to help decrease cost of the healthcare system and increase patient satisfaction (Hare-Duke, 2018). NHS England is currently responsible for both physical and mental healthcare within the criminal justice system. An estimated £400 million was provided for the healthcare of patients within prisons, £150 million of this solely for mental health and substance misuse services (House of Commons, 2017). With evidence of money being provided by the government, it would be interesting to know how much of this was put aside for occupational health, including physiotherapy.

Within FMH, pharmacotherapy is seen as the backbone of forensic mental health rehabilitation (Andiné and Bergman, 2019). The service within forensic mental health is also reliant on specialist nursing staff, psychologists, psychiatric doctors, and occupational therapists with a distinct focus on trying to get patients back to everyday life outside of in-patient services (Sullivan and Mullen, 2006). Probst (2017), states that physiotherapy within mental health is

often overlooked, which is highlighted by the focus of an occupational therapy and pharmacotherapy led service.

1.3 Physiotherapy and mental health

The NHS states that physiotherapy can be used within mental health to encourage participation, physical activity and reduce isolation and social exclusion (NHS, 2020). Physiotherapy within mental health is often underestimated (Probst, 2017), and for that reason physiotherapists working within the field gained recognition as a subgroup to help clarify the role of physiotherapy and provide alternative interventions. The International Organisation of Physical Therapists in Mental Health (IOPTMH) was recognised in 2011 and aims to provide specialist support and recommendations to physiotherapy in mental health. The organisation helped provide a definition, “Physiotherapy in mental health aims to empower the individual and optimise well-being by promoting self-awareness, functional movement, physical activity and exercises, bringing physical and mental health together” (IOPTMH, 2019). Stubbs et al (2014a) explains that physiotherapists help by bridging the gap between physical and mental health, by providing health promotion, therapeutic relationships, and specialist rehabilitation related to complex mental health disorders.

1.4 Is physiotherapy needed within forensic mental health?

The prevalence of SMI is higher in FMH settings (Vollm et al, 2018), and the SMI population have a 3.7 times higher death rate under the age of 75 compared to the general population (NHS, 2016). There are also 198 more deaths per 100,000 in SMI compared to the general population for cardiovascular diseases (NHS, 2016).

The increased cardiovascular disease morbidity has been associated with increased weight gain, it was found that the weight of psychiatric inpatients on average increased 10.6 kg during admission to hospital, and obesity levels were 36% compared to 17% of the UK population. (Cormac et al, 2005). Clinicians have correlated obesity levels within SMI to antipsychotic medication because of their metabolic side effects (Hirsch et al., 2017). Pérez-Iglesias et al, (2013) found that there was a 12.1kg weight gain after three years of taking antipsychotic medication in a cohort of 170 first episode psychosis patients, with 80% of this weight increasing during the first year.

As well as taking medication with undesirable side effects the SMI population also experience increased sedentary behaviours (Soundy et al,2014), which are caused by the undesirable symptoms of SMI, such as low mood and poor self-confidence (Vancampfort et al, 2017). This makes it hard for individuals with SMI to find the motivation to do anything about their declining physical health. The recommended physical activity guidelines provided by Health England

state that adults should aim to exercise every day and do at least 150 minutes of moderate exercise or 75 minutes vigorous exercise a week, with resistance muscle strengthening twice a week to supplement (GOV.UK, 2020). However, research suggests that forensic mental health patients do not meet the recommended guidelines, in a cross-sectional study Bergman et al (2018) found that forensic patients in Sweden had very low VO2 max and low levels of physical activity compared to that of the general public.

With altered mental state, violence between patients and staff can be high in compulsory FMH hospitals, therefore the use of manual restraint is warranted by NHS England to protect patients and staff from on-going violence. Stewart et al (2009) found that the average incidence rate of restraints was 18.9 restraints per month, with injuries to patients occurring in 5-18% of restraints, resulting in 1-3 patients injured a month as a result of restraints. Altered mental state within SMI also puts patients at higher risks to themselves, James et al (2012) recorded that there was an incidence rate of 17.4% of self-harm within mental health hospitals, however it was much higher on compulsory forensic inpatient wards.

There is also evidence of low education levels within FMH hospitals, putting patients at risk of poor physical health lifestyle choices. Participant characteristics from the authors Livingston et al (2011) found that 46% of FMH patients did not finish secondary school and 69% were un-employed. Published in Canada with a small sample size of forensic patients (52), the findings should not be generalised to the UK population. Nevertheless, with limited research within Great Britain, these findings provide some evidence that forensic mental health patients come from a poorly educated and low socio-economic background.

The research clearly identifies a need for physiotherapy within FMH due to cardiovascular disease risk, obesity, sedentary behaviours, poor motivation, and injuries. Probst, (2017) discusses that physiotherapy within mental health is often overlooked, and this is highlighted by the fact that FMH is predominately led by psychiatry, pharmacotherapy, and occupational therapy (Andiné and Bergman, 2019). In 2016, A five-year plan was proposed by NHS England (NHS, 2016) to improve the outcomes within mental health, however, there was no mention of physiotherapy included within this plan, making it difficult for physiotherapy to emerge through to FMH as a beneficial intervention to patients in the future.

1.5 Reason for search strategy

Although there is a five-year plan put forward by the government to improve mental health services and physical health outcomes, research and recognition into physiotherapy within forensic mental health is still a grey area. The research suggests that there is a clear need for physiotherapy within the service that is predominately occupational therapy and pharmacotherapy led. Therefore, a search strategy was conducted to identify research for

physiotherapy within FMH services, to try and identify if there are any barriers or facilitators to accessing physiotherapy services.

1.6 Search strategy

In order to explore the barriers and facilitators of physiotherapy within FMH, the following search strategy was undertaken.

Key words: Physiotherap* *AND* forensic psychiatry *AND* mental health *AND* secure unit *OR* inpatient services *AND* UK *OR* United Kingdom.

The key word 'physiotherap*' truncated was included as a key word to ensure that research was not limited to physiotherapy or physiotherapists. It was important to include this as a key work as physiotherapy is the main interest of the research being undertaken. The key words 'forensic psychiatry', 'mental health' and 'secure unit' were included as they were the key search terms used by Brendon Stubbs, who is a leading researcher of physiotherapy within SMI. The decision to include these search terms involved reading the key words used within Brendon Stubbs papers such as Stubbs et al (2014a). A thesaurus was used to explore possible alternatives for 'secure unit', hence the inclusion of 'inpatient services'. The search strategy included 'UK OR United Kingdom' to ensure the research found was associated with forensic mental health within the United Kingdom, as other countries adopt slightly different mental health acts.

Originally, the key words for the search involved 'hospital', another word for inpatient service or secure unit. However, because of the large volume of hits that were produced (3,751) it was decided to be removed as a search term, as it could not differentiate between general and mental health hospitals. To further justify this, the key words used in Stubbs et al (2014a) and related research, did not include this term within the vocabulary list either, instead those researchers used 'secure unit' or 'inpatient services'. Evidence of the search is portrayed in appendix 1.

The key words were searched through CINAHL, PubMed and PEDro databases on the 10/05/2020. The CINAHL database was used as it is the most widely used database used for nurses and allied health professionals, including over 3,075 health journals (CINAHL Database, 2020). PubMed was used as it covers over 5,600 healthcare journals with over 26 million references (PubMed, 2020). The PEDro search engine was used to try and target the physiotherapy led research, PEDro includes over 48,000 trials and reviews related to physiotherapy interventions (PEDro, 2020).

Table 2: Search strategy results

Key words: Physiotherap* *AND* forensic psychiatry *AND* mental health *AND* secure unit *OR* inpatient services *AND* UK *OR* United Kingdom		
CINAHL	**PubMed**	**PEDro**
Results= 2 hits	Results= 6 hits	Results= 0 hits
Relatable= **0 hits**	Relatable- **0 hits**	Relatable= **0 hits**

The hits that were produced through CINAHL were not related to physiotherapy or forensic mental health, as shown in appendix 2. PUBMED produced 6 hits, made evident in appendix 3. Although one hit was related to mental health, it did not relate to forensic or physiotherapy, and therefore had to be disregarded. PEDro produced no hits with the specified search terms.

As made evident in appendix 2 and 3, there were no found relatable research into physiotherapy and FMH using the specified search terms. Therefore, a manual search by hand had to be carried out by the researcher. This involved manually searching through the reference lists and abstracts of related articles. Understandably this leads to judgements of researcher bias, hindering the reflexivity and confirmability of the research. However, with screenshots of the limited amount of research produced shown in the appendix, it highlights that recommendations are needed to create new terminology for this specialist FMH care service.

1.7 A review of the literature

After a manual search was carried out, four articles were found relating to the barriers and facilitators of physiotherapists working within FMH. It is important to note that the chosen research for critique does not relate to both physiotherapy, and forensic services. Instead, the articles relate to either one of physiotherapy, or forensic settings.

1.7a Physical performance and activity levels of forensic mental health inpatients.

Bergman et al (2018) conducted a study within a FMH unit. The authors aim was to assess health variables of patients under mandatory forensic psychiatry services. Twenty eight patients recruited from a Swedish forensic unit were measured on the following variables: walking ability, running speed, explosive leg strength, VO2 max, physical activity level, aggressive behaviours, stress levels, character maturity and health related quality of life (HRQL). Results showed that the mean VO2max was 25.3 mL/min/kg, which is 15 mL/min/kg below that of the matched age healthy adult. The average physical activity was 268 minutes

a week, however 9 patients were below the 150 minute a week recommendation from the government. For aggression, stress, character maturity, and HRQL the authors concluded that all variables were worse than that of the general Swedish population.

The results from this study highlight that health and activity levels are low in FMH patients. The authors concluded that this increases the risk of cardiovascular disease and a shorter life span. One limitation is that the research was carried out in a FMH unit in Sweden, whereby the Mental Health Act and law is different to those in the UK. Also, the results from a single inpatient unit in Sweden cannot be generalised to the whole population, never mind the UK FMH population. However, this study does provide new and emerging evidence that forensic mental health patients are at risk, and with limited amounts of research, it highlights the low VO2 max and activity levels within the population. Another limitation is the chosen methods of gathering health variable results. Physical activity, aggression, stress, HRLQ and character maturity were all assessed using self-directed questionnaires. Not only do subjectivity issues arise, but also critique of inferring that all participants in the sample had the mental capacity to answer correctly, without recognition of mental state. The authors justified this by stating that the examiner assisted participants who struggled to respond to questions, which inflicts judgements of researcher bias. Another limitation of the study is that there was no direct control group to compare to; instead the authors chose to compare the results to findings of previous research into the general Swedish population. This leads to arguments of researcher bias, choosing to compare the results to findings that would benefit their conclusions.

The authors conclude that physiotherapeutic interventions including physical exercises should be incorporated into forensic healthcare to lower the risk of cardiovascular mortality. Although this article does not form the basis of this research, it provides supplementary information that physiotherapeutic interventions are needed within FMH.

1.7b View of physiotherapy within SMI and the barriers presented

Lee et al (2017) conducted a qualitative study using focus groups to explore the patients and mental health care professionals view of physiotherapy within SMI within Australia. Twenty four mental health professionals and 35 people with severe mental illness took part in the study. Results from the study found that both the patients and professionals showed a limited understanding of the role of physiotherapy within SMI. Barriers to physiotherapy were lack of motivation, cost, and transport. Facilitators to physiotherapy were education of physiotherapy, cost, and provision of transport.

One limitation of this study is that the researchers state that some participants did not participate in the focus groups; instead they receive a one to one interview. This change in the methodology shows that all participants were not treated equally which could skew the

findings. Within focus groups conformation issues arise; with participants influencing the responses of others, this does not occur with individual interviews, consequently affecting the dependability of the methodology. On the other hand, the use of semi-structured interviews, which were used for all participants show that the researchers tried to tackle dependability issues. Another limitation is questioning the dependability of responses given by SMI patients. However, the researchers tried to amend the issue by excluding participants who were unable to consent or were currently suffering from an acute episode of psychosis. There is also an issue with the transferability of results, with participants only being recruited from the Perth Metropolitan area in Australia.

The authors concluded that there is limited understanding of the role of physiotherapy within SMI, and there is a need for a greater understanding in order to facilitate greater physiotherapeutic involvement. This study gives insight into the possible barriers and facilitators to physiotherapy within mental health; however, it does not directly involve the FMH population in which this research question is exploring.

1.7c Barriers and facilitators to physical activity within schizophrenia

Soundy et al (2014) explored physical therapists experiences and perceptions working within SMI, investigating the barriers and facilitators to physical activity for people diagnosed with schizophrenia. In the study, 151 physical therapists from the IOPTMH were recruited via an email invitation to take part in an online survey. The survey adopted a qualitative design using open questions. Results showed that the most frequently stated themes for barriers to physical activity were the patients lack of motivation (45% of respondents) and the lack of priority given to physical activity by other professionals (25%). The most frequently stated facilitators were support by the healthcare workers (28%) and promotion of enjoyment for the patient (25%).

One limitation of this study is that the researchers report that participants were sent the survey via email, containing two open ended questions regarding barriers, and two for facilitators. However, the article does not highlight or make evident what the questions were, creating confirmability issues. On the other hand, judgements of poor confirmability can be overturned as the researchers state that a full audit trail can be obtained, reducing arguments of researcher bias. Another limitation is the use of online surveys. This method is not preferred within qualitative research as it does not allow the researcher to include probes for further elaboration. Gratton and Jones (2010) discuss that there is also a decreased depth of response in online surveys due to having to manually type responses.

The authors conclude that healthcare professionals should take an individualised approach to promote physical activity within schizophrenia. The relevance of this study highlights that there is a perceived lack of motivation for physical activity within schizophrenia. Schizophrenia is a

severe mental health illness (WHO, 2016), and is relevant to this research question because there is high prevalence of schizophrenia within FMH (REF).

1.7d Health risk factors of long stay mental health inpatients

Cormac et al (2005), evaluated the physical health and risk factors in long stay psychiatric inpatients. A semi structured cross sectional survey was carried out using 214 patients from a high secure FMH hospital (Rampton hospital) to evaluate the physical health and risk factors to the psychiatric inpatients. Two researchers conducted the interviews and examined the case notes to gather further information on medication, health problems, past physical illness, and smoking habits. Measurements of weight, blood pressure, BMI and waist circumference were taken and compared to those taken on admission. The data was analysed against preadmission case notes, and the general population. Results showed that there was a mean increase in weight since admission (+10.6Kg for males and+ 12.7Kg for females), obesity rates were higher than that of the general population (males 36% v 17% and females 75% v 22%).

One limitation of this methodology is that two researchers conducted the study. The authors state that two researchers conducted the semi structured interviews and then analysed the case notes of participants. However, there is no evidence of any standardisation, questioning the confirmability of the methodology. There is another argument for lack of confirmability, the researchers carrying out the study both claim to work at Rampton hospital, where they are carrying out the study. This leads to judgements of researcher bias and shows there was no effort to try and recruit a sample from elsewhere, also questioning the transferability of the findings.

The authors conclude that the physical health of long stay psychiatric inpatients indicated the need for health promotion in these secure settings, and a need to improve primary healthcare settings. Although this study is not directly associated with physiotherapy, the findings highlight the need for primary healthcare services within FMH secure units and provides evidence for health promotion.

1.8 Literature review conclusion

With unclear terminology and search terms, and limited amounts of studies, it is clear that physiotherapy within FMH has not been thoroughly researched. There is strong stance portrayed by Probst (2017) that indicates physiotherapy is an effective intervention within mental health. However, there is lack of mention of physiotherapy in the NHS five-year plan, which is predominantly psychiatry, pharmacotherapy and occupational therapy led. Hence the research question, what are the barriers and facilitators to physiotherapy within FMH?

Section Two: Aims and objectives

The aim of this study was to explore the perceived barriers and facilitators to physiotherapy within FMH, combining the views of experienced physiotherapists and mental health nurses. The overall study objectives were to (1) explore the barriers to patients accessing physiotherapy within FMH; (2) explore the facilitators to FMH patients accessing physiotherapy.

Section Three: Methods

3.1Theoretical stance

Twining et al (2017) states that it is vital that the theoretical stance is made clear, underpinning the research, reflecting contrasting ontological and epistemological positions. Firstly, a paradigm originates with positivist v interpretivism. Interpretivism is based on subjective experiences, with individuals having different perceptions and experiences with the external world, whereas positivist theorists are objective and quantifiable. For this piece of work an interpretivism stance was used, to allow subjective accounts of facilitators and barriers to flourish.

Within these paradigms are theoretical stances that help drive and develop goals throughout research (Twining et al, 2017). Ontology is the study of existence and what things are, basing itself on relativism and multiple realities (Scotland, 2012). On the other hand, epistemology is the study of nature of knowledge and the way we know things, based on subjectivism and construction of knowledge between people (Scotland, 2012). The basis of this research adopted an epistemology stance to try and understand the beliefs and opinions of physiotherapists and nurses within forensic mental health. The justification for an epistemology stance is due to the authors background knowledge within forensic mental health, that could not be avoided and was therefore used in a positive way.

3.2 Methodology: Quantitative v qualitative

Twining (2017) states that it is important to acknowledge the deductive or inductive approaches that can influence the nature of the study and the results they produce. Deductive approaches such as quantitative research focus on the collection of numerical and quantifiable data. The research is based on structure and uses experiments and surveys as methods, whilst adopting statistical sampling methods (Al-Busaidi, 2008). However, Grbich (1999) asks, how could you possibly quantify an individual's feeling about a certain situation? Therefore, it is important to provide inductive qualitative research to healthcare settings. Since qualitative

research does not aim to enumerate, it is sometimes viewed as the exact opposite to quantitative methods and the two methods are frequently presented as antagonists (Myers, 2009). Qualitative research avoids numerical approaches and is a means by which the researcher can gain insights into another person's views, opinions, and beliefs (Patton, 2002). It also relies heavily on accurate reporting in a natural environment, without control or restriction being imposed by the researcher (Al-Busaidi, 2008).

Quantitative research identifies a hypothesis to prove or disprove, whereas qualitative develops a research question to explore (Myers, 2009). Quantitative uses measurable outcomes and data collects to achieve statistical significance to prove generalisability of results to other populations (Al-Busaidi, 2008). On the other hand, qualitative uses explanatory contextual text and data collects until saturation, arguing transferability of findings to similar circumstances (Patton, 2002).

The current overwhelming interest is that randomised control trials are seen as the gold standard for medical healthcare research, yet it is often criticised for being reductionist (Myers, 2009). Qualitative on the other hand is more holistic and can be useful to describe a phenomenon or patient experiences (Patton, 2002). It is important to acknowledge that within research quantitative and qualitative studies complement each other to provide understanding, and one should not be seen as more superior to the other (Al-Busaidi, 2008).

There are many questions that routinely emerge in clinical practice that are more appropriately answered using experimental methods and formal scientific designs, however for the purpose of this study it was important to adopt a qualitative approach to gain meaningful opinions and beliefs. Of course, there are strengths and limitations to choosing qualitative designs for healthcare research. Limitations including being a labour-intensive approach, the risk of researcher bias due to poorly structured designs, and it does not prove transferable to wider populations. On the other hand, it can help discover meaning and beliefs, allows for a measure of sensitivity and intuition, and provide a holistic view of a particular phenomenon. With arguments for and against approaches it was important for this piece of research to be inductive and qualitative in nature, allowing participants to provide insightful views on their experiences, rather than providing numerical data that could not possibly be analysed in this way.

3.3 Design: Relevant theory

Grounded theory and phenomenology are two widely used approaches used in qualitative research (Al-Busaidi, 2008). To choose an approach to adopt, it is important to understand the positives and negatives of each approach. Grounded theory is an inductive approach where data collection and analysis are conducted simultaneously, to support the discovery of

theory from the data (Strauss and Corbin, 1998). It has been described as a flexible way of interpreting complex social phenomena. However, the approach has been criticised for being laborious, Myers (2009) explained that novice researchers may lose sight of the task and new themes emerging due to the time-consuming open coding method.

Phenomenology explores how humans make sense of an experience and their perceived meaning to such experiences (Al-Busaidi, 2008). Within phenomenology, is interpretive phenomenological analysis, whereby themes arise from analysis of the data. This includes exploring the individual's perception of an experience, but also realises that one cannot achieve this entirely and the access is reliant on the researcher's analysis through interpretive activity (Smith et al, 2009). One negative that arises within published articles is that two analysts working on the same data, can infer two completely different conclusions due to researcher subjectivity (Tuffour, 2017). Another limitation is that the approach only seeks to understand the personal experience, rather than explain how an experience occurs (Tuffour, 2017).

This piece of research has favoured phenomenology, in particular interpretive phenomenological analysis, to understand the barriers/ facilitators physiotherapists face through lived experiences, rather than develop a new theory through grounded theory.

3.4 Methods: Types of approach instruments

To capture personal life experiences there was the choice of two qualitative approach instruments, interviews or focus groups. Keats (2000) describes an interview to be a controlled interaction with verbal interchange that allows data to emerge that is difficult to measure. When compared to questionnaires, interviews allow respondents to have more freedom in their answers, capture richer data from smaller groups and allow respondents to elaborate their own opinions in areas of importance (Hicks, 2009). Whereas questionnaires are limited to set questions that participants may not have the motivation to write full answers to, instead questionnaires are suited to gathering small amounts of data from a lot of respondents (Gratton and Jones, 2010). On the other hand, interviews are often criticised for researcher bias, whether this be unconscious or conscious, respondents may feel as though they are being prompted due to the investigators actions such as nodding or head shaking (Hicks, 2009). Another limitation discussed by Gratton and Jones, (2010) is that the quality of responses is entirely dependent on the recall and recognition of the participant.

Another instrument used to collect rich and meaningful data is focus groups. This is where a group of participants share accounts and experiences related to the topic question, rather than a subjective account of one person during interviews. Wilkinson (2011) states that this instrument is useful and individuals within the group can trigger memories and stimulate

debate, which can also facilitate disclosure on the whole groups elaborative account. Advantages of this instrument are that it is more time efficient to interview more than one person at a time; it is also believed that focus groups produce a much richer set of data due to interaction and triggering of experiences and memories (Kreuger and Cassey, 2002). On the other hand, focus group interviews can lead to social conformation, documenting the public's view rather than the individuals. Also, some people tend to avoid group social interactions, and therefore may not interview well in large groups (Gribich, 1999).

For this study interviews were justified, this is because it is important for participants to subjectively explore their own experiences, whereas in focus groups one may be hindered to fully explain a past event due to social confirmation, consequently missing out on crucial data.

3.5 Methods: Interview approaches

Semi structured interviews were preferred for data collection as opposed to structured and open interviews. Al-Busaidi (2008) states that the semi structured interview is the most commonly used in healthcare qualitative research. Semi structured interviews have a flexible schedule, and the researcher can react and modify the discussion, whereas structured interviews have predetermined questions and the schedule cannot change, preventing participants the chance to elaborate (Kvale, 1996). Another possibility was open interviewing, this is where there is no set schedule, and the participant leads the discussion. However, this has been criticised for being time consuming, and is best suited for developing an area of interest, rather than gain information on a perspective like a semi structured interview (Gratton and Jones, 2010). To justify semi structured interviewing, it was important to choose an approach that allowed flexibility to explore the participants experiences, which the other two interview types could not do. However, this approach has been criticised for leading judgements to possible researcher bias, swaying the probes for the participant to answer in a certain way (Al-Busaidi, 2008).

This study used semi structure interviews carried out via online video chat (Skype). This was preferred over face to face interviewing as cost and time are significantly reduced; it also allowed a larger sample to be collected over a geographically dispersed area. This was important to gain transferability. However, Gratton and Jones (2010) argue that online interviewing is harder to build rapport when compared to face to face interviewing. To try to overcome this, an introductory passage was included explaining the researchers background, in hope to build more rapport.

3.6 Methods: Interview question design

It was important to design an interview that would produce data about the barriers and facilitators to physiotherapy. The flexibility of the semi structured interview approach allowed for continuous development, probing, and prompting throughout data collection. Introductory questions were asked first to set the scene, build rapport, and put the participant at ease. Gratton and Jones (2010) state that this is essential to calm participants nerves and to allow them to settle in order to provide trust and give meaningful, longer answers. The questions were also grouped in concepts to prevent jumping between barriers and facilitators. The questions started with discussing facilitators to try and prevent giving the interview a negative feel from the off. The questions were designed in a way that was clearly worded and unambiguous, to make them understandable to the participant. Closed questions were avoided as they limit the response to one-word answers, it was important to include open ended questions in order to produce rich and meaningful data. Table 3 discusses the justification for each question used. One of the advantages of semi structured interviewing is the possibility to use probing. Probing allows additional information from the respondent via two types of probes, clarification probes or elaboration probes. The interview format that was used is displayed in appendix 4.

Table 3: Question justification.

Question	Justification
How did you get into working within forensic mental health? OR/ AND How long have you worked within forensic mental health?	Not nessacccarily linked with the study but an inductory question to settle the particpant and build rapport.
Tell me about your working day as a physio'/ nurse in forensic mental health	Another inductory question to settle the participant and ease them into the interview. Also allows for information to flourish that could promote further probing.
Could you describe the process by which patients are refered to physiotherapy? Is there a typical route?	This question was designed because of the lack of guidance found for physiotherapy within forensic mental health. It allowed exploration of the referal process to see if this was a facilatator or barrier in some trusts.
How does the system help patients to access physiotherapy?	An example of a possible prompt to explore how the guidelines/ system in place facilitates physiotherapy.

What is it that makes it easier for patients to access physiotherapy?	An example of a possible probe to delve into some of the facilitators for patients.
Who makes the decision who gets referred and who might not?	This question further probes the referal process and provides a negative to lead on to the following concept.
What might be the barriers to patients accessing physiotherapy?	The concept of barriers were asked secondly to facilitators to prevent a negative feel towards the interview from the beginning. This questions is directly aimed at answeirng the research question.
Why might it be that some individuals are not referred to physiotherapy?	This question further explores some of the barriers leading on from the last question.
What might be done to help forensic mental health patients access physiotherapy services?	Asking what could be done better allows for discussions for potential improvements, and allows potentail bariers to be explained.
Is there anything that you could do to help forensic mental health patients access physiotherapy services?	This was asked towards the latter because it may have been interpreted as potentially criticising, asking this first could have damaged the rapport and trust with the participant.
Can you describe when you helped a patient access physiotherapy?	A probe to possibly re word the last question.
Is there anything you would like to add? Have we perhaps forgotten something that you think is important / that you would like to talk about?	A concludory question to give the particpant chance to think of anyhting important that may not have been picked up through the other questions.

3.7. Sample and participants

Registered physiotherapists and qualified mental health nurses were chosen as the sample for the study. To answer the research question, it was vital to include physiotherapists who could give personal opinions about the facilitators and barriers to the service within FMH. Up until the pilot study only physiotherapists were going to be interviewed as a sample; however as discussed further in figure 1, mental health nurses are the first point of call for FMH patients and have a clear understanding of the referral process for physiotherapy. For this reason, it was decided that nurses would be included within the sample to offer a wider understanding from the multidisciplinary team.

Table 4: Inclusion criteria

Inclusion criteria	Justification
Registered physiotherapist/ nurse.	To ensure registered professionals are included rather than students who have not finished their training.
Worked within mental health in the UK for at least one year.	It's important that the chosen sample has enough relevant experience within the field to provide independent views and opinions. Also, limiting the sample to the UK was vital because different countries within Europe have extremely different procedures and guidelines within forensic mental health.
Gained chartered status before 2018.	Gaining status after this period would have meant that prior to interview the participant would not have the required one-year experience within the field and may still be undergoing training within the job.
English as first language or fluent in English.	Non- English translation would not have been cost or time effective during a university semester.
Currently working with forensic mental health or has in the past for at least one year.	It was essential for the research question that the participants worked within the field; also widening the criteria to "in the past for at least one year" provided a larger target to sample.
Mental health as their main role, or part time alongside another role.	Allowing the inclusion of working within forensic mental health part time also widened the target population.

Table 5: Exclusion criteria

Exclusion criteria	Justification
Registered physiotherapists/ nurses that have never worked within the UK	Countries all over the world have different guidelines and procedures within forensic mental health, therefore it was essential to only include participants within the UK.
Gained status in 2018/2019.	Gaining status within this year would not have the necessary one-year experience needed for inclusion.
Non- English speaking.	Non- English translation would not have been cost or time effective during a university semester.

3.8. Sampling method

All data collection involves sampling, though the term sample is often replaced with terms such as cases or participants in qualitative research. This reflects the fact that qualitative research, because of its ontological and epistemological stance, does not consider the sample to be representative of the entire population and thus does not expect to be able to generalise from the study's findings (Twining et al, 2012). This tends to mean that sample sizes in qualitative studies are much smaller than is required for quantitative research (Hicks, 2009).

Sampling strategies are largely determined by the purpose of the study. Unlike quantitative research, statistical representativeness is not primarily sought, which makes qualitative sampling more time consuming. It was important to choose a sampling method that allowed exploration of the chosen phenomena, Al-Busaidi (2008) discusses two sampling theories commonly used to maximise data collection within qualitative research, maximum variation and homogenous sampling.

Patton (2002) describes maximum variation sampling as attempting to seek a phenomenon by representing diverse cases, covering different constituencies such as cultural background, experience, and age. On the other hand, homogeneous sampling requires the researcher to choose a small sample to describe a chosen subgroup in depth (Al-Busaidi, 2008). This study adopted a maximum variation sampling method to allow transferability to a wider population by including variations within the sample, for example physiotherapists, nurses, experiences and age were not confined to one particular subgroup.

This research obtained its sample via a poster (appendix 5) through the Chartered Physiotherapists within Mental Health (CPMH) website and social media platform as discussed in figure 1. This method was a cost-effective way of targeting participants over a geographically dispersed area, in hope to increase transferability of findings. However, one limitation of this method is that it only targets forensic mental health physiotherapists. Therefore, a snowball sampling method was introduced to allow recruitment of the forensic mental health nurses. Snowball sampling as described by Gratton and Jones (2010) is a method whereby the identified subject within the target population (physiotherapist) recommends further participants who may wish to participate in the study (mental health nurses). It is important to note that no names were exchanged at this stage to ensure confidentiality, and that the snowball sample had to initiate the first contact by emailing a non-personal address asking for participation. Snowball sampling does however pose the risk of sampling bias, and it is not considered a representative sampling method (Gratton and Jones, 2010).

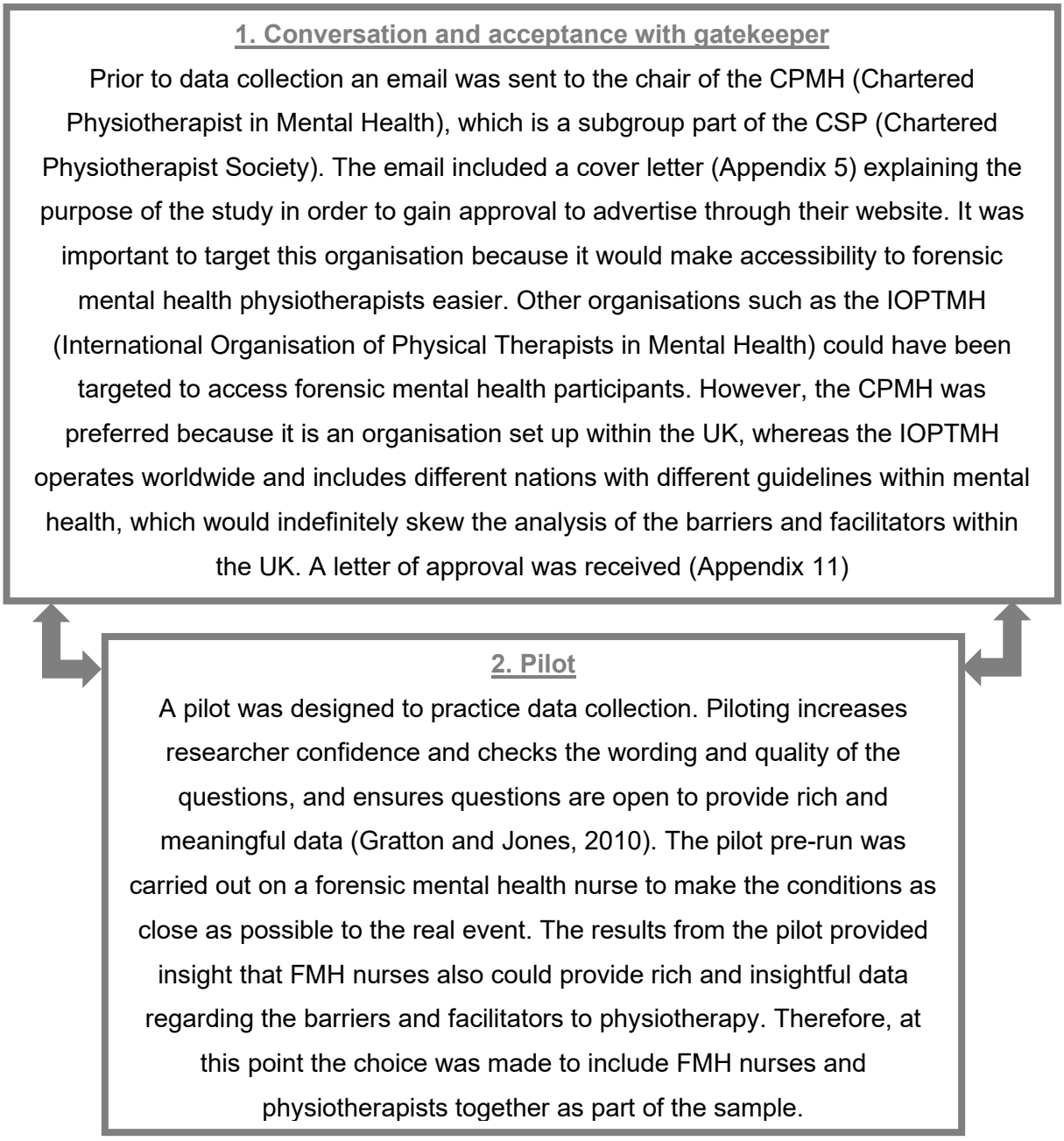
3.9. Case size

Unlike quantitative research where there is often a requirement for the largest possible case size to reach generalisability, qualitative research prefers generating richer data from a smaller group to reach transferability (Patton, 2002). For this study there was not an expected target sample size, instead saturation of data collection was preferred.

3.10 Data collection

Figure 1 is a flowchart to explain and justify the chronological steps that occurred during data collection and carrying out the research.

Figure 1: Data collection process.



3. Advertisement for sampling

Once approval had been granted from the CPMH, a poster advertisement (appendix 10) was displayed on the CPMH website platform and shared through the CPMH twitter feed. This method was chosen as it was a quick and easy way to access the target sample all over the UK, rather than manually displaying a poster inside FMH hospitals, which would not have been time or cost effective. One limitation of using online platforms to advertise is the assumption that all FMH physiotherapists and nurses operate through them. The poster advertisement includes the title, inclusion and exclusion criteria and contact information, inviting FMH workers to contact the researcher via email (on a non-personal email). It was important that only a brief description of the study was included to help minimise any predetermined judgements or bias from the participant prior to data collection.

4. Participation information sheet

Following contact initiated from the participant, a participant information sheet (appendix 9) was sent via a non-personal email. The purpose of this information sheet was to notify the nature of the study and how it abides by the key ethical principles, giving the participant the necessary information to make an informed decision for participation. One key point that was highlighted within the information sheet is the right to withdraw, as discussed in step 6.

5. Informed consent

After making an informed decision the participant could opt into the study by returning the consent form that was emailed to them. It is important to note that no pressure was put on the participant to sign and that it was the participants independent decision to participate. Once this was signed and sent back to the researcher a date for interview could be made.

6. Explanation of the right to withdraw and ethical principles.

Ethical principles such as anonymity and confidentiality were then discussed with the participant. It was important to highlight that the participant had the right to withdraw at any point up until two weeks after the interview data collection period. This is because after this period all data was anonymised for analysis, making it untraceable to a participant.

7. Introduction to the participant

Prior to the interview a brief introduction was used to introduce the author and the study. This was included because it is important to build rapport and trust when carrying out qualitative research. The introduction included a brief background of the author and interest within the field.

8. The interview (appendix 4)

Once consent had been given and a date arranged for interview, a code was emailed to the participant inviting them to join a Skype Business video call. Skype Business was chosen because of the extra security measures that are in place compared to other video call software. The participants were advised to use a non-personal email account that could be traced back to them to ensure anonymity and confidentiality, it was advised they create a new skype account that would not be traceable to them. It was also important to note that any NHS participants were not allowed to be interviewed during working hours to abide by the ethical procedures of Leeds Beckett University and the NHS. It was also advised that participants were in a private quiet room that could not be traced to find their location. Just before the interview commenced the participants were once again reminded about the right to withdrawal at any point up until data analysis (2 weeks from the interview). The interviews were recorded and stored using a Yamah Pocketrack Audio Recorder. In-between data collection the audio recorder was stored in a locked safe. Following data analysis, the recordings were permanently deleted from the device.

9.Further snowball sampling

After the interview had taken place and recording had stopped, the participants were asked if they knew any other physiotherapists or nurses that would like to participate in the study. The reason why snowball sampling was included here was to try and recruit participants that may not have seen the poster advertisement originally put out. This sampling method is also quick, easy, and cost effective. However, this sampling method has been criticised for leading to sampling bias, and not recruiting a representative sample, however due to the constraints of a MSc dissertation, the method was justified.

10.Transcription

Transcriptions were stored on password protected laptop and destroyed after analysis (2 week period). Using a Yamah Pocketrack Audio Recorder the author listened through all the recordings and transcribed them on to a Microsoft Word document, naming the document a name not traceable to the patient in any way, ensuring anonymity. The documents were stored on a password protected laptop that only the author could access. The recordings were permanently deleted from the transcribing device after transcription two weeks after interview had taken place, in line with the right to withdrawal procedure. Prior to analysis, the transcriptions were re-read against the recordings to ensure no information was missed to ensure credibility of the data.

3.11 Data analysis

Following the interpretivism paradigm, it was important to adopt an analysis that supported the underpinning theoretical stance. This section consists of examining and combining data to draw conclusions and interpretations to help develop a theory or explanation (Twining et al, 2012).

Following interpretivism and epistemology, thematic analysis was chosen as an appropriate tool for analysis for this research. Thematic analysis, described by Braun and Clarke (2006) is a method for identifying, analysing, and reporting themes. Therefore, allowing interpretation of the research topic. This is preferred to other analysis methods such as content analysis as it aims to understand the data. Content analysis is where a pre-set list of topics are created beforehand, and analysis counts the number of responses that fall within categories. Although this is quick and easy, it has been criticised for being superficial and unrelated to theory. On the other hand, thematic analysis aims to understand rather than to know the data, leading towards a more qualitative approach, which is why it was chosen for this research.

Braun and Clarke (2006) state that thematic analysis requires a number of decisions that should be explicitly considered and discussed within methodology. The first decision being, what counts as a theme? Braun and Clarke discuss that thematic analysis is flexible and it is down to researcher judgement, however consistency is vital throughout the analytical process.

Secondly, the choice was made to provide a rich description of the data through analysis, as opposed to a detailed account of one particular aspect. This type of analysis was chosen after considering Braun and Clarke's (2006) opinion, they argue that it gives the reader a sense of the important themes rather than an in-depth analysis of every theme discovered. Providing a

rich description of the data set has been criticised for losing some depth and complexity, however it is recommended for short dissertation thesis, hence the justification for selection.

Following Braun and Clarkes guidance a third decision was made, inductive versus theoretical thematic analysis. For this research, a theoretical analysis approach was taken, allowing the theoretical interest from the researcher to drive the analytic process, rather than taking a more inductive approach which is more suited to grounded theorists. However, it is important to note that this form of analysis tends to produce fewer rich data when compared to inductive thematic analysis. This method allowed coding to be specific to the research question being explored.

The next decision was choosing what level to analyse the themes, either semantically or latently. Braun and Clarke (2006) describe semantic level analysis as theorizing patterns into meanings and patterns, whereas the latent level goes further, trying to identify and understand specific aspects of the data. Semantic analysis was chosen to allow analysis in a rich descriptive way, considering the whole data, rather than specific aspects in a more detailed latent way.

The final decision for analysis was to choose whether to adopt an essentialist or constructionist analysis template. To consider meanings throughout analysis of the whole data it was important to adopt an essentialist approach. This approach was best suited for this piece of research because the researcher believed that experiences, meanings, and language are related, following an essentialist approach. A constructionist view would require latent analysis and understanding the theories between individual accounts and sociocultural contexts, which would not fit with ideology of this research.

The six phases of thematic analysis produced by Braun and Clarke (2006) have been used to explain how data analysis occurred. The six phases have been adapted to suit the research study, as displayed in table 6. NVivo software version 12 was used for data analysis on a password protected laptop to ensure confidentiality.

Table 6: Phases of thematic analysis, Braun and Clarke (2006).

Phase	**Description**
Phase 1- (Familiarising the data)	Transcription of the voice recorded data to the password protected laptop was carried out to start familiarising the data, informing the early rich descriptions of the data in a semantic way. Following this the transcriptions were re-read prior to coding to try and identify possible patterns.

Phase 2- Generating initial codes	Once the transcription was re-read, codes began to emerge. Using the NVIVO software codes could be highlighted and stored for later use. It was important for the study that each data set was given full and equal attention to. As proposed by Braun and Clarke (2006), as many codes were produced as possible, just in case they turn out to be relevant later.
Phase 3- Searching for themes	Following coding all transcripts, the codes were sorted into potential themes. NVivo12 software was used to link codes into potential themes. Some codes emerged that did not seem to fit with other themes; these were grouped into 'miss themes' in case of future need.
Phase 4- Reviewing themes	After creating initial themes, the codes were reviewed to see if they form a coherent pattern. If codes did not fit within the patterns, the theme would be reworked, or a new theme created. At this stage it became apparent what the main themes for the barrier and facilitators were going to be, allowing just fine tuning of themes before entering the next phase.
Phase 5- Defining and naming themes	During this phase identification of the essence of the theme was made clear. For each theme, a detailed analysis occurred, justifying why each code was within this theme, and how it related to the research question.
Phase 6- Producing the report	It was chosen to portray the results in a table rather than a mind map of themes. This was chosen as it makes it clear what the codes and themes were within the supraordinate. It also allowed for exploratory passages of each code.

Section Four: Ethics

It is vital that any piece of research involving a human sample follows strict ethical procedures to protect psychological welfare, rights, and dignity (Hicks, 2009). Table 6 discusses the six ethical principles highlighted by Hicks (2009), followed by a justification of how this research has abided by the principles. As part of Leeds Beckett University policy, there is also a requirement that any student participating in research needs to gain acceptance and clearance from the research ethics team. Appendix 6 is the process of ethical approval granted by Leeds Beckett University for this research. To abide by ethical procedure, the participants did not participate within their NHS working hours.

Table 7: Ethical principles and justifications.

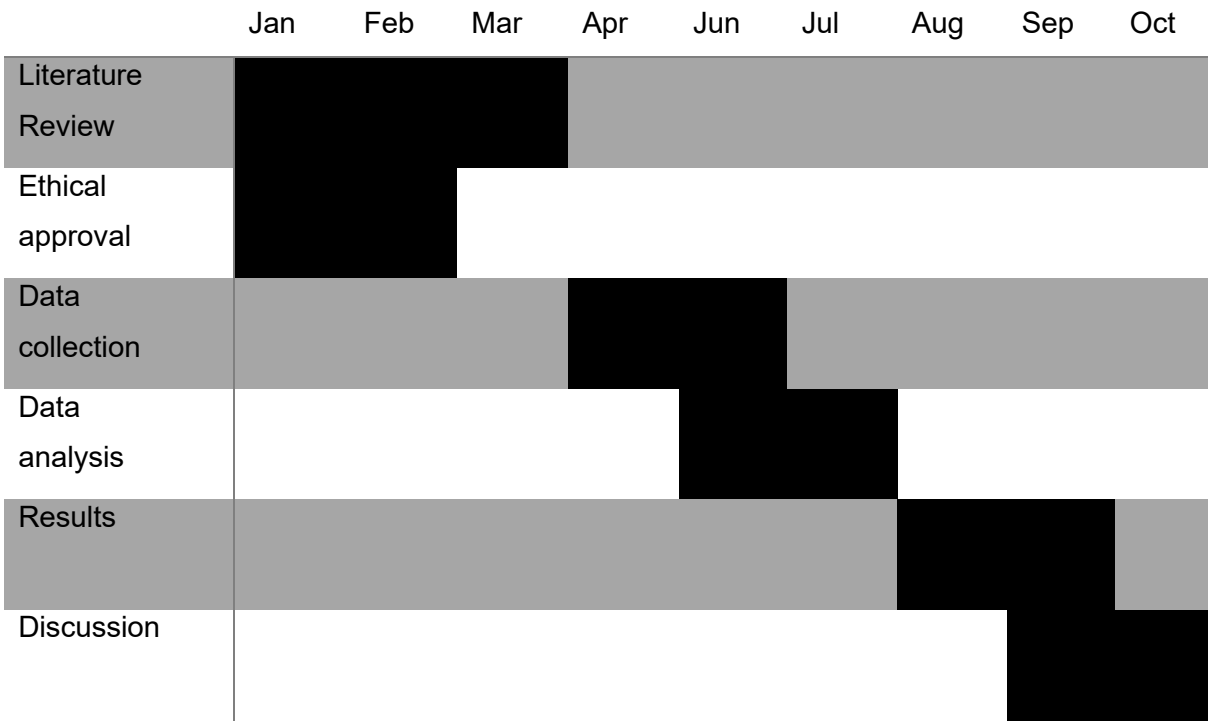
Principle	Explanation and justification
Confidentiality	The 1988 Data Protection Act supports that research should not publicly share subjects personal details, and those involved should remain anonymous to everyone apart from the researcher. To abide by this, participants were advised to use a non-personal email to protect anonymity and were also advised to conduct the online interview in a room that could not be traced back to their location. A password protected laptop was used to store transcriptions, and the transcriptions were stored for two weeks in a locked safe to allow participants the chance to withdraw from the study. Information was permanently destroyed off the transcriber. The names used within results were changed to protect anonymity and confidentiality.
Justice	All participants should be treated fairly and equally throughout the research process. In this study all participants followed the same steps throughout data collection and were all given the opportunity to withdraw during a two-week period prior to analysis. All participants undertook the same semi-structured interview by the same researcher.
Beneficence	Research should be able to make evident the benefits in taking part of the study. Although this study doesn't directly benefit the individual participants, they are made aware that the results could benefit the FMH services in the future through the participation information sheet.
Fidelity	The research should never be placed above the participants welfare, based on the premises of safeguarding, there must always be a level of trust between the participant and researcher. Introduction took place pre interview to build rapport and trust. Throughout data collection the participants are aware of their voluntary participation and right to withdraw at any point up until data analysis.
Veracity	Research should be performed truthfully and fairly, ensuring participants are not lied to. A participation information sheet with the title and nature of study ensured that the participants were fully aware of the purpose and nature of the study prior to participation.
Non-maleficence	Research should not inflict physical or mental harm to participants. Although the risk of physical or emotional harm is very low, the participants were reassured of their right to withdraw throughout. The Leeds Beckett ethical committee also branded the study as low risk during

	ethical approval. It is also important to note that all participants were instructed to participate in the interview outside of their working hours, to reduce the risk of work-related stress.

Section Five: Work plan

Figure 2 portrays the work plan scheduled by the author. It was important to set aside realistic targets alongside the author studying and working part time. Three months was allocated for producing a search strategy and critiquing the necessary research in the literature review. Two months were needed for data collection, starting with initial contact with the gatekeeper, to reaching saturation. Two months were allocated for transcribing, thorough analysis and reviewing themes. Followed by a total of three months for producing the results and discussing the findings. Details of logged supervision sessions with the authors dissertation work plan are included in appendix 7.

Figure 2: work plan



Section Six: Results

Saturation occurred after eight interviews, as there was a perceived sense from the author that the same codes and themes were emerging. The 8 participants (two males and six females) experience ranged from 3 to 15 years across private and NHS sectors. Two mental health nurses and six physiotherapists took part in the study. On average the eight interviews lasted 40 minutes. For the purpose of presentation, the transcriptions were labelled with random names to protect anonymity.

Table 8: Demographics

Participant (no.8)	Occupation	Experience within mental health (years)	Sector	Sex
Ruth	Nurse	12	NHS	F
Christine	Physiotherapist	5	Private	F
Robert	Nurse	8	NHS	M
Elizabeth	Physiotherapist	15	NHS	F
Logan	Physiotherapist	5	Private	F
James	Physiotherapist	3	NHS	M
Eileen	Nurse	6	NHS	F

After analysis 60 codes were coded, which were of interest to the research question, and of these codes 12 themes were produced. Five of these themes were interpreted as the facilitators to physiotherapy within FMH. However, for the purpose of this research the following themes will be discussed; Education of physiotherapy, Physiotherapy presence and Adapting conventional physiotherapy. These three themes were chosen because they occurred the most throughout transcription, providing rich and plentiful data. To increase confirmability a full audit trail was produced for the discussed findings of this report (appendix 8).

6.1 Facilitators

Education of physiotherapy

This theme was chosen to analyse because it occurred in 6/7 of the participants transcriptions, which is more than the other themes. This theme not only captured the participants views that education of physiotherapy helped patients to access the service, it also captured the participants suggestions that education would help overcome the barriers to physiotherapy within FMH.

Table 9
Facilitators to physiotherapy within forensic mental health

Themes	Codes	Exemplary passages	No. of passages	No. of participants contributing to nodes (n=7)
Building positive relationships	-Building Rapport	"The patients seem to get the best out of treatment when they have good relationships with the staff"	11	3
	-Enjoyment	"When interventions are fun for the patient, they are more likely to participate"	1	1
	-Care seeking	"The patient knows I am an individual practitioner that will spend some one to one time with them"	2	1
	-Goal setting	"Breaking things down into achievable goals helps initiate a start to treatment"	1	1
	-Patient length of stay	"Patients that are here long term are known to the system and their issues can be flagged up easier"	1	1
Adapting conventional physiotherapy	-Covert physiotherapy	"If somebody refuses physiotherapy then I can use other staff such as gym instructors to get my point across"	11	3
	-Flexibility	"I get a better response if I try to be as fluid and flexible as possible with people, and I think patients appreciate that personally"	5	2
		"Its useful to set group sessions up for those patients that prefer group	1	1

	-Group treatment sessions -Perseverance with treatment -Simplified documents for patients -Time of the day	work” “Within mental health you have to go in with an approach which may require multiple attempts to engage with patients” “Sometimes patients have issues with literature, so I have had to make easy read versions of documents to increase continuation to treatment” “Most patients are not early morning people, so I’ve amended my hours to better suit the patients, which is now why I work potentially until 18:30”	 1 4 6	 1 2 2
Effective referral process	-Clear referral process -Flexible referral system	“Maybe it would be easier to refer patients if there was a clear route, like for example a form that could be sent to the physio” “There are multi points of referral, so that makes it quite accessible, and the fact they don’t have to fill in complicated forms”	6 6	4 3
Physiotherapy presence	-Physiotherapy on the ward -Physiotherapist presence within MDT	“On the ward you can provide treatments to those patients who don’t have the access to leave and come to the GP clinic” “The patient may bring up their issue with the nurse which I might only pick up in the MDT meetings”	4 3 10	3 1 4

	-Physiotherapist based on site	“it would make things a lot easier if there was a physio here, that could just come and see the patients without having MOJ approval”	22	5
	-Physiotherapist presence on the ward	“It is often about being on the ward enough to promote it and giving patient a physical reminder what you do”		
Education of physiotherapy	-Health promotion	“To get people on board I actually have to promote health first”	2	2
	-Patient education	“So, the way I help patients access physiotherapy is by providing education of what I do, as most patients don’t know what we do”	7	4
	-Promoting physical activity	“Providing a level of understanding about physical activity is probably the biggest help I can give patients”	12	1
	-Promoting physiotherapy	“I think creating a physiotherapy profile and promoting it to staff and patients would help increase access”	3	2
	-Staff education	“Giving the staff on the wards a better understanding of what physiotherapy is would definitely help prevent things getting missed”	13	6

For example, Logan expressed that they have personally educated their staff and patients to understand the physiotherapy role, which has consequently led to increased staff referrals and increased interest from the patients to access physiotherapy services. As the below transcriptions portrays:

"I sometimes do health promotion to kind of profile physiotherapy"

"And this building of staff awareness has in turn bumped up the number of referrals for physio I get"

Participants Eileen and Ruth who are both FMH nurses admitted that education for themselves would be helpful to help increase the access for patients. Eileen suggested ways of increasing staff awareness which would facilitate physiotherapy within their hospital:

"Possibly posters or handouts, or even a talk by a physio on a training day to improve staff awareness, yeah I think that could possibly help"

Similarly, Ruth also expressed:

"posters on the ward to what physiotherapy services could provide, or common conditions that need a referral and a flow chart maybe of how that is done. Errmm yeah that would be helpful for me"

The views expressed throughout this theme strongly suggested that more education was needed for the staff. This theme also highlighted that if staff have a better understanding of physiotherapy, the number or referrals would increase, which links with the theme "Effective referral process"

Physiotherapy presence

This theme encapsulated the participants views that the existence of the physiotherapist within the hospital helped facilitate the service to patients. Christine discussed that their presence as the physiotherapist on the ward in fact helped increase awareness and caseload, as transcribed below:

"I would make time on the ward and patients would come talk to me, and I would really try to promote that. Yeah just that I am there, and we would make appointments. So, I think that is the best thing for patients, me just being around. It gives them a physical reminder"

And later stating:

"and it is often about being on the ward enough to promote it and getting other people sold on the same subject".

Robert also agreed and felt that the presence of the physiotherapist on the ward facilitated the service, mentioning that the patients are more likely to flag up physical health issues if the physiotherapist is present on the ward:

"when the physio is here, I think patients think oh the physio is here, I do actually have an injury that wants looking at.

Robert also suggested that increasing the presence would also increase patient engagement to physiotherapy:

"I think that actually the presence of a physio would engage a lot of the patients"

This theme was strongly identified throughout transcription, occurring in all of the participants interviews. The key code throughout was that the presence of the physiotherapist helped facilitate the service by increasing awareness and increasing ease of access.

Adapting conventional physiotherapy

This theme demonstrates some of the examples of adaptations physiotherapists have to undertake to increase the access and aid facilitation within FMH. All participants that were physiotherapists discussed ways in which they had to adapt their way of working to suit the FMH population. Adaptations include altering the time of the day and usual working hours to suit patient needs, simplifying treatments and documents to suit the patients with poor mental health, and working in a flexible way, often covertly.

Logan reported having to change her traditional working hours in order to facilitate accessing more patients a day:

"When I first started I worked classic physio hours, you know half 8 to half 4, but actually I've found that my busiest time is actually just after lunch, because a lot of my patients are not early morning people, so actually I've amended my hours to better suit the patients, which is now why I work until potentially 18:30"

Logan later explains how she specifically adapted her way of working:

"initially I was putting people down as not attending or I didn't want to come, but then I spoke to patients asking what time they preferred and I actually figured, it was a lot later during the day."

Another code that heavily featured throughout analysis was the idea of covert physiotherapy to help facilitate the service to patients whose mental health did not want them to participate in traditional physiotherapy.

Christine discussed ways of observing the patients without formally assessing them, facilitating the overall physiotherapy care for patients:

"So you have to be quite creative a lot of the time, I spend a lot of the time just watching patients moving around when they don't know that I am watching them. Sometimes I'll get a better idea of how that person is feeling and moving when they don't know they're being watched if you get what I mean?"

Logan also discussed ways in which she has adapted conventional physiotherapy to help facilitate the service to the target population, explaining how she uses other members of the team to facilitate a physiotherapy treatment:

"I think that working alongside other people, who everyone has different approaches, can be quite useful because if patients aren't responding to your approach, they may respond better to somebody else's. And if you know all sort of giving the same message, and the message is consistent, then I think that the opportunity for change then in terms of the patient is beneficial"

"I can join the gym instructor and we can kind of sort do joint one to one session that can sometimes suite the patient and their problem. Without the patients actually directly seeing me if that makes any sense, it's just about doing the physio a bit more discreetly sometimes."

6.2 Barriers

The remaining 7 themes were interpreted as barriers to physiotherapy, most of which are contrary to the facilitator themes, however a number of new themes did emerge. For the purpose of this research project the following themes were discussed: knowledge of physiotherapy, Mental Health Act law, and the patient population. The themes 'Knowledge of physiotherapy' and 'Mental health Act Law' were chosen because all seven participants talked about the theme at least once, with 'Patient population' being one of them most talked about themes throughout. The 'Mental health Act Law' theme was chosen because of the sheer volume of codes that occurred throughout.

Knowledge of physiotherapy

Throughout analysis a number of participants discussed that the staff and patients lack of understanding inhibited the likelihood of new referrals being made. James stated:

"their understanding of what physiotherapy is, is really quite poor; they just see me as the guy who does exercise and just helps sore backs"

Table 10

Barriers to physiotherapy within forensic mental health

Themes	Codes	Exemplary passages	No. of passages	No. of participants contributing to nodes (n=7)
Knowledge of physiotherapy	-Patients understanding of physiotherapy	"Their understanding of what physiotherapy is really quite poor"	4	2
	-Staffs understanding of physiotherapy	"Giving staff on the wards a better understanding of what physiotherapists do would definitely prevent things getting missed"	16	7
Mental Health Act law	-High risk patient population	"I think a barrier to treatment could be if they're aggressive, that can make it difficult"	19	4
	-Escorts for patients	"If patients cannot be escorted to my clinic room for whatever reason, I cannot see them"	9	5
	-MOJ restrictions to leave	"Patients that are confined to wards because of their risk, meaning that they can't go and see a physio without the MOJ authorising it"	10	4
	-Patient restrictions		7	2

	-Patient length of admission	"Patients are at that much of a risk to themselves they would not be able to use equipment that could act as ligatures" "Patients that have shorter admissions, consequently, don't have the time to bring up their issues"	1	1
Organisational	-Funding	"We also have issues because of the way things are funded"	4	1
	-Lone physiotherapist	"I am the only physiotherapist that cannot cover everything"	2	1
	-Part time hours	"One barrier being, there is 127 patients and I only work 20 hours per week, that's the amount of time I've been allotted"	12	3
	-Staff turnaround	"Because of the turnover of staff, it's really difficult to get everyone to recognise the value in what physio can bring"	3	2
	-Low staffing levels	"I rely on a member of staff from the ward to escort the patient over, which in the morning has a limited number of staff"	11	4
Patient population	-Attachment issues	"Patients with personality disorders that have past attachment issues may find it hard to engage in initial treatments"	1	1
	-Masking symptoms	"If they have been in prison or gangs or anything like that or abused, they're really good at hiding injuries"	10	5
	-Poor mental health	"With the negative symptoms of schizophrenia, it is hard to get motivated and have that drive, it's part of their symptoms"	17	7

	-Obesity	"There are a lot of obese people within this population, who don't have the motivation to participate"	7	3
	-Patient motivation	"Patients find it hard to motivate themselves to even get out of bed in the morning, never mind engaging in conversation with other people"	11	4
	-Poor engagement	"non-attendance is a big problem, patients get offered the service, but often never show up"	2	1
	-Sedentary behaviours	"There is a massive sedentary behaviour, possible due to medication and poor motivation"	7	2
	-Medication	"they may be drowsy because of the medication they are taking"	9	5
Presence of the physiotherapist	-No physiotherapist based on site	"The biggest barrier for us is not having a physio present on the site"	16	5
	-Lone physiotherapist	"I am the only physiotherapist that cannot cover everything"	2	1
	-Part time hours	"So there are barriers that I'm not available on the ward, or ward rounds, because I'm only part time"	12	3
	-Lack of physiotherapists within MDT	"We had a primary healthcare department, which ran supervised by nurses and a GP, with no physio present"	5	3

Referral issues	-Complicated referral process	“It’s a lengthy process trying to get authorisation for the patient to be granted MOJ approved leave to access a physiotherapist”	2	2
	-Lack of referrals	“Throughout the whole five years I worked within forensic mental health there probably wasn't many referrals to physio”	4	2
	-Missed referrals	“I don’t think the staff understand what a physio could bring to the hospital, so maybe things are getting missed or not being referred”	6	5
	-Unclear referral process	“But there is no clear referral system whereby there is a referral form, it would most likely be a telephone or email referral”	8	4
Risk assessments	-High risk patient population	“One time a patient said he wanted to see me in seclusion, but then an hour later said he wanted to kill me, so obviously I wouldn’t go”	19	4
	-Lack of access	“Mental health patients have such terrible access to healthcare, and access healthcare so sporadically and poorly in general”	5	2
	-Patient clothing	“the barriers are sometimes clothing; people don’t have the right clothing to participate”	1	1
	-Restricted equipment	“Things can be used as weapons, there’s quite an array of equipment, measuring tape, I have to sign that in and out when I use it, it’s all accounted for because of patient restrictions”	7	3
	-Restricted times	“I think sometimes the system is too restricted because it tries to get people into very set meals time, quite regimented”	3	2
	-Low staffing levels	“we are much more of a skeleton staff level to what we were, offering a much reduced service”	11	4

Similarly, Eileen discussed that due to the patients mental health they may struggle to fully understand the role of the physiotherapist:

"I think with some of our patients that are not in the best mental state, they would struggle to understand what physiotherapy is"

Lack of staff understanding was a popular code that occurred in all transcription files. The participants discussed that lack of staff' knowledge made it difficult to produce new referrals and consequently act as a barrier to physiotherapy. Robert stated:

"but in general, I don't think the staff on the wards would have a general understanding of physio and what they do, in fact I don't think some nurse do."

This statement was also supported by Eileen a mental health nurse, admitting that they don't fully understand the physiotherapists role:

"I don't think many of us here understand what a physio could bring to the hospital."

Mental Health Act Law

This theme refers to the times participants stated that jurisdictions of the population was a barrier to receiving certain aspects of physiotherapy care. The most talked about codes within this theme were the 'MOJ (Ministry of Justice) restrictions to leave' and 'High risk patient population'. Because of the forensic backgrounds of some of the patients within FMH hospitals, some of the patients are detained, requiring the MOJ to grant them approval to leave certain parts of the site or wards. Elizabeth discussed this issue:

"Now for some people it's not just the case of a doctor signing them off to see a physiotherapist, sometimes the ministry of justice has to allow it, making it a little more complicated'

Similarly, Ruth articulated the issue of not having a physiotherapy present on the wards, creating a barrier due to restrictions imposed by the law:

"if somebody had to leave hospital to go and access a physiotherapy appointment rather than a physio coming into the hospital, it would have to be subject to the MOJ approving leave for that appointment. So obviously if somebody is sectioned then they are subject to restrictions under the law."

"And if the patients don't work well with women because of their history, they have strict care plans where they could only work with males, that would have been a barrier at the time"

Logan also described a barrier due to the patients risk:

"And if a patient can't come to me because their access has been restricted, or something may have happened, they may be in seclusion or whatever, then obviously, I would need a risk assessment before going to see those patients."

Logan later discussed a personal experience that highlighted the dangerous and unpredictable nature of working within FMH:

"We did have one patient one time said he wanted to see me in seclusion, but then an hour later said he wanted to kill me".

Patient population

The characteristics associated with FMH patients were highlighted by the participants, they explained that the patients mental health was as a barrier for receiving physiotherapy. The theme 'Poor mental health' occurred in all of the participants transcriptions, being one of the most talked about themes throughout. It refers to the patients symptoms being a predominant factor which prevents their engagement in physiotherapy. To highlight this Christine noted:

"So an individual reason to why a patient wouldn't come and see me is their mental health doesn't allow them to access me."

Eileen supports this by stating,

"yeah I think one of the main challenges is overcoming the barrier within oneself. What I have seen quite a lot on the unit is that people have quite low self-esteem, and self-worth".

Logan also explained that the symptoms associated with the patients mental health impacted on their engagement, in particular motivation:

"because the of the negative things associated with their condition, they just really struggle to build up that motivation to do it."

Elizabeth described a time she tried to access a patient, but their mental health denied it:

"I am not based on the unit, I'll go on there, I'll tell them I'm coming about 2, I'll turn up at 2. And if the patient Is not available at that time for some reason, either they're struggling, they're stressed, they could miss that, and then I have to go somewhere else and the patient would not get seen."

Similarly to the theme 'Patients understanding of physiotherapy', Eileen explained that a person's mental health may lead to a lack of understanding of physiotherapy:

"Also actually knowing what the physio does, I think with some of our patients that are not in the best mental state would struggle to understand what physiotherapy is"

Ruth supports this statement by saying:

"The patient if they are really mentally unwell, they may not be able to talk or articulate their physical healthcare needs"

The participants described some of the medication FMH populations are prescribed, and there was a clear opinion that the medication caused undesirable side effects that acted as a barrier to physiotherapy. Eileen reported:

"a lot of our patients are on medication that makes them drowsy, so they may lack the motivation to get up and participate in activities during the day"

Ruth supports this and agrees that the antipsychotic medication causes patients to become drowsy:
"They may be drowsy because of the medication they are taking"
The 'medication' code was also linked with the 'sedentary behaviours' code, with participants discussing the effects of antipsychotic medication causing sedentary behaviours. Christine highlighted:
"There is a massive sedentary behaviour, this can be down to a number of factors, depression, lack of confidence, medication"

Elizabeth also mentions the prevalence of sedentary behaviours:

"There is usually quite an overweight sedentary population on the wards"

Section Seven: Discussion

7.1 Gaining trustworthiness

Credibility, transferability, dependability, and confirmability are important terminology that ensures trustworthiness in qualitative research (Trochim, 2006). Table 11, adapted from Lincoln and Guba (1985), was used to discuss the terminology, and justifies how this study merits them to gain trustworthiness.

Table11: Justification of qualitative terminology.

Terminology	Justification
Credibility (Showing confidence in the truth of the findings)	This was ensured by the inclusion and exclusion criteria, demonstrating a purposive sample. This excluded any random sampling methods, which meant that a

	representation of forensic mental health physiotherapists and nurses could occur.
Transferability (Showing the findings are applicable within other contexts)	This study can argue transferability by its evidence of providing a geographically dispersed sample, which is representative of forensic mental health. It also does this by including NHS trusts and private sectors.
Dependability (Showing that the findings can be repeated and will be consistent)	The use of semi-structured interviewing can confirm that the study could be repeated for future use. Also, figure 1 provides a step by step plan which could also be repeated for future use. To also aid dependability, the same researcher was used throughout collection and analysis.
Confirmability (Showing that the findings are not shaped by researcher bias, but instead by the case sample)	To establish confirmability an audit trail was produced (appendix 8) to detail the process of collection and analysis. This was done to reduce researcher bias and prove that the findings were shaped by the sample and not the researcher. To also aid confirmability, each transcription was sent back to the participant to check and confirm responses.

7.2 Relevance of findings

It is believed that this is the first study to investigate the barriers and facilitators to physiotherapy within FMH. This discussion considers the results from this study against pre-existing literature and provides recommendations for future physiotherapy practice within the field.

A key finding of this study was that the FMH patient population and their characteristics acted as a barrier to receiving physiotherapy. There is a growing concern regarding the physical health status of psychiatric inpatients (Cormac et al, 2005). It has been estimated that inpatients with schizophrenia die 20-25 years prematurely compared to that of the general population (Kilbourne et al, 2009). Cormac et al (2005) found that long stay psychiatric inpatients had a mean increase of 10.6 Kg (men) and 12.74 kg (women) in weight since their admission. This supports the findings from this study, as physiotherapist and nurses working within FMH expressed that that the patient population were generally overweight/ obese, which consequently acted as barrier to receiving physiotherapy. In this study, the participants highlighted that the obesity levels acted as a catalyst to sedentary behaviours. These findings reaffirm the need for physiotherapeutic interventions, not only to decrease obesity levels, but

to decrease the mortality rates associated with poor physical health within psychiatric inpatients.

Current research correlates anti-psychotic medications with the development of obesity (Bak et al, 2014). Similarly, the findings from this study also identify that a barrier to physiotherapy was due to the antipsychotic medication prescribed, this is because it is known to cause obesity and sedentary behaviours. This study used the views of physiotherapists and nurses, whereas Every-Palmer et al (2018) conducted their study to using psychiatric inpatients perceptions of their obesity. Every-Palmer et al (2018) found that the patients believed their obesity was attributed to their medication and hospitalisation. Interestingly, Every-Palmer et al (2018) found that the patients obesity increased sedentary behaviours because of loss of confidence and feeling self-conscious about their weight. This may explain why the theme 'Patient population' arose as a barrier to physiotherapy within this study, inferring that patients may choose to disengage from physiotherapy because of their obesity and loss of self-confidence. The results from this study and Every-Palmer et al (2018) highlight that both staff and patients agree that medication and obesity act as a barrier to receiving adequate healthcare within hospital, which allows for future interventions to be recommended to tackle the patient populations disengagement from physiotherapy.

However, the poor health of people suffering from SMI cannot be solely attributed to antipsychotic medication (Holt and Peveler, 2009). A meta-analysis conducted by Soundy et al (2014) concluded that another attribution to poor health within SMI is sedentary behaviours. Vancampfort et al (2017) report that these sedentary behaviours within SMI are due to the population experiencing low mood, high levels of stress, lack of self-confidence and somatic comorbidities. This correlates to the perceptions of participants within this study, who discuss that poor mental health was a barrier to receiving physiotherapy. Acting as a barrier to physical activity, sedentary behaviours have been found to increase the risk of developing cardiovascular diseases and mortality in hospitalised adults (Biswas et al, 2015). Given the evidence of sedentary behaviours of this patient population and the risk of cardiovascular disease, efforts should be made to provide tailored physiotherapeutic sessions to overcome barriers for patients with SMI.

Within this study it was found that the physiotherapy presence was a facilitator to patients accessing the service, and it is important to note that the majority consensus was that increasing the physiotherapy presence should be a recommendation to promote physiotherapy on FMH wards. This was highlighted by both physiotherapists and nurses, discussing that increasing the presence of physiotherapy, would therefore increase awareness, education, and referrals. This is similar to a sub-theme finding from the authors

Lee et al (2017), whereby mental health professionals discuss a 'lack of presence' and report that increasing the presence would increase the awareness of physiotherapy within SMI patients. The authors also discovered that mental health professionals did not perceive physiotherapy to be part of the multidisciplinary team, unlike occupational therapy, due to a lack of presence of physiotherapists within SMI (Lee, et al, 2017). Likewise, Bergman et al (2018) states that physiotherapists are not regularly involved in FMH rehabilitation teams. Research suggests that physiotherapy within mental health services are an effective way of bridging the gap between physical and mental health (Probst, 2017). However, the evidence infers that the presence of physiotherapy as a discipline is weak within FMH and SMI. Therefore, future efforts should be made to increase the presence of physiotherapy to increase knowledge and awareness to mental health professionals and patients.

The lack of knowledge of physiotherapy was a powerful theme that emerged as a barrier to physiotherapy. The physiotherapists that took part discussed that both the staff within the multidisciplinary team, and the FMH patients, had a limited understanding of what physiotherapy provided for the service. Similarly, the mental health nurses were able to highlight this theme from a different perspective, discussing that they were unsure what the physiotherapy service provided within their place of work. This limited understanding of physiotherapy is consistent with recent literature within mental health services, highlighted by Lee et al (2017). The authors found that both staff and patients with SMI had a limited understanding of the role of physiotherapy and their relevance within mental health. Consequently, this lack of understanding of physiotherapy can lead to missed referrals, acting as a barrier to patients receiving physiotherapy. It also highlights the advocacy for future staff and patient education of physiotherapy within FMH.

Conversely, it was found that education of physiotherapy was a prominent facilitator to physiotherapy. The physiotherapists highlighted that providing education to staff and patients was necessary to produce more physiotherapy referrals, facilitating the service. One mental health nurse discussed that education of the physiotherapists role would help improve their awareness. These findings are consistent with current literature within schizophrenia, highlighting that the role of physiotherapy within schizophrenia is not well understood (Stubbs et al, 2014a), and state that physiotherapists are integral in health promotion efforts within schizophrenia, offering a link between physical and mental health. Education of physiotherapy as a facilitator has also been recognised and supported by physiotherapy governing body statements within mental health services (Pope, 2009). It is clear that there is a lack of understanding of physiotherapy within mental health, and education is needed. Future recommendations to physiotherapy should include integrating awareness of the role within mandatory training for staff within the multidisciplinary team.

There was an overwhelming consensus from the physiotherapist participants that facilitation of patients accessing physiotherapy required flexibility and adaptation, hence the theme 'adapting convention physiotherapy'. The definition of conventional physiotherapy is somewhat overlooked within mental health because of the challenging nature and complexity of patients, which requires flexibility for physiotherapists working within the specialist field (Probst, 2017). The physiotherapists that took part in this study discussed a popular code that arose eleven times throughout transcription, expressing a view of 'covert physiotherapy' to increase patients engagement in physiotherapy. This supports current research within dementia, whereby physiotherapists are adapting interventions to provide individualised patient centred care (Hall et al, 2017). These adaptations required to treat within a specialist area are often overlooked within the national curriculum, and Probst (2017) recommends more efforts should be made to integrate more education to physiotherapy students regarding physiotherapy within mental health. To support this, Connaughton and Gibson, (2016) conclude that physiotherapists working with patients with SMI felt underprepared to work with this specialist patient population, and recommend a need for the undergraduate curriculum to be revised to incorporate mental health.

This study highlighted that a barrier to physiotherapy with FMH was due to the restrictions placed upon the patient population. With participants discussing that the restrictions posed by the MOJ consequently acted as a barrier to patients receiving physiotherapy. Recent research conducted by Tomlin et al (2019) investigated FMH patients perceptions of the restrictions imposed upon them. One theme which arose discussed restrictions on the patients daily lives, describing activities such as exercise to be inaccessible. This is similar to findings of this research, whereby participants explain that some patients could not leave the ward they were on, meaning that they could not visit the physiotherapy clinic off that ward. While these restrictions are necessary to protect the patient and the public, it is clear that FMH patients are at risk of a reduced service because of the restrictions imposed upon them. To support this, restrictions set out in the Mental Health Act (1983) mean that patients on a Section 41 (restriction order) are not granted approval to leave the enclosed fences of secure units, without permission from the MOJ. However, a finding of this study discusses the theme 'physiotherapy presence' and a sense of perceived importance that patients could only access physiotherapy if the physiotherapist were based on the site. Unfortunately, due to the restrictions of a Section 41 under the Mental Health Act, this excludes patients receiving physiotherapy, as they are not always granted permission to leave the hospital grounds to access an external physiotherapist.

In 2016 the five-year mental health plan acknowledged that individuals with SMI have a shorter life expectancy of 15-20 years compared to that of the general population, and therefore

recommended that by 2020/21 at least 280,00 people with SMI would receive a full physical health check (NHS, 2016). However, the findings from this study highlight that physiotherapy within FMH is underestimated, putting individuals with SMI within FMH settings at risk of missing out of their physical health needs. The findings show that the presence of physiotherapy was lacking, with some participants stating there were no physiotherapists based on site, or the physiotherapists only acquired part time roles. If this is a transferable consensus then it flags concerns that the five-year plan will struggle to meet its physical health care goals within SMI and FMH.

7.3 Limitations

The author of this research accepts its limitations, and the impact these may have on the findings. One limitation is that the provided literature search for critique, produced no relevant hits with the terms used. Undoubtedly the use of manual search strategies leads to judgements of researcher bias, questioning the credibility of the manual search. On the other hand, this does highlight that recommendations are needed to provide better terminology for FMH research. Another limitation is that the study was only advertised through the CPMH, which is a small branch associated with the Chartered Society of Physiotherapy based within the UK and requires a voluntary paid subscription. Therefore, findings from this study can not be fully transferable to a wider physiotherapy population that work within FMH, as some physiotherapists may not have subscription to the CPMH. Further research should target the IOPTMH which could include a worldwide representative and transferable sample. There were other limitations associated with sampling. To include FMH nurses a snowball sampling method was adopted, which could argue sampling bias, decreasing the credibility of the research. Future studies should include a mental health nursing platform such as the Royal College of Nursing to try and recruit samples and avoid snowball sampling limitations However, for this Masters research project the chosen sampling method was justified. While this research is the first to highlight the barriers and facilitators perceived by physiotherapist and nurses to physiotherapy within FMH, there was a missed opportunity to explore the differences in views between the professions, instead this study merged the two findings together to give a global perception. Similarly, there was also a missed opportunity to include other professions and patients within FMH. Therefore, future recommendations for researching the barriers and facilitators to physiotherapy within FMH should explore the differences between the wider MDT and/or the views of patients.

7.4 Impact and implications

Given that the NHS have proposed a five-year plan to improve the services within mental health, this study will further inform governing bodies about the physiotherapy services within

FMH. It provides insight to physiotherapists working within the FMH speciality, informing them what can be done to facilitate physiotherapy within the service. While the phenomenon being explored can not be interpretated to all FMH establishments, the findings highlight that the presence of physiotherapy within FMH is sparse, and there is a perceived lack of understanding of the physiotherapy role from both staff and patients. These implications can provide recommendations to the NHS five-year plan to improve the service. As physiotherapy was not mentioned within this five-year plan, these findings could help promote physiotherapy within the whole of mental health, not just FMH settings. These findings also have implications on similar healthcare settings, such as acute mental health hospitals (that are not forensic), whereby SMI prevalence is also high. Finally, these findings have identified that there is a gap within the knowledge, highlighting that research within physiotherapy and FMH is sparse, and more efforts need to me made to promote the service for patients.

7.5 Conclusions

Ultimately, both physiotherapists and nurses that work within FMH highlighted that the facilitators to physiotherapy were education of physiotherapy, adapting conventional physiotherapy and the presence of physiotherapy. The barriers were the patient population, the Mental Health Act law and a lack of knowledge of physiotherapy. These findings are similar to the findings of other studies which explore the perceived facilitators/ barriers within other mental health settings. Nonetheless, the findings provide a good insight into physiotherapy within FMH. Services within mental health should be parallel to those within general health settings, however it is clear that the presence and understanding of physiotherapy within FMH is lacking. Further research and guidelines are needed to help clarify and promote the physiotherapy profession within FMH.

Section Eight: References

Al-Busaidi, Z., 2008. Qualitative Research and its Uses in Health Care. *Sultan Qaboos University Medical JournaL*, Volume 8(1), pp.11-19.

Andiné, P. and Bergman, H., 2019. Focus on Brain Health to Improve Care, Treatment, and Rehabilitation in Forensic Psychiatry. *Frontiers in Psychiatry*, 10.

Arsenault-Lapierre, G., Kim, C. and Turecki, G. (2004). Psychiatric diagnoses in 3275 suicides: a meta-analysis. *BMC Psychiatry*, 4(1).

Bak, M., Fransen, A., Janssen, J., van Os, J. and Drukker, M., 2014. Almost All Antipsychotics Result in Weight Gain: A Meta-Analysis. *PLoS ONE*, 9(4), p.e94112.

Bergman, H., Nilsson, T., Andiné, P., Degl'Innocenti, A., Thomeé, R. and Gutke, A., 2018. Physical performance and physical activity of patients under compulsory forensic psychiatric inpatient care. *Physiotherapy Theory and Practice*, pp.1-9.

Biswas, A., Oh, P., Faulkner, G., Bajaj, R., Silver, M., Mitchell, M. and Alter, D., 2015. Sedentary Time and Its Association With Risk for Disease Incidence, Mortality, and Hospitalization in Adults. *Annals of Internal Medicine*, 162(2), p.123.

Braun, V. and Clarke, V., 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), pp.77-101.

Chesney, E., Goodwin, G. and Fazel, S., 2014. Risks of all-cause and suicide mortality in mental disorders: a meta-review. *World Psychiatry*, 13(2), pp.153-160.

Connaughton, J. and Gibson, W., 2016. Do Physiotherapists Have the Skill to Engage in the "Psychological" in the Bio-Psychosocial Approach?. *Physiotherapy Canada*, 68(4), pp.377-382.

Cormac, I., Ferriter, M., Benning, R. and Saul, C. (2005). Physical health and health risk factors in a population of long-stay psychiatric patients. *Psychiatric Bulletin*, 29(1), pp.18-20.

England.nhs.uk. (2016). [online] Available at: https://www.england.nhs.uk/wp-content/uploads/2016/02/Mental-Health-Taskforce-FYFV-final.pdf [Accessed 22 Jan. 2020].

Every-Palmer, S., Huthwaite, M., Elmslie, J., Grant, E. and Romans, S., 2018. Long-term psychiatric inpatients' perspectives on weight gain, body satisfaction, diet and physical activity: a mixed methods study. *BMC Psychiatry*, 18(1).

GOV.UK. (2017). *Thriving at Work: a review of mental health and employers*. [online] Available at: https://www.gov.uk/government/publications/thriving-at-work-a-review-of-mental-health-and-employers [Accessed 22 Jan. 2020].

GOV.UK. 2020. *Physical Activity Guidelines: UK Chief Medical Officers' Report*. [online] Available at: <https://www.gov.uk/government/publications/physical-activity-guidelines-uk-chief-medical-officers-report> [Accessed 20 March 2020].

GOV.SCOT (2020). *Mental health: Forensic mental health - gov.scot*. [online] Available at: https://www.gov.scot/policies/mental-health/forensic-mental-health/ [Accessed 23 Jan. 2020].

Gratton, C. & Jones, I. (2010) Research Methods for Sports Studies. 2nd ed. Taylor and Francis.

Grbich C. *Qualitative Research in Health*. London: Sage Publications, 1999.

Gunn, J. and Taylor, P., 2014. *Forensic psychiatry: clinical, legal and ethical issues*. CRC Press.

Hall, A., Watkins, R., Lang, I., Endacott, R. and Goodwin, V., 2017. The experiences of physiotherapists treating people with dementia who fracture their hip. *BMC Geriatrics*, 17(1).

Hare Duke, L., Furtado, V., Guo, B. and Völlm, B. (2018). Long-stay in forensic-psychiatric care in the UK. *Social Psychiatry and Psychiatric Epidemiology*, 53(3), pp.313-321.

Harty, D., Walsh, J., Harty, D. and Walsh, J. (2018). *NHS England » Transforming services for forensic patients*. [online] England.nhs.uk. Available at: https://www.england.nhs.uk/blog/transforming-services-for-forensic-patients/ [Accessed 23 Jan. 2020].

Haw, S. (2014) Self-harm. The short-term physical and psychological management and secondary prevention of self-harm in primary and secondary care. Clinical guideline 16. (2004). London: NICE.

Health.ebsco.com. 2020. *CINAHL Database | Index To Nursing And Allied Health | EBSCO | EBSCO Health*. [online] Available at: <https://health.ebsco.com/products/the-cinahl-database> [Accessed 1 October 2020].

Heller, T., Roccoforte, J., Hsieh, K., Cook, J. and Pickett, S., 1997. Benefits of support groups for families of adults with severe mental illness. *American Journal of Orthopsychiatry*, 67(2), pp.187-198.

Hicks, C. (2009). *Research methods for clinical therapists*. Edinburgh: Churchill Livingstone/Elsevier.

Hirsch, L., Yang, J., Bresee, L., Jette, N., Patten, S. and Pringsheim, T., 2017. Second-Generation Antipsychotics and Metabolic Side Effects: A Systematic Review of Population-Based Studies. *Drug Safety*, 40(9), pp.771-781.

Holt, R. and Peveler, R., 2009. Obesity, serious mental illness and antipsychotic drugs. *Diabetes, Obesity and Metabolism*, 11(7), pp.665-679.

House of Commons Committee of Public Accounts (2017). *Mental health in prisons*. House of Commons, pp.1-30.

James, K., Stewart, D. and Bowers, L. (2012). Self-harm and attempted suicide within inpatient psychiatric services: A review of the Literature. *International Journal of Mental Health Nursing*, 21(4), pp.301-309.

Keats D (2000) *Interviewing***.** Buckingham: Open University Press

Kilbourne, A.M., Morden, N.E., Austin, K., Ilgen, M., McCarthy, J.F., Dalack, G. and Blow, F.C., 2009. Excess heart-disease-related mortality in a national study of patients with mental disorders: identifying modifiable risk factors. *General hospital psychiatry*, *31*(6), pp.555-563.

Kvale S. (1996), *Interviews: An Introduction to Qualitative Research Interviewing*, Thousand Oaks Ca., Sage Publications.

Kvale, S. and Brinkman,S. (2009*) Interviews. An introduction to qualitative research interviewing* (2nd edition) Sage Publications, Thousand Oaks, California

Krueger, R.A. and Casey, M.A., 2002. *Designing and conducting focus group interviews*.

Lally, J., Gardner-Sood, P., Firdosi, M., Iyegbe, C., Stubbs, B., Greenwood, K., Murray, R., Smith, S., Howes, O. and Gaughran, F., 2016. Clinical correlates of vitamin D deficiency in established psychosis. *BMC Psychiatry*, 16(1).

Lally, J., Ajnakina, O., Singh, N., Gardner-Sood, P., Stubbs, B., Stringer, D., Di Forti, M., David, A., Smith, S., Murray, R., Howes, O. and Gaughran, F., 2019. Vitamin D and clinical symptoms in First Episode Psychosis (FEP): A prospective cohort study. *Schizophrenia Research*, 204, pp.381-388.

Lee, S., Waters, F., Briffa, K. and Fary, R. (2017). Limited interface between physiotherapy primary care and people with severe mental illness: a qualitative study. *Journal of Physiotherapy*, 63(3), pp.168-174.

Legislation.gov.uk. 2019. *Mental Health Act 1983*. [online] Available at: <http://www.legislation.gov.uk/ukpga/1983/20> [Accessed 22 December 2019].

Lincoln, YS. & Guba, EG. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage Publications

Livingston, J., Rossiter, K. and Verdun-Jones, S. (2011). 'Forensic' labelling: An empirical assessment of its effects on self-stigma for people with severe mental illness. *Psychiatry Research*, 188(1), pp.115-122.

McNamee, L., Mead, G., MacGillivray, S. and Lawrie, S. (2013). Schizophrenia, poor physical health and physical activity: evidence-based interventions are required to reduce major health inequalities. *British Journal of Psychiatry*, 203(4), pp.239-241.

Myers, M. D. (2009). *Qualitative research in business & management*. Thousand Oak, CA: Sage

NHS (2017). Mental Health Act Statistics, Annual Figures: 2016-17, Experimental statistics - NHS Digital. [online] NHS Digital. Available at: https://digital.nhs.uk/data-and-information/publications/statistical/mental-health-act-statistics-annual-figures/mental-health-act-statistics-annual-figures-2016-17-experimental-statistics [Accessed 31 May 2019].

NHS Digital. (2018). Inpatients formally detained in hospitals under the Mental Health Act 1983 and patients subject to Supervised Community Treatment: 2015/16, Annual figures - NHS Digital. [online] Available at: https://digital.nhs.uk/data-and-information/publications/statistical/inpatients-formally-detained-in-hospitals-under-the-mental-health-act-1983-and-patients-subject-to-supervised-community-treatment/inpatients-formally-detained-in-hospitals-under-the-mental-health-act-1983-and-patients-subject-to-supervised-community-treatment-2015-16-annual-figures [Accessed 31 May 2019].

NHS. (2020). *NHS England » Adults*. [online] England.nhs.uk. Available at: https://www.england.nhs.uk/mental-health/adults/ [Accessed 22 Jan. 2020].

NHS (2016). *THE FIVE YEAR FORWARD VIEW FOR MENTAL HEALTH*. [online] Available at: https://www.england.nhs.uk/wp-content/uploads/2016/02/Mental-Health-Taskforce-FYFV-final.pdf [Accessed 4 Feb. 2020].

Nice.org.uk. (2011). *Introduction | Common mental health problems: identification and pathways to care | Guidance | NICE*. [online] Available at: https://www.nice.org.uk/guidance/cg123/chapter/Introduction [Accessed 11 Jun. 2019].

Office for national statistics (2017). *Suicides in the UK - Office for National Statistics*. [online] Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2017registrations [Accessed 22 Jan. 2020].

Patton, M. Q. (2002). *Qualitative Evaluation Methods*.CA: Sage Publications.

PEDro. 2020. *English - Pedro*. [online] Available at: <https://pedro.org.au/> [Accessed 1 October 2020].

Pérez-Iglesias, R., Martínez-García, O., Pardo-Garcia, G., Amado, J., Garcia-Unzueta, M., Tabares-Seisdedos, R. and Crespo-Facorro, B., 2013. Course of weight gain and metabolic abnormalities in first treated episode of psychosis: the first year is a critical period for development of cardiovascular risk factors. *The International Journal of Neuropsychopharmacology*, 17(01), pp.41-51.

Pope, C., 2009. Recovering mind and body: a framework for the role of physiotherapy in mental health and well-being. *Jounral of Public Mental Health, 8*(2), p.3639

Probst, M. (2017). *Physiotherapy and Mental Health*. Clinical Physical Therapy, Toshiaki Suzuki, IntechOpen, DOI: 10.5772/67595. Available from: https://www.intechopen.com/books/clinical-physical-therapy/physiotherapy-and-mental-health

PubMed. 2020. *Pubmed*. [online] Available at: <https://pubmed.ncbi.nlm.nih.gov/> [Accessed 1 October 2020].

Scotland, J., 2012. Exploring the Philosophical Underpinnings of Research: Relating Ontology and Epistemology to the Methodology and Methods of the Scientific, Interpretive, and Critical Research Paradigms. *English Language Teaching*, 5(9).

Smith, J. Flower, P. Larkin, M, (2009). Interpretative Phenomenological Analysis: Theory, Method and Research. *Qualitative Research in Psychology*, 6(4), pp.346-347.

Soundy, A., Stubbs, B., Probst, M., Hemmings, L. and Vancampfort, D. (2014). Barriers to and Facilitators of Physical Activity Among Persons With Schizophrenia: A Survey of Physical Therapists. *Psychiatric Services*, 65(5), pp.693-696.

Stewart, D., Bowers, L., Simpson, A., Ryan, C. and Tziggili, M. (2009). Manual restraint of adult psychiatric inpatients: a literature review. *Journal of Psychiatric and Mental Health Nursing*, 16(8), pp.749-757.

Strauss A, and Corbin J (1998) *Basics of qualitative research; techniques and procedures for developing grounded theory*, (2nd edition) Thousand Oaks, Sage Publications

Stubbs, B., Soundy, A., Probst, M., De Hert, M., De Herdt, A. and Vancampfort, D. (2014a). Understanding the role of physiotherapists in schizophrenia: an international perspective from

members of the International Organisation of Physical Therapists in Mental Health (IOPTMH). *Journal of Mental Health*, 23(3), pp.125-129.

Stubbs, B., Probst, M., Soundy, A., Parker, A., De Herdt, A., De Hert, M., Mitchell, A. and Vancampfort, D. (2014b). Physiotherapists can help implement physical activity programmes in clinical practice. *British Journal of Psychiatry*, 204(2), pp.164-164.

Sullivan, D. and Mullen, P., 2006. Forensic mental health. *Australian and New Zealand Journal of Psychiatry*, (40), pp.505-507.

Swanson, J.W., 1994. Mental disorder, substance abuse, and community violence: An epidemiological approach. *Violence and mental disorder: Developments in risk assessment*, pp.101-136.

Tomlin, J., Egan, V., Bartlett, P. and Völlm, B., 2019. What Do Patients Find Restrictive About Forensic Mental Health Services? A Qualitative Study. *International Journal of Forensic Mental Health*, 19(1), pp.44-56.

Trochim, W.M.K. (2006) *Qualitative validity* [Internet] Available at: http://www.socialresearchmethods.net/kb/qualval.php

Tuffour, I., 2017. A Critical Overview of Interpretative Phenomenological Analysis: A Contemporary Qualitative Research Approach. *Journal of Healthcare Communications*, 02(04).

Twining, P., Heller, R., Nussbaum, M. and Tsai, C., 2017. Some guidance on conducting and reporting qualitative studies. *Computers & Education*, 106, pp.A1-A9.

Vancampfort, D., Firth, J., Schuch, F., Rosenbaum, S., Mugisha, J., Hallgren, M., Probst, M., Ward, P., Gaughran, F., De Hert, M., Carvalho, A. and Stubbs, B., 2017. Sedentary behavior and physical activity levels in people with schizophrenia, bipolar disorder and major depressive disorder: a global systematic review and meta-analysis. *World Psychiatry*, 16(3), pp.308-315.

Völlm, B., Edworthy, R., Holley, J., Talbot, E., Majid, S., Duggan, C., et al. (2017). A mixed-methods study exploring the characteristics and needs of long stay patients in high and medium secure settings in England: implications for service organisation. *Health Services Delivery Research*.

Völlm, B., Clarke, M., Herrando, V., Seppänen, A., Gosek, P., Heitzman, J. and Bulten, E., 2018. European Psychiatric Association (EPA) guidance on forensic psychiatry: Evidence based assessment and treatment of mentally disordered offenders. *European Psychiatry*, 51, pp.58-73.

Walker, E., McGee, R. and Druss, B., 2015. Mortality in Mental Disorders and Global Disease Burden Implications. *JAMA Psychiatry*, 72(4), p.334.

Wilkinson, S., 2011. Analysing focus group data. *Qualitative research*, *3*, pp.168-184.

World Health Organization (2005). *Promoting mental health: Concepts, emerging evidence, practice: report of the World Health Organization.* Department of Mental Health 194 Clinical Physical Therapy and substance abuse in collaboration with the Victorian Health Promotion Foundation and the University of Melbourne; 2005. Geneva: World Health Organization.

World Health Organization (2016). *International classification of diseases and related health problems*. ICD-10 10th revision; 2016. Fifth edition– Geneva: World Health Organization

World Health Organisation. (2019). [online] Available at: http://www.euro.who.int/__data/assets/pdf_file/0004/404851/MNH_FactSheet_ENG.pdf?ua=1 [Accessed 22 Jan. 2020].

World Health Organisation. (2020). *10 facts on mental health*. [online] Available at: https://www.who.int/news-room/facts-in-pictures/detail/mental-health [Accessed 22 Jan. 2020].

Zhang, C., Fang, X., Yao, P., Mao, Y., Cai, J., Zhang, Y., Chen, M., Fan, W., Tang, W. and Song, L., 2017. Metabolic adverse effects of olanzapine on cognitive dysfunction: A possible relationship between BDNF and TNF-alpha. *Psychoneuroendocrinology*, 81, pp.138-143.

Section Nine: Appendices

Appendix 1: 'Hospital' search term

Appendix 2: CINAHL search

Appendix 3: PUBMED search

Appendix 4: The interview design

Online video interview format

Greeting to participant

Background of study

Ethics and right to withdraw

Consent

Introductory questions

How did you get into working within forensic mental health?

Tell me about your working day as a physio' in forensic mental health

Let's talk about physiotherapy services within forensic mental health.

Could you describe the process by which patients are refered to you? Is there a typical route?

Prompt: How does the system help patients to access physiotherapy?

Probe: What is it that makes it easier for patients to access physiotherapy?

Who makes the decision who gets referred and who might not?

What might be the barriers to patients accessing physiotherapy?

Why might it be that some individuals are not referred to you?

What might be done to help forensic mental health patients access physiotherapy services?

Is there anything that you could do to help forensic mental health patients access physiotherapy services?

Probe: Can you describe when you helped a patient access physiotherapy?

Conclusion questions

Is there anything you would like to add? Have we perhaps forgotten something that you think is important / that you would like to talk about?

Thank you for your time!

Appendix 5: Cover letter to the CPMH

I am currently a student at Leeds Beckett University studying physiotherapy (MSc Pre-registration). For my research topic I am exploring the views of physiotherapists that work within forensic mental health. Using a semi- structured interview design I would like to discuss the potential facilitators and barriers to physiotherapists working within this field.
With your permission, would it be possible to advertise through the CPMH for possible participants?

Before research takes place it will be granted ethical approval from the Leeds Beckett ethical committee.

Thank you for your time,
James Starmore.

Appendix 6: Ethics

Application Ref: 62251
Applicant Name: JAMES STARMORE
Project Title: What are the potential barriers/ facilitators for physiotherapists working within forensic mental health hospitals?

Dear JAMES STARMORE, before Gill Phillips, the Local Research Ethics Co-ordinator, can give ethical approval for this project, revisions or further information are required. Please see your application on the online system for details.

Please note that you cannot commence any data collection until ethical approval is received.

Sent on behalf of the Local Research Ethics Co-ordinator.

Appendix 7: Supervision log

Date of meeting: 04/07/19	**Time of meeting:** 10:00
Student: James Starmore	**Supervisor:** James Milligan
Summary of main issues discussed: Initial ideas • Sudden cardiac arrests within youth football • Other interests for study (effects of lack of sleep on cardiovascular system) • Forensic mental health and physiotherapy • Writing a project that will be enjoyable • Choosing what methodology would suite me best	
Agreed actions • Explore qualitative designs into physiotherapy and forensic mental health	
Signed – student: James Starmore	
Signed – supervisor James Milligan	

Date of meeting: 08/09/19	**Time of meeting:** 16:00
Student: James Starmore	**Supervisor:** James Milligan
Summary of main issues discussed: The research question and methodology • A clear research question "what are the barriers and facilitators to physiotherapy within forensic mental health?" • How to answer this question. Via interviews • Who I need to target? Inclusion/ exclusion criteria • Initiating discussions with a gatekeeper to accessing participants (CPMH)	
Agreed actions • Start to familiarize myself with interview types • Initiate contact with CPMH for a platform to advertise my study for participation	
Signed – student: James Starmore	
Signed – supervisor James Milligan	

Date of meeting: 18/10/19	**Time of meeting:** 14:00
Student: James Starmore	**Supervisor:** James Milligan
Summary of main issues discussed: Gaining ethical approval • Risk • Stages of ethical approval	
Agreed actions • Sending ethics to Leeds Beckett Ethical Committee for approval	
Signed – student: James Starmore	
Signed – supervisor James Milligan	

Date of meeting: 14/12/19	**Time of meeting:** 17:00
Student: James Starmore	**Supervisor:** James Milligan
Summary of main issues discussed: Literature review • Layout • Search strategy • Critique	
Agreed actions • Comprehensive search strategy and critique of the literature	
Signed – student: James Starmore	
Signed – supervisor James Milligan	

Date of meeting: 24/03/20	**Time of meeting:** 18:00
Student: James Starmore	**Supervisor:** James Milligan
Summary of main issues discussed: Transcription and analysis • Ways of transcribing • Braun and Clarke (2006) thematic analysis • How to layout for final report	
Agreed actions • Write up of data collection and analysis	
Signed – student: James Starmore	
Signed – supervisor James Milligan	

Date of meeting: 14/08/20	**Time of meeting:** 17:00
Student: James Starmore	**Supervisor:** James Milligan
Summary of main issues discussed: Discussion and limitations • How to produce a final report • How to link it to current research • Limitations of the study • Conclusion • Abstract • Final pointers and tips	
Agreed actions • Write up of discussion and conclusion sections	
Signed – student: James Starmore	
Signed – supervisor **James Milligan**	

Appendix 8: Audit trail

Example passages	Codes/ concepts	Themes	Supraordinate
"To get people on board I actually have to promote health first"	Health promotion	Education of physiotherapy	Facilitators
"Ermmmm well, as I've said we run these health promotion kind of groups to increase awareness"			
"So, the way I help patients access physiotherapy is by providing education of what I do, as most patients don't know what we do"	Patient education		
"So I can provide some written information to them about physio and what it can do"			
"So the way I help people access it, you can pick any example, but actually help them, provide education"			
"I could if I had the resources, if I could I would go in and do some promotion work, I could go do some screening, screen everyone for pain, for activity levels and look at the barriers, screen for posture. Chest physio as well, promote that, you know they all smoke"			
"probably some education or leaflets to help promote what physios do"			
"its all about trying to basically get as much information into the patients and staff about physical health"			
"educating the patients individually helps"			
"And so physical activity is my biggest promotion"	Promoting physical activity		
"So, I do a lot around physical activity promotion"			
"it is much more about trying to get people to be as active as they can be and understand why that's important"			
"We do a lot of physical activity to educate the patients"			
"so its all about trying to basically get as much information into the patients and staff about physical health, ermmm in order to enable a healthier heart"			
"Patients need exercise promotion to prevent declines in physical health"			
"I would be heavily promoting physical activity at that time"			
"We have just managed to have some t shirts made, with HCA activator on them to give out to healthcare assistants who are promoting physical activity"			
"making an environment to the best they can be, so ill measure distances for people on the wards, even down the corridor so that they can tell how many walking laps they are doing, and can measure			

themselves for their own personal knowledge”			
“So across the wards that I work on, that level of understanding about physical activity which is probably the biggest help I can give people is spreading in various different ways”			
“think that because I do a lot of work around physical activity because that’s where I see the biggest needs.			
“Promoting exercise is key to influencing patients”			
“I think creating a physiotherapy profile and promoting it to staff and patients would help increase access”	Promoting physiotherapy		
“Yeah, so that could be tackled in the promotion work, educating staff as well, I find that helps. They have a basic idea, but there is probably a lot they don’t know about physiotherapy, and it helps to educate them”			
“I promote chest physio as well, promote that, you know they all smoke”			
“It helps when staff understand what physiotherapy is”	Staff education		
“so its all about trying to basically get as much information into the patients and staff about physical health, ermmm in order to enable a healthier heart”			
“well in the induction I would discuss what the physio role is and where we work”			
“I find that the teaching the healthcare assistants about us increases their referrals”			
“So ermm, ive tried to run a group of physical health, for health care assistants which, I think would work quite well”			
“Ive trained my lot to understand physical activity and me”			
“Possibly posters or handouts, or even a talk by a physio on a training day to improve staffs awareness, yeah I think that could possibly help”			
“Yeah, so that could be tackled in the promotion wor, educating staff as well”			
“I sometimes do health promotion alongside the physical health people, we would do kind of physical health checks and do them to kind of profile physio, but also the dietician SLT, the physical health care team and nurses. Its not that we don’t get a lot of referral, because we do get a lot, but to help build peoples awareness”			
“It could be incorporated into mandatory training, where you have a physio come in and do a talk about their role, and what they would do”			
“To give staff on the wards a better understanding of what they could look out			

for, this would definitely prevent things getting missed”			
“Or a poster on the ward to what physiotherapy provides, or common conditions that need a referral, possibly a flow chart, yeah that would help increase referrals”			
“Educating my staff has helped provide a better service within my hospital”			
“On the ward you can provide treatments to those patients who don’t have the access to leave and come to the GP clinic”	Physiotherapy on the ward	Physiotherapy presence	
“if I can’t get into that gp clinic I would then just go to the wards and do what I can there and catch up with them another time”			
“So that means when on the ward can you actually provide, what you can do to provide physio treatment. And there’s not much ff the wards, no room for someone to take the top off or whatever, there no rooms suitable enough for you to do a whole assessment”			
“I would say the physios would have to treat on the ward”			
“The patient may bring up their issue with the nurse which I might only pick up in the MDT meetings”	Physiotherapy presence within the MDT		
“The other roles that aren’t so physio I guess, because all the nurses and staff don’t have a medical background, I attend MDT meetings promotion and to get my foot in”			
“Attending the MDT allows nurses to flag up any issues around referrals”			
“it would make things a lot easier if there was a physio here, that could just come and see the patients without having MOJ approval”	Physiotherapist based on site		
“I’m based on the same campus, so they just have to pop over”			
“In terms of accessibility to get treatment, we go to them, that makes a difference if there sectioned to the unit”			
“some patients need permission by the ministry of defence if they want to leave and that’s a big barrier, so we would go to them”			
“but if you had a physio based on the unit that would be better, because they could realise, they’ve been up all night we can go see them later, but I don’t have that flexibility, that’s the down side of it”			
“Because if we were based on the ward I could pick up more referrals because I would notice it”			
“I think if we had the physio clinic in the building, in the forensic unit, it would help the patients access”			

“you’d be able to promote it more wouldn’t you, if you were actually there”			
“And it was the patient at these other sites who were not really having their physio needs met at all, so when the job came up here It was really because that the decision had been made that actually they needed a physio based in each site, not a full time physio but part time, but they need a part time present on the site, so the other team didn’t have to keep travelling, but the patient needs could still be met”			
“It would help raise our awareness”			
“It is often about being on the ward enough to promote it and giving patient a physical reminder what you do”	Physiotherapist based on the ward		
“I’ll talk to any of the patients and if I go onto the ward ill find patients come up to me, because they know me and say I’ve got a problem, and I’ll give them a bit of advice or id chat to them or say right, I’ll come back and book an appointment to see you”			
“So, you have to be quite creative a lot of the time, I spend a lot of the time just watching patients moving around when they don’t know that I am watching them”			
“unless I go in and knock on their door”			
“I’ll sometimes over hear conversations on the wards and go, oh, I’ll go have a look at them”			
“So me being there or my assistant increases my awareness”			
“and it is often about being on the ward enough to promote it and getting other people sold on the same subject”			
“Well, being physically present on the ward works really well”			
“I would make time on the ward and patients would come talk to me, and I would really try to promote that. Yeah just that I’m there and we would make appointments. So I think that’s the best thing for patients me just being around. It gives them a physical reminder”			
“when the physio is here I think patients think oh the physio is here, I do actually have an injury that wants looking at”			
“i think that actually the presence of a physio would engage a lot of the patients”			
“When I’m on the wards I can talk to staff about possible referrals”			
“I think my presence helps”			
“because I don’t have to wait for referrals off anybody, I’m on and off the wards and I’m seeing something, then I can offer it them if that’s required”			

“I think that it makes easier for them to access if I physically go and get them and bring them to the clinic”			
“then if they approach me, then I could come and see them quicker, I wouldn’t need to do as much exploring what the risk and so what were, because of I’ve already done that previously”			
“but I also generate my own work, so if I’m walking about and I see something or I’m walking about and I hear about something I think I should be getting involved in then I just put them on my waiting list, then I get involved with them”			
“I tend to go on the ward and patients just come up to me”			
“I think for the majority of them its actually quite easy because I’m in and out of the wards all of the time “			
“I’m in and out of the wards all of the time to just show my face, or the community centre as well, so I leave it up to them to come and find me pretty much”			
“you’d be able to promote it more wouldn’t you, if you were actually there”			
“Because if we were based on the ward, I could pick up more referrals because I would notice more”			
“If somebody refuses physiotherapy then I can use other staff such as gym instructors to get my point across”	Covert physiotherapy	Adapting conventional physiotherapy	
“And if I’m not the best resource to trial it as a physio then maybe there’s someone else that can, who has a better rapport”			
“Because I do a lot assessments, patients feel like they’re being tested, and I don’t feel like that always goes particular well. So I just try to use other members of staff to help me with that”			
“they don’t want to see me or even have the insight to realise there is a problem, so in that way we have to covert physio and do a bit ore around the environment and equipment trials”			
“there’s patients that you need to go and offer a service to a patient a number of times, and be prepared for your assessment to go over a number of sessions of seeing them before you can actually come off with an realistic or appropriate treatment plan”			
“and I think that working alongside other people, who everyone has different approaches, can be quite useful because if patients aren’t responding to your approach, they may respond better to somebody else’s. And if you know all sort of giving the same message, and the message is consistent, then I think that the			

opportunity for change then in terms of the patient is beneficial”			
“I have to do a lot of skimming the surface of things rather than going into looking at the depth”			
“he doesn’t want that to be highlighted, so I am monitoring him from a far, and giving him advice, but I cant get anywhere near him with an SP02 monitor”			
“Sometimes I do a bit of covert physio, in that ill give some guidance to a member of staff and then I’ll go back and ask questions”			
“So you have to be quite creative a lot of the time, I spend a lot of the time just watching patients moving around when they don’t know that I am watching them. Sometime il get a better idea of how that person is feeling when they don’t know they’re being watched if you get what I mean. So you can look at movement and see if somebody’s pain level is addressing that”			
“I have to adapt to conventional methods to suite the population”			
“I get a better response if I try to be as fluid and flexible as possible with people, and I think patients appreciate that personally”	Flexibility		
“But obviously that’s not the same for every physio but I’m quite lucky that I can do that, so if I think someday needs seeing the same week then I can make that happen”			
“and I suppose that’s partly because I work on my own, that I have a waiting list, but I have complete control of my diary”			
“I think pretty much at the moment I have made it as open as much as I can make it”			
“its up to me to move the service in whatever direction I feel, or think I would work, so its 100% flexible”			
“Its useful to set group sessions up for those patients that prefer group work”	Group treatment sessions		
“Within mental health you have to go in with an approach which may require multiple attempts to engage with patients”	Perseverance with treatments		
“Sometimes patients have issues with literature, so I have had to make easy read versions of documents to increase continuation to treatment”	Simplified documents		
“so we have used the easy read version of the healthy heart document that I managed to find online”			
“I do a lot around changing the colours and changing the fonts, those types of things to try and increase errrmmm, access”			
“everyone has a different level of understanding and there’s a few guys that can converse quite well, but when it comes			

down to a sort of written down format or breaking it down simply its easier that way”			
““Most patients are not early morning people, so I’ve amended my hours to better suit the patients, which is now why I work potentially until 18:30”	Time of the day		
“Yeah, normally I work hands on face to face 10 onwards, I’m in about 8, this is due to patient regime, getting up having meds getting a shave, following ward protocols, sharp procedure and then around 1 o clock normally it slows down again, sort of this slump after lunch time, probably happens in all clinics, also there’s a drop in café as well, so its knowing the guys well enough to know they’re no good to me at this time, so I’ll come get you when I know you’ll be up for it later on”			
“because I actually starting later and finishing later actually is better for the patient, and therefore more patients are able to access”			
“Because of I’m relying on a member of staff from the ward to escort the patient over, the ward especially in the morning has a limited number of staff”			
“And when they’ve got used to you seeing them at a certain time of the day, the patients often feel quite let down when you can’t see them in that moment, that can be a problem in terms of behaviours”			
“There are some that prefer late morning, but actually the afternoon slot is much more popular, there’s more people up. So that’s one thing, but that’s not really the system as such that’s me just changing my hours to help fit in the service, so that I could provide a better service for the patient”			
“Their understanding of what physiotherapy is really quite poor”	Patients understanding of physiotherapy	Knowledge of physiotherapy	Barriers
“Also actually knowing what the physio does, I think with some of our patients that are not in the best mental state would struggle to understand what physiotherapy is”			
“I think the biggy is understanding what physio provides, traditionally and holistically from patients and staff”			
“but there understanding of what physiotherapy is really quite poor, they just see me as the guy who does exercise and just helps sore backs, and asks what it is specifically”			
“Giving staff on the wards a better understanding of what physiotherapists do would definitely prevent things getting missed”	Staffs understanding of physiotherapy		
“no it was a massive surprise to them that we would even think respiratory on the back of all the COVID stuff. No, they don’t			

know all the things that we can do, and obviously that's our job to enlighten them"			
"sometimes things get missed, or people don't know if they need to get hold of me"			
"Ermmmmm, lack of understanding of what physio does, errm some people don't know I exist, errrm despite being here a long time"			
"its interesting, it's the understanding within the hospital with what a physio can do"			
"I don't think many of us here understand what a physio could bring to the hospital"			
"No I don't think everyone in the unit understands what physios do"			
"They have a basic idea, but there probably a lot they don't know about"			
"They do not have a full understanding"			
"Sometimes they have an idea, not exhaustively but it periodically"			
"its really difficult to get everyone to recognise the value in what physio can bring"			
"but in general, I don't think the staff on the wards would have a general understanding of physio and what they do, in fact I don't think some nurse do"			
"not having a, well not just the nurse but the people on the ward not having an awareness of basic physical healthcare physio"			
"A lot of my staff don't know what we do"			
"some of the new staff don't know we have a physio, or what they do"			
"Ill be the first to admit that I don't understand the role within mental health fully"			
"I think a barrier to treatment could be if they're aggressive, that can make it difficult"	High risk patient population	Mental health Act Law	
"You see its not just as simple as someone coming in or out, there has to be risk assessments for the patient, maybe has to be approved by the ministry of justice depending on the patients section"			
"Some patients that are on the most secure ward can not leave the ward due to their risk to other people"			
"they have to stay on secure wards to prevent them from harming others or themselves"			
"sometimes requiring constant one to one observations, and it would be impossible for them to leave the ward to go and see a physio"			
"There are patients that are confined to wards because of their risk within the public, meaning that they cant just go and see a physio without the MOJ authorising it"			

“The unpredictable nature of the patients because of their mental health could mean that everything is sorted for a particular session, but you turn up and the patient has either been in an altercation, or is threatening to other staff, meaning that the session could not go ahead”			
“And if they don’t work well with women and they had strict care plans where they could only work with males, that would have been a barrier at the time”			
“we have a lot of self-harm, so rehabbing, so people have had broken bones deliberately, and I’ve been involved in rehab and care of deliberately burnt themselves”			
“so if a patient approached me saying that they feel they need physio, then obviously if I don’t know them, I would have to check out if it’s safe, I don’t know all the patients that well, I have to do a bit of background research, I can’t see them straight away, and need to make sure I know fully about their risk and so on”			
“And you know if a patient cant come to me because, physically or because there access have been restricted or something may have happened, they may be in seclusion or whatever, then obviously, I would need a risk assessment before going to see those patients”			
“We did have one patient one time said he wanted to see me in seclusion, but then an hour later said he wanted to kill me, so they said maybe don’t come straight away”			
“Well there’s practical reason in terms of our medium secure wards, we have a lot of prison transfers, and they can’t always access the low secure environments”			
“But that person may not be able to access or have access to a clinic type of assessor, errmmmm, you know so that’s a restriction but again part of the, that’s not something you can get over, because theyre in a medium secure unit for a reason, they have a transfer from prison”			
“Because it is a medium secure unit, there is an element of danger, so a main part of the job is ensuring safety”			
“Some patients for example are one, dangerous to themselves due to self-harm and wanting to hurt themselves. And two, attacking staff because of their mental state”			
“because another issue is that its not just as simples as a patient being referred to physio, you’ve got to find escorts to take them out of the hospital, you’ve got to come up with a management plan because of their risk outside of the hospital, got to get a			

section 17, all of which Is a pretty lengthy process to get somebody near a physio with there not being one employed within the hospital”			
“Its always about ensuring staffs safety, if there is a risk that day, access will be hard”			
“If there is a dangerous patient, there’s no way they can leave the ward to access physiotherapy”			
“If patients cannot be escorted to my clinic room for whatever reason, I cannot see them”	Escorts for patients		
“And id only see patients if they had an escort, if I’m ever having to do any palpation or anything ermmm then, or if they have to take their clothes off I would have to have a chaperone there with me on escort”			
“then allocating escorts that are trained to handcuff or restrain”			
“Ermmm sometimes theres a, well its not a barrier to getting treatment but the quality of it, is that sometimes they do have to have chaperones, and it has to be on the unit”			
“Because of I’m relying on a member of staff from the ward to escort the patient over, the ward especially in the morning has a limited number of staff”			
“Actually, when the time comes, it may be that something has happened, it can be very unpredictable. You know something has happened on the ward or whatever, and it means that member of staff that was due to be that escort, suddenly isn’t available”			
“Which means I see physically less patients throughout the day because i have to escort patients to me, and back again to the ward”			
“because another issue is that its not just as simples as a patient being referred to physio, you’ve got to find escorts to take them out of the hospital”			
“a big barrier is that patients require escorts, which always isn’t easy”			
“Patients that are confined to wards because of their risk, meaning that they can’t go and see a physio without the MOJ authorising it”	MOJ restriction		
“You see its not just as simple as someone coming in or out, there has to be risk assessments for the patient, maybe has to be approved by the ministry of justice depending on the patient’s section”			
“There are patients that are confined to wards because of their risk within the public, meaning that they can’t just go and see a physio without the MOJ authorising it”			

“In terms of accessibility to get treatment, we go to them, that makes a difference if there sectioned to the unit”			
“Some people are restricted to the unit and it’s a complicated long process to get out of it”			
“Everyone in there is on a section and in order to get you need to have a medical team to decide of your allowed a section 17, which means you’re allowed to leave the unit”			
“Now for some people its not just the case of a doctor signing them off, sometimes the ministry of justice has to allow it, making it a little more complicated”			
“Is complicated and takes a lot of time, there’s a lot of sections you see, the ones that we come across in psychiatric units, the forensic sections there’s more of them and they’re a little more complicated”			
“because of their risk outside of the hospital, got to get a section 17, all of which Is a pretty lengthy”			
“to go and access a physiotherapy appointment rather than a physio coming into the hospital, it would have to be subject to the ermm sort of ermm MOJ approving leave for that appointment”			
“Patients are at that much of a risk to themselves they would not be able to use equipment that could act as ligatures”	Patient restrictions		
“You see its not just as simple as someone coming in or out, there has to be risk assessments for the patient, maybe has to be approved by the ministry of justice depending on the patient’s section”			
“Some patients that are on the most secure ward cannot leave the ward due to their risk to other people”			
“It might be hard for some of our patients to access the equipment needed, or even leave the ward”			
“Also, on our ICU wards, patients are at that much of a risk to themselves they would not be able to use equipment that could act as ligatures”			
“And you know if a patient can’t come to me because, physically or because there access have been restricted or something may have happened, they may be in seclusion or whatever, then obviously, I would need a risk assessment before going to see those patients”			
“Even things like you know trying to access gyms. You can’t access that on a medium secure ward, the equipment in the gym is sort of fixed bench presses so that’s restricted to the things you can do”			

“Patients that have shorter admissions, consequently, don’t have the time to bring up their issues”	Patient length of admission		
“Patients with personality disorders that have past attachment issues may find it hard to engage in initial treatments”	Attachment issues	Patient population	
“If they have been in prison or gangs or anything like that or abused, they’re really good at hiding injuries”	Masking symptoms		
“however with some of our patients they are very good at disguising their pain level through their movement, so you cant tell really, because they are so used to being under stress”			
“so I’ve got a patient who is post COVID who I think has got fatigue, but when I’ve asked him he’s says no I’m absolutely fine, yet the people that he’s working with, we think he’s just trying to disguise that he doesn’t want it highlighting, because of his level of “I’m trying to be a big man” on a ward and trying to maintain his safety”			
“A lot of the patients that come from prison or gang related backgrounds don’t like to admit anything is wrong, I think it’s a way they mask a lot of their emotions or feelings, in order to look strong, so possible pain or issues could get missed due to this”			
“The staff may have referred on their behalf but when I’ve turned up, the patient will say no its okay I’m fine, ill deal with it”			
“sometimes someone has made the referral and by the time I get to them they’ll say I don’t want to see you anymore; I don’t need to see you”			
“And that’s not necessarily true, sometimes it is but sometimes the nursing staff will go ooo they’re still needing pain relief and still taking medication, so obviously the pain still hasn’t gone away”			
“they don’t want to see me or even have the insight to realise there is a problem, so in that way we have to covert physio and do a bit ore around the environment and equipment trials”			
“they might require physio, know that a nurse cannot help the problem so just keep it to themselves”			
“Sometimes they will mask an injury to not look weak, as some come from a gang culture”			
“With the negative symptoms of schizophrenia, it is hard to get motivated and have that drive, it’s part of their symptoms”	Poor mental health		
“So an individual reason to why a patient wouldn’t come and see me is their errrrmmmm mental health doesn’t allow them to access me”			

“yeah just like the mental health issues is massive then you’ve got autism on top of that”			
“Also actually knowing what the physio does, I think with some of our patients that are not in the best mental state would struggle to understand what physiotherapy is”			
“Oh actually I think a big one is the patients mental health”			
“if they’re not in a good place at that time, mentally, it would be much harder to get them on board with seeing a physio”			
“and find it hard to motivate themselves to even get out of bed in the morning, never mind engaging in conversation with other people during activities”			
“The unpredictable nature of the patients because of their mental health could mean that everything is sorted for a particular session, but you turn up and the patient has either been in an altercation, or is threatening to other staff, meaning that the session could not go ahead”			
“And if the patient Is not available at that time for some reason, either they’re struggling, they’re stressed, they could miss that, and then I have to go somewhere else”			
“yeah I think one of the main challenges is overcoming the barrier within oneself. What I’ve seen quite a lot on the unit is that people have quite low self-esteem, and self-worth”			
“Then there’s probably been a few guys not to sure, maybe due to their personality or maybe where they are at the moment with their mental health”			
“I suppose its because of where they are with the mental health, they’re at their most brittle”			
“Any physio they may require, because they’re not always in a place mentally where they can go to see people in the acute hospitals at that stage”			
“Yeah undoubtedly their conditions play a massive role, have a massive impact on motivation to be able to engage”			
“because the of the negative things associated with their condition, they just really struggle to build up that motivation to do it”			
“However, some patients due to their mental health may not be able to”			
“The patient if they are really mentally unwell they may not be able to talk or articulate their physical healthcare needs”			

“There are a lot of obese people within this population, who don’t have the motivation to participate”	Obesity		
“There are a lot of obese people within this population”			
“The medication they take makes them obese”			
“Also some medication such as clozapine can cause issues with patients eating habits, consequently putting on more weight”			
“one is we know the antipsychotic medication on average makes you put on about on average 4 kilos in the first month, and goes up to about 12 kilos after 12 months I think”			
“you store more lipids and crave more sugary things when you take them			
“So it is a role in obesity but by allowing them to exercise, but bearing in mind that’s only going to tackle the 20% of obesity”			
“Patients find it hard to motivate themselves to even get out of bed in the morning, never mind engaging in conversation with other people”	Patient motivation		
“So barriers around motivation”			
“a lot of our patients are on medication that makes them drowsy so they may lack the motivation to get up and participate in activities during the day”			
“Which often means they retire early to bed or don’t feel up to ward activities”			
“and find it hard to motivate themselves to even get out of bed in the morning, never mind engaging in conversation with other people during activities”			
“They haven’t got great motivation”			
“and particularly with the negative symptoms of schizophrenia, very flat, and it is hard to get motivated. It’s hard to have that drive, it’s part of the symptoms of schizophrenia”			
“So although they have pain and have problems, one of the main barriers is the symptom of actually being driven to do anything about it”			
“The staff may have referred on their behalf but when I’ve turned up, the patient will say no its okay I’m fine, ill deal with it”			
“even with like an additional person that could support that some people just, because the of the negative things associated with their condition, they just			

really struggle to build up that motivation to do it”			
“Yeah undoubtedly their conditions play a massive role, have a massive impact on motivation to be able to engage, for a lot of people that, I see a lot of people that during the assessment and treatment they really want to engage, but in fact they really struggle to do anything you suggest in between treatment, and carry anything on by themselves or with care co-Ordinator of HCA on the ward”			
“non-attendance is a big problem, patients get offered the service, but often never show up”	Poor engagement		
“I think the nonattendance is a big problem”			
“There is a massive sedentary behaviour, possible due to medication and poor motivation”	Sedentary behaviours		
“There is a massive sedentary behaviour”			
“low levels of any activity levels on the ward unless people are really having that promoted to them”			
“Ermm the nature of the environment, there’s something about the environment and something about the ethos, generally of lack of activity, poor motivation could be involved in physical activity people just not liking it”			
“we’ve got some people that never want to come out of their bedrooms within an autistic client group, so there all sorts of issues to why people are sedentary”			
“there’s usually quite an overweight sedentary group”			
“And also they’re not a very active bunch either”			
“they may be drowsy because of the medication they are taking”	Medication		
“Yeah, its ermm, obviously there’s the psychogenic medication. Obesogenic medication, medication issues”			
“a lot of our patients are on medication that makes them drowsy so they may lack the motivation to get up and participate in activities during the day”			
“The medication some patients are on means they become tired easily”			
“Also some medication such as clozapine can cause issues with patients eating habits, consequently putting on more weight”			
“we know the antipsychotic medication on average makes you put on about on			

average 4 kilos in the first month, and goes up to about 12 kilos after 12 months I think”			
“patients within forensic mental health hospitals are often on a lot of medication that can slow down metabolism and are often overweight”			
“The unwanted side effects of medication makes it hard to pluck that motivation out”			
“Antipsychotic medication can cause patients to have lack of motivation”			

Appendix 9: Participation information sheet

Participation Information Form

Study Title: What are the potential barriers/ facilitators for physiotherapists working within forensic mental health hospitals?

Principal Investigator: James Starmore (student physiotherapist)

Invitation
You are invited to take part in our experimental study. Before you decide whether or not you would like to take part it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with friends and relatives if you wish. Ask me if there is anything that is not clear, or if you would like more information, a contact number and address are at the end of this information sheet. It is important that all of your questions are answered before you decide whether or not to participate in the research study.

What is the purpose of the study?

The purpose of this study is to investigate and explore the potential barriers and facilitators physiotherapists may face when working within forensic mental health.

Am I a suitable participant for the study?

We are seeking healthy volunteers who are 18 years or above and are fluent in English to take part. You should be a Chartered physiotherapist that currently works within mental health or has in the past for at least one year. You would have to be available to complete an online skype interview that could take up to one hour of your time. We will ask you to check that you are eligible to take part in the study from a list of criteria that will be given to you during the first visit.

Do I have to take part?

No. It is your decision whether or not to take part. If you decide to take part, you will be given this participant information form to keep. You will be required to sign a consent form if you take decide to take part in the experiment. You are free to withdraw from the study at any time, up until the point of data collection. You do not have to give your reasons for withdrawal.

What will happen if I agree to take part?

You will be asked to be co-operative through non personal email addresses to comply with informed consent and further procedures. You will then be invited to take part in a skype interview, where you will be asked a series of semi structured questions about your experiences working within forensic mental health. You will have an opportunity to ask questions and seek clarification. After the interview, you will have up to two weeks if you wish to withdraw from the study.

What are the possible benefits of taking part I the study?

The study will not help you directly. The findings will help us understand the challenges physiotherapist face when working within forensic mental health and will help us to design future studies to explore physiotherapy interventions within mental health further. You can have access to the finding results through dissemination if you wish.

What are the possible risks of taking part in the study?

The experiment has been risk assessed and ethically approved by Leeds Beckett University and these documents are available on request. This study was categorised as category 2 ethics/ low risk. Although the risk of emotional distress is low, you are free to terminate the interview at any point, and advice to your GP and CSP helplines can be given.

What if there is a problem?

If you have a concern about any aspect of this study, you should ask to speak with myself or the supervisor associated with this study. They will do their best to answer your question. If you wish to complain formally about any aspect of the study, including the conduct of the investigator, you can do this through the Independent Contact Person identified at the end of this sheet. In the event that something does go wrong, and you are harmed during the research study there are no special compensation arrangements. If you are harmed and this is due to someone's negligence, then you may have grounds for a legal action for compensation, but you may have to pay your legal costs. The normal University complaints mechanisms will still be available to you.

What do I have to do before I take part in the study visit?

We would like you to ensure that you are in a safe and quiet place for interview, in a room that cannot be tracked back to you. There are no other requirements so you can continue with your normal diet and daily activities.

What will happen to the results of the study?

It is expected that the study findings will be presented at a scientific end of university conference and written up for a scientific journal.

Will taking part in this study be kept confidential?

All information collected about you will be coded for anonymity and kept strictly confidential other than to those of us who are involved directly with the study. The study is not designed to collect information about your attitudes or behaviours that are deemed 'sensitive'. We are duty bound to disclose any information that you provide that relates to criminal activity so we encourage you not to engage the investigators in conversation about such matters. Any data gathered that leaves Leeds Beckett University will be coded to maintain your anonymity. You are free to leave the study at any time and without giving a reason. If you do wish to withdraw before study completion, unless you object, we will still keep records relating to you, as this is valuable to the study. The information will be kept confidential at all times and held securely on paper and electronically at Leeds Beckett University under the provision of the 1998 Data Protection Act.

Complaints and Independent Contact

If you have any complaints, concerns or would like to chat about any aspect of the research with someone independent to the research you should contact:

Dr Rob Brooks (School Research Ethics Co-ordinator)

School of Clinical and Applied Sciences, Leeds Beckett University, Calverley Street, Leeds, LS1 3HE

Tel: 0113 81 25636 or email r.b.rooks@leedsbeckett.ac.uk

Contact for further information

If you require further advice about this study you may contact

James Starmore (Principal Investigator/ student physiotherapist)

School of Clinical and Applied Sciences, Leeds Beckett University

e-mail: j.starmore3682@student.leedsbeckett.ac.uk

James Milligan (Research Supervisor)

School of Clinical and Applied Sciences, Leeds Beckett University, Calverley Street, Leeds, LS1 3HE

Tel: 0113 81 23494 **or email** j.g.milligan@leedsbeckett.ac.uk

What do I do next?

If you decide that you would like to take part in the study then please inform James Starmore as the principal investigator who will arrange a time for you to participate or ask any further questions. You will be given a copy of this information sheet and the consent form to keep. You can have more time to think this over if you are at all unsure.

Thank you for taking the time to consider participating in this study.

Appendix 10: Advertisement of study

What are the potential barriers/ facilitators for physiotherapists working within forensic mental health hospitals?

Research co-ordinator:	Research supervisor:
James Starmore	James Milligan
j.starmore3682@student.leedsbeckett.ac.uk	j.g.milligan@leedsbeckett.ac.uk

I am currently studying physiotherapy (MSc pre-registration) at Leeds Beckett University, looking for willing participants to participate in an online interview to explore physiotherapy experiences within forensic mental health. You will be required to take part in an online skype interview, to hold a conversation about your experiences working within forensic mental health.

Who can participate?

Inclusion	*Exclusion*
- Registered physiotherapists/ nurses that have worked within mental health in the UK for at least one year. - English as first language or fluent in English - Currently working with forensic mental health or has in the past for at least one year. -Mental health physiotherapy/ nurse as their main role, or part time alongside another role.	- Registered physiotherapists/ nurses that have never worked within the UK. - Gained status in 2018/2019. - Non- English speaking.

Gatekeeper details

This study has approval for advertisement by Caroline Griffiths (Vice chair for the CPMH)

The project has received ethical approval from the Local Research Ethics Co-ordinator/Leeds Beckett University Research Ethics Committee.

If you have any further questions or would like to participate, please contact j.starmore3682@student.leedsbeckett.ac.uk James Starmore (student).

Dear James,
It is with great pleasure and on behalf of the CPMH committee that I give you permission to use the CPMH web page and will moderate iCSP Mental Health Network to allow the publication of your Research participant request.
Please contact me if you have any difficulties with this.
Best wishes
Caroline

[redacted]
Vice Chair
Moderator

Chartered Physiotherapists in Mental Health

Appendix 12: Risk assessment

STAGE 1 - RESEARCH ETHICS APPROVAL FORM

Research by students and staff at the University must receive ethical approval before any data collection commences. Applications may be made on the Research Ethics Online system or via approval forms.

If using the approval forms, applicants complete this Stage 1 - Research Ethics Approval Form which includes the Risk Checklist.

For student projects classified as Risk Category 1 (e.g., many literature reviews), these can be approved on this Stage 1 – Research Ethics Approval Form by the Research Supervisor.

Applicants whose research studies are classified as Risk Category 2 or 3 must also complete and submit the separate Stage 2 - Research Ethics Approval Form.

Guidance for completion of this form and the application process is provided on pages 3 and 4.

APPLICANT DETAILS	
Your name (if a group project, include all names)	James Starmore
School	Leeds Beckett University- Physiotherapy
STATUS	
• Undergraduate student	☐
• Taught Postgraduate student	☒
• Research Postgraduate student	☐
• Staff member	☐
• Other (give details)	
IF THIS IS A STUDENT PROJECT	
• Student ID	33457680
• Course title (eg. BA (Hons) History)	MSc Physiotherapy (Pre-registration)
• Student email	j.starmore3682@student.leedsbeckett.ac.uk
• Research Supervisor's name Or Director of Studies' name	James Milligan
THE PROJECT/STUDY	
Project /study title	What are the potential barriers/ facilitators for physiotherapists working within secure forensic mental health care settings?
Start date of project	01/07/2019
Expected completion date of project	25/11/2020
Project summary – please give a brief summary of your study (maximum 100 words)	
Research suggests that forensic mental health patients are in need of physiotherapy interventions due to; obesity, restraint injuries, self harm and poor mental health. However, there is no mention or little to none studies investigating physitherapy within these secure settings. the government state that patients within these hospitals should receive the same care as that of the general public, however it is clear that there is lack of motivation when accessig or refereing patients to physiotherapy. therfore, what are the potential barriers/ facilitators to physiotherapists working within forensic mental health?	
CONFIRMATION STATEMENTS	
The results of research should benefit society directly or by generally improving knowledge and understanding. Please tick this box to confirm that your research study has a potential benefit. *If you cannot identify a benefit you must discuss your project with your Research Supervisor to help identify one or adapt your proposal so the study will have an identifiable benefit.*	☒
Please tick this box to confirm you have read the Research Ethics Policy and the relevant sections of the Research Ethics Procedures and will adhere to these in the conduct of this project.	☒

RISK CHECKLIST - Please answer ALL the questions in each of the sections below – tick YES or NO WILL YOUR RESEARCH STUDY.....?		YES	NO
1	Involve direct and/or indirect contact with human participants?	☒	☐
2	Involve analysis of pre-existing data which contains personal or sensitive information not in the public domain?	☐	☒
3	Require permission or consent to conduct?	☒	☐
4	Require permission or consent to publish?	☐	☒
5	Have a risk of compromising confidentiality?	☐	☒
6	Have a risk of compromising anonymity?	☐	☒
7	Collect / contain sensitive personal data?	☒	☐
8	Contain elements which you OR your supervisor are NOT trained to conduct?	☐	☒
9	Use any information OTHER than that which is freely available in the public domain?	☐	☒
10	Involve respondents to the internet or other visual/vocal methods where participants may be identified?	☐	☒
11	Include a financial incentive to participate in the research?	☐	☒
12	Involve your own students, colleagues or employees?	☐	☒
13	Take place outside of the country where you are enrolled as a student, or for staff, outside of the UK?	☐	☒
14	Involve participants who are particularly vulnerable or at risk?	☐	☒
15	Involve any participants who are unable to give informed consent?	☐	☒
16	Involve data collection taking place BEFORE informed consent is given?	☐	☒
17	Involve any deliberate deception or covert data collection?	☐	☒
18	Involve a risk to the researcher or participants beyond that experienced in everyday life?	☐	☒
19	Cause (or could cause) physical or psychological harm or negative consequences?	☐	☒
20	Use intrusive or invasive procedures?	☐	☒
21	Involve a clinical trial?	☐	☒
22	Involve the possibility of incidental findings related to health status?	☐	☒
23	Fit into any of the following security-sensitive categories: concerns terrorist or extreme groups; commissioned by the military; commissioned under an EU security call; involves the acquisition of security clearances? If yes, see the guidance.	☐	☒

CLASSIFICATION The following guidance will help classify the risk level of your study	Tick the box which applies to your project
If you answered **NO** to all the above questions, your study is provisionally classified as **Risk Category 1** (literature reviews will be Risk Category 1).	☐
If you answered **YES** to any question from 1-13 and **NO** to all questions 14-22, your study is provisionally classified as **Risk Category 2**.	☒
If you answered **YES** to any question from 14-22, your study is provisionally classified as **Risk Category 3**.	☐
If question 23 has been answered **YES**, your application will be reviewed by the Chair of the University Research Ethics Sub-committee	☐

Appendix 13: A statement to declare

I confirm that the work submitted in this project is my own. Where material has been used from other sources it has been properly acknowledged

Signed: James Starmore Date: 01/10/202