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Exploring the attitudes of mental health nurses and mental health nursing students toward the physical health of service users- a mixed methods study

A thesis submitted for the degree of
Professional Doctorate (Nursing)

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Contents

List of Figures

Abstract

Rationale: People with mental ill health face higher mortality rates than the general population with reported reductions in life expectancy of up to twenty years, often dying from common medical conditions that do not impact on mortality rates for the general population. Mental health nurses and mental health nursing students have a role in supporting the physical health of people with mental illness.

Aim: The aim of this study is to explore what mental health nurses and mental health nursing students' attitudes are toward managing physical health with a view to identifying factors that could help improve physical health monitoring and surveillance and help to improve physical well-being for service users.

Methodology: A mixed methods convergent design was used. Quantitative data were collected via the Physical Health Attitude Scale, (PHASe) followed by semi-structured interviews with both qualified and student mental health nurses to explore their attitudes towards the management of physical health. There were 110 responses to the PHASe, in the quantitative arm of the study, and 9 registered and 4 student nurses were interviewed for the qualitative arm.

Findings: The findings indicate that, although mental health nurses encounter a range of challenges in physical health management, they view it as a key component of their clinical role. Issues impact on mental health nurses when managing physical health included poor integration of health services, confidence of medical colleagues, and access to resources in terms of equipment to undertake monitoring and time to have meaningful conversations about physical health.

Conclusion: Mental health nurses are committed to delivering holistic care. Physical health management requires input from clinicians and managers to ensure that time and equipment is available to undertake the work, and a more collaborative approach between mental health, primary care and acute care services is needed to ensure that patients are treated holistically in all health care settings.

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Prologue

This prologue is intended to set the scene for why research into the attitudes of mental toward managing service users' physical health is needed and how generating knowledge relating to this has the potential to improve the physical well-being of people with severe and enduring mental illness.

The following paragraphs give detail of an incident that took place in the author's practice area, and highlights the importance of mental health nurses understanding physical health problems. In the vignette detailed, it transpired that the Community Psychiatric Nurse gave good advice, but may not have appreciated the relevance of nausea and vomiting as symptoms of diabetic ketoacidosis.

An experienced community psychiatric nurse (CPN), with a case load of thirty-one service users, had an appointment with a thirty-six year old male service user, whose primary mental illness had a psychotic component, and who also had type 1 diabetes. He had been living alone in the community following a period of in-patient care, but was in regular contact with his sister. He was not employed, but was planning to undertake an Open University course. His sister worked full time, and saw him three to five times a week.

At the appointment, which was on a Thursday, late afternoon, the service user reported to his CPN that he had been measuring his blood glucose levels and managing his insulin quite well, but recently his glucose levels had increased. He was advised to see his General Practitioner (GP) for advice and support with his diabetes. The service user also reported feeling a bit nauseated, and had vomited, but this was qualified with: *"My sister has had a*

tummy bug too, this week, so I haven't seen her for a few days". Mental health assessment indicated that the service user was feeling positive about the course he wanted to do, and pleased to be managing his life independently.

The service user was found dead by his sister on the following Sunday morning. The post-mortem examination reported the cause of death as natural causes, related to high blood glucose and diabetic keto-acidosis.

This incident was discussed at a mortality review group, and it was acknowledged that the CPN had not recognised the nausea and vomiting as being related to increasing blood glucose levels and a fatal diabetic keto- acidosis. The CPN had been the last health professional to see the service user, and indeed the last person to see him alive. Further details emerged regarding input from the specialist diabetes team; it transpired that the service user had missed lots of appointments with them, and had become disengaged. A similar picture applied to the relationship with his GP and primary care clinicians.

The discussion at the mortality review group centred on how the CPN did not think in a joined-up way, which meant that their lack of awareness of the symptoms of diabetic keto-acidosis had inhibited the CPN from making a connection between the symptoms. Further discussion related to how this could be prevented from happening again.

I believe asking mental health nurses about their attitudes toward managing physical health by exploring their written and verbal expressions, will aid the acquisition of insight into this complex area of care. The absence of collaboration with the primary care team was seen as

an issue, and it was felt that efforts should be made to improve working relationships between secondary mental health and primary care services.

Chapter 1 Introduction

Introduction

People who have severe and enduring mental illness experience poorer physical health with multiple morbidity, have a shorter life expectancy that the rest of the population. This amounts to a social injustice. This study is undertaken in the light of the higher than average mortality rates being experienced by people with mental ill health. Statistical evidence collated by NHS Digital (2016) demonstrates increased mortality in people aged under75, who have mental illness. Bardi and Moorley (2016) report that the life expectancy of people with poor mental health can be up to twenty years less than that of the general population, whilst Hayes et al. (2017) suggest that the mortality gap for people with bi-polar disorder and schizophrenia is widening. Further evidence in support of this stark finding is discussed by Public Health England, (2018) and Docherty and Clark (2018). This study explores mental health nurses attitudes towards how they look after the physical health of their service users and seeks to find out what could be done to support this aspect of their role.

Public Health England (2018) report that for 7 out of 10 common physical health conditions, people with SMI experience a higher prevalence, with diabetes having the ratio, at 1.9 times more prevalent in people with SMI than other patients. Public Health England (2018) point out that in England people with SMI die on average 15 to 20 years earlier than the general population and have a death rate that is 3.7 times that of those aged under 75 who do not have a diagnosed serious mental health condition. It is also reported that two out of three of these deaths are attributable to conditions that are preventable. The findings of

this report were drawn from analysis of the "The Health Improvement Network"(THIN) database which is a general practice database holding records from approximately 6% of the population, which is reported as just under 3 million people. Significantly, other studies, (Reilly et al. 2015; Bahorik et al. 2017; Hayes et al. 2017; John et al. 2018;) also examined the mortality rates of people with SMI and underpin the findings of the Public Health England (2018) report across a range of populations of people with severe mental illness, in both the United Kingdom and the United States of America. The evidence suggests a grim situation, yet offers robust reasons for why an exploration of mental health nurses' attitudes towards managing physical health is needed.

The scenario described in the prologue led to a tragic incident, which could have been prevented if the mental health nurse involved had had better awareness of the service user's physical health condition, coupled with a more collaborative approach to care between primary and secondary care services. This research examines attitudes and perspectives of mental health nurses, regarding their role in managing their service users' physical health care.

It is therefore relevant to explore what may be meant by the term "attitude". Gross, (2005, p 434) suggests that there is *"no single definition with which all psychologists would agree"* and points out three components as affective, - referring to how a person might feel about an issues, - behavioural, referring to impact of an individual's thoughts on the actions they take, and cognitive, referring to beliefs that are held by the individual. Gross (2005) also

points out the relevance of attitudes, in terms of the way individuals make sense of their world, and are viewed as energy saving, as they provide a prepared response to situations. Using a validated scale to ascertain attitudes, and exploring these further in face to face interviews is envisaged to generate learning about aspects of the respondents feelings, thoughts and actions when managing physical health.

The research was carried out within a mental health Trust, situated in the east of England, where the researcher is employed. The researcher is a nurse who has worked in both mental health and adult acute care, predominantly in the accident and emergency setting, and has developed an interest in supporting mental health nurses to undertake basic physical health monitoring, including vital sign recording, blood taking, ECG recording and resuscitation skills.

A convergent mixed methods design is used in this study, enabling the researcher to gain insight into the attitudes of a range of mental health nurses, via the Physical Health Attitude Scale, which was developed by Robson and Haddad, (2012) and available in Appendix 1, with subsequent acquisition of qualitative data, focussing on the attitudes towards, experience of, and perceived barriers to delivering physical health care, adding context to the quantitative findings. The focus of the study is to explore mental health nurses' attitudes towards managing physical health care. Mixed methods research has been described by Creswell (2014, p.32) as, "*an approach to inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct*

designs that may involve philosophical assumptions and theoretical frameworks. The core assumption of this form of inquiry is that the combination of qualitative and quantitative approaches provides a more complete understanding of a research problem than either approach alone". A more in-depth discussion of the relevance of employing a mixed methods approach to this study is provided in Chapter 3.

1.2 Background

Over eighty years ago, Phillips (1937, p. 366) identified physical ill health in one hundred and sixty four consecutive admissions to a "mental institution" and suggested that there was "an obvious need for a miniature general hospital, with all its numerous departments, within the organization of each mental hospital, and consequently a real necessity for a resident house-physician whose sole function would be the care of the bodily ailments of the patients". This suggests that even then, the physical health care of service users was considered to be separate from their mental health care, and that integrated services were required. More recently Gittins, (2008) recalled how people who were cared for in the in-patient mental health facility would be transferred to the on-site wards that were staffed by adult care nurses and doctors if physical illness developed. This system ceased to exist once the large mental hospitals were closed and mental health care began to be delivered in the community, and by the 1990s, people with mental illness were experiencing high mortality rates compared with the general population (Harris and Barraclough, 1998; Phelan et al. 2001), sadly this trend has continued to today. (Public Health England, 2018, Rodgers et al, 2018)

Many researchers offer a perspective on the issue of increased mortality, and recognise that it needs to be addressed by wider society, as well as those involved in delivering mental health care (Beecroft et al. 2001; Brown et al., 2007; Lawrence et al. 2010; De Hert et al., 2011b) . Nash (2009, 2011) focuses on the impact of poor management of diabetes in mental health service users, recognising that failing to recognise the potential consequences of this most complex physical condition could have a major impact on the service user's overall well-being. Nash (2010) also points out that there may be problems with policy, given that the National Service Framework for Mental Health, published in September 1999, does not refer to those with coronary heart disease or diabetes, and yet people with mental health problems feature significantly in the population of individuals with coronary heart disease and diabetes.

The Coronary Heart Disease National Service Framework, published in March 2000, acknowledged that as the second of the first two national service frameworks, aimed at addressing the commonest health conditions experienced, links between mental ill health and coronary heart disease were not explicit. Shefer et al. (2014) discuss the impact of diagnostic overshadowing – where physical symptoms are mistakenly attributed to mental illness - as impacting negatively on the physical health care of mental health service users. They advocate that the National Health Service, (NHS) requires a radical review in order to enlighten clinicians on how to appreciate that physical symptoms cannot always be attributed to poor mental health. Nash (2013) suggests that the negative attitudes and stigma experienced by mental health service users when accessing physical health care from care sectors such as GPs and general hospitals, as well as the medications used to treat

mental health conditions, can impact on their physical well-being. Gray et al. (2009) point out a range of factors, including poor lifestyle choices, side effects of antipsychotic medication and difficulties with accessing services for physical health management, that contribute to the increased mortality rates among mental health service users. Nash (2013) reiterates previous work which had proposed that a proactive approach should be adopted by mental health nurses, and that they should be focusing on those service users whose risk factors indicate an increased risk of developing diabetes, notably type 2 diabetes, which is prevalent among anti-psychotic medication users. (Llorente and Urrutia, 2006)

The Chief Nursing Officer's report (Department of Health, 2006) was aimed at helping mental health nurses to recognise their potential to positively contribute to improving their service user's physical health by encouraging engagement in physical health monitoring. In the early twenty-first century, Phelan et al. (2001) reported that mental health practitioners may have had minimal training in physical care, and Gournay (1996) had previously found that community mental health nurses were unprepared to undertake physical health monitoring. Nash (2005) echoed this view, evidencing that this staff group may have little experience or training in physical health management. Nash (2010) discovered that many mental health nurses lacked basic knowledge of physical health, even in relation to blood lithium levels, which could influence their ability to safely care for service users' physical well-being. Given that mental health nurses are a professional group who spend most time with mental health service users, it would seem appropriate that their knowledge base should be inclusive.

Physical and mental health service integration and the government's aim to mainstream mental health, and establish parity of esteem – i.e. supporting the physical health of people with severe and enduring mental illness and ensuring equality across health care services for people with mental health problems – was introduced in the "No Health without Mental Health" strategy, published in February 2011 (Department of Health, 2011). It constituted a significant component of the 2010 UK coalition government's mental health strategy.

In 2013, the Royal College of Psychiatrists published Occasional Paper 88 (Royal College of Psychiatrists, 2013b) outlining how this objective could be achieved. Professor Sue Bailey, who was president of the college at the time, wrote the foreword to the report in which she expressed regret that such a report was needed, and called for government and policy makers, as well as commissioners and care deliverers, to view service users holistically. Millard and Wesseley (2014, p. 2) discussed a number of further reports relating to the "parity of esteem" agenda, and concluded that "*administrative and therapeutic separation and enduring stigma*" need to be addressed as a priority.

The Adult Psychiatric Morbidity Survey (APMS) 2014 (McManus et al., 2016), which was the fourth such survey to be undertaken, and involved participation by a large sample of people who had experience of mental health problems, highlighted issues in the management of physical health for individuals with mental illness. The report makes the suggestion that integration of physical and mental health services is needed to address the difficulties being faced by a significant proportion of the population.

Further context is added by the contemporary initiatives aimed at galvanising the "parity of esteem" program. NHS England (2014) established a board to bring together initiatives that would facilitate access to safe and effective care and treatment for people with mental ill health, along with improving the quality of care by ensuring comparable resource allocation. Equal status of mental health conditions in terms of health care practice and education, as well as outcome measurement, are also advocated and service users are promised better management of their long term conditions.

The "Five Year Forward View" for the NHS was published in October 2014 sets out the government's aims to achieve "parity of esteem" by 2020, and states (pp. 26-27):

"Physical and mental health are closely linked – people with severe and prolonged mental illness die on average 15 to 20 years earlier than other people – one of the greatest health inequalities in England. However only around a quarter of those with mental health conditions are in treatment, and only 13 per cent of the NHS budget goes on such treatments when mental illness accounts for almost a quarter of the total burden of disease."

More recently, Panday (2016) reported on strategies to improve the physical health of people with severe mental illness (SMI) and pointed out that lifestyle, poverty, ineffective prevention, poor commissioning and access to services, as well as stigma, were barriers to moving the agenda forward. The Department of Health (2016) published guidance and a toolkit aimed at supporting physical health promotion interventions by mental health

nurses, encouraging the use of enhanced communication and interpersonal skills to enable the service user to access information and advice on improving and maintaining their physical well-being. Mental health nurses are encouraged to discuss smoking and substance misuse, diet and weight management, medication optimisation and side effect monitoring, sexual and dental health. They are also prompted to consider the risk of falls, which can occur in adults of working age who live with SMI, often due to the potentially over-sedating effects of antipsychotic medication, or the impact of their mental health condition on issues such as gait, footwear and risk-taking behaviour.

The Care Quality Commission (CQC), whose role is to monitor and report on the performance of the NHS, include the requirement for mental health service providers to report on the number of physical health checks undertaken. As such, mental health services are required to offer holistic care whilst ensuring that liaison takes place between primary, secondary and other agencies to ensure continuity and quality of care (National Institute for health and Clinical Excellence, 2014; 2018).

A further focus on mortality is offered in the CQC's December 2016 review of the way NHS Trusts review and investigate the deaths of patients in England. The review found that none of the Trusts contacted could demonstrate best practice when it came to identifying, reviewing and investigating deaths and ensuring that learning from both deaths and near misses is implemented. This has led to the development of mortality review processes across the National Health Service, and in the mental health setting. The investigation and

review of the deaths of all service users has led to board level awareness and subsequent management activity to ensure that deaths are investigated appropriately, as mentioned in the prologue. National Guidance on Learning from Deaths was published by the National Quality Board in March 2017 and outlines a framework for all NHS Trusts to ensure that all deaths are fully reported and investigated and that lessons are learned as a result.

The guidance explains that, following the Francis report on the Mid-Staffordshire NHS Trust enquiry (Francis, 2013), fourteen NHS Trusts that had the highest mortality rates were reviewed and it was discovered that learning from deaths was not always taking place. The focus had been on aggregated mortality which did not encourage Trust boards to recognise the potential usefulness of investigated individual deaths and learn practical strategies to reduce mortality. The guidance suggests that family and carers of people who have died should be involved in candid discussions with health care Trusts to support public involvement and strengthen confidence in health services, and concludes that, "*they offer a vital perspective because they see the whole pathway of care that their relative experienced*" (NHS England, 2017, p. 6).

1.3 Rationale for the study

The rationale for undertaking this study is to generate information that might impact positively on the morbidity rates experienced by people with mental illness, as they experience poor physical health resulting in reduced life expectancy of up to twenty-five years, according to Gimblett (2015). The literature points out that reluctance to access

primary care for day to day health care and health screening, contributes to their unacceptably high mortality rates. Complex mental health needs, especially where psychosis is a component of the service user's presentation, coupled with the effects of psychotropic medications, are not always fully understood by primary care providers, with consequent difficulties relating to effective management and the maintenance of good physical health. People with severe and enduring mental ill health often display risky behaviour, with smoking and substance misuse having a higher prevalence than among the general population (Gimblett, 2015).

The Royal College of Nursing (2018) survey of 566 mental health practitioners highlighted that over half of the respondents felt that their country had not been successful in implementing "parity of esteem", indicating that further enquiry into mental health nurses' perspectives on managing physical health is necessary. Mental health nurses work closely with the most vulnerable people in society, and it is therefore appropriate that their views should be sought and explored in a structured way so that the knowledge base underpinning their practice can be developed. Taking care of physical health forms a significant component of a mental health nurse's remit, and information that examines areas of practice that work well, or require improvement, will enable mental health nurses, their managers and commissioners to consider service improvements. This study will add to this knowledge base and, most importantly, has the potential to support the development of strategies that can impact positively on mortality.

1.4 Research question and aims of the study

The research question addressed by this study relates mental health nurses attitudes towards managing physical health in their clinical practice. Exploring their views on this aspect of care will enable an appreciation of their perspective. The aim of the study is to add to the body of nursing knowledge relating to the management of physical health in the mental health setting, with a view to offering intelligence that could influence clinical practice and service development. Such knowledge could increase understanding of the management of physical health by mental health nurses and help to develop a focus on interventions that could help support the physical well-being of people with poor mental health

1.5 Clinical environment

This study is set within the context of mental health service delivery, where people being cared for by mental health professionals are experiencing poor physical health. Users of mental health services, who experience severe and enduring mental illness, have worse health than that of the general population. Severe and enduring mental illness (SMI) is defined by the NHS England (2014) as referring to conditions such as schizophrenia and bipolar affective disorder. In 2016, NHS England's 2016 toolkit to support the role of mental health nurses in managing their service user's physical health pointed out that the mortality rate of mental health service users aged 19 and over in England was 3.6 times the rate of the general population in 2010/11.

The document emphasised that people with mental health problems die from potentially preventable causes more often than the general population. Mental health service users were four times more likely to die from respiratory diseases and diseases of the gastro-intestinal tract, and almost three times more likely to die from cardiovascular diseases. The document notably highlights that, amongst people in their thirties, mortality rates were almost five times that of the general population.

Lifestyle factors, including unemployment and low income, are cited as relevant issues relating to high mortality, as people with long-term mental ill health have the lowest employment rate among people who are considered to have a disability. Social factors impacting on physical health, such as poor housing and unemployment, along with lifestyle choices relating to smoking, alcohol and substance use, and poor diet and exercise, adversely affect the mortality rates. Mental health nurses have an extremely important role in supporting the service users' ability to maintain physical well-being.

As part of their quality outcome framework, General Practitioners are required to maintain registers of patients with SMI and undertake physical health examinations at least annually. The Care Quality Commission's monitoring framework includes the requirement for mental health service providers to report on the number of physical health checks undertaken and, as such, mental health services are required to offer holistic care whilst ensuring that liaison takes place between primary, secondary and other agencies to ensure continuity and quality of care (National Institute for health and Care Excellence, 2009).

This range of complex problems associated with the delivery of health care for mental health service users manifests in higher morbidity among this group, and the government's review has led to the development of mortality review processes across the National Health Service, including in the mental health setting. The investigation and review of the deaths of all service users has led to board level awareness and subsequent management activity to ensure that deaths are investigated appropriately. This work stream has highlighted premature mortality in the clinical setting, and focused the minds of mental health nurses and others involved in the delivery and management of mental health care on the high mortality rates being experienced by a very vulnerable group.

1.6 Summary

This chapter has introduced the study. The background, rationale and aims of the study have been explained to elucidate the context, while the clinical environment in which the study is set has been described. Contemporary focus has been discussed in terms of current guidance, and the emphasis on the management of physical health for people with SMI has been highlighted.

Chapter 2 Literature Review

2.1 Introduction

This chapter presents an analysis of published research relating to the physical health of mental health service users and the use of the PHASe (Robson and Haddad, 2012) questionnaire.

2.2 Search strategy

A systematic search of multiple databases (CINAHL Complete; E-journals; MEDLINE with full text; PsycARTICLES; PsycINFO; Google Scholar) using the keyword search terms "mental health nurs*" and "attitude" and "physical healthcare" was undertaken. Subsequent searches included the key words "mental illness" and "physical health attitude scale". The searches were limited to English language, peer reviewed publications.

Search	Term	Results
Search 1	"mental health nurs*" AND "attitude" AND "physical health*"	2544
Search 2	Search 1 + mental illness	774
Search 3	Search 2 + date limited 1998 -present	458
Search 4	Search 3 with "peer reviewed"	458
Search 5	Search 4 AND "Physical Health Attitude Scale"	108
	Articles chosen for review	37

Figure 1: Search strategy

The search sequence returned 108 results, the abstracts of which were manually reviewed.

PRISMA flow diagram

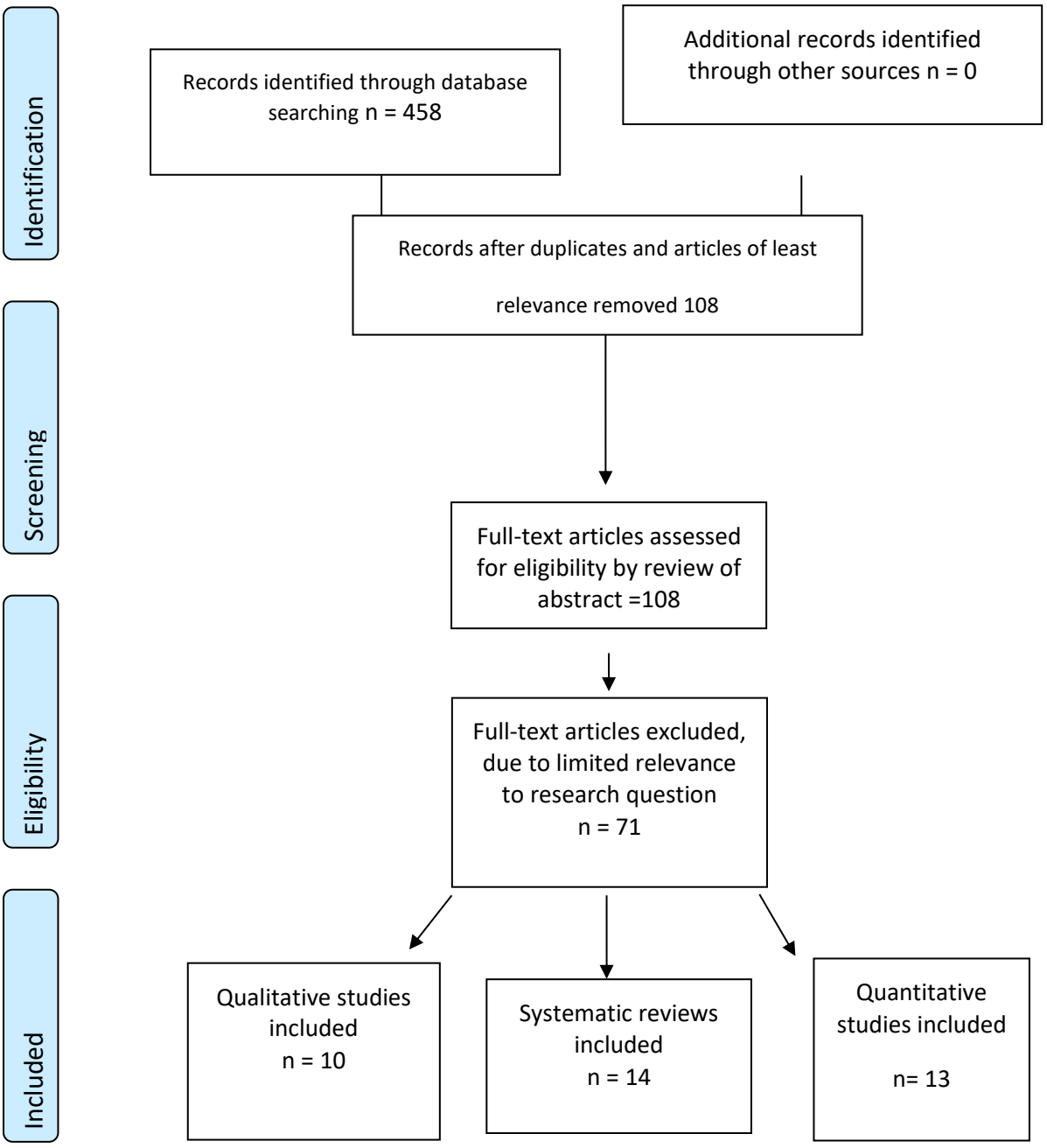

Figure 2: PRISMA diagram

From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009).

*P*referred *R*eporting *I*tems for *S*ystematic Reviews and *M*eta-*A*nalyses:

The PRISMA Statement. PLoS Med 6(6): e1000097. doi:10.1371/journal.pmed1000097

Duplicates and papers reporting studies relating specifically to substance and alcohol abuse were discarded as they did not relate to the role of mental health nurses or their perspective on physical health management. 71 papers were excluded. These included non- published papers and papers which examined attitudes of nurses working with the general population. Following this, 37 papers were reviewed of which 10 were qualitative studies, 14 were systematic reviews and 13 were quantitative studies (2 cohort, 2 randomised controlled trials and 9 cross-sectional). Four other papers which bore relevance to this study in terms of studied population, (mental health nurses) interventions, (physical health care) and outcome, (attitudinal terms) dating from 1998 to present were also selected for in-depth review, as they focused on factors that influence the physical health of people with SMI with focus on the impact of mental health nurses approach to this.. Critical Appraisal Skills Program (CASP, 2018) tools were used to critique papers, as the following paragraphs explain. A table of reviewed papers is available in Appendix 2.

2.2.1 Systematic/Literature Reviews

14 systematic reviews of published literature were reviewed (Harris and Barrowclough, 1998; Saha et al. 2007; Lawrence et al.; 2010; Hardy et al. 2011; De Hert et al. 2011a; Verhaeghe et al. 2011; Chacon et al. 2011; Mitchell et al. 2011; Chadwick et al. 2012; Blythe and White, 2012; Tosh et al. 2014; Rodgers et al.; 2016; Rodgers et al. 2018 and Dickens et al. 2019).

These were papers in which results were valid and bore relevance to the physical health of people with SMI and/or the attitudes of mental health nurses towards their role in

supporting it. Consideration was given to whether the appropriate databases were reviewed and whether selected studies addressed the questions that were applicable to this study setting. Papers were considered on the basis that they had clearly stated objectives, a well- documented methodology supporting reproducibility, clear assessment of the validity of findings and presented synthesis which debated appropriate themes.

2.2.2 Qualitative Studies

10 Qualitative studies were reviewed (El-Mallakh 2006; Griswold et al. 2008; Hetrick et al. 2010; Carson et al. 2010; Mesidor et al. 2011; Shattell et al. 2011; Roberts and Bailey, 2013; Ehrlich et al. 2014; Gray and Brown 2017; Mwebe, 2017). Papers were included if a clear research goal was stated, and a qualitative approach to addressing this was appropriate. A clear rationale for the research design, recruitment of the sample, data collection methods and reproducibility was also required of these papers. Consideration was also given to the ethical aspects discussed and whether the relationship between the researcher and participants had been explored fully. The value of the reviewed papers was judged in terms of what information was gained that related directly to people with severe mental illness, and mental health nurses practice specifically.

2.2.3 Cohort Studies

2 cohort studies were included in the literature review (Brown et al, 2000; Chang et al. 2010). These studies were critiqued on whether a clarity of focus, and whether the cohorts were recruited appropriately. To minimise bias, the measurement of exposure that the

cohorts were subject to was considered, as was the measurement of the outcomes. Identification of any other potentially confounding factors in both design and analysis were also considered. Quality of follow up and presentation of results were deemed important, along with credibility of the findings; the cohort studies represented aspects of service user outcomes and practice aligned to this study, and added to the evidence base underpinning this work.

2.2.4 Randomised Controlled Trials

2 randomised controlled trials were selected for inclusion in the literature review (Brown and Smith, 2009; Griswold et al. 2009). These papers were assessed on randomisation process, blinding and accurate documentation of outcomes, as well as relevance of the results as applicable to local populations and practice.

2.2.5. Cross-Sectional (Survey) Studies

9 Studies detailing cross-sectional survey research were appraised (Happell et al. 2013; Hemingway et al. 2014; Wynaden et al., 2016; Knight et al. 2017; Chee et al. 2017; Ganiah et al., 2017; Bressington et al. 2018; Clancy et al. 2019; and Ozaslam et al. 2019).

Appraisal was based on clear focus on a specific research question. Responder bias, due to the recruitment strategy, size and representativeness of the sample and response rates were also considered. The validity of the instrument was of significant relevance where the PHASe had been used, and statistical information was reviewed. In all cases, authors

had undertaken a range of non-parametric tests to determine whether the PHASe and similarities in data analysis were evident

2.2.6 Other papers included in the review

4 other papers as detailed below were also included in the review as their content demonstrated links to issues that impact on the physical health of people with mental illness and related specifically to mental health nurses' practice.

The paper detailing the development of the PHASe, (Robson and Haddad, 2012) was pivotal to the research and a more in-depth critique is included in the following chapter. Two papers relating to diagnostic overshadowing, (Nash, 2013; Mitchell et al. 2017) were included as this topic had been alluded by other researchers (Roberts and Bailey 2011; Rodgers et al. 2016. A discussion document, (De Hert et al. 2011b) which was published as a follow up to the findings of an included systematic review (De Hert et al. 2011a) was also included for completeness, as the papers were a two part publication

The review of papers led to the generation of the following themes:

- People with mental illness have poorer physical health than the general population
- Mental health nurses' approach to practice impacts on the physical health of people with severe mental illness
- Service users value the opportunity to discuss their physical health
- The PHASe instrument is a credible measure of mental health nurses' attitudes towards the management of physical health.

2.3 Theme 1 - People with mental illness have poorer physical health than the general population

Harris and Barraclough's 1998 extensive, clearly documented review concluded that all mental health conditions are linked to increased mortality. They reported that deaths from both natural and unnatural causes were high for all mental health conditions but notably so in the case of people with schizophrenia. Harris and Barrowclough (1998) concluded that the presence of mental illness increases the chances of premature mortality not just in cases of death by unnatural causes such as suicide and substance misuse, but also where death occurs by natural causes as a result of poor lifestyle choices.

Harris and Barrowclough (1998) warned that with the development of mental health community care would result in "other influences" (Harris and Barrowclough, 1998 p.51) affecting mortality rates in people with mental health disorders may develop. In particular, deaths in younger people with SMI from natural causes was a concern; relating lifestyle factors that are detrimental to physical health as being a serious risk. Whilst Harris & Barrowclough (1998) provide evidence of the presence of the problem, the paper does not offer any ways in which mental health practitioners could begin to address the topic.

Brown et al. (2000) undertook a 13 year follow-up review of the health of370 individuals who had schizophrenia. They were able to trace 96% of the cohort and reported that in the 79 cases where the patient had died, the standardised mortality rates were significantly raised for both natural and unnatural causes of death. Brown et al. concluded that more could and should be done by mental health practitioners to reduce the high mortality rates. Brown et al. (2000) reported that mortality rates from circulatory, digestive, endocrine,

central nervous and respiratory system disorders were higher, as were suicide and undetermined causes, while smoking-related deaths also rated more highly than among the general population. Brown et al. (2000) concluded proactive management of physical health risks needed to be embedded in the practice of mental health clinicians, and that improved management of psychosis and mood disorder was also required. Brown et al. (2000) acknowledged limited generalisability of their study due to sampling bias; they had retrospectively reviewed a small cohort of middle aged individuals, and as such their findings may not relate to contemporary younger groups Investigator and recorder bias was also acknowledged due to the data having been collected by retrospective examination of case records.

Saha et al. (2007) undertook a meta-analysis of mortality rates for people who had been diagnosed with schizophrenia in 25 countries, ascertaining that these were increasing over time, and concluded that practice relating to the management of people taking anti-psychotic medication needed to be reviewed urgently. Saha et al.'s (2007*)* clearly documented review identified 1726 papers. Studies were included if the inclusion criteria of published between 1st January 1980 to 31st January 2006, reporting on deaths of people aged 15 or over with schizophrenia and reported on cause of death in enough detail to enable calculation of standardised mortality. 37 studies were reviewed and Saha et al. (2007) reported a mortality rate for people with schizophrenia that was 2.5 times higher than that of the general population, leading them to hypothesise that the rate of mortality had increased in the preceding decades for people with schizophrenia.

Saha et al's (2007) findings suggest that this group had not benefitted overall from the increased quality of health care at the same rate as the rest of the population across the 25 countries and concluded that mental health clinicians needed to improve skills around physical health management. Saha et al. (2007) pointed out that the introduction of atypical antipsychotics had positively impacted on the management of mental health symptoms for people with schizophrenia and associated mental illnesses, but the physical health of this population had been affected negatively. Saha et al. (2007) recognised that publication bias, and international variances in psychiatric and the categorisation of causes of death may be limiting factors to their review. However, their findings highlight the importance of managing physical health care for people with SMI, and the responsibility that mental health service providers have to embed it into practice.

A further systematic review and meta-analysis was undertaken by Osborn et al. (2008*)*, who explored the prevalence of cardiovascular risk factors, namely diabetes, hypertension, dyslipidaemia and metabolic syndrome in people with mental illness, as compared to those without. These conditions are commonly identified within the mental health setting. Osborn et al. (2008) searched a range of databases under the themes of SMI, cardiovascular disease and each of the cardiovascular risk factors. Their search yielded 14592 citations, with 134 papers meeting the inclusion criteria and 36 were finally included. Data gathered on other risk factors were less reliable as it was felt that some findings were inconsistent or of poor quality; however, some studies did evidence that metabolic syndrome showed an increased prevalence among people with severe mental illness. Osborn et al. (2008) concluded that diabetes is more common in people with severe mental illness, but not

hypertension, and their findings suggest that managing metabolic syndromes related to anti-psychotic use, and diabetes is crucial, and that mental health clinicians, including nurses, need to develop their confidence and skills in managing these conditions in clinical practice. Osborn et al. (2008) reported that their study was the first to systematically review and appraise the literature at the time, but acknowledged that limitations relating to the quality of the reviewed literature and the length of time that the review took to complete, and indicated their awareness that more recent studies of potentially better quality were emerging, and that future reviews would need to be of high quality to help understand factors that can impact on cardiovascular health.

Lawrence et al.'s (2010) also investigated excess mortality in people with mental illness by undertaking a systematic review of MEDLINE, extracting peer reviewed papers from the preceding 30 years and focusing on a cross section of papers that related to the topic. They reviewed 85 papers following a clearly documented search which had originally yielded 3554. Inclusion criteria publication between January 2000 to January 2010 however studies detailing mortality rates for people with alcohol or substance misuse and dementia were excluded as the authors felt that increased mortality was "an integral part of the disease process" in those cases Lawrence et al. (2010, p 753). Lawrence et al. (2010) stated that their work "updated" Harris and Barraclough's (1998) review.

Lawrence et al. (2010) reported that mortality rates for people with mental illness had not declined over the preceding thirty years, echoing the findings of Saha et al, (2007), although it was acknowledged that, since care delivery in the community setting had increased, freedom to make lifestyle choices had become enhanced for people with mental illness and,

as such, this could have affected mortality. This reflects Harris and Barrowclough's (1998) earlier observation the impact of lifestyle choices that would become more influential on individuals with SMI living independently in the community. This finding implies that increased autonomy to make health-related decisions and lifestyle choices may be adversely affecting physical health among this population. Lawrence et a. (2010) acknowledge that the studies they had reviewed were based on information gained from the review of medical records, and as such, may not have reflected lifestyle factors that could have influenced the physical well-being of the SMI population, and this might limit the generalisability of their findings. Lawrence et al. (2010) also identified that better physical health due to improved health care technology, especially relating to infection control, had not been experienced by this group, unlike the wider population. It was reported that people with mental illness received lower levels of intervention despite having recognised higher rates of cardiovascular disease, and were less likely to be offered routine interventions such as treatments for dyslipidaemia and hypertension. Lawrence et al.(2010) concluded that high levels of morbidity among people with mental illness had increased across all psychiatric and physical health diagnoses, and observed that few interventions aimed at reducing cardiovascular disease were targeted specifically for people with mental illness.

Chang et al's (2010) cohort study findings were consistent with those of Harris and Barrowclough (1998), Brown et al (2000), Saha (2007), Osborn (2008) and Lawrence (2010). Chang et al (2010) reported that mortality rates for people with mental illness were twice that of the general population, but recognised that their study had some methodological

limitations, due to the geographical range of the sample and potential prevalence bias, whereby clinical episodes reflect multiple care events for the same individual. The study did however highlight that the problem of poor physical health and unacceptably high mortality rates were persisting for people with SMI. Chang et al. (2010) alluded to factors such as lifestyle choices resulting in poor weight management, smoking and substance misuse as impacting negatively on physical well-being.

Roberts and Bailey's (2011) searched 8 databases and undertook a narrative review of literature in which 14 studies drawn from 302 papers were examined in detail. The review aimed to identify factors that could incentivise or discourage the pursuit of a healthy lifestyle for people with severe mental illness. Roberts and Bailey (2011) concluded that none of the studies chosen specifically focused on exploring potential barriers and incentives, but postulated that the literature had alluded to common themes. Roberts and Bailey (2011) identified that negative symptoms experienced by people with SMI such as low mood and social isolation, side effects of treatments, poor levels of support and unhelpful staff attitudes as discouraging people to access health promoting activities whilst a reduction in symptoms, an awareness of the condition, peer and staff support were felt to be encouraging factors.

Roberts and Bailey (2011) concluded that, whilst information on factors that encourage or reduce engagement in health promoting activities remains limited, mental health nurses should try to circumvent these in order to increase the likelihood of their service users engaging in health promotion activity and recommended that further research should be undertaken to gain knowledge of the service user perspective on this issue.

De Hert et al.'s (2011a) review highlighted the prevalence of physical health conditions experienced by people with poor mental health across Europe, Africa, Asia and the Americas. The authors describe their review as "*selective*" (De Hert et al. 2011a p 52) Their search of MEDLINE for papers published from 1966 to August 2010 focused on those relating to morbidity and mortality in people with SMI, and epidemiological information De Hert et al. (2011a, p 53) reported that their review revealed "*very good evidence for increased risk*" in human immunodeficiency virus (HIV), obstetric complications, cardiovascular disorders, hyperlipidaemia and obesity for people with mental illness. De Hert et al. (2011a) concluded that increased vigilance towards physical health problems is required and that this should be undertaken at individual practitioner and service level in order to address the evidenced mortality gaps.

De Hert et al.'s (2011b) paper was published as a follow up to their 2011a review and highlighted the difficulties faced by people with mental illness when managing their physical health and reiterates the requirement for action. Specific recommendations at individual practitioner level include increased communication with speciality services as well as strengthening links to the service users own primary care teams. The paper advocates for lifestyle modification advice and support and health promotion activities to be delivered by mental health practitioners. De Hert et al. (2011b) stress the importance of supporting wellness, and encouraging service users to develop a sense of personal empowerment so that they can make informed healthy choices aimed at recovery, implying that mental health practitioners should take on this role. De Hert et al. (2011b) stress the importance of

the improving integration of physical and mental health services as crucial if the physical well-being of people with SMI is to be improved.

Although Lawrence et al.(2010) had reported that the impact of increased autonomy had previously been cited as a potential threat to the physical well-being of people, De Hert et al. (2011b) saw this as a potentially positive, but recognised that skill and judgement was required to enable therapeutic conversations relating to sensitive topics.
Rodgers et al.'s (2016) review assessed contemporary mental health service provision to assess whether there was evidence of development in line with integrated care models, were addressing physical health care for people with mental illness. The review highlighted that mental health staff and service users should be able to access physical health care services more easily, by the improvement of communication between, and the use of information technology among, service providers.

Rodgers et al. (2016) acknowledged that the review included a limited amount of in-depth research, mostly carried out in England, this adversely affected the generalisability of its findings and suggested that further work should be undertaken to explore the literature with a more focused approach to exploring barriers experienced by service users in accessing physical health care. Consequently, Rodgers et al. (2018) conducted a "mapping review" which not only reviewed literature, but also included service user and provider perspectives. The findings reiterated the view that integration of care between services, and the management of physical health by mental health service providers, including mental health nurses, are issues of vital importance across England, if the physical health of people with mental illness is to be improved.

Sub-optimal physical health care was recognised by Hetrick et al. 2010, who undertook a mixed methods study in Australia, retrospectively reviewing 108 case files, and then interviewing an undisclosed number of psychiatrists. Hetrick et al. (2010) identified that physical health monitoring was not always being undertaken in a clinic caring for young people with a first episode of psychosis and explored perceived barriers to physical health monitoring. Hetrick et al. (2010) concluded that mental health teams were well placed to undertake this work but require resources, such as training and equipment to do so. Hetrick et al (2010) undertook their study in one location and as such the generalisability of the findings may be limited, but their findings offer a perspective that suggests discussion and interpretation of appropriate physical health care can be addressed by the mental health team, and that local arrangements can underpin this area of practice.

Ehrlich et al.'s (2014) qualitative study examined the ability of the Australian health system to integrate physical health promotion into mental health care. Ehrlich et al.(2014) purposively recruited and interviewed 50 mental health professionals from a range of disciplines to explore how guidelines relating to physical health promotion were integrated into routine practice. Their data collection method was based on implementation theories, and aimed to explore the process and experience of implementing guidelines in practice. Ehrlich et al. (2014, p 245) recognised a central theme of their data was '*care boundaries'*. Such boundaries were attached to a range of aspects of care including the patient's level o f insight into their illness, the practitioner's area and scope of practice, as well as variances in practice sector, (e.g. state or privately run) funding and *"societal norms".* Erhlich et al.

(2014) reported that participants practiced in ways that supported the continuation or attempted to mediate such boundaries. Ehrlich et al. (2014) postulated that these boundaries and participants' responses to them impacted on ability to implement practice guidelines.

Poor collaboration with physical health care services was perceived as a barrier to improving the physical health of people with mental illness. The findings relate to the attitudes of mental health medical, allied health professional and nurses towards managing physical health, as all professions reported being involved in negotiating the boundaries of care that were deemed to be problematic. Ehrlich et al.'s (2014) study findings may have limited transferability due to the geographical focus and there was no input from service users, although the issues raised bear relevance to the improvement of the physical well-being fo people with SMI.

Carson et al.'s (2011) explored physical health management for people with mental health problems, undertaking an exploratory observational study which reported the frequency of physical health assessment by mental health practitioners in the USA. Carson et al. (2011) found rates differed according to practitioner discipline and the ethnicity of the service user. This study drew on data previously acquired as part of a larger project, that stemmed from a national survey undertaken from 2004 -6. Carson et al. (2011) focused on physical health components mentioned in the video-taped encounters. In a third of cases, physical health was brought into the discussions by the service user first and this encouraged Carson et al. (2011) to suggest that a new way of thinking was required to address the disparities uncovered in the management of physical illness among individuals with mental illness.

Carson et al.'s findings related to a range of mental health practitioners, including some from social care and allied health professions. Psychiatrists and mental health nurses were identified as professionals who were more likely to discuss physical health issues spontaneously, rather by prompting from the service user. Carson et al. (2011) noted that 100% of the interviews conducted by nurses included discussion of at least one physical health issue, and that nurses were more likely to have these discussions than psychiatrists or psychologists. The study findings relate only to an urban setting where primary care facilities were accessible and may not be generalizable to more rural based practices, but indicate that policy and educational revisions may be required to support mental health clinicians in managing the physical health of people with mental health problems.

Shattell et al. (2011) undertook a qualitative study in the Midwestern USA which at the time of completion, was regarded as unique, with findings that could inform service development. Shattell et al. (2011) recruited a convenience sample of staff from five community mental health teams and undertook five focus groups with a total of 33 staff. Shattell et al. (2011) concluded that some practitioners within the multi-disciplinary team may need to re-frame their approach, in terms of taking responsibility for physical health care, and fostering closer integration with primary care providers. The study setting was an assertive community team, which Shattell et al. (2011 p 57) described as "*an ideal setting in which mental health and physical health care can be integrated*" and reported that mental health nurses recognise physical health issues and adjust their role to take account of them, despite finding integration with physical care services challenging. The findings however,

may have limited generalisability given the small convenience sample and narrow geographic setting of the study.

The papers identified in this section of the literature review all provide evidence of a correlation between mental illness and reduced physical well-being. These papers have been presented chronologically to show that since Harris and Barrowclough (1998) identified the problem of integrating physical health care into mental health services difficulties in this area of care remain.

The papers reviewed show that mental health practitioner should be proactively working with service users to monitor physical health generally and specifically in relation to physical health condition. Harris and Barrowclough (1998) highlighted the potential for further problems in relation to the development of mental health community care; this is supported by Lawrence et al.'s (2010) finding. Supporting service users to manage social exclusion and be assertive in accessing community resources to promote health is an area where mental health nurses should be well placed to provide positive impact.

2.4 Theme 2 - Mental health nurses' approach to practice impacts on the physical health of people with severe mental illness

This theme relates to mental health nurse's training and management of physical health monitoring and promotion, access to primary care services as well as attitudes and perceived barriers. The impact of offering training to mental health nurses to support their

physical health management role has been reported by Brown and Smith, (2009), Hemingway et al. (2014) and Blythe and White, (2014).

2.4.1 Training

Brown and Smith's (2009) randomised controlled trial hypothesised that a programme of focused health promotion interventions, planned and delivered by trained mental health nurses, would have a positive impact on the physical health of the participating service users. The health gains made were reported as small, although some improvements in cardiovascular risk were recorded. Brown and Smith (2009) acknowledged that the small sample size, and a potentially positive bias towards improving physical health on the part of both the key workers who undertook training (n = 8) and the service user sample (n = 26) could impact on the validity of their findings. They reported that key workers who did not want to participate gave reasons relating to high work-loads. Response bias as also an issue given that the findings were self-reported. It was also felt that key workers who did not undertake specific training may have been prompted to focus more on physical health promotion having heard the rationale for the study.

The authors concluded that service users with mental illness are an appropriate population towards whom health promotion interventions should be targeted, although intense support was likely to be required. This finding suggests links between the need for mental health nurses to focus on health promotion, while recognising that doing so may be resource intensive – an area that the PHASe brings into question.

Hemingway et al.'s (2014) cross sectional study focused on the issues that might affect the safe administration of medicines in the mental health setting, having recognised that previous research on the topic has mostly been carried out in the acute care setting. Criteria for participation was registration as a mental health nurse and current involvement in delivering care in an in-patient or community setting, or in final year of training, studying at Bachelor of Science or Diploma level. 70registered and 41 student mental health nurses completed a questionnaire consisting of closed and open ended questions reported as response rates of 24% and 96% for the registered and student nurse cohorts respectively. Heminway et al. (2014) concluded that whilst mental health nurses maintain awareness of physical health risks issues such as environmental distractions, pressure of work, and inaccurately written prescriptions could hinder the safe administration of anti-psychotic medication. Hemingway et al. (2014) recommended that training in maintenance of pharmacological knowledge, particularly side effect profiles of anti-psychotic medications could support improved physical health outcomes for service users and commented that addressing the issue should considered an organisational rather than individual practitioner issue. Hemingway et al (2014) acknowledged their study may have limited generalisability due to small sample size and narrow geographical focus,

Blythe and White's (2014) systematic review found that physical health care training is not routinely available for mental health nurses, and that many felt their role was unclear when it came to physical health management. Nurses working in in-patient areas had a more negative approach to this, and collaboration between primary and secondary care was viewed as problematic, as noted by Shattell (2011). These findings reflect those of Shattell

et al. (2011), indicating that further enquiry into the attitudes of mental health nurses in these areas is advocated. Blythe and White (2014, p200) state that attitudes of mental health nurses should be explored stating that "*Future research should examine what the attitudes are of MHN in relation to their physical health-care role and explore whether interventions aimed at the level of the organization can improve clinical practice".*

Brown and Smith (2009), Hemingway et al. (2014) and Blyth and White's (2014) papers report that mental health practitioners should focus on supporting the delivery of specific interventions underpinned by training and professional development, however Hardy et al.'s (2011) review highlighted that no appropriate studies had been undertaken regarding the impact of education and training on the knowledge base and practice of mental health professionals. Whilst acknowledging that their search criteria were robust, it was recognised that smaller studies that may have been of interest could have been missed. Hardy el al. (2011) urged researchers to publish such papers to better understand how, the outcomes of education with regard to healthcare professionals' knowledge, attitudes and behaviours. Hardy et al. (2011) suggested that taking a lead in improving physical well-being was a crucial component of the mental health nurses' role, and evaluating initiatives aimed at supporting mental health professionals to undertake this requires further research.

2.4.2 Physical health management

A further perspective on physical health management was reported by Chacón et al. (2011) who highlighted the impact of focusing on diet and exercise lifestyle interventions as a

means of managing cardiovascular risk factors experienced by individuals with severe and enduring mental ill health. Chacón et al.'s (2011) only searched Medline for articles published from 2004 – 2010 and retrieved 37 papers for inclusion in their review. The review discussed the potential genetic predisposition of people with schizophrenia to develop cardiovascular disease, and highlighted that anti-psychotic medication and poor lifestyle choices compounded the risk. Chacon et al. (2011) concluded that there was a wealth of evidence supporting the benefits healthy lifestyle management initiatives and recommended that physical health monitoring and promotion should come within the remit of mental health practitioners as part of their everyday clinical practice. Implications of this review are that mental health practitioners should incorporate physical health promotion strategies into their practice, and their preparedness to do so may be indicated by the attitudes they hold towards physical health management Chacon et al. (2011) included only one database in their search for papers to review, however those included bore strong relevance to the research question, and as such the review bore relevance to my study.

Mitchell et al. (2011) indicated a low level of physical health monitoring and promotion despite the availability of guidelines for practice. This review employed a robust search strategy and identified 47 international studies. Mitchell et al. (2011) searched Medline, Pubmed and EMBASE and following a well-documented process of review reported that physical health screening was not carried out consistently. Mitchell et al. (2011) concluded that whilst guidelines advocate increasing cardio-metabolic monitoring, most mental health service users do not receive an adequate level of screening, and as such, cardiovascular risks are not addressed adequately. This finding has implications for the practice of mental

health nurses, who are consistently cited as an important professional group whose practice should include vigilant physical health monitoring.

Further information regarding the role of offering physical health advice was generated by Tosh et al. (2014), who recognised that mental health practitioners were developing a responsibility toward the management of the physical health of people with mental illness undertook a systematic review to investigate the effectiveness of physical health advice for this group. Tosh et al. (2014) reviewed 5 studies, but acknowledged that they were of poor quality and concluded that physical health advice could persuade people with mental illness to increase their use of health services, and that this could ultimately impact and improve their overall well-being. However, they argued that, because the data quality of the studies under review was poor, it could be the case that clinical practitioners are giving ineffective advice. Tosh et al. (2014) recommended that good quality research was required in this area, to establish what factors might impact on the delivery of physical health advice, and care, in order to improve overall well-being for people with severe mental illness. Tosh et al (2014) pointed out the lack of evidence in support or at variance with current guidance and suggest that practitioner experience rather than robust evidence is underpinning activity in this area. An increased need for health promotion and disease prevention services should be delivered for people with mental health problems was reported as requiring more focus.

2.4.3 Access to primary care

Beecroft et al. (2010) undertook a qualitative study to asses where the responsibility for managing the physical health of people with SMI who live in community settings might lie.

Their study inquired into whether better physical health management was achieved if people with SMI attend their GP, Community Mental Health Team of both agencies. Beecroft et al. (2010) selected 309 individuals for interview from a sample of 566 relevant cases. The study had a narrow geographical focus, having been undertaken in South London, and as such may have limited transferability to other settings. Beecroft et al.(2014) reported that higher levels of satisfaction with the care they had received was experienced by those who had been treated by their GP in the preceding six months Beecroft et al. (2014) concluded that all people with SMI should be registered with a GP and annual physical health monitoring should be undertaken in that setting, determining that the role of the GP in monitoring physical health care for this population was pivotal. This study was well documented and of relevance to my study, but omitted to consider factors that impact on the willingness of people with SMI to attend their GPs.

Mitchell et al.'s (2011) review recommended that closer integration of primary and secondary mental health services had to be developed to support the physical health of people with SMI. In line with this, De Hert et al. (2011b) and Shattell et al. (2011) cite improved integration between primary and specialist mental health services as vital to support the physical health of people with SMI. However, Nash (2013) warns of the diagnostic overshadowing that this group can experience in primary care, as a barrier to engagement, citing the "cruel reality" (Nash 2013 p.26) of stigmatisation and its role in diagnostic overshadowing. Mitchell et al (2017) pointed out that there continued to be inadequate provision of physical health care for people with SMI and that this was leading to poor outcomes in terms of physical health for this population. Mitchell et al (2017) that

despite the emergence of the parity of esteem policy, practice had changed little in the preceding five years. Mitchell et al(2017) urged all clinicians and commissioners of health services to develop awareness of what parity of esteem entails to support appropriate funding, planning and development of services so that inequalities in health care are reduced.

2.4.4. Attitudes as barriers

Mwebe's (2016) qualitative exploratory study explored ten mental health nurses' views on screening and monitoring the physical health care needs of people with serious mental illness, recognising that mental health nurses are well placed to undertake this role. Mwebe (2016) identified four key themes: physical health monitoring, barriers to this, educational needs and strategies to improve this aspect of practice. Mwebe (2016) points out that health promotion, especially relating to smoking cessation, remains a complex issue on which mental health nurses' practice can have a positive impact. Mwebe (2016) concludes nurse education should focus on recognising social determinants of health care behaviour and increased collaboration with other providers such as primary care to facilitate access to physical care services for people with SMI. Mwebe's (2016) study may have limited transferability due to the small sample size and narrow geographical range, however bears relevance to my study in terms of relevance to the attitudes expressed by mental health nurses.

Dickens et al.'s (2019) systematic review of 22 studies that emerged from a in-depth search of multiple relevant databases explored mental health nurses' experiences in physical health care focusing on their skills and experience in managing emergency medical care of physical health deterioration. Dickens et al (2019) recognised an increasing trend among mental health nurses in that their recognition of their role in managing physical health and how keen they are becoming to undertake this appropriately, but concluded that a more robust evidence base need to be developed to better support mental health nurses with their emergency physical health care skills. Dickens et al(2019) reflect the findings of Brown and Smith, (2009), Hemingway et al. (2014), Blythe and White (2014), and Mwebe (2016) the authors point out the implications for nurse education.

This section has highlighted that mental health nurses are well placed to support their service user's physical health, but training is required in order for this to be undertaken confidently. Implementing health promotion strategies, especially smoking cessation, is complex and mental health nurses are well placed to support people with SMI to benefit from such initiatives. A more integrated approach to working with medical or other colleagues across primary, acute and secondary mental health services is crucial to ensure service users are appropriately monitored and their physical well-being maintained - mental health nurses recognise that this can be challenging. Mental health nurses are noted to have an important role in managing physical well-being and their attitudes and behavioiur in undertaking this influence the physical well- being of service users.

2.5 Theme 3 - Service user's value the opportunity to discuss their physical health needs

Eight papers reported on service user views regarding the management of their physical health needs by mental health practitioners, to develop insight into their perceptions of this.

El-Mallakh's (2006) United States based study explored developing a theory of self-care for individuals with schizophrenia/schizoaffective disorder and diabetes. El-Mallakh (2006) interviewed 11 service users and concluded that mental health nurses should educate their service users on how psychosis can affect the individual's ability to manage their diabetes. The small sample size limits transferability of the findings as it was drawn from an urban, population who were in receipt of publicly funded services. Furthermore recall bias has to be considered due to the data collection method of self-reporting. However, the study focused on confidence in managing diabetes, which aligns to the management of abnormalities in blood glucose levels which are items included in the PHASe. Items relating to mental health nurses' attitudes to supporting and educating their clients in developing self-care strategies that El-Mallakh (2006) alludes to are also evident in the PHASe.

Griswold et al. (2009) undertook a randomised controlled trial to explore whether the introduction of nominated care managers would improve access to primary care for people who had experienced a mental health crisis, and to help understand such experiences from the patient's perspective. Griswold et al. (2009) randomly allocated 175 patients who had presented with a mental health crisis in the emergency setting into intervention (allocation of case manager) and control (normal practice) groups and undertook semi-structured interviews at time of allocation and again one year later to assess outcomes. three interviewers were trained to use a uniform approach to undertake 112 baseline and 28 follow up interviews. A questionnaire to collect information on physical and mental well-

being was also administered at initial recruitment, six months and 1 year later. Data analysis was undertaken by 5 professionals, who analysed scores for physical and mental well-being . Griswold et al.(2009) reported that at baseline, the majority of the respondents experienced negativity with regard to their mental health, which was felt to be expected, given the circumstance at the time of the interview, however at both 6 months and 1 year quantitative and qualitative findings respectively, all patients in the intervention group had improved physical and mental health functioning. These findings led Griswold et al.(2009) to conclude that care management plays a crucial role in supporting the mental health service user post-crisis, and that service users would value a primary care service that addresses both physical and mental health concerns. There a number of limitations to the study as interviews were conducted via telephone and in person, which could affect the quality of information gathered. The interviewees were not blinded at any point and the sample were drawn from a population that were known to have difficulties in accessing health care, limiting transferability of the findings. The care management role was identified as beneficial in the provision of integrated care and considered appropriate for mental health nurses to undertake. Mental health nurses attitudes towards a more collaborative approach to practice are important to support such service development.

Verhaeghe et al.'s (2011) review of Medline using appropriate search terms with a view to identifying the perspectives of mental health service users and mental health nurses in relation to physical health promotion. 14 papers were reviewed and the study identified that mental health practitioners and service users had positive but differing perceptions of the meaning of promoting health especially in terms of weight management and healthy

eating. Whilst both groups felt that discussing exercise and diet in the mental health setting was useful, Verhaeghe et al. (2011) pointed out that a review of practitioners' attitudes towards health promotion was required. This review has some limitations in terms of transferability of findings as many of the included studies had small sample groups and the quality of the reviewed studies was variable.

Mesidor et al. (2011) undertook a qualitative study which was carried out as part of a large trial, to explore factors that could obstruct or facilitate access and provision of primary care for individuals with SMI. They explored the views of both administrative and clinical staff who were working in primary care setting where a nurse practitioner led model of care was in place. 10 interviews were undertaken and analysed using NVIVO qualitative data analysis software. Mesidor et al. (2011) reported that a range of factors were cited as causing significant issues with accessing primary care for people with SMI. Financial and staff resources were viewed as barriers to the delivery of primary care, as it was found to be time consuming due to the complexities of patient engagement (affected by ability to organise appointments, and impact of poor mental functioning) and inter-agency working. The nurse practitioner role was viewed as a positive but resource intensive service. The study has limited transferability as it was undertaken in the USA but does highlight the benefit of mental health nurse input in supporting the physical health care of people with SMI, from the point of view of the administrative staff and the patients involved in the study. Mesidor et al. (2011) report that their interviewees felt the presence of the mental health nurse practitioner in primary care facilitated access for patients and reassured administrators as they were available to discuss and review cases without involving the physician. The study

adds weight to the debate that mental health nurses are well-placed to support the physical health of people with SMI in the primary care setting.

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Chadwick et al.'s (2012) review explored service user's perceived barriers to physical health care and management across the USA, Australia and the UK. Attitudes of primary health care providers were reported as uncaring, and non-engagement was cited as being misunderstood by practitioners. Chadwick et al. (2012) highlighted the findings of two studies which claimed that a shift in power was needed, with mental health practitioners recognising and valuing the service user's experience of their illness as an important factor in case management. Chadwick et al. (2012) allude to diagnostic overshadowing, citing the development of training in physical health monitoring for mental health practitioners and the need for these practitioners to collaborate with service users as key aspects of practice required to improve physical health outcomes.

Roberts and Bailey's (2013) undertook an ethnographic study aimed to explore factors that might facilitate or obstruct the delivery of health promoting education for people with SMI They collected data via participant observation and also undertook 8 semi-structured interviews with attendees at a health promotion group. The opportunistic sample had been invited to take part by the group facilitator, 11 individuals responded and took part in the study, although 66 people had been invited to do so.

Roberts and Bailey (2013) reported that findings from participant observation indicated that the provision of a comfortable environment, group cohesion and ownership, the facilitator's

style, perceived benefits of gaining information and learning and peer support as facilitators to physical health improvement and environment Large groups and limited space were observed to be barriers to engagement in the health promoting activity group. The interview data highlighted support with weight management as being a barrier, (being weighed was cited as such) but a facilitator when encouragement and success at weight loss was experienced. Positive social networking and anxiety at meeting new people were cited as incentive and barrier to engagement respectively. The study demonstrates rigour by clear documentation of adherence to qualitative methodology, and there is transparency in terms of data collection, analysis and management. Roberts and Bailey (2013) concluded that their study generated information that could inform future practice aimed at supporting the delivery of health promoting lifestyle interventions for people with SMI.

Nash (2013) reported that service users with diabetes frequently experienced stigma, and pointed out that the issue of diagnostic overshadowing continued to be problematic. Service users felt that they were not being treated holistically, in that clinicians would only deal with problems arising in their area of specialisation, e.g. mental health practitioners could not advise on diabetes, and did not recognise the impact of the condition on their service user's cardio-vascular health. Participants reported that their mental health care did not always take account of symptoms of diabetes, and Nash (2013) pointed out that mental health staff needed to know the importance of recognising and treating symptoms of diabetes to prevent longer term, potentially avoidable, complications.

Gray and Brown (2017) explored the perceptions of service users and mental health nurses to ascertain what mental health nursing might contribute to the physical health of people

with severe and enduring mental illness. They recognised the previously reported positive attitudes held by mental health nurses with reference to their management of physical health, and considered whether these positive attitudes impacted on clinical practice. Gray and Brown (2017) undertook semi-structured interviews with 15 service users and 18 mental health nurses and used a thematic analysis approach to distil themes from the data.

The themes included the perception of mental health nurses that physical health management was not always part of their work; the impact of psychotropic medication on physical health was not recognised by clinical staff; and, as a professional group, mental health nurses felt their skills regarding physical health monitoring and surveillance were in need of updating. Gray and Brown (2017) also pointed out that mental health nurses cited poor motivation on the part of the service user to change lifestyle and diet as barriers and that challenges to encouraging a healthier lifestyle were often encountered in practice.

This section highlights that service users' value receiving holistic services which place equal value on their physical and mental health; the studies also recognise that such services are not commonplace.

Collaborative work between mental and physical health services is essential both at a generic level but also in relation to specific health conditions. However, work is also required to improve the skills of mental health nurses in supporting service users' motivation to maintain physical well-being.

2.6 Theme 4 – The development and use of the PHASe

The Physical Health Attitude Scale – PHASe – (Robson and Haddad, 2012) is the quantitative data collection instrument used in this study and is 28 item questionnaire designed to elicit the views of mental health nurses regarding the management of physical health. Robson and Haddad's (2012) paper detailed the process of the development of the scale. Papers from the UK, US, Australia and Hong Kong, Qatar, Japan, Jordan and Turkey which detailed the use of the PHASe were also reviewed.

Robson and Haddad (2012) recognised that people with SMI experience high levels of co-morbidity and mortality than the rest of the population in the UK, and explored the role of mental health nurses may have in improving this situation. They specifically note that the attitudes of mental health nurses towards this aspect of their role was crucial and that exploring these using a valid measure would be of benefit. Robson and Haddad (2012) undertook a review of contemporary literature, administered a postal questionnaire to 585 registered nursing staff in a NHS trust and carried out two focus groups to garner evidence to support the development of the PHASe. The process of the development of the scale is clearly documented in the paper, and this aspect is critiqued further in Chapter 3, paragraph 3.11.2. Robson and Haddad (2012) concluded that whilst this was a first attempt at developing such an instrument, further testing of the PHASe would help to establish validity.

Robson and Haddad's (2012) study hypothesised that nurses who had received further training in physical health and those who were registered with the UK Nursing and Midwifery Council as a Registered Nurse - Adult in addition to Registered Nurse – Mental Health, would have more positive attitudes. However, their findings suggested that this qualification was not significant, although nurses who had received targeted training did

have a more positive view of their role in managing their service user's physical health. Robson and Haddad (2012) acknowledge that study limitations include low representativeness and generalisability due to a low response rate of 52% which they felt could have been improved if they had provided first-hand information to potential participants. It was also recognised that the study was undertaken in one mental health NHS trust, also limiting generalisability. Robson and Haddad (2012) recognised that the overall PHASe was measuring concepts of physical healthcare via its sub-scales, and as such was not measuring a single, clearly defined construct. Further use of the scale by other researchers was indicated as necessary to further refine the instrument and the dissemination of the findings of my study will add to this process. Robson and Haddad (2012) concluded that the PHASe had the potential to measure the impact of training on nurse's attitudes.

Happell et al. (2013) used an adapted version of the PHASe to explore approaches os Australian mental health nurses towards the value of training in physical health care management. The PHASe was adapted slightly, by changing the word "client" to "consumer" and by the addition of questions asking how nurses recognised people at risk from physical ill health, and how they approached sensitive topics of conversation with their service users. The results indicated that 91.6% of the 643 respondents thought that training mental health nurses in physical health care was of moderate or significant value. An average of 67% of nurses expressed interest in undertaking training in aspects of care alluded to in the questionnaire, with 42% expressing interest in all areas. Caring for people with diabetes, and supporting people with issues related to sexual health and medication, were perceived

as important, with cardiovascular health being the topic that most respondents felt they would like to receive training on. Happell et al. (2013) recognised limitations the study, including the low response rate (22%) and the potential responder bias, as nurses who were interested in physical health care may have been more likely to respond. Happell et al. (2013) concluded that their study findings suggested that Australian mental health nurses recognised the importance of physical health care management.

Knight et al.'s (2017*)* study explored attitudes, confidence and barriers encountered by mental health nurses when managing the physical health care of people with SMI who may be experiencing or at risk of developing metabolic syndrome,(characterised by raised blood pressure, blood glucose, cholesterol and body mass index). Knight et al. (2017) explored whether nurses attitudes and confidence where relative to the delivering of physical health care in practice. They also queried whether undertaking physical health care was relative to nurses perceptions of how empowered and influential they are in practice. Knight et al. (2017) recognised the prevalence of metabolic syndrome and pointed out that, despite there having been a range of suggested guidelines for practitioners in the mental health setting to support the monitoring of risk factors, this had exerted little influence on practice as the risk had remained relatively unchanged in the USA over the past two decades. Knight et al. (2017) indicated that US mental health nurses faced a challenge to using an evidence-based practice approach to reduce the occurrence of metabolic syndrome in their service users. Knight et al. (2017) made adaptations to the PHASe and a second scale, known as the Menon Empowerment Scale, was also employed. Knight et al. (2017) found that that mental health nurses' contribution to supporting their service user's physical

health continues to involve weight management, along with monitoring blood pressure, glucose and lipid levels. They reported that 36% of care was related to managing these, as well as organisational factors, including the development of clarity regarding which professionals should be undertaking said monitoring. The generalisability of the findings are limited due to the sample having been drawn from a single professional body, which may not be representative of the entire population of USA mental health nurses, also more than half of sample were graduate or doctorate level which was also not felt to be reflective of the majority. K night et al. (2017) suggested that further research into role clarity is therefore needed.

Bressington et al. (2018) undertook a cross-sectional survey using the PHASe examining the attitudes, practices and perceived training needs of mental health nurses towards the management of physical health care for people with SMI and acknowledged that studies had suggested mental health nurses were interested in physical health and had a desire to be trained in this area to support their service users. In their study, the PHASe was sent to 1,253 nurses across Japan, Qatar and Hong Kong, of which 481 were returned, giving a response rate of 39%. Barriers to managing physical health care that were perceived by the respondents included: high workloads which prevented nurses from having in-depth discussions regarding the side effects of antipsychotic medication; and the problems encountered when caring for service users who had little or no motivation to undertake exercise, or take action to improve their physical health in terms of dietary and lifestyle factors such as smoking and substance misuse. Bressington et al. (2018) expressed that nurses from the Asian continent were more likely to feel that mental illness is a barrier to

improving physical well-being. Bressington et al. (2018) had translated the PHASe into Japanese which may have affected impacted on validity, and response rates varied across the three countries which was acknowledged as potentially limiting sample representativeness and generalisability of the finding. Bressington et al. (2018) concluded that their study, in line with similar previously published paper, indicated that all mental health nurses regardless of location, nationality or registration level perceived that they would benefit from further training in physical health care management.

A further cross sectional study undertaken by Chee et al, (2018) involved207 Australian registered nurses and used a modified version of the PHASe (Robson and Haddad, 2012). The study focused on physical health care provided to young people presenting with a first episode of psychosis and aimed to explore the influence of the nurses' training (psychiatric or generalist) on the likelihood of them delivering physical health care. Chee et al (2018) modified the PHASe by the addition of a closed question asking if the respondent had experience of working with young people experiencing first episode psychosis, and a revised question relating to nurse training, to reflect the Australian nurse education system. Chee et al (2018) found that there were differences in practice between psychiatric and generalist trained nurses, reporting that generalist nurses were more likely to support cancer screening, sexual health care and smoking cessation than their psychiatric trained colleagues. Chee et al (2018) felt that nurse from either background should be prepared to support young people with first episode psychosis in the monitoring of the impact of anti-psychotic medication on physical health. Further support and education was felt necessary to underpin this aspect of the nurses' role. The authors acknowledge that a limitation to the study relates to the differences in practice between psychiatric and generalist nurses and

that a cross sectional design may not have shown a causal relationship between the skills and practices of the two groups, and that generalisability of findings may be limited. Whilst generalisability of the findings may be limited by the use of a cross-sectional design and convenience sampling technique, Chee et al (2018) concluded that all nurses require skills in physical health monitoring when working with vulnerable young people experiencing first episode psychosis as this group are likely to experience physical co-morbidities relating to anti-psychotic use, whilst at the same time not accessing health promotion services.

Ganiah et al.'s (2017) cross-sectional study aimed to describe mental health nurses' attitudes and practice towards the delivery of physical health care for people with mental ill health. Ganiah et al. (2017) delivered a translated version of the PHASe to a convenience sample of 202 from a total population of 225 mental health nurses working in mental health settings in Jordan. The criteria for participation were that the nurses were currently caring for people with mental illness. Ganiah et al (2017) felt that their findings aligned well with the findings of other authors in recognising that mental health nurses appreciate the importance of their role in physical health care, but did not concur with authors who suggested that mental health nurses felt themselves to be inadequately trained to deliver this aspect of care. The findings may be limited by responder bias via use of the self-reported questionnaire and convenience sampling. The authors highlight implications for nurse education and training especially relating to education regarding anti-psychotic use, cancer screening and sexual health needs, as necessary to equip mental health nurses to support physical health care.

A study undertaken by Özaslan et al (2019) aimed to explore the validity and reliability of a translated version of the PHASe, and was co-authored by Haddad. The scale was completed by 174 Turkish mental health nurses working in an acute psychiatric in-patient setting. Özaslan et al (2019) recruited a sample of 230, which they deemed appropriate for factor analysis, as their study included psychometric evaluation of the scale. Özaslan et al (2019) conclude that their study adds to the literature assessing the validity of the PHASe and pointed out that mental health nurses' confidence was higher when relating to basic checks such as blood pressure and glucose levels but that targeted training could improve outcomes for service users.

Wynaden et al (2016) used the PHASe (Robson and Haddad, 2012) in an Australian survey. The results were analysed by factor, (attitude to involvement in physical health care, confidence in delivering physical health care, barriers to physical health care delivery and attitudes to smoking). As the survey data collected was categorical, Chi square tests were used to analyse results, whilst descriptive statistics presented the demographic Wynaden et al (2016) found that there remains a situation where mental health nurses seem to be keen to support the physical health of their service users, but are unsure about their responsibility in this area. Issue of complexity, and "therapeutic fatalism" – where the health care professional prejudges their potential to influence the service user's health behaviour as ineffective – as well as the stigma attached to people with mental health problems are cited as problematic.

Clancy et al (2019) compiled a new scale, comprising of 147 items that had been derived from previous instruments, including Robson and Haddad's 2012 PHASe. The scale was subjected to psychometric testing and demonstrated satisfactory internal consistency on calculation of Cronbach's alpha for each subscale. Their "PhysCare" survey was sent to the email accounts of 1035 clinicians who were working in a mental health service of New South Wales. The findings that physical and mental health nurses have a significant role especially where case managers are allied health professionals. Allied health professionals require medical and/or nursing support to undertake physical health aspects of the role such as medication monitoring and cardio –metabolic screening, and that seeking consultation with such colleagues was likely. The perspectives highlighted by Clancy et al (2019) indicate awareness and acknowledgement of the role that mental health clinicians have in supporting physical health care, but brings the issue of multi-disciplinary case management into the spotlight. The role of care co-ordinator in the United Kingdom can be filled by allied health professionals, although my study is focusing on nurses attitudes, those of other professions are a relevant area of further enquiry.

The main point to emerge from the review of literature detailing the use of the PHASe indicates that the scale has demonstrated validity. PHASe has been used extensively internationally with good results, demonstrating accessibility and good utility.

2.7 Conclusions from the literature review

The literature review had identified the existence of the problem of poor physical health pf people with SMI. The literature also supports the view that mental health nurses' have an important role in the delivery of physical health care, and they are keen to address this. Negative attitudes among mental health nurses towards this aspect of care are not evident, and as a professional group, mental health nurses are well placed to deliver physical health care to a standard that can reduce morbidity. Strengthening this role by improving core basic training and continuous professional development could help reduce the morbidity rates experienced by people with SMI. (Brown et al., 2000; Lawrence et al., 2010; Hemingway et al. 2014). This is reflected in the NHS Outcomes Framework (Department of Health, 2012), which relates to "parity of esteem"; an initiative launched by the Department of Health (Department of Health, 2013), aimed at addressing the marked difference in NHS access and response pattern for mental health service users, when compared to physical health service users.

Chadwick et al. (2012) pointed out that many barriers to improving the physical health of people with SMI relate to problems with communication between practitioners, suggesting that improving mental health nurses' overall awareness of physical health will facilitate this. Indeed Hemingway et al. (2014*)* found that targeted education for mental health nurses is effective in facilitating their role in the management of their service user's physical health. This population, whose mortality rates are higher than the general population, comprises those who take antipsychotics and mood stabilisers, and the literature discusses the nature

of the physical health care people with SMI should be offered and what barriers there may be to delivering this care. Moreover, there is strong evidence to suggest the professional group who could be most influential in reducing the unacceptably and globally acknowledged high mortality rates and improve the physical well-being are mental health nurses, as discussed by Hetrick et al. 2010; Hardy et al. (2011); De Hert et al. (2011a); De Hert et al. (2011b); Verhaeghe et al. (2011); Chacón et al. (2011); Mitchell et al. (2011); Chadwick et al. (2012); Blythe and White (2014); Tosh et al. (2014); and Hemingway et al. (2014).

The PHASe was developed by Robson and Haddad (2012) and, through its development, has contributed to a growing body of knowledge highlighting the assertion that mental health nurses are well placed to support and manage the physical health needs of their service users. The literature includes published studies that confirm the PHASe is a valid tool for eliciting nurses' attitudes on physical health management. This is an important implication for my study and suggests that the PHASe can be used with the confidence that it has been validated as reliable by peers.

Reviewing literature has galvanised the need to find out what mental health nurses attitudes towards managing physical health are; information that could underpin professional and service development, and lead to improved outcomes for service users whilst offering opportunities for advanced training and development for mental health nurses. The review has highlighted that mental health nurses are well placed to develop

their role in supporting the physical well-being of their service users, and that this view has been reported across the globe. The findings are in keeping with those of a recent literature review undertaken by the Royal College of Nursing (2019, page 13), which concluded that there are "a number of *challenges associated with improving the care experiences of those who are diagnosed with severe mental illness*" and that these challenges appear to be across the health care system.

The reviewed papers also explored specific aspects of physical health care which included management of the side effects of antipsychotic medication, and the impact of poor lifestyle choices such as smoking, poor diet, inadequate exercise and weight management.

Authors of the reviewed papers have endorsed the need for further research in the context in which my study is placed and, as such, my study has the potential to add to the current evidence base and generate further knowledge regarding how mental health nurses they can contribute to improving and maintaining their service user's physical well-being. Previous studies using the PHASe received combined responses from mental health nurses, (Happell et al., 2013; Wynaden et al., 2016; Knight et al., 2017; Chee et al., 2017; Ganiah et al., 2017; Bressington et al., 2018; Clancy et al., 2019; and Ozaslam et al., 2019) and the authors (Robson and Haddad, 2012;) recommended further use of the scale, affirming that further study has a valid basis

Reviewed sources also indicate that further inquiry is needed to ascertain how people with SMI can be educated about healthy lifestyles and encouraged to adapt behaviours to

improve diet and increase exercise. (Osborn et al, 2008, Shattell et al, 2011). Managing the side effects of the psychotropic medications that affect weight, levels of blood pressure, lipids and glucose is vital, and mental health practitioners are key to supporting this, (Griswold et al., 2008; Brown and Smith, 2009; Hardy and Gray, 2010; Brown et al., 2011).

The overwhelming message across the range of reviews was that there is unquestionable evidence of physical health problems in people with SMI, and that mental health practitioners should be proactively working to support their service user's physical health by direct intervention, collaboration or referral to primary care agencies; barriers to attaining this also featured prominently (Harris and Barraclough, 1998; Saha, 2007; Osborn et al., 2008; Lawrence et al., 2010; Verhaeghe et al. 2011; Chacón et al., 2011; Mitchell et al., 2011; Hardy et al., 2011; Roberts and Bailey, 2011; Blythe and White, 2012; and De Hert et al., 2013).

This study seeks to offer a more complete picture; as Creswell and Plano-Clark (2011) discuss, the quantitative data only tell half the story and qualitative findings can enrich the findings. This study will offer a more complete narrative on the reality of practice because it relates to the lived experience and current practices of mental health nurses and their attitudes towards managing physical health care;

2.8 Summary

This chapter has outlined a search of the literature relevant to the study, and has included articles that have reviewed and confirmed the existence of high mortality and morbidity

rates in people with severe mental illness and the potential impact that mental health nurses could have on reducing this by focusing on managing physical health. This finding is reflected in international literature, which suggests that further research may be able to contribute knowledge in support of a global problem. Research related to the management of physical health for people with mental illness, and research that has used the PHASe, also indicates that further research on the topic could be valuable in supporting the mental health nurse's role in managing their service user's physical health. The evidence amassed by this review has substantiated the rationale for undertaking this study: the physical health issues faced by people with severe and enduring mental illness are not well addressed by health services, and it is evident that there is potential for mental health nurses to impact positively to improve well-being.

Chapter 3 Methodology

A note about terminology

Whilst 'respondent' is used more generally within quantitative research and 'informant' in qualitative research, this study is mixed methods. Consequently, to avoid confusion, the single term 'respondent' is adopted throughout.

3.1 Introduction

This chapter explores the methods used in this study; axiological, ontological and epistemological perspectives are explained and the rationale for adopting a convergent mixed-methods research approach explored. The process of data collection, analysis and the strategy for integration of the quantitative and qualitative findings are presented.

3.2 Theoretical Approach

The overarching method employed in this study is a convergent parallel design (Creswell and Plano Clark, 2011) which involved consecutive quantitative data collection via the Physical Health Attitude Scale (PHASe) (Robson and Haddad, 2012), and qualitative data collection from interviews with a sample of mental health nurses and mental health student nurses.

The epistemological basis for my awareness of the poor mortality rates of people with SMI could be considered to be positivist, a case of "this phenomenon must be provable because it has been experienced, so therefore can be explained" having lived the experience and

seen the situation manifest in practice. There is an inductive and deductive sense to the knowledge; having experienced first-hand evidence of poor physical health in individuals with mental illness, and having been in a professional position, there is an expectation on me to explore evidence that underpins practice, and to interpret information from published sources regarding practice issues. This has led to recognition of the phenomenon (that people with mental ill health experience poor physical health), whilst having a professional responsibility to try to address the situation: I am duty bound to undertake the research in an effort to ascertain whether the physical well-being of people with mental ill health could be improved by understanding the attitudes of mental health nurses.

This research adopts an interpretivist perspective; meaning is afforded to phenomena that are experienced and reflected upon over time by those who are engaged with the phenomena. I considered a phenomenological approach to the study, as it was based on my experience of being an experienced nurse, having worked in both acute services and mental health services, and having recognised the difficulties of delivering holistic care for service users with severe and enduring mental illness (SMI).

Whilst considering my approach to this study,I took Dowling and Cooner (2012) advice and looked at the origins of phenomenology, with reference to the work of Husserl, Merleau-Ponty, and the American philosophers Giorgi and Garza. The latter allude to trying to reduce preconceptions that might attach meanings to research on behalf of the researcher that may not be entirely true. Given my experience of having worked in both acute and mental health settings, it was important for me to remain impartial to discussions that could be disparaging, for example where mental health nurses may have expressed frustration

with the apparent inability of their acute care colleagues to engage with individuals with mental health issues. The use of memoing here was important, following interviews I noted down my own reactions to the information discussed.

3.3 Axiology

Axiology refers to the values held by the researcher which should be examined at each stage of the research process, alongside the process of evaluation and re-evaluation that has underpinned research activity throughout the study, (Biddle and Schafft, 2015).

The axiological assumption in this study is one of social justice, and potential discrimination, in relation to mental health service users. This study will generate information that may reduce the injustice experienced by people with mental health problems in addressing their physical health needs.

3.4 Ontology

Ontology refers to the nature of reality and what can be known about it (Lincoln and Guba, 1994). Examining the ontological approach enables the researcher to establish a sound base from which to undertake research and generate knowledge, considering whether knowledge is anchored in reality, or whether it has it developed subjectively in the mind of the view holder.

Abercrombie et al. (2006) question whether the context in which the research project is framed exists in reality or whether the research focuses on the context configured by the

researcher in their own mind. This study is being undertaken with the acknowledgment that the focus has developed across both aspects. Firstly, evidence from the literature which explicates the role of the mental health nurse in supporting the physical health of service users; secondly, by the researcher's own engagement as a mental health nurse in clinical practice.

The study will engage with a community of mental health nurses; Hills and Mullett (2000) point out that undertaking research in such communities investigates the concepts and ideas people develop as a result of their experiences in the world. Such studies have a subjective-objective ontological approach, suggesting that there is a component of participation, within the study in relation to the researcher and respondents, which is relevant in this study. Hills and Mullett (2000) point out that research that is based within communities, seeks to investigate the perceptions of individuals that have developed from their experience.

Hills and Mullett (2000) further theorise that research taking place in communities, with similarities to the context in which this study is undertaken, closely relates to the ideology of the co-operative inquiry method also created by Heron and Reason (1997). This relates to recognising that knowing is generated by our experience of being in a world and also recognising how we might reframe and possibly corrupt knowledge is also important. It must also be borne in mind that reflexivity of the researcher will impact on the quality of the knowledge they may generate (Heron and Reason, 1997). Researching communities is

researching what people believe and experience about their reality and the sense they make of what they are experiencing in their world, in this case the world of the mental health nurse when managing the physical health of their service users. This research study aims to do exactly that, and reflects the subjective – objective ontological perspective that Hills and Mullett (2000) articulate.

3.5 Epistemology

The epistemological basis of this study is the quest for the acquisition of knowledge that will provide a research-based understanding of the attitudes of mental health nurses towards the physical health of service users.

There is an inductive and deductive sense about the knowledge under consideration; using a mixed methods approach will enable this dual perspective to be examined. The researcher has experienced the limited attention paid to the physical health of service users in mental health services as part of clinical practice. In addition, based on analysis of the evidence from published research, the researcher recognises the phenomenon that people with mental ill health experience poor physical health care.

There is also a basis for the research topic to be appreciated from an interpretevist perspective. Interpretivism represents the view that meaning is afforded to phenomena that are experienced and reflected upon over time, with consequent development of knowledge. The research may be well grounded in both deductive and inductive processes

that have led the potential researcher to a position where a mixed methodology could satisfy the need to generate credible knowledge from the project. This is postulated given the awareness of the statistical and experiential evidence that has influenced an appreciation that the physical well-being of people with mental ill health has it's basis in both quantitative and qualitative domains, and therefore a mixed methods approach to this exploratory study is appropriate.

3.6 Pragmatism

In this study the PHASE questionnaire allowed for the attitudes of mental health nurses to be quantified. This quantification is comparable with research by Bressington et al. (2018) and Chee et al. (2018). In addition, the study gives parity to reported experiences comparable to studies by Ehrlich et al. 2014, Gray and Brown 2017, and Mwebe, 2017. Working with these two data sets creates a convergent design which lends itself to a pragmatic approach (Creswell and Plano Clark 2011)

Pragmatism offers a research approach that values truth and recognises it as emerging from real, contemporary, contexts. Such an approach is entirely consistent with a study undertaken in a contemporary mental health setting using data generated by practicing mental health nurses and nursing students.

Pragmatism enables mixed methods research to prioritise the research question over the methods employed (Tashakkori and Teddlie 2003). This study recognises that, individually, qualitative or quantitative research cannot offer a satisfactory account of the research topic. In order that we may understand the attitudes of mental health nurses and mental health nursing students toward the physical health of service users, the study focused on 'what works' to induce the truth (Tashakkori &

Teddlie 2003) rather than adopting a single pure approach to design. The desire for research purity was not permitted to give dominance or to subordinate either qualitative or quantitative data.

McCaslin (2012 p 672) cited in Given (2012) reiterates that pragmatism embraces that truth is found in "what works" and hold relevance in the contemporary setting - this study set out to discover what attitudes are held by the contemporary mental health nurse - so a pragmatic approach enable the researcher to "tell it like it is" and as such was felt to be the appropriate approach.

Allmark and Machaczek (2018) suggest that, as mixed methods studies have become more commonplace in nursing and health care research, researchers should be encouraged to think about adopting a realist approach, as an additional source of insight for studies undertaken from a perspective of pragmatism.

3.7 Rationale for using mixed methods

A convergent mixed methods design has been selected to generate rich datasets, both qualitative and quantitative from which to generate appropriately robust findings. Quantitative findings can be explained in more detail by the qualitative findings, and findings can emerge from either data set as well as from integration of both.

Bazeley (2017) argues that all studies look at phenomena that have both quantitative and qualitative aspects, and that using a mixed methods approach encourages a holistic perspective. Mixed methods researchers are exhorted to engage with all their research

findings from a range of perspectives, as this will develop relevance, and that relevance is more important than what form the data is in (Bazeley 2017).

Creswell (2016) discusses how, in the media, statistics relating to phenomena such as terrorism or severe weather are often followed up by stories of people's experiences in order to create authenticity and realism for the viewer, pointing out that the detail of the experiences of those involved in a situation offers much more insight into the significance of the event. A mixed methods research as a realistic approach to research enables us to know about the numbers alongside the details of a phenomenon (Creswell and Plano Clark 2011). A convergent approach can create findings that are influential, as a rich exploration of the phenomenon has been undertaken, but the integration of data is paramount; not just to respect the research paradigm, but to ensure that findings are complementary and adequately rich in detail.

Collecting and analysing both quantitative and qualitative data enables the researcher to attain a more complete picture of the reality being studied, (Creswell and Plano-Clark 2011). Including qualitative data collection also gives participants a voice and allows the research to draw conclusions from their experiences adding description and realism, but also developing controversy or contradiction – thus allowing a more complete narrative of the reality to be acquired. In mixed methods research the focus is on the messages that can be derived from studying and integrating the findings from both sets of data (Bazeley, 2016).

Tashakkori and Teddlie (1998, 2003) are credited with developing mixed methods to the point of it becoming the third paradigm**;** a "distinct third methodological movement" (Tashakkori and Teddlie, 2003, p. 24) with emphasis on the integration of data as a key process.

Mixed methods researchers at any level are encouraged to consider the importance of a clear argument to support their use of mixed methods, in order to maintain and develop the mixed methods approach as a valid and credible research paradigm (Creswell and Plano Clark 2011; Wisdom et al. 2011; Ritchie et al. 2014 and Mertens et al. 2016). The argument being presented in this study is that mental health nurses attitudes towards managing physical health care can be explored to ascertain information that highlight issues faced with this aspect of their role. By the collection and analysis of both qualitative and quantitative data a more informed perspective can be gained to generate credible data with immediate utility in practice.

Employing mixed methods can support the researcher to acquire quantitative and qualitative data to enhance understanding of issues such as social injustice or unfairness, (Mertens et al. 2016). The unjust inequality in terms of physical well-being will be better understood if explored using mixed methods, rather that sole use of either quantitative or qualitative inquiry. This makes mixed methods the most suitable research approach to understanding the poor physical health management for people with Serious Mental Illness

(SMI). Such a study will improve both the recognition of physical health in mental health environments and potentially improve the practice of mental health nurses.

This study is designed to use a convergent approach, as neither data set has priority; rather the qualitative findings add description and context to complement the quantitative data. The initial quantitative data collection did not influence the pre-arranged plan for collection of the qualitative data. Although data collection was consecutive, giving access to quantitative data in advance of the qualitative (as the qualitative information was generated from a sample of respondents who had already contributed to the quantitative data), the questionnaire was not revised in light of the quantitative findings; this was in line with a convergent design for generating complementary data sets.

Selecting a mixed methods approach facilitates a better awareness of the social context of the research. Mertens (2017, p. 7) identifies what she terms 'wicked problems' and 'grand challenges' and explains how these can be categorised:

"Wicked problems and grand challenges can be characterized in sectorial terms and as cross-cutting problems. For example, cross-cutting wicked problems include armed conflict and other forms of inequities on the basis of gender, disability, race/ethnicity, religion, sexual orientation or other characteristics used to deny people's rights."

Such problems and challenges require researchers to use innovative approaches, citing mixed methods research as a framework that socially responsible researchers can build their work around (Mertens 2017).

Using mixed methods is inclusive of the social responsibility that some researchers may feel towards their work (Mertens 2017) and, as such, approach can add validity to findings with a view to offering plausible explanations regarding phenomena that impact directly on social issues. This study has exactly that aim, seeking to generate information from both quantitative and qualitative sources that can influence service development in an area where vulnerable people may require a different approach to manage their physical health. By using a mixed methods approach a richer view of the attitudes of mental health nurses is sought.

Mixed methods research was viewed by O'Cathain et al. (2007) as an emerging paradigm, requiring development and refinement, using a range of traditional quantitative and qualitative approaches to enable future health research to be robust and credible; in contemporary society, the approach has developed credibility as a research design. In health research the rise in the popularity and use of the mixed methods approach is seen as motivated by a sense that quantitative findings alone is not able to adequately reflect the complexity of the study areas within health-related research (O'Cathain et al. 2007), a view echoed by the researcher. Asking a number of mental health nurses their views via a questionnaire would not lead to rich data that could be analysed to distil themes that would resonate with contemporary mental health practitioners.

Creswell and Plano Clark (2011) also warn that mixed methods can present challenges relating to the skills required for data management, but can lead to findings that offer a more complete picture of a phenomenon. Shorten and Smith (2017) point out that adding the voice of the respondent to the numerical evidence enriches the findings and enhances the quality of the researcher's experience too.

In the case of this study, the researcher reviewed a range of perspectives and discussions relating to the use of mixed methods, and came to the conclusion that, if knowledge that might influence practice is to be gained, the whole picture has to be examined: quantitative information alone will not tell us what mental health nurses attitudes towards managing physical health are, or why these develop, but if we ask measure their attitudes using the PHASE and ask them to talk about their experiences, they may tell us their views and sharing such information could influence practice.

3.8 Integration of data

The literature review demonstrated that further enquiry is needed into how mental health nurses' view their role in managing their service user's physical health, in order for mental health delivery and education services to support and develop this component. Apel (cited in Floistad, 1982) discusses the dichotomy of the positive versus interpretivist approaches to research, and also brings in the "Erklaren versus Verstehen" (explaining versus understanding) debate that was contemporary at the time. Apel (cited in Floistad, 1982) suggests that research scholars and teachers may be entrenched in one approach to their

subject and that they may therefore need to develop greater flexibility towards the diversity of approaches available.

The process of mixed methods research can be complex; Onwuegbuzie and Combs (2011) describe thirteen steps in the process of mixed methods research; however, the step involving integrating and analysing data is perceived as the most complex. This is because the researcher(s) involved have to be able to analyse both quantitative and qualitative data and integrate the results in a way that will generate meaning (Onwuegbuzie and Combs 2011).

Wolf (2010, p. 155) argues that the integration of quantitative and qualitative data to produce a third data set has great potential to strengthen the rigour and enrich the analysis and findings of this study. It carries an expectation that, "mixed methods researchers should make perfectly clear which of their statements is based on which kind of reasoning, and how the conclusions they draw from the different strands of their research relate to one another". This is supported by O'Cathain et al. (2010) who argues that separate analysis will render the researcher unable to appreciate contextual detail that could lead to the findings of the study being more meaningful.

The researcher needs to guarantee meaningful and accurate quantitative data collection and analysis and discussion of the qualitative findings in order to ensure that inferences from the data sets are accurate. Onwuegbuzie and Combs (2011) encourage the mixed methods researcher to become skilled in both quantitative and qualitative data collection

and analysis: previously undertaken research activity has enabled the researcher to develop both quantitative and qualitative data collection and analysis skills, which are drawn upon in the execution of this study.

Greene (2007, p. 155) identifies four phases of analysis: (a) data transformation; (b) data correlation and comparison; (c) analysis for inquiry, conclusions and inferences; and (d) using aspects of the analytic framework of one methodological tradition within the analysis of data from another. These phases are reflected in the processes undertaken in this study to ensure that the quantitative and qualitative findings were blended together to generate relevant and meaningful information that practitioners will find useful and applicable to their practice.

Creamer (2018) discusses strategies that advise the mixed methods researcher to embed mixing and a blended approach in the entire process of carrying out the research project so that a sense of wholeness is conveyed throughout the study. This is important to ensure that readers may recognise a transparency that will enable them to work out where the conclusions drawn by the author have come from and to allay any concern that inaccurate conclusions might have been drawn.

Accurate data integration requires the researcher to make decisions relating to the priority of the different data sets, although in this study, neither data set has priority; rather the qualitative findings add context to the quantitative findings**.**

Bazeley (2017 p. 97) refers to the mixed methods researcher as a bricoleur, and suggests that the creation of a bricolage (i.e. the creation of a new whole from pieces of a previous one, thus creating a new object from pieces of at least two predecessors) can constitute a realistic basis for research projects undertaken by a single researcher who has a robust knowledge base and can draw on experience, with a flexible approach to the inquiry.

The researcher identifies with the above description, and sees this artistic approach as an attempt to create new knowledge from more than one source. The researcher has considered this perspective and views the integrated data as being the green light created by shining the yellow light of the quantitative findings and the blue light of the qualitative findings together, resulting in a sense that the green light indicates knowledge that can help to move practice forward, by sharing the knowledge generated by an exploration of mental health nurses' attitudes towards managing physical health care.

Burke-Johnson et al. (2007, p. 123) point out that broader and deeper understandings of phenomena can be gained through a process of corroboration of the findings. Wolf (2010) offers a further perspective on data integration approaches which the novice researcher can relate to and bemoans the fact that the term "triangulation" seems to have too many meanings in the research language, whilst O'Cathain et al. (2010) explain that, in relation to mixed methods research, "triangulation" means looking at a subject using different methods, rather than looking at research findings from two different sources.

O'Cathain et al. (2010) point out that the process of triangulation can lead to the discovery of similar and contradictory findings, and that the mixed methods researcher has to be diligent in their data analysis to enable such findings to emanate from two data sets. Disagreement among findings is felt to be extremely useful as it encourages the researcher to undertake further contemplation and analysis. Houghton et al, (2013) discuss the benefits of comparing two sources of data to underpin confirmability when consistent findings emanate from the separate study arms.

"Following a thread" and developing a matrix of findings are also explored as useful integrative strategies. O'Cathain et al. (2010, online) admit that their work suggests a relatively simplistic understanding of data integration, pointing out that for the single researcher, it may be a more straightforward process than if it involved a team of researchers. However, it is also acknowledged that a team of researchers are likely to have a greater range of data analysis skills that include expertise in quantitative and qualitative analysis, and that the findings will be enriched by the blending together of the two data sets to see what else can be discerned.

3.9 Ethical Issues

As the study involved the participation of personnel from an NHS Trust and a University, ethical approval applications were submitted to and approved by the NHS and University ethics committees. The application process was completed via the Integrated Research

Application Service (IRAS). This system enables ethical approval and permission from NHS research and development officers to be sought, in order to gain approval to approach nursing staff from the participating NHS mental health Trust. Approval was also sought from the University Ethics Committee to gain permission to approach mental health nursing students; this was with a view to generating information relating to whether their training supported preparedness to undertake physical health care in the mental health setting. Approvals were gained from both agencies prior to IRAS application and commencement of the study. Approval documentation is contained within appendices 2, 3 and 4.

An appreciation of ethical issues posed by the study is considered in light of the principles discussed by Beauchamp and Childress (2013). These principles relate to beneficence, non-maleficence, autonomy and justice, while Snowden (2014) also advises doctoral students to be aware of potential dilemmas when undertaking research, and emphasises that recognising values, doing good and causing no harm within agreed principles must underpin research: the principles are considered individually.

Beneficence

Beneficence (Beauchamp and Childress, 2013) relates to the recognition that the study will do some good. The overall aim of this study is to generate information that mental health nurses may find useful in helping them to realise their potential to support their service user's physical health. The consequences of the enhanced contribution that mental health nurses can make could lower the unacceptably high mortality rates that are experienced by

people with severe and enduring mental illness. The mental health nursing profession's role in doing so is recognised in the literature, but the mortality rate remains high despite the phenomenon having been acknowledged for more than two decades. The study will be published in a report with a view to sharing the findings, in keeping with the principle of beneficence in terms of sharing knowledge with peers.

Non-maleficence

The principle of non-maleficence (Beauchamp and Childress, 2013) refers to the consideration of any harm that could come to study participants. In undertaking this study, the researcher considers that the overall aim is to generate information that will be of benefit to both mental health service providers and users, and is confident that the participants are not exposed to any potential harm in the process, as both the quantitative and qualitative data are collected from a consenting and self-selecting sample of adult respondents. Consideration of the time taken to complete a questionnaire and/or take part in an interview requires safeguards to be put in place to ensure that participants are not inconvenienced, so the researcher negotiated with the interviewees when arranging dates and venues to find those that best suited the participant. The principles of confidentiality for participants were respected as completion of the questionnaire was entirely anonymous; however, at the interview, participants were also assured that the data would be anonymised and used solely for the purposes of the study. The questionnaire was introduced with a paragraph explaining the background to the work and the fact that it was based on Robson and Haddad's (2012) study.

Further information telling the potential respondents about the nature of the questions to come was also included, so that they were prepared for what to expect. Respondents who agreed to take part in an interview were asked to leave their contact details on the questionnaire and were contacted by email to confirm their consent and arrange a date and venue for the interview. The interview participants were then asked to complete and sign a consent form, and it was explained that they could change their minds and withdraw from the research at any point with no consequences, and each participant was given a copy of the interview schedule before commencing the interview. The consent form also explained that the interviews were audio recorded and that the recordings would only be used for study purposes, and would be destroyed on completion of the research. The interview participants shared details of either their employing NHS Trust or University with the researcher, so the researcher was known to some of them. It was important for this to be borne in mind by the researcher, who ensured that each participant was treated with respect and courtesy at all times. It is also important to recognise the potential impact of the researcher on the study participants, acknowledging that research reflexivity is maintained throughout the study underpinning the trustworthiness and transparency of the study.

Autonomy

Autonomy relates to freedom of choice and the ability of an individual to make decisions for themselves (Beauchamp and Childress, 2013). In this study, both data collection methods required participants to take action, based on their decision to complete a questionnaire or

not, and then to leave contact details with a view to being interviewed. Participants were able to use their own judgement about whether to be involved in the study, exercising autonomy by taking their own beliefs and values into account. The study method respects the autonomy of the participant by ensuring that information regarding the background and aims of the study were available for perusal by potential participants.

The autonomy of the participants was also ensured by the data collection method; participants in both study arms self–selected to complete the questionnaire, and then decided whether or not to agree to an interview. In the quantitative data collection process, consent to participate was implied by the act of participation, whereas consent forms were completed by all participants prior to the interview.

Justice

In the context of the study, the principle of justice (Beauchamp and Childress, 2013) relates to the fair treatment of all participants in research. Adhering to the principle demands that an ethical review process is undertaken before a research study is commenced, as detailed above.

Each participant's response is considered of equal value in recognition of the principle of justice, and to ensure that no respondent is treated unfairly. Overarching perspectives

relating to a professional code of practice (*Nursing and Midwifery Council, 2015*) must be considered. All completed questionnaires contributed to the quantitative data set, and the interview data were reflective of the responses from each interviewee. Interview participants were not categorised by their professional status or position, as the perspectives of a range of mental health nurses were respected.

3.10 Research Design

The convergent parallel design (Creswell and Plano Clark, 2011) involved the acquisition of quantitative data, in this case from the PHASe survey results, and collection of qualitative data from interviews. The data from each arm of the study is analysed separately, and then the point of integration occurs when both data sets are examined together, resulting in a third data set.

Data collection comprised two discrete but inter-related processes. The next sections will address the process of data collection and management from both quantitative and qualitative processes.

Study flowchart– illustrating mixed methods convergent design and number of participants in each arm of the study

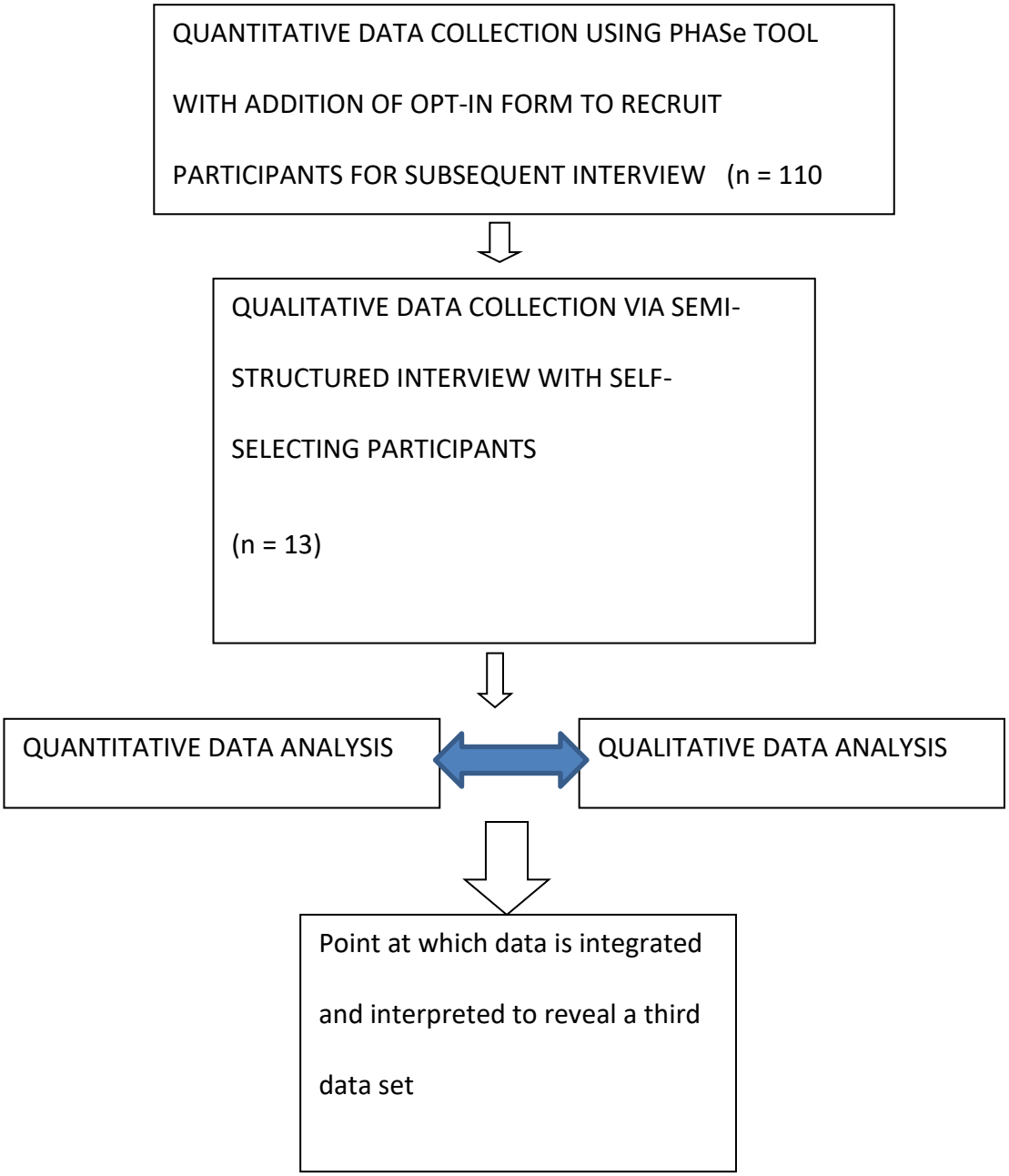

Figure 2: **Study flowchart–mixed methods convergent design**

3.11 Quantitative Data Collection

3.11.1 Quantitative Data Collection Tool

The decision to use the PHASe came from reviewing the literature and recognising that the scale had the potential to develop findings that could increase understanding of how mental health nurses perceive their role in physical health management. The convergent parallel design was followed by making the PHASe available via an electronic link, once it was loaded on to the "Qualtrics" survey engine. This involved loading the questions contained within the Robson and Haddad (2012) survey on to the site in a format that would enable reporting. All questions from the original questionnaire were used, and the link was made available to first and third year student nurses and registered mental health nurses working in an NHS mental health Trust.

The PHASe (Appendix 1) is a 49 item questionnaire, which Robson and Haddad (2012) developed following literature searches, mental health staff and service user focus groups, and analysis of responses to their pilot version. Robson and Haddad (2012) concluded that the scale had demonstrated validity and consistency and that its further use may help to establish the scale as an outcome measure to support the development of training targeted for mental health nurses to enhance their management of physical health. The twenty-eight items of the PHASe questionnaire that relate to attitude were divided into four sub-scales: nurses' attitudes towards their involvement in managing their service users' physical health (ten items); nurses' confidence in delivering physical health care (six items); perceived barriers to delivering physical health care (seven items); and attitudes to smoking (five items). Smoking is considered to be a crucial aspect of physical health management for

people with severe and enduring mental health, as it contributes to poor mortality rates, and so has strong relevance to the investigation of physical health management. Respondents were asked to rate their answers on a scale of 1 (strongly disagree) to 5 (strongly agree), and the scale was subjected to robust statistical testing. Two further sections, consisting of fourteen items relating how often defined aspects of physical health care were undertaken as part of the respondents current practice, and seven questions relating to perceived training needs as well as and demographic information and date/level of qualification were also included giving a total of 49 items.

3.11.2. Critique OF PHASe

Özaslan et al (2018, p 64) refer to PHASe *"… the only one commonly used scale in the international literature that determines the attitudes of nurses regarding physical health in psychiatric care"*.

The PHASe tool (Robson & Haddad 2012) was constructed to explore the attitudes of mental health nurses to the multi-dimensional nature of engagement in physical health care; in doing so it examines associations with their practice and training. The attitude measuring component of the PHASe comprises a 28-item scale based on a review of the literature, focus groups and principal component analysis of nurses' responses to the draft questionnaire (Robson & Haddad, 2012). It is comprises four subscales: (i) nurses' attitudes to involvement in physical health care (10 items); (ii) nurses' confidence in delivering physical health care (6 items); (iii) nurses' perceived barriers to physical health care delivery (7 items); (iv) nurses' attitudes to smoking (5 items) (Robson & Haddad, 2012).

Robson and Haddad's testing of the PHASe Scale to establish its credibility as an instrument that could measure attitude is reported in Robson and Haddad (2012). "The internal consistency of the scale is satisfactory: Cronbach's alpha for the total scale is 0.76, and between 0.86 and 0.61 for the subscales" (Robson and Haddad 2012 p75). Other authors (Özaslan et al. 2018; Wynaden 2016; Ganiah et al. 2017; Bressington et al. 2018) have subsequently acknowledged the PHASe tool as a credible instrument for measuring mental health nurses attitudes towards delivering physical health care. As pointed out by Robson and Haddad (2012) however, positive attitudes may not equate to knowledge levels, and as such the PHASe can only report attitudes as expressed at the time. Robson and Haddad (2012) recognised that the use of postal questionnaires has advantages in terms of ease of distribution and low cost, however online distribution of PHASe whilst sharing these advantages, meant that there is no way of knowing how much thought a respondent may put into completion, and how accurately responses reflect their attitude. The PHASe appears to be a valid tool, however this can be augmented by further use of the instrument on different sample groups and as such the PHASE may become more reliable in the future. Limitations related to questionnaire use (Lavrakas, 2011) are applicable to PHASE, such as the potential superficial nature of the information gained as the respondents cannot be probed, however, clear instructions and an easy box clicking technique were provided to encourage response. In consideration of both the established uniqueness of the tool and its validity as a tool for attitude measurement, the PHASe tool was used to acquire the quantitative data component of this mixed methods study.

3.11.3 Quantitative Sample

The target population were registered mental health nurses and student mental health nurses (the term 'Registered' mental health nurses refers to current registration with the United Kingdom Nursing & Midwifery Council) The convenience sample was drawn from registered mental health nurses who worked for the researcher's employing mental health trust, and two student nurse cohorts, studying at the sponsoring university.

A pre-determined target was not set, as all participants would be self-selecting; the study was undertaken, (March – June, 2016). The 49 item questionnaire was distributed to the registered mental health nurses and student mental health nurses cohort, with the only revision relating to the question asking for the respondent's date of registration (enabling student nurses to state when they were expecting to become registered).

3.11.4 Quantitative Pilot Study

The PHASe questionnaire has been piloted and validated in previous studies (Robson and Haddad, 2012; Happell et al., 2013) and, therefore, no pilot study was considered to be required.

3.11.5 Quantitative Data Collection Procedures

The questionnaire was distributed to the convenience sample using an electronic version of the tool which was made available via "Qualtrics", an online survey programme, by which respondents could access and complete a questionnaire, and return it anonymously.

- For Registered Mental Health Nurses - an electronic link to the questionnaire was publicised on the communications page of the mental health Trust's website, which employed around 750 qualified nurses at the time.
- For student Mental Health Nurses – the questionnaire was emailed to two cohorts of student nurses, a first year cohort of 30, and a third year cohort of 15. The rationale for including these cohorts was to generate information regarding the preparedness of student mental health nurses to undertake physical health care on commencing their programme of studies and on completion.

Table of questionnaire response rates:

Questionnaire	
110/795 =14%	
Registered Nurses 95/750 = 12%	Student Nurses 15/45 = 33%

The online system "Qualtrics" (Qualtrics.com, 2017) is aimed at researchers undertaking data collection from populations and provided an effective means of gathering information. "Qualtrics" provides data analysis and reporting; descriptive statistics were generated online from the PHASe questionnaire results. Following contact with Debbie Robson, the "PHASe" was made available to the researcher in electronic format and input to "Qualtrics".

A link to the questionnaire was sent via email across the NHS Trust, and to two student nurse cohorts, and was also added to the researcher's e-mail signature, on e-mail accounts

at the NHS Trust and the University. This was done to draw attention to the study, as a proportion of emails received would have been related to physical health issues, and were potentially from clinicians who had clinical connections to practice situations that involved managing physical health for people with severe and enduring mental illness.

The questionnaire link was also added to the NHS Trust Communication briefing, which is sent out weekly, to all Trust employees from the Communication team. The researcher holds a senior clinical role within the NHS organisation and was able to demonstrate to senior colleagues that the research would yield potentially useful information that could underpin service development, and this enabled the wider dissemination of the link across the organisation. The link was available for eight weeks and the results showed that, after each bulletin, a few people would respond. It was decided that after eight weeks of availability, those who were going to respond probably had done so by then, as the number of respondents towards the end of week eight dwindled down to two, which was in line with expectations.

Bazeley (2016) discusses the importance of the context in which mixed methods research is undertaken, indicating that the credibility and relevance of the research topic has to resonate with potential participants. The study was undertaken in a setting where completion would represent an extra expectation of the respondent, and given the busy schedules of mental health nurses, and their competing priorities, making the questionnaire available easily and formatting it to make it easy to complete was of paramount importance

to encourage responses. This point has particular relevance with regard to the timing of the study: the questionnaire coincided with the National Student Survey, and the NHS Staff Survey, both of which could have impacted on an individual's enthusiasm for filling in yet another survey.

The issue of "questionnaire fatigue" (Porter et al. 2004) was considered as students undertaking academic courses are frequently asked to contribute their opinions via surveys. Lavrakas (2011) reports that respondent fatigue is discussed in the research literature and appears to be a problem that occurs when respondents become weary of completing questionnaires, with consequent deterioration in the quality of the data collected. It seems that questions towards the end of a questionnaire are more likely to be affected by this phenomenon. Lavrakas (2011) further points out that "don't know" or "neither agree nor disagree" answers or responses that are recorded in the same column or on the same line might indicate that a respondent had become tired or bored. Such respondents sometimes give up answering and, in this study; the number of responses to the later questions was lower.

However, the study was undertaken during a period of significant activity in terms of highlighting the poor physical health of mental health service users by the UK Government, particularly NHS England and Public Health England, as well as high profile sources including the World Health Organisation, (NHS England, 2014, World Health Organisation 2013).

Activity levels aimed at raising the profile and importance of physical health have been considerably elevated within the mental health service domain.

The registered mental health nurse respondents to the PHASe scale in this study were drawn from mental health nurses whose current clinical role involved the management of their service user's physical health. Fifteen, of the registered nurse and student nurse respondents were happy to participate in the follow-up qualitative interviews

The response rate to the survey in this study was low, Cooper and Brown (2017) reiterate the importance of accessing respondent sample sizes that will generate valid data; however, they also point out a number of difficulties in achieving this. Cooper and Brown (2017) discuss strategies to help improve the response rate to surveys, specifically by health care professionals, and point out that offering small monetary incentives, giving clear information on the purpose of the survey and the impact of its findings, and the use of paper surveys, are believed to have a positive effect on response rates. Cooper and Brown (2017) cite a study by LoBiondo-Wood et al., which achieved an 11% response rate and was a web-based survey, which included sending a reminder to potential participants. Monetary incentives were never considered as a potential strategy to increase the response rate. As part of an academic study, this survey had to attract respondents who felt that they wanted to be able to participate in the potential generation of knowledge that could underpin their role in the future, rather than seek to gain personal reward. The use of paper surveys was considered; however, the electronic platform supported by the host University was much

more accessible and manageable, without the need for any hard copy information. As an organisation, both the University and NHS Trust, which formed the study setting, are moving towards a paper-free environment, encouraging staff to use electronic recording systems for their day to day study and work purposes, so sending a paper questionnaire would have felt somewhat out of step with current practice.

3.11.6 Quantitative data analysis

The quantitative data were analysed using descriptive statistics within the Qualtrics platform. Further analysis was undertaken using IBM Statistical Package for the Social Sciences, version 25.

3.12 Qualitative Data Collection

3.12.1 Qualitative Data Collection Tool

Qualitative data were collected using semi-structured interview which was considered the most appropriate tool with which to engage with mental health nurses and student mental health nurses. The semi-structured interview allows for exploration of phenomena within the context of practice; in this study it allows for further illumination of quantitative findings (Tod, cited in Gerrish and Lacey, 2010, p. 345). Qu and Dumay (2011) encourage researchers, particularly those working at doctoral level, to appreciate the complex social interactions that can form part of the interview process, and not to think of the interview simply as a research tool. A reflexive approach is required to ensure that due consideration

is given to the relationship between the researcher and the participant (Dyson and Brown, 2006; Shorten and Smith, 2017). The semi-structured interview, which has a loose framework and allows for open ended questions to be asked and discussed offers the freedom for both interviewer and interviewee to have a conversation with the purpose of sharing experiences and reflections (Dyson and Brown, 2006). This was felt to be an appropriate method of data collection for the study.

3.12.2 Qualitative Sample

Registered Mental Health Nurses and Student Mental Health Nurses self-selected to be interviewed. Self-selection was demonstrated by the respondent choosing to append their contact details to the quantitative PHASe questionnaire. 13 interviews were completed, 9 with registered nurses and 4 with student nurses.

Interviews	
13	
9 registered mental health nurses	4 student mental health nurses

3.12.3 Qualitative Pilot Study

The interview schedule was piloted with a registered nurse and a student. This process did not lead to amendment to either the interview or the process for delivering the interview. As changes were not made to either interview data formed part of the analysis.

Reflecting on the initial pilot interview served to demonstrate the importance of not expressing minor comments or talking too much when the interviewee's perceptions were being sought. I recognised an anxiety in myself when there was silence, but in subsequent interviews this was far less uncomfortable. Subsequent interviews recorded much less of the researcher's voice.

3.12.4 Qualitative Data Collection Procedures

Semi-structured interviews took place from June to December, 2016. The interviews were all carried out in clinical areas in quiet rooms set aside for the purpose of the interview.

An interview participation sheet (Appendix 6) offering information about the study, requesting signed consent and clarifying withdraw from the study at any time with no consequences for themselves, was completed by each participant before commencement. Each interview commenced with a welcome from the researcher and an explanation of the research study and the purpose of the interview. The interviews were recorded using an encrypted Smart Phone and transcribed by the researcher.

Undertaking interviews yields data that helps the researcher to better understand the perspective of their interviewee, in a way that an examination of documentation cannot

(Ritchie et al. 2014). Interviews can lead to in-depth interpretations of phenomena, as experienced by the interviewee, and this can produce a powerful and persuasive discussion. To optimise the quality of the qualitative data an interview schedule was developed.

The interview schedules (Appendices 8 and 9, for use with registered mental health nurses and student mental health nurses respectively) were developed to prompt an open, frank and honest discussion about the management of physical health care, in the experience and practice of the interviewees.

Two questions formed the basis of the interview, and were designed to encourage participants to explore participants' attitudes toward and experience of managing their service user's physical health. Student nurses were also asked to comment on their educational preparation for the management of service users' physical health.

The length of the interviews varied and the range of topics raised by the respondents enabled the researcher to explore the questionnaire findings in more detail. This led to a range of themes and issues being raised for discussion.

3.12.5 Qualitative data analysis

Analysis of the qualitative data followed Ritchie & Spencer's (1994) cited in Bryman and Burgess, (1994) Framework design. Framework Analysis Stages are discussed in detail by

Smith and Firth (2011), and Ritchie et al. (2014) who offer advice on the implementation of the approach which has informed this analysis of qualitative data. Ritchie et al. (2014) guide the researcher through the process of framework analysis, offering clear advice on each stage and is described as consisting of five stages, (Ritchie et al. 2014)

1. familiarisation:
2. construction of a thematic framework;
3. indexing and sorting;
4. reviewing data extracts;
5. data summary and display

3.12.6 Familiarisation

Familiarisation with the qualitative data involved transcribing verbatim the electronic recordings of interviews and creating text based documents that were then copied onto Microsoft Excel (2016) spreadsheets. The Excel table ensured that each line of conversation was allotted a reference number. Transcription which accurately reflected the conversations in both words and intonations was undertaken using voice recognition software; the recordings were reviewed repeatedly to ensure accuracy of content. Reflecting on the stage of familiarisation, which is aimed at encouraging the researcher to get to know the data – having recorded and transcribed all the interviews personally enabled the process and led to a sense of closeness to the data. This allows the researcher to identify the range of topics and builds a foundation to support the development of relevant themes, ensuring their roots can be traced back to the raw data.

3.12.7 Construction of a thematic framework

The organisation of data constitutes the next stage of the Framework approach, leading to the identification of a thematic framework to enable the organisation of data into categories. This part of the process is informed by the researcher's original research question, in addition to emerging information emanating from the data. At this point broad topics as well as more specific issues become evident.

On reflection, it is considered advantageous to have been a solo researcher at this point, although a consistent approach had to be cultivated and clear links to the data needed to be explicit, (Please see annotated interview transcript, appendix 9).

Once all the interview transcriptions were entered into Excel, they could be interrogated and the appearance of words and phrases could be traced. Initial categories that emerged at this point included diabetes, primary care access, confidence in and problems experienced when managing physical health and health promotion.

3.12.8 Indexing and sorting

Indexing is the process of organising the transcripts into the categories. This included highlighting where themes were being repeated, and as the transcripts were transferred into an Excel pivot table, it was possible to recognise recurring words and phrases by case (respondent) and indexed theme. A thematic framework was generated with columns representing categories identified at the indexing stage and rows containing verbatim text.

3.12.9 Reviewing data extracts

The next stage involved organising the data into a manageable form. At this point the data were summarised by a line by line analysis of the transcripts which led to population of cells with summarized data, (Ritchie et al. 2014). It was then possible to see summarised data within cases (interview transcripts) and the indexed themes. New columns were generated for additional themes emerging from the analysis of summarized data. Following an iterative process, the framework eventually represented a complete account of the phenomena described in the data. The analysis was then shared with the interview participants, who provided feedback on the relevance of the identified themes.

3.12.10 Data summary and display

This involved defining concepts and refining categories (Ritchie et al. 2014), and it is at this point that researcher interpretation of the data becomes relevant. Developing a conceptual framework upon which to analyse the qualitative data involved a range of potential methods to obtain an accurate, insightful and relevant range of themes from the narrative of the interviews and as such required immersion in the data. Each interview was listened to at least three times, to ensure that the narrative was recorded accurately and reflected the discussion. Ritchie et al. (2014, p283) suggest that this is the point at which the researcher can figure out "*What in essence is each person saying about a particular theme?*"

This stage precedes the stage of interpreting the data to discern meaningful findings from the data.

Listening to the recordings of interviews was a hugely fascinating and absorbing, aspect of this study. Hackett and Strickland (2018) recognise the all-encompassing nature of undertaking in-depth analysis of qualitative data, but point out that the use of the

framework approach in nursing research is well documented, whilst Ramjan (2018, p.7) explains that “good qualitative analysis takes time, perseverance and hard work to ensure the rigour and robustness is maintained and that the voices of participants are listened to and respected. These authors indicated to the researcher that the time spent on immersion in the qualitative data would help to ensure that analysis would lead to the accurate development of themes and consequent confidence in the findings.

Following immersion in the data, as suggested by Ritchie et al. (2014), the researcher ascertained themes that repeatedly recurred in the conversations. This iterative process brought about new insights from the data.

The use of Computer-Aided Qualitative Data Analysis Software (CAQDAS) was considered; CAQDAS offers many features that support qualitative data analysis but should not replace the intellectual effort required by the researcher (Ritchie et al. 2014). Consideration of the use of CAQDAS led to the decision that an Excel spreadsheet, containing the transcribed interviews in blocks which related to the common themes, offered the most straightforward way of dealing with the information, given the level of immersion of the principal researcher and the iterative process undertaken. Text was colour coded to help navigate across the rows and columns, making it easier to pick out and subsequently develop the most commonly recurring points made.

Woods et al. (2016) comment in relation to the use of CAQDAS that researchers need to be aware of the risk of the software driving data analysis, and that careful consideration is therefore needed to enable reflexivity to be undertaken by the researcher; qualitative research is described as being led by judgement, intuition, knowledge and understanding, rather than more technical issues. The decision not to use CAQDAS was underpinned by the sense of understanding the data gained by the iterative process undertaken. Once the decision was made, the researcher continued with the review of data using the Framework principles (Ritchie and Lewis, 2011).

Guetterman et al. (2015) explore options involving "joint displays" and report that "statistics by themes" is an approach to presenting mixed methods research findings in an accessible and understandable fashion, designed to encourage the reader to see links between the different findings that have been identified by the researcher. Findings are presented as such, with a joint display, followed by further discussion of both data sets.

3.13 Reflexivity

Qualitative data attract the researcher as they provide a rich source of information, offering the ability to develop ways to explain phenomena within a context or a locality. Miles and Huberman (1994) discuss the process that qualitative researchers need to embrace to gain the most from their data: this relates to distilling raw data into concepts and themes.

The researcher must be conscious of their own presence within the data. Tufford and Newman, (2010) discuss the importance of maintaining transparency, by referring to the importance of self –awareness, to mitigate the risk of distortion during data collection and analysis. A Reflexive Journal was kept during the course of the study as means to support the vigilance in recognising prejudices, this process of self –reflection helped the researcher to approach the study with an open mind. The journal consisted of notes made during supervision, as well as during the process of planning and executing the study. – i.e. developing and maintaining awareness of one's impact on others is entirely subjective, and difficult to measure.

Reflexivity is "full of muddy ambiguity and multiple trails" (Finlay 2002, page 209) and concerns the researcher's ability to remain objective throughout the research process. It requires the researcher to maintain objective oversight of the research process whilst acknowledging that they are an integral part of the research, placing personal beliefs and assumptions to one side (Ahern, 1999).

Finlay's "muddy ambiguity" I recognise, having had to consider and reflect upon being a senior clinician undertaking qualitative interviews with peers and junior colleagues, whilst remaining aware of the potential to unconsciously introduce researcher bias. As noted by Darawsheh, (2014) research rigour in qualitative research is strengthened through careful exploration of reflexivity.

Hugill (2012) encourages researchers to develop reflexivity to enable understanding of how professional and personal biography may affect their research. Considering this approach helped me to recognise my own influence on the research, and indeed vice versa, as my aim is to generate knowledge through an accountable and transparent process that will inspire confidence and credibility to the findings and recommendations. Key resources in my own reflexive armoury have been the journaling, memoing and supervision; evidence from these resources I have spread through the remainder of the thesis in order that their impact on the findings is transparent.

3.14 Commitment to Parity of Esteem

This research project underpins my professional contribution to the development of the "Parity of Esteem" agenda. This was launched by the Department of Health (Department of Health 2013) and was aimed at addressing the inequity in National Health Service (NHS) accessibility and responses for mental health service users, when compared to physical health service users.

The agenda is a central tenet of the Royal College of Psychiatrists (2013) and relates directly to my area of clinical practice. The "Parity of Esteem" agenda acknowledges that mental health services are under-resourced and less developed than those aimed at supporting physical health in terms of accessibility, despite the "No Health without Mental Health" (Royal College of Psychiatrists, 2010) report, which cited a vast range of over 270 reference

sources supporting a considered discussion relating to addressing the physical health needs of people with severe and enduring mental ill health.

For me the most provocative information relates to the lower than average life expectancy for people with SMI. Consequently, I wanted to highlight this issue and to influence health care service delivery for the local populace, championing the cause to help save lives.

3.15 The Researcher's Role in the researched context

As a researcher, undertaking physical health monitoring in the secondary mental health service provider setting is my positive contribution to improving the well-being of mental health service user.

The role of Nurse Consultant – Physical Health, was introduced to facilitate the development of services in line with the Parity of Esteem. This role presents challenges in terms of the research as I am investigating an aspect of the Trust in which I have a vested interest. It is, therefore, imperative that I developed strategies for ongoing management of reflexivity before I commenced the study. I have used reflective journals, supervision notes and "notes to self" (recorded on a mobile phone).

The assumption of the researcher, prior to undertaking the study, was that as a nurse, my role was to enable people to be healthy, by helping them to manage their physical well-being. Recognising that my fellow professionals are implicated in the failure of health

services to have had any impact on reducing morbidity in people with SMI over the past twenty years was abhorrent. I felt that the research was founded in a sense of "surely we can do something about this" and was conscious that I hoped to discover that colleagues had an equally positive regard for physical health management. Ahern (1999) warns that, when surprised, researchers should also ask why they are surprised; I bore this in mind as I worked through the findings and constantly challenged my own surprise.

Priest (2007) highlights the benefits and pitfalls of being a researcher in a practice setting, where the researcher is well known, and holds a senior role, pointing out that novice researchers may be perceived as "management spies" or that respondents will feel that the researcher is so well versed in the topic that they will not offer detailed responses, and may require considerable prompting. As far as I can reasonably ascertain all participants knew my role within the organisation from the electronic questionnaire link attached to e-mail, and from the participant information sheet, (Appendix 6) and this point has been borne in mind throughout the study.

My clinical pathway has led me to hold a position of seniority in the organisation, and enabled the formulation of the research question. Regular review of progress and supportive supervision help me to remain committed to the study.

3.16 The researcher's impact on data collection

Finlay (2002) points out the value of reflexivity, in encouraging the researcher to consider the impact of their position, viewpoint and presence in the interview process, whilst helping

to enhance insightful findings by exploring the dynamics of the setting. This was especially significant to me during qualitative data collection. Throughout the interviews I constantly needed to remind myself through notes and memos of my position in the organisation and the power embedded in that role so as not to present as authoritarian and adversely impact the data.

Young, (2005) offers an interesting perspective on the situation of undertaking research as an insider, offering a discussion of the terms 'emic' and 'etic' as applied to inside or outside a group respectively. I considered how to structure the interview process with colleagues. The research study was undertaken as an "insider" (emic), as the researcher worked alongside the participants in both arms of the study. I needed to remain vigilant to maintain objectivity, especially as the findings could generate information that would affect my role in terms of supporting nurses to manage their service user's physical health (Priest, 2007).

3.17 Implications of Findings

The study has generated findings that might serve to justify my current clinical role. This is a particular concern, as the study recommendations may imply that mental health nurses require targeted, in-house, training to help them to understand and manage physical health issues, something which is specifically mentioned in the researcher's job description. The findings also reflect that problems with integrating service delivered by primary and secondary providers impact significantly on the physical health of people with SMI. The findings of this study will have relevance for practitioners in settings where mental health

care is not a primary concern; highlighting the importance of recognising that mental health impacts on an individuals' ability to access health services will be of value.

3.18 Researcher Actions

The previous research undertaken by Robson and Haddad (2012), and Happell et al. (2012), has highlighted that mental health nurses in the United Kingdom and Australia have expressed awareness and willingness to undertake the management of physical health for their service users. Their research has encouraged me to pursue this research project, as I will be able to share the findings with the original researchers, having already made contact with Robson. . The findings of this study, along with other national and local initiatives, may help services to improve the physical health of people with mental ill health and; I am compelled by my passion to nurse, to be part of this, and need to keep my enthusiasm in check in order to recognise the thoughts of others on the subject.

3.19 Trustworthiness

The measure of qualitative research can be judged by strategies imposed on the study by the researcher. Lincoln & Guba (1985) described criteria for assessing quality in naturalistic inquiry as credibility, transferability, dependability and confirmability; this seminal work was expanded in 1989 to include authenticity, (Seale 1999 p46). The following table details actions taken in respect of enhancing trustworthiness:

Authenticity	In the semi structured interviews: • I attempted to engage the respondents in the co-production of the research output. This was demonstrated by representing transparently the views expressed. (Fairness) • Respondents were encouraged to explore the reality of their practice experience and consider this in relation to the extant knowledge of the topic through published literature (Ontological authenticity & Educative authenticity). • Respondents were given the opportunity to think about the topic which opens up the potential, in itself, for developing practice. (Catalytic authenticity & Tactical authenticity)
Credibility	• The utilisation of qualitative and quantitative data sets and the novel integration of these data sets to create cohesive mixed-methods findings • Supervision received throughout the study
Dependability	• Throughout the thesis I have attempted to demonstrate a step-by-step approach to delivering an auditable trail of decision making
Confirmability	• I have been explicit about my own 'position' in relation to these data and the strategies adopted to

	stand away from unconsciously biasing the data • The study adopts Bazeley's (2017) novel approach to production of mixed methods findings
Transferability	• A rich description of the research environment and of the self-selected respondents in the study is provided though this is not as deep as in some qualitative studies. However, the nature of the mixed methods approach provides strength in numbers along the experiential data which enhances transferability.

Figure 3: Trustworthiness/ Authenticity

3.20 Summary

To summarise, the research has been carried out using a convergent mixed methods approach which served to help to understand how mental health nurses regard the management of their service user's physical health. Set against a backdrop of increased mortality, highlighted in the literature for more than two decades, it is relevant to try to understand how the attitudes of mental health nurses can influence physical health care and impact positively on the life expectancy of this vulnerable group. The researcher's interest in this area is driven by working in mental health service delivery, and the recognition that mental health nurses are pivotal to delivering holistic care for their service users in a potentially challenging environment.

This study involved quantitative data collection via the online questionnaire, followed up by qualitative data collection via semi-structured interviews. Descriptive statistics generated from the quantitative data and in-depth thematic analysis of the qualitative data added depth and richness to the findings, offering insights into nurse attitudes, to be further developed.

Chapter 4 Findings

4.1 Introduction

This chapter details the findings of the study. Themes identified from both data sets are presented. The PHASe was constructed with sub-sets of questions aimed at inquiring into nurses' attitudes, confidence, and what they perceived as barriers to managing the physical health needs of their service users. The semi-structured interview was designed to encourage discussion and each respondent was asked what worked well in terms of physical health management and what could be improved, and given the opportunity to discuss their experiences. Student nurses were asked to consider how prepared they felt to undertake physical health monitoring.

In line with the mixed methods research design, this chapter presents the quantitative and qualitative findings together, along with the themes that have emerged from the convergence and integration of both data sets. The findings are presented by theme, with quantitative and qualitative data extracts to offer background and contextual information, in joint display. Quantitative data were collected via the Qualtrics platform and analysed using IBM Statistical Package for the Social Sciences Statistics for Windows version 25 software. The framework model (Ritchie and Spencer, 1994 cited in Bryman and Burgess 1994) was used to analyse and interpret findings from the qualitative data set. The following diagram indicates the number of participants in each arm of the study: student nurses were included to ascertain how prepared for physical health care practice.

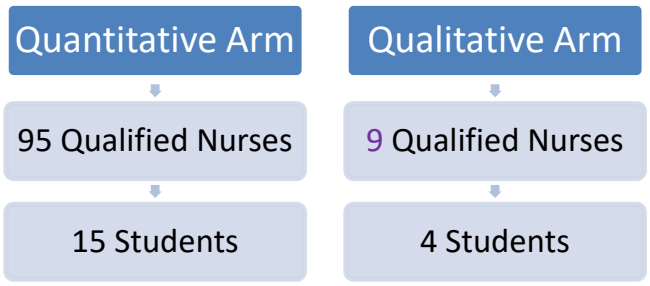

Figure 4 Respondents

4.2 Joint display

The following table sets out the main themes that have emerged from the data. These are reported jointly to demonstrate conformity to the convergent mixed methods model (Creswell and Plano Clark, 2011; Guetterman et al. 2015). Further details regarding how the findings from both data sets were integrated are given in the subsequent paragraphs. The themes emerged from the integration of the quantitative and qualitative data and, as such, represent the values of the two data sets, offering insight into, and context to, the findings. The following joint display sets frequency tables detailing questionnaire responses alongside verbatim extracted from the qualitative interview transcripts. The object of displaying data jointly is to enable visualisation of themes that have developed from the examination of both sources, offering insight into how new insights can develop from using a mixed methods approach.

Five themes that emerged from analysis of both data sets and subsequent integration of the quantitative and qualitative data are:

1. Mental health nurses want to support the physical health of mental health service users but this is complex and challenging
2. Mental health patients can be hard to engage when unwell, but mental health nurses do not perceive this as a barrier to managing physical well-being.
3. Unhelpful service provision and providers - collaboration with primary care colleagues can be difficult.
4. Physical health promotion may not be a priority for people with poor mental health
5. Patient autonomy is important but their decision making can be detrimental to their physical health.

Joint Display of Themes and data source

	Theme	Quantitative finding (n=110)	Qualitative finding
1	Mental health nurses want to support the physical health of mental health service users but this is complex and challenging.	94.5% (n = 104) respondents strongly agreed/agreed that helping clients to manage their weight and giving nutritional advice is part of their role. 75.4% (n = 89) strongly	"*our primary focus is on improving mental health, but we must treat the whole person.*" (RN 8, Line 4-5) "*it's not rocket science, we're not forging new territories here, it's all quite straightforward, there's lots of evidence to back it up.*" (SN 1, Line 55-56)

	Theme	**Quantitative finding (n=110)**	**Qualitative finding**
		agreed/agreed that giving advice on how to prevent heart disease is part of their role. 67.3% (n = 74) strongly agreed/agreed that they were confident in assessing hyperglycaemia 73.6% (n =81) strongly agreed/agreed that they were confident in assessing hypoglycaemia 99.1% (n =109) indicated confidence in measuring blood pressure accurately	"*we need to be interested in physical health monitoring given the side effects of the meds.*" (SN 4, Line 18-20) "the *most common problems we are faced with are diabetes and problems with blood pressure.*" (RN 9, Line 1)
2	Mental health patients can be hard to engage when unwell, but mental health nurses do not perceive this as a barrier to managing physical well-being.	80% (n = 88) strongly disagreed/disagreed that physical health concerns are due to poor mental health. 79.1% (n = 87) strongly disagreed/disagreed that patients are not interested in their	"*Sometimes patients are really in control of their diabetes and they know more about their condition we do.*" (RN2, Line 2—3)

	Theme	Quantitative finding (n=110)	Qualitative finding
		physical health.	
3	Unhelpful service provision and providers - collaboration with primary care colleagues can be difficult.	73.7% (n = 81) indicated that their practice always/very often/ often involved ensuring that their patient is registered with a GP.	"*they don't get that good a deal in primary care sometimes – some GPs are great but some patients don't feel very welcome.*" (RN 9, Line 182-183)
4	Physical health promotion messages do not always appeal to people with poor mental health.	57.3% (n =63) strongly agreed/agreed that clients are not motivated to exercise	"*it's hard to talk about promoting health to someone who does not want to be alive.*" (RN 3, Line 87-88)
5	Patient autonomy is important but their decision making can be detrimental to their physical health.	46.4% (n = 51) report that their practice always/very often/ often includes helping clients to stop smoking 61% (n = 67) report that their practice always/very often/ often involves giving clients advice about how to eat healthily	"*if we don't give them the right messages, they can't make an informed choice*" (RN 2, Line 33-34) "*I know we say it's okay to make an unwise decision – but we do need to help get the messages across.*" (RN 3, Line 22)

Figure 4: Joint Display of Themes and data source

4.3 Quantitative Findings

4.3.1 Respondent details

110 responses to the PHASe were received, giving a response rate of 14%. The characteristics of respondents are presented in the following tables. 103 responds reported both their age and gender whilst 106 respondents indicated their gender only.

			Male	Female	Total
Age Group	20-29	Count	3	13	16
		% within Age Group	18.8%	81.3%	100.0%
		% within What is your gender?	11.5%	16.9%	15.5%
		% of Total	2.9%	12.6%	15.5%
	30 - 39	Count	8	13	21
		% within Age Group	38.1%	61.9%	100.0%
		% within What is your gender?	30.8%	16.9%	20.4%
		% of Total	7.8%	12.6%	20.4%
	40 -49	Count	8	28	36
		% within Age Group	22.2%	77.8%	100.0%
		% within What is your gender?	30.8%	36.4%	35.0%
		% of Total	7.8%	27.2%	35.0%
	50-59	Count	2	17	19
		% within Age Group	10.5%	89.5%	100.0%
		% within What is your gender?	7.7%	22.1%	18.4%
		% of Total	1.9%	16.5%	18.4%
	over 60	Count	5	6	11
		% within Age Group	45.5%	54.5%	100.0%
		% within What is your gender?	19.2%	7.8%	10.7%
		% of Total	4.9%	5.8%	10.7%
Total		Count	26	77	103
		% within Age Group	25.2%	74.8%	100.0%
		% within What is your gender?	100.0%	100.0%	100.0%
		% of Total	25.2%	74.8%	100.0%

Figure 5: Demographic information

Health Education England (2019), report that 71% of mental health nurses working in the NHS are female, so the questionnaire respondents, whilst constituting a small sample, reflect the gender split within the NHS closely.

98 respondents indicated their pay band,

Pay band (n = 98)	n	%
5	26 (21 F 5 M)	26.50% (80% F 20% M)
6	40 (27F 13M)	41.00% (67.5% F 32.%% M)
7 +	18 (10 F 8 M)	19.00% (52.6% F 43,4% M)
Student	14 (11 F 3M)	13.50% (78.5% F 21.5% M)

Figure 6: Paybands

Female nurses working at pay band 6 constituted the largest group of respondents.

109 respondents indicated their level of qualification

Respondents indicated their level of qualification	n	%
Student	15	14
Registered Nurse	21	19
Diploma	36	33
Degree	22	20
Masters	15	14
TOTAL	109	100

Figure 7: Qualifications

Respondents represented both community and in-patient mental health nurses, although students were not asked which clinical area they were placed in at the time of responding.

100 respondents indicated their clinical area of practice as follows;

CLINICAL AREA OF PRACTICE

Where do you work? (n=100)	n	%
Student nurse on placements	6	6%
In-patient setting	32	32%
Community Setting	47	47%
Across in-patient and community setting	15	15%
Total	100	100%

Figure 8: Clinical area of practice

4.3.2 Responses to statements regarding attitudes towards managing physical health.

The PHASe included 10 statements (items 1,2,4,6,7,10,11,17,22 and 25) that were designed to elicit mental health nurses attitudes towards managing physical health care and as such the responses to these represent an important component of this study. The findings from these items have been cross tabulated by respondent gender for comparison, and are presented below

Item 1 of the PHASe asked respondents attitudes toward helping clients to manage their weight; 95.5% (n=106) strongly agreed or agreed that this should be part of their role indicating that mental health nurses positively approach weight management as part of practice. 95% (n=75/79) of female respondents and 96% (n= 26/27) of males agreed or strongly agreed with the statement, indicating that positive attitudes towards this aspect fo health promotion are not influenced by gender. This is an important finding given that

weight management, especially for people who are taking anti-psychotic medication, is a significant factor in maintaining physical well-being. Figure 9 indicates the results:

Helping clients manage their weight should be part of the mental health nurses role (n = 106)						
	Total	Disagree	Strongly disagree	Unsure	Agree	Strongly agree
Female	79	1	0	3	41	34
Male	27	0	1	0	14	12
Female	74.5%	100.0%	0.0%	100.0%	74.5%	73.9%
Male	25.5%	0.0%	100.0%	0.0%	25.5%	26.1%

Figure 9: Managing weight / gender cross tabulation

Item 2 of the PHASe asked respondents attitudes toward giving nutritional advice; again 95.5% (n = 107) strongly agreed or agreed that it should be part of their role reaffirming a positive approach to this aspect of care. 95%(n = 46/80) of female respondents and 93% (n = 25/27) of males agreed or strongly agreed with the statement indicating that mental health nurses have a positive attitude towards this aspect of health promotion regardless of gender. Figure 10 indicates responses:

Giving nutritional advice to clients should be part of a mental health nurses role (n =107)						
	Total	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Female	80	0	2	2	43	33
Male	27	0	1	1	17	8
Female	74.8%	0.0%	66.7%	66.7%	71.7%	80.5%
Male	25.2%	0.0%	33.3%	33.3%	28.3%	19.5%

Figure 10: Giving nutritional advice /gender cross tabulation

Item 4 related to attitudes towards giving advice about exercise and was scored so that disagreement or strong disagreement indicated a positive attitude to the issue. Figure 11 indicates responses indicating that 75% (n=87/107) strongly disagree or disagree with the statement and felt that giving advice about exercise was part of their role. 82% (n = 66/80)

of female respondents were in this group as were 78% (n = 21/27) of males. This finding suggests that mental health nurse attitudes towards providing exercise advice for clients is regarded positively and is not gender specific.

It should not be the role of the mental health nurse to provide advice about exercise to clients (n = 107)						
	Total	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Female	80	24	42	5	7	2
Male	27	9	12	1	5	0
Female	74.8%	72.7%	77.8%	83.3%	58.3%	100.0%
Male	25.2%	27.3%	22.2%	16.7%	41.7%	0.0%

Figure 11: Give exercise advice/gender cross tabulation

Item 6 related to giving advice regarding heart disease and 82% (n = 88/107) of respondents agreed or strongly agreed that offering such advice is part of their role. This group comprised 82% of the female respondents and 81% (n = 22/27) of males indicating that giving advice on how prevent heart disease is regarded positively as part of the mental health nurses role and is not relative to the gender of the nurse. Figure 12 indicates the results:

Giving advice on how to prevent heart disease should be part of the mental health nurses role (n =107)						
	Total	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Female	80	1	5	8	49	17
Male	27	0	1	4	13	9
Female	74.8%	100.0%	83.3%	66.7%	79.0%	65.4%
Male	25.2%	0.0%	16.7%	33.3%	21.0%	34.6%

Figure 12: Preventing heart disease advice/gender cross tabulation

Item 7 related to cancer screening checks and this statement was reverse scored, so that disagreement indicated a positive response. Figure 13 shows that 55% (n = 59/107) of

respondents did not agree with the statement, although 19% (21/107) respondents indicated that they were unsure. This statement attracted on of the higher "unsure" scores perhaps indicating that this aspect of care does not fit with the mental health nurse's role, given that it is generally carried out in primary care. The respondents who strongly disagreed/disagreed with the statement were 55% (n = 44/80) of the female respondents and 55% (n = 15/27) of males, suggesting that respondent gender did not impact on response rates. Figure 13 indicates the findings:

It should not be the mental health nurse role to check with a client if they have had cancer screening checks (e.g. cervical smear/mammogram) (n= 107)						
	Total	Strongly Disagree	Disagree	Unsure	Agree	Strongly agree
Female	80	16	28	15	15	6
Male	27	3	12	6	3	3
Female	74.8%	84.2%	70.0%	71.4%	83.3%	66.7%
Male	25.2%	15.8%	30.0%	28.6%	16.7%	33.3%

Figure 13: Cancer screen check/gender cross tabulation

Item 10 related to ensuring that clients are registered with a dentist, Figure 14 indicates 46% (n = 49/106) respondents agreed or strongly agreed that their role included ensuring that clients are registered with a dentist. This statement prompted one respondent to point out that it was not necessarily the role of the mental health nurse to ensure that the client visited the dentist, and that whilst it should be encouraged it could not be ensured. The gender profile of the respondents has not influenced the findings, as the respondents who agreed or strongly agreed with the statement were 44% (n = 35/39) of the female respondents and 51% (n = 14/27) of the males.

Ensuring clients are registered with dentist should be part of the mental health nurses role (n =106)						
	Total	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Female	79	6	10	28	26	9
Male	27	2	3	8	11	3
Female	74.5%	75.0%	76.9%	77.8%	70.3%	75.0%
Male	25.5%	25.0%	23.1%	22.2%	29.7%	25.0%

Figure 14: registered with dentist/gender cross tabulation

Item 11 related to giving contraceptive advice and 47% (n= 50/107) respondents agreed that mental health nurses should provide clients with contraceptive advice, however 29% (n = 31/107) were unsure. 24% (n= 26/107) of respondents disagreed with the statement. The agreeing or strongly agreeing respondents were 46% (n=37/80) of the female respondents and 48% (n=13/27), of the male respondents suggesting that the gender of the respondent has not influenced the responses, although this is an area of care about which mental health nurses hold less positive attitudes. This is an example of a service that is predominantly delivered in primary care, and as such mental health nurses may feel unfamiliar with this aspect of care. Figure 15 indicates responses:

Mental health nurses should provide clients with contraceptive advice (n = 107)						
	Total	Strongly Disagree	Disagree	Unsure	Agree	Strongly agree
Female	80	4	13	26	26	11
Male	27	1	8	5	9	4
Female	74.8%	80.0%	61.9%	83.9%	74.3%	73.3%
Male	25.2%	20.0%	38.1%	16.1%	25.7%	26.7%

Figure 14: Should give contraceptive advice / gender cross tabulation

Item 17 related to the importance of educating female clients on the importance of regular breast self-examination. 43% of respondents (n = 46/106) agreed or strongly agreed that

mental health nurse should be doing so although 32% (n =34/106) were unsure. Figure 16 indicates the results:

Mental Health Nurses should educate female clients about breast self-examination (n =106)						
	Total	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Female	79	4	14	25	26	10
Male	27	4	4	9	5	5
Female	74.5%	50.0%	77.8%	73.5%	83.9%	66.7%
Male	25.5%	50.0%	22.2%	26.5%	16.1%	33.3%

Figure 16 Importance of breast self-examination/gender cross tabulation

45% (n = 36/80) of female respondents agreed or strongly agreed on this point as did 37% (n=10/27) of males. These findings suggest that mental health nurses have less positive attitudes towards this aspect of physical health promotion and that the gender of the mental health nurse does not influence this.

Item 22 related to whether mental health nurses should ensure that their clients have regular eye checks by an optician. 47% (n = 50/107) agreed or strongly agreed that they should ensure that clients have their eyes regularly checked by an optician. 49% (n=39/80) of female respondents agreed or strongly agreed, as did 41% (n = 11/27) of males, suggesting that gender did not impact on decision. Figure 16 indicates responses:

Ensuring clients have their eyes regularly checked by an optician should be part of the mental health nurses role (n= 107)						
	Total	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Female	80	4	17	20	31	8
Male	27	1	8	7	8	3
Female	74.8%	80.0%	68.0%	74.1%	79.5%	72.7%
Male	25.2%	20.0%	32.0%	25.9%	20.5%	27.3%

Figure 16: Regular eye check/gender cross tabulation

Item 25, related to whether mental health nurses should educate male clients about the importance of testicular self-examination. 49% (n =53/107) or respondents agreed or strongly agreed that they should. 53% (n = 43/80) of female respondents and 40% (n= 11/27) of male respondents did not agree or were unsure whether this aspect of care was the role of the mental health nurse. This finding attracted responses similar to those relating breast self-examination and offering contraceptive advice. These three aspects of health promotion seem to generate less positive attitudes from respondents, which does not appear to be influenced by the gender of the respondent significantly. Figure 17 indicates the findings:

Mental health nurses should educate male clients about the importance of testicular self -examination (n = 107)						
	Total	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Female	80	6	19	18	31	6
Male	27	1	4	6	11	5
Female	74.8%	85.7%	82.6%	75.0%	73.8%	54.5%
Male	25.2%	14.3%	17.4%	25.0%	26.2%	45.5%

Figure 17: Testicular check/gender cross tabulation

Overall, the ten statements regarding attitudes to aspects of physical health management reflected that female and male mental health nurses responded similarly. Responses indicating a positive attitude were very closely matched with two exceptions – when referring to breast self-examination for female clients 45% of female and 37% of male respondents indicated they agreed that mental health nurses should educate their clients on the topic. The other exception relates to education regarding testicular self-examination for male clients – 53% of female mental health nurses agreed that it should be part of their role, whereas 40% of male mental health nurses did. This finding may indicate that mental health nurse recognise the importance of such education but maybe don't'

have positive attitudes towards it. It may be that this aspect of health promotion in mental health settings requires further exploration, to support all mental health nurses in this regard.

4.3.3 Responses to statements regarding confidence in physical health care

Six items contained with within the PHASe related to confidence in specified aspects of physical health management. The responses have been cross tabulated by gender and the findings are presented in the following figures.

Item 3 related to confidence in assessing hyperglycaemia, 60% (n = 64/106) of respondents agreed or strongly agreed with the statement. This group comprised 60% (n = 48/79) of the female respondents and 59% of males (n = 16/27) indicating that confidence in this aspect of practice did not differ significantly between genders. Figure 18 displays the findings:

I am confident in assessing signs and symptoms of hyperglycaemia (n = 106)						
	Total	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Female	79	9	3	19	33	15
Male	27	1	4	6	11	5
Female	74.8%	90.0%	42.8%	76.0%	75.0%	75.0%
Male	25.2%	10.0%	57.2%	24.0%	25.0%	25.0%

Figure 18 Confidence in assessing hyperglycaemia/gender cross tabulation

Item 19 related to confidence in assessing hypoglycaemia, 72% (n = 76/106) of respondents agreed or strongly agreed with the statement. 76% (n = 60/79) of female

respondents were in this group as were 59%(n = 16/27) of males. This finding may be suggesting that the female mental health nurses in the sample are slightly more confident in managing hypoglycaemia than their male colleagues. Figure 19 indicates the findings:

I am confident in assessing signs and symptoms of hypoglycaemia (n = 106)						
	Total	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Female	79	1	3	15	46	14
Male	27	1	4	6	11	5
Female	74.8%	50.0%	42.8%	71.4%	80.7%	73.6%
Male	25.2%	50.0%	57.2%	28.6%	19.3%	26.4%

Figure 19 Confidence in assessing hypoglycaemia/gender cross tabulation

Item 8 referred to confidence in measuring blood pressure, and only 1 female respondent felt they did not have confidence in this area. 99% (n = 78/79) of female and 100% (n=27/27) of males expressed agreement with the statement. This area of care is a basic requirement for a nurse to be able to monitor physical health and the almost the entire sample regardless of gender are confident in undertaking this practice. Figure 20 indicates the results:

I am confident that I can measure a client's blood pressure accurately (n=106)						
	Total	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Female	79	0	1	0	21	57
Male	27	0	0	0	11	16
Female	74.8%	0.0%	100%	0.0%	65.6%	78.0%
Male	25.2%	0.0%	0.0%	0.0%	34.4%	22.0%

Figure 20 Confidence in measuring blood pressure/gender cross tabulation

Item 24 related to confidence in awareness of the potential cardiac risk when taking anti-psychotic medication. This is another important aspect of physical health care for people

with SMI as many patients will be taking this medication. 78% (n = 83/104) of respondents agreed or strongly agreed with the statement indicating the confidence in recognising the cardiac risk. 81% (n = 64/79) of female nurses and 76% (n= 19/25) of males were in this group. Figure 21 indicates the results:

I am confident that I know which psychotropic drugs increase the risk that a client may experience cardiac problems (n= 104)						
	Total	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Female	79	1	3	11	44	20
Male	25	0	2	4	15	4
Female	75.9%	100.0%	60%	75.0%	74.5%	83.3%
Male	24.1%	0.0%	40%	25.0%	25.5%	16.7%

Figure 21 Confidence awareness of cardiac risk/gender cross tabulation

Item 24 related to awareness of psychotropic drugs that can increase damage to the eyes and 23% (n = 24/104) of the respondents indicated that they knew which drugs these are. 24% (n= 19/79) of female nurses and 20% (n =5/25) of males were in this group. Both genders reported similar response rates, and a high rate of disagreement and uncertainty are manifest by the findings, as indicated by Figure 22

I am confident that I know which psychotropic drugs increase damage to the eyes (n=104)						
	Total	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Female	79	2	26	32	14	5
Male	25	3	7	10	5	0
Female	75.9%	40.0%	78.7%	76.1%	73.6%	100%
Male	24.1%	60.0%	21.3%	23.9%	26.4%	0.0%

Figure 22 Confidence in assessing ophthalmic risk/gender cross tabulation

Item 26 asked respondent whether they have confidence in their ability to resuscitate a client who had a cardiac arrest. 84% (n = 87/104) of respondents indicated that they had

confidence in this area. The gender cross tabulation indicated that 83.5% (n = 66/79) of female respondents and 87.5% (n = 21/25) of male respondents were in this group. Figure 23 indicates the findings:

I am confident that I could resuscitate a client who had a cardiac arrest (n=104)						
	Total	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Female	79	0	2	11	39	27
Male	25	0	2	2	16	5
Female	75.9%	0.0%	50.0%	84.6%	70.9%	84.3%
Male	24.1%	0.0%	50.0%	15.4%	29.1%	15.7%

Figure 23 Confidence in resuscitation/gender cross tabulation

4.3.4. Responses to statements regarding perceived barriers to physical health

The PHASe includes 7 items relating to perceived barriers to managing physical health care. Item 5 asked respondents to agree with a statement suggesting that clients with SMI are not interested in their physical health. Disagreement or strong disagreement with the statement suggests that this is not perceived as a barrier, and 80% (n = 83/104) of respondents were in this group comprising 81% (n = 64/79) of females and 72% (n=18/25) of males. Figure 24 indicates the findings:

Clients with serious mental health problems are not interested in improving their physical health (n = 104)						
	Total	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Female	79	26	38	7	5	3
Male	25	5	14	4	2	0
Female	75.9%	83.8%	73.0%	63.6%	71.4%	100%

Male	24.1%	16.2%	27.0%	36.4%	28.6%	0.0%

Figure 24 Clients are not interested in physical health/gender cross tabulation

Item 9 of the PHASe asked whether respondents agreed that it is difficult to get clients to follow advice on how to manage their weight. 54.8% (n = 57/104) disagreed or strongly disagreed that this was a problem. 66% (n = 52/79) of female respondents and 20% (n = 5/25) of males made up this group. This finding suggests that male mental health nurses may not find that their patients follow advice on weight management to the extent that female mental health nurses do. Figure 25 indicates the findings:

It is difficult to get clients to follow advice on how to manage their weight (n=104)						
	Total	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Female	79	9	43	23	3	1
Male	25	1	4	2	16	2
Female	75.9%	90.0%	91.0%	92.0%	15.7%	33.3%
Male	24.1%	10.0%	9.0%	8.0%	84.3%	66.6%

Figure 25 It is difficult to get clients to follow advice/gender cross tabulation

Item 13 asked respondents whether they thought informing clients of the possible effects medication may have on their physical health might reduce adherence to medication regimes. 64% (n= 67/104) strongly disagreed or disagreed with the statement. This group of respondents included 64% (n=51/79) of female respondents and 64% (n=16/25) of males, clearly indicating that gender does not impact on the perception that informing clients about medication effects reduces adherence. Figure 26 indicates the findings:

Informing clients about the possible effects medication may have on their physical health may reduce adherence (n = 104)						
	Total	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Female	79	15	36	15	7	6
Male	25	7	9	2	5	2
Female	75.9%	68.1%	86.6%	88.2%	58.3%	75.0%

Male	24.1%	31.9%	17.4%	17.8%	41.7%	25.0%

Figure 25 Informing clients will reduce adherence/gender cross tabulation

Item 15 of the PHASe asked respondents to indicate whether they agreed that clients are not motivated to exercise. 59% (n = 61/104) of respondents strongly disagreed or disagreed with the statement, comprising 57% (n = 45/79) of female respondents and 64% (n = 16/25) of males. Figure

Clients are not motivated to exercise (n = 104)						
	Total	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Female	79	11	34	17	16	1
Male	25	0	16	3	5	1
Female	75.9%	100%	68.0%	85.0%	76.1%	50.0%
Male	24.1%	0.0%	32.0%	15.0%	22.9%	50.0%

Figure 26 Clients are not motivated to exercise/gender cross tabulation

Item 18 of the PHASe asked respondents whether they agreed that it is difficult to get clients to follow healthy eating advice. 33% (n= 34/104) of respondents strongly disagreed or disagreed with the statement. This group were 35% (n= 28/79) of the female respondents and 24% (n = 6/25) of the males. Figure 27 indicates the results:

It is difficult to get clients to follow healthy eating advice (n = 104)						
	Total	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Female	79	4	24	22	48	4
Male	25	0	6	3	15	1
Female	75.9%	100%	80.0%	88.0%	76.1%	75.0%
Male	24.1%	0.0%	20.0%	12.0%	22.9%	25.0%

Figure 27 It is difficult to get clients to follow advice/gender cross tabulation

Item 23 of the PHASe asked respondents if they agreed that their workload prevents them from doing any physical health promotion with clients. Some respondents did not answer this question, the total number of responses received was 98. 49% (n=48/98) of

respondents strongly disagreed or disagreed with the statement, comprising 51%(n = 38/74) of female respondents and 42% (n = 10/24) of males. Figure 28 indicates the findings:

My workload prevents me doing any physical health promotion with clients (n = 98)						
	Total	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Female	74	8	30	9	20	7
Male	24	3	7	4	8	2
Female	75.5%	72.7%	81.0%	81.8%	71.4%	77.0%
Male	24.5%	27.3%	19.0%	18.2%	28.6%	23.0%

Figure 28 Workload/gender cross tabulation

Item 27 of the PHASe asked respondents whether they agreed with the statement that clients' physical health worries are mostly due to their mental illness. 84% (n = 82/98) of respondents strongly disagreed or disagreed with this statement, comprising 84% (n = 62/74) of female respondents and 83% (n = 20/24) of males, indicating that gender does not impact on the mental health nurses perception regarding their clients physical health worries being due to their mental illness. Figure 29 indicates these findings:

Client's physical health worries are mostly due to their mental illness (n = 98)						
	Total	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Female	74	19	43	10	2	0
Male	24	6	14	1	2	1
Female	75.5%	76.0%	75.4%	90.0%	50.0%	0.0%
Male	24.5%	24.0%	24.6%	10.0%	50.0%	100.0%

Figure 29 Physical health worries due to mental illness/gender cross tabulation

Overall, responses to statements regarding attitudes to and confidence in delivering physical health care, did not vary by gender of the respondent. Similarly there was no

significant differences to statements regarding perceive barriers between female and male mental health nurses.

4.3.5 Responses to perceived training requirements

Respondents were also asked whether they felt that they would like further training on some aspects of physical health care. 87% of respondents (n=74) reported that they would like more training on managing cardiovascular disease and 78% (n =67) indicated that diabetes was a topic they would like more training on. Figure 25 indicates all responses to this item:

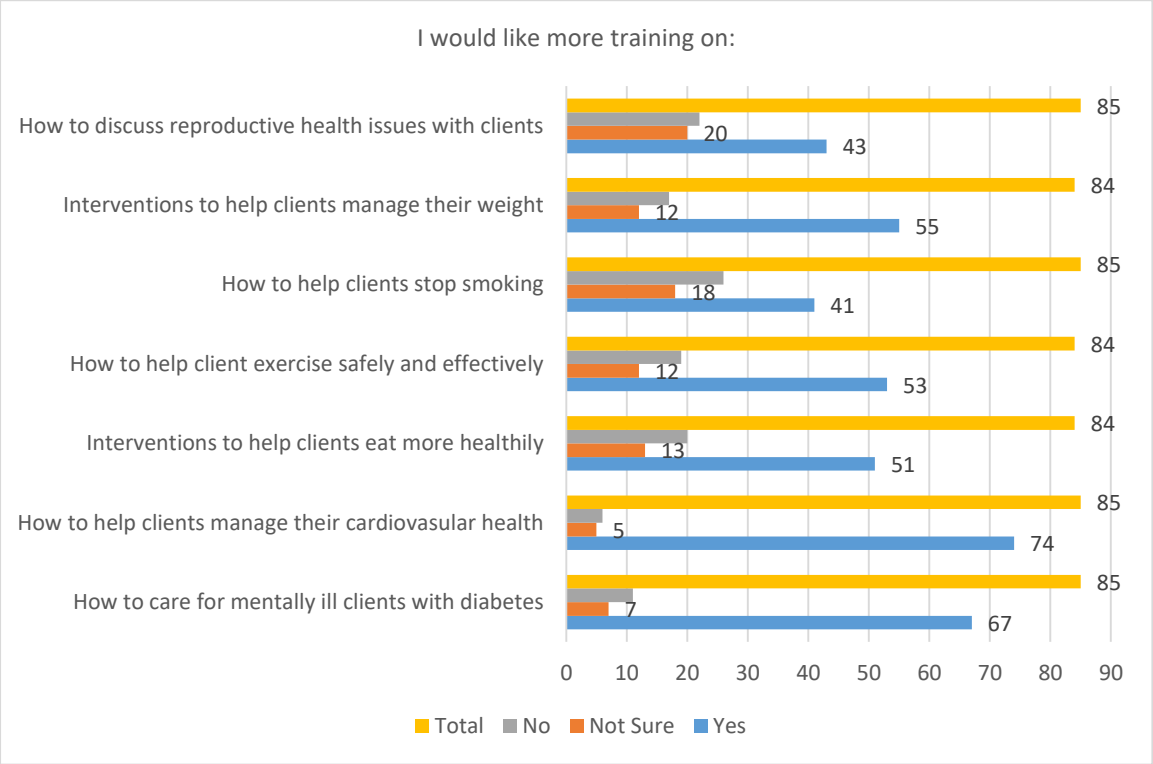

Figure 15: Training graph

Reproductive health and smoking cessation were the topics that attracted the lowest "Yes" scores, with 50% (n=43) and 48% (n=41) respectively.

4.3.6 Confidence and attendance at training cross tabulations

As the data has been collected from a small sample size, non-parametric testing was considered. The Chi-square test for independence was used with no collapsed variables, to explore the relationship between confidence in physical care skills and attendance at physical health care training. It was hypothesised that respondents who had attended training, would be more confident. Cross tabulation tables were calculated for each of the aspects of physical health care.

Have you attended any physical health care training in the past 5 years? * I am confident in assessing signs and symptoms of hyperglycaemia Crosstabulation 1

			Strongly disagree	Disagree	Unsure	Agree	Strongly Agree	Total
Have you attended any physical health care training in the past 5 years?	Yes	Count	2	8	13	44	17	84
		Expected Count	1.6	8.0	16.8	41.6	16.0	84.0
		% within Have you attended any physical health care training in the past 5 years?	2.4%	9.5%	15.5%	52.4%	20.2%	100.0%
		% within I am confident in assessing signs and symptoms of hyperglycaemia	100.0%	80.0%	61.9%	84.6%	85.0%	80.0%
		% of Total	1.9%	7.6%	12.4%	41.9%	16.2%	80.0%
	No	Count	0	2	8	8	3	21
		Expected Count	.4	2.0	4.2	10.4	4.0	21.0
		% within Have you attended any physical health care training in the past 5 years?	0.0%	9.5%	38.1%	38.1%	14.3%	100.0%
		% within I am confident in assessing signs and symptoms of hyperglycaemia	0.0%	20.0%	38.1%	15.4%	15.0%	20.0%
		% of Total	0.0%	1.9%	7.6%	7.6%	2.9%	20.0%
Total		Count	2	10	21	52	20	105
		Expected Count	2.0	10.0	21.0	52.0	20.0	105.0

	% within Have you attended any physical health care training in the past 5 years?	1.9%	9.5%	20.0%	49.5 %	19.0 %	100.0 %
	% within I am confident in assessing signs and symptoms of hyperglycaemia	100.0%	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
	% of Total	1.9%	9.5%	20.0%	49.5 %	19.0 %	100.0 %

Chi-Square Tests 1

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.802[a]	4	.214
Likelihood Ratio	5.608	4	.230
Linear-by-Linear Association	.872	1	.351
N of Valid Cases	105		

a. 5 cells (50.0%) have expected count less than 5. The minimum expected count is .40.

Figure 16: Assessing Hyperglycaemia Chi Square

Chi-Square tests 1 showed that there is no significant association between attendance at physical health training and confidence in assessing hyperglycaemia: X2 (4, N = 105) = 5.8, p = .21

Have you attended any physical health care training in the past 5 years? * I am confident in assessing signs and symptoms of hypoglycaemia Crosstabulation 2

			I am confident in assessing signs and symptoms of hypoglycaemia					
			Strongly Disagree	Disagree	Unsure	Agree	Strongly agree	Total
Have you attended any physical health care training in the past 5 years?	Yes	Count	3	5	10	46	20	84
		Expected Count	2.4	5.6	12.8	45.6	17.6	84.0
		% within Have you attended any physical health care training in the past 5 years?	3.6%	6.0%	11.9%	54.8%	23.8%	100.0%
		% within I am confident in assessing signs and symptoms of hypoglycaemia	100.0%	71.4%	62.5%	80.7%	90.9%	80.0%
		% of Total	2.9%	4.8%	9.5%	43.8%	19.0%	80.0%
	No	Count	0	2	6	11	2	21
		Expected Count	.6	1.4	3.2	11.4	4.4	21.0
		% within Have you attended any physical health care training in the past 5 years?	0.0%	9.5%	28.6%	52.4%	9.5%	100.0%
		% within I am confident in assessing signs and symptoms of hypoglycaemia	0.0%	28.6%	37.5%	19.3%	9.1%	20.0%
		% of Total	0.0%	1.9%	5.7%	10.5%	1.9%	20.0%
Total		Count	3	7	16	57	22	105
		Expected Count	3.0	7.0	16.0	57.0	22.0	105.0
		% within Have you attended any physical health care training in the past 5 years?	2.9%	6.7%	15.2%	54.3%	21.0%	100.0%
		% within I am confident in assessing signs and symptoms of hypoglycaemia	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	2.9%	6.7%	15.2%	54.3%	21.0%	100.0%

Chi-Square Tests 2

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.788[a]	4	.216
Likelihood Ratio	6.216	4	.184
Linear-by-Linear Association	1.451	1	.228
N of Valid Cases	105		

a. 5 cells (50.0%) have expected count less than 5. The minimum expected count is .60.

Chi-Square tests 2 showed that there was no significant association between attendance at physical health training and confidence in assessing hypoglycaemia: X^2 *(4,* N *= 105) = 5.7,* p *= .21*

Figure 17: Assessing hypoglycaemia Chi Square

Have you attended any physical health care training in the past 5 years? * I am confident that I can measure a client's blood pressure accurately Crosstabulation 3

			Agree	Strongly Agree	Total
Have you attended any physical health care training in the past 5 years?	Yes	Count	21	64	85
		Expected Count	23.3	61.7	85.0
		% within Have you attended any physical health care training in the past 5 years?	24.7%	75.3%	100.0%
		% within I am confident that I can measure a client's blood pressure accurately	72.4%	83.1%	80.2%
		% of Total	19.8%	60.4%	80.2%
	No	Count	8	13	21
		Expected Count	5.7	15.3	21.0
		% within Have you attended any physical health care training in the past 5 years?	38.1%	61.9%	100.0%
		% within I am confident that I can measure a client's blood pressure accurately	27.6%	16.9%	19.8%
		% of Total	7.5%	12.3%	19.8%
Total		Count	29	77	106
		Expected Count	29.0	77.0	106.0
		% within Have you attended any physical health care training in the past 5 years?	27.4%	72.6%	100.0%
		% within I am confident that I can measure a client's blood pressure accurately	100.0%	100.0%	100.0%
		% of Total	27.4%	72.6%	100.0%

Ch **Chi-Square Tests 3**i

	Value	Df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.519[a]	1	.218		
Continuity Correction[b]	.920	1	.337		
Likelihood Ratio	1.446	1	.229		
Fisher's Exact Test				.275	.168
Linear-by-Linear Association	1.505	1	.220		
N of Valid Cases	106				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.75.

b. Computed only for a 2x2 table

Figure 18: Measuring blood pressure Chi Square

Chi-Squares test 3 showed no significant association between attendance at physical health training and confidence in measuring blood pressure. Responses received to this aspect of care were only in "agree" of "strongly agree" category – reducing the degrees of freedom as shown. X^2 *(1,* N *= 106) = 1.5,* p *= .21*

Have you attended any physical health care training in the past 5 years? * I am confident that I know which psychotropic drugs may cause damage to the eyes Crosstabulation 4

			I am confident that I know which psychotropic drugs may cause damage to the eyes					
			Strongly Disagree	Disagree	Unsure	Agree	Strongly agree	Total
Have you attended any physical health care training in the past 5 years?	Yes	Count	5	28	31	16	5	85
		Expected Count	4.0	29.7	32.1	15.2	4.0	85.0
		% within Have you attended any physical health care training in the past 5 years?	5.9%	32.9%	36.5%	18.8%	5.9%	100.0%
		% within I am confident that I know which psychotropic drugs may cause damage to the eyes	100.0%	75.7%	77.5%	84.2%	100.0%	80.2%
		% of Total	4.7%	26.4%	29.2%	15.1%	4.7%	80.2%
	No	Count	0	9	9	3	0	21
		Expected Count	1.0	7.3	7.9	3.8	1.0	21.0
		% within Have you attended any physical health care training in the past 5 years?	0.0%	42.9%	42.9%	14.3%	0.0%	100.0%
		% within I am confident that I know which psychotropic drugs may cause damage to the eyes	0.0%	24.3%	22.5%	15.8%	0.0%	19.8%
		% of Total	0.0%	8.5%	8.5%	2.8%	0.0%	19.8%
Total		Count	5	37	40	19	5	106
		Expected Count	5.0	37.0	40.0	19.0	5.0	106.0
		% within Have you attended any physical health care training in the past 5 years?	4.7%	34.9%	37.7%	17.9%	4.7%	100.0%
		% within I am confident that I know which psychotropic drugs may cause damage to the eyes	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	4.7%	34.9%	37.7%	17.9%	4.7%	100.0%

Chi-Square tests 4

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.320[a]	4	.506
Likelihood Ratio	5.247	4	.263
Linear-by-Linear Association	.397	1	.528
N of Valid Cases	106		

a. 5 cells (50.0%) have expected count less than 5. The minimum expected count is .99.

Figure 19: Damage to the eyes Chi Square

Chi-Squared tests 4 showed that there was no significant association between attendance at physical health training and confidence in knowing which psychotropic medication may cause damage to the eyes: X^2 *(4, N = 106) = 3.3, p = .50*

Have you attended any physical health care training in the past 5 years? * I am confident that I know which psychotropic drugs increase the risk that a client may experience cardiac problems Crosstabulation 5

			I am confident that I know which psychotropic drugs increase the risk that a client may experience cardiac problems					
			Strongly Disagree	Disagree	Unsure	Agree	Strongly agree	Total
Have you attended any physical health care training in the past 5 years?	Yes	Count	1	4	11	51	18	85
		Expected Count	.8	4.8	12.8	48.1	18.4	85.0
		% within Have you attended any physical health care training in the past 5 years?	1.2%	4.7%	12.9%	60.0%	21.2%	100.0%
		% within I am confident that I know which psychotropic drugs increase the risk that a client may experience cardiac problems	100.0%	66.7%	68.8%	85.0%	78.3%	80.2%
		% of Total	0.9%	3.8%	10.4%	48.1%	17.0%	80.2%
	No	Count	0	2	5	9	5	21
		Expected Count	.2	1.2	3.2	11.9	4.6	21.0
		% within Have you attended any physical health care training in the past 5 years?	0.0%	9.5%	23.8%	42.9%	23.8%	100.0%
		% within I am confident that I know which psychotropic drugs increase the risk that a client may experience cardiac problems	0.0%	33.3%	31.3%	15.0%	21.7%	19.8%
		% of Total	0.0%	1.9%	4.7%	8.5%	4.7%	19.8%
Total		Count	1	6	16	60	23	106
		Expected Count	1.0	6.0	16.0	60.0	23.0	106.0
		% within Have you attended any physical health care training in the past 5 years?	0.9%	5.7%	15.1%	56.6%	21.7%	100.0%
		% within I am confident that I know which psychotropic drugs increase the risk that a client may experience cardiac problems	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	0.9%	5.7%	15.1%	56.6%	21.7%	100.0%

Chi-Square Tests 5

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.320[a]	4	.506
Likelihood Ratio	5.247	4	.263
Linear-by-Linear Association	.397	1	.528
N of Valid Cases	106		

a. 5 cells (50.0%) have expected count less than 5. The minimum expected count is .99.

Figure 20: Risk of cardiac problems Chi Square

Chi-Square tests 5 showed no significant associate between attendance at physical health training and confidence in knowing which psychotropic medication can increase the risk of cardiac problems: *X2 (4, N = 106) = 3.3, p = .50*

Have you attended any physical health care training in the past 5 years? * I am confident that I could resuscitate a client who had a cardiac arrest Crosstabulation 6

			I am confident that I could resuscitate a client who had a cardiac arrest				
			Disagree	Unsure	Agree	Strongly agree	Total
Have you attended any physical health care training in the past 5 years?	Yes	Count	4	13	35	32	84
		Expected Count	3.2	12.8	40.0	28.0	84.0
		% within Have you attended any physical health care training in the past 5 years?	4.8%	15.5%	41.7%	38.1%	100.0%
		% within I am confident that I could resuscitate a client who had a cardiac arrest	100.0%	81.3%	70.0%	91.4%	80.0%
		% of Total	3.8%	12.4%	33.3%	30.5%	80.0%
	No	Count	0	3	15	3	21
		Expected Count	.8	3.2	10.0	7.0	21.0
		% within Have you attended any physical health care training in the past 5 years?	0.0%	14.3%	71.4%	14.3%	100.0%
		% within I am confident that I could resuscitate a client who had a cardiac arrest	0.0%	18.8%	30.0%	8.6%	20.0%
		% of Total	0.0%	2.9%	14.3%	2.9%	20.0%
Total		Count	4	16	50	35	105
		Expected Count	4.0	16.0	50.0	35.0	105.0
		% within Have you attended any physical health care training in the past 5 years?	3.8%	15.2%	47.6%	33.3%	100.0%
		% within I am confident that I could resuscitate a client who had a cardiac arrest	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	3.8%	15.2%	47.6%	33.3%	100.0%

Chi-Square Tests 6

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6.998[a]	3	.072
Likelihood Ratio	8.080	3	.044
Linear-by-Linear Association	.455	1	.500
N of Valid Cases	105		

a. 3 cells (37.5%) have expected count less than 5.

The minimum expected count is .80.

Figure 21: Cardiac arrest Chi Square

Chi-Square tests 6 showed no significant association between attendance at physical health care training and confidence in ability to resuscitate a client who had a cardiac arrest: X^2 (3, N = 105) = 6.9, p = .07

4.3.7 Attitudes to Smoking

The attitudes of mental health nurses to smoking were explored and responses compared by smoking status of the respondent to see where attitudes might vary if the respondent smokes. The smoking status of respondents by gender is presented below. 108 respondents reported their smoking status however 11 cases were missing the combined information.

Do you smoke? * What is your gender? Crosstabulation

			What is your gender?		
			Male	Female	Total
Do you smoke?	Yes	Count	5	16	21
		% within Do you smoke?	23.8%	76.2%	100.0%
		% within What is your gender?	18.5%	20.0%	19.6%
		% of Total	4.7%	15.0%	19.6%
	No	Count	22	64	86
		% within Do you smoke?	25.6%	74.4%	100.0%
		% within What is your gender?	81.5%	80.0%	80.4%
		% of Total	20.6%	59.8%	80.4%
Total		Count	27	80	107
		% within Do you smoke?	25.2%	74.8%	100.0%
		% within What is your gender?	100.0%	100.0%	100.0%
		% of Total	25.2%	74.8%	100.0%

Figure 22: Gender and smoking

This table indicates that 16 of the 21 (75%) of respondents who smoke are female.

The following tables compare attitudes to smoking, by smoking status of the respondent.

RESPONSES TO STATEMENT REGARDING ENCOURAGING SMOKING CESSATION

Clients should not be encouraged to give up smoking, as they have enough to cope with

Do you smoke?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Unsure	1	10.0	50.0	50.0
		Strongly agree	1	10.0	50.0	100.0
		Total	2	20.0	100.0	
	Missing	System	8	80.0		
	Total		10	100.0		
Yes	Valid	Disagree	4	19.0	19.0	19.0
		Unsure	5	23.8	23.8	42.9
		Agree	9	42.9	42.9	85.7
		Strongly agree	3	14.3	14.3	100.0
		Total	21	100.0	100.0	
No	Valid	Disagree	6	6.9	6.9	6.9
		Unsure	6	6.9	6.9	13.8
		Agree	**40**	46.0	46.0	59.8
		Strongly agree	**35**	40.2	40.2	100.0
		Total	87	100.0	100.0	

Figure 23: Not encourage to stop smoking

A significant proportion of non-smoking nurses (86%, n =75/87) agreed that smoking cessation should not be encouraged.

RESPONSES TO STATEMENT REFERRING TO STAFF SMOKING ON HEALTH CARE PREMISES

Staff should be banned from smoking on all health care premises

Do you smoke?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Agree	1	10.0	50.0	50.0
		Strongly agree	1	10.0	50.0	100.0
		Total	2	20.0	100.0	
	Missing	System	8	80.0		
	Total		10	100.0		
Yes	Valid	Strongly Disagree	5	23.8	23.8	23.8
		Disagree	6	28.6	28.6	52.4
		Unsure	4	19.0	19.0	71.4
		Agree	**1**	4.8	4.8	76.2
		Strongly agree	**5**	23.8	23.8	100.0
		Total	21	100.0	100.0	
No	Valid	Strongly Disagree	2	2.3	2.3	2.3
		Disagree	8	9.2	9.3	11.6
		Unsure	10	11.5	11.6	23.3
		Agree	**23**	26.4	26.7	50.0
		Strongly agree	**43**	49.4	50.0	100.0
		Total	86	98.9	100.0	
	Missing	System	1	1.1		
	Total		87	100.0		

Figure 24: Ban staff from smoking

67% (n =72) of 107 respondents agreed or strongly agreed that staff should not be smoking on health care premises, 6 of whom were smokers. Tolerance to staff smoking is reduced compared to tolerance towards patients being given cigarettes and smoking.

RESPONSES TO STATEMENT REFERRING TO CLIENTS BEING GIVEN CIGARETTES TO ACHIEVE THERAPEUTIC GOALS

Do you smoke? * Clients should be given cigarettes to help achieve therapeutic goals Crosstabulation

			Clients should be given cigarettes to help achieve therapeutic goals					Total
			Strongly Disagree	Disagree	Unsure	Agree	Strongly agree	
Do you smoke?	Yes	Count	1	0	3	4	13	21
		% within Do you smoke?	4.8%	0.0%	14.3%	19.0%	61.9%	100.0%
		% within Clients should be given cigarettes to help achieve therapeutic goals	33.3%	0.0%	33.3%	14.3%	20.3%	19.4%
		% of Total	0.9%	0.0%	2.8%	3.7%	12.0%	19.4%
	No	Count	2	4	6	24	51	87
		% within Do you smoke?	2.3%	4.6%	6.9%	27.6%	58.6%	100.0%
		% within Clients should be given cigarettes to help achieve therapeutic goals	66.7%	100.0%	66.7%	85.7%	79.7%	80.6%
		% of Total	1.9%	3.7%	5.6%	22.2%	47.2%	80.6%
Total		Count	3	4	9	28	64	108
		% within Do you smoke?	2.8%	3.7%	8.3%	25.9%	59.3%	100.0%
		% within Clients should be given cigarettes to help achieve therapeutic goals	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	2.8%	3.7%	8.3%	25.9%	59.3%	100.0%

Figure 25: Smoking and therapeutic goals

The high proportion of non-smokers who agreed that clients should be given cigarettes suggests a tolerance to clients smoking within both smoking and non-smoking respondents which does not apply to staff smoking.

RESPONSES TO STATEMENT RELATING TO CLIENTS SMOKING ON HEALTHCARE PREMISES

Clients should be banned from smoking on all health care premises

Do you smoke?			Frequency	Percent	Valid Percent	Cumulative Percent
Yes	Valid	Strongly Disagree	**7**	33.3	33.3	33.3
		Disagree	**6**	28.6	28.6	61.9
		Unsure	**3**	14.3	14.3	76.2
		Agree	1	4.8	4.8	81.0
		Strongly agree	4	19.0	19.0	100.0
		Total	21	100.0	100.0	
No	Valid	Strongly Disagree	**6**	6.9	6.9	6.9
		Disagree	**19**	21.8	21.8	28.7
		Unsure	**22**	25.3	25.3	54.0
		Agree	19	21.8	21.8	75.9
		Strongly agree	21	24.1	24.1	100.0
		Total	87	100.0	100.0	

Figure 26: Ban clients smoking

54% (n = 47) of non –smokers and 76% (n=16) of smokers disagreed or were unsure whether clients should be banned from smoking on all health care premises.

RESPONSES TO STATEMENT RELATING TO STAFF AND CLIENTS SMOKING TOGETHER

Staff and clients smoking together helps to build a therapeutic relationship

Do you smoke?			Frequency	Percent	Valid Percent	Cumulative Percent
Yes	Valid	Strongly Disagree	3	14.3	14.3	14.3
		Disagree	6	28.6	28.6	42.9
		Unsure	5	23.8	23.8	66.7
		Agree	**2**	9.5	9.5	76.2
		Strongly agree	**5**	23.8	23.8	100.0
		Total	21	100.0	100.0	
No	Valid	Disagree	14	16.1	16.1	16.1
		Unsure	15	17.2	17.2	33.3
		Agree	**27**	31.0	31.0	64.4
		Strongly agree	**31**	35.6	35.6	100.0
		Total	87	100.0	100.0	

Figure 27: Smoking together builds relationships

66.6% (n =58/87) of non-smokers and 33% (n = 7/21) of nurses who smoked agreed that staff and clients smoking together helps to build a therapeutic relationship.

4.3.8 Reflexivity

The researchers practice situation involves leading on the "smokefree" initiative, and problems have been identified among nursing staff who are indifferent to this, leading to inconsistent implementation of the policy. The CQC have questioned the support that nurses who smoke are offered by their employing health organisation, encouraging senior managers to consider how this could be delivered. Further research is needed to help identify how this can be achieved.

4.3.9.Quantitative Data –what has been learned?

The quantitative data findings suggest that overall mental health nurses have positive attitudes towards managing physical health care, irrespective of gender, and that their confidence in undertaking this aspect of care is not significantly linked to training. It is

evident that positive attitudes are most prevalent when supporting the overall physical health of patients, for example relating to cardiac health, diet and exercise however attitudes and confidence levels seem to be lower when relating to gender specific screening and contraception. The quantitative findings offer an insight into what mental health nurses have shared about their attitudes via PHASe, and indicate that there are complexities for mental health nurse in their practice regarding holistic care –it appears that aspects of care that are considered to be the remit of primary care may be the most challenging for the mental health nurse to manage. Another complex area relates to smoking and how mental health nurses deal with trying to offer health promoting support whilst acknowledging that smoking can be a comfort for people with SMI. Using the PHASe has elicited quantitative data regarding attitudes and as such contributes effectively towards the overall exploration being undertaken by this study.

4.4 Qualitative data – framework analysis

The interviewees were nine registered mental health nurses and four student mental health nurses. The registered nurses were a group of nine females, and the students comprised a group of three females and one male.

The student nurse group consisted of two students who were due to qualify within six months and two who were due to qualify the following year. An annotated transcript of one of the interviews has been included in Appendix 9 to demonstrate how connections were made from the verbatim. The following paragraphs describe the process undertaken leading to the identification of the themes from the both data sets.

The interviews were recorded and transcribed, by the researcher alone, enabling familiarisation with the data to develop. Interviews were recorded as detailed below:

INTERVIEW DURATION AND CLINICAL BACKGOUND OF INTERVIEWEE

Interview	Duration	Nurse Background
1	44m 13s	Child and Adolescent Mental Health Inpatient Ward
2	22m 9s	Community Adult Mental Health Service
3	34m 20s	Community Adult Mental Health Service
4	34m 41s	Adult Mental Health In-patient ward
5	28m 56s	Practice Educator
6	22m 27s	Adult Mental Health In-patient ward
7	28m 24s	Adult Mental Health In-patient ward
8	36m 52s	Older Adult Mental Health In-patient ward
9	49m 56s	Eating Disorders Service
10	51m 53s	Student Nurse
11	40m 38s	Student Nurse
12	33m 27s	Student Nurse
13	47m 10s	Student Nurse

Figure 28: Interview duration and clinical background

Transcription was followed by reviewing the recordings and systematically re-reading each transcript, and a view or opinion relating to what worked well or what needed improvement, as well as other points raised that were felt to be of interest, were highlighted. Interviewees were encouraged to talk about issues relating to all aspects of managing physical health, and conversation was allowed to flow at all times. The focussed

discussions led to the identification of a range of themes. A coding frame was developed to enable the data to be examined and categorised.

EXTRACT FROM CODING FRAME

Extract from coding frame
1 Physical health conditions encountered in mental health practice
1.1 Diabetes
1.2 Cardiovascular disease
1.3 Obesity
1.4 Side effects of psychotropic medication

Figure 29: Extract from coding frame

The iterative process led to common findings emerging from the text, which were collated onto a separate spreadsheet. At this point colour coding was applied to highlight commonalities, and a further spreadsheet was then opened for each theme as it emerged. This sheet contained the theme across the top and boxes of text which were identified by interviewee number and line number to enable specific points to be revisited. This process led to the development of thematic charts. Further review of the charts which identified basic topics, and then sub-themes that led to the evolution of the overarching themes, featured in the joint display, (as detailed on page 124).

EXTRACT FROM THEMATIC CHART

Extract from thematic chart				
1 Managing physical health problems	1.1	1.2	1.3	1.4
RN 3	*a gentleman who comes to my clinic who has very poorly managed diabetes*	*The GP just told him he was fine and that he was just worried, and to go away …I'm thinking that if I'd gone to the GP with that story I think I might of had more investigations perhaps a 24-hour trace done*	*we have lots of ladies and gentlemen is with very big waists and they're rather apple shaped rather than pear-shaped so have an unhealthy fat distribution*	*half my patients are overweight they've had so many antipsychotics and have so many risk factors*
RN 4	*Diabetes issues relating to when people have been mistreated –*	*I worked with her GP who was excellent, and she was very unwell and only*		

Extract from thematic chart				
	sometimes by themselves	*15 years old but very psychotic*		

Figure 30: Extract from thematic chart

Further iterative review of the interview data, ensuring that the information was appropriately coded and labelled, led to an eventual saturation point, at which time no new information became evident. A table of main and sub themes was then developed as follows:-

THEME AND SUB-THEME DEVELOPMENT

	Main theme	Sub-themes
1	Mental Health Nurses want to support the physical health of mental health service users which can be complex and challenging	Diabetes and Cardiovascular disease management Vital sign monitoring equipment Anti-psychotic medication side effects Workload issues
2	Mental Health patients can be hard to engage when unwell, but this is not a barrier to managing physical well being	Engagement issues especially where psychotic component evident Co-morbidity Recognition of relapse indicators
3	Unhelpful service provision and providers - collaboration with primary care colleagues can be difficult	Problems navigating primary and secondary care agencies Liaison with acute care
4	Physical health promotion messages do not always appeal to people with poor mental health	Health promotion work is time consuming and not always effective Access to appropriate materials
5	Patient autonomy is important but their decision making can be detrimental to their physical health	Respecting autonomy Encouraging healthy choices

Figure 31: Theme and sub-theme development

4.5 Integrated Findings

Both the quantitative and qualitative findings indicate that physical health care features significantly in the role of the mental health nurse, implying that this aspect of care is potentially core business, and is encountered frequently in practice. The following pages detail the integration of findings from both data sets, and are presented by themes distilled from the process.

1. Mental health nurses want to support the physical health of mental health service users but this is complex and challenging

This theme points out that, whilst mental health nurses recognise the physical health risks faced by patients, and are keen to support and advise on physical health issues, they also recognise the challenges they faced in trying to do so. Quantitative findings regarding aspects of the mental health nurse's role that relate to providing help and advice to support physical health indicate the percentage of responses that "agreed" or "strongly agreed"

These findings indicate that more than 95% of questionnaire respondents felt that helping with weight management, offering nutritional advice and advising on avoiding heart disease constitute part of their role. This practice was reflected in the interview data, with respondents discussing how they see their role in relation to physical health management:

"*I think the physical health monitoring has become the norm now especially now we got the resources and that we don't see it really as extreme as they say it was part of a normal mental health nurse's role It's great that we have all the kit now but we need to remember to keep it ready for use*" (RN 4, Line 165 – 169)

One community nurse reported that nurse-led physical health monitoring is effective, commenting:

"*It's so much better now that we can have all the physical health information at our fingertips and do not have to wait for the GP to do an ECG or blood test for us; it means we can process people more quickly and more efficiently and I think the mortality rates will come down when the medication improves and when we are all vigilant around managing physical health*." (RN 4, Line 161- 165)

This comment implies that the mental health nurse is able to undertake monitoring and that such care can be delivered safely and efficiently in the secondary care setting.

Recognition of the importance of working with primary care colleagues was mentioned, with one community mental health nurse commenting:

"*You know getting things like smear test or mammograms for a woman with a learning difficulty was really difficult.*" (RN 9, Line 181 - 183)

The quantitative data indicates a low level of agreement among the respondents in recognising gender-specific screening – 54.6% disagreed with the statement that it should not be their role - whilst 46.3% agreed that giving contraceptive advice is part of their role; the qualitative data confirms that it can be hard to arrange in practice:

"*they don't get that good a deal in primary care sometimes – some GPs are great but some patients don't feel very welcome.*" (RN 9, Line 182-183)

Other aspects of physical health care, which require access to primary care services, were also discussed; the quantitative findings indicate that 46.8% that their role should include

ensuring service users are registered with a dentist and that regular eye checks are undertaken.

One student nurse who had worked as a health care assistant on a young person's mental health unit commented that they had not taken a patient to the optician or dentist, but had accompanied patients to the genitourinary medicine clinic a few times, and had been involved in discussions about what safe sexual practice means. Another registered practitioner commented that "ensuring" was an inappropriate word to use regarding registration with a dentist. Mental health nurses can encourage the patient to register, but given that dental services can be difficult to access, it is not within the mental health practitioner's remit to ensure that services are available for the patient. A nurse working in a community setting commented on the difficulties faced by a patient who required dental treatment:

"he felt there were spikes coming through his head where in fact he was having significant toothache. ……. but his language was just his way of expressing his pain. They gave him another appointment and recognised the abscess which led to them giving him antibiotics and after this treatment he was fine ….. his treatment was delayed which meant he was in pain for longer than he needed to have been." (RN 2, Line 41 -51)

This comment highlights the difficulties faced by people with psychosis, whose language may not make sense to some health care practitioners, thus evidencing that the mental health nurse is more able to translate psychotic thinking into everyday language – in this case by recognising "spikes" as pain.

The PHASe also contained questions which related to the barriers perceived by the respondents as problematic in managing their patient's physical health. The questions were phrased in such a way that disagreement or strong disagreement indicated that the respondent did not recognise the topic as a barrier. Responses indicating disagreement or strong disagreement were aggregated.

The quantitative findings indicate that, whilst nurses acknowledge that their patients are interested in managing their own physical health, engaging clients in weight management and healthy eating strategies remains difficult. The qualitative findings expanded on this topic, recognising the issues patients face when taking antipsychotic medication, which can lead to increased appetite, weight gain and type 2 diabetes.

The interview data indicated that mental health nurses faced challenges when discussions relating to health promotion were not well received by their patients whose mental ill health was linked to suicidal ideation and concepts of low self–esteem. One community nurse commented:

"It's hard to discuss physical health when they would rather not be alive." (RN 3, Line 85)

The interview responses also highlighted the importance of discussing medication side effects, and suggested that this does not necessarily increase the likelihood of the patient not wanting to take their medication; in fact the opposite seems to be true, as nurses said that if a full explanation of side effects could be given, patients would be less anxious about what they are experiencing, and could work with their nurse to help them become more

informed about what might be expected, and how to stay well on their medication. One in-patient nurse remarked:

"*Sometimes it's almost a trade-off between putting up with side-effects and enjoying improved mental health sometimes anti-psychotics have to be given before we can do any baseline checks – if the patient cant' engage with us."* (RN 4, Line 139)

Interviewees reported that exercise could be difficult to arrange – in the case of both community and in-patient settings – although one nurse explained that the unit she worked on included a gym, with an appropriately qualified instructor, but patients were often not interested in attending. However, they were more likely to become motivated when mentally well:

"they might want to go to the gym, but quite often we are facing fact that patients don't want to engage sometimes." (RN 9, Line 39-40)

Interview respondents also discussed their patients' physical health needs that cannot be attributed entirely to the mental health problems being experienced, indicating that mental health nurses recognise the potential that their patients have to maintain and manage their physical health, and that this may require an individualised approach to care, which involves focusing on specific health risks. Recognising the right time to bring physical health issues into conversations with patients was acknowledged as needing skilful handling:

"*It is difficult to motivate people, but when we get the chance, we should try and discuss physical health promotion", and "they" (the patients) get it (physical health advice) from the doctors too, and sometimes I think they feel a bit nagged … it feels hard to keep on*

top of the most up to date information regarding physical health promotion." (RN 2, Line 91 - 95)

The quantitative findings indicated that 50% of respondents disagreed that their workload prevented their involvement in physical health promotion interventions with their patients. However, at least half of the questionnaire respondents recognised that their workload can negatively impact on their ability to manage their patient's physical health care needs. This was reflected in the interview data, which also identified workload issues as a potential barrier:

"*It's difficult to get him to accept his dietary intake and his insulin on a very busy mental health ward where you've got 18 other patients and sometimes more and there's only three staff, so it does get quite busy*." (RN 6, Line 18 – 20)

Further PHASe questions related to the confidence the respondents had in aspects of caring for their patient's physical health:

The interview respondents commented on their confidence to manage these areas of physical health too, but the impact of antipsychotic medication on eye health was not specifically mentioned, although the importance of regular sight tests was acknowledged. 22% of respondents indicated confidence in recognising anti-psychotic medication that may cause eye damage – this finding is significantly lower than the other five areas of care in which respondents were asked if they were confident.

All the interviewees were currently employed in the mental health setting, either as registered or student nurses, and would be expected to undertake mandatory basic life support training, so their confidence in resuscitation was not a surprising finding.

Interviewees cited use of colour coded monitoring systems, based on the National Early Warning System (Royal College of Physicians, 2015), which offered a clear system to support recognition of abnormal vital signs and the use of interpretive ECG machines as measures that had increased confidence in this aspect of practice. Nurses reported that their role was to procure the information to pass on to the responsible medical practitioner, or prescribing practitioner, who may have been a nurse prescriber, so that side effects of medication could be accurately monitored, and the patient's physical well-being preserved. Nurses indicated that physical health parameters are often measured and reported by health care assistants or other non-registered practitioners, and use of mechanisms to highlight potential problems is helpful:

"*Using the colour coded recording chart and the ECG machines that know when the ECG is normal or not, are really reassuring as you can usually have confidence in what the unregistered staff members are reporting.*" (RN 4, Line 71-74)

The quantitative findings highlight that hypertension and blood glucose management, weight management and dietary advice, featured more often in the mental health nurse's role than contraceptive advice, dental care and eye health. One respondent, who was a newly qualified nurse working in a mental health admission and assessment setting, and a student nurse, reported that mental health nurses took a holistic approach to care:

"*Every part of the patient is connected and you can't disconnect them*." (RN 6, Line 157)

A student nurse, who was due to qualify within the following year, commented on their experience of working with mental health nurses who were indifferent regarding physical health management:

"*… you know, if we're going to be genuinely holistic, obviously we're not going to become trained to the same level as the physical health nurse, and they're not going to be trained to the same level as a mental health nurse, but we can have understanding of each other's input, and where the boundaries, if there are any, lie, so you can support the individual dealing with both aspects of themselves.*" (SN 1, Line 155 – 160)

This respondent explained their sense of disappointment and dismay when they encountered mental health nurses who felt that physical care must be undertaken by adult care services, along with comments that reflected the difficulties associated with engaging clients who feel their physical health is of no importance, and how challenging this could be.

A range of comments were made which related to difficulties in accessing physical care services, for example:

"*Physical health is as big a challenge as mental health on a mental health ward but it doesn't get the attention it deserves, that's my feeling.*" (RN 6, Line 41)

The following comment related to the respondent's concern regarding getting access to the diabetes and respiratory care teams, as well as tissue viability and wound care specialists:

"They think that because we are a hospital, we should be able to sort these things out." (RN 9, Line 56)

It was expressed by a nurse working on an acute mental health in-patient ward, who had been caring for a patient with a leg ulcer, who also had chronic obstructive pulmonary disease, and who had been receiving care from a community nursing service whilst at home, which was not accessible once the patient was admitted. The lack of information or care planning was perceived as frustrating, and the fact that the mental health team had to make enquiries in order to access information about these physical health conditions was time-consuming:

"*We have to do the running – as we can't access each other's record systems.*" (RN 8, Line 82)

This comment led to further articulation of the difficulties involved in tracking down the right clinician and obtaining the right information to ensure that continuing and appropriate care can be delivered:

"*We don't see wounds or people with airway problems on a regular basis – so of course we need to talk to the experts - their expertise is hugely important – but they can't always share it – it's great when they do!*" (RN 1, Line 36)

This comment implies that mental health nurses appreciate the support of colleagues from other care delivery settings, once they have been able to access it.

The PHASe also asked respondents whether they had undertaken any physical health care training in the preceding five years. This question received 106 responses; 60% of respondents indicated that they had. Basic Life Support, ECG recording, diabetes management,venepuncture, wound care and smoking cessation were the topics mentioned.

54 respondents gave details of the duration of training; this varied from sessions delivered in-house that lasted just half an hour, to courses that ran for up to two years.

Summary of Theme 1

The data indicated that mental health nurses recognise their potential to contribute to the management of their patient's physical health, but that they have to skilfully judge the patient's mood and mental state, in order to offer appropriate interventions. The timing of conversations relating to physical health is crucial, as often priority is given to improving mental health so that patients can become mindful of important physical health information. Difficulties in accessing clinical expertise relating to chronic physical problems were also reported, although physical health care skills training had been received by most of the questionnaire respondents and interviewees.

2. Mental health patients can be hard to engage when unwell, but mental health nurses do not perceive this as a barrier to managing physical well-being

Nurses expressed their concerns in relation to supporting patients who were mentally unwell, and difficulties in supporting them with their physical health were discussed in a number of the interviews:

"*Often we work with people who cannot see a future for themselves, these are often very intelligent people who just choose not to want to do anything to maintain health. The messages themselves are reasonably simple, but the way they are conveyed can be very complicated and you really do need to support the person with a mental health problem so that they are then able to process the information that you're giving them*." (RN 3, Line 100 – 104)

"*Sometimes they might be self-medicating with drugs, street drugs and alcohol or maybe using their insulin either to harm or to sabotage their physical health."* (RN 4, Line 49 – 51)

These comments highlight the concerns that nurses expressed, recognising that their ability to support patients who did not seem to regard their physical health as a priority is a key skill, and that supporting the patient to take care of their physical health is challenging. Nurses expressed the view that overcoming problems relating to patient engagement was also part of the role and that, despite these, the nurse can persevere with providing appropriate support for physical health.

Patients experiencing low self-esteem also featured in discussions relating to potential barriers, as respondents pointed out that, whilst the patient may be significantly mentally unwell, physical health management needs to be in place to prevent deterioration where possible:

"*I think with him it's because he feels he doesn't deserve to be going, he pooh-poohed the fact that his blood sugars were abnormal and this should be investigated.*" (RN 3, Line 12 -13)

Supporting patients to manage physical well-being whilst they may be in quite poor mental health was also reflected upon and reported to be a challenging aspect of care:

"His mental state means that he denies that he has any physical health conditions you know, he says 'oh I don't have diabetes I don't need you to do that', and it's difficult to get blood test from him and getting him to understand the importance of his medication and diet." (RN 6, Line 61-64)

Several interviewees recounted anecdotes evidencing that they had experienced similar problems in engaging with their patients about physical health when the patient was experiencing psychosis, and could not relate to their physical health or mortality.

Summary of Theme 2

Theme 2 relates to the skill required by mental health nurses when caring for acutely mentally unwell people who may have difficulties in recognising the risks they may be taking with their physical health. Nurses' inter-personal and communication skills are key to recognising how to approach the mentally unwell person, in terms of the timing and content of conversation that is aimed at reducing risky behaviour and respondents indicated their understanding of this.

3. Unhelpful service provision and providers - collaboration with primary care colleagues can be difficult

The quantitative findings also related to aspects of practice that indicate how frequently attention was being paid to physical health parameters. 57% (n = 49) indicated that they would check for glucose abnormalities:

The qualitative findings indicate that some respondents expressed disappointment with the way that their patients and they were viewed by acute care colleagues. Respondents talked about difficulties in communication and liaison with acute care services, especially for mental health in-patients, who seem to be compromised as community services were unwilling to see patients in the mental health setting:

"but if she goes to the GP he'll just say oh she needs a specialist bed I don't wanna be involved in her care." (RN 8, Line 180-181)

This comment related to the nurse's experience of working with both mental health and learning disability patients, and specifically referred to a patient who had a complex eating disorder. It suggests that the GP thought that the necessity for a specialist service was something that would absolve his responsibility for providing primary care, although the interviewee went on to detail instances of exemplary care by other GPs:

"You know, that whole diagnostic overshadowing stuff – one of my patients went to his GP complaining of chest pain, and an ECG was recorded and normal so he was sent away - I think if I'd gone with the same story I might have ended up with more investigations … another one of my patients has very poorly controlled diabetes and when he's unwell, he doesn't want to have anything to do with monitoring blood sugar or taking meds or eating properly – we keep an eye on relapse indicators like him telling us he isn't diabetic." (RN 2, Line 35 -40)

This comment highlights the difficulties faced when patients who have co-morbid mental and physical health problems find themselves unable to care for their physical health when their mental health deteriorates. Mental health nurses need the support of colleagues in primary and/or acute care services to enable a swift, collaborative response to be delivered. Colleagues within the primary care setting are recognised as suggesting many physical symptoms are part of the mental health condition.

One interviewee had worked as a liaison nurse, having been based in the acute care setting, whilst employed by the mental health care Trust, and reported that difficulties could occur when a patient's mental health seemed to override their physical health:

".. I have come across diagnostic overshadowing where everything is put down to the mental health condition. I can remember several episodes where the consensus from the general side was that oh it's all because of her dementia or because she is bipolar, because she is schizophrenic, but this blocks them looking for a good physical reason for the patient's symptoms…. there was a constant battle every day to fight people's corners for them." (RN 5, Line 126 – 132)

Mental health nurses' awareness of the longer term impact of physical health conditions, in particular in the case of patients who have diabetes, was discussed in a number of interviews; vigilance around blood glucose management and accessing clinical expertise from community based services were brought up. One in-patient nurse who had worked with younger people reported that "*there is not too much problem*" in accessing specialist advice, and discussed the case of a patient who had been known to the local diabetes specialist nursing team, and whose care plan was shared with the ward team, along with copious advice regarding diet and medication management. In contrast, mental health nurses who worked in a community setting, and in adult in-patient services, expressed their frustration with the difficulties they had experienced in trying to access such expertise. Issues raised related to there being no service available to in-patient mental health teams from the community based diabetes specialist nurses. Mental health nurses also reported that they appreciated how frustrating it could be for the community based diabetes specialist nurses when they had offered appointments and advice to patients who had severe and enduring mental health problems, who then did not attend for appointment or did not engage fully with their treatment and care plans. Other specialist services, such as

tissue viability, continence, wound care, chronic obstructive pulmonary disease (COPD) and cardiovascular disease (CVD) teams were also cited as being difficult for mental health nurses and patients to engage with:

"they will go to a patient at home, but they won't come into the mental health unit." (SN 2, Line 12)

and:

"they say you are a hospital, you have doctors and nurses, so you can manage. "(SN 4, Line 20)

Mental health nurses reported that, whilst they can and do manage such conditions at a basic level, further collaboration with community based specialist condition experts would enhance their ability to manage the physical health conditions that were commonly experienced by the mental health patients:

"*For instance recently there was a lady was presenting as hypomanic in A&E and sadly the A&E department had not carried out the most basic of physical health checks and she was admitted to our ward and we discovered she had a blood sugar level of 35."* (RN 6, Line 7-9)

One nurse, who had been qualified for under a year, expressed frustration with trying to access information from services that had previously delivered care to the patient:

"*Obviously both physical health care teams and mental health care teams are very busy, but we find obstacles when we work closely with the general hospital, sometimes*

things like discharge summaries so brief I don't really understand exactly what's going on for the patient. Sometimes we literally get one line we have to wonder what they mean. Often it's in jargon that we don't entirely understand, often with abbreviations that are not clear and we don't know what it means." (RN 9, Line 99 – 103)

Other issues relating to the reluctance of acute care services to keep mental health patients within the acute care setting were also expressed:

"*We know that we always try to send an escort with our patients to the General Hospital, but for some reason when we can't it's not unusual for the General to tell us within a couple of hours that the patient's medically fit and needs to come back to us and we know sometimes that isn't necessarily the case. At least now the liaison team is in place – and located over there so assessments can be set up*" (RN 7, Line 122 – 125)

This point was also brought up by nurses who worked in an in-patient setting, both in units for older people and people of working age, and by nurses who held community based posts. The role of liaison posts, i.e. those that were held by mental health nurses who were based in the acute care setting, were reported to be hugely beneficial.

A further issue, which was brought up by interviewees, related to the negative experiences of patients who were treated in emergency departments as a consequence of self–harm. Mental health nurses thought that patients were made to feel as though they were a burden, and that acute care staff did not fully appreciate what had brought the patient to the point of self-harming:

"It feels very separate as patients may require both sets of services, but we are very separate. I'm not sure how we could integrate services more closely but encouraging general

care staff to give more time to patients' mental health might help although they are of course very busy with staff shortages and increasing pressures." (RN 3, Line 156 – 159)

This interviewee had worked in the community setting, and been involved with mental health liaison services, and indicated that they had been frustrated by the disintegration of services:

"They seem to be bothered by patients who deliberately cut or overdose, but if you think about it, lots of their patients, fast drivers, unsafe DIY, and that, they're self-harmers too! And smokers." (RN 3, Line 166-167)

Summary of Theme 3

This theme relates to issues involving diagnostic overshadowing, poor awareness and/or non-recognition of mental ill health and difficulties in collaborating with primary and acute care specialist colleagues whose expertise is required to advise and support the mental health patient. Mental health nurses seem to understand that their acute care colleagues work under pressure, but have experienced situations where practitioners working in acute or primary care settings appear to lack awareness of the impact of mental ill health on patient engagement and physical health-related behaviour.

4. Physical health promotion messages do not always appeal to people with poor mental health

The quantitative findings indicate that mental health nurses are not frequently involved in helping patients to consider smoking reduction and helping them to access contraceptive advice. Whilst weight management and smoking cessation support is directly referred to in the PHASe, during the qualitative data collection process, a number of interviewees talked

about the significant challenge presented to them in recognising the point at which a person's mental health has improved to the extent that they would be able to process information relating to reasonably simple health promotion messages. There was a sense that health promotion messages are better received when a person's mental health has improved, so it is appropriate to focus initially on mental well-being, but it is also important to help patients to understand these messages:

"*if we don't give them the right messages, they can't make an informed choice.*" (RN 2, Line 33-34)

And:

"I know we say it's okay to make an unwise decision – but we do need to help get the messages across." (RN 3, Line 22)

The above comments were made by mental health nurses working in a community setting, one of whom also recognised the value of internet resources in helping to support their health promotion knowledge:

"Using the Change 4 Life and the British Heart Foundation websites has been helpful - I don't need to know everything about health promotion, but I know where to get information from that my patients can understand and appreciate." (RN 3, Line 44 -47)

This comment infers that accessing appropriate information does not present too much of a challenge but there was a sense of frustration with offering information that some patients would not or could not, recognise any value in.

Specific challenges relating to health promotion were mentioned by interviewees who had been caring for people with severe and enduring mental ill health in community settings, one of which was the challenge of ensuring good side-effect monitoring of atypical antipsychotics. This topic was discussed when respondents were asked what aspect of physical health care management might benefit from improvement. Nurses pointed out that patients who were being treated with medications that had well known and potentially problematic side effects were often more likely to receive physical health monitoring to enable the prescription to continue:

"It's difficult to get the balance right, sometimes with clozapine patients we know that the side-effects can be complex but we know that patients' mental health will improve and once someone is well enough even to go back to work then the impact on their physical health is good. Sometimes clozapine will work so well that the patient will go back to work and they are much more likely to want to look after themselves." (RN 3, Line 134 – 137)

Several community based nurses commented on the variance in the contribution of primary care to the physical health monitoring of patients with severe and enduring mental illness, for example:

"So I think in that respect one of the positives and the benefits of being in the liaison between us and the GP surgeries and that's got better as we've got to know them better because previously we were pretty much on our own as were they." (RN 4, Line 12 – 14)

Some respondents thought that mental health nurses' interest in physical health had strengthened relationships between them and the GPs, and this was generally reported as being a positive development. Where collaboration had developed, the mental health

nurses reported that their patients were well supported, and the mental health nurse had developed a better understanding of the GP's position:

"*You do hear some client saying oh you know the doctor didn't listen to me but then I think well okay the time is limited and it is difficult for them….and sometimes the GP may not of had much exposure to mental health* ." (RN 3, Line 146 -148)

Some nurses commented on the bureaucratic nature of their work, and in particular, on the impact of their workload on their ability to undertake as much physical health promotion as they would like:

"I know we have to try and meet CQUIN targets, but just ticking a box to say you have had a conversation about health promotion doesn't reflect the amount of time you might spend doing it." (RN 4, Line 125 -126)

It was reported that sometimes conversations regarding health promotion could be quite complex, especially when working with clients who might be difficult to engage, and whose mental health impacted on their willingness and/or ability to make lifestyle changes that could improve their health:

"It's disheartening when the patients don't want to hear the message around health promotion, I think this might sometimes mean that we withdraw and don't give as much information as perhaps we should." (RN 9, Line 50 -53)

As previously mentioned, this study does not focus specifically on the impact of tobacco smoking, although the interviewees commented on the issue of mental health nurses thinking that it is punitive to discuss smoking cessation with patients who feel that their anxiety is reduced by smoking:

"we give health promotion advice and information about the smoking and eating we put things in the care plan……but it's tricky to approach smoking because quite often it's a lifeline for them." (RN 3, Line 35 -38)

A further comment relating to smoking, by a nurse who was a smoker, reiterates the problem:

"*Trying to convince my smoking clients that actually, nicotine is not a substance that will help you to relax is tricky…..I think the focus on breathing, and the time out that smokers have is what they think they benefit from.*" (RN 9, Line 120 – 123)

Robson and Haddad (2012) originally constructed the PHASe to canvass views on smoking, and the qualitative data also brought smoking to the fore as a major concern for nurses who were well aware of the risks their patients take with their physical health:

"it's about getting people to look at their lifestyle and identifying if they can see what's unhealthy in that which I think for all of it is quite difficult because we all know that we possibly eat too much, we don't do enough exercise or some of the people I see maybe drink too much, smoke, take a few substances that maybe don't assist their mental health." (RN 2, Line 90-94)

A ward based nurse commented that their patients, who already have to deal with the side effects of their antipsychotic medications, increased their physical health risk by using alcohol and illicit substances too:

"I think mainly alcohol withdrawals and also substance misuse, which is actually lots of people coming through our door, sometimes we don't know what they've taken, as there is lots of so-called legal highs and we don't know what's in there anymore, so we don't know

what impact this had on the physical health, what they're exactly taking can't always test for it so that can be challenging." (RN 9, Line 134 – 137)

Two nurses who worked in a community mental health setting commented on the frustration they felt about not having the necessary equipment to enable them to carry out physical health monitoring. This led to a discussion about the need for operational leadership as well as strategic directives to be clarified and supported. Targets and changes to monitoring requirements were mentioned as causing confusion, and others referred to commissioning as being the driver for improvements to be made, as illustrated by the following comment:

"our targets do make sense [referring to a CQUIN relating to the management of risky behaviour] and I realise that we are often the only health professional that our patient might see." (RN 3, Line 56)

This demonstrates an awareness of the importance of the role of the mental health nurse in trying to support patients to be motivated to take care of themselves.

Other nurses referred to difficulties in recording physical health care on what they perceived as a rather cumbersome electronic patient record system. Specific improvements to the electronic database were reported to be needed, with more integration to enable the mental health team to access blood results quickly and easily.

Four interviewees were student mental health nurses at the time. When asked whether they prepared for managing their patient's physical health they gave generally positive responses:

"*I think that mental health assessment is far more complex; after all, physical health monitoring is straightforward and even more complex stuff like ECGs and blood taking are reasonably easy to access skills.*" (SN 2, Line 20 – 22)

It was expressed that the training curriculum had covered a range of physical health issues but that a more specific focus on the conditions that would be present in their future client group would be useful:

"We learnt about anatomy and physiology, but it would be good to have discussed diabetes in more detail, given that you can guarantee you will meet many patients with the condition." (SN 2, Line 60)

Another point that was made by two student nurse respondents related to the difficulties they perceived in navigating health services on behalf of their patients, particularly as a result of organisational changes:

"There seems to be so much re-organisation." (SN 3, Line 12)

And:

"it's hard to keep up with changes. " (SN 4, Line 20)

The concept of metabolic syndrome was mentioned by one student who reported that once they had experienced working on an acute admission ward, they could visualise what was happening to patients who were prescribed antipsychotics, and reported that patients could be disadvantaged and not informed in detail about the potential for this to occur:

"*they tend not to tell the whole story when it comes to side effects*, *but once they [the antipsychotics] work it's easier to explain things to the patient.*" (SN 3, Line 55-57)

Student nurses who may be unfamiliar with antipsychotic use in practice, but who understand the potential side effect profile of the drugs, may be uncomfortable with antipsychotic use when the patient is not fully able to appreciate the side effects. Recognising that patients are likely to be in a better position to consider their physical health care needs once their mental health has improved indicates the point at which it can become part of the nurses' role to offer physical health support and advice.

Summary of Theme 4

Theme 4 relates to the difficulties that providing physical health promotion advice can present. Mental health nurses understand that mental illness can be a barrier to an individual's awareness or ability to appreciate physical health promotion messages; however, recognising when a patient is in a position to take action regarding their physical well-being is viewed as part of the mental health nurse's role.

5. Service user autonomy is important but their decision making can be detrimental to their physical health

The PHASe did not specifically enquire into how the client's autonomy may impact on the nurse's role in managing physical health care, and so this theme emerged from the qualitative data set, but reflects evidence from the literature review. Mental health nurses working in the community recognised the importance of respecting patient autonomy, whilst encouraging physical well-being. These nurses reported that they should take the lead in supporting their patients to make wise choices, but also discussed issues relating to the social aspects of alcohol use. Smoking was mentioned in every interview as being problematic in terms of the perceived benefits versus the physical health risk. The

interviewees reported that many patients would be able to improve their diet, but that their limited income meant that they experienced difficulties in accessing good quality food on a tight budget.

"…… *when we enquire about diet and we ask if people are able to eat fruit and vegetables often they are quite expensive and when people are on limited budgets the less healthy food seem to be cheaper.*" (RN 3, Line 64 – 67)

Further comments implied that many patients living in the community would also experience difficulties in accessing opportunities for exercise, as these could be costly in terms of time and money. Some nurses said they had asked the patient's GP to refer them to an exercise program, and it became clear that some areas had a better infrastructure in place to support the exercise needs of the mental health patient. Gym referral, and reduced cost access to leisure centres with a swimming pool and /or gym, were available for some patients:

"*we occasionally see GPs referring the patient to an exercise programme, but I know some of my patients don't want to go.*" (RN 3, Line 77-78)

Antipsychotic use was seen as a problem in this respect, as one nurse explained:

"If somebody is on Clozaril it increases the appetite, it gives them a craving for food that is full of carbs and full of sugar, those things we know we shouldn't be eating so it's about trying to get my patients to make small changes and recognising when they've done something small and how good that is." (RN 2, Line 112 -115)

Respecting patient autonomy was also demonstrated by one of the student nurse interviewees, who discussed how important they believed it was to understand the patient

and their point of view, as this would lay the foundations for a relationship that could then lead to conversations about things that the patient did not always want to hear:

"And I think also there's a benefit in terms of establishing that rapport with someone - you might be talking about their lifestyle or their diet choices for example, but you're having a conversation with another human being." (SN 1, Line 82 -84)

Summary of Theme 5

Theme 5 relates to the mental health nurse's awareness that patient autonomy, notably when they are living independently in their community, must be respected and can lead to the patient making unwise decisions in terms of physical health. The mental health nurse's role is to work with the patient to ensure that health promotion messages are shared, in acknowledgement that the empowered patient can then make a more informed decision.

Chapter 5 Discussion

5.1 Introduction

Five themes have emerged from the integration of the quantitative and qualitative data and this chapter will explore these in detail. Utilising a mixed methods approach has supported the aim of the study which was to generate information relating to what mental health nurses attitudes towards managing physical health, and the value of that information in underpinning current practice. The study has generated information that could contribute to the "Parity of Esteem" agenda, as discussed previously. This agenda has been introduced to the NHS via NHS England and is a current theme with which mental health care practitioners are familiar, but feel frustrated by, because its goals are difficult to attain (Royal College of Nursing, 2018). The Centre for Mental Health (2012, 2016, and 2018) has also focused on reducing inequality in health care and improving subsequent life expectancy, so the findings of this study will add to the body of knowledge that is under scrutiny from a range of perspectives

Theme 1- Mental health nurses want to support the physical health of mental health service users but this is complex and challenging

As Robson and Haddad (2012) concluded, mental health nurses recognise their role in managing physical health, an important point which has been reiterated by this study. Howard and Gamble (2011) concluded that mental health nurse have positive attitudes towards managing physical health but that further bespoke training and support was required; this study's findings echo that, indicating that mental health nurses are committed to physical health management, but keen to point out some specific challenges relating to this aspect of their role.

Whilst their focus is primarily on mental health care, mental health nurses adopt a holistic approach to care and strive to ensure it applies to their practice. Heavy workloads cause difficulties in being able to undertake full and in-depth assessments of physical health and there are also some issues associated with mental health nurses' core knowledge of physical health conditions, (Nash 2005; 2009; Blythe and White2012). Despite these issues, mental health nurses continue to pay attention to physical health care, but operate in a complex setting where some aspects of their endeavours to manage physical health are not well supported by service infrastructure, (Clancy et al, 2019). Poor integration with primary care and acute care services means that mental health nurses have to navigate these care systems on behalf of their service users.

Nonetheless, their willingness to learn the skills required to do this is evident. Mental health nurses have adapted to be able to undertake physical health monitoring that may not have constituted part of their core basic training; (Wynaden et al 2016) however, this has not prevented them from supporting their service user, and they have often been able to acquire the necessary skills.

The qualitative findings of this study highlight that innovations such as the introduction of medical early warning systems, with built in escalation procedures and colour coded recording charts, indicating normal parameters, electronic sphygmomanometers, pulse oximeters and easy to use thermometers are cited as useful in supporting physical health monitoring. The use of Electro-cardiograph machines with built-in interpretive software and capillary blood glucose testing equipment have also enabled mental health nurses to develop their confidence and provide the holistic care required by the service user. This is especially important where a psychotropic medication regime in use which is known to

predispose the service user to cardiovascular and/or endocrine disorders that can go unnoticed if not checked.

The study findings point out that undertaking such checks can be challenging when a service user is extremely unwell and unable to engage with health care monitoring. During the interviews, nurses reported their awareness of managing complex situations, and voiced their concerns regarding situations where medication is to be administered without them being able to undertake prior baseline physical health assessment first.

Churchward and Oxborrow (2009) reviewed the guidelines that were available at the time to support mental health practitioners in monitoring the physical health of their service users who took antipsychotic medication. They pointed out that introducing regular monitoring could bridge the mortality gap, encouraging mental health practitioners to undertake regular physical health checks. Churchward and Oxborrow (2009) advocated that further enquiry was required to ascertain how hard-to-engage groups can be educated about healthy lifestyles, and encouraged to adopt behaviours such as improved diet and increased exercise, as well as looking into managing side effects of the psychotropic medications that may impact on weight, and levels of blood pressure, lipid and glucose levels. Mental health nurses are key to accessing this group as they develop therapeutic relationships that can enhance communication and education, making them well placed to undertake physical health and medication monitoring and supporting their service users in making improved lifestyle choices, as is further reflected in Brown and Smith's (2009) study.

Theme 2 - Unhelpful service provision and providers - collaboration with primary care colleagues can be difficult

This theme relates to the issue of diagnostic overshadowing and the experiences that mental health nurses have had when caring for service users in the acute care setting. The interview data related to nurses having accompanied self-harming service users to the Accident and Emergency (A&E) department and experiencing unhelpful comments, an aloof manner and sometimes derogatory approaches to service users on the part of the acute care staff.

Mental health nurses voiced their appreciation of the busy and intense nature of the work that their A&E colleagues are undertaking, but indicated that they feel stigmatised by acute care staff who imply that the mental health nursing role is less valid than that of the physical health nurse, reportedly referring to acute care as more important than mental health care nurses. A Royal College of Psychiatrists survey (RCPsych. 2013a) found that medical students often misunderstood the role of the psychiatrist and viewed is as being less scientific than that of a surgeon or physician, and that doctors working in psychiatric settings felt undervalued. . Mental health nurses were uneasy with the way some acute care staff spoke to the service user, and noted disregard and lack of compassion as problematic. Acute care nurses tended to see every detail of the service user through the lens of the diagnosis rather than treating the individual holistically. Diagnostic overshadowing is a well-documented and high profile issue (Nash, 2013; Shefer et al., 2014).

Mental health nurses are well placed to help colleagues in other clinical teams to understand that people with mental health problems should have their physical well-being respected and that diagnostic overshadowing should be recognised in practice, and should cease. Consideration must be given to the potential pathology that a service user's symptoms may be revealing, with less emphasis placed on their mental health and more vigilance exercised in relation to their physical health, especially where significant health problems are being experienced.

Collaborative working and holistic care form part of mental health nursing care (Gray and Brown, 2017) and this approach can be instrumental in ensuring that all aspects of a service user's needs are addressed. However, this presents challenges in terms of care logistics, given that services are diverse and delivered from different sites supported by different budget lines. Mental health nurses are reportedly aware that staff working in primary or acute care settings are unsure of the impact of mental illness on an individual's presentation.

Mental health nurses advocate for service users and they also experience difficult interactions in unfamiliar clinical settings: this suggests nurses need to experience a more diverse range of care settings during training, to develop an appreciation of the roles of both mental health and acute care nurses. Wand (2011) pointed out that acknowledging and understanding the relationship between mental and physical health can benefit not only the

individual, but also health care organisations and nations in the development of a healthy workforce, and emphasises the potential contribution that mental health nurses can make.

A “mapping review” (Rodgers, 2016) explored barriers and facilitators that impact on the physical health of people with mental illness, and looked into how these are evaluated (Rodgers et al., 2018). It was found that, whilst low life expectancy and poor physical health for people with mental health conditions is a recognised phenomenon, there is evidence to suggest that factors relating to clinical risk, socioeconomic and health systems have resulted in poor integration of services. The situation remains problematic despite the development of an evidence base relating to improving integration between services. Rodgers et al. (2018) examined published literature and worked with individuals involved in using or providing services and reported that information regarding service models was not well described or evaluated, leading them to question whether these could be regarded as replicable or their findings generalised appropriately.

Rodgers et al. (2018) reported that common themes emerged from their review and advocated that more effort is required to enable mental health staff to support physical health. They also asserted that communication and collaboration between primary and secondary care sectors needs to be improved. It was also reported that roles needed to be made more explicit, and that there should be a clear recognition of who is taking responsibility for managing physical health issues. Increased awareness of the impact of stigma was also considered important. A further point relating to the availability of appropriate electronic service user record systems was also made, as many services had reported difficulties with accessing information to support physical health management,

such as difficulties locating blood test results or other diagnostic findings. Rodgers et al. (2018) add weight to the persistent claim that services do not work collaboratively enough and that some service providers do not support people with mental health problems equitably.

The Centre for Mental Health worked with The King's Fund and the London School of Economics in 2012 to review evidence on the extent of co-morbidities, their impact on the quality and cost of care, and the ways in which people with both a long-term condition and a mental health problem could be better supported and concluded that the cost of mental health problems among people with physical illnesses to NHS services and society is considerable, (Naylor et al. 2012). Thus, by developing increasingly integrated responses to these service users' multiple needs, reductions in costs and improvements in overall care could be made. The link between mental health problems and the exacerbation of physical health issues was noted, in particular that people with poor mental health tend to spend more time in acute hospitals with long term conditions, and this resulted in increased use of outpatient services, thereby requiring more support from clinical specialists especially in relation to diabetes management and heart disease. Co-morbidities were recognised as affecting clinical outcomes for service users and leading to a lower quality of life. The Centre for Mental Health (Naylor et al, 2012) highlighted studies that indicate that poor mental health impacts on mortality, noting that depression may increase mortality in people who have experienced myocardial infarction, and that in young people with diabetes, there is an increased chance of developing retinal damage if poor mental health is also

experienced. The call for more integrated services is supported by closer collaborative working between professionals in order to improve outcomes while also reducing costs.

The findings of this study, notably the qualitative data generated from interviews, has highlighted that a range of issues seem to impair the ability of health services to impact on the high mortality rates of people with severe and enduring mental illness, as some health care agencies do not engage well with the SMI population. Evidence from the literature review had also raised this issue, and pointed out that people with mental illness have been experiencing high rates of physical illness for more than two decades. This study adds to this body of knowledge and reports that recognising physical health monitoring and promotion need to become part of everyday clinical practice.

Development of the PHASe scale focused on how to assess mental health attitudes, confidence, and the barriers they face influence their ability to support the physical health needs of their service users. This study has added that confidence in other colleagues, poor collaboration between services and diagnostic overshadowing, are also implicated. Empowering service users to help them to understand and appreciate the risks they may be taking with their physical health can be a complex process, and environments such as busy in-patient mental health units, may not be the ideal situation for this aspect of care to be delivered. Community settings may lend themselves better, but time constraints caused by heavy caseloads, (as mentioned in the prologue) can inhibit the development of

conversations. Recognition of this aspect of the role of mental health nurses working in these settings is a strong rationale for reducing case load numbers.

The attitudes of those involved in the delivery of mental health services seem to be far more positive than some that are encountered by mental health staff and service users when accessing primary or secondary physical health services. These barriers perceived by mental health staff relate to the limited collaboration between services, coupled with diagnostic overshadowing, which constitutes a complex problem that requires a significant change in perceptions to solve. The Parity of Esteem agenda suggests that the government has given consideration to this issue but, at ground level, services have not improved enough to make a significant impact on service user's physical health. Taking the findings of this study forward will involve sharing the insights gained from this small scale inquiry. Local impact could at least be achieved by increased fostering of collaboration and communication with other care sector colleagues.

Theme 3- Mental health service users can be hard to engage when unwell, but mental health nurses do not perceive this as a barrier to managing physical well being

This theme highlights the complexities of having conversations with mental health service users who are significantly mentally unwell, and is drawn from study findings that suggest mental health nurses do not see mental illness as a barrier to managing physical health. This is an important point, as it implies that mental health nurses recognise the potential of people with mental health problems to manage physical health. Mental health nurses also

recognise that they need to utilise their interpersonal and communication skills if they are to reach this group to offer physical health support (Gray et al., 2009). Key skills related to developing therapeutic relationships that will engender trust and foster engagement with services are vital if the physical well-being of the mental health service user is to be improved.

Some service users may not have insight into their condition and this appears be a barrier to the delivery of care by other clinicians who are not acquainted with the behaviour of service users, particularly when their illness may have a psychotic component to it. Mental health nurses can liaise between services, advocating for their service users, but are reportedly frustrated by the approaches taken by non-mental health colleagues.

Working clinically with people experiencing psychosis and being able to care holistically for someone in this situation are core mental health nursing skills. Mental health nurses work closely with this group, and develop therapeutic relationships that enable meaning to be discerned from difficult discussions especially where issues such as smoking and eating are concerned (Roberts and Bailey, 2011). Mental health nurses can feel uncomfortable when implementing smoking cessation policies and helping service users to avoid weight gain, but recognise that these are core components of maintaining physical well-being, but denying a service user cigarettes and food has to be tempered with supporting healthy lifestyle choices, and developing skills in discussing such topics sensitively is paramount (Brown and Smith, 2009).

Promoting physical health care is also challenging if a service user has expressed suicidal ideation, and cannot see a future for them self. Mental health nurses are expected to undertake physical health observations, but it is not unusual for service users to sometimes refuse intervention as they view it as pointless, and do not wish their health to be monitored, as they may be actively contemplating ending their life, or seriously self-harming (Howard and Gamble, 2011). Mental health nurses have to sensitively try to deliver holistic care in an environment where their caring intervention can be viewed negatively by the recipient – adding to the complexity of the mental health nurses role. It is difficult to quantify the resource intensity of efforts made and lengths gone to by mental health nurses in order to reach out to people who do not see a value in themselves, but recognition and acknowledgement of the complexity of the issue could help practitioners and service managers to evaluate these relationships more accurately.

The side effects of modern antipsychotic medication also impact significantly on the management of physical well-being. Often, in an urgent situation where mental health deterioration is significant, prescribing has to commence before a full physical examination can be performed, and this can present a dilemma. Multi-disciplinary support is crucial to underpin safe care in such circumstances, and nurses appreciate this approach (Chang et al., 2010*).* Importantly, mental health nurses recognise that even severe mental illness does not have to be a barrier to managing physical well-being, and they seize opportunities to undertake this work when they recognise that mental health is improving, enabling vital sign monitoring and diagnostic tests to be undertaken in as timely a manner as possible.

Mental health nurses are aware of the future health of service users and strive to deliver holistic care in a complex setting. Happell et al. (2011 p 1) discussed the well documented and internationally renowned issue of increased mortality and highlighted it as "a major form of inequality". Their commentary pointed out that the quality of physical health care for people with severe mental illness had been poor and that nurses were the professionals who could be instrumental in improving this. Happell et al. (2011) felt that leadership and direction were needed and that physical health monitoring should be integrated into the mental health nurse's role, and advocated the use of a "Health Improvement Profile" as a tool that could support its development. The profile is a form of physical health assessment, which encourages the practitioner to consider all aspects of physical health, taking account of the impact of mental illness and psychotropic prescribing and, thus, offers practical advice on how to improve physical health care.

Happell et al. (2011b) further developed their discussion in a subsequent article which argues that mental health nurses should be encouraged to take on a leadership role to support their service users to make lifestyle changes, such as increasing physical activity levels, in order to enhance their well-being. Happell et al. (2011b) highlighted the Australian perspective and outlined strategies involving the integration of physical activity into individual care plans, as well as pointing out that mental health nurses can deliver care collaboratively, by developing professional networks in the primary care setting. Further discussion relates to supporting the sustainability of improved physical health care by

mental health nursing, and proposes that the nurse training curriculum should include physical activity awareness and understanding to support this.

Theme 4 – Physical health promotion messages do not always appeal to people with poor mental health

Mental health nurses recognise that is important to monitor the service user's mental health so that the optimum time to have conversations about topics such as weight management and smoking cessation. It is clear that health promotion messages are less effective if the service user is in an acute phase of mental illness. Whilst health promotion messages can be broken down and simplified, to facilitate understanding and application to lifestyle, it is important to filter messages and encourage sharing of information at the point at which the service user can be receptive (Gray and Brown, 2017). Problems can arise when service users do not see a future for themselves, also indicating that emphasis must be placed on the improvement of mental health to support meaningful processing of health promotion messages. Mental health nurses recognise that such messages are accessible from a range of media, and that they are well placed to support and empower service users by making resources accessible.

Supporting smoking cessation and weight reduction attempts was viewed as important but also difficult to put into practice (Gilbody et al., 2015) this is reflected in the four smoking related items included in the PHASe. Health promotion messages tend to be aimed at

individuals who want to improve their lifestyle, and aim to encourage the recipient by providing facts relating to improved health and longer life expectancy; these messages do not appeal to those whose mental health adversely impacts on their view of the future. In order to increase the impact of such messages, the mental health nurse must focus on supporting mood improvement and encouraging positive approaches to support the person.

Mental health nurses attending to gender based screening appears to be considered difficult as mental health services are not equipped to undertake screening, and this involves accessing primary care clinic settings that sometimes require appointments to be made. This can be a problem for people whose mental health impacts on their ability to organise their time to attend. Offering health promotion advice has to be tempered with monitoring the side effects of antipsychotic medication, as issues relating to weight gain and impaired sexual function can be exacerbated (Gray and Brown, 2017).

Theme 5 - Service user autonomy is important but their decision making can be detrimental to their physical health

Mental health nurses working in a community setting report that, whilst service users exercise autonomy in living independently, this can impact on the lifestyle choices they make, and lead to increased risky behaviour, which can involve unhealthy eating, heavy smoking, alcohol and substance abuse. This finding builds on those of both Saha (2007) and Lawrence (2010); as discussed in Chapter 2, as these authors suspected that increased

service user autonomy may adversely impact physical health and well-being. This is a significant finding that relates strongly to the ability of mental health nurses to communicate information at the right time and using the appropriate language to achieve behaviour change.

In practice, the time and interpersonal skills invested in undertaking such communication must be recognised as a cornerstone of mental health nurses' practice – requiring recognition and investment from service commissioners and delivery managers, and this is reflected in the toolkit published by NHS England (2016). The toolkit galvanises the point that engaging in healthy behaviour requires commitment and motivation, and that people with mental health issues may encounter difficulties in this respect, but that mental health nurses are well placed to offer support and encouragement where needed.

A further role for the mental health nurse involves being able to take responsibility for their own physical health and well-being by demystifying and reinforcing health promotion. Bradshaw and Mairs (2017) discussed the importance of respecting the autonomy of the service user whilst supporting decision making using motivational interviewing and empowering service users to access health promotion. Thornicroft (2013) followed up his earlier publication (Thornicroft, 2006) and comment on the subject (Thornicroft, 2011) by pointing out that there were specific areas of care that need to be addressed in order to reduce the fifty year history of increased mortality in people with severe mental illness. Thornicroft (2013) recognised that mortality rates are increasing in rich countries, such as

Australia, Scandinavia, the US and the UK, and that increased mortality has to be understood as being part of a range of social and health care deficits rather than being attributed to increased rates of suicide. Thornicroft (2013) argued that the time had come for evidence-based interventions to be implemented, and that descriptive research was no longer a priority. He also highlighted the importance of ensuring that the public health agenda should prioritise the issue, and went on to argue that the human rights of people with severe mental illness were being infringed upon, due to their diminished life expectancy. In order to achieve this public health messages need to appeal to people who have mental health problems and consultation with user groups to target messages accurately may be beneficial.

5.2 Reflexivity

Theme 5 predominantly emerged from the qualitative data, but still represented findings from a level of integration, and as such remains valid. Objective consideration and not presuppositions regarding practice had to be considered – the uniqueness of the identified theme was considered relevant and useful to bring into the discussion.

5.3 Summary

Throughout the process of qualitative data collection, an overall theme emerged: mental health nurses appreciate the importance of managing physical health but appear to perceive that they are frustrated in their attempts to do so, by limited acknowledgement of the time and physical resources required, and having to defer to their colleagues in acute and primary care, as the experts.

A more collaborative approach to care, and more confident medical colleagues, are core components that require urgent attention in order to bring about some improvement in the persistently high mortality rates during the next two decades. Whilst NHS commissioning reflects the objectives of the Five Year Forward View (NHS England, 2016) the focus of development is on those delivered by secondary mental health services, whereas in fact it appears that more investment in the primary care sector is needed, (Centre for Mental Health, 2018). The findings of this study echo those of Robson et al, (2012), where the PHASe was first used – mental health nurses are undertaking physical health care, but are less keen in areas of gender specific cancer screening and may be ambivalent towards encouraging smoking cessation. These aspects of care require further investigation.

Chapter 6 Limitations and Recommendations

6.1 Introduction

This chapter examines the strengths and limitations of the study and makes recommendations for future practice. The chapter will highlight the contribution of the study to the body of nursing knowledge relating to physical health management in the mental health setting. Suggestions for further research will also be presented.

This study examined existing literature to which these findings now add in relation to mental health nurses attitudes to managing physical health; mental health nurses physical health care as part of their practice but delivery of physical health care is compromised by a range of factors.

During the development of PHASe Robson and Haddad (2012) reported on the physical health care skills of mental health nurses and mental health nursing students, and difficulties in collaborating with primary care colleagues. The findings of this study suggest that mental health nurses are resilient in continuing to advocate holistic care for people with severe mental illness, in spite of continued difficulties in getting the wider health economy to accept this.

6.2 Limitations

The limitations of this study have been considered and the following are highlighted:

Sample size

The number of respondents was small and therefore cannot be considered to accurately represent the population (Moule and Hek 2011).

Creswell and Plano-Clark(2011) advise mixed methods researchers to adhere stringently to the conventions of the quantitative and qualitative research paradigms to underpin the quality of the mixed methods study, and as such the small quantitative sample size has to be acknowledged as a limitation, in terms of the validity, reliability and generalisability of the quantitative findings.

The sample were however recruited from a population group consistent with the aim of the study , and the data collection instrument had previously been validated (see Happell et al. 2013; Knight et al. 2017; Bressington et al. 2018; Ganiah et al. 2017; Chee et al. 2018; Özaslan et al. 2019; Wynaden et al. 2016 and Clancy et al. 2019)

The intention was to develop knowledge that would complement the results of the PHASe. Respondents to the questionnaire and interview participants were self-selecting, although the questionnaire was available to the entire workforce of the NHS trust in which the study was carried out.

Gender Bias

Gender bias is a limitation in that respondents were predominantly female. Comstock (2012) argues that careful formulation of data collection instruments is essential to avoid introducing a gender bias. Internally, therefore, gender bias may be present but,

taking the samples as a whole, the gender balance of the questionnaire respondents is consistent with the employment profile. Health Education England (2019) record that 71% of mental health nurses are female; the predominance of females at 75% in this study reflects the wider population in this area of study.

Transferability

Transferability is not synonymous with generalizability (Lincoln and Guba 1985). The qualitative data presented and discussed in this study details the attitudes of a group of registered mental health nurses and mental health nursing students; alongside this rich data is also offered in relation to the environment in which data were collected. Those studying the topic could, therefore, 'transfer' to similar populations in similar backgrounds. So whilst generalisability of the quantitative findings is limited, it is pertinent to consider that the study findings have transferability, and as such balances the overall value of the findings.

Sampling bias

Sampling bias (Stec, cited in Lavrakas, 2011) is considered given the limited geographical / organisational reach of the study. The study was carried out in one mental health trust in the east of England, and therefore the views reflected by participants may differ from those who work in more urban settings where resources, in terms of specialist advice and equipment could be more available.

Non-response bias,

Non-response bias is evident in the low response rate. The poor response rate results from the individual's refusal or inability to complete the survey – online access to the survey was intended to facilitate and encourage completion. Stec (cited in Lavrakas

2011) identifies that some respondents may feel survey questions are inappropriate or irrelevant to them; this may have been the case in this study.

Motivation to complete the questionnaire also cannot accurately be assessed. Respondents may have had an increased motivation to manage physical health than non- respondents, therefore a non-response bias must also be considered, to have impacted on the response rate (Sedgewick, 2014).

Social desirability

Respondents may complete a questionnaire in a way that portrays them in a more favourable light (Moule and Hek, 2011). This implies that respondents may have adjusted their response to suggest that their attitudes are more positive and that practice is comprehensive.

For example, in relation to PHASe statement 5:

"*Clients with serious mental health problems are not interested in improving their physical health*".

Respondents may have felt that agreement with this statement implies a sense of hopelessness and/or challenge in managing physical well-being, suggesting a negative attitude towards managing physical health.

Recall Bias

The semi-structured interviews were aimed at encouraging participants to discuss their experiences of managing physical health, and as such, recall bias (Moule and Hek, 2011), should be considered. The opening line for each interview asked each

participant to think about their experience of managing physical health and talk about what went well or not so well. Interviewees discussed the experiences they remembered, and may have chosen to do this selectively.

Response bias

As it is not possible to confirm that the responses given accurately reflect the experience of the participants, response bias also has to be considered (Furr 2013).

For example, in relation to PHASe statement 27:

"Clients' physical health worries are mostly due to their mental illness"

If agreed with, this statement implies a level of diagnostic overshadowing, and a reduced focus on holistic care which could imply that the respondent had a negative attitude towards managing physical health care. Similarly, asking interviewees to discuss aspects of physical health management that could be improved implies suspicion that current care standards may be of poor quality, reflecting negatively on the nurse.

6.3 Strengths

The strengths of this study have been considered and the following are highlighted:

1. Authenticity

Criteria to assess the authenticity of research are explored by Guba and Lincoln (1989). Authenticity relates to ensuring that respondents are gathered from an appropriately experienced population, full consent is gained from each, and that both researcher and

participants are equally involved in the research process. Guba (2011, cited in Lewis-Beck et al, 2011) offers definitions of such criteria and examples of procedures that should be undertaken to ensure that the authenticity of the research.

Examples of action taken to enhance authenticity in this study include, using direct quotations from interview participants, detailed discussion of methodology (Seale, 1999) and asking interview respondents to review their transcripts prior to analysis.

Researchers must consider the quality of their inquiry in term of fairness, as well as ontological, educational, catalytic and tactical authenticity, as discussed in Chapter 3 (Guba (2011 cited in Lewis-Beck et al 2011). This study has addressed these issues as follows – fairness has been demonstrated by clearly documenting the process undertaken to undertake the study from conception to completion. Participation in the study was open to all members of the targeted populations of registered mental health nurses and mental health nursing students,

2. Convergent Mixed Method

Creswell and Plano-Clark (2011) detail the importance of being able to give a much more detailed account of an area of research by collecting and analysing quantitative and qualitative data, and also by the bringing together of the two data sets.

Using a convergent mixed methods design has led to the generation of information that would not have been forthcoming from conducting an entirely quantitative or qualitative study alone. An example of this enhanced exploration is the recognition of the inter-

personal skills required by mental health nurses to be able to encourage understanding and actions needed to maintain physical health would not have emerged from the quantitative findings; it was not until the interview discussion took place that this theme emerged.

3. Convergent results

The converged results led to development of insights into the practice and attitudes of mental health nurses and mental health nursing students, not just within their own professional sphere, but in relation to collaborative work with other colleagues and in other settings. For example, whilst the quantitative findings suggest that primary care colleagues are pivotal in ensuring that gender specific screening takes place, the qualitative findings highlight the difficulties that people with mental health problems experience in accessing such service.

4. Real World Findings

The study constitutes research in the real world, having been undertaken in the clinical area, and with respondents were currently engaged in working with people who have mental illness. Registered mental health nurses and mental health nursing students have been able to offer their unique perspectives on managing the physical health of service users.

6.4 Recommendations

The study findings highlight themes that need to be addressed by mental health, primary and acute care services and wider society. Drawing on the findings of this study the following recommendations are made:

Recommendation 1

Resources to support physical health monitoring consistently and safely must be made available to mental health nurses.

> *"I think the physical health monitoring has become the norm now especially now we got the resources and that we don't see it really as extreme as they say it was part of a normal mental health nurse's role It's great that we have all the kit now but we need to remember to keep it ready for use" (RN 4, Line 165 – 169)*

Nurses reported frustration with access to equipment and time to deliver meaningful physical health care to patients whose mental health was the primary concern. The mental health nurse's role in undertaking this should be respected in terms of mental health nurses' core business; and not solely part of key performance indicators, and applying targets to force conversations regarding physical well-being. Mental health services must acknowledge responsibility for:

- Resourcing adequate time for mental health nurses to engage holistically with service users, including comprehensive physical health monitoring.
- Providing, monitoring the currency of and replacement of defunct equipment as a quality standard.
- Ensuring that each service has sufficiently trained staff that can confidently and competently use contemporary monitoring equipment.

This is reflected in contemporary campaigns, (Centre for Mental Health, 2012, 2016, 2018 and RCN, 2018) and requires addressing nationally. Ensuring the procurement and

maintenance of medical devices and ensuring staff availability to support physical health monitoring is essential to ensure that mental health nurses can effectively and confidently carry it out. Therefore service managers and deliverers must assure that resources to support this aspect of practice are always available for use, when required.

Recommendation 2

Mental health nurses should be mindful of the timing and nature of interactions with patients that are directed at improving physical well-being

> *"The messages themselves are reasonably simple, but the way they are conveyed can be very complicated and you really do need to support the person with a mental health problem so that they are then able to process the information that you're giving them." (RN 3, Line 101 – 104)*

Mental health nurses have to judge carefully when to discuss potentially sensitive physical issues. This aspect of their role must be recognised. The impact and knock on effect of the time resource required to manage physical health appropriately, has to be acknowledged being part of the mental health nurses' role rather than an "add on". This would develop a culture of physical health care being a routine part of mental health practice, (Gray et al, 2009, Rodgers et al, 2016). This issue requires addressing by both mental health care commissioners and managers to ensure that interventions to support the promotion of physical health are viewed as core business.

Key performance indicators that require mental health nurses to evidence that they have had conversations or delivered interventions aimed at improving or maintaining physical

health are important, but acknowledgement of the potential complexity of this is required. Such indicators must be articulated in a meaningful and measureable way.

True Parity of Esteem (Department of Health 2013) would manifest in mental health nurses routinely undertaking physical health checks, not just when directed. Commissioners and managers of mental health services must appreciate that mental health nurses' work holistically towards recovery for patients, and that conversations relating to physical health issues are integral to such a holistic perspective.

Recommendation 3

Pre and Post Registration Training for Mental Health Nurses should explicitly value the study of essential physical health care as integral to the health and well-being of service users.

> *"We learnt about anatomy and physiology, but it would be good to have discussed diabetes in more detail, given that you can guarantee you will meet many patients with the condition." (SN 2, Line 60)*

Pre-registration training for mental health nurses should include teaching to support the recognition and management of cardiovascular complications of antipsychotic drug use. This is of particular relevance, and the ability to record an ECG when required is useful in monitoring the potential cardio-toxic impact of these medicines. Recent review of standards for registered nurses, published by the Nursing and Midwifery Council (2018)

indicate that all nurses will be involved in all aspects of frequently presenting physical and mental health conditions.

The attitudes of student mental health nurses indicated that more awareness of the specific issues they will face in practice, such as metabolic syndrome, type 2 diabetes, anti-psychotic medication side effects and routine gender/age specific screening, could be integrated into the curriculum. Further areas for inclusion would relate to physical health conditions that are associated with alcohol and substance misuse, eating disorders, self-harm, psychosis and dementia.

The Parity of Esteem agenda (Department of Health, 2013) is an initiative that has led to stronger on the management of physical health in mental health services. As a consequence mental health nurses find themselves being expected to undertake investigations that may previously have been carried out in primary care settings. Undertaking basic physical monitoring and surveillance requires awareness of basic homeostatic principles as well as technical skills which need to be understood.

In practice, mental health nurses are likely to encounter common physical illnesses; rates of diabetes and cardio vascular disease are high in people with mental illness therefore it makes sense to ensure that mental health nurses are aware of the basic physical health monitoring that should be undertaken to support physical health. Mental health nurses may be undertaking monitoring intermittently, and may fear losing their skills, therefore opportunities for bespoke training should be available.

Mental health nurses' confidence in physical health care management is underpinned by using safe systems such as colour coding for vital signs monitoring charts, aligned to the National Early Warning Score system (NHS England, 2017). ECG machines with interpretive software are recommended to support cardio-metabolic screening, especially when physical health deterioration may be presenting, (RCN, 2019). The promotion of safe care requires an infrastructure which would involve clear, multi-disciplinary protocols and referral pathways to ensure that abnormal findings can be addressed promptly and effectively. Therefore opportunities to learn refresh and develop expertise in physical health monitoring, surveillance and promotion need to be afforded to mental health nurses at all stages of their career.

Recommendation 4

Physical health competency frameworks for mental health nurses should be developed to support professional development and practice quality.

> *"Physical health is as big a challenge as mental health on a mental health ward but it doesn't get the attention it deserves, that's my feeling." (RN 6, Line 41)*

Physical health competency frameworks are beneficial for mental health nurse to help them to gauge their proficiency in techniques required to support physical health, (Nash 2010). Health Education England (2017) published a comprehensive physical health competency framework with a view to supporting mental health nurse's practice in this aspect of care. Formal competency frameworks for mental health nurses will add structure to support the acquisition and development of physical care skills. This is a developing area and

competency frameworks specifically for mental health and learning disability nurses are available. These represent a system of recording and reviewing skills as required and enable nurses to maintain an appropriate portfolio of skills relevant to the client group they are working with. Competency frameworks enable documentation of skills and facilitate regular review of the scope of practice; which can be a useful source of evidence in determining that proficiencies have been acquired, and as such underpin the process of registration and revalidation. Therefore physical health competency frameworks should be in use by mental health nurses to offer assurance that they can effectively meet the physical health care needs of mental health service users.

Recommendation 5

Consideration must be given to developing opportunities for formal training that would enable registered mental health nurses to acquire registration as an adult care nurse and vice versa.

> *"… you know, if we're going to be genuinely holistic, obviously we're not going to become trained to the same level as the physical health nurse, and they're not going to be trained to the same level as a mental health nurse, but we can have understanding of each other's input, and where the boundaries, if there are any, lie, so you can support the individual dealing with both aspects of themselves." (SN 1, Line 155 – 160)*

Pre and post registration training for both mental health and adult nurses needs to include closer integration in order to foster a sense of the contribution of each branch of nursing by all nurses. Such training could reduce the number of mental health patients whose physical health cannot be managed in the mental health setting, and who experience sub-optimal care when transferred into acute care services. Doctors and nurses working in mental health settings may have limited exposure to physical ill health, but should be familiar with commonly presenting conditions such as diabetes and cardiovascular disease, and transfers to acute care may be avoided if the physical health knowledge base of mental health nurses is developed further. Mental health nurses report that they and their patients encounter stigma and prejudice in the acute care setting and being able to deliver more medical care in the mental health setting could reduce and/or avoid this. (Robson and Haddad, 2012, Robson et al, 2012) Developing an appreciation of the management of mental health care may help acute care staff to support people with mental health problems.

Mental health nurses report that when their patients are nursed in acute care settings, adult care nurses are reluctant to be involved in care delivery. Bringing acute care and mental health care nursing staff together to create opportunities for joint working could foster mutual appreciation of the roles. There the opportunity for joint and /reciprocal training should be considered by service developers. Therefore opportunities to acquire dual registration as an adult and mental health nurse are recommended to address problems associated with disintegrated care.

Recommendation 6

Health promotion messages need to appeal to the autonomous person, living independently with mental ill health problems.

> "*It is difficult to motivate people, but when we get the chance, we should try and discuss physical health promotion", and "they" (the patients) get it (physical health advice) from the doctors too, and sometimes I think they feel a bit nagged … it feels hard to keep on top of the most up to date information regarding physical health promotion*." (RN 2, Line 91 - 95)

Mental Health Nurses reported in this study, that people with mental illness do not identify well with health promotion messages. Many nurses found that they could offer the right type of message to their patients but that often public health information messages are not perceived as appropriate or relevant.

Encouraging people to engage with health promotion messages can be complex, especially where a person's mental state impacts on their self-esteem, and where issues of self-neglect and/or self-harm are evident. Health promotion campaigns need to appeal to people with poor mental health. This would involve refocusing on how mental health impacts on motivation to improve physical health. Encouraging the engagement of service users would help to develop health promotion strategies that will appeal to this group. It would be useful to seek advice of mental health service users and their advocates to help design health promotion campaigns that appeal to people with poor mental health. (Rethink 2012), Public Health England 2018).

The "*We are undefeatable"* campaign (Public Health England 2019) aims to encourage people with long term conditions to increase activity levels; promotional material for this campaign recognises the impact of mental well- being on physical health improvement, and is supported by agencies such as Mind, and Rethink – this is a step forward, but all campaigns need to be assessed on their ability to appeal to the autonomous person with mental health problems, who may not identify with key messages.

This is a significant recommendation which suggests action is required by agencies involved in disseminating health promotion materials, who may need to review their approaches to enhance the appeal of their messages for people with mental ill health. This would help to engage this group, and could impact on health seeking behaviour, with the potential to reduce morbidity and mortality relating to commonly occurring illnesses.

Recommendation 7

Diagnostic overshadowing must be challenged, and non-mental health clinicians should be encouraged to understand and be aware of the potential danger of diagnostic overshadowing in the practice environment

> *"They don't get that good a deal in primary care sometimes – some GPs are great but some patients don't feel very welcome." (RN 9, Line 182-183)*

Whilst psychiatric liaison services can help to improve the treatment of mental health patients in the acute care setting, it is clear that diagnostic overshadowing still prevails. (Nash 2013, Shefer et al 2014).

Increased collaborative care delivery systems should be developed. These would include specialist services such diabetes, COPD, CVD, Tissue Viability and other services aimed at supporting people with long term conditions. These services must recognise that people with long term mental illness will often have a long term physical condition, and services must be available for them too. Efforts to increase accessibility for people with mental illness are required if any impact is to be made on increasing life expectancy by proactive management of long term physical health conditions. If we are to achieve true parity of esteem, it will a prerequisite for people with mental health problems to receive the same level of physical health investigation as the rest of the population, without having their physical symptoms attributed to their mental health condition.

Recommendation 8

Medical staff working in mental health settings must transparently evidence knowledge and skills in physical health conditions and be able to make referrals directly to secondary physical care services.

> *"it doesn't help that our doctors can't directly refer to the teams over at the general"*
>
> *SN3, Lines 189-190*

In this study, mental health nurses refer to their medical colleagues for advice and support when faced with challenges relating to physical health conditions, in the knowledge that they have undergone medical training, and as such view them as an extremely valuable and respected resource. Mental health nurses must perceive their medical colleagues as being demonstrably confident and competent at managing complex physical health conditions.

This is reflected in the Lester tool, (Royal College of Psychiatrists, 2014) which was developed following national audit of care for people with psychosis. The tool is an "aide memoire" which encourages doctors working in the mental health setting to undertake physical health screening and intervention. Advice on addressing medical conditions relating to metabolic syndrome including hypertension, hypercholesterolaemia, hyperglycaemia and increased body mass index, has been introduced as a postcard sized document, and most recently has been developed into a mobile phone application, (Phull and Naoui, 2018).

Multi-disciplinary team management of physical health monitoring to support side-effect management and medicines optimisation should be encouraged, to improve concordance with medication regimes. Expertise in emergency care should also be maintained – in an urgent situation the doctor will be the most senior clinician present and as such has to be able to run the scenario and engender confidence in nursing colleagues. Mental health nurses can support their medical colleagues by developing and maintaining skills in the physical health issues that affect their client group, ensuring that they understand these and can engage in meaningful care planning with the multi-disciplinary team.

The development of a health service infrastructure that supports mental health clinicians is also required. A more inclusive system would mean that doctors and nurses working in mental health settings could refer to and access health care services in the same way that GPs do; this would enable primary care services such as gender or disease specific screening, or requests for surgical or medical consultations could be accessed directly,

rather than via the GP. This could reduce the opportunity for diagnostic overshadowing to occur, at source.

6.5 Reflexivity

Courage was required to enable the researcher to feel comfortable with making the above recommendations, especially recommendations six and eight that relate to public health promotion messages and medical confidence respectively. However, as a result of undertaking this study the researcher felt more empowered, more able and better informed to highlight all the areas which worked against good physical for mental health service users.

This transformative experience has helped the researcher to recognise whenever mental health nurses are scapegoated for poor physical health care of mental health service users and to question whether it is an issue with the mental health nurse or are their much more complex factors at work. The prologue to this document details the scenario that ignited my interest in finding out what factors might impact on improving mental health nurse's awareness of physical health issues and undertaking this study has reassured me of their positive attitudes, however training and resources to build confidence and competence are required – the positive regard in which mental health nurses hold physical health care must be capitalised upon by underpinning with education, training and resources and my clinical role involves driving this agenda forward.

6.6 Summary

The study findings suggest that mental health nurses have positive attitudes towards managing physical health, but this may be compromised by a multitude of factors and attitudes prevalent in the wider health and social care economy. Bressington et al, (2018) and Knight (2017) both discuss how mental health nurses are recognising that their practice has to become inclusive and that integration with colleagues is key to achieving this – the findings of this study add weight to their claim. The study recommendations reflect the voice of the participants and this must be respected despite the message being uncomfortable.

Chapter 7 Conclusion

This study details an attempt to generate knowledge that could be shared with colleagues working in mental health delivery to help them understand and rise to the challenges presented in managing the physical health of service users. The study used a validated quantitative data collection instrument, and qualitative interviews to collect quantitative and qualitative data respectively, and both data sets were analysed to distil themes relating the attitudes held by mental health nurses towards managing physical health care, and evidence practice undertaken in that regard.

The study was undertaken against a background of poor physical health and reduced life expectancy for people with SMI and an exploration of literature indicated that this is due is some part to the lack of attention paid to physical health in the mental health setting. This was felt to be a social injustice, and the aim of this study intended to shed light on what attitudes of mental health nurses towards what is required to support physical health and how they make their contribution to it via an exploration of these attitudes.

The study findings suggest that mental health nurses hold positive attitudes towards the management of physical healthcare but that the infrastructure in which they practice does not support them well enough. Mental health nurses are challenged by the attitudes of colleagues from differing disciplines, who often don't recognise the impact of poor mental health on overall well-being; this is likely to be a common experience in contemporary mental health practice.

This study reiterates that mental health nurses are well-placed to undertake basic physical health monitoring and surveillance, and that they are keen to learn and develop their skills in order to do this safely and effectively. The study finding indicate that physical health management is a key component of the mental health nurses' role and as such needs to be recognised as such and not developed as a "bolt on" extra task that is measured by quantity rather than quality.

Dissemination of the findings of this study may help to maintain positive attitudes toward physical health by mental health nurses and could reduce the implied sense of antipathy of mental health nurse towards managing physical health that has seeped into the literature. In addition, dissemination will enhance universality, encouraging mental health nurses to build networks and share good practice. As my clinical role is focused on the physical health and well-being agenda for people with SMI, through this I can support these endeavours by highlighting and encouraging adherence to the Parity of Esteem agenda Furthermore, I can use the research findings to encourage colleagues to engage with physical health by helping them to recognise their unique role and also will be able to share the findings in my teaching at local Higher Education Institutions.

This study has utilised a convergent mixed methods design to collect quantitative and qualitative data that have been analysed and the findings integrated to explore mental health nurses' attitudes towards managing physical health. The mental nurses who contributed to the study are in current practice and therefore well placed to comment and

share their experiences on the topic. Their views need to be recognised by the wider health economy to improve the system that currently seems to prevent mental health practitioners being able to access and refer to physical care services for their service users.

Mental health nurse strive to deliver holistic care, and recognise that their role in developing therapeutic relationships with their service users includes broaching sensitive topics relating to physical well-being. Physical health care must be a core component of mental health nurse training to ensure that polarisation does not feature: physical and mental health must be afforded parity of esteem by mental health nurses of the future.

Previously cited literature has alluded to the need for further research into the attitudes of mental health nurses, and this study has added the dimension of positivity in this regard. It has become evident that whilst mental health nurses have developed positive attitudes to physical health care, this does not seem to be mirrored in physical health care settings, with negative attitudes to mental illness are still being encountered. This study has added weight to the issue of integration of services; health care service delivery from whatever setting, must recognise the impact of poor mental health on an individual's physical health.

Mental health nurses have an important role in supporting the physical health of their patients, and both the data sets generated by this study allude to this. Service commissioners and managers must support clinical staff and recognise that the clinician's role in supporting both physical and mental health requires commitment and resources to enable this aspect of clinical care to flourish. The commitment of mental health nurses, who advocate for their service users when required, has to be appreciated by mental health

service commissioners and managers and the resource implication of this considered when developing services.

This study has identified that increased collaboration with other health sector colleagues is also crucial in order to ensure that mental health service users can access services in a way that is not affected by their mental illness. Issues of diagnostic overshadowing and the poor integration of services impact negatively on the physical health of people with mental illness as they experience difficulties in engaging with services that do not recognise this population as service users, rather as a population who should be receiving care elsewhere. There are implications for the practice of acute and primary care clinicians relating to the recognition and reduction of diagnostic overshadowing, to enable the adoption of a more enlightened approach to every service user. In terms of improving the physical well-being of people with severe and enduring mental illness, mental health nurses make an important and significant contribution, despite recognising limits to their role and acknowledging that some areas of care such as gender specific screening and contraceptive advice remain areas of expertise that people with SMI may struggle to access in primary care.

The wider health sector and society in general need to recognise that mental illness does not have to be a barrier to good health. In addition to developing mental health awareness skills across the health care economy, practitioners in other agencies could engage better with people who have poor mental health particularly those delivering services such as housing, education and employment, as these are frequently areas identified by mental health nurses as those where people with mental illness struggle to access their requirements.

Recognising that everybody has a right to access good quality health care, in a society that does not discriminate in the case of mental illness, is key to improving the physical well-being of people with mental illness, and it would make sense to attempt to reduce the stigma that is apparent within the health care sector. As already mentioned if true parity of esteem is to be achieved, then health care professionals working in predominantly physical care services will develop their mental health awareness skills, whilst those working in mental health services will develop their physical health awareness. The findings of this study imply that the latter is developing, and healthcare practitioner roles that can span across these care domains can be pivotal in developing such skills.

This study has attempted to explore how access to good quality health care could be supported; further enquiry is needed to develop this area of care and to explore how the issue of stigma could be addressed. It is evident that mental health nurses recognise their potential contribution to the maintenance of their service user's physical well-being, and this aspect of their role is critical if mortality rates of people with severe and enduring mental illness are to be reduced. The findings of this study may offer some useful insight for clinical staff involved in mental health service developments that can be delivered by a mental health nursing workforce. Clinical roles that support the development of basic physical healthcare skills for mental health nurses can facilitate accurate and effective physical health surveillance and monitoring, which would help identify deterioration and avoid increased morbidity in the SMI population.

Mental health nurses role in developing therapeutic relationships in which sometimes sensitive topics relating to physical well-being need to be discussed is crucial, and requires commitment and resources to maintain. Respecting every individual's right to access good quality health care, in a society that does not discriminate in the case of mental illness, is key to reducing mortality rates. It would make sense to attempt to reduce the stigma that is apparent within the health care sector in order to achieve this and this study indicates that mental health nurses are the professional group whose positive attitudes towards managing physical healthcare can have a positive impact on the physical well-being for people with SMI, and are uniquely placed to help this population to access good quality health care in line with the rest of the population.

7.1 Reflexivity

Undertaking this study has highlighted to the researcher that mental health nurses are willing and able to offer holistic care. It is the lack of infrastructure in which mental health nurses work that compromises their ability to deliver physical health support to service users. The researcher is encouraged to know that colleagues want to do work in a holistic manner and that physical health management is considered to be core business. However it is disappointing to find that the wider health care system needs to experience significant change to support them to do so. From my perspective, I have felt encouraged and reassured by undertaking the study and generating information to suggest that mental health nurses are committed to holistic care, whilst appreciating that my contribution to

supporting the development of their physical health care skills, can underpin their confidence in doing so.

Sadly there still seems to be stigma experience in the mental health services all my courageous colleagues from the most junior to the most senior need to bring this to the fore – I kept a research journal and recognised this noting "*clinicians should not feel devalued or stigmatised by colleagues who work in more mainstream services – what can we do about this? Maybe reading this study will provoke action"*

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Appendix 1 – Physical Health Attitude Scale (Robson and Haddad, 2012)

Mental Health Nurse

Physical Health Attitude Scale

Debbie Robson MSc, RN, Mental Health Tutor & Research Nurse

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	Please read the statement and tick/click the box that relates best to your personal opinion	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
1	Helping clients manage their weight should be part of the mental health nurses role	☐	☐	☐	☐	☐
2	Giving nutritional advice to clients should be part of a mental health nurses role	☐	☐	☐	☐	☐
3	I am confident in assessing signs and symptoms of **hyper**glycaemia	☐	☐	☐	☐	☐
4	It should **not** be the role of the mental health nurse to provide advice about exercise to clients	☐	☐	☐	☐	☐
5	Clients with serious mental health problems are not interested in improving their physical health	☐	☐	☐	☐	☐
6	Giving advice on how to prevent heart disease should be part of the mental health nurses role	☐	☐	☐	☐	☐
7	It should **not** be the mental health nurse role to check with a client if they have had cancer screening checks (ie cervical smear	☐	☐	☐	☐	☐

	/mammogram)					
8	I am confident that I can measure a client's blood-pressure accurately	☐	☐	☐	☐	☐
9	It is difficult to get clients to follow advice on how to manage their weight	☐	☐	☐	☐	☐
10	Ensuring clients are registered with a dentist should be part of the mental health nurses role	☐	☐	☐	☐	☐
11	Mental health nurses should provide clients with contraceptive advice	☐	☐	☐	☐	☐
12	Clients should **not** be encouraged to give up smoking, as they have enough to cope with	☐	☐	☐	☐	☐
13	Informing clients about the possible effects medication may have on their physical health will increase non-adherence	☐	☐	☐	☐	☐
14	Staff should be banned from smoking on all Healthcare premises	☐	☐	☐	☐	☐
		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
15	Clients are **not** motivated to exercise	☐	☐	☐	☐	☐

16	Clients should be given cigarettes to help achieve therapeutic goals	☐	☐	☐	☐	☐
17	Mental health nurses should educate female clients about the importance of breast self-examination	☐	☐	☐	☐	☐
18	It is difficult to get clients to follow healthy-eating advice	☐	☐	☐	☐	☐
19	I am confident in assessing signs and symptoms of **hypo**glycaemia	☐	☐	☐	☐	☐
20	Clients should be banned from smoking on all Healthcare premises	☐	☐	☐	☐	☐
21	I am confident that I know which psychotropic drugs increase the risk that a client may experience cardiac problems	☐	☐	☐	☐	☐
22	Ensuring clients have their eyes regularly checked by an optician should be part of the mental health nurses role	☐	☐	☐	☐	☐
23	My workload prevents me doing any physical health promotion with clients	☐	☐	☐	☐	☐
24	I am confident that I know which psychotropic drugs may cause	☐	☐	☐	☐	☐

	damage to the eyes					
25	Mental health nurses should educate male clients about the importance of testicular self-examination	☐	☐	☐	☐	☐
26	I am confident that I could resuscitate a client who had a cardiac arrest	☐	☐	☐	☐	☐
27	Clients' physical health worries are mostly due to their mental illness	☐	☐	☐	☐	☐
28	Staff and clients smoking together helps to build a therapeutic relationship	☐	☐	☐	☐	☐

ABOUT YOU (please tick the box that applies to you)

Male ☐ [1]	Grade
	Band 2 ☐
Female ☐ [2]	Band 3 ☐
	Band 4 ☐
How old are you?	Band 5 ☐
	Band 6 ☐
What year did you qualify?	Band 7 ☐

Do You smoke?

No ☐ [1]

Yes ☐ [2]

Band 8 ☐

Other

What is your highest academic qualification?

Certificate (eg RMN, RGN	☐ [1]
Diploma (eg Dip HE)	☐ [2]
Degree (eg BSc/BA)	☐ [3]
Masters (eg MSc/MA)	☐ [4]
MPhil/PHD	☐ [5]

Other (please specify)

Where do you work?

In patient ☐ [1]

Community ☐ [2]

Specialty

General adult	☐ [1]
Forensic	☐ [2]
Older Adults	☐ [3]
CAMHS	☐ [4]
Addictions	☐ [5]
Primary Care	☐ [6]

Physical Health Training received in past 5 years

Name of Course	Length (days)

APPENDIX A: Current Practice

My current practice involves……	Never 1	Rarely 2	Often 3	Very often 4	Always 5
Checking if clients have had their general physical health assessed when they first come into contact with our service	☐	☐	☐	☐	☐
Checking if the clients I work with are registered with a GP	☐	☐	☐	☐	☐
Assisting clients to attend to their personal hygiene	☐	☐	☐	☐	☐
Monitoring clients blood-pressure	☐	☐	☐	☐	☐
Giving clients advice on the benefits of exercising regularly	☐	☐	☐	☐	☐
Helping clients manage their weight	☐	☐	☐	☐	☐
Giving clients advice on how to eat healthily	☐	☐	☐	☐	☐
Assessing clients' bowel habits	☐	☐	☐	☐	☐
Giving clients advice on dental health	☐	☐	☐	☐	☐

Testing clients for glucose abnormalities (eg checking glucose in urine/checking a clients BM)	☐	☐	☐	☐	☐
Weighing clients routinely throughout their contact with our service	☐	☐	☐	☐	☐
Helping clients to stop smoking	☐	☐	☐	☐	☐
Giving clients contraceptive advice	☐	☐	☐	☐	☐
Ensuring clients have their eyesight assessed regularly	☐	☐	☐	☐	☐

APPENDIX B: PERCIEVED TRAINING NEEDS

I would like more training on…….	Yes 1	No 2	Not sure 3
how to care for mental health clients with diabetes	☐	☐	☐
how to help clients manage their cardiovascular health	☐	☐	☐
interventions to help clients eat more healthily	☐	☐	☐

how to help clients exercise safely and effectively	☐	☐	☐
how to help clients stop smoking	☐	☐	☐
interventions to help clients manage their weight	☐	☐	☐
how to discuss reproductive health issues with clients	☐	☐	☐

Mental Health Nurse Physical Health Attitude Scale [PHASe] Scoring instructions

The 28 items of the PHASe are scored 1 (strongly disagree) to 5 (strongly agree), where 5 indicates strong agreement with positive health promoting attitudes.

The scale comprises of four components/factors

Component 1] nurses' attitudes to involvement in physical health care (10 items)

Items 1, 2, 4, 6, 7, 10, 11, 17, 22, 25

Component 2] nurses' confidence in delivering physical health care (6 items)

Items 3, 8, 19, 21, 24, 26

Component 3] perceived barriers to physical health care delivery (7 items)

Items 5, 9, 13, 15, 18, 23, 27

Component 4] nurses' attitudes to smoking (5 items)

Items 12, 14, 16, 20, 28

Some items have been stated in such a way that strong agreement indicates a negative attitude. The scoring of such items should be reversed for analysis purposes to ensure that a high score indicates positive attitudes.

ITEMS FOR SCORE REVERSAL:

ITEM 4

ITEM 5

ITEM 7

ITEM 9

ITEM 12

ITEM 13

ITEM 15

ITEM 16

ITEM 18

ITEM 23

ITEM 27

ITEM 28

The supplementary questions concerning participant demographics, practice and training are useful for audit and research purposes. These help identify associations between these staff characteristics and attitudes.

Appendix 2 Table of Reviewed Literature

Title, Author(s) and publishing details	Study type	Findings	Strengths	Limitations
Mental health nurses' attitudes towards the physical health care of people with severe and enduring mental illness: The development of a measurement tool Robson, D. and Haddad, M. (2012) International Journal of Nursing Studies 49, 72-83	Cross sectional	The PHASe may be a useful instrument with which to measure attitudes	Clearly documented strategy for tool development and initial use	Limited generalisability
Excess mortality of mental disorder Harris E. C. and Barraclough B. (1998) British Journal of Psychiatry, 173 11 – 53	Literature review	Concludes that all mental disorders lead to increased risk of premature death.	Seminal work cited by 934 further authors	Some concessions made if study had <10% of lost cases
A Systematic Review of Mortality in Schizophrenia: Is the Differential Mortality Gap Worsening Over Time? Saha, S., Chant, D., and McGrath, J (2007) Archives of General Psychiatry.;64(10):1123-1131	Systematic review	Mortality rates of people with severe and enduring mental illness. Recognition of the gap in health care for people with mental illness when compared to the general	37 papers reviewed were from 25 different nations	Publication bias is acknowledged as are concerns regarding categorisation of cause of death and psychiatric diagnosis

Title, Author(s) and publishing details	Study type	Findings	Strengths	Limitations
		population		
The Epidemiology of Excess Mortality in People With Mental Illness Lawrence, D., Kisely, S. And Pais, J. (2010) Canadian Journal of Psychiatry 55 12 752 -760	Systematic review	Concluded that alternative approaches need to be developed to prevent persistence of high mortality rates.	Indicates that people with SMI have not experienced improvements in mortality rates	Many of the reviewed studies relied on the quality of records with no reference to psychological or social issues
Incentives and barriers to lifestyle interventions for people with severe mental illness: a narrative synthesis of quantitative, qualitative and mixed methods studies. Roberts, S.H. & Bailey, J.E. (2011) Journal of Advanced Nursing 67(4), 690–708.	Systematic review	Mental health nurses, should consider factors that may influence their patients to participate in lifestyle interventions	Wide range of study types included	Narrative approach and use of English only studies could impact on generalisability of findings

Title, Author(s) and publishing details	Study type	Findings	Strengths	Limitations
Integrated care to address the physical health needs of people with severe mental illness: a rapid review Rodgers, M., Dalton, J., Harden, M., Street, A., Parker, G. and Eastwood A. (2016) Health Service Delivery Research 4 13	"Rapid Review" to appraise evidence from 2013 - 5	Integrated records systems and improved collaboration between services is required	Databases searched and expert opinion sought	"Snapshot" nature of review and short time scale
Integrated Care to Address the Physical Health Needs of People with Severe Mental Illness: A Mapping Review of the Recent Evidence on Barriers, Facilitators and Evaluations Rodgers, M., Dalton, J., Harden, M., Street, A., Parker, G. and Eastwood, A. (2018) International Journal of Integrated Care, 18(1), pp. 1–12	Literature review	There is a consensus on service improvements to improve physical health of people with SMI but not on accountability. Heavy caseloads and unprotected time for physical health management is problematic	Well documented search which examined contemporary reports and derived useful findings	Authors acknowledge that a pragmatic approach was taken and this was not a "full" systematic review

Title, Author(s) and publishing details	Study type	Findings	Strengths	Limitations
Parity of esteem: Addressing the inequalities between mental and physical healthcare Mitchell, A.J., Hardy, S. and Shiers, D. (2017) British Journal of Psychiatric Advances 23, 3 196-205	Paper discussing Parity of Esteem	Reinforces learning to identify aspects of care required to achieve parity	Discussion paper	Discussion paper
Providing physical health care for people accessing mental health services: Clinicians' perceptions of their role Clancy, R., Lewin, T. J., Bowman, J. A., Kelly, B.J., Mullen, A.D., Flanagan, K. and Hazelton, M.J. (2019) International Journal of Mental Health Nursing 28, 256–267	Cross-sectional study	Case managers who are Allied Health Professionals may find meeting physical health needs challenging.	Large multi-professional study looking at role of physical health care for people with mental illness	Low response rate (34%) inhibits generalisability
Efficacy of lifestyle interventions in physical health management of patients with severe mental illness Chacón, F., Mora, F., Gervás-Ríos, A. and Gilaberte, I. (2011) Annals of General Psychiatry, 10(22), p. 1 – 10	Systematic Review	Highlights the impact of health promotion strategies	Well documented search strategy	Funding via pharmaceutical company could bias findings towards lifestyle intervention as mitigating risk of anti-psychotic use
Improving the physical health of people with severe mental illness: boundaries of care provision	Qualitative study	Highlighted difficulties in decisions	Recognised collaboration in physical health	May be limited transferability due to geographic

Title, Author(s) and publishing details	Study type	Findings	Strengths	Limitations
Ehrlich, C., Kendall, E., Frey, N., Kisely, S., Crowe, E. and Crompton D. (2014) International Journal of Mental Health Nursing; 23 (3) 243-51.		regarding responsibility for physical health promotion	care as a barrier that needs to be overcome to improve the physical health of people with mental illness	focus of the study
Assessment of Physical Illness by mental health clinicians during intake visits Carson, N., Katz, A M., Gao, S. and Alegría, M. (2010) Psychiatric Services 61 (1) 32-37	Qualitative observational study	Reported that physical health whilst discussed frequently is often brought up by the patient first	Findings could influence policy and educational development	Duration of interviews was not standardised
Assertive Community Treatment and Physical Health Needs of Persons With Severe Mental Illness: Issues Around Integration of Mental Health and Physical Health Shattell, M., Donnelly, N., Scheyett A. and Cuddeback, G.M. (2011) Journal of the American Psychiatric Nurses' Association 17 (1) 57 - 63	Qualitative	Adaptations to ACT could be made to included innovative practices addressing issues of integration with primary care.	Unique study with findings that inform service development	Small convenience sample may impact on generalisability of findings

Title, Author(s) and publishing details	Study type	Findings	Strengths	Limitations
The chasm of care: Where does the mental health nursing responsibility lie for the physical health care of people with severe mental illness? Wynaden, D., Heslop, B., Heslop, K., Barr, L., Lim, E., Chee, G-L., Porter, J., and Murdock, J. (2016) International Journal of Mental Health Nursing 25, 516–525	Cross sectional study using the PHASe	Culture of the workplace impacted on the level of physical	Well documented study that documents clear evidence of uncertainty regarding responsibility for physical health care	Australian study with findings that may not be generalizable to the UK
Causes of the excess mortality of schizophrenia Brown, S., Inskip, H. and Barraclough, B. (2000) British Journal of Psychiatry 177 212 – 7	Cohort study	Concluded that some of the excess mortality of schizophrenia could be lessened by reducing patients' smoking and exposure to other environmental risk factors	Mental health practitioner can support physical health by improving the management of medical disease, mood disturbance and psychosis	Small cohort Omission of drug/alcohol problems could affect generalisability Recorder or investigator bias could have influenced case note review

Title, Author(s) and publishing details	Study type	Findings	Strengths	Limitations
The physical health of young people experiencing first-episode psychosis: Mental health consumers' experiences Chee, G-L., Wynaden, D. and Heslop, K. (2018) International Journal of Mental Health Nursing 28, 330 – 338	Qualitative	Health professionals need to support young people's health literacy especially regarding maintaining healthy lifestyle	Clearly documented research design and execution focusing on the role of mental health nurses and potential improvements to practice	92% of respondents were male constituting a gender bias
Physical health care for people with severe mental illness: The role of the general practitioner Beecroft, N., Becker, T., Griffiths, G., Leese, M., Slade, M. and Thornicroft, G. (2001) Journal of Mental Health 10 1 53 – 61	Qualitative Study - 309 patients interviewed	Patients who visit there GP for physical health checks were more satisfied that their physical health needs were met	Argues strongly for the role of the GP in supporting the physical health of people with mental illness	Low response rate and potential for interviewer bias
Primary Care after Psychiatric Crisis – A qualitative analysis Griswold, K., Zayas, L.E., Pastore. P.A., Smith, S.J., Wagner, C. and Servoss, T.J. (2008) Annals of Family Medicine	Qualitative inquiry	Care management is effective but collaboration between primary care and mental	Study added further insight into a previously reported randomised control trial	Interviews conducted face to face and via telephone and no blinding of interviewers

Title, Author(s) and publishing details	Study type	Findings	Strengths	Limitations
6 1 38 – 43		health services could improve this		
Can a brief health promotion intervention delivered by mental health key workers improve client's physical health?: A randomised controlled trial Brown, S. and Smith, E. (2009) Journal of Mental Health 18 5, pp 372-378	Randomised Controlled Trial	More intensive approaches to physical health promotion might achieve better outcomes for patients.	The package of care introduced in the trial reflected current best practice accurately.	Small sample (n= 15), with possibility for type two error.
All -cause mortality among people with serious mental illness, substance use disorders and depressive disorders in south east London: a cohort study Chang, C-K., Hayes, R.D., Broadbent, M., Fernandes, A.C., Lee, W., Hotopf, M. and Stewart, R. (2010) Bio Med Central Psychiatry 10:77	Cohort study	Higher mortality rates persist for people with serious mental illness, substance misuse and depressive disorders. Mortality risk differs with age, diagnosis, gender and ethnicity.	More than 31,000 clinical records reviewed	Prevalence bias may have been introduced. Data on causes of death not included, and some diagnostic overlap of categories was recognised
Promoting physical health in youth mental health	Qualitative	Focussed study	Interview data	"All" psychiatrists

Title, Author(s) and publishing details	Study type	Findings	Strengths	Limitations
services: ensuring routine monitoring of weight and metabolic indices in a first episode psychosis clinic Hetrick, S., Alvarez-Jimenez, M., Parker, A., Hughes, F., Willet, M., Morley, K., Fraser R., McGorry, P.D., and Thompson A., (2010) Australasian Psychiatry, 18(5) pp. 451 -455	study undertaken following clinical file (n=108) audit		were analysed to determine themes for consequent information raising activities led to useful knowledge transfer	in the clinical team were interviewed, but number is not specified. Local service development is discussed, which may be difficult to replicate
Initial psychometric evaluation of the physical health attitude scale and a survey of mental health nurses Özaslan, Z., Bilgin, H., Yalçın, S.U. and Haddad, M. (2019) Journal of Psychiatric and Mental Health Nursing 27, 62–76.	Cross sectional	Turkish nurses had positive attitudes towards managing physical health care. Training needs were highlighted	Used the PHASe to assess its transferability to Turkish participants. Clear documentation and further psychometric assessment of PHASe conducted	Limited generalisability
Physical health monitoring in mental health settings: a study ***exploring mental health nurses' views of their role*** Mwebe, H. (2016) Journal of Clinical Nursing 26, 3067 - 3078	Qualitative	Mental health nurses are keen to address physical health issues but obstacles such as attitudes of other staff are perceived	Well documented research design with use of narratives to	Limited generalisability as UK study with 11 participants

Title, Author(s) and publishing details	Study type	Findings	Strengths	Limitations
Educating healthcare professionals to act on the physical health needs of people with serious mental illness: s systematic search for evidence Hardy, S., White, J., Deane, K., and Gray, R. (2011) Journal of Psychiatric and Mental Health Nursing 18 721-727	Systematic review	No articles that matched the search criteria were found, confirming paucity of evidence	Search criteria explained in detail	Authors acknowledge that their search criteria could have excluded small studies or studies in progress
'Physical illness in patients with severe mental disorders. I. Prevalence, impact of medications and disparities in health care', De Hert, M., Correll, C.U., Detraux, J., Bobes, J., Cetkovich-Bakmas, M., Cohen, D., Gautam, S., Moeller, H-J., Ndetei, D.M., Newomer, J.W., Uwakwe, R. and Leucht, S. (2011a) World Psychiatry, 10(1), pp. 52-77.	Database review	Evidenced that physical illness is more prevalent in people with severe mental illness	Clearly detailed criteria for inclusion documented	Part 1 of an educational module
Physical illness in patients with severe mental disorders. II. Barriers to care, monitoring and treatment guidelines, plus recommendations at the system and individual level', De Hert, M., Cohen, D., Bobes, J., Cetkovich-Bakmas, M., Leucht, S., Ndetei, D.M., Newcomer, J.W., Uwakwe, R., Asai, I., Moeller, H-J., Gautam, S., Detraux, J. and Correll, C. U. (2011b) World Psychiatry, 10(2), pp. 138 -151	Discussion document in tandem to database review.	Reiterates the issues relating to poor physical health in people with SMI	Examines barriers to physical health care in detail	Part 2 of educational module
Perceptions of mental health nurses and patients about	Literature	Suggests that	Focussed review	Only qualitative

Title, Author(s) and publishing details	Study type	Findings	Strengths	Limitations
health promotion in mental health care: a literature review Verhaeghe, N., De Maeseneer, J., Maes, L., Van Heeringen, C. and Annemans, L. (2011) Journal of Psychiatric and Mental Health Nursing, 18, pp. 487–492.	review	consideration needs to be given to enhancing the perceptions of health promotion in patients and mental health nurses and that attitudes towards the potential of health promotion interventions appear to be in need of change.	with well documented search strategy	studies were included in the review irrespective of the psychiatric diagnosis of patients, so focus was not entirely on people with SMI Studies included had generally small sample size, which could inhibit generalisability
Efficacy of lifestyle interventions in physical health management of patients with severe mental illness Chacón, F., Mora, F., Gervás-Ríos, A. and Gilaberte, I. (2011) Annals of General Psychiatry, 10(22), p. 1 – 10	Systematic Review	Highlights the impact of health promotion strategies	Well documented search strategy	Funding via pharmaceutical company could bias findings towards lifestyle intervention as mitigating risk of anti-psychotic use

Title, Author(s) and publishing details	Study type	Findings	Strengths	Limitations
Guideline concordant monitoring of metabolic risk in people treated with antipsychotic medication: systematic review and meta-analysis of screening practices Mitchell, A. J., Delaffon, V., Vancampfort, D., Correll, C.U. and De Hert, M. (2011) Psychological Medicine, 42(1) pp. 125 – 147.	Systematic Review	Screening for metabolic syndrome in people taking antipsychotic medication is not carried out often enough	Appropriate databases searched, and PRISMA process followed	Quality of findings is influenced by quality of included studies, pharmaceutical funding may introduce bias
Minding our own bodies: reviewing the literature regarding the perceptions of service users diagnosed with serious mental illness on barriers to accessing physical health care Chadwick, A., Street, C., McAndrew, S., Deacon. M. (2012) International Journal of Mental Health Nursing, 21(3), pp. 211-219.	Literature review	Although funding streams vary, physical health care for people with SMI across UK, USA and Australia remains problematic	Appropriate database searched and search strategy clearly reported. Focus on the service user perspective is useful	Only 9 studies included in the review
Role of the mental health nurse towards physical health care in serious mental illness: An integrative review of 10 years of UK Literature Blythe, J. and White, J. (2012)	Systematic review	Mental health nurses mental health nurses may experience	Stringent inclusion criteria and clearly document search strategy reported	Only 9 studies included in the review

Title, Author(s) and publishing details	Study type	Findings	Strengths	Limitations
International Journal of Mental Health Nursing, 21, pp. 193–201.		role Ambiguity regarding physical health care. Notably those working in inpatient settings perceive primary–secondary care interface communication as problematic.		
General physical health advice for people with serious mental illness Tosh, G., Clifton, A.V., Xia, J. and White, M.M. (2014) Cochrane Database Systematic Review, 2014, Mar 28(3).	Systematic Review	Giving health advice to people with SMI might impact positively on morbidity and mortality	All studies reviewed were RCT/quasi RCT	5 studies reviewed,
The perceptions of nurses towards barriers to the safe administration of medicines in mental health settings Hemingway, S., McCann, T., Baxter, H., Smith, G., Burgess-Dawson, R. and Dewhirst, K. (2014)	Cross sectional Survey	Discussed poor knowledge base as a barriers faced by nurses	Focus on antipsychotic use and impact on physical health	Sample recruited from one mental health trust and generalisability may be limited

Title, Author(s) and publishing details	Study type	Findings	Strengths	Limitations
International Journal of Nursing Practice. Available at: https://onlinelibrary.wiley.com/doi/pdf/10.1111/ijn.12266 (Accessed: 17 July 2017).		when administering medication and consequent impact on physical health		
Evolving Self-Care in Individuals with Schizophrenia and Diabetes Mellitus El-Mallakh, P. (2006) Archives of Psychiatric Nursing, 20(2), pp. 55-64.	Qualitative grounded theory study	Self-care for people with SMI and diabetes relates to them being able to master their mental illness and accommodate their diabetes	Clearly documented methodology	11 respondents self-reported and recall bias may be an issue
A qualitative study: Barriers and facilitators to health care access for individuals with psychiatric disabilities. Mesidor, M., Gidugu, V., Rogers, E.S., Kash-MacDonald, V. M., Boardman, J B.(2011) Psychiatric Rehabilitation Journal 34 (4) 285 - 294	Qualitative study undertaken as part of a larger RCT	Barriers to delivering physical health care to people with SMI relate to financial, administrative , staff and service user issues	Methodology clearly documented	Localised study which may limit generalisability of findings
An ethnographic study of the incentives and barriers to lifestyle interventions for people with severe mental	Ethnographic qualitative	A range of barriers were	Participant observation and	Limited generalisability

Title, Author(s) and publishing details	Study type	Findings	Strengths	Limitations
illness Roberts, S. H. and Bailey, J. E. (2013) Journal of Advanced Nursing, 69(11), pp. 2514 – 2524.	study	identified which health care professionals should consider when delivering lifestyle interventions	interviews undertaken	
Diagnostic Overshadowing: a potential barrier to physical health care for mental health service users Nash, M. (2013) Mental Health Practice, 17(4), pp. 22-26.	Exploratory narrative	Clarifies what constitutes diagnostic overshadowing the discusses implications for practice	Non-statutory agency involved in writing the paper adds authenticity to recommendations	
What does mental health nursing contribute to improving the physical health of service users with severe mental illness? A thematic analysis Gray, R. and Brown, E. (2017) International Journal of Mental Health Nursing, 26, pp. 32–40.	Qualitative study	30 nurses and 15 service users were interviewed	Emerged themes relate closely to this study	Male interviewer may have inhibited female participants to discuss sensitive issues.
Physical health care for people with mental illness; Training needs for nurses Happell, B., Platania- Phung, C. and Scott, D. (2013)	Survey	Mental health nurses indicate that they would benefit	Use of PHASe with modifications endorsed the	Low response rate may affect generalisability of findings; sample

Title, Author(s) and publishing details	Study type	Findings	Strengths	Limitations
Nurse Education Today, 33, pp. 396 – 401.		from physical health training	scale as a valid instrument	bias as respondents may have had enhanced interest in physical health care
Providing Physical Care to Persons With Serious Mental Illness: Attitudes, Confidence, Barriers and Psychological Empowerment Knight, M., Bolton, P. and Kopeski, L. (2017) Archives of Psychiatric Nursing, 31, pp. 447–453.	Exploratory study using the PHASe	Concludes that creative thinking is required to support the management of common physical health co-morbidities in people with SMI	Use of PHASe, and indicated that use of the scale enabled positive attitudes towards physical health management to be evidenced.	Sample was drawn came f one professional organization, therefore did not represent all psychiatric mental health nurses in the U.S. Authors also cite service structure which may impact on empowerment of staff which could impact on scope of practice.
Physical Health Care for People with Severe Mental Illness: the Attitudes, Practices, and Training Needs of Nurses in Three Asian Countries Bressington, D., Badnapurker, A., Inoue, S., Ma, H.Y., Chien, W.T., Nelson, D. and Gray, R. (2018) International Journal of Environmental Research and	International survey using PHASe	Concludes that mental health nurses indicate that physical healthcare training would help them to care for their	Strong relevance regarding use of PHASe, and supports validity of the PHASe, suggesting internal consistency in use	Representativeness of sample and generalisability of findings could be undermined by having translated PHASe into 3 languages

Title, Author(s) and publishing details	Study type	Findings	Strengths	Limitations
Public Health, 15, p. 343. Available at: http://www.mdpi.com/1660-4601/15/2/343/htm (Accessed: 15 July 2018).		patients physical well-being	across different settings.	
Effectiveness and experiences of mental health nurses in cases of medical emergency and severe physiological deterioration: A systematic review Dickens, G.L., Ramjan, L., Endrawesb, G., Barlow, E.M. and Everetta, B. (2019) International Journal of Nursing Studies 95 73–86	Systematic Review	Comparisons were made of the use of PHASe and the international information regarding mental health nurses' attitudes was generated	Large study with well documented search strategy	Some studies in the review included non-nursing staff
Mental Health Nurses Attitudes and Practice Toward Physical Health Care in Jordan Ganiah, A.N., Al-Hussami, M., and Alhadidi, M.M.B. (2017) Community Mental Health Journal 53, 725–735	Cross sectional	Mental health nurses have positive attitudes toward managing physical health care	Well documented research design and clear data analysis	Reporting bias due to use of questionnaires
Parity of esteem: addressing the inequalities between mental and physical healthcare Mitchell, A.J., Hardy, S. and Shiers, D. (2017) Advances in Psychiatric Treatment 23 3 196-205	Discussion paper			

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Appendix 3 University Ethical Approval Letter

29th October 2015

JUDITH SKARGON

SCHOOL OF HEALTH AND HUMAN SCIENCES

UNIVERSITY OF ESSEX

WIVENHOE PARK

COLCHESTER

ESSEX

CO4 3SQ

Dear Judith,

Re: Ethical Approval Application (Ref 14044)

Further to your application for ethical approval, please find enclosed a copy of your application which has now been approved by the School Ethics Representative on behalf of the Faculty Ethics Committee.

Yours sincerely,

Ethics Administrator

School of Health and Human Sciences

cc. Research Governance and Planning Manager, REO

Appendix 4 – Mental Health Trust Ethical Approval Letter

[redacted]

22nd February 2016

Mrs Judith Skargon
School of Health and Human Sciences
University of Essex
Colchester
CO4 3SQ

Dear Mrs Skargon,

An exploration of mental health nurse's attitudes to managing their patient's physical health

Project Reference Number	IRAS 154849	R&D 1510/1
NRES Reference Number	N/A	
Research Ethics Committee Approval	N/A	
Sponsor	University of Essex	
Protocol Reference	Protocol v4, 9/9/2015	
Approved Research Site	North Essex Partnership University NHS Foundation Trust	

I am pleased to confirm that the above study (defined by those documents listed overleaf) now has permission to proceed at the above site. Please note that this permission only relates to the above Site.

May we remind you that the Principal Investigator is locally responsible for ensuring that:

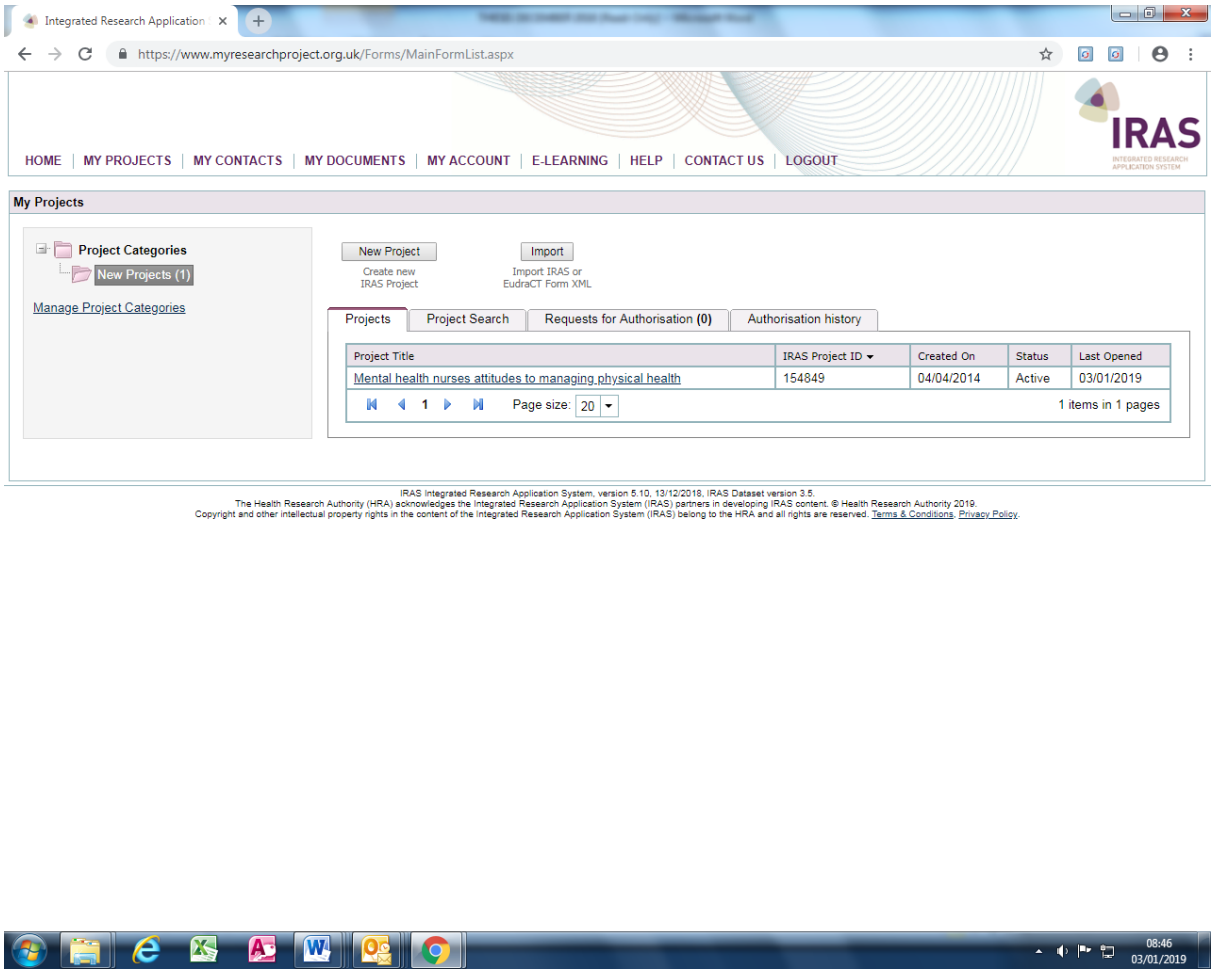
- The study is conducted in accordance with the Department for Health Research Governance Framework
- The study complies with the law, all internal Trust policies and processes and any relevant good practice guidance, including ICH GCP and reporting of Serious Adverse Events / SUSARS
- Appropriate indemnity arrangements are in place
- NHS Permission is sought for all project amendments
- The study is managed in a way that internal or external monitoring can be carried out with reasonable notice.

Very best wishes for your study, and please do not hesitate to contact me for any assistance during the project.

Yours sincerely,

[redacted]

Appendix 5– IRAS screenshot



Appendix 6 – Interview Participation and Consent

I agree to take part in a recorded interview with Judith Skargon as part of her research. I understand that she is undertaking the Professional Doctorate in Nursing at the University of Essex, and is conducting interviews for her Research Project exploring mental health nurses' attitudes towards managing their patient's physical health.

I understand that the recording will be kept in a secure place. Only Judith Skargon and her academic supervisor will have access to this information. Upon completion of this project, all data will be destroyed.

I am aware that my participation in this interview is voluntary, and I understand the intent and purpose of this research. If, for any reason, at any time, I wish to stop the interview, I may do so without having to give an explanation.

I am aware the data will be used in a research project being undertaken as part of the Professional Doctorate and that I have the right to review, comment on, and/or withdraw information from the transcript of my interview before the project is submitted The data gathered in this study are confidential with respect to my personal identity, unless I disclose information that indicates a breach of patient safety.

If I have any questions about this study, I am free to contact the researcher or the academic supervisor whose contact details are below.

I have been offered a copy of this consent form that I may keep for my own reference.

I have read the above information and, with the understanding that I can withdraw at any time and for whatever reason.

I consent to participate in today's interview.

_____ _____

Participant's signature Date

_____

Interviewer's signature

Researcher:

Judith Skargon

Lecturer/Practitioner

School of Health and Human Sciences

University of Essex

Wivenhoe Park

Colchester CO4 3SQ

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Academic Supervisor

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e mail petem (non-Essex users add @essex.ac.uk)

Appendix 7- Interview schedule – Registered Nurse

Introductions and welcome

Explanation of purpose of interview and completion of consent forms.

Please tell me about your clinical role.

Please tell me about your experiences relating to managing the physical health of your patients.

What do you think works well?

What do you think requires improvement?

Prompt – have you come across any particular physical health conditions?

Please tell me your thoughts on how your management of physical health issues could be supported.

Prompt – do you feel you have any training and/or development needs?

Is there anything further you would like to discuss?

Thanks and close.

Please note that a transcript of the interview will be made available to you so that you may check the accuracy of the contents.

Appendix 8 – Interview schedule Student Nurse

Introductions and welcome

Please tell me when you commenced your mental health nurse training.

Explanation of purpose of interview and completion of consent form

Please tell me about your experiences of managing the physical health of your patients.

What do you think works well?

What do you think could be improved?

Please tell me your thoughts on how you feel your training addresses your future role in managing physical health issues.

Is there anything further you would like to discuss?

Thanks and close

Please note that a transcript of the interview will be made available to you so that you may check the accuracy of the contents.

Appendix 9 Interview Transcript - RN 2

	Please tell me your experience of managing physical health and mental health setting	
Issues of access to services	Sometimes patients are really in control of their health, and they know more about their condition we do, but I can think of an immediate example of a gentleman who comes to my clinic who has very poorly managed diabetes, and probably as a result of the years of antipsychotics and eating poorly and all the stuff that comes with the appetite et cetera he has got poorly managed diabetes and we are really struggling to get him to engage with the GP. There's lots of issues, related to his mental illness, around him not wanting to be ill in any way he doesn't want to be diabetic he doesn't want to be schizophrenic he's got lots of problems with getting his head round his serious illness so it is a struggle to manage to get him into services some of which have quite limited access. It's difficult for us to manage the long term complications of something like diabetes but it is equally as difficult for us to get them into the services who can do that. We have to manage the fallout from when patients cannot access other services	Diabetes Primary care Access to services
	There is a gap in these services that patients can fall into and if I do things like monitor some parameters for a sample say	

Psychiatrist Reluctance to prescribe Diagnostic overshadowing Role of mental health nurse in health	someone's got high blood pressure if it's just a one off I may not act on it straight away depending on how high is but I don't jump up and down but I might get them to come back the next day or the next week and I'll write to the GP and say look this is what we found, and will ask the patient to make an appointment, but you can't ask the GP to please encourage the patient to come……it's difficult for the GP to do that and with sometimes it's their expectation that obviously that's what we are monitoring When we find some things wrong with physical health our psychiatrist may intervene but they don't prescribe around diabetes and high blood pressure and I think it might be helpful if at any time in the future we could actually look at doing the whole package and looking after the physical health entirely. So we just take the patient on in secondary care but at what point would you hand back. I know we have some shared care arrangements, but it does lead you to question what primary care are contributing Some of my patients will go there and it'll be fine but others don't engage and I don't know what that's about I don't know if it's because they have negative experiences or maybe they're just a bit scared of going. I know that I've done some work with the associate practitioners, some of this is about	Issues with primary care Issues with primary care Mental health nurse supporting access to primary care

promotion	them actually taking the person to the GP for a couple of times so that they can get a relationship built with the doctor, but the other thing that they sometimes find is that they go along to the GP with something and it's always put down to their mental health problem rather than their physical health actually being the problem and it might be that they're being a bit anxious or this something related to them perhaps something psychotic and it's just a belief on the part of the GP rather than a true picture. I think the patient's insight into managing their physical health is affected by mental health – so we need to help them understand this, if we don't give them the right messages, they can't make an informed choice.	
Diagnostic overshadowing	You know, that whole diagnostic overshadowing stuff – one of my patients went to his GP complaining of chest pain, and an ECG was recorded and normal so he was sent away - I think if I'd gone with the same story I might have ended up with more investigations … another one of my patients has very poorly controlled diabetes and when he's unwell, he doesn't want to have anything to do with monitoring blood sugar or taking meds or eating properly – we keep an eye on relapse indicators like him telling us he isn't diabetic	
	I had another gentleman who told me he had a problem	

	with his chest explaining that it hurt and that he'd been to the walk-in centre and had an ECG done which was normal but the pain continued so we went to his GP. The GP just told him he was fine and that he was worried and to go away but the pain is continuing and it wasn't looked at further where is I'm thinking that if I'd gone to the GP with that story I think again, I might have more investigations perhaps a 24-hour trace done	
	PAUSE	
	This particular gentleman had also had a problem with the dentist because he has a strange way of expressing himself and had gone to the dentist and said that he felt there was spikes coming through his head where in fact he was having significant toothache. It turned out that this patient had an abscess but had been describing his pain in quite a psychotic manner. Once he came to see me and explained the situation I was able to phone the dentist and let them know that he had significant mental health issues but that he had been in pain and that his mental health problem meant that he was not good at expressing himself, but that he was not someone who is going to harm anyone……. but his language was just his way of expressing his pain. They gave him another appointment and recognised the abscess which	Example of difficulty with accessing primary care dentist

	led to them giving him antibiotics and after this treatment he was fine it seems so unfair that his treatment was delayed which meant he was in pain for longer than he needed to have been. I suppose if you're not aware of what someone might be saying, it could come across as slightly weird and potentially a bit scary	
	Any other issues you've come across, do you think?	
Obesity related to anti-psychotic use	I would say is that more than half my patients are overweight they've had so many antipsychotics and have so many risk factors because they tend to put weight on in the wrong places. You know we have lots of ladies and gentlemen is with very big waists and they're rather apple shaped rather than pear-shaped so have an unhealthy fat distribution and it's quite hard to get people motivated to do anything about that.	
	Do you think your training prepared you for managing physical health?	
	It's a long time ago since I did my training so I don't know really what they have now but I can remember feeling unprepared and I know that my experience when I worked on the ward we had a situation where someone actually died from physical health complications.	

Benefit of colour coded (NEWS) style recording Concern regarding maintaining up to date knowledge	In this case it was pneumonia that caused the problem and the patient became unwell very quickly. We have now got the track and trigger which is really helpful because it points out where observations are within normal range but I just wonder if we are prepared when we start as nurses we might be quite confident but we don't see some conditions very often and this is not often enough to know always know how to handle them. And I think also that we have had that historical thing of well we are mental health nurses we don't do that acute physical health stuff. I think it happens the other way round because often general nurses don't know what to do with the mental health side of things even though it's about being with people fundamentally that's what we do it's about being with people and helping them through whatever the difficulty is..... pain or mental health crisis. I don't think we are prepared enough and I don't think from an ongoing perspective that we continue to be prepared enough because things change and that she sometimes in general health care it can change quite quickly. Vital signs can change quickly so the advice might change quickly. Things change about how you deal with something so for example the latest things around wound care and dressings and things like that can change. And it	Parity of esteem

	can be difficult for us to keep up and we would look to a specialist colleagues for advice to guide and help us	
	How do you feel about health promotion, how does that work with your patients?	
Recognition of unhealthy lifestyles	Stuff that I'm trying do with my patients – it's about looking at lifestyles - so it's about getting people to look at their lifestyle and identifying if they can see what's unhealthy, and in fact, that health promotion which I think for all of us. it is quite difficult because we all know that we possibly eat too much we don't do enough exercise - or some of the people I see maybe drink too much smoke, take a few substances that maybe don't assist their mental health. Sometimes is difficult to get the right level of information because sometimes I think they get it from all angles, and end up feeling overwhelmed. So our doctors will talk to them about it and then if I go along and talk about it to someone feel a bit nagged and some of them will listen and try and make changes but it's about keeping people engaged with the message. It is difficult to motivate people, but when we get the chance, we should try and discuss physical health promotion", and "they" (the patients) get it (physical health advice) from the doctors too, and sometimes I think they feel a bit nagged … it feels hard	

	to keep on top of the most up to date information regarding physical health promotion	
Challenge of health promotion	I've got a few people with diabetes and if you can get the message across about them managing their diabetes and explaining that if they can keep the sugar under control that they are less likely to suffer the side effects and consequences of the disease and also it can help with mood as well. Because if your diabetes is poorly managed and your blood sugar levels are all over the place your mood is potentially going to follow that you are going to feel unwell and may be more aggressive at times or like you've got no motivation…. but is getting that message without being negative it's quite difficult. I've got health promotion booklets and I do acknowledge with people that the medication does make it even harder for them. I know we have trust targets and initiatives that are encouraging us to support a patient's physical health but it is difficult when they feel they're always being told they getting things wrong. If somebody is on clozaril it increases the appetite it gives them a craving for food that that is full of carbs and full of sugar, those things we know we should be eating so it's about trying to get my patients to make small changes and recognising when they've done something small and how	Health promotion Time for health promotion

	good that is. But it is difficult especially bearing in mind that see people for about 20 minutes to half an hour once a month. But we are trying to develop a more team approach and our associate practitioner is doing more about physical health and health promotion but it is ultimately how much time we have to do that and get the message across.	
	PAUSE	
	It is hard because of all the things we have to do because as well as actually seeing people we have to document that we are trying to them keep up-to-date with care plans and risk assessments which are all important and are things that you have to do– with the physical health promotion stuff, even little things like having access to the booklets and having them physically where you are that you have to go look for them would be helpful I know it doesn't sound like a lot but I only work 15 hours a week in that role and that's quite a lot to fit into that time. I'd like to be able to do it all with some people we really do have success stories for example I've got one lady who used to weigh more than 17 1/2 stone and I weighs just under 13 and instead of giving her the message that she still got weight to lose it's been fantastic to be able to point out how successful she has been. She has been able to do this just by walking, so not by having to do runs or	Time constraints Nurses role in clarifying health promotion

	marathons just by walking which is been easy for her to take up. And a lot of our patients will eat food that is convenient so like they'll go to the chip shop but if you just point out that if you have less takeaway is in the week and do more though steps it will help – just small changes, My patients are far more likely to think seriously about improving their physical health if I clearly explain what's needed and what little changes they can make to their lifestyle – just make the info accessible for them	information
	PAUSE	
	How can we encourage our mental health nurses to spread the Health promotion message?	
Approach of	Well what worked for me was somebody dying! I think it's about trying to get the message to people that it's okay to not know it's okay to seek advice but it's not okay to think that it's not our role. Same with infection control and I think that people are starting to get the message that things related to physical health are important in the mental health setting. About being out there and get in the message over and about recognising when people have done really good things as I think people respond to that as there are so many messages in practice about what we haven't achieved that we perhaps maybe could do a little bit more when we do	Recognition of MH nurses' role Help people to understand health promotion

doctors towards physical health Access to expert advice Reference to medical confidence	something well. I don't know if it's a training issue you know from scratch, with the universities because it's either you you're in a mental health placement or a physical health placement there is a big divide. And also the doctors that you get, if you happen to get a doctor that is very much into particular things about physical health you're probably going to get that embedded in practice a bit more then someone who says if there is a physical health problem they just go back to the GP or it goes to the general. We do have scope of practice but I think it's about understanding - it's maybe is broader and lots of things that we are worried about we can actually fix it's just about helping people to recognise it. It's great when we get access to specialist services and they come in and support as I know we've had district nurses in who's been out to us about tissue viability and wound care it's been brilliant It means that our staff can take things on and run with them and it increases the confidence. Whether it is reassurance and support from experts this helps nurses to feel more empowered and more confident in perhaps extending the scope of practice to something that they may not have done before. I Remember nursing a lady who had a really bad hand injury and the plastics department sent a very detailed	

	care plan and information about the dressings and everything and we were really diligent about doing the dressing and the feedback we got was that we at she probably did a better job or as good a job as they would've done on this particular wound. This was mostly because we were so scared of getting it wrong we were meticulous about doing the dressing. Even having the confidence to assess the wound when someone self- harm is unclear can we Steri-Strip? but actually people so often go off to the acute care…we could do quite a lot ourselves with the right support….if our ward doctor is happy to support us with the physical health stuff we feel much better about it!	