LESSONS FROM THE COVID-19 PANDEMIC: Improving access to adult mental health services for LGBTQ+ people in Lancashire and South Cumbria

Hayley J. Lowther-Payne

Lancaster Medical School
Faculty of Health and Medicine
Lancaster University

November 2024

This thesis is submitted for the degree of Doctor of Philosophy in Social and Behavioural Sciences in Medicine

Abstract

The COVID-19 pandemic and associated restrictions significantly disrupted the delivery of mental health services, worsened the mental health of the population, and exacerbated existing health inequalities. Whilst COVID-19 disproportionately increased the presentation of mental health difficulties for lesbian, gay, bisexual, transgender, and queer (LGBTQ+) people, limited evidence exists on how it may have impacted inequalities in access to mental health services for these population groups. Therefore, this thesis presents mixed methods research which aimed to explore access to mental health services for LGBTQ+ people during the COVID-19 pandemic. First, a systematic mapping review was undertaken to understand how inequalities in access to adult mental health services in the UK have been researched previously. Second, routinely collected NHS mental health service data were analysed to explore the feasibility of examining variations in access by sexual orientation and how these changed during COVID-19. Finally, topic-guided interviews were conducted with LGBTQ+ people who accessed mental health services during the pandemic to explore their experiences of access. Levesque's Conceptual Framework for Healthcare Access was adopted throughout this research to conceptualise what was meant by "access". The review emphasised a need for mixed methods research to examine access to mental health services for LGBTQ+ people. Together, the primary research studies generated insight into the disproportionate effects that the COVID-19 pandemic had on LGBTQ+ people, through an increased risk of mental ill health from isolation and loss of social connectedness, and unique challenges in negotiating access to mental health services under crisis conditions, such as insufficient resources, experiences of stigma, and concealing their identity. This thesis concludes that much remains to be done within policy to prioritise the potential vulnerabilities of LGBTQ+ people and mitigate against disproportionate effects in the event of future crises. Improvements in sexual orientation and gender identity data collection and the inclusivity of mental health services, by enhancing the knowledge and competencies of professionals providing mental healthcare to LGBTQ+ people, is recommended to address the poor experiences of LGBTQ+ service users.

Declarations

This thesis is submitted to Lancaster University for the degree of Doctor of Philosophy in Social and Behavioural Sciences in Medicine.

I declare that this thesis is my own work and has not been submitted for the award of a higher degree elsewhere.

The following sections of this thesis have been or will be submitted for publication:

- **Chapter 4** – "*Understanding inequalities in access to adult mental health services in the UK: a systematic mapping review*". This systematic mapping review chapter has been published in *BMC Health Services Research*.

- **Chapter 5** – "*Access to NHS adult mental health services during COVID-19 for sexual minority groups in an area of North West England: an exploratory study using routinely collected data*". This exploratory quantitative study chapter has been prepared in a publishable format and intended for submission to *Social Psychiatry and Psychiatric Epidemiology*.

- **Chapter 6** – "*LGBTQ+ experiences of accessing NHS adult mental health services during COVID-19 in an area of North West England: a qualitative interview study*". This qualitative interview study chapter has been prepared in a publishable format and intended for submission to *BMC Health Services Research*.

A statement of authorship is detailed below for sections of this thesis which have been or will be submitted for publication:

- **Chapter 4** – "*Understanding inequalities in access to adult mental health services in the UK: a systematic mapping review*". The primary author of this chapter was the PhD researcher (HL). HL was responsible for joint conceptualisation of the review and conducted the database searches, screening, data extraction, data analysis, and write-up of the paper. Louise Speakman (LS), a faculty librarian, reviewed and provided feedback on the search strategy. Addie Beckwith (AB) and Catherine Liberty (CL) supported by duplicating a proportion of title, abstract, and article screening, and data extraction as per methodological requirements of systematic mapping reviews and provided feedback on the analysis and final draft of the paper. Three academic supervisors, Anastasia Ushakova (AU), Rhiannon Edge (RE), and Fiona Lobban (FL), contributed to conceptualisation of the review and provided support with the analysis and feedback on drafts of the paper.

- **Chapter 5** – "*Access to NHS adult mental health services during COVID-19 for sexual minority groups in an area of North West England: an exploratory study using routinely collected data*". The primary author of this chapter was the PhD researcher (HL). HL was responsible for joint conceptualisation of the study, and drafted the NHS ethics application. HL acquired data compiled by the NHS Trust and conducted data analysis and write-up of the paper. Two academic supervisors, AU and FL, contributed to study conceptualisation and provided support with the analysis and feedback on drafts of the paper. An additional academic supervisor, Jo Knight (JK), provided support with the analysis and feedback on drafts of the paper. AB provided support with the analysis and feedback on the final draft of the paper.

- **Chapter 6** – "*LGBTQ+ experiences of accessing NHS adult mental health services during COVID-19 in an area of North West England: a qualitative interview study*". This primary author of this chapter was the PhD researcher (HL). HL was responsible for joint conceptualisation of the study, and drafted the university ethics application. HL conducted participant recruitment, data collection, data analysis, and write-up of the paper. AB contributed to study conceptualisation and provided support with the analysis and feedback on the final draft of the paper. Two public advisers, Neil Caton (NC) and Keith Holt (KH), contributed to study conceptualisation, and provided support with the analysis and feedback on the final draft of the paper. Two academic supervisors, FL and AU, contributed to study conceptualisation and provided support with the analysis and feedback on drafts of the paper.

This research was supported by the National Institute for Health and Care Research (NIHR) Applied Research Collaboration North West Coast (ARC NWC) through the form of a doctoral studentship. The views expressed in this thesis are those of the author and not necessarily those of the NIHR or the Department of Health and Social Care.

The word count for this thesis, constituted by the main text and text from table and figures, excluding the bibliography and appendices, is 54,793 words, and therefore does not exceed the maximum permitted word length of 80,000 words.

Acknowledgements

I would like to express my heartfelt thanks to the following people, who have been instrumental in my PhD journey and without whom I would not have been able to complete this thesis.

To my fantastic supervisory team over the three years. Fi, thank you for sharing your catalogue of expertise and experience, and supporting me to become a better mixed methods researcher. Anastasia, thank you for always being my cheerleader throughout my PhD, helping me to find my passion, and the many hours we spent putting the world to rights together. Rhiannon, thank you for starting this PhD journey with me and setting me off on the right track. Jo, thank you for stepping in towards the end and going the extra mile to help me get this thesis submitted. I will be eternally grateful for all of your encouragement, support, and feedback, and it’s been an absolute privilege to learn from you all.

To my funders at ARC NWC, thank you for not only providing the financial support which allowed me to pursue this personal development opportunity, but also for the practical support to enable me to include PPI, engage with stakeholders, build networks, and attend conferences, all of which contributed to ensuring this research was of benefit.

To colleagues at LSCft, in particular Phil and Andrew, thank you for sharing your knowledge of mental health services and providing practical advice and guidance to access, analyse, and interpret the data, without which this research would not have been possible.

To the service users whose data I analysed, the participants who took part in my qualitative study, and my public advisers Keith and Neil, a special thank you for sharing your knowledge, experiences, and time with me, you were instrumental in the undertaking of this research.

To my friend Nicola, thank you for the many writing sessions spent in the library together and your overall encouragement and moral support throughout my PhD.

To my favourite four legged companion Henry, thank you for always being there to greet me with your stomping paws and wagging tail after a long day of research and writing.

Finally, to my wife Jessica, thank you for always believing in me, especially when I didn’t believe in myself. I couldn’t have done this PhD without your unwavering confidence in me and I am forever grateful to you for being my comrade in this adventure. You really are best of wives and best of women!

Table of contents

Publications arising from this thesis

Lowther-Payne HJ, Ushakova A, Beckwith A, Liberty C, Edge R, Lobban F. Understanding inequalities in access to adult mental health services in the UK: a systematic mapping review. BMC Health Services Research 2023;23(1042). https://doi.org/10.1186/s12913-023-10030-8

Lowther-Payne HJ, Knight J, Lobban F, Beckwith A, Ushakova A. Access to NHS adult mental health services during COVID-19 for sexual minority groups in an area of North West England: an exploratory study using routinely collected data. (in preparation).

Lowther-Payne HJ, Holt K, Caton N, Beckwith A, Ushakova A, Lobban F. LGBTQ+ experiences of accessing NHS adult mental health services during COVID-19 in an area of North West England: a qualitative interview study. (in preparation).

Other outputs arising from this thesis

Oral presentations

Lowther-Payne HJ. "If we're not counted, we don't count": sexual orientation and gender identity data collection in healthcare services. Health Data Research UK (internal meeting – invited talk). 05/06/2024 & 25/06/2024.

Lowther-Payne HJ. Understanding access to NHS adult mental health services for sexual minority groups in North West England: an exploratory study using routinely collected data. Health Data Research UK Conference (early career researcher lightning talk). 05/03/2024.

Mountain R, Garner A, Lowther-Payne HJ. Achieving best practice in research with routinely collected data: confessions of a PhD student. National Institute for Health and Care Research (NIHR) Statistics Group Conference (conference workshop). 23/06/2023.

Poster presentations

Lowther-Payne HJ, Holt K, Caton N, Beckwith A, Ushakova A, Lobban F. LGBTQ+ experiences of accessing mental health services during the COVID-19 pandemic: a qualitative interview study. Health Services Research UK Conference (Oxford). 08/07/2024.

Lowther-Payne HJ, Ushakova A, Lobban F. Access to NHS mental health services for sexual minority groups in Lancashire and South Cumbria: an exploratory study using routinely collected data. Lancaster University Faculty of Health and Medicine Postgraduate Research Symposium (Lancaster). 23/04/2024.

Lowther-Payne HJ, Ushakova A, Lobban F. Access to NHS mental health services for sexual minority groups in Lancashire and South Cumbria: an exploratory study using routinely collected data. Queer Medical Humanities Network Public Research Showcase (Lancaster). 19/04/2024.

Lowther-Payne HJ, Ushakova A, Lobban F. Access to NHS mental health services for sexual minority groups in Lancashire and South Cumbria: an exploratory study using routinely collected data. MQ DATAMIND Mental Health Data Science Meeting (London). 19/10/2023.

Lowther-Payne HJ, Ushakova A, Beckwith A, Liberty C, Edge R, Lobban F. Researching inequalities in access to adult mental health services in the UK: a systematic mapping review. Health Services Research UK Conference (Birmingham). 04/07/2023.

Lowther-Payne HJ, Ushakova A, Lobban F. Lessons from the COVID-19 pandemic: access to mental health services for LGBT+ people in Lancashire and South Cumbria. Lancaster University Faculty of Health and Medicine Postgraduate Research Symposium (Lancaster). 29/03/2023.

Lowther-Payne HJ, Hall P, Ushakova A, Lobban F, Edge R. Lessons from the COVID-19 pandemic: access to mental health services for LGBT+ people in Lancashire and South Cumbria. National Institute for Health and Care Research (NIHR) Applied Research Collaboration North West Coast (ARC NWC) (Kendal). 13/09/2022.

Lowther-Payne HJ, Ushakova A, Lobban F, Edge R. Lessons from the COVID-19 pandemic: access to mental health services for LGBT+ people in Lancashire and South Cumbria. Lancaster University Faculty of Health and Medicine Postgraduate Research Symposium (Lancaster). 30/03/2022.

Blogs

Lowther-Payne HJ. "If we're not counted, we don't count": sexual orientation and gender identity data collection in healthcare services. Health Data Research UK. 24/06/2024. (https://www.hdruk.ac.uk/news/pride-guest-blog/)

Lowther-Payne HJ. The value of LGBTQ+ experiences when designing and delivering mental health services. Lancashire and South Cumbria NHS Foundation Trust (LSCft). 06/03/2024. (https://lnks.gd/l/eyJhbGciOiJIUzI1NiJ9.eyJidWxsZXRpbl9saW5rX2lkIjoxMTAsInVyaSI6ImJwMjpjbGljayIsInVybCI6Imh0dHBzOi8vY29udGVudC5nb3ZkZWxpdmVyeS5jb20vYXR0YWNobWVudHMvVUtMU0NGVE5IUy8yMDI0LzAzLzA2L2ZpbGVfYXR0YWNobWVudHMvMjgwNTE3OC8yNC4wMi4yMiUyMExTQ2Z0JTIwTEdCVCUyMEhpc3RvcnklMjBNb250aCUyMFBoRCUyMEJsb2clMjAlMjgwMDIlMjkuZG9jeCIsImJ1bGxldGluX2lkIjoiMjAyNDAzMDYuOTEzNjIxOTEifQ.C5yViMMktuJvXltRHlsB2cUWuQIlbe23es0zKpRbK7k/s/1882407197/br/238298071519-l)

Mountain R, Lowther-Payne HJ, Garner A. Using NHS routinely collected data to power PhD research. Lancaster University. 21/02/2024. (https://www.lancaster.ac.uk/business/case-studies/using-nhs-routinely-collected-data-to-power-phd-research#tabs-485430-1)

Lowther-Payne HJ. “If we’re not counted, we don’t count”: inequalities in access to mental health services for LGBTQ+ people. National Institute for Health and Care Research (NIHR) Applied Research Collaboration North West Coast (ARC NWC). 14/07/2022. (https://arc-nwc.nihr.ac.uk/uncategorized/if-were-not-counted-we-dont-count-inequalities-in-access-to-mental-health-services-for-lgbtq-people/)

Brokering Innovation Through Evidence (BITEs)

Lowther-Payne HJ. Mapping existing evidence to understand inequalities in access to adult mental health services in the UK. National Institute for Health and Care Research (NIHR) Applied Research Collaboration North West Coast (ARC NWC). 01/09/2023. (https://arc-nwc.nihr.ac.uk/wp-content/uploads/2023/10/ARC-BITE-SMR-inequalities-in-access-to-MH-services.pdf)

Lowther-Payne HJ. Measuring access to NHS mental health services for sexual minority groups during the COVID-19 pandemic using routinely collected data. National Institute for Health and Care Research (NIHR) Applied Research Collaboration North West Coast (ARC NWC). (in preparation).

Lowther-Payne HJ. Experiences of LGBTQ+ people accessing NHS mental health services during the COVID-19 pandemic. National Institute for Health and Care Research (NIHR) Applied Research Collaboration North West Coast (ARC NWC). (in preparation).

List of tables

List of figures

List of abbreviations and acronyms

AIDS	Acquired immunodeficiency syndrome
AMHS	Adult mental health services
APMS	Adult Psychiatric Morbidity Survey
ARC NWC	Applied Research Collaboration North West Coast
A&E	Accident and emergency
BITE	Brokering Innovation Through Evidence
BME	Black and minority ethnic
BTC	Barriers to care
CAMHS	Child and adolescent mental health services
CBT	Cognitive behavioural therapy
CCG	Clinical commissioning group
CI	Confidence interval
CMD	Common mental disorders
CMHT	Community mental health team
COREQ	Consolidated Criteria for Reporting Qualitative Research
COVID-19	Coronavirus 19
CRHT	Crisis resolution and home treatment team
CRIS	Clinical Record Interactive Search
DUP	Duration of untreated psychosis
ED	Eating disorder
EHR	Electronic health record
EIP	Early intervention for psychosis
EIS	Early intervention services
FEP	First episode of psychosis
FHM	Faculty of Health and Medicine
GBD	Global Burden of Disease
GIC	Gender identity clinic
GP	General practitioner
GPPS	General Practice Patient Survey
GRIPP2	Guidance for Reporting Involvement of Patients and the Public
HIAT	Health inequalities assessment tool
HIV	Human immunodeficiency virus
HRA	Health Research Authority
IAPT	Improving access to psychological therapies
ICD	International Classification of Diseases

ID	Intellectual disability
IMD	Index of multiple deprivation
LGB+	Lesbian, gay, and bisexual (plus other sexual minority identities)
LGBQ+	Lesbian, gay, bisexual, and queer (plus other sexual minority identities)
LGBT	Lesbian, gay, bisexual, and transgender
LGBTQ	Lesbian, gay, bisexual, transgender, and queer
LGBTQ+	Lesbian, gay, bisexual, transgender, and queer (plus other sexual and gender minority identities)
LGBTQIA	Lesbian, gay, bisexual, transgender, queer, intersex, and asexual
LGBTQIA2S	Lesbian, gay, bisexual, transgender, queer, intersex, asexual, and two spirit
LSCft	Lancashire and South Cumbria NHS Foundation Trust
LSOA	Lower-layer super output area
MH	Mental health
MHA	Mental Health Act
NHS	National Health Service
NICE	National Institute for Health and Care Excellence
NIHR	National Institute for Health and Care Research
OCD	Obsessive compulsive disorder
ONS	Office for National Statistics
OR	Odds ratio
OSF	Open Science Framework
PCA	Principal components analysis
PD	Personality disorder
PICU	Psychiatric intensive care unit
PPI	Patient and public involvement
PRISMA-ScR	Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews
PTSD	Post-traumatic stress disorder
RECORD	REporting of studies Conducted using Observational Routinely collected Data
SE	Stakeholder engagement
SLaM	South London and Maudsley NHS Foundation Trust
SMI	Serious mental illness
UK	United Kingdom
USA	United States of America
WHO	World Health Organisation

Chapter 1. Introduction

1.1. Chapter introduction

This introductory chapter sets the context for this research with a brief overview of the problem which the thesis attempts to address. The chapter concludes with the research question and the aims of this thesis, and an outline of the structure of the thesis.

1.2. The problem to address

Facilitating sufficient access to high quality and timely mental healthcare is necessary to improve quality of life and can be considered as a pathway to addressing inequalities associated with experiencing mental health conditions (e.g., lower life expectancy, higher rates of poverty and homelessness, stigma and discrimination) (1). However, less than half of the people needing mental health treatment are able to access the support they need at the time they need it (2, 3). Those who experience poorer mental health often also experience the greatest difficulty in accessing mental health services. Lesbian, gay, bisexual, transgender, and queer (LGBTQ+) population groups experience a higher prevalence of mental health conditions than heterosexual (4) and cisgender people (5), which has been attributed to the greater risk of LGBTQ+ people being exposed to social disadvantage (e.g., stigma and discrimination) (6, 7). Despite this, there has been limited examination of access to mental health services for LGBTQ+ people in the United Kingdom (UK), beyond survey research which has highlighted poorer experiences of access for these population groups (8, 9).

Evidence suggests that the COVID-19 pandemic and efforts to contain the virus worsened the mental health of the population, exacerbated existing health inequalities, and caused significant disruptions to the delivery of mental health services (10). Widespread decreases in people accessing mental health support were observed during the first national lockdown in the UK, but demand has since significantly surpassed pre-pandemic levels and put pressure on overstretched and underfunded mental health services (11). It has been identified that the effects of COVID-19 disproportionately increased the presentation of mental health difficulties for some population groups (e.g., ethnic minorities, younger and older people, those living in deprived areas) (12). Limited evidence however exists on how the pandemic may have impacted on inequalities associated with access to mental health services for other underserved population groups, such as LGBTQ+ people. In order to improve the accessibility of services and address inequalities, it is imperative to observe how demand for and the provision of mental health services may have changed over time for underserved population groups during these crisis conditions (13).

LGBTQ+ people may have experienced unique challenges within the conditions of the COVID-

19 pandemic, such as greater exposure to stigma and discrimination, loss of social support, and loss of access to affirmative care (14, 15). Despite these disproportionate effects and LGBTQ+ people being at a higher risk of developing mental health conditions pre-pandemic, sexual orientation and gender identity have received little attention in research examining the effects of the COVID-19 pandemic on access to mental health services. It is important to ascertain variations in and experiences of access to mental health services during COVID-19 for LGBTQ+ population groups to inform future actions, to not only mitigate against disproportionate impacts if significant disruptions like the COVID-19 pandemic were to happen again, but to improve the inclusivity and equity of services now. The research conducted for this thesis aimed to address this gap in the evidence base.

1.3. The research question

How has access to adult mental health services changed during the COVID-19 pandemic for people who identify as LGBTQ+, and how have changes in access differentially affected these population groups?

1.4. The aims of this thesis

Within the above research question, there were three broad aims for this thesis:

1) to systematically review existing literature in order to understand how inequalities in access to adult mental health services in the UK have been researched previously;
2) to assess the feasibility of using routinely collected data from an NHS Trust based in North West England to investigate differences in access to mental health services for sexual minority and heterosexual service users during the COVID-19 pandemic;
3) and to explore the experiences and perspectives of people who identify as LGBTQ+ who accessed or tried to access mental health services during the COVID-19 pandemic.

1.5. The structure of this thesis

This thesis begins by defining some key concepts and reviewing relevant literature to describe the background to the research, including mental health inequalities, LGBTQ+ population groups, access to mental health services, and the context of the COVID-19 pandemic (Chapter 2). A discussion of the methodology used across the research conducted is presented in Chapter 3, with a detailed rationale of how the studies have been undertaken, the selected mixed methods approach, and how the chosen theoretical framework has been applied. Chapter 4 is a published systematic mapping review undertaken to understand how inequalities in access to adult mental health services in the UK have been researched previously. Chapter 5 presents a quantitative study, written in a publishable format, which explored the feasibility of using routinely collected mental health service data from an NHS Trust to understand if access to services can be measured for people who identify as a sexual minority (e.g., lesbian, gay, bisexual) and if so, how access changed over the course of the COVID-19 pandemic for these groups. A qualitative interview study exploring the experiences and perspectives of LGBTQ+ people who accessed or tried to access mental health services during the COVID-19 pandemic is described in Chapter 6 and written in a publishable format. Chapter 7 concludes this thesis with a detailed discussion of the key findings of this research and the implications for future practice and research, in the context of existing literature.

This thesis is presented in the “alternative format” according to Lancaster University’s Manual of Academic Regulations and Procedures. Chapters 4, 5, and 6 are written as a series of related research articles which have been published or made suitable for publication. Whilst every effort has been made to limit repetition across the chapters of this thesis, there may be some repetition as each of the chapters reporting original research required adequate information for publication.

Chapter 2. Background

2.1. Chapter introduction

This chapter provides an overview of the key concepts considered in this thesis, namely mental health inequalities, lesbian, gay, bisexual, transgender, and queer (LGBTQ+) population groups, access to mental health services, and the context of the COVID-19 pandemic. An in-depth review of existing background literature relevant to these key areas is presented. This chapter concludes with an outline of current gaps in knowledge, which this thesis attempts to address.

2.2. Defining key concepts

2.2.1. Mental health and mental illness

Historically, mental health is a highly complex area with a substantial amount of literature on defining what the term does or does not mean. As this thesis focused on examining access to mental health services, the terms defined below are inferred from those which are currently applied within the design and delivery of publicly funded mental health services in England.

Mental health is a term used to refer to an individual's social, emotional, and psychological well-being. The World Health Organisation (WHO) defines mental health as "a state of mental well-being that enables people to cope with the stresses of life, realise their abilities, learn well and work well, and contribute to their community" (16). Mental health has more recently become a concept which goes beyond just the presence or absence of a mental illness, and is thought to be experienced on a continuum from positive mental well-being through to severe and enduring mental illness (17).

Mental illness is a term used to refer to an illness or condition which causes disturbances in an individual's cognition, perception, and behaviour, and can lead to significant distress and impairments in functioning (16, 17). According to Engel's 1977 biopsychosocial model of mental health, the development of mental illness is thought to be determined by a complex interaction of biological, psychological, and social factors (18). The terms of mental health and mental illness in this thesis are differentiated through the lens that mental illness sits along the continuum of mental health and is classified through the mechanism of psychiatric assessment and diagnosis. In the United Kingdom (UK), the International Classification of Diseases (ICD-10) is used as a reference for mental health professionals to diagnose mental illnesses and includes detailed classifications of mental illnesses and their associated aetiology and symptomology. In the wider literature and across policy documents, mental illnesses are often further categorised into two: common mental health disorders (CMDs) and severe mental illness (SMI). CMDs are termed "common" as they affect a larger proportion of the population and include conditions such as depression and anxiety (19). SMI is a term referring to conditions that are less common such as bipolar disorder and schizophrenia, which can significantly impair an individual's ability to function in society and the symptoms associated with these disorders can be extremely debilitating (20).

2.2.2. Inequalities

Health inequalities are differences in people's health status, and access to and experience of healthcare (21). This thesis considered inequalities as being associated with the unequal distribution of the social determinants of health; in that the conditions in which people are born into, live, work, and age, and the healthcare they are able to access, determine their health status and their health outcomes (22). Krieger (23) defines inequalities as "health disparities, within and between countries, that are judged to be unfair, unjust, avoidable, and unnecessary (meaning: are neither inevitable nor unremediable) and that systematically burden populations rendered vulnerable by underlying social structures and political, economic, and legal institutions". This thesis in particular focuses on mental health inequalities; in that the social and economic conditions people experience determine their mental health status and mental health outcomes, and the unjust disparities associated with access to and use of mental health services.

2.2.3. Sexual orientation

An individual's sexual orientation can be defined as an identity associated with the gender or genders of the people that they are emotionally, romantically, and/or sexually attracted to. An individual belongs to a sexual minority group if they identify with a sexual orientation other than heterosexual, for example bisexual, lesbian, or gay. *Table 1* presents definitions of the most common terms used for sexual orientations.

Table 1. Definitions for most common terms used for sexual orientations

Sexual orientation	**Definition**
heterosexual	men who are attracted to women and women who are attracted to men
lesbian	women who are attracted to other women
gay	men who are attracted to other men / umbrella term for people who are attracted to someone of the same sex or gender
bisexual	someone who is attracted to both men and women
pansexual	someone who is attracted to people regardless of sex or gender
asexual	someone who does not experience sexual and/or romantic attraction

2.2.4. Gender identity

An individual's gender identity can be defined as an identity through which they perceive their gender and may not necessarily match the sex that they were assigned at birth. Another term which is related to an individual's gender identity is gender expression, which is used to describe how an individual chooses to outwardly express their gender identity, often along the continuum of feminine to masculine. An individual belongs to a gender minority group if they identify with a gender identity other than cisgender, for example trans or non-binary. *Table 2* presents definitions of the most common terms for gender identities.

Table 2. Definitions for most common terms used for gender identities

Gender identity	**Definition**
cisgender	someone whose gender is the same as the sex they were assigned at birth
non-binary	someone whose gender does not sit within the binary categories of male or female
trans	umbrella term for people whose gender is not the same or does not sit within the sex they were assigned at birth
transgender man	someone who was assigned female at birth but now identifies as a man
transgender woman	someone who was assigned male at birth but now identifies as a woman

2.2.5. LGBTQ+

There are a range of terms used as an umbrella description for the community of individuals who identify as a sexual and/or gender minority, such as LGBT (lesbian, gay, bisexual, and transgender), LGBTQ (lesbian, gay, bisexual, transgender, and queer), LGBTQIA (lesbian, gay, bisexual, transgender, queer, intersex, and asexual), and LGBTQIA2S (lesbian, gay, bisexual, transgender, queer, intersex, asexual, and two spirit). The main initialism used throughout this thesis is LGBTQ+, which stands for lesbian, gay, bisexual, transgender, and queer, with the + allowing for the inclusion of any other sexual or gender minority identities (e.g., asexual, intersex, non-binary). Whilst sexual orientation and gender identity are different concepts in meaning as defined above, LGBTQ+ people claimed the initialism of LGBT in the 1990s to describe a spectrum of sexual and gender minorities whose experiences were united by a shared movement to defend their human rights. Though historically "queer" has been used as an offensive term referring to someone who is LGBTQ+, this term has been reclaimed and is now used more widely by the LGBTQ+ community either as an umbrella term for LGBTQ+ identities or as a term to describe an identity which does not fit into the other categories. Whilst this thesis recognises the shared experience that people who identify as LGBTQ+ may have had during the COVID-19 pandemic by researching these population groups as a collective, it does not neglect to consider the complexity, diversity, and intersectionality of these identities and how their needs as individual groups may have also differed.

2.3. Mental health

2.3.1. Population mental health

The Global Burden of Disease (GBD) study in 2019 reported an estimated 970.1 million people across the globe were living with a mental health condition, such as depression, anxiety, and psychosis, a 48.1% increase from the estimated 654.8 million people in 1990 (24). Mental ill health represents a top ten leading cause of global disease burden, with 15.6 years lived with disability attributable to mental health conditions (24). As of 2016, mental ill health was an increasing population health challenge in England, with the Adult Psychiatric Morbidity Survey (APMS) reporting that approximately one in six people over the age of 16 years experience a mental health problem each year (2). Whilst this is expected to have increased in more recent years, a further iteration of the APMS has not yet been analysed at the time of writing this thesis. More recently, the annual General Practice Patient Survey (GPPS) conducted in January 2024 collated information on a sample of randomly selected GP-registered patients and their health conditions, with 14% of survey respondents reporting that they have a mental health condition (25). Though this proportion is slightly lower than that reported in the 2016 APMS, it is likely to be an under-representation due to participation bias. Given the prevalence of mental ill health across the general population, research to understand the causes and risk factors for mental health conditions, and how to provide adequate access to effective treatments to improve mental health is vital.

2.3.2. Mental health inequalities

The likelihood of experiencing a mental health condition is influenced by a complex range of individual, social, environmental, and structural factors within society (22, 26). Whilst anyone can experience poor mental health, a higher risk of developing a mental health condition has been found to be associated with experiences of social disadvantage and structural injustices, such as deprivation, social isolation, stigma, and discrimination (22, 27). As such, some population groups, for example people living in deprived areas, those living alone, people from ethnic minority groups, and those who identify as LGBTQ+, experience a higher prevalence of mental health conditions (27), and are therefore unjustly affected by the negative consequences associated with mental ill health. People experiencing mental illness have considerably higher levels of poverty, unemployment, physical comorbidities, and premature mortality (1, 20). These resulting disparities can be viewed as both the “cause” and “consequence” of having a mental health condition (1). In recognition of the complexities associated with the biological, social, and structural systems which influence the development of a mental health condition, mental health inequalities are increasingly being researched through an intersectional lens (28). Intersectionality is a concept which attempts to elucidate the cumulative effect having multiple socially marginalised identities may have on the extent of inequalities experienced by an individual or group (28). This is particularly important in mental health research due to the dual direction through which mental health inequalities can arise; for example, exposure to stigma on the basis of belonging to a minoritised group increasing the risk of mental ill health, and subsequently exposure to stigma on the basis of having a mental health condition increasing the risk of social exclusion and further deterioration of mental health.

2.3.3. LGBTQ+ mental health

A higher prevalence of mental health conditions has been identified in people from sexual minority groups (e.g., lesbian, gay, bisexual people) and people from gender minority groups (e.g., trans, non-binary people), compared with heterosexual people (4), and cisgender people (5), respectively. LGBTQ+ people are two to three times more likely to report mental health conditions compared to the general population (29). Evidence suggests that bisexual and trans people in particular experience greater disparities in mental health compared with other sexual and gender minority groups (29).

To date, the higher prevalence of mental health conditions for LGBTQ+ people has largely been attributed to "minority stress" (6). Minority stress theory suggests that exposure to stress-inducing experiences of stigma and discrimination (e.g., homophobia, transphobia) as a result of belonging to a minority group can have a detrimental impact on mental health (6). Meyer (6) argues that there are distal and proximal stressors which are relevant to sexual minority groups; external events and conditions (e.g., experiencing prejudice), the expectations of such events and conditions (e.g., fear of rejection), internalising negative societal attitudes (e.g., internalised homophobia), and concealing one's sexual orientation (e.g., hiding identity in fear of harm). Besides stress that the whole population experiences, these additional stressors can surpass an individual's capacity to cope and have the potential to induce psychological distress at levels greater than that seen in the rest of the population (6). Argyriou et al. (30) found that the majority of studies included in their 2021 systematic review provided support for minority stress theory, highlighting that sexual minorities experience stressors, such as victimisation, violence and abuse, family rejection, and a lack of social support, which act as mediators for the elevated rates of depression seen in these population groups. Since Meyer's 2003 paper, the minority stress theory has also been extended to include gender minority groups (31) and describes exposure to transphobia as a stressor for people who do not identify as cisgender.

Despite the application of minority stress theory remaining relevant today, there have been some critiques (32); highlighting issues with the "deficit-based" approach the theory operates within, which overlooks the potential resilience of sexual and gender minority individuals, and the lack of consideration of how poor "social safety" can lead to mental health inequalities for LGBTQ+

people. Diamond and Alley (7) propose that an absence of reliable social connection, belongingness, inclusion, recognition, and protection has significant consequences for stigmatised individuals, creating conditions for stigma-related health disparities for LGBTQ+ people, and where efforts to intervene should be directed. Societal heteronormativity, the view that heterosexuality is the norm and privileging people based on being heterosexual (29), and gender normativity, the view that being cisgender is the norm and privileging people as a result of being cisgender (29), are substantial contributors to the disproportionately higher levels of mental ill health for sexual and gender minority groups through the mechanism of an absence of "social safety", and continue to perpetuate inequalities for these population groups (7). In an analysis of two APMS conducted in England, Pitman et al. (4) identified that despite what was thought to be an increase in societal acceptance of sexual minority identities between the two survey time points, mental health inequalities for these population groups have not narrowed as expected. In their analysis of the UK Longitudinal Household Survey from 2010 to 2021, Bai et al. (33) demonstrated that disparities in psychological distress for sexual minorities had actually increased over time. Watkinson et al. (34) analysed the 2021 and 2022 iterations of the GPPS, identifying that the probability of self-reporting a mental health condition was highest among transgender and non-binary patients (35-47%), compared with cisgender patients (7-12%).

Whilst it is evident from current research that there are mental health disparities for LGBTQ+ people, there are some limitations to the evidence base. Studies exploring this area are often based on cross-sectional self-report surveys with small sample sizes (35), and often "lump" together LGBTQ+ people into one population group (29, 36), thus missing the opportunity to observe differences between each group and capture the rich lived experiences of individuals. Few studies consider the intersectionality between sexual and/or gender minority status and other factors associated with mental health inequalities such as age, geography, and ethnicity (29, 37, 38). Sexual orientation and gender identity are often omitted as subgroup analyses in population surveys and administrative data, therefore research on sexual and gender minority groups is rarely resourced through large-scale datasets (37, 39). Enhancing our understanding of the mental health needs of LGBTQ+ people and the causes of underlying inequalities is fundamental to develop policies that aim to promote, protect, and restore the mental health and well-being of these population groups.

2.4. Mental health in the context of COVID-19

2.4.1. Population mental health during COVID-19

The COVID-19 pandemic, declared by the WHO on the 11th March 2020 (40), required countries to implement widespread changes to society (e.g., social distancing, lockdowns) to contain the virus, which fundamentally changed our daily lives and how we function. With that, the pandemic carried known risk factors for mental ill health such as social isolation, stress, and economic insecurity (10). The GBD study in 2020 estimated that the COVID-19 pandemic had led to a 27.6% increase in people experiencing depression and a 25.6% increase in people experiencing anxiety globally (41). According to the UK-based Centre for Mental Health, the economic and social costs of mental ill health in England increased to almost £119 billion a year in 2020 (42), and up to 10 million people were estimated to need new or additional mental health support in the aftermath of the pandemic (43). Longitudinal UK population-based surveys exploring mental health and well-being changes during lockdowns found overall increases in the prevalence of mental health problems (44), psychological distress (45, 46), and rates of suicidal ideation (47), when comparing to pre-pandemic years. The effects of the COVID-19 pandemic were widespread, with government restrictions and attempts to contain the virus having significant impacts on human existence on a global scale. Early on, Holmes et al. (10) called for urgent research to understand the mental health consequences of the COVID-19 pandemic across the whole population to be made a priority. However, as the pandemic progressed, it became increasingly clear that whilst its effects had been felt by the entire population, it was not an equal experience in terms of mental health across different population groups.

2.4.2. Mental health inequalities during COVID-19

The COVID-19 pandemic happened amidst significant disparities in the distribution of mental health conditions across the population. Such unprecedented events like pandemics or disasters are thought to widen existing health inequalities in society, and have a greater impact on population groups who are already vulnerable to social disadvantage (12). Bambra et al. (48) argued that COVID-19 was being experienced as a syndemic – “a co-occurring, synergistic pandemic that interacts with and exacerbates” existing inequalities in physical and mental health conditions and the social determinants of health. The pandemic was not only implicated in increasing susceptibility to more severe infection and mortality for vulnerable populations, but in also creating and exacerbating inequalities through complex social (e.g., stigma), political (e.g., unequal resource allocation), and economic (e.g., unemployment) pathways, which increased susceptibility to mental ill health for vulnerable populations (48). In a systematic review of 117 studies from 28 different countries, Gibson et al. (12) summarised a number of individual and social factors which were associated with an increased risk of poor mental health during the COVID-19 pandemic. Being female, younger, experiencing financial insecurity, having existing physical and/or mental health conditions, and being exposed to stigma due to a marginalised identity (e.g., ethnic minority, sexual minority) predicted COVID-19 mental health inequalities (12). These findings are consistent with longitudinal evidence from the UK, which has shown that similar population groups were faring worse in their experiences of depression, anxiety, suicidal ideation, and loneliness, such as females, younger adults, people from lower socioeconomic backgrounds, and ethnic minorities, during lockdown periods (44-47, 49-51). For those experiencing pre-existing mental health conditions, the impacts of the pandemic exacerbated such difficulties and may have had lasting consequences that surpassed the time period of the pandemic itself (52). Through an intersectional lens, Moreno-Agostino et al. (53) used British cohort studies to assess inequalities by clustering respondents across multiple social identities, and demonstrated a cumulative effect of intersections (e.g., age, sex, ethnicity, sexual orientation, and socioeconomic status) on mental ill health. A comprehensive understanding of mental health inequalities experienced during the pandemic and their underlying causes is necessary to not only generate learning of how to mitigate against these impacts in the event of future pandemics or similar disaster conditions, but also to inform public health policy to address the longstanding inequalities that have been laid bare by the consequences of the COVID-19 pandemic (48).

2.4.3. LGBTQ+ mental health during COVID-19

As of early 2021, very little research had been published on the potential disproportionate impacts of the COVID-19 pandemic on LGBTQ+ people (54). A systematic review, co-authored by the PhD researcher before the start of the research presented in this thesis, identified eleven grey literature reports, mostly published by third sector organisations, and reporting cross-sectional self-report surveys capturing LGBTQ+ experiences of the COVID-19 pandemic (54). Many of the included reports focused on mental health and well-being and found that the general trends indicated poor outcomes for LGBTQ+ population groups, suggesting they may have been faring poorly during the pandemic (54). Since the publication of this review, there have been a further five review papers published (14, 15, 55-57), which have synthesised international literature on the impact of the COVID-19 pandemic on the mental health and well-being of LGBTQ+ population groups.

Bleckmann et al. (14) identified 33 studies investigating the mental health impacts and concluded that minority-specific (e.g., discrimination) and pandemic-specific (e.g., experiencing lockdown in unsupportive environments) stressors interacted to produce increased vulnerabilities to psychological consequences for LGBTQ+ people. Worsened psychological health associated with unique COVID-19 stressors, particularly around a loss of social support for LGBTQ+ people, was also found by Datta and Mukherjee (15) in their review of 16 studies. According to Dietzel et al. (55), isolation and a loss of access to inclusive spaces increased the risk of experiencing adverse mental health outcomes for LGBTQ+ people during COVID-19. In their review of 61 studies, the authors identified that LGBTQ+ mental health was disproportionately affected by the pandemic when compared with heterosexual and cisgender people (55). The authors however, found that studies also reported that some LGBTQ+ people experienced better mental health during lockdowns as it presented them with opportunities to develop strategies to improve their health and well-being (e.g., period of reflection, physical activity, eating healthily). Lucas et al. (56) examined international evidence of LGBTQ+ experiences of loss and grief during COVID-19, and identified that experiences of loss associated with income, social connection, LGBTQ+ community connection, health support, and affirmation of identity within a cis-heteronormative society were amplified as a result of pandemic conditions. Finally, in a narrative review, Sampogna et al. (57) specifically highlighted the unique impacts of the COVID-19 pandemic on LGBTQ+ people of different age groups. Young LGBTQ+ people were more likely to be affected by experiencing lockdown conditions with unsupportive family members and a loss of socialisation with their peers, yet older LGBTQ+ people were more likely to live alone and experience loneliness and isolation; both experiences had a detrimental impact on mental health (57).

Whilst the aforementioned reviews identified a growing body of literature demonstrating the negative psychological impacts the COVID-19 pandemic had on LGBTQ+ people globally, much of the focus of the included studies was outside of the UK. Evidence of how the COVID-19 pandemic influenced the mental health of LGBTQ+ people within a UK context is far less extensive. Conducting comprehensive scoping searches of existing literature using academic databases and reference lists of the reviews, the PhD researcher identified 17 primary research studies published between 2021 and 2024, which were focused on this area and conducted in the UK. Twelve studies conducted a survey with LGBTQ+ people (53, 58-68), most of which were cross-sectional and completed online, and seven studies conducted interviews with LGBTQ+ people (59, 61, 69-72). Overwhelmingly, the UK evidence base also painted a very poor picture of how LGBTQ+ people fared during the COVID-19 pandemic. Much of the studies indicated that sexual and gender minorities experienced unique challenges during COVID-19, which led to an increased risk of experiencing mental ill health.

Bécares and Kneale (58) analysed survey data from two waves of the UK Millenium Cohort Study, identifying significant inequalities in social support and self-rated physical and mental health among sexual minority young adults compared to heterosexual young adults during COVID-19. Using a cross-sectional study during the first UK lockdown, Kneale and Bécares (64) found LGBTQ+ respondents had high levels of perceived stress and depressive symptoms, when compared with standardised thresholds, which was in part explained by experiences of sexuality and gender-based discrimination experienced during the pandemic. A secondary analysis of this survey highlighted how the pandemic exacerbated the “psychosocial hostility” experienced by LGBTQ+ people, which resulted in poor psychological well-being (65).

Qualitative interviews with 15 LGBQ+ people, conducted by Hope et al. (61), revealed profound experiences of isolation and loneliness, and how they contributed to mental ill health. In a survey of 161 people who identified as trans and/or gender diverse, respondents shared that their mental health had deteriorated as a result of pandemic restrictions (62). Many reported that the loss of structure and routine had enforced unwelcome periods of self-reflection and a loss of positive social interactions, which normally acted as a protective buffer against transphobia, made them feel invisible and invalidated (62). In their study assessing intersectional mental health inequalities during COVID-19, Moreno-Agostino et al. (53) found that the most significant gaps in measures of depression, anxiety, loneliness, and life satisfaction were for sexual minorities, suggesting that regardless of other characteristics, these groups were disproportionately affected by COVID-19. Whilst it is evident that the pandemic had significant impacts on LGBTQ+ mental health, much of the UK-based evidence is constituted by online surveys conducted in the early stages of the pandemic, which may have been less likely to capture the rich lived experiences of LGBTQ+ people and the longer-term impacts of COVID-19 on their mental health.

2.5. Access to mental health services

2.5.1. Structure of mental health services in the NHS

Mental health services provided by the NHS in England are specialist services which aim to deliver support, treatment, and management for individuals experiencing mental health conditions. Within the NHS, mental health services are separated into three tiers of care; primary, secondary, and tertiary. Primary care services (e.g., general practitioners (GPs), improving access to psychological therapies (IAPT) services) provide treatment and support for individuals experiencing CMDs. Secondary care services provide treatment and support for some CMDs, but mostly for SMI, and include community mental health teams (CMHTs), crisis resolution and home treatment teams (CRHTs), early intervention services (EIS), and eating disorder (ED) services, amongst others. Tertiary care services provide highly specialised treatment for individuals whose needs cannot be met at a primary or secondary care level (e.g., secure forensic mental health services). Mental healthcare is delivered by a range of professionals such as psychiatrists, psychologists, social workers, mental health nurses, care coordinators, and psychological practitioners, and is provided in inpatient, outpatient, and community settings. As is the case with the wider NHS healthcare system, the provision of mental healthcare is extremely complex and characterised by significant variations in the configurations of services across different geographical areas (73). These variations are often accounted for by local commissioning bodies, who are tasked with making resource allocation decisions based on local population need (73). Aside from services provided by the NHS, there are a number of third sector organisations which provide support to individuals experiencing mental health conditions (e.g., Mind, Rethink Mental Illness, The Samaritans). Anecdotally, these organisations frequently fill the treatment gap for those who are unable to access NHS mental health services.

2.5.2. Mental health services in Lancashire and South Cumbria

Lancashire and South Cumbria, the setting for the research presented in this thesis, is a geographical region in the North West of England, constituted by a mixture of small cities and towns, rural and coastal areas, and has a population of approximately 1.8 million people (74). There is considerable variation in the health and well-being of Lancashire and South Cumbria's population, with significant disparities in life expectancy (75), prevalence of physical and mental health conditions (76, 77), and concentration of social deprivation (78), across the area. Lancashire and South Cumbria NHS Foundation Trust (LSCft) provides a range of mental health, community health, and well-being services across Lancashire and the neighbouring southern parts of Cumbria (*Figure 1*) (79). LSCft deliver secure, perinatal, inpatient, and community services to meet the mental health needs of children, young people, adults, and older adults residing in the geographical area (79).

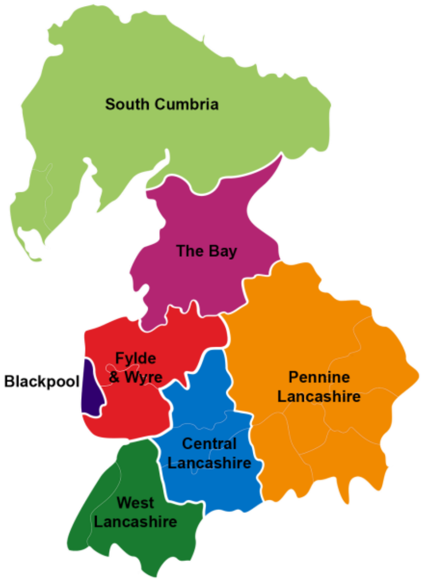


Figure 1. Geographical area that LSCft mental health services are delivered in (79)

Amidst rising demand and operational pressures in 2019, a review of Lancashire and South Cumbria's urgent mental health services was conducted (80). The review highlighted that Lancashire specifically was above the national average for prevalence of mental health problems and had higher rates of adults in contact with mental health services, but the spend for mental health was lower for areas of Lancashire than other areas of England with comparable levels of social deprivation and prevalence of mental ill health (80). As a result of the review, further work to examine drivers for demand, capacity of LSCft services and pathways, and service user transitions between services, and instigating collaborative work as a system to strengthen mental health service delivery, was recommended (80). Whilst the review recognised variation across the geography of Lancashire and South Cumbria, potentially reflecting a "postcode lottery", and associated influences of varying social deprivation, the process did not explore data on other service user characteristics (e.g., age, gender, ethnicity, sexual orientation) and potential differential access to services for different population groups. A report from the Northern Health Science Alliance highlighted the disproportionate impacts of the COVID-19 pandemic on the North of England (81); observing higher rates of mortality, higher hospital pressures, a longer time under restrictions, and larger reductions in self-reported mental well-being. Consequently, due to the high mental health needs of this geographical area, under-resourcing of mental health services, and disproportionate impacts of COVID-19, there is a demonstrable need to examine access in Lancashire and South Cumbria for underserved population groups and identify opportunities to address potential inequalities.

2.5.3. Accessing mental health services

To address the increasing population health challenge of mental ill health, the WHO report published in 2022 on "transforming mental health for all" called for action to strengthen access to mental healthcare as services continue to be under-funded and under-resourced (82). Accessing NHS mental health services in England has historically been regarded as quite challenging. Due to a lack of resources allocated to mental health, individuals are faced with high thresholds for being eligible to receive mental healthcare and if deemed eligible, long waiting times before receiving that care (83). Timely access to mental healthcare is imperative to improving outcomes for individuals experiencing mental health conditions and to ensuring that the care provided meets their needs at the time they most need it (83). The length of time between the presentation of mental health symptoms and accessing mental health services is correlated with the likelihood that a mental health condition will become more acute and difficult to treat, and a greater risk of other health and social consequences presenting as a result of the mental health conditions (e.g., physical symptoms, unemployment, family breakdown).

The pathways to accessing mental health services in England are also quite complex to navigate. Many individuals seek mental health support from their GP in the first instance, who may then refer them on to NHS mental health services. Others seek support from third sector organisations (e.g., MIND), telephone helplines (e.g., The Samaritans), or present in Accident and Emergency (A&E) departments situated in acute NHS Trusts. Though rarer, referrals to some NHS mental health services can also be completed by family members, carers, education staff, work colleagues, criminal justice staff, local authority staff, or the individual can self-refer. Despite the urgency and scale of mental ill health in the general population, research on access to mental health services has trailed behind other healthcare areas in terms of priority. The concept of "parity of esteem" refers to the idea that society should value mental health and physical health equally (84). A lack of parity of esteem is of great concern when delivering mental healthcare provision in the NHS, as services are not adequately resourced from a commissioning point of view, despite population need, and pervasive mental health inequalities persist in our society. This lack of adequate attention on access to mental health services has also been mirrored within a research context.

2.5.4. Inequalities in access to mental health services

In 2016, it was estimated that only one in three people who experience a mental health condition in England could access the mental health support they needed at the time they needed it (2). By 2021, an estimated 8 million people with unmet mental health needs were not in contact with mental health services (3). In recent years, the UK Government has committed to improving the accessibility of publicly funded mental health services and addressing inequalities (73, 85). A recent report reviewing the progress of these commitments based on audits, suggested that whilst more people are now in contact with mental health services than in 2016, targets to improve access and address inequalities have been missed (3). Evidence suggests that population groups exposed to social disadvantage (e.g., discrimination, poverty) experience differential access to timely and high-quality mental healthcare in the UK (83). These disparities in access to support can ultimately result in further deterioration of mental health and presentation at more acute services at a later stage (83). The NHS Advancing Mental Health Equalities Strategy released in 2020 summarised evidence of differential access to NHS mental health services across population group characteristics (86). According to this report, males, older people, young people, people from ethnic minority groups, people from sexual minority groups, people with disabilities, and those in lower income households were experiencing significant inequalities in access to mental health services (86). The report also recommended that the NHS has a duty to reduce disparities in access and ensure that services meet the needs of different population groups at risk of experiencing mental health conditions (86). Asthana et al. (87) conducted an evidence review of quantitative variations in access to NHS mental health services in England and reported differences associated with age, gender, ethnicity, socioeconomic status, and geographical area. Those who experience poorer mental health (noted in the earlier mental health inequalities section 2.3.2) tend to also experience the greatest difficulty in accessing mental health services, a principle referred to as the "inverse care law"

(88, 89). Understanding differential access to mental health services can help to identify population groups that may have unmet mental health needs and allow services to identify priorities for improvement so that access to mental healthcare can be tailored and targeted to population group need.

2.5.5. LGBTQ+ access to mental health services

Whilst there is a strong evidence base of mental health disparities for LGBTQ+ people in the UK and globally, there is less research specifically examining access to mental health services for these population groups in the UK. Lesbian, gay, and bisexual people have been shown to have higher rates of access to primary care and community care for psychological difficulties (90), and higher rates of access to psychological interventions delivered by IAPT services (91), in England than heterosexual people. The over-representation of sexual minorities within these services could reflect the higher prevalence of mental health needs seen in these population groups. Sexual orientation data collected in primary care and IAPT services has enabled research to highlight increased need, increased access, and poor experiences, but there is limited evidence available for secondary and specialist mental health services, and access for gender minorities.

A survey of 292 LGBTQ+ people, mostly based in the United States of America (USA), outlined two types of barriers to accessing mental healthcare; functional barriers, associated with the resources and logistics needed to practically access support (e.g., costs, location), and communicative barriers, associated with relationships and social connection to support access (e.g., trust, stigma) (92). The authors argue that whilst these barriers are not solely experienced by sexual and gender minorities, they are operationalised differently for these groups (e.g., intersecting identity that amplifies stigma, financial issues more pronounced) (92). A scoping review of 77 studies which examined mental health service utilisation by lesbian, gay, and bisexual (LGB) people, identified higher rates of utilisation and higher unmet needs, when compared to heterosexual people (93). Filice and Meyer (93) also summarised a series of potential predictors of mental health service utilisation among these sexual minority groups, including characteristics (e.g., gender, age, ethnicity, migration status, education, HIV status, openness about sexual orientation, degree of internalised homophobia), enabling resources (e.g., socioeconomic status, social support, connection to LGBT community, patient-provider relationship, disclosure to provider, provider characteristics), need (e.g., pre-existing mental health condition, perceived risk and attitudes towards help-seeking), and environment (e.g., rurality, healthcare system). The authors concluded however, that there was little agreement across studies in terms of what predicts mental health service utilisation and how effective services are for LGB people (93). Whilst the findings of the survey study (92) and scoping review (93) provide some insight into the potential factors which may cause inequalities in access to mental health services for LGB people, they have more relevant application to contexts outside of the UK (e.g., insurance-based healthcare systems).

In a review of UK evidence conducted in 2016 (8), mental health services were viewed as the most discriminatory healthcare service by LGBTQ+ people. Heteronormative assumptions and the fear of judgement or discrimination and pathologisation based on their identity had prevented LGBTQ+ people from accessing services (8). Hudson-Sharp and Metcalf (8) suggested that as a result of these barriers, LGBTQ+ people demonstrated a preference for seeking support from LGBTQ+ specific organisations and were therefore not being adequately catered for by publicly funded services. The National LGBT Survey launched by the Government Equalities Office in 2017 (9) received 108,100 responses from people identifying as LGBTQ+ (61% lesbian/gay, 26% bisexual, 7% other; 49% male, 42% female, 7% non-binary; 69% aged under 35; 19% from London). Twenty-four percent of respondents had accessed mental health services in the last 12 months (higher than expected in the general population); 72% reported that access had not been easy, citing difficulties such as long waiting times, feeling anxious or embarrassed, and unsupportive GPs. In reporting their experiences of access, only 57% reported that the services they used were mainly positive, this figure was lower for trans respondents (51%). The qualitative data captured in the survey included many references to experiencing a lack of support from services (9).

Findings of academic studies which surveyed or interviewed LGBTQ+ people in the UK (94-97) reiterate that people who identify as a sexual and/or gender minority encounter a range of barriers to accessing or engaging with mental health services, including anticipating judgement or discrimination based on their identity, previous negative help-seeking experiences, reluctance to disclose LGBTQ+ identity to services, and professionals having a lack of knowledge and experience of LGBTQ+ identities. A survey of 1,064 LGBT+ young people indicated barriers to accessing mental health services across three levels; individual (e.g., belief in ability to cope, low self-confidence), sociocultural (e.g., mental health-related stigma, lack of family support), and mental health system (e.g., accessibility of services, availability of services, lack of competence working with LGBT+ people) (98). Bishop et al. (99) interviewed 21 LGB people about their perspectives on what a culturally competent provision of mental health service would mean to them, highlighting that the importance of creating a safe space and therapists demonstrating inclusivity, awareness of heteronormativity, and knowledge about LGB issues. Prior to the COVID-19 pandemic, LGBTQ+ population groups appeared to be facing inequalities in their use and experience of mental health services in the UK.

2.6. Access to mental health services in the context of COVID-19

2.6.1. Supply of mental health services during COVID-19

Actions implemented to mitigate the spread of the COVID-19 virus and effectively treat those infected caused unprecedented disruptions to the delivery of healthcare services in the UK and globally, and thus hindered access to non-COVID-19 care. A review of 81 studies across 20 countries found substantial reductions in the utilisation of healthcare services during the initial stages of the pandemic and highlighted that the long-term impacts of missing care needed monitoring (100). Countries worldwide reported significant disruptions to the delivery of mental healthcare during the pandemic (101), including reductions in patient presentations, the redeployment of staff and facilities to COVID-19 related healthcare provision, and the rapid replacement of in-person contacts with remote delivery. In the UK, mental health services were already on the backfoot pre-pandemic, with limited resources allocated to their provision compared with physical health services, and significant challenges with access (102). During COVID-19, mental health services were initially temporarily suspended or at least considerably reduced so that their resources could be redirected to respond to pandemic efforts, which was likely to have further exposed issues around access and had detrimental impacts on those who needed support during that time (102). The re-establishment of services during 2020 involved a dramatic shift to delivering mental healthcare remotely as it enabled the provision of care whilst also reducing risk of spreading the virus (103). Whilst this was an effective adaptation in light of pandemic conditions and transformed service delivery, it had the potential to cause or exacerbate barriers to access to mental health services for some population groups.

2.6.2. Demand for mental health services during COVID-19

Routinely collected mental health service data were used to explore patterns of service activity during the first COVID-19 lockdown in England (March to May 2020), observing widespread changes in the demand for and provision of mental healthcare; reductions in referrals (104-107), decreased inpatient admissions (104, 105, 107), fewer psychiatric presentations (108), and increased use of remote technologies to deliver care (104, 105), compared to previous years. From a demand point of view, it remains somewhat unclear whether this global reduction in access to mental health services during the initial stages of the pandemic was a genuine reduction in the need for support or driven by a lack of help-seeking. The dramatic decrease in service activity may have been accounted for by a lack of access to referrers (e.g., GPs, A&E), perceptions around mental health services being closed, individuals feeling like a burden during a global crisis, and concerns about virus transmission (109). Whilst few studies had examined patterns beyond the early stages of the pandemic (post-June 2020), demand was expected to surpass pre-pandemic levels with people being referred who should have been referred during lockdown, people requiring more support due to a deterioration in their existing mental health condition as a result of the pandemic, and the effects of the pandemic causing people to need new support (11). Amidst surges in demand on the release of lockdowns, NHS mental health trusts were seeing an increase in the severity of difficulties people were presenting to services with, suggesting that they may have needed support at a much earlier stage but had delayed help-seeking (109). In 2023, adult mental health services in England reported receiving 5 million referrals, which was a 33% increase from 2019, and thus highlighting increasing pressure on services post-pandemic (110). An audit report published in 2023 estimated that in the post-pandemic context in the UK, 8 million people were estimated to have mental health needs who were not in contact with services, and 1.2 million people were on the waiting lists for community-based mental health support (3). Attempts to respond to the long-term impacts of the COVID-19 pandemic or effects of similar future events on both population mental health and mental health services through service planning need to be informed by knowledge of how supply of and demand for support changed and the impact of those changes. However, few studies have specifically investigated the extent to which the pandemic and changes to mental health service delivery have created or altered existing inequalities in access for different population groups.

2.6.3. Inequalities in access to mental health services during COVID-19

Moreno et al. (13) proposed that access to, and the use of, mental health services during and after the COVID-19 pandemic and the sociodemographic characteristics of those service users should be continuously monitored to maintain a focus on improving accessibility of mental healthcare and reducing inequalities. Chen et al. (106) examined the effect of the first COVID-19 lockdown (March to May 2020) on referral rates to secondary mental health services, reporting that referrals had remained low in some vulnerable groups such as children and adolescents, older adults, those from ethnic minority groups, and those with existing mental or physical health conditions after the lifting of the first lockdown. It was therefore suggested that the pandemic may be exacerbating existing inequalities as many of these groups were noted to have inequitable access to mental healthcare prior to the pandemic (86), and were also those reporting poorer mental health in early studies of the impact of the pandemic (45, 47). Bauer-Staeb et al. (111) however, found faster increases in referrals to IAPT services for ethnic minorities, younger people, and those living in more deprived and urban areas, highlighting a potential greater impact of COVID-19 on the mental health needs of these population groups. Beyond these quantitative explorations, interview studies have identified other population groups that experienced amplified inequalities in access to mental healthcare during COVID-19 (52, 112-114). People experiencing homelessness felt excluded from accessing mental health support and were disproportionately affected by the lack of available services (112). Those with existing mental health conditions faced inadequate access to mental health services (52, 115), often losing a source of much needed support they had relied upon pre-pandemic. The shift towards delivering mental healthcare remotely may have provided continuity of care for some, but disadvantaged many, including individuals with hearing and communication difficulties (114), older people (114), people with limited English language (114), and people with learning disabilities (113). Acknowledging that inequalities in access to mental health services are likely to have been worsened by the impacts of the pandemic, there is considerably uncertainty about the ways in which it may have influenced access for LGBTQ+ population groups.

2.6.4. LGBTQ+ access to mental health services during COVID-19

Whilst evidence exists on the disproportionate impacts of the COVID-19 pandemic on the mental health of people identifying as a sexual and/or gender minority, limited research has drawn upon on how access to mental health services was affected. Nevertheless, potential effects can be hypothesised based on existing literature. Increased mental health needs as a result of the disproportionate impacts of the COVID-19 pandemic (e.g., isolation, discrimination, lack of social safety) may have led to an increased need for mental health services and therefore higher levels of access. The loss of usual forms of support for LGBTQ+ people (e.g., the wider LGBTQ+ community, LGBTQ+ specific organisations) during COVID-19 pandemic restrictions, which can act as protective buffers against mental ill health, may have left LGBTQ+ people with no option but to seek more formal support from mental health services and thus resulted in higher levels of access. However, increasing hostile attitudes towards LGBTQ+ people and the loss of social safety may have deterred these population groups from seeking the support they needed at the time they needed it, leading to either unmet mental health needs or later presentations to mental health services at a greater level of acuity. The move to delivering mental healthcare remotely during the COVID-19 pandemic may not have been appropriate for all LGBTQ+ people; some may have lacked privacy due to unsupportive living environments and so could have struggled to engage with services in this format, whilst others may have preferred the remote mode of delivery due to the potential for more easily concealing their LGBTQ+ identity from services.

The LGBT Foundation’s “Hidden Figures” report stated that 42% of 555 LGBTQ+ survey respondents based in the UK wanted to access support for their mental health in the early stages of the pandemic (116); this was increased for ethnic minority LGBTQ+ people (66%) and for trans people (57%). Sixty-four percent of respondents reported that they had a preference for receiving mental health support from LGBTQ+ specific organisations over generic support services (116). In a further UK survey of 1,745 LGBTQ+ people, respondents shared their experiences of difficulties in accessing community mental health support and how increasing fears of discrimination were affecting their ability to seek mental health support (117). Jones et al. (62), in an online survey of 161 young people who identified as trans and gender diverse, found that 68% of respondents experienced difficulties accessing healthcare for their mental healthcare during the COVID-19 pandemic. Within the qualitative data from this survey, trans and gender diverse young people shared that the remote nature of mental healthcare delivery during COVID-19 was not always accessible to them (62). In a report by Healthwatch Together, a charity covering Blackpool, Blackburn-with-Darwen, Cumbria, and Lancashire, 57% of LGBTQ+ respondents said they were unable to access support for their mental health during the pandemic. A larger study involving a survey (n=1,368) and interviews (n=18) with sexual minority males conducted during the COVID-19 pandemic, examined what predicted mental health help-seeking in these population groups and the barriers and facilitators to seeking remote support for mental health (118). Twenty-two percent of participants used remote mental health resources during the COVID-19 lockdowns, and only anxiety and existing mental health diagnoses predicted mental health help-seeking behaviour (118). A lack of knowledge, confidence, motivation, and perceived benefit acted as barriers to remote mental health help-seeking in sexual minority males during COVID-19, but inclusivity, discreetness, and perceived positive impact on mental health facilitated help-seeking for these population groups. It is apparent from this evidence, albeit mostly from grey literature sources and self-report surveys, that there may have been an increased need for mental health service access for LGBTQ+ people, but they were experiencing barriers to accessing this support during the pandemic. Given the negative impacts of COVID-19 on LGBTQ+ people's mental health, mental health services needed adequate resources and competencies to respond and deliver effective treatment for these population groups.

2.7. Gaps in knowledge

As the summary of literature above indicates, there are unanswered questions around if and how the COVID-19 pandemic affected access to mental health services for LGBTQ+ population groups. LGBTQ+ people experience a higher prevalence of mental health conditions than heterosexual and cisgender people, and this is likely to have increased as a result of the COVID-19 pandemic. In the UK, existing research on LGBTQ+ mental health tends to rely on survey studies with small samples, which do not capture population level effects or the rich lived experiences of LGBTQ+ population groups. Sexual orientation and gender identity data were largely omitted from any of the public health surveillance during COVID-19, presenting a missed opportunity to capture insights on the disproportionate impacts for LGBTQ+ people. There is a need for research in this area that is resourced by large scale datasets, such as electronic health records in mental health services, to observe variations in access to mental health services. This is particularly the case for secondary mental health services and for under-studied geographical areas like the North West of England, for which limited evidence currently exists. To what extent the COVID-19 pandemic and associated restrictions influenced mental healthcare access for LGBTQ+ people has been largely absent from COVID-19 research, and where there is some evidence, it is from grey literature sources or small self-report surveys. Almost all of the research on access to mental health services focuses specifically on the earlier impacts of the COVID-19 pandemic (e.g., the first UK lockdown) and therefore neglects the ongoing long-term impacts that this unprecedented event has had on services (e.g., continued underfunding) and demand for underserved population groups (e.g., financial stress during post-pandemic economic insecurity). It is imperative to ascertain the mental healthcare experiences of underserved population groups, such as LGBTQ+ people, to inform future public policy to improve the inclusivity and equity of services and thus address inequalities laid bare by the COVID-19 pandemic, and to generate learning about how to mitigate against disproportionate effects in the event of future pandemics or other similar disruptions to mental health services. This research area would be strengthened by studies which identify the unmet mental health needs of these population groups and identify priorities for service improvements that can be implemented to have a direct impact on the mental health and well-being of LGBTQ+ people.

2.8. Chapter summary

This chapter has defined the key concepts considered in this thesis and has provided an overview of existing background literature relevant to mental health inequalities, access to mental health services, LGBTQ+ population groups, and the context of the COVID-19 pandemic. It has concluded with an outline of the current gaps in knowledge that the research presented in this thesis aims to address. The next chapter delivers a comprehensive overview of the methodology used for this thesis, decisions of which were shaped by much of the background literature reviewed in this chapter.

Chapter 3. Methodology

3.1. Chapter introduction

This chapter presents an in-depth description of the methodological considerations of the research conducted for this thesis. It begins with an outline of the epistemology and philosophical position which underpins the research undertaken, critical realism. A description of the methodologies employed across the three studies conducted for this thesis is presented, along with a justification for the use of a mixed methods approach. The theoretical framework used across the studies to conceptualise access is described. The chapter also examines the approaches to patient and public involvement and stakeholder engagement, the PhD researcher's identity and positioning as a researcher, ethical considerations, and dissemination.

3.2. Epistemology and philosophical position

Research is underpinned by the philosophical position of the individual/s conducting it. The beliefs a researcher holds about the nature of reality (ontology), how knowledge about reality is acquired (epistemology), and the approaches that can be used to acquire knowledge (methodology and methods), influence how research is designed, conducted, and interpreted (119). Two traditional research paradigms dominate historically; positivist and interpretivist. Positivism regards the "researcher as a scientist", in that positivist research is a "quest for objective knowledge" predominantly using quantitative methodologies and is underpinned by the view that a single reality exists (120). Contrastingly, interpretivism is underpinned by the view that multiple realities exist (120). For any event, the people involved will all have a different interpretation of what happened and there is no one objective reality. Interpretivist research is a "quest for subjective knowledge", predominantly using qualitative methodologies. This research paradigm regards the "researcher as a detective" (120), who themselves will have their own interpretation of the world. Therefore, knowledge of a researcher's philosophical position and underlying research paradigm from the outset is important as it helps to understand what effect their perspective has on the research and the assumptions that are being made.

The research conducted for this thesis aimed to examine access to adult mental health services for lesbian, gay, bisexual, transgender, and queer (LGBTQ+) people during the COVID-19 pandemic. Access to mental healthcare is a complex process to study and one that is unlikely to be a truly observable phenomenon. Outcomes associated with the process of accessing healthcare such as referral and contact rates, waiting times, non-attendance to appointments, and lived experiences of access, can be measured and interpreted, but the experience of the process itself and the mechanisms through which access occurs (or not) cannot be directly observed. As such, aligning with the PhD researcher's own beliefs about the nature of reality and knowledge of reality, this thesis draws upon the philosophy of critical realism.

The philosophy of critical realism, originating from the work of Bhaskar (121), holds an alternative position to the positivist and interpretivist paradigms, proposing that although a single reality exists independent of our experiences and perspectives, the knowledge constructed from our observations and experiences does not full reflect that reality and is partial, incomplete, and fallible (122). Bhaskar (121) offered the view that reality is stratified into three domains; the empirical, the actual, and the real. The empirical domain being that where observations are made and experienced (123). Events take place in the actual domain, some of which can be observed and experienced but not all, and the real domain being that where the causal mechanisms underlying the events operate within (123). A critical realist researcher attempts to go beyond what can be observed and measured, to consider the underlying mechanisms and the contextual conditions in which events and experiences are observed and measured.

According to critical realism, the social world is a highly complex and ever changing open system, and thus our knowledge of it is transitive, in that it needs to be open to being challenged and changed (124). Social science research, such as that presented in this thesis, is conducted within the empirical domain as the data collected captures experiences and observations of events. Knowledge gained from research conducted from a critical realist position should be used to generate theories of the causal mechanisms underlying these experiences and observations, which are context dependent. This is of particular importance for research concerning inequalities, whereby without contemplating the underlying and often invisible mechanisms through which inequalities arise, such as power structures, marginalisation, and discrimination, knowledge of inequalities is likely to be weak (124, 125). In this thesis, examining access to mental health services for LGBTQ+ people necessitated some theorising about the potential mechanisms and contextual conditions through which inequalities may arise.

Finally, unlike positivism and interpretivism, critical realism does not prescribe to a certain methodology, and due to the layered nature of reality, holds a pragmatic view that different methodologies may be needed to contribute to knowledge of a social phenomenon (122, 124). Many have argued that the philosophical assumptions of quantitative and qualitative research are diametrically opposed (126), with quantitative methods taking a more positivist position and qualitative methods taking a more interpretivist position. As critical realism seeks to understand how social phenomena occurs by examining the underlying factors at play (127), both quantitative and qualitative methodologies are noted as "compatible" with this philosophical position. Briefly, the research presented in this thesis adopted a mixed methods approach to capture different types of data which can contribute to developing our knowledge of reality, specifically of inequalities in access to mental health services for LGBTQ+ people during the COVID-19 pandemic.

3.3. Mixed methods approach

Using both quantitative and qualitative methods to investigate a research problem can strengthen the research findings and conclusions (128). Adopting a mixed methods approach however, is not just about conducting both quantitative and qualitative research, it involves careful consideration of the purpose, theoretical stance, design, timing, and integration of the findings (128). Creswell and Plano Clark (126) provide a set of core characteristics to describe what mixed methods research should entail, which includes, collecting and analysing both quantitative and qualitative data to respond to research questions, integrating and combining quantitative and qualitative data and their findings, organising this process according to specific research designs that provide logic for conducting the study in this way, and framing this process within theory and philosophy. Social science researchers have used mixed methods approaches to take advantage of the strengths of different methods and produce robust findings that offer contextual understanding of the size, frequency, and meaning of a research problem (129). Research problems which are well-suited to a mixed methods approach are those where one type of data is insufficient (126).

The research conducted for this thesis aimed to understand how access to mental health services changed during the COVID-19 pandemic for people who identify as LGBTQ+. Given the complexity of the concepts of healthcare access and inequalities, the purpose of having a mixed methods approach here was to collect and analyse different types of data to enhance our understanding of a complex research problem. According to Greene et al. (130), this purpose best describes “complementarity”, whereby different methods of inquiry are used to elaborate or enhance understanding of a phenomenon. This also aligns with the philosophical position of this thesis, as critical realism endorses capturing different types of data which can ultimately contribute to developing our knowledge of reality (122, 124). In addition, by studying the issue of LGBTQ+ access to mental health services during COVID-19 using multiple methods, more complementary knowledge of a problem for which limited evidence currently exists can be generated. The individual research studies conducted within this thesis were designed and delivered to address specific research questions with a view to contributing to an overall understanding of access to adult mental health services for LGBTQ+ people during the COVID-19 pandemic. However, the research studies were not conducted entirely independent of each other, they were conducted in a sequential pattern, and each study informed the design of the subsequent study as outlined below and in *Figure 2*.

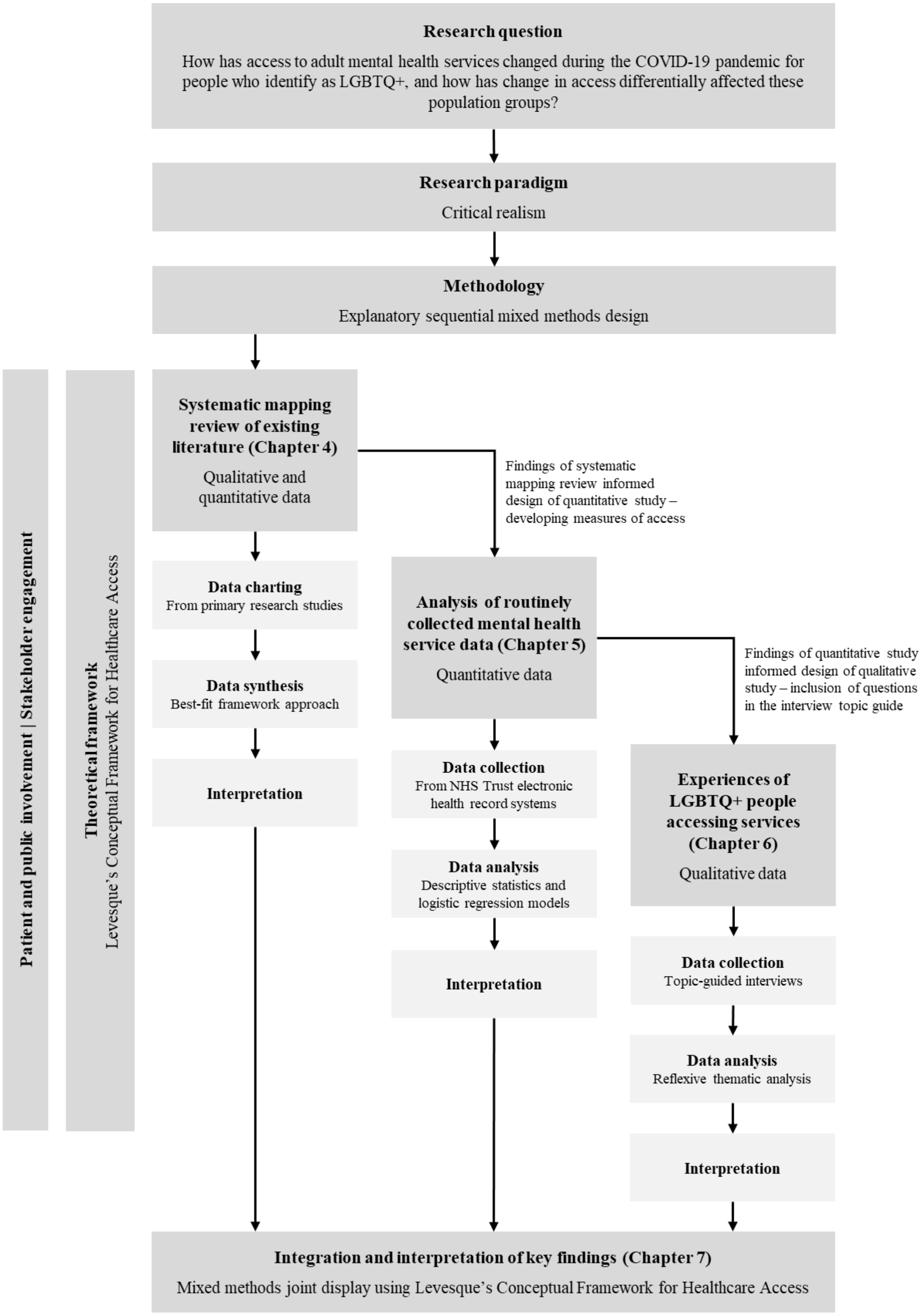


Figure 2. Flowchart presenting the overall research design of the thesis

Firstly, the systematic mapping review (Chapter 4) aimed to synthesise both quantitative and qualitative data from existing literature on inequalities in access to National Health Service (NHS) mental health services in the UK. The review identified ways in which access had been defined and/or measured in this context and what research methodologies had been used. It was not specific to LGBTQ+ population groups or to the COVID-19 pandemic, as it was intended to produce a broad picture of how access to mental health services could be researched and to inform the design of subsequent studies. The systematic mapping review highlighted that many previous studies relied on a simple conceptualisation of access such as mental healthcare seeking or mental healthcare utilisation, with limited application of theoretical frameworks (131). It also emphasised previous use of routinely collected data in measuring mental healthcare access and identified a gap in the evidence base associated with inequalities in access by sexual orientation and gender identity (131). As such, a study utilising routinely collected data from mental health services (Chapter 5) was subsequently designed to explore the feasibility of using this data to investigate differences in access for LGBTQ+ people during the COVID-19 pandemic. This quantitative study was informed by the review in that it used a theoretical framework to conceptualise how access was measured by the routinely collected data and focused on LGBTQ+ population groups for which limited evidence currently existed. This was specifically the case for the time period of the COVID-19 pandemic, which was thought to have disproportionately impacted LGBTQ+ people. This quantitative study identified a significant amount of missing data for sexual orientation and no option to record gender identity data in the mental health service datasets that were analysed, and variations in access by sexual orientation. Finally, the interview topic guide for the qualitative study (Chapter 6) was developed considering the quantitative findings, particularly around the presence of missing data. Participants were asked additional questions to explore their experiences of being asked about their sexual orientation and gender identity during contact with mental health services and their perspectives on disclosure, to explain in part the presence of missing data and what could be changed to address this.

In summary, this thesis used an explanatory sequential mixed methods design. This particular design involves collecting and analysing quantitative data, followed by the collection and analysis of qualitative data to explain or elaborate on the quantitative findings (128, 132). Each stage of research in this thesis was conducted in order to inform the next *(Figure 2*). Despite what is stipulated of a sequential mixed methods design (126), each type of data collected in this research was considered of equal importance in answering the overall research question. In the interests of time during the PhD particularly when applying for ethical approval, the three studies did overlap somewhat so preliminary rather than finalised findings were used to support the design of the subsequent study. The key findings from all three studies were integrated by mapping them to Levesque's Conceptual Framework for Healthcare Access (133) and producing a mixed methods joint display (134), to generate an enhanced understanding of the research problem and are discussed in Chapter 7.

3.4. Theoretical framework

Healthcare access is a complex concept to define and measure. It can refer to entry into or use of the healthcare system, and can be characterised by healthcare need, help-seeking behaviour, and the provision or utilisation of healthcare services. Mental healthcare access is further complicated by the existence of involuntary mental healthcare, the significant burden of stigma people with mental health conditions experience, and mental health not being valued the same as physical health, known as a lack of "parity of esteem" (84, 135). Many theoretical frameworks have been developed to conceptualise access.

One of the earliest is Andersen's Behavioural Model of Health Services Use (136), which defined healthcare use as a function of an individual's predisposition to use healthcare services (e.g., demographics, health beliefs), factors that enable or impede use (e.g., costs, availability), and an individual's need for care (e.g., perceived, evaluated). The original model has evolved over time, with a more recent version adapted for vulnerable population groups (137), suggesting that there are additional vulnerability factors that influence healthcare use, such as social structures (e.g., immigration status), demographics (e.g., sexual orientation), and resources (e.g., self-help, community). Whilst this model incorporates various determinants of healthcare use and highlights sexual orientation as a specific vulnerability factor, it has had limited application in United Kingdom (UK) mental health research. This is likely due to the framework originating from the United States of America (USA) and its application within the context of an insurance-based healthcare system (137).

Other prominent healthcare access frameworks include the Candidacy framework (138), whereby an individual's eligibility for healthcare is negotiated both by the individual themselves and the healthcare services; the Equity of Access framework (139), which focuses on the supply side of healthcare suggesting equal access to healthcare for equal need; and Penchansky and Thomas's framework (140), alluding to dimensions of access representing areas of "fit" between service users and the healthcare system (e.g., availability, accessibility, accommodation, affordability, acceptability). All of these frameworks have potential utility in research on inequalities in access to mental health services for LGBTQ+ people, but they tend to have a limited focus on specific factors or are more compatible with certain types of methodologies. The Equity of Access framework (139), for example, only considers supply-side features and as such, disregards variations in the demand for healthcare. Variations in demand are of particular importance when trying to understand how COVID-19 may have disproportionately impacted on LGBTQ+ population groups and their access to services. Originating from a synthesis of evidence on access to NHS healthcare for socio-economically disadvantaged groups, Dixon-Wood's Candidacy framework dominates the healthcare access literature recognising the importance of individuals' establishing their "candidacy" for care and considering the proposal that disadvantaged groups experience vulnerabilities that can influence this process (138). The main limitation of this framework within the field of inequalities in healthcare access is the preoccupation on individuals and their interactions with the local healthcare system, and it's neglect in contemplating the wider social, economic, and political structures which influence people's lives. For example, the final component of the framework, "local operating conditions" restricts how the process of candidacy operates within wider societal structures (141). In the context of critical realist research involving LGBTQ+ population groups, the wider structural causes of inequalities need attention in order to theorise the causal mechanisms and contextual conditions behind variations in access to mental health services by sexual orientation and gender identity during the COVID-19 pandemic.

A more recent framework is Levesque's Conceptual Framework for Healthcare Access (133), which extended Penchansky and Thomas's framework (140), and is constituted by the view that healthcare access is a multi-dimensional concept associated with healthcare systems and their approachability, acceptability, availability, affordability, and appropriateness, and with individuals and their abilities to perceive, seek, reach, pay, and engage with healthcare services (*Figure 3*). A scoping review of studies that have used Levesque's framework reported that it has been applied successfully across a number of study types and healthcare settings, including mental health, and has enabled a comprehensive exploration of access and it's complexity (142). This framework offers a broad conceptualisation of access (133), which suggests that determinants arise from the supply-side (e.g., service providers, organisations, institutions, systems) and from the demand-side (e.g., individuals, households, communities, populations). This broad and comprehensive conceptualisation enables the assessment of the barriers people experience across different stages of access and how the care that an individual may or may not receive is influenced by wider structural systems in addition to healthcare services and the individuals themselves.

The use of Levesque's framework in this thesis has enabled an exploration of dimensions of access from a healthcare system perspective, such as the availability of mental health services during COVID-19, and the appropriateness of remote delivery of mental healthcare during COVID-19. It has also enabled the assessment of underserved population groups, such as LGBTQ+ people, and their ability to seek, reach, or engage with mental health services during the pandemic. This framework provided a lens through which access could be conceptualised as a complex process from an individual perceiving a mental health need and identifying a need for care through to utilising that care and assessing what consequences that subsequently had on their mental health need. Levesque et al. (133) outlined the need for empirical mixed methods research to explore variations in access as a result of supply and demand factors across different contexts. The context of the COVID-19 pandemic, an unprecedented societal event, offered an unique opportunity to test the relevance of these dimensions when examining inequalities in access to adult mental health services for LGBTQ+ people. In addition, this framework has been recently applied in a related research area considering the efficacy of psychological treatments for sexual minorities post COVID-19 (143).

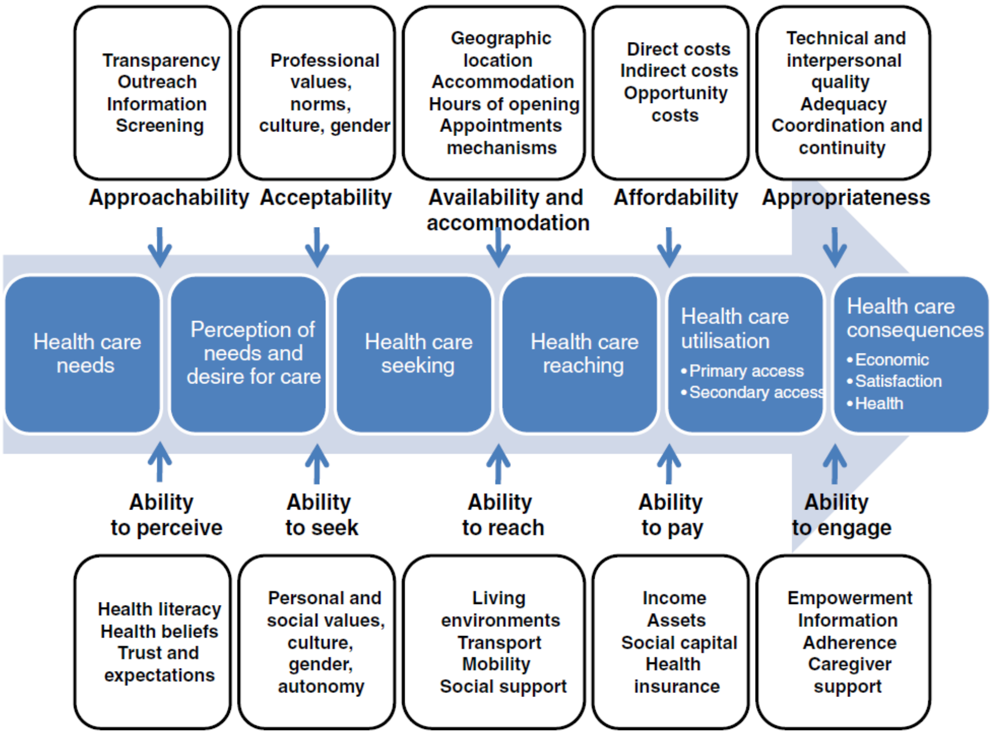


Figure 3. Levesque's Conceptual Framework for Healthcare Access (133)

The research presented in this thesis used Levesque's Conceptual Framework for Healthcare Access (133) as a deductive lens across all three studies to consider the complexity of access to mental health services. In the systematic mapping review (Chapter 4), the framework was used to collect and analyse data from primary research studies to understand how previous literature had defined and measured access to mental health services (e.g., mental healthcare seeking, mental healthcare utilisation). It was also used to categorise the barriers that studies reported population groups experience when accessing mental health services (e.g., ability to seek, ability to engage). Outcome variables in the routinely collected mental health service data (Chapter 5) were categorised according to Levesque's framework to define the dimension of access they were measuring (e.g., referral rates being mental healthcare seeking, a referral being converted to a contact with mental health services being mental healthcare reaching, contact rates being mental healthcare utilisation). Finally, Levesque's Conceptual Framework for Healthcare Access was used to design the interview topic guide and analyse qualitative data from interviews conducted with LGBTQ+ people who had accessed or tried to access mental health services during the COVID-19 pandemic (Chapter 6). The framework's application and its usefulness in the context of mental healthcare access during COVID-19 for LGBTQ+ people is evaluated in the discussion chapter of this thesis (Chapter 7).

3.5. Methods of data collection

3.5.1. Systematic mapping review

Systematically reviewing published literature is a vital first step to understanding what evidence exists on a particular topic and to informing the development of future primary research (144, 145). A systematic review sets out to answer a specific clinical question with well-defined inclusion and exclusion criteria, and is restricted to a specific outcome or set of outcomes, to ensure the robustness of its approach (144, 145). A systematic review however, may not always be the most appropriate method to apply when attempting to understand what evidence exists on a particular topic. Within the design of a scoping review, a systematic approach to reviewing the literature is still applied without having a restriction on answering a specific clinical question or defining specific outcomes (145). Scoping reviews differ from systematic reviews in that they can be applied to an evidence base which is heterogenous in nature and where the purpose is to describe the state of existing evidence and identify gaps that could be explored with further research (146). A systematic mapping review is a type of scoping review, which goes beyond scoping what evidence exists and aims to map out and categorise evidence on a broader topic than would be studied in a typical systematic review (147). Unlike a systematic review, scoping reviews and thus systematic mapping reviews do not typically involve quality appraisal of the included studies (145, 146), as the aim is to understand what has been done previously rather than selecting studies based on methodological quality.

When designing the first primary research study involving routinely collected data from mental health services, it became clear that healthcare access is a complex concept and that a comprehensive understanding of the ways in which inequalities in access could be measured in the context of mental health services was limited. The initial scoping of the literature highlighted that a significant amount of literature on inequalities in access to mental health services existed, but it was heterogeneous in nature. Even when attempting to filter down to a particular population group of interest, which was a decision informed by public involvement and stakeholder engagement activities, it still remained quite varied in terms of the study design and outcomes measured. Therefore, a systematic mapping review was deemed a suitable way to answer the broad questions that were being raised, to summarise evidence in this area in a way that would be useful for others, and to identity potential gaps that could be explored in subsequent studies for this thesis.

The systematic mapping review presented in Chapter 4 was conducted based on existing guidance for scoping reviews (146), and is reported based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) checklist (148). Decisions on the search strategy, eligibility criteria, and data selection process were discussed with academic supervisors, to ensure that the review provided widespread coverage of relevant literature to answer the broad research questions. For example, both quantitative and qualitative studies were included in the review so that it could go beyond similar published reviews (87), to consider how qualitative evidence could be used to contextualise quantitative variations in access to mental health services between population groups.

3.5.2. Routinely collected mental health service data

Mental health services routinely collect detailed information about their service users, from referral through to discharge, for the primary purpose of delivering and documenting the healthcare of individuals. This data is stored electronically and captures service user demographics (e.g., age, gender, ethnicity, address), and details of the care received by service users (e.g., service accessed, contact date, contact type). Alongside its primary purpose, the data is also an essential tool for service providers and commissioners to monitor activity and support improvements in service planning and delivery (149, 150). Routinely collected data has become increasingly recognised for its value as a resource in health service research (151). Relying on this type of data offers certain advantages for researchers including cost-effectiveness and access to data with large sample sizes that is longitudinal in nature (149). Observational studies which use routinely collected data can act as an alternative to clinical trials, the gold-standard in the hierarchy of evidence (152), as they enable the exploration of a real-world problem rather than a specific intervention and enable the inclusion of underserved population groups that are not well represented in clinical trials. In 2022, the National Institute for Health and Care Excellence (NICE) acknowledged their acceptance of using “real-world data” such as electronic healthcare records to “identify, characterise, and address health inequalities” and outlined principles for evidence generation using these types of data (153).

The first primary research study in this thesis aimed to explore inequalities in access to NHS mental health services for LGBTQ+ people during the COVID-19 pandemic. Therefore, the focus was not an intervention as such, but rather seeking how access changed as a result of a significant real-world event and drawing on comparisons between population groups based on sexual orientation and gender identity. Routinely collected data from mental health services provided an opportunity to understand patterns of access over time between service users based on their demographics and thus exploiting this type of real-world data was an appropriate study design for the research question.

There are however, barriers to using routinely collected data in research, which should be acknowledged, including the lengthy process through which researchers must go through to access the data safely and securely, and issues associated with the quality and missingness of the data. Obtaining access to routinely collected data took around eleven months in total from the point of drafting the ethics application through to beginning data analysis, which delayed progress somewhat in the early stages of this research. Deeny and Steventon (154) outline the principle that routinely collected data consists of "only vague shadows of the people and activities they represent". In mental health services, routinely collected data is generated via a relationship between the service user and the healthcare professional, and as such a range of factors influence what is shared and recorded (e.g., disclosure, health literacy, system resources). It cannot be assumed that routinely collected data contains a true depiction of reality, and so an awareness of how the data is collected and what may have influenced what was shared and recorded enhances the interpretation of any analyses. This notion is one that fits well within the philosophy of critical realism, with routinely collected data being a piece of the jigsaw to ultimately develop our knowledge of inequalities in access for LGBTQ+ people during COVID-19. Other methods could have been used to explore this area, such as secondary analyses of population survey data, which often have small sample sizes for LGBTQ+ groups, but there are currently few examples of the use of routinely collected data for LGBTQ+ groups and the self-report nature of surveys may limit the real-world and real-time perspective that mental health service data captured over the COVID-19 pandemic.

The study presented in Chapter 5 used data from Lancashire and South Cumbria NHS Foundation Trust (LSCft), a mental health and community health and well-being service provider based in North West England (79). The geographical region covered by LSCft is constituted by a mixture of small cities and towns, rural and coastal areas, across Lancashire and the neighbouring southern parts of Cumbria, and has a population of 1.8 million (74). There is considerable variation in the health and well-being of the population in Lancashire and South Cumbria, with significant disparities in life expectancy (75), prevalence of physical and mental health conditions (76, 77), and concentration of social deprivation (78), across the geographical area. Evidence has indicated that Lancashire and South Cumbria is above the national average for prevalence of mental health conditions, has higher rates of adults in contact with mental health services, and has considerably less funding available for mental health (80). In addition, a 2021 report of the impacts of the COVID-19 pandemic in the North of England (81), suggested that the mental health of populations like Lancashire and South Cumbria is likely to have been disproportionately affected. There was a clear need to not only understand how access to mental health services changed as a result of the COVID-19 pandemic from the perspective of mental health need, but also as an under-researched geographical area. This study arose from existing relationships with the NHS Trust and an interest from NHS colleagues in wishing to better understand access to mental health services for population groups that are typically underserved, such as LGBTQ+ people, and to develop strategic improvements to equity in service accessibility and delivery.

3.5.3. Topic-guided interviews

Qualitative designs, involving interviewing participants on a one-to-one basis using a flexible topic guide to facilitate the discussion between participant and researcher, can result in rich and meaningful data to understand the personal experiences of individuals on potentially sensitive topics (155, 156). Certain research questions lend themselves well to interviewing, whereby the researcher acts as a "miner" to unearth pieces of knowledge that contribute to our understanding of the lived experiences of a social phenomenon (155). This qualitative method is also consistent with the critical realist perspective, capturing information to understand the complexities of reality and the mechanisms through which things happen.

The study presented in Chapter 6 is a topic-guided interview study which sought to understand the experiences of LGBTQ+ people accessing or trying to access mental health services during the COVID-19 pandemic. It was designed to complement the routinely collected data study (Chapter 5) by providing meaning behind the findings associated with missing data and changes observed during COVID-19. The decision to interview service users to understand their experiences was informed by the identification of a real lack of this type of research in existing literature (131). LGBTQ+ populations are classed as "seldom-heard groups", in that their voices are less likely to be heard by researchers, health and care services, and decision-makers (157). It was important from the PhD researcher's perspective and the perspectives of various stakeholders that this research endeavoured to highlight the lived experiences of LGBTQ+ people during the COVID-19 pandemic as these groups had largely been omitted from COVID-19 research studies. It would have been interesting to also have considered staff perspectives more comprehensively to further contextualise access to mental health services for LGBTQ+

people, but this wasn’t feasible in the scope of this thesis.

Interviews with service users as opposed to focus groups, were proposed more suitable by experts-by-experience (e.g., those with lived experience of being LGBTQ+ and/or accessing mental health services) because experiences of accessing mental health services and being LGBTQ+ could be potentially difficult topics to discuss within a group environment. Convenience sampling through various different sources and networks was conducted as difficulties with participant recruitment from LGBTQ+ population groups were anticipated. LGBTQ+ people have endured historical experiences of stigma and discrimination, medical maltreatment, and societal exclusion, and this may have affected their perception of safety in taking part in mental health research. Due to the complexity of mental health services and their different configurations across England, recruitment was restricted to individuals who had accessed or tried to access mental health services in Lancashire and South Cumbria. This helped in using the qualitative findings to complement the quantitative findings as individuals were discussing their experiences with services that the PhD researcher was familiar with after analysing the LSCft data. Permission to recruit via the NHS was not sought for this study, as it aimed to also capture the experiences of individuals who tried to access mental health services but were unable to. Participants were recruited via electronic adverts shared on social media and with LGBTQ+ organisations and networks, and via paper adverts placed in local spaces known to offer LGBTQ+ support sessions. Finally, participants were given a choice between the interview being conducted face-to-face or using video conferencing software. As a result, most likely out of convenience, all interviews for this study took place virtually. There has been some stipulation that virtual interviews affect rapport building with participants or cause participant fatigue and therefore can reduce the depth that could be achieved if they were conducted in person (158). The COVID-19 pandemic accelerated the rate at which qualitative research was conducted in this way and undertaking interviews using video conferencing software now offers opportunities to recruit more flexibly and capture recording and transcription more easily (158). The PhD researcher felt that enabling participant choice over the format of the interview meant that more in-depth data could be collected and reduced burden on both the participant and the PhD researcher.

3.6. Methods of data analysis

3.6.1. Systematic mapping review

Much of the data collected from included studies for the systematic mapping review was narratively synthesised in order to describe their characteristics (e.g., type, design, setting). However, for detailed data such as how studies had defined and measured access to mental health services, which dimensions of inequalities had been studied, and the study findings themselves, a more nuanced approach to data analysis was required. Framework analysis is a well-established approach to qualitative data analysis, which involves a systematic process of key stages; familiarisation, identifying a thematic framework, indexing, charting, mapping, and interpretation (159). Developed in the 1980s, framework analysis has become hugely popular as if offers a flexible method to enable themes to be identified *a priori* and combine them with themes that emerge during the analysis (160). A best-fit framework approach, similar to framework analysis but for synthesising studies, involves creating or using an existing framework and coding data from included studies against the domains or constructs of said framework (161, 162). Carroll et al. (161) recommend this approach for synthesis as it enables a "relatively rapid, transparent, and pragmatic process" when compared with other forms of synthesis. The best-fit framework method was applied for the systematic mapping review presented in Chapter 4 as it facilitated the utilisation of Levesque's Conceptual Framework for Healthcare Access (133) to conceptualise access, and the development of a further framework to describe dimensions of inequality. It also offered a highly pragmatic method for where there was a significant amount of quantitative and qualitative data collected from a large amount of studies. As the purpose of a systematic mapping review is to map out and categorise evidence to provide an overview and identify potential gaps (147), a best-fit framework synthesis was exploited in order to create *a priori* map which evidence could be categorised against.

3.6.2. Routinely collected mental health service data

For the study presented in Chapter 5, basic exploration of the routinely collected data was initially conducted to understand what it could tell us about access to mental health services for LGBTQ+ people. Descriptive statistics and cross-tabulation, including frequencies, proportions, means, and chi-square tests of independence, were used to explore the data, highlighting the size and characteristics of the LGBTQ+ sample available in the dataset. Various tables and charts were produced to visualise the exploratory analysis and to plot the data over time to examine patterns before and during the COVID-19 pandemic. Acknowledging issues with the extent of missing sexual orientation data, logistic regression models were used to understand whether missingness of sexual orientation data was associated with other variables (e.g., age, ethnicity, service, referral source, contact type), or whether it happened at random.

3.6.3. Topic-guided interviews

Thematic analysis is a well-established approach to qualitative data analysis, which involves a systematic process of six key stages; familiarisation, data coding, initial theme generation, theme development and review, theme refinement, and writing up (163). Thematic analysis has an interest in making sense of qualitative data by identifying patterns of meaning through the practice of coding and theme generation (163). Thematic analysis is flexible and accessible in its approach, and is not restricted to a specific research paradigm (163). In addition to thematic analysis and framework analysis (mentioned earlier), there are other approaches to organising, analysing, and interpreting qualitative research data; content analysis, narrative analysis, discourse analysis, and grounded theory analysis. Content analysis involves determining the presence of certain words, themes, or concepts from qualitative data to provide some insight into the meaning (164). Although probably most similar to thematic analysis, it can be a time-consuming process and sometimes limited in terms of its flexibility. Narrative analysis focuses on interpreting participants' stories and how participants construct their stories (164). Interviews which use a topic guide shaped by a framework, like the qualitative study in this thesis, do not lend themselves well to this type of analysis as it doesn't give participants much space to tell stories as such. Attempting to understand the contextual meaning of language used by participants is a key practice of discourse analysis (164). Similarly to content analysis, this approach can be time-consuming and limited in its flexibility. Grounded theory analysis involves the process of generating theories which are grounded in the data being collected (164). It is a highly involved process which requires data collection and analysis to be undertaken simultaneously in an iterative way to form these theories. Thematic analysis was identified as the most suitable approach to qualitative data analysis in this thesis. It was considered appropriate for the research question aiming to identify patterns and themes underlying the experiences of LGBTQ+ people during the COVID-19 pandemic, and it enabled flexibility in how the PhD researcher approached the interview data.

The second primary research study presented in Chapter 6 adopted a hybrid approach to thematic analysis (165); it incorporated a data-driven inductive approach in coding and theme generation, and a deductive *a priori* template of codes from Levesque's Conceptual Framework for Healthcare Access (133). The convergence of inductive and deductive thematic analysis is highly relevant to the philosophical perspective applied in this thesis, as it corresponds to the critical realist tools of abduction and retroduction (165, 166). These analytical tools are central to critical realism (166), in that they define how a researcher goes about approaching the data analysis, by reflecting on the *a priori* knowledge and theories that they bring (retroduction), and enabling the formulation of new knowledge which doesn't necessarily fit within existing theories (abduction). Within this hybrid approach, the PhD researcher considered Levesque's conceptualisation of access during the analysis and allowed themes to be generated directly from the data. This was particularly pertinent to the research conducted for this thesis as there is need to undertake theory-driven research in this area, whilst also acknowledging that limited evidence exists on LGBTQ+ experiences of accessing mental health services during COVID-19 and so avoiding being reductive about findings which did not fit into the framework.

The PhD researcher played an active role in generating and analysing data for the qualitative study. The interviews were transcribed by the PhD researcher, and she listened back to each recording more than once and re-read the transcripts multiple times, in order to immerse herself in the data and get a sense of the patterns of meanings through the whole dataset. Both electronic and hard copies were used during the analysis, and the PhD researcher changed the environments where she undertook the analysis process (e.g., office space, cafes, university library), which helped to ensure she was flexible in her thinking. Analysis was an iterative process, involving the PhD researcher and a small supervisory group with various lived and professional experiences gradually refining the themes from the initial coding and theme generation. The PhD researcher acknowledged that her role as the researcher contributed to the collection of the data and its interpretation, and reflected continuously on her subjectivity throughout the study.

3.7. Patient and public involvement

The quality, relevance, and impact of health research can be strengthened by embedding the perspectives of those with lived experience of health conditions and accessing health and care services (167). The National Institute for Health and Care Research (NIHR) defines patient and public involvement (PPI) in research as "research carried out 'with' or 'by' members of the public rather than 'to', 'about' or 'for' them" (168). There are a range of approaches that can be used to involve members of the public in research, and they can be involved at various stages from designing and conducting research through to disseminating and implementing the findings of the research (168). Despite the potential for PPI to enhance the research and the range of approaches that can be used, the reporting of PPI and its impact has been limited in the past, particularly in doctoral research (169). In addition, the views of marginalised individuals such as those experiencing mental health conditions or those who identify as LGBTQ+ have rarely been considered and are often perceived to lack credibility as opposed to professional knowledge (170). It is argued that embedding PPI into research such as that described in this thesis is imperative to address issues of "epistemic injustice" (170), a concept whereby marginalised individuals are excluded from the process of creating knowledge. The Guidance for Reporting Involvement of Patients and the Public (GRIPP2) checklist (171) has been used as a framework in this thesis to describe the aims and methods used for PPI in the research, and reflect on the extent to which PPI influenced the research (*Table A1* in *Appendix A*). The terms "public advisers" and "experts-by-experience" are used interchangeably throughout this thesis to refer to those who were involved in the research who had lived experience of being LGBTQ+ and/or accessing mental health services.

3.8. Stakeholder engagement

In addition to PPI, the knowledge and experience of individuals who design and deliver health and care services can also be utilised to enhance the quality and relevance of health research (172). Mental health services are situated within highly complex healthcare systems and the mechanisms through which they are delivered vary across different areas, therefore it is essential to collaborate with stakeholders who possess knowledge and experience of these contexts. Engaging with stakeholders who have a "direct interest" in the research being conducted, such as clinicians, commissioners, and administrators, can also support the translation of health research findings into practice (172). An amended version of the GRIPP2 checklist (171) has been used as a framework in this thesis to reflect on the extent to which stakeholder engagement (SE) influenced the research (*Table A2* in *Appendix A*). The terms "stakeholders" and "domain-experts" are used interchangeably throughout this thesis to refer to those who were involved in the research who have professional knowledge and experience of mental health services.

3.9. Reflexivity

As a researcher, it is important to acknowledge your role in the research process. A researcher's prior experiences, perspectives, and assumptions, influence how the research is designed and carried out, and how the resulting data is analysed and interpreted (173). Unlike the rest of this thesis, this section is written in the first person to enable the PhD researcher to authentically reflect on her identity and positioning as a researcher in the research process, and acknowledge that her role is unlikely to have been one of a neutral observer. The PhD researcher kept a reflexive diary throughout the research to capture her decision-making process and reflect on how her experience has shaped the research that was conducted for this thesis; this section summarises those reflections.

3.9.1. Personal reflexivity

Personal reflexivity involves the researcher reflecting on how their identity, prior experiences, and motivations may have influenced the research (173). I held an "insider" status when undertaking the research for this thesis as I have attributes and personal experiences which closely aligned with the population groups being researched. Dwyer and Buckle (174) outline that being an "insider" researcher can provide trust and openness in participants and can support access to groups which may have been difficult as an "outsider" researcher. However, the authors also suggest that having an "insider" status can negatively affect the research if the researcher makes assumptions based on their own personal experiences and therefore doesn't seek out additional information to expand their understanding (174).

I am a bisexual cisgender woman in a same-sex relationship with lived experience of accessing mental health support prior to the pandemic and of homophobic discrimination during the pandemic, and I navigate heteronormativity on a daily basis. My interest in wanting to understand access to mental health services for LGBTQ+ people during COVID-19 is one that was largely driven by my own identity and experiences. My lived experience has enabled me to provide insights that others may not have had prior to commencement of the research and empowered me to undertake research which ultimately aimed to influence perceptions and generate change for LGBTQ+ people. Whilst this was my motivation to pursue the topic, I needed to acknowledge that I had pre-conceived ideas and beliefs about what I may find based on my own experiences. Beyond keeping a reflexive diary, I challenged these assumptions in three ways. I interacted with others who have lived experience of being LGBTQ+ and accessing services, recognising that my views are not representative of all LGBTQ+ people. I interacted with stakeholders involved in the delivery of services, recognising the importance of their contextual knowledge of service delivery during COVID-19. I also used my supervision meetings as a reflexive space to discuss my decision-making process and my findings, valuing input and oversight from my academic supervisors who also challenged my assumptions based on their own lived experience and expertise. Neither of my academic supervisors identified as LGBTQ+ or had experience of accessing mental health services as an LGBTQ+ person. Using these opportunities to build my awareness enabled me to minimise the influence of my personal biases and acknowledge my subjectivity.

Bringing my personal experience into my PhD often felt difficult, particularly in relation to continuously disclosing my own identity in fear of reaction from others, frustration at the lack of existing research, and doubting the relevance and importance of the research when I was faced with a lack of engagement from others. These are issues that have been noted by other LGBTQ+ researchers (175, 176) and can be an emotional burden when conducting LGBTQ+ research. My PPI and SE activities however, helped to maintain my enthusiasm and reiterated that this was an important area that warranted further exploration and would benefit LGBTQ+ people. My supervision meetings also acted as a space where I could reflect on my experiences and debrief following my qualitative interviews and dissemination activities. During my PhD, I engaged with researchers who were also undertaking LGBTQ+ research and found these spaces to be supportive and validating, which mitigated some of the effects mentioned above.

3.9.2. Interpersonal reflexivity

Research can be influenced by the relationships between participants and researchers, and the power dynamics potentially at play, and interpersonal reflexivity requires reflection on how this may have influenced the research (173). This type of reflexivity was of particular importance for my qualitative study, interviewing LGBTQ+ people about their experiences of accessing mental health services during COVID-19. At the beginning of each interview, I declared my "insider" status and explained my interest in the research being conducted. The purpose of this was to put the participant at ease and create a safe space for the interview. I felt it was important to let the participants know that not only have I got shared personal experiences, but what my intentions were with the information they provided. There is limited representation of LGBTQ+ voices in health research (36), which has caused LGBTQ+ people to feel invisible and reluctant to share their experiences. I found that declaring my "insider" status helped to build rapport in the interviews, so much so that a participant concluded an interview with the following statement:

> *"I really love that research about LGBT people is now being done by us rather than to us. I think that's a huge immeasurable shift, you know, I don't feel like I'm something on a slide under a microscope. I feel like this is a conversation that I can have with someone who gets some of the issues that I have come up against."*

This was really rewarding feedback and demonstrates how my personal identity may have influenced the relationships I developed with my participants and is likely to have shaped what was shared by participants in the interviews. Although the insider status appears to have been important in this research, I cannot claim to share attributes or personal experiences with all LGBTQ+ groups (e.g., gender minorities). Dwyer and Buckle (174) suggest that it is not "insider" or "outsider" status which is a recipe for success, it is the "ability to be open, authentic, honest and deeply interested in the experience of one's research participants, and committed to accurately and adequately representing their experience". This is a statement I reflected on before each interview and helped me to develop a close awareness of my own personal biases and subjectivity as a bisexual cisgender woman, and how they might have influenced the information participants gave.

3.9.3. Methodological reflexivity

Researchers need to consider how their philosophical positions and decisions around what research methodologies are used influence the research process (173). In late 2020, I reached out to some colleagues from other institutions via email in my role as a researcher about their work exploring LGBTQ+ experiences of the COVID-19 pandemic. These conversations initiated the undertaking of a systematic review which aimed to review all evidence on the impact of COVID-19 on the health and well-being of LGBTQ+ people in the UK (54). This review highlighted a significant lack of research in this area and ignited a real desire in me to contribute to addressing this gap. The funded PhD opportunity looking at access to mental health services during COVID-19 become available a few months after and I applied outlining my interest in focusing on LGBTQ+ population groups.

Prior to this PhD, I had been involved in individual quantitative and qualitative research studies, but had limited experience of undertaking mixed methods and independent research. I brought expertise in collecting and analysing qualitative data from interviews and focus groups, and experience of analysing quantitative data from psychological and neuroscientific studies, and in my role as a data analyst in a local authority service. I value the contribution that both qualitative and quantitative data can bring to developing our knowledge of reality, and identified that critical realism was the philosophical position that most closely aligned with this view. This position has influenced the methods that I chose to use in the research, with each study designed to improve knowledge of an area where limited evidence currently exists as outlined in earlier section of this chapter. Being reflexive here entailed understanding the strengths and limitations of the methodological choices I made, which are discussed across the individual study chapters and in Chapter 7.

3.9.4. Contextual reflexivity

All research is influenced by its historical and societal context (173). LGBTQ+ history and societal attitudes towards LGBTQ+ people have implications for research, particularly that associated with the mental health of LGBTQ+ people. I sought out information about what was happening across the world for LGBTQ+ rights during the pandemic and in the aftermath. There were a number of contextual conditions identified, including LGBTQ+ terror attacks in the USA, changes in legislation to exclude LGBTQ+ people, the synergy of the COVID-19 pandemic with the acquired immune deficiency syndrome (AIDS) epidemic, and the rise of transphobic abuse being reported in the media. I reflected on how this context creating further hostile conditions for LGBTQ+ people, alongside the invisibility of LGBTQ+ population groups in COVID-19 research, may have influenced my research. My PPI discussions were particularly helpful here to challenge my assumptions, but also ensure that my pre-conceptions about how other LGBTQ+ people might be feeling as a result of these contextual conditions did not influence my choice of approach or my interpretation.

3.10. Research governance and ethical considerations

All research undertaken as part of this thesis received appropriate ethical approval prior to commencement. The quantitative study presented in Chapter 5, which involved analysing routinely collected mental health service data, received ethical approval from the Health Research Authority (Reference: 22/HRA/2339) on 12th July 2022. The qualitative study presented in Chapter 6, which involved conducting topic-guided interviews with LGBTQ+ people, received ethical approval from Lancaster University's Faculty of Health and Medicine

Research Ethics Committee (Reference: FHM-2023-3639-RECR-1) on 16th June 2023.

3.10.1. Systematic mapping review

The systematic mapping review presented in Chapter 4 was conducted based on existing guidance for scoping reviews (146), and reported based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) checklist (148). It is widely expected that researchers prospectively register a protocol for their systematic review, a process which aims to reduce bias and increase transparency in the conducting and reporting of systematic reviews (177). PROSPERO is the most widely known international prospective register of systematic reviews, but does not currently accept protocols for systematic mapping reviews or scoping reviews. A protocol for this systematic mapping review was registered on an alternative online registry hosted by the Open Science Framework (OSF), to ensure transparency of the evidence synthesis being undertaken (https://doi.org/10.17605/OSF.IO/RQ5U7). For transparency and replicability, all data generated or analysed as part of the systematic mapping review are included in the publication and its supplementary information files (131).

3.10.2. Routinely collected mental health service data

The use of health data in research which was not primarily collected for this purpose is a somewhat contentious issue. When individuals access a healthcare service, the use of data collected about them to drive improvements through audits and service evaluation is arguably ethical as it is not only kept within the organisation they have used but the individuals are likely to directly benefit from those activities. However, using this data for research can have potential ethical implications in that individuals lose their autonomy and risk being identified by those outside of the healthcare organisation.

The quantitative study presented in Chapter 5 relied on analysing a large dataset containing thousands of de-identified service user records over a 4.5 year period, therefore it was not feasible to request consent directly from these individuals. The PhD researcher and academic supervisors had no direct contact with service users or identifying information (e.g., name, date of birth, postcode). The PhD researcher accessed the pseudonymised data stored on LSCft servers using a secure NHS laptop provided by LSCft and had an NHS research passport in place. Pseudonymisation was undertaken by those who already had access to the service user data in their usual role at LSCft, using established pseudonymisation software before the data were made available to the PhD researcher and academic supervisors. Only aggregated, non-identifiable data from statistical analyses is reported in publications and in this thesis to prevent potential identification of service users. Any data taken outside of the LSCft servers was completed with the agreement and approval of LSCft colleagues. Regular audit meetings were held with LSCft colleagues throughout the study to review the data being used in the research, discuss lessons learned from the research activities, and continuously monitor data security. As the data to support the findings of this study was acquired from the NHS Trust, restrictions apply to the availability of this data, and so it is not publicly available in any outputs. In the interests of replicability, access to the data is possible, but would be dependent on the recipient agreeing a data sharing agreement with the NHS Trust.

3.10.3. Topic-guided interviews

For the qualitative study presented in Chapter 6, all participants were provided with a participant information sheet outlining the study and what it entailed, and a consent form to sign and confirm they had received information about the study and that they consented to take part, prior to the interview. During the interview, participants were asked to re-confirm their consent to take part and for the interview to be audio-recorded, along with being reminded that they were free to withdraw from the interview at any time without providing a reason. To address the issues of anonymity and confidentiality, all data collected during the qualitative study was stored securely on Lancaster University's One Drive, with access only granted to the PhD researcher and academic supervisors. Consistent with data protection requirements, data from audio recordings, monitoring forms, and transcripts, was anonymised by assigning participants a unique identification number and stored separately to any personal information (e.g., name, contact details). Any identifying information was removed from transcripts, and quotes reported from the interviews were anonymised to ensure participants were not identifiable. Confidentiality was upheld at all times, but participants were made aware that the confidentiality agreement would be broken if the PhD researcher felt there was a risk of harm to the participant or others and that she would let them know if this was the case where possible. The data to support the findings of this study have not been made publicly available due to potential identifiability of the participants and the sensitive nature of the research. However, some supporting data is available from the PhD researcher, upon reasonable request.

Although there were no serious risks anticipated with participating in the study, participants could have become distressed when discussing a sensitive topic and reflecting on potentially difficult experiences. As a result, a distress protocol was developed to detail the actions that would be taken in the event that a participant appeared to become distressed. Participants were reminded that they could withdraw from the interview at any time without providing a reason and did not have to answer any questions that they did not wish to answer. At the end of the interview, all participants were encouraged to seek support from their general practitioner (GP) or mental health service provider if applicable and were signposted to resources for support provided in the participant debrief sheet. Given the nature of the interviews and the PhD researcher's own LGBTQ+ identity, there were some minimal risks that the participant may have shared particularly distressing experiences (e.g., homophobia, biphobia) which may have affected her. The PhD researcher scheduled regular debrief meetings with academic supervisors to discuss any concerns and utilised relevant support services where necessary.

Each participant was provided with a £25 shopping voucher as a thank you for taking part in the interview. As the interviews were conducted online and participants were not required to travel, this was more of an renumeration payment rather than reimbursement. There are ethical considerations associated with paying research participants, particularly in using incentives to improve recruitment and retention. Whilst it is widely recognised that participants should be compensated for their time and contribution to research, the payment they receive should not create undue inducement that would influence their capacity to consider the potential risks of the research (178). The decision to offer participants a shopping voucher of £25 was informed by discussions with academic supervisors about an appropriate amount to offer and after consulting various guidance documents on the ethics of paying research participants (178-181).

3.11. Dissemination

The primary method of dissemination for the research conducted for this thesis will be the published journal articles for each study and associated presentations at research conferences. It is intended that all journal articles will be published open access in order to improve the reach of the findings for both researchers and practitioners. The PhD researcher has and will also utilise opportunities to disseminate knowledge and raise awareness with the potential end users of this research (e.g., at a local service user group meeting, internal NHS Trust meetings, and a local LGBTQ+ charity training session). Research summaries in the form of Applied Research Collaboration (ARC) Brokering Innovation Through Evidence (BITEs) have been and will be co-developed with public advisers for each study to communicate findings in a suitable format for lay audiences (e.g., service users, NHS Trust colleagues).

3.12. Chapter summary

This chapter has provided an overview of the methodology used within this thesis and a rationale behind how this mixed methods research was conducted to understand access to mental health services for LGBTQ+ people during the COVID-19 pandemic. It outlined the PhD researcher's reflections on some of the key concepts which should be routinely considered when conducting any piece of research, including the philosophical position of the researcher, PPI and SE, reflexivity, ethics and governance, and dissemination. All of which have shaped the research that was undertaken, now presented in the subsequent chapters of this thesis.

Chapter 4. Understanding inequalities in access to adult mental health services in the UK: a systematic mapping review

4.1. Abstract

4.1.1. Background

Population groups experience differential access to timely and high-quality mental healthcare. Despite efforts of recent UK policies to improve the accessibility of mental health services, there remains a lack of comprehensive understanding of inequalities in access to services needed to do this. This systematic mapping review aimed to address this gap by identifying which population groups continue to be poorly served by access to adult mental health services in the UK, how access has been measured, and what research methods have been applied.

4.1.2. Methods

Seven electronic databases were searched from January 2014 up to May 2022. Primary research studies of any design were included if they examined access to adult NHS mental health services in the UK by population groups at risk of experiencing inequalities. Study characteristics, measures of access, inequalities studied, and key findings were extracted. A best-fit framework approach was used, applying Levesque's Conceptual Framework for Healthcare Access to synthesise measures of access, and applying a template derived from Cochrane Progress-Plus and NHS Long Term Plan equality characteristics to synthesise key findings associated with inequalities.

4.1.3. Results

Of 1,929 publications retrieved, 152 studies of various types were included. The most frequently considered dimensions of inequality were gender, age, and ethnicity, whilst social capital, religion, and sexual orientation were least frequently considered. Most studies researched access by measuring "healthcare utilisation", followed by studies that measured "healthcare seeking". Key barriers to access were associated with individuals' "ability to seek" (e.g., stigma and discrimination) and "ability to reach" (e.g., availability of services). Almost half of the studies used routinely collected patient data, and only 16% of studies reported patient and public involvement.

4.1.4. Conclusions

Little appears to have changed in the nature and extent of inequalities, suggesting that mental health services have not become more accessible. Actions to reduce inequalities should address barriers to population groups' abilities to seek and reach services such as stigma-reducing

interventions, and re-designing services and pathways. Significant benefits exist in using routinely collected patient data, but its limitations should not be ignored. More theoretically informed research, using a holistic measurement of access, is needed in this area.

4.2. Background

Mental ill health, such as depression, anxiety, and psychosis, is one of the top ten leading causes of global disease burden (24). The World Health Organisation (WHO) 2022 report on "transforming mental health for all" called for action to strengthen global mental healthcare to address this need as services continue to be under-funded and under-resourced (82). In 2016, it was estimated that only one in three people who experience a mental health condition in England could access the mental health support they need (2). By 2021, an estimated 8 million people with mental health needs were not in contact with mental health services (3). On the whole, individuals face high thresholds for being eligible to receive mental healthcare and if deemed eligible, long waiting times before receiving care (83). Evidence suggests that population groups who have been exposed to social and economic disadvantage experience differential access to timely and high-quality mental healthcare in the United Kingdom (UK) (83).

Healthcare access however, is a complex concept to define and measure. Many theoretical frameworks have been developed to conceptualise access, adopting a range of ways to not only define what access is but also understand what may influence access. One of the most recent frameworks is Levesque's Conceptual Framework for Healthcare Access (133), which views access as a multi-dimensional concept associated with dimensions of healthcare systems (e.g., their approachability), and individuals' abilities to access healthcare (e.g., ability to seek). The application of theoretical frameworks is somewhat limited in mental health service research. The stigma people with mental health conditions experience and the existence of involuntary mental healthcare adds further complexity to understanding access to mental health services specifically. Given these unique challenges, there is a need to understand how existing research has conceptualised access in relation to mental healthcare.

In recent years, the UK Government have committed to improving the accessibility of publicly funded mental health services (85, 182, 183). A recent report reviewing the progress of these commitments based on audits, suggests that whilst more people are now in contact with mental health services than in 2016, targets to improve access and address inequalities have been missed (3). A comprehensive understanding of inequalities is required to review and improve access to mental health services for different population groups. The National Health Service (NHS) Advancing Mental Health Equalities Strategy summarised differential access to mental health services across population group characteristics (e.g., age, ethnicity, deprivation, sexual orientation) (86). Evidence drawn upon in this report however, was largely from the grey literature (e.g., third sector organisation reports). Reviewing the academic literature could develop a more empirical foundation to inform policy decision making and actions to address inequalities. Asthana et al. (87) conducted an evidence review, now 8 years old, of quantitative variations in access to NHS mental health services in England, and reported differences associated with age, gender, ethnicity, socioeconomic status, and geographical area. The review however, omitted other dimensions (e.g., sexual orientation, gender identity, refugee and asylum seeker status), did not review the intersectionality of these groups, and did not include qualitative evidence. Therefore, it is necessary to update these findings to not only consider more recent research (e.g., impact of COVID-19, effect of mental health policies), but also to consider other dimensions of inequalities and qualitative evidence that may be able to contextualise quantitative variations in access to mental health services between groups.

This systematic mapping review collated existing evidence to identify which population groups are poorly served by access to adult mental health services in the UK. The review explored how access was measured and which, if any, theoretical frameworks have been applied. Due to the complexity of mental health services across different countries and the unique challenges posed for insurance-based and universal healthcare systems, this review focused only on the UK context. The NHS Advancing Mental Health Strategy outlined the need to use data to drive insight and decision making to improve accessibility of services (86), so this review also assessed how routinely collected patient data has been used to quantify inequalities in access. Specifically, this systematic mapping review aimed to address the following research questions:

1) How has *access* been measured in research exploring inequalities in access to adult mental health services in the UK?
2) What *research methods* and *theoretical frameworks* have been applied in this research?
3) What evidence exists regarding the *differences in access* between population groups, and how does this evidence offer insights into inequalities in access to adult mental health services in the UK?
4) How has the analysis of *routinely collected patient data* from mental health services been used to understand inequalities in access?

4.3. Methods

A systematic mapping review aims to map out and categorise existing evidence on a broader topic than would be studied in a typical systematic review, to develop an understanding of the literature and identify gaps that could be explored with further research (184). Due to the breadth of evidence available in this area, the heterogeneity of studies, and the broad research questions, a systematic mapping review was deemed a suitable way of synthesising evidence from relevant studies. This review was conducted based on existing guidance for scoping reviews (146), and reported based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) checklist (148) (see *Table B1* in *Appendix B* for reporting checklist), as one does not specifically exist for systematic mapping reviews.

4.3.1. Search strategy

Studies were identified through searching the titles, abstracts, and keywords of records across seven electronic databases (Academic Search Ultimate via EBSCOhost, CINAHL via EBSCOhost, EMBASE via Ovid, MEDLINE Complete via EBSCOhost, PsycINFO via EBSCOhost, Scopus via Scopus, and Web of Science via Clarivate) from January 2014, in line with the release of the NHS Five Year Forward report (13) and to extend previous review findings (11), up to 25th May 2022. A search strategy using a combination of Subject Headings and keywords related to main concepts of the research questions was developed and finalised with the assistance of a Faculty Librarian from Lancaster University. Search terms used across all searches are presented in *Table 3*. *Table B2* presents the search strategies used across the seven databases, the date the search was conducted, and the corresponding number of results identified (*Appendix B*). Additional studies were identified through screening reference lists and citations of included studies and relevant review articles.

Table 3. Search terms

Key concepts	**Search terms – combination used across all databases**
Mental health services	mental health care OR mental healthcare OR mental health service* OR mental health therap* OR mental health treatment* OR psychological care OR psychological service* OR psychological therap* OR psychological treatment* OR psychiatric care OR psychiatric service* OR psychiatric therap* OR psychiatric treatment*
Access	access OR accessibility OR availability OR consultation* OR contact* OR entry OR pathway* OR referral* OR utilisation OR utilization OR use OR uptake
Inequalities	barrier* OR determinant* OR difference* OR disadvantage* OR discriminat* OR disparit* OR equal* OR equit* OR facilitator* OR inequal* OR inequit* or intersectional* OR minorit* OR unequal OR unfair OR variation*
UK	united kingdom OR uk OR great britain OR england OR wales OR scotland OR northern ireland OR national health service OR nhs OR london

4.3.2. Eligibility criteria

Preliminary searches were used to develop the eligibility criteria. Primary research studies of any design (quantitative, qualitative, mixed methods) which examined access to adult mental health services in the UK and focused on population groups noted to be at risk of experiencing inequalities according to the NHS Long Term Plan (182) and Cochrane Progress-Plus framework (185) were eligible for inclusion. Studies were limited to those published in English. As grey literature (e.g., charity reports, policy documents) had already been summarised in a recent NHS policy document (86), these types of documents were not considered for inclusion. The eligibility criteria are outlined in *Table 4*.

Table 4. Eligibility criteria

Eligibility criteria	
Include	
Study type / design	Any primary research studies (quantitative, qualitative, mixed methods)
Setting / context	UK-based (England, Wales, Scotland, Northern Ireland)
Population(s) / participants	Adult populations (aged 18+) noted to be at risk of experiencing inequalities according to NHS Long Term Plan (182) and Cochrane Progress-Plus framework (185)
Concept of access	Considers population groups that need to, have tried to, and/or have gained entry to adult mental health services in the UK
Mental health services	Specialist mental health service provision offered at primary, secondary, or tertiary levels of the NHS in the UK
Outcome measure(s)	Differences in or challenges to accessing adult mental health services between population groups (quantitative, qualitative)
Publication type	Peer-reviewed research articles
Publication date	From 1st January 2014 to 25th May 2022
Publication language	English
Exclude	
Population(s) / participants	Children and young people
Publication type	Review articles, letters, editorials, opinion pieces, study protocols, grey literature, conference abstracts

4.3.3. Data selection

All retrieved citations from the searches were collated in EndNote (186) and duplicates were removed. The remaining citations were imported into Rayyan (187). One reviewer (HL) screened titles and abstracts of retrieved citations against the eligibility criteria in Rayyan. Full texts of studies thought potentially relevant were obtained and assessed by HL. Twenty percent of the titles and abstracts, and 15% of full text articles were screened by a second reviewer (AB/CL) to check consistency and accuracy in applying eligibility criteria. Uncertainty or disagreements at any stage were resolved through discussion, and if consensus could not be reached, the wider review group was consulted. Reasons for exclusion at the full text screening stage were documented.

4.3.4. Data charting and synthesis

A bespoke data extraction form was developed and piloted to collect relevant information from included studies. Data extracted included author(s), year of publication, study aim(s), setting, design, population, theoretical framework (if applicable), measure of access, measure of inequality, and key findings. Data extraction was performed by HL and a 5% sample of this was checked by a second reviewer (AB/CL) to verify completeness and accuracy. Any discrepancies were resolved through discussion or consultation with a third reviewer, and where necessary the wider review team. Quality assessment was not conducted in this review as studies were not going to be excluded on this basis.

Study characteristics (e.g., design, setting) were tabulated and synthesised narratively to describe the type of evidence available. A best-fit framework approach (161, 162) was used to analyse the data. Levesque's Conceptual Framework for Healthcare Access (133) was used as the *a priori* framework to code how each study had measured access, applying the five stages of access as key concepts: perception of needs and desire for care, healthcare seeking, healthcare reaching, healthcare utilisation, and healthcare consequences. This framework offered a useful conceptualisation of access to healthcare as a multi-dimensional concept, and has not been used in this way in reviewing mental health service research.

A further framework was developed by combining equality characteristics in the NHS Long Term Plan (182), and the Cochrane Progress-Plus framework (185): age, disability, education, gender and sex (including gender identity), occupation, place of residence, pregnancy/maternity, ethnicity, religion, sexual orientation, social capital, socioeconomic status, and other. This template was used as the *a priori* framework to identify which dimensions of inequality had been studied and to code key findings from the studies. Key findings for each dimension of the template framework were grouped together in the synthesis: differences in levels of access, differences in pathways to access, and barriers to accessing mental health services. For data related to barriers to access, the abilities of individuals to access healthcare according to Levesque's framework (133), were used to code factors identified by studies that had influenced access: ability to perceive, ability to seek, ability to reach, ability to pay, ability to engage. Tables and figures have been used to characterise the evidence base identified. HL performed the data synthesis and the wider review team were consulted during the process to review and feedback on the presentation and interpretation of the results.

4.3.5. Stakeholder involvement

The proposed research questions were reviewed by a service user group and a public adviser from a marginalised group with lived experience of accessing mental health services. Their involvement led to the inclusion of a theoretical framework (133) as a lens to further understand how studies have measured access. Three co-authors (AB/CL/FL) have experience and expertise in delivering mental health services to adults experiencing mental health conditions. Finally, the authors received feedback on the review findings and their interpretation from experts-by-experience and domain-experts.

4.4. Results

After the removal of duplicates, the search strategy identified a total of 1,929 citations. Based on screening titles and abstracts, 1,653 citations were excluded. A total of 276 full texts were assessed for eligibility, of which 138 papers were included in the review (*Figure 4*). An additional 14 papers were also identified through citation checking.

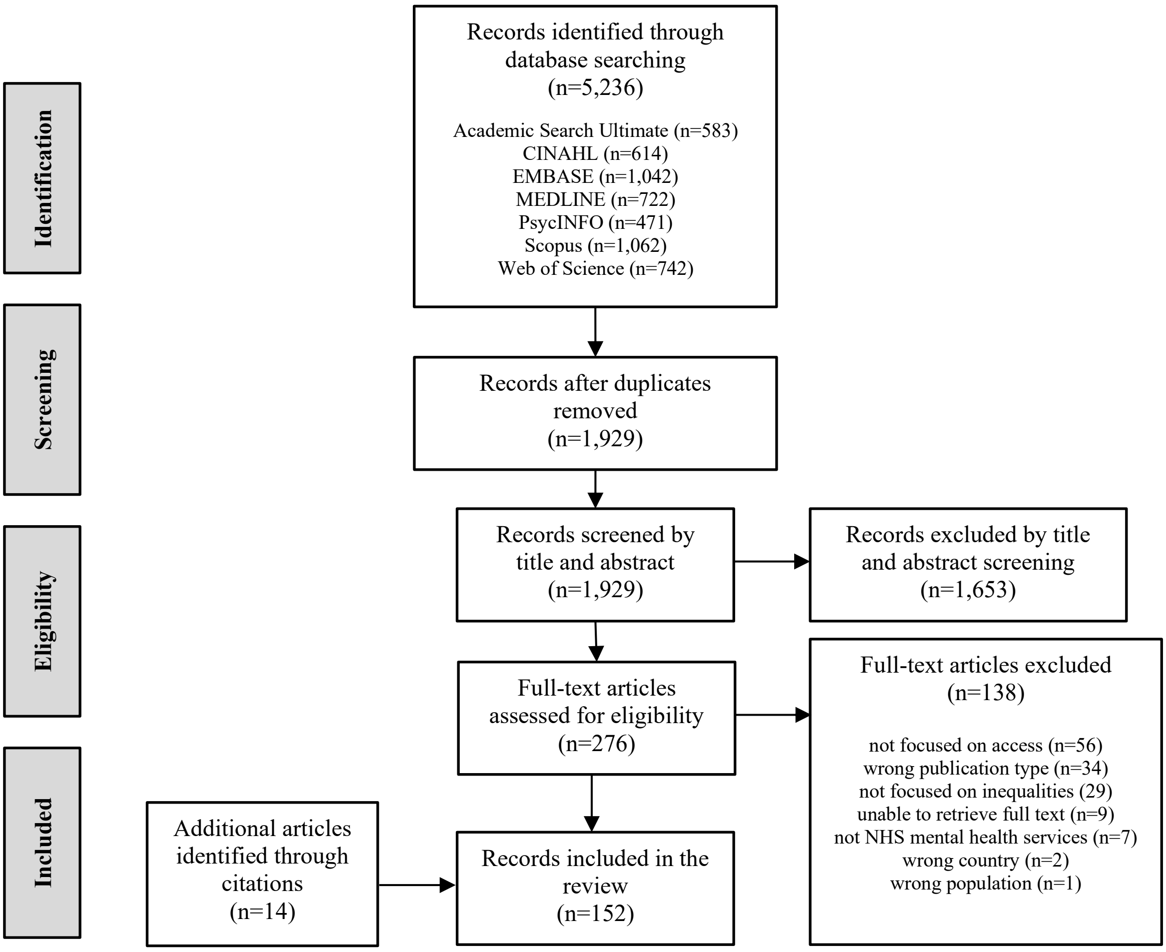


Figure 4. Flowchart of the study selection process

4.4.1. Study characteristics

An overview of the study characteristics is presented in *Table 5,* split by study type. The size of the literature on access to mental health services has grown gradually over time, seeing a larger increase in qualitative studies in more recent years. Over a third of studies were conducted in secondary care settings (e.g., community mental health teams, early intervention in psychosis services), and another third were conducted in other settings (e.g., population-based surveys, educational). The remaining studies were conducted across Improving Access to Psychological Therapies (IAPT) services, tertiary care (e.g., forensic services, veteran services), and primary care (e.g., GP) settings. Eighty percent of the studies were conducted in England, with fewer studies covering other nations in the UK (Wales (n=6), Scotland (n=4), Northern Ireland (n=2), UK-wide (n=24)). Of those conducted in England, nearly half of the studies were conducted in London (n=50). Almost half of the studies used routinely collected patient data, 62 of which were quantitative. Only 25 studies reported any patient and public involvement, 15 of which were qualitative. Larger sample sizes were seen in quantitative studies.

Table 5. Summary of study characteristics

Study characteristic		**Quantitative** n (%)	**Qualitative** n (%)	**Mixed** n (%)	**Total** n (%)
Publication year	2014	9 (10)	3 (7)	1 (7)	13 (9)
	2015	9 (10)	2 (4)	3 (20)	14 (9)
	2016	8 (9)	2 (4)	2 (13)	12 (8)
	2017	12 (13)	6 (13)	1 (7)	19 (13)
	2018	8 (9)	3 (7)	1 (7)	12 (8)
	2019	14 (15)	2 (4)	2 (13)	18 (12)
	2020	13 (14)	6 (13)	1 (7)	20 (13)
	2021	12 (13)	12 (27)	1 (7)	25 (16)
	2022	7 (8)	9 (20)	3 (20)	19 (13)
Study setting	Primary care (e.g., GPs)	5 (5)	0 (0)	0 (0)	5 (3)
	IAPT services	10 (11)	4 (9)	5 (33)	19 (13)
	Secondary care (e.g., CMHTs)	42 (46)	12 (27)	1 (7)	55 (36)
	Tertiary (e.g., military, forensic)	5 (5)	2 (4)	2 (13)	9 (6)
	Other (e.g., educational)	27 (29)	25 (56)	7 (47)	59 (39)
	Multiple settings	3 (3)	2 (4)	0 (0)	5 (3)
Study design	Focus group	0 (0)	7 (16)	0 (0)	7 (5)
	Interview	8 (9)	34 (76)	1 (7)	43 (28)
	Observational	55 (60)	1 (2)	1 (7)	57 (38)
	Questionnaire /	20 (22)	2 (4)	10 (67)	32 (21)

	survey				
	Multiple study designs	9 (10)	1 (2)	3 (20)	13 (9)
Study sample size	0 – 24	0 (0)	19 (42)	2 (13)	21 (14)
	25 - 150	7 (8)	26 (58)	6 (40)	39 (26)
	151 - 1,000	34 (37)	0 (0)	5 (33)	39 (26)
	1,001 – 10,000	27 (29)	0 (0)	0 (0)	27 (18)
	10,000+	21 (23)	0 (0)	2 (13)	23 (15)
	Unclear / not stated	3 (3)	0 (0)	0 (0)	3 (2)
Evidence of PPI	Yes	4 (4)	15 (33)	6 (40)	25 (16)
	No	88 (96)	30 (67)	9 (60)	127 (84)
Use of routinely collected patient data	Yes	66 (72)	1 (2)	3 (20)	70 (46)
	No	26 (28)	44 (98)	12 (80)	82 (54)
Measuring access – using Levesque framework (133)	Perception of needs and desire for care	1 (1)	1 (2)	0 (0)	2 (1)
	Healthcare seeking	11 (12)	30 (67)	7 (47)	48 (32)
	Healthcare reaching	2 (2)	6 (13)	2 (13)	10 (7)
	Healthcare utilisation	77 (84)	7 (16)	6 (40)	90 (59)
	Healthcare consequences	1 (1)	1 (2)	0 (0)	2 (1)
Main dimensions of inequality studied	Age	12 (13)	5 (11)	3 (20)	20 (13)
	Disability	3 (3)	3 (7)	1 (7)	7 (5)
	Education	1 (1)	0 (0)	0 (0)	1 (1)
	Gender and sex	2 (2)	1 (2)	2 (13)	5 (3)
	Occupation	6 (7)	6 (13)	1 (7)	13 (9)
	Place of residence	1 (1)	0 (0)	0 (0)	1 (1)
	Pregnancy and maternity	2 (2)	1 (2)	1 (7)	4 (3)
	Race, ethnicity, culture, and language	19 (21)	17 (38)	1 (7)	37 (24)
	Religion	0 (0)	0 (0)	0 (0)	0 (0)
	Sexual orientation	1 (1)	1 (2)	1 (7)	3 (2)
	Social capital	0 (0)	0 (0)	0 (0)	0 (0)
	Socio-economic status	6 (7)	1 (2)	1 (7)	8 (5)
	*Contact with criminal justice system	7 (8)	1 (2)	0 (0)	8 (5)
	*Refugees and asylum seekers	1 (1)	2 (4)	0 (0)	3 (2)

	*Trafficked people and street sex workers	0 (0)	2 (4)	1 (7)	3 (2)
	Multiple / exploratory	31 (34)	5 (11)	3 (20)	39 (26)

* *CMHTs,* community mental health teams; *GP,* general practice; *IAPT,* improving access to psychological therapies; *PPI,* patient and public involvement

4.4.2. Measures of access

The five stages of access in Levesque's framework (133) were used to note how each study measured access to mental health services. The superscript numbers used in this section refer to the references used in *Appendix B*, which presents a table of included studies categorised by measure of access (*Table B3*).

Perception of needs and desire for care

Two studies[1-2] explored illness perceptions and help-seeking attitudes of population groups and their influence on accessing mental health services. One study[1] explored how illness attributions differed by ethnicity using a questionnaire, and another study[2] interviewed service users about their perceptions of eligibility for mental healthcare during the COVID-19 pandemic.

Healthcare seeking

Healthcare seeking as a measure of access was used by 48 studies[3-50]. These were most notably qualitative studies[3-8,13,17,18,20-22,24,26-44,46,47,49,50] which explored barriers to seeking mental healthcare from the perspectives of service users, carers, and professionals. Some quantitative studies which used routinely collected data[12,23] or self-report surveys[9-11,14-16,19,25,45,48] about being referred to mental health services were also included here as this suggested seeking mental healthcare but not necessarily reaching or utilising it. Most studies measuring healthcare seeking focused on a specific dimension of inequality, such as ethnicity[4-6,19,21,22,27,29,32,34-36,41,43,46,50], and occupation[8,13,16,23,26,31,37,44,45,48,49].

Healthcare reaching

Ten studies[51-60] ascertained from service users or professionals, using mainly interviews, the barriers to reaching mental healthcare. Four studies[52-54,57] were focused specifically on the dimension of disability and the availability and accommodation of mental health services (e.g., location, transport, mobility). Inadequate transitions from child and adolescent mental health services to adult mental health services were the focus of two studies[51,58] measuring healthcare reaching.

Healthcare utilisation

Ninety studies[61-150] measured healthcare utilisation, of which were mostly quantitative and observational. These studies either used routinely collected data or survey responses self-reporting use of mental health services to understand differences in rates of utilisation or receipt of care between population groups. Studies were predominantly conducted in secondary care or IAPT settings, most likely due to the routinely collected patient data that is available from these service providers. Twenty-eight[62,66,67,69,72-75,80,81,83,88,89,100,109,111,112,119,123,128,132,133,137,138,143,146,147] studies measuring healthcare utilisation did not focus on a specific dimension of inequality and were mainly exploratory by looking at the characteristics of those accessing services, whilst 20 studies[61,63,65,68,77,85,88,94,99,103,104,113,114,120-122,124,135,136,150] specifically focused on rates of utilisation by ethnicity.

Healthcare consequences

Two studies[151-152] explored the consequences of accessing inappropriate mental healthcare. One study[151] investigated the experiences of people with mental health conditions accessing remote mental healthcare during the COVID-19 pandemic, and another study[152] examined unmet psychological care needs of people living with human immunodeficiency virus (HIV) and associated health outcomes.

4.4.3. Research methods and theoretical frameworks

Quantitative studies (n=92) were mostly observational using routinely collected patient data (n=55), or surveys collecting quantitative data (n=20), often using established scales (e.g., Barriers to Care, Stigma Scale), to examine differences between population groups. These studies had larger sample sizes and used sampling methods that were more representative, but were less likely to demonstrate evidence of patient and public involvement. Some quantitative studies combined minority groups due to small sample sizes (e.g., Black and minority ethnic, sexual minorities) assuming a shared experience. Descriptive statistics, statistical tests, such as chi-square, and regression analyses were used to analyse differences between population groups. Qualitative studies (n=45) were mainly interviews (n=34) or focus groups (n=7) conducted with service users, carers, or professionals about their experiences or perspectives on access to mental health services. Participants were recruited purposively, typically belonging to a particular minority group or professional role. Studies often used thematic analysis to synthesise the data, and were more likely to demonstrate evidence of patient and public involvement. Surveys collecting both quantitative and qualitative data were used in mixed methods studies (n=10), but few studies referred to the integration of findings as would be seen in a typical mixed methods design. Only 17 studies discussed the application or production of a theoretical framework to understand access or inequality, and this was mostly frequently used to analyse qualitative data. Dixon-Woods' Candidacy Framework (138), Andersen's Model of Health Services Use (188), and Kleinman's Healthcare Model (189), featured in multiple studies.

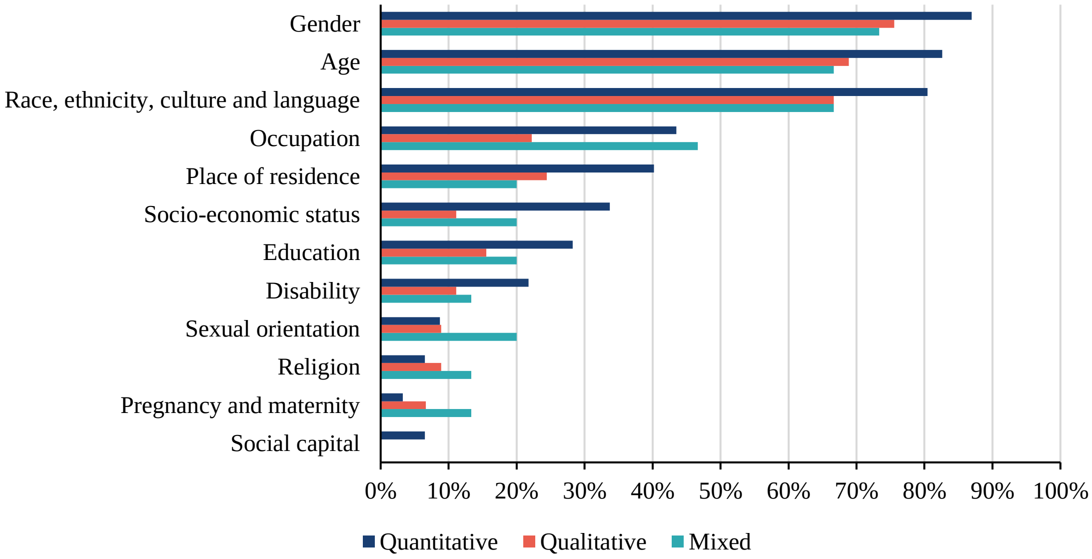


Figure 5. Percentage of studies that collected data for each dimension of inequality by study type

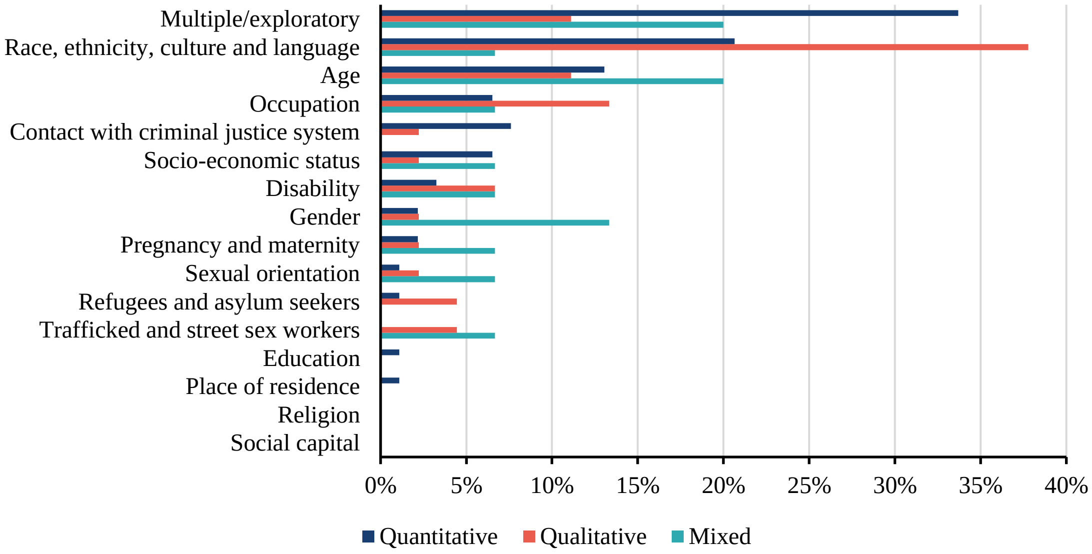


Figure 6. Main dimensions of inequality examined by the included studies by study type

4.4.4. Key findings on inequalities in access

To understand inequalities, data was most frequently collected by studies for gender (n=125), age (n=117), and ethnicity (n=114). Social capital (n=6), religion (n=12), and sexual orientation (n=15) were the least frequently considered. *Figure 5* presents the percentage of studies that collected data for each dimension of inequality by study type. 113 studies focused on a specific dimension of inequality, these tended to use qualitative methods. Whilst the remaining studies (n=39) were more exploratory or studied multiple dimensions of inequality, these tended to be quantitative. *Figure 6* presents the percentage of studies that focused on a specific dimension of inequality by study type. Some studies only included specific groups in their study population, such as ethnic minorities (n=17), young people (n=11), and women in the pre-natal or post-natal period (n=6). The superscript numbers used in this section refer to the references used in *Appendix B*, which presents a table of the key findings on inequalities in access by dimension of inequality (*Table B4*).

Differences in levels of access to mental health services

Forty-one studies found no differences in access between age groups[1-6], disabilities[4,26,52,53], educational qualifications[13,39], gender and sex[1,3,4,6,13-15,20,23,24,26,30,32,33,35,38,66-68], employment status[13,35,75], place of residence[6,12,18,33,35], ethnicity[1-3,6,11,14,30,33,38,53,76,92,97-100], religion[3], social capital[11,12], socioeconomic status[16,18,26,35,75,76,128,135], or relationship status[6,13,23,35]. Referral rates to secondary mental health services were found to be higher for young people[14], people with long-term conditions[15], females[16], and lower for homeless people[53], and those living in more deprived areas[136,137]. Access measured by mental health service contacts, admissions, and caseloads, highlighted a mixed picture of differences in access by age group, educational qualification, gender and sex, employment status, sexual orientation, and deprivation. Consistent findings for studies measuring access in this way were higher access for females[16,26,27,44,62,63,69,70], unemployed people[29,44,49,62,76,77,78], and prisoners[60,70,73], and lower access for homeless people[53], and ethnic minorities[13,24,26,27,44,62,64,77,102-107]. Working age adults[11], people with long-term conditions[11], those with higher educational qualifications[11-12], females[10,11,61], unemployed people[11], those living alone[12], people with a sense of belonging and social support[10], those on lower incomes[11], and single people[11], were more likely to report formal mental health help-seeking (e.g., from a mental health professional). Higher mental health service costs were associated with younger and older adults[7-9], people with long-term conditions[7,8], males[8], those living alone[7], ethnic minorities[7], and those living in more deprived areas[7-8]. Risk of disengagement with mental health treatment was found in younger adults[30], people with learning disabilities[52], unemployed people[30], homeless people[53], ethnic minority males[75], Muslim males[75], sexual minority males[75], and males living in more deprived areas[75]. Unmet mental health needs were reported for people with disabilities[54], people living with HIV[55], males[70,72], ethnic minorities[24,64], and prisoners[64,72].

Differences in pathways to access mental health services

Referral sources and destinations were explored by some studies to understand pathways into care. For IAPT services, GP-referred patients were more likely to be younger[29], male[29], unemployed[29] and White[29]. There were little variation in IAPT access via self-referral routes. Black people[32,68,79,110-112] and males[68] had higher rates of criminal justice system involvement in their referral source to secondary mental health services. Despite presenting to primary care with psychological care needs, refugees and asylum seekers[145], and migrants[62] were unlikely to be referred to mental health services. Compulsory mental health treatment (e.g., being subject to a Mental Health Act section) was more likely for unemployed people[81], those living alone[81] or in supported accommodation[32], ethnic minorities, particularly those from a Black ethnic background[34,79,81,105,110-113], people from more deprived areas[34], and single people[33]. Waiting times also differed amongst some groups with people from less deprived areas[6], ethnic minorities[35], and older people[28,31,35] waiting less time for treatment.

Barriers to accessing mental health services

Barriers to accessing mental health services were most frequently associated with individuals' "ability to reach" services, followed by individuals' "ability to seek" services. Experiences of or anticipating experiences of stigma and discrimination was a key barrier to seeking mental health services across 43 studies, for age[39-42,44], disability[55,56,58], education[44,65], gender and sex[61,65,69], occupation[44,69,83-91], pregnancy/maternity[95,96], ethnicity[44,65,96,97,109,114-117,119-124,126-131], sexual orientation[44,63,67,134], contact with criminal justice system[97], and refugee and asylum seeker status[146]. The majority of studies referred to stigma and discrimination related to having a mental health condition and/or accessing mental health services. However, for studies which looked specifically at ethnicity or sexual orientation, this barrier was also sometimes discussed in terms of individuals' previous experiences of or anticipating future experiences of stigma and discrimination based on their identity as an ethnic minority[44,114-115,119,124,126-127,129] or sexual minority[44,67,134]. Previous or anticipated experiences of racism or homophobia when accessing mental health services acted as barrier to seeking mental healthcare for these groups specifically. Thirty-two studies identified a key barrier to engaging with mental health services was the appropriateness of services to meet the needs of different population groups, for age[36,37,41], disability[56,57], gender and sex[71,74], occupation[83,88,89], place of residence[93], pregnancy/maternity[94,95], ethnicity[60,96,117,119,121,125,127,129,130,133], sexual orientation[67,94,134], socioeconomic status[141,143], contact with criminal justice system[72,144], trafficked people[147,149], and street sex workers[148]. The availability of services was reported a barrier to reaching mental health services across 23 studies, for age[43,45,46], disability[58,59], occupation[83,85,87-89], ethnicity[115,119,121,128,132,133], socioeconomic status[141], contact with criminal justice system[72,97,144], refugees and asylum seekers[132], trafficked people[147,149], and street sex workers[148]. Difficulties in recognising mental health symptoms (n=18) and trust in mental health professionals (n=18) were barriers to perceiving mental health needs associated with age[39,49,43], gender and sex[69,74], occupation[69,83-90], pregnancy/maternity[95], ethnicity[114-120,122,124-128], contact with criminal justice system[97], and trafficked people[148]. No studies referred to barriers associated with individuals' "ability to pay" for services, this is likely due to the provision of universal healthcare in the UK.

4.4.5. Routinely collected patient data

Sixty-nine studies used routinely collected patient data, such as referrals, contacts, attendances, and admissions to mental health services, to explore differential rates of access between population groups. This frequently involved comparing access according to the patient demographic data available (e.g., age, gender, ethnicity, deprivation), and using descriptive statistics, statistical tests, and regression modelling to make inferences about how groups differ in rates of access. A few studies also analysed data such as referral source, referral destination, whether a contact was attended, and whether admission was voluntary, to understand pathways to care as a measure of access. Other data sources such as the UK Census or Office for National Statistics (ONS) data were used by some studies to examine whether access rates were proportionate with population estimates. However, the Census or ONS data tended to be out of date compared with the mental health service data. Other studies linked mental health service data with other health data, such as primary care data or community health survey data, to understand "potential access" (e.g., self-reporting a mental health need in a community health survey, GP appointment for mental health condition) and "realised access" (e.g., contact with a mental health service). A large proportion of studies that analysed routinely collected patient data, had used the Clinical Record Interactive Search (CRIS) system at South London and Maudsley NHS Foundation Trust (SLaM), a large mental health service provider, or had extracted data from NHS Digital, such as the IAPT service evaluation database. Almost all of the studies that used routinely collected patient data were coded as "healthcare utilisation", as it was a direct quantification of individuals using mental health services. All studies discussed the usefulness of analysing routinely collected patient data to understand differences in access to mental health services, but also reflected on the challenges it poses when being used for research purposes. Its accuracy and completeness, particularly in relation to demographic data such as ethnicity and sexual orientation, incompleteness of which can limit understanding of inequalities, was the main challenge noted by study authors (n=22).

4.5. Discussion

This systematic mapping review synthesised research on inequalities in access to adult mental health services in the UK, and the measures of access, research methods, and key findings of relevant studies. It was important to update previous review findings (87), following the COVID-19 pandemic (10) and recent changes to UK policies (85, 182, 183). Although there was significant heterogeneity amongst studies, this review has provided a broad overview of the evidence base through categorising studies by their approach to measuring access, and the dimensions of inequality that have been studied.

4.5.1. Measures of access and research methods

Whilst this review found studies across the continuum of access as defined by Levesque's framework (133), most were positioned in exploring healthcare utilisation. This is similar to findings from reviewing studies of other types of healthcare access (142). Healthcare utilisation is determined by the need for care and whether healthcare can be accessed. However, this review found that accounting for differences in need was not routinely considered, and represents a deficiency in current ability to accurately understand inequalities in access to mental health services. This is a conclusion that was shared by Asthana et al. (87). Levesque et al. (133) suggested that to understand the complexity of access, mixed methods research in different contexts is needed to ameliorate factors that influence access and develop strategies to improve access. This review has highlighted that there continues to be a paucity of theoretically informed evidence in this area, and studies tend to rely on a simple conceptualisation of access. Despite the valuable perspective that patients, carers, and the public can bring to research (190), their involvement was largely absent from this evidence base. There is a need to address challenges associated with involving patients, carers, and the public, and identify ways in which this can be reported effectively in the future (171).

4.5.2. Inequalities in access to adult mental health services in the UK

This review reiterates findings from the previous review (87), suggesting that the evidence base of variations in access to mental health services remains complex and somewhat contradictory. Despite the implementation of policy changes, this review has highlighted that inequalities in access may persist for some population groups, such as ethnic minorities and older people. Studies published since 2014 did not indicate a consistent pattern of differences in access, finding over-representation of groups in some contexts (e.g., ethnic minorities and males in compulsory mental health treatment) and less access in others (e.g., ethnic minorities and males in IAPT services). These mixed findings could reflect the differences in which these services are accessed and the stages at which they are accessed. For example, a lack of access to lower intensity therapies such as those delivered by IAPT services could be associated with later presentation to compulsory mental health treatment if mental health conditions have deteriorated. These mixed findings could also highlight the importance of intersectionality in the context of inequalities (191). For example, Smyth et al. (192) explored males accessing IAPT services, and reported differential access within the study population across other dimensions, such as ethnicity and sexual orientation. Differences in access may be obscured if studies do not consider variation within population groups. Despite considering additional dimensions of inequality beyond the scope of Asthana et al. (87), this review found that studies continued to focus on differences based on age, gender, and ethnicity. This is likely due to the data available from healthcare services for these characteristics. The absence of evidence of inequalities across dimensions such as religion, sexual orientation, and social capital, does not indicate that inequalities do not exist; and highlights a poor understanding of the extent of inequalities in access to mental health services in the UK for these population groups.

Unlike the previous review (87), qualitative data was analysed to identify key barriers to accessing mental health services across dimensions of inequalities. These findings have added some context to the factors that may influence access to mental health services for different population groups. Stigma and discrimination, appropriateness of services, availability of services, difficulties associated with recognising mental health problems, and trust, were frequently cited by studies; all of which are reflected in the wider literature on barriers to healthcare access (193-195). The Health Stigma and Discrimination framework (196) theorises the mechanisms through which mental health-related stigma and discrimination influence access to healthcare services and how individuals with intersecting stigma, such as minority groups, can lead to a double burden. Action to reduce inequalities should consider how to address the barriers identified. Stigma-reducing interventions may be effective for specific population groups (e.g., ethnic minorities, LGBTQ+ groups), such as individual support to overcome internalised stigma, or community support to change harmful attitudes towards mental ill health (196). Re-designing services and pathways, in collaboration with population groups experiencing inequalities (190), could improve the accessibility and appropriateness of mental healthcare to meet the needs of different groups. Mental health awareness campaigns and community outreach programmes, particularly targeted at groups who have difficulties in recognising mental health need and trusting mental health professionals (e.g., veterans, ethnic minorities, LGBTQ+ groups), could remove barriers to seeking mental healthcare (195).

4.5.3. Routinely collected patient data

There are significant benefits to using routinely collected patient data to understand inequalities in access to mental health services. Primarily the data, particularly from secondary care services, has been used to examine differences in mental healthcare utilisation between population groups. Other studies had used data to identify variations in pathways into mental healthcare, or risk of disengaging from mental health treatment. Increases in the availability and accessibility of healthcare data have dramatically changed the landscape of population health research (151), presenting opportunities to conduct studies which require much less resource than primary data collection, and have real-world generalisability, often with large sample sizes (149). There are challenges to overcome in using this data for research purposes, many of which study authors alluded to. Low quality or missingness of data on patient characteristics can influence our understanding of variations in access for population groups and limits what conclusions can be reached. As such, there may be hidden inequalities as a result of poor data collection and quality. Recent NHS Digital guidance (197) has set out to improve data quality for many of the dimensions of inequalities identified in this review, through enabling patient self-reporting, embedding inclusive ways of working and reducing staff assumptions, and sharing feedback on data quality. These planned improvements will enhance the use of this data to generate more reliable evidence of inequalities in access to mental health services and may clarify inconsistent findings.

4.5.4. Strengths and limitations of the review

This systematic mapping review was conducted in line with existing guidelines for reviews (146), applied a well-established framework in the analysis (133), and included stakeholder involvement. Comprehensive searches were undertaken across seven electronic databases and eligibility criteria was kept intentionally broad to ensure relevant studies were included. Grey literature was not considered for inclusion in this review as it has been summarised elsewhere (86). Whilst this review aimed to identify studies primarily focused on examining access, evidence from studies where this was not the primary focus and inadvertently found inequalities in access may have been missed. As this review captured a breadth of evidence rather than a specific standard of evidence, issues associated with quality appraisal were not addressed. This may have led to an oversimplification of concepts and could limit conclusions about the reliability of findings. There may also have been a publication bias in that studies where no differences or inequalities were found may be less likely to have been published than those that did. This review was unable to draw on the influence of mental health conditions and sometimes the service due to poor description available in the studies; this is important to assess in future studies as access and inequalities are likely to differ based on the condition experienced and the service accessed. This review was limited to studies conducted with adult populations accessing mental health services in the UK; additional insight of other contexts and for children and young people may be beneficial. The majority of the studies identified were conducted in England, particularly London, and so there is a potential limitation to the review findings being generalisable to other regions in England and in the UK. Further exploration to understand inequalities in access to mental health services within these contexts is needed.

4.5.5. Conclusion

This systematic mapping review successfully applied an established framework to synthesise a large heterogenous body of research on inequalities in access to adult mental health services in the UK. The findings indicate that attempts to understand inequalities in access to mental health services require a much more holistic measurement of access than being used in current research. Little has changed in the nature and extent of inequalities, suggesting mental health services have not become more accessible as was planned in policy. Whilst using routinely collected data to measure mental healthcare utilisation provides a useful contribution to understanding inequalities, relying solely on quantifying if someone uses a mental health service does not present an opportunity to fully understand the complexities of access. Policy on addressing inequalities in access to mental health services could be better informed by mixed methods research which attempts to contextualise access in a holistic way, such as considering mental health need, help-seeking behaviour, and healthcare utilisation.

Chapter 5. Access to NHS adult mental health services during COVID-19 for sexual minority groups in an area of North West England: an exploratory study using routinely collected data

5.1. Abstract

5.1.1. Background

People from sexual minority groups are disproportionately impacted by mental health conditions and more likely to report poor experiences of accessing mental health services. There has been limited exploration of variations in access to mental health services by sexual orientation, specifically during the COVID-19 pandemic. This study aimed to assess the feasibility of using routinely collected data from an NHS Trust based in North West England to investigate differences in access to mental health services for sexual minority and heterosexual service users during COVID-19.

5.1.2. Methods

Retrospective de-identified service user level data from two adult mental health services, an improving access to psychological therapies (IAPT) service and community mental health teams (CMHTs), collected between January 2018 and September 2022, were analysed. Levesque's Conceptual Framework for Healthcare Access was used as a framework to contextualise the outcome measures. To examine differences in access, descriptive statistics of referral and contact data from IAPT (*referrals*=168,800; *contacts*=555,414) and CMHTs (*referrals*=37,770; *contacts*=809,576) were calculated to compare access between service users who identified as a sexual minority (e.g., lesbian, gay, bisexual, other) and heterosexual service users.

5.1.3. Results

Representation of sexual minority groups was higher in IAPT and CMHTs than in the Census 2021 general population. Service user demographic characteristics differed by sexual orientation, with sexual minority service users more likely to be younger, female, from a White ethnic background, and live in more deprived areas. Missing sexual orientation data was a substantial problem across the datasets. Referral and contact rates during COVID-19 differed by sexual orientation, but contact attendance rates did not differ.

5.1.4. Conclusions

Despite high levels of missing data, lesbian, gay, bisexual and other sexual minority (LGB+) people were over-represented in IAPT and CMHTs compared to the general population, which may reflect the higher mental health needs observed for these groups. Differences in service

user demographics by sexual orientation may indicate that only certain groups are accessing services or disclosing their sexual orientation to services. Differences in patterns of access during the pandemic may highlight the differential impacts that COVID-19 had on sexual minorities. Improvements in sexual orientation data collection are required to understand access to mental health services for LGB+ people and potential inequalities to a greater extent.

5.2. Background

People from sexual minority groups (e.g., lesbian, gay, bisexual) are at a higher risk for experiencing mental health conditions, compared to heterosexual people (4, 8, 198). To date, these inequalities have largely been explained by the "minority stress" theory (6), whereby mental health is negatively impacted by exposure to stress-inducing experiences of stigma and discrimination (e.g., homophobia, biphobia). Societal heteronormativity (29), a lack of social support (30, 199), disproportionate experiences of violence and abuse (30), and a lack of social safety (7), also contribute to higher levels of mental ill health in lesbian, gay, bisexual, and other sexual minority (LGB+) people. Mental health inequalities for sexual minority groups are perpetuated through the provision of ineffective mental health services that are not responsive and inclusive to the needs of diverse population groups (200). Despite being at a higher risk of mental health conditions, limited research has examined sexual minority groups' access to mental health services in the United Kingdom (UK).

Evidence suggests that population groups exposed to social disadvantage (e.g., stigma and discrimination) experience differential access to timely and high-quality mental healthcare in the UK (83). These disparities in access to support can ultimately result in a further deterioration of mental health and presentation at more acute services at a later stage (83). A recent systematic mapping review, conducted by this study's authors, highlighted the complexities associated with measuring inequalities in access to NHS mental health services, suggesting that future attempts move beyond simplistic measure of access and approach contextualising access in a more holistic way by applying a theoretical framework (e.g., Levesque's Conceptual Framework for Healthcare Access (133)) (131). When reviewing existing literature on inequalities in mental health service access, the authors acknowledged an absence of evidence of inequalities by sexual orientation, and outlined that whilst this did not necessarily indicate that inequalities do not exist, it did suggest a poor understanding of the extent of inequalities for sexual minority groups (131). Low quality or missing data routinely collected by mental health services on service users' sexual orientation was considered in part to account for this lack of evidence as it influences the extent to which variations in access by this service user demographic can be investigated (131). The LGBT Foundation released a good practice guide in 2021 entitled "if we're not counted, we don't count" to provide healthcare services with guidance on implementing sexual orientation monitoring (201). The report emphasised the need for services to improve the collection of monitoring data as it can play a fundamental role in identifying and addressing inequalities for sexual minority groups (201). A Sexual Orientation Monitoring Information Standard was published by NHS England in 2017 (202); however to date, this remains non-mandatory and therefore is not routinely implemented by healthcare services.

Sexual minority groups report experiencing a range of barriers to accessing mental health services. Fears about encountering stigma and discrimination (94), being subjected to potential pathologisation of their LGB+ identity (98), or anticipating that healthcare professionals lack knowledge to effectively support them (8) prevent LGB+ people from accessing services. LGB+ people have reported experiencing poor responses from healthcare professionals when disclosing their sexual orientation (e.g., refusal of care, dismissal, and discrimination) (203). As a result, individuals who identify as a sexual minority may chose not to disclose or may not be asked by healthcare professionals, which could hinder therapeutic relationships and lead to less effective psychological treatment for LGB+ people (94). Despite self-reported poor experiences of accessing mental health services by LGB+ people (8), there has been limited quantitative exploration of variations in access by sexual orientation (e.g., levels of utilisation, differences in care pathways, disengagement with services). In England, one study found LGB+ people have higher rates of access to primary care and community care for mental health difficulties (90), and another showed higher rates of access to psychological interventions by improving access to psychological therapies (IAPT) services (91), than heterosexual people.

Furthermore, the mental health of LGB+ people may have been disproportionately affected by the COVID-19 pandemic, through experiences of increased exposure to discrimination (14), isolation and loneliness (15, 55), and loss of access to supportive spaces and affirmative care (55). Studies have identified that the pandemic had negative psychological impacts for sexual minority groups globally (60, 204, 205). Sexual orientation data was largely omitted from any of the public health surveillance during COVID-19 (54), likely due to its quality and missingness within healthcare services. Routinely collected data from mental health services was utilised during the pandemic to explore patterns of service activity, observing widespread decreases in the demand for and provision of mental healthcare (104-108), and increased use of remote technologies to deliver care (104, 105). Chen et al. (106) examined the effect of the first COVID-19 lockdown in England on referral rates to secondary mental health services, reporting that referrals remained low in some vulnerable groups such as children, older adults, ethnic minority groups, and those with existing mental health conditions. COVID-19 is thought to have exacerbated existing mental health inequalities as many of these groups were found to have inequitable access to mental healthcare prior to the pandemic (83). Despite evidence of the potential disproportionate impacts of COVID-19 on LGB+ people, an absence of research in this area has persisted.

To date, no study in the UK has used routinely collected data from mental health services to examine access for sexual minority groups during the COVID-19 pandemic. As outlined in the LGBT Foundation's report (201), capturing and assessing sexual orientation monitoring data within healthcare services is a fundamental step to identifying and addressing inequalities experiences by sexual minority groups. This study aimed to assess the feasibility of using routinely collected data to investigate differences in access to mental health services for sexual minority and heterosexual service users during the COVID-19 pandemic. Data from two adult mental health services, an IAPT service and community mental health teams (CMHTs), based in an area of North West England, was analysed to attempt to address the following research questions:

1) What is the representation of LGB+ service users accessing mental health services? How does this compare to the representation of LGB+ people in the general population of the geographical area the NHS Trust covers?
2) What are the demographic characteristics (e.g., age, gender, ethnicity, deprivation) and service related characteristics (e.g., referral year, referral source, contact year, contact type) of LGB+ service users accessing mental health services? How do these compare to the demographic and service related characteristics of heterosexual service users?
3) Is missing sexual orientation data associated with other demographic or service related characteristics for service users accessing mental health services?
4) What are the patterns of access[a,b,c,d,e] to mental health services for LGB+ service users over the course of the COVID-19 pandemic? How do these compare to heterosexual services users?
    a. *referral rates*
    b. *referral-to-contact conversion*
    c. *referral-to-contact waiting times*
    d. *contact rates*
    e. *contact attendance rates*

5.3. Methods

5.3.1. Theoretical framework

Levesque's Conceptual Framework for Healthcare Access (133) was drawn upon in this study to conceptualise a definition of "access". Levesque et al. (133) described healthcare access as a multi-dimensional concept associated with healthcare systems and their approachability, acceptability, availability, affordability, and appropriateness, and with individuals and their ability to perceive, seek, reach, pay, and engage with healthcare services. Similarly to the authors’ systematic mapping review (131), the framework was used in this study to contextualise the outcomes used to measure access for sexual minority groups; mental health needs, perception of needs and desire for care, healthcare seeking, healthcare reaching, healthcare utilisation, or healthcare consequences (*Figure 7*).

5.3.2. Study design and setting

This study was a retrospective exploratory analysis of de-identified service user level data from electronic health records stored by Lancashire and South Cumbria NHS Foundation Trust (LSCft), an NHS mental health service provider in North West England. LSCft provides secure, perinatal, inpatient, and community services to meet the mental health needs of children, young people, adults, and older adults residing in Lancashire and the neighbouring southern parts of South Cumbria (79). The geographical region has a population of approximately 1.8 million people and is constituted by a mixture of small towns and cities, rural and coastal areas (74). There is considerable variation in the health and well-being of the population in this region, including disparities in life expectancy (75), prevalence of mental and physical health conditions (76, 77), and concentration of social deprivation (78). This study is reported in accordance with the REporting of studies Conducted using Observational Routinely collected Data (RECORD) checklist (151), which is presented in *Table C1* in *Appendix C*.

5.3.3. Study data and variables

Ethical approval was obtained for this study in July 2022 from the Health Research Authority (Reference: 22/HRA/2369). De-identified data from LSCft service users aged 16 years and over who had at least one referral and/or one contact with an IAPT service and from LSCft service users aged 18 years and over who had at least one referral and/or one contact with a CMHT between 1st January 2018 and 30th September 2022, were extracted from structured fields of electronic health records. IAPT services, now named NHS Talking Therapies, provide low-intensity psychological interventions for adults with common mental health disorders (e.g., depression, anxiety), and CMHTs provide more intensive mental healthcare for adults with severe mental illness (e.g., bipolar, personality disorder) within the community or close to home (79). Data from these services were analysed in this study as on initial exploration they had the least missing sexual orientation data compared to other services (e.g., home treatment teams, early intervention for psychosis), and also varied in their service provision so that comparisons could be drawn. Referrals represent where an individual’s care has been directed to a LSCft service, and contacts represent where a contact was planned or has taken place between a service user and a LSCft service provider (e.g., therapist, psychologist). LSCft routinely collect data on all referrals to and contacts with the services they provide, including service user demographics, to document the healthcare received and to support service planning and delivery.

The variables used in this study are derived from routinely available data collected at referral and contact stage for all LSCft service users. Due to limited numbers in some categories, some variables were recoded and collapsed, in collaboration with NHS colleagues and service users. Variables derived from referral information included referral date, referral source (A&E/ambulance services, community services, criminal justice/forensic services, education/work, family/friend/carer, GP/primary care, independent sector, secondary care, self-referral, social care/local authority, other), and service (CMHT, IAPT). Variables derived from contact information included contact date, contact type (face-to-face, telephone, video, other), attendance status (attended, did not attend, cancelled, other), and service (CMHT, IAPT). Service user demographic variables included age group in years (16-17, 18-24, 25-34, 35-44, 45-54, 55-64, 65+), gender (male, female), deprivation (based on Index of Multiple Deprivation (IMD) of the lower-layer super output area (LSOA) of a service user's residence, which were grouped together as 1-3 (most deprived), 4-7, 8-10 (least deprived)), ethnicity (Asian/Asian British, Black/Black British, Mixed, White, other), and sexual orientation (heterosexual, lesbian/gay, bisexual, other). These demographic variables were identified as important for inclusion due to evidence around how these characteristics may influence inequalities in mental health service access (131). Other demographic variables such as employment status, accommodation status, and religion were not included in the analysis due to the extent of missingness, with over 75% of service users having data for these variables missing. Referral and contact data were linked using a pseudonymised NHS number variable to construct additional outcome variables; whether a service user received contact from an LSCft service following a referral to understand whether a referral was converted to a contact (healthcare reaching), the number of days between referral date and first contact date to understand waiting times for service users (healthcare reaching), the average number of contacts (healthcare utilisation), and average attendance rates to contacts (healthcare utilisation).

5.3.4. Statistical analysis

As the aim of this study was to explore the feasibility of using this routinely collected data to investigate differences in access by sexual orientation, the nature of the data analyses were primarily exploratory. Data cleaning and analysis was conducted using R Studio (v2021.9.0.351) (206). To understand service user demographic characteristics across the different healthcare access measures (e.g., referral rates, referral-to-contact conversion, referral-to-contact waiting times, contact rates, attendance rates), descriptive statistics including frequencies, proportions, and means of variables within the overall IAPT and CMHT referral and contact datasets were calculated. The proportions of service users (those who had at least one referral and/or contact with IAPT or CMHT) who identified as lesbian/gay, bisexual, or other, were compared with figures from the Census 2021 (207), to broadly understand the representation of sexual minorities accessing mental health services compared with sexual minorities in the general population of Lancashire and South Cumbria. Descriptive statistics were cross-tabulated to describe the relationships between different categorical variables (e.g., number and proportion of service users by sexual orientation and age group). Chi-square tests were conducted to determine statistically significant associations between different categorical variables (e.g., test for a relationship between sexual orientation and age group). For these chi-square tests (n=26), a Bonferroni correction was conducted resulting in a corrected significance level of $p<0.002$. Descriptive statistics and cross-tabulation were used to quantify levels of missingness of variables across the datasets. Logistic regression was used to infer the predictors of missingness for a binary sexual orientation variable (e.g., sexual orientation populated (0) vs sexual orientation missing (1)), to understand whether missing sexual orientation data was occurring randomly or was associated with other variables in the datasets (e.g., age, ethnicity, referral source). Due to the extent of missingness across the datasets and to minimise exclusion of service users, missing data was not removed or imputed and service users with missing sexual orientation data were treated as a separate group for the remainder of the analyses.

Monthly referral rates (healthcare seeking) and contact rates (healthcare utilisation) were calculated for the IAPT and CMHT datasets, and time-series plots were produced to visualise change over time for service user groups by sexual orientation. Data were stratified into appropriate time tranches that corresponded with lockdown periods during the COVID-19 pandemic (208); April 2020 to June 2020 being the first lockdown, and November 2020 to February 2021 being the second lockdown. Sexual minority groups were grouped into one comparator group for these comparisons due to small service user numbers. Percentage change in referral and contact rates between months were calculated to draw upon comparisons in access to mental health services between sexual minority and heterosexual service users during COVID-19. Chi-square tests were conducted to determine statistically significant associations between sexual orientation and the observed changes in referrals and contact for the months of the onset of COVID-19 lockdowns (April 2020, November 2020), the prior month (March 2020, October 2020), and the same month in the previous year (April 2019, November 2019). Means and standard deviations were calculated where necessary to make comparisons on the additional outcomes constructed (e.g., referral-to-contact conversion, referral-to-contact waiting times, number of contacts, attendance rates) by sexual orientation.

5.3.5. Stakeholder involvement

A service user research group at LSCft, a LGB+ public adviser with lived experience of accessing LSCft services, and NHS colleagues were involved in the study design. Data analysis was conducted in collaboration with service users and NHS colleagues, and their feedback was integrated to understand the context and interpret the findings.

5.4. Results

5.4.1. Study population characteristics

Figure 8 presents study population characteristic proportions by sexual orientation for IAPT and CMHT referrals, and *Figure 9* presents study population characteristic proportions by sexual orientation for IAPT and CMHT contacts. IAPT received a total of 168,800 referrals between 1st January 2018 and 30th September 2022 for 113,438 service users. During the same time period, 555,414 contacts took place or were planned to take place with IAPT for 93,450 service users. CMHTs received a total of 37,770 referrals between 1st January 2018 and 30th September 2022 for 16,508 service users. A total of 809,576 contacts took place or were planned to take place with CMHTs during the same time period for 21,537 service users. In *Appendix C*, *Table C2, Table C3, Table C4,* and *Table C5* present study population characteristics by sexual orientation in more detail, for IAPT and CMHT referrals, and IAPT and CMHT contacts, respectively.

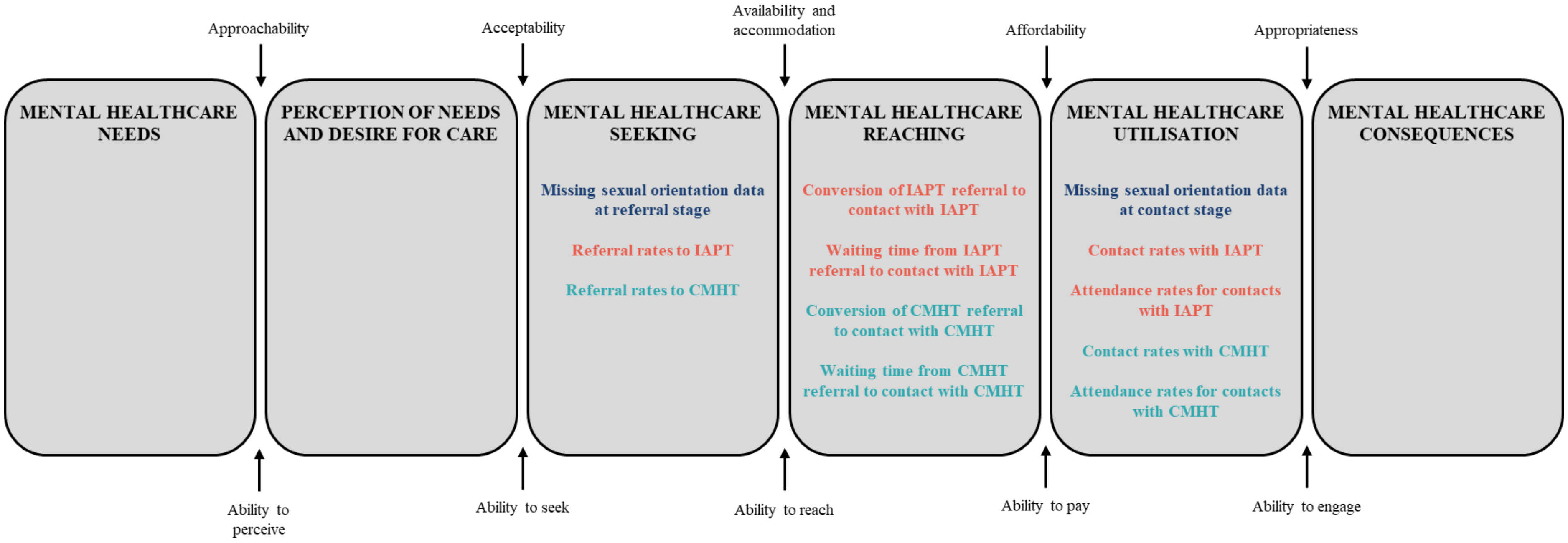
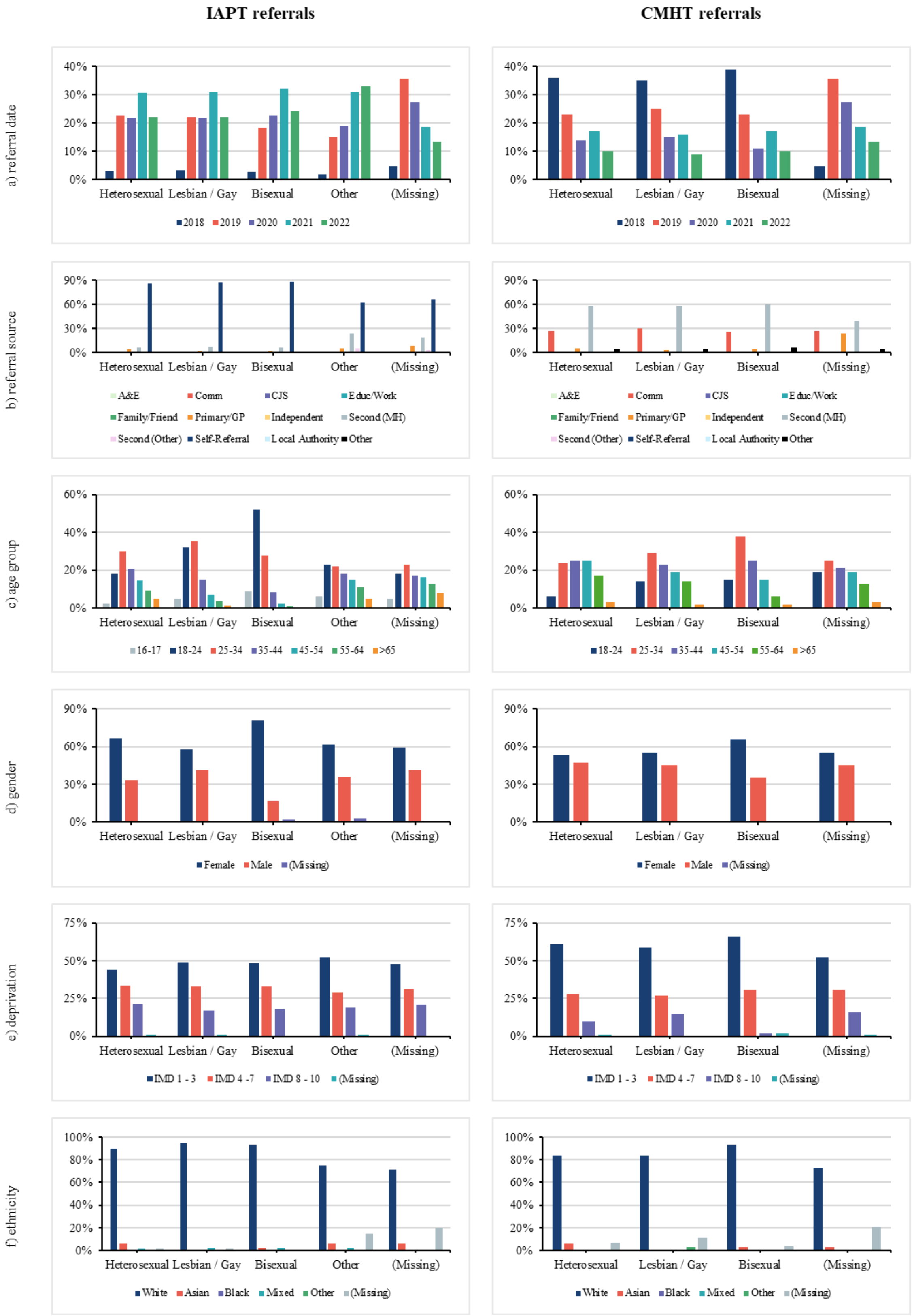
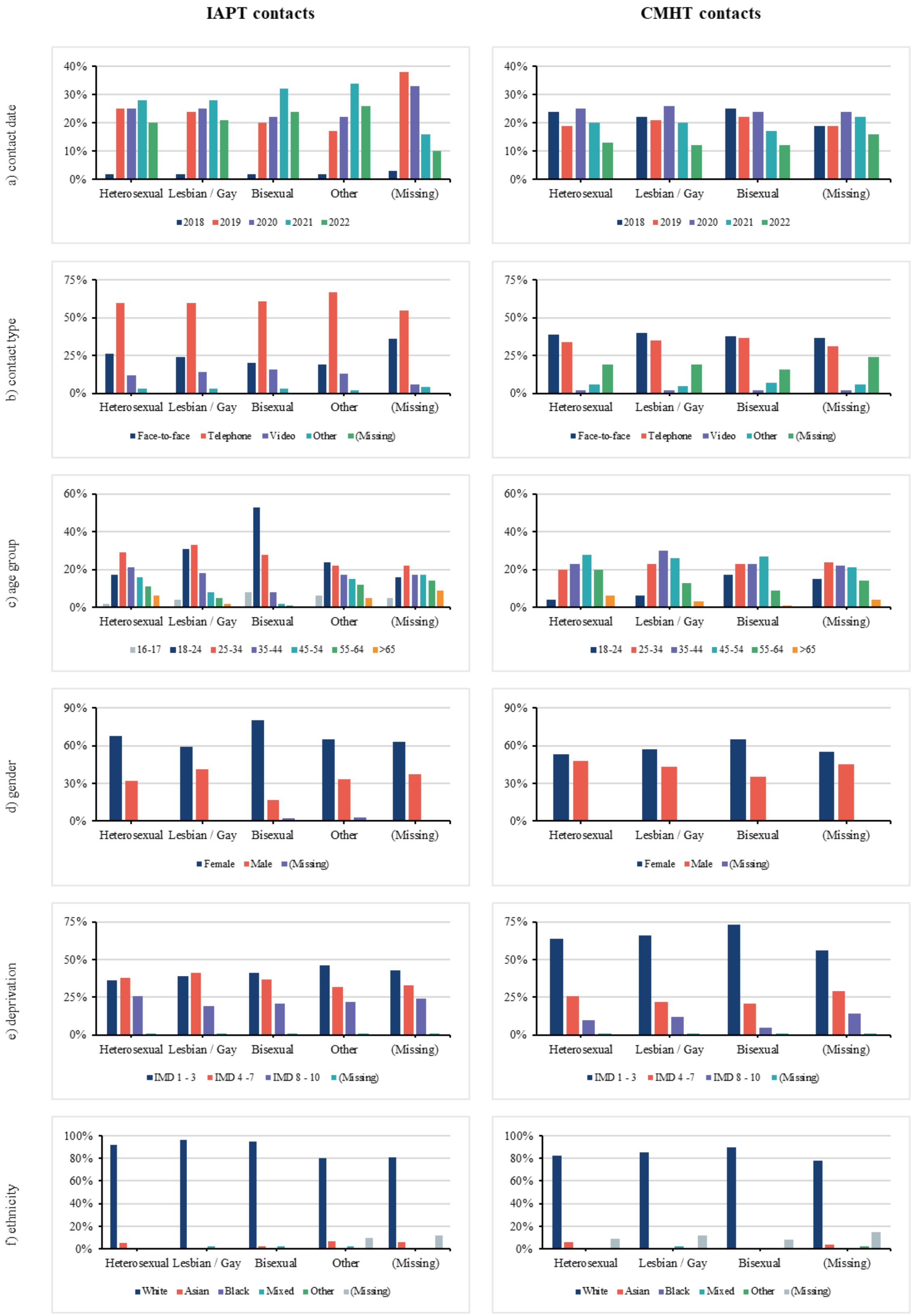


Figure 7. Study outcomes mapped to the domains of Levesque's Conceptual Framework for Healthcare Access (133)



* *A&E,* accident and emergency; *CJS,* criminal justice system; *CMHT,* community mental health team; *Comm,* community services; *Educ/Work,* education/work; *GP,* general practitioner; *IAPT,* improving access to psychological therapies; *IMD,* index of multiple deprivation; *Second (MH),* secondary mental health services; *Second (Other),* secondary services (not mental health)

Figure 8. Study population characteristic proportions by sexual orientation for referrals received by IAPT and CMHT between 1st January 2018 and 30th September 2022



* *CMHT,* community mental health team; *IAPT,* improving access to psychological therapies; *IMD,* index of multiple deprivation

Figure 9. Study population characteristic proportions by sexual orientation for contacts with IAPT and CMHT between 1st January 2018 and 30th September 2022

5.4.2. Representation of LGB+ service users

Where sexual orientation was populated (72.8% of IAPT referrals), 11.8% of those referred to IAPT identified as a sexual minority (3.0% lesbian/gay, 4.1% bisexual, 4.7% other). Three quarters of IAPT contacts had sexual orientation populated (75.5%), and 11.5% of service users identified as a sexual minority (3.0% lesbian/gay, 4.1% bisexual, 4.4% other). Where sexual orientation was populated (30.9% of CMHT referrals), 4.4% of those referred to a CMHT identified as a sexual minority (3.2% lesbian/gay, 1.3% bisexual). Over half of CMHT contacts had sexual orientation populated (52.4%), and 4.3% of service users identified as a sexual minority (3.2% lesbian/gay, 1.1% bisexual). According to the Census 2021 (207), 40,035 (2.9%) people identify as a sexual minority in Lancashire and South Cumbria (1.6% lesbian/gay, 1.2% bisexual, 0.3% other). Despite high levels of missing sexual orientation data across the datasets, representation of sexual minorities was higher in both IAPT and CMHT than in the general population.

5.4.3. Service user demographic and service-related characteristics

Results from the chi-square tests indicated significant associations (p<0.002) between sexual orientation and all service-related and service user demographic characteristic variables (see *Table C2, Table C3, Table C4,* and *Table C5* in *Appendix C*). For IAPT, there was a slightly higher proportion of self-referrals and slightly lower proportion of GP referrals for lesbian/gay and bisexual people than heterosexual people. As most CMHT referrals came from within secondary care, there were limited differences in referral source by sexual orientation. A higher proportion of LGB+ people referred to IAPT services were from younger age groups (<35 years), from more deprived areas, and from a White ethnic background. For IAPT, a higher proportion of bisexual people were female, and a higher proportion of lesbian/gay people were male, than heterosexual people. A higher proportion of LGB+ people referred to a CMHT were from younger age groups (<35 years). For CMHT, bisexual people had a higher proportion of females, those from more deprived areas, and those from a White ethnic background. Patterns in demographic characteristics at referral were also largely reflected across those in contact with IAPT and CMHT (e.g., higher proportion of LGB+ from younger age groups, more deprived areas, and a White ethnic background). Bisexual people who accessed IAPT or CMHT had a lower proportion of face-to-face contacts and a higher proportion of remote contacts.

5.4.4. Missing sexual orientation data

The extent of missing sexual orientation data was considerable across all datasets. Sexual orientation was missing for 27.2% of IAPT referrals and 61.0% of CMHT referrals. The extent of missingness lessened at contact stage for IAPT (24.5%) and CMHT (47.6%), indicating that sexual orientation was being updated later in the service user journey. In the Census 2021 (207), sexual orientation was missing for only 6.9% of Lancashire and South Cumbria. Logistic regression results for missing sexual orientation data across IAPT and CMHT datasets are reported in *Appendix C* (*Table C6*, IAPT referrals; *Table C7*, CMHT referrals; *Table C8*, IAPT contacts; *Table C9*, CMHT contacts). Missing sexual orientation was statistically associated with almost all other variables in the datasets, suggesting that missingness was not occurring at random. The direction of associations between missing sexual orientation and other demographic variables in IAPT services differed (e.g., less likely to be missing for 25-34 year olds (compared with 35-44 year olds) and females (compared with males), more likely to be missing for most ethnic minority groups (compared with White) and people living in more deprived areas (compared with IMD 4-7). For CMHTs, the direction of associations between missing sexual orientation and other demographic variables also differed (e.g., less like to be missing for 45-64 year olds (compared with 35-44 year olds) and females (compared with males), more likely to be missing for only other ethnic minority groups (compared with White) and people living in less deprived areas (compared with IMD 4-7). Proportions of missing sexual orientation data have decreased over time for IAPT, but increased over time for CMHT. Proportions of missing sexual orientation data for self-referrals were lower, compared with other referral sources for IAPT. The logistic regression results imply that the patterns identified in service user demographics noted in the earlier section are likely to have been influenced by data availability.

5.4.5. Referral rates during COVID-19 (mental healthcare seeking)

Monthly referral rates plotted over time by sexual orientation are shown in *Figure 10****Error! Reference source not found.*** for IAPT and *Figure 11* for CMHT. Whilst the number of referrals to IAPT have been increasing over the four year period (2018-2022), the number of referrals to CMHT have decreased, which may reflect the reorganisation that took place during COVID-19 to cope with increasing demand for more acute mental health support. ***Error! Reference source not found.*** and ***Error! Reference source not found.*** present the number of IAPT and CMHT referrals by sexual orientation for the onset of the first and second COVID-19 lockdowns with the comparison months and results from the chi-square tests. IAPT referrals received for LGB+ people in April 2020 (*n*=142) declined, compared with March 2020 (-37%) and April 2019 (-35%). A decline in IAPT referrals was larger for heterosexual people in April 2020 (*n*=917), compared with March 2020 (-45%) and April 2019 (-57%). IAPT referrals received for LGB+ people in November 2020 (*n*=363) increased, compared with October 2020 (+1%) and November 2019 (+35%). A smaller increase was observed for heterosexual people in November 2020 (*n*=2,313), compared with October 2020 (+3%) and November 2019 (6%). For those referred to IAPT without sexual orientation recorded, referrals declined on the onset of both the first and second lockdowns. CMHT referrals received for LGB+ people in April 2020 (*n*<15) declined, compared with March 2020 (-57%) and April 2019 (-86%). A decline in CMHT referrals was not observed to the same extent for heterosexual people in April 2020 (*n*=145), compared with March 2020 (+7%) and April 2019 (-61%). CMHT referrals received for LGB+ people in November 2020 (*n*<15) increased, compared with October 2020 (+200%) and November 2019 (+20%). CMHT referrals also increased for heterosexual people in November 2020 (*n*=215), compared with October 2020 (+76%) and November 2019 (+44%). For those referred to CMHTs without sexual orientation recorded, referrals declined on the onset of the first lockdown but increased on the onset of the second lockdown. Results from the chi-square tests indicated significant associations (p<0.05) between sexual orientation and the observed change in referrals for months April 2020 and April 2019 for both IAPT and CMHT, months November 2020 and October 2020 for CMHT, and months November 2020 and November 2019 for IAPT.

5.4.6. Referral-to-contact conversion and waiting times (mental healthcare reaching)

When referral and contact datasets were linked, 82.4% of IAPT referrals had a corresponding contact with the service, and 87.2% of CMHT referrals had a corresponding contact with a CMHT. For heterosexual service users, 84.6% of IAPT and 93.5% of CMHT referrals had a corresponding contact. Service users who identified as lesbian/gay had a referral-to-contact conversion proportion of 82.8% for IAPT and 94.0% for CMHT, and those who identified as bisexual had a referral-to-contact conversion proportion of 83.9% for IAPT and 94.4% for CMHT. For service users from other sexual minority groups, 78.8% of IAPT referrals had a corresponding contact with the service. Those with missing sexual orientation data had a referral-to-contact conversion proportion of 78.1% for IAPT and 83.8% for CMHT.

The average number of days between a referral and first contact was 18.3 days (SD=14.9) for IAPT, and 80.7 days (SD=159.4) for CMHT. For IAPT, waiting time between referral and first contact differed by sexual orientation, with sexual minority groups waiting slightly longer on average for contact with IAPT than heterosexual service users; heterosexual (M=18.2, SD=14.2), lesbian/gay (M=19.7, SD=13.9), bisexual (M=20.2, SD=14.8), other (M=23.3, SD=17.9), and missing (M=17.5, SD=15.9). Days between referral and first contact for CMHTs also differed by sexual orientation, with those with missing sexual orientation data waiting longer on average for contact with a CMHT than other service user groups; heterosexual (M=72.8, SD=148.8), lesbian/gay (M=68.6, SD=131.6), bisexual (M=67.6, SD=158.5), and missing (M=90.0, SD=170.7).

5.4.7. Contact rates during COVID-19 (mental healthcare utilisation)

Monthly contact rates plotted over time by sexual orientation are shown in *Figure 12* for IAPT and *Figure 13* for CMHT. ***Error! Reference source not found.*** and ***Error! Reference source not found.*** present the number of IAPT and CMHT contacts by sexual orientation for the onset of the first and second COVID-19 lockdowns with the comparison months and results from the chi-square tests. To a lesser extent than referrals, IAPT contacts with LGB+ service users in April 2020 (*n*=731) decreased, compared with March 2020 (-14%) and April 2019 (-16%), and IAPT contacts with heterosexual service users in April 2020 (*n*=7,317) decreased, compared with March 2020 (-8%) and April 2019 (-19%). A decrease was maintained for IAPT contacts with heterosexual service users in November 2020 (*n*=7,847), compared with October 2020 (-8%) and November 2019 (-8%), but a similar decrease was not observed for IAPT contacts with LGB+ service users in November 2020 (*n*=1,007), compared with October 2020 (-1%) and November 2019 (+25%). CMHT contacts for LGB+ service users in April 2020 (*n*=552) increased, compared with March 2020 (20%) and April 2019 (98%), and CMHT contacts for heterosexual service users in April 2020 (*n*=8,974) increased, compared with March 2020 (5%) and April 2019 (57%). As of November 2020, CMHT contacts decreased for both LGB+ (*n*=316) and heterosexual (*n*=7,198) service users, compared with October 2020 (-14%, -14%) and November 2019 (-14%, -1%) respectively. For those in contact with services without sexual orientation recorded, IAPT contacts decreased and CMHT contacts increased for the onset of the lockdowns. Results from the chi-square tests indicated significant associations ($p<0.05$) between sexual orientation and the observed changes in contacts for months April 2020 and March 2020 for CMHT, months April 2020 and April 2019 for CMHT, months November 2020 and October 2020 for both IAPT and CMHT, and months November 2020 and November 2019 for both IAPT and CMHT.

5.4.8. Contacts and attendance (mental healthcare utilisation)

For IAPT services, the average number of contacts per service user was 5.9 (SD=6.7). The average number of IAPT contacts per service user did not largely differ by sexual orientation; heterosexual (M=6.4, SD=7.1), lesbian/gay (M=5.9, SD=7.0), bisexual (M=6.3, SD=7.1), other (M=5.2, SD=6.4), and missing (M=5.1, SD=5.4). The average number of CMHT contacts per service user was 37.6 (SD=58.8). The average number of CMHT contacts per service user did differ by sexual orientation, with a higher number of contacts for sexual minority service users and a lower number of contacts for those with missing sexual orientation data; heterosexual (M=50.7, SD=68.4), lesbian/gay (M=55.6, SD=73.0), bisexual (M=57.2, SD=74.4), and missing (M=29.2, SD=49.8). Both IAPT and CMHT contact attendance did not largely differ by sexual orientation (*Figure 14* and *Figure 15*). The group with missing sexual orientation data had a lower attendance rate for CMHT contacts than other groups.

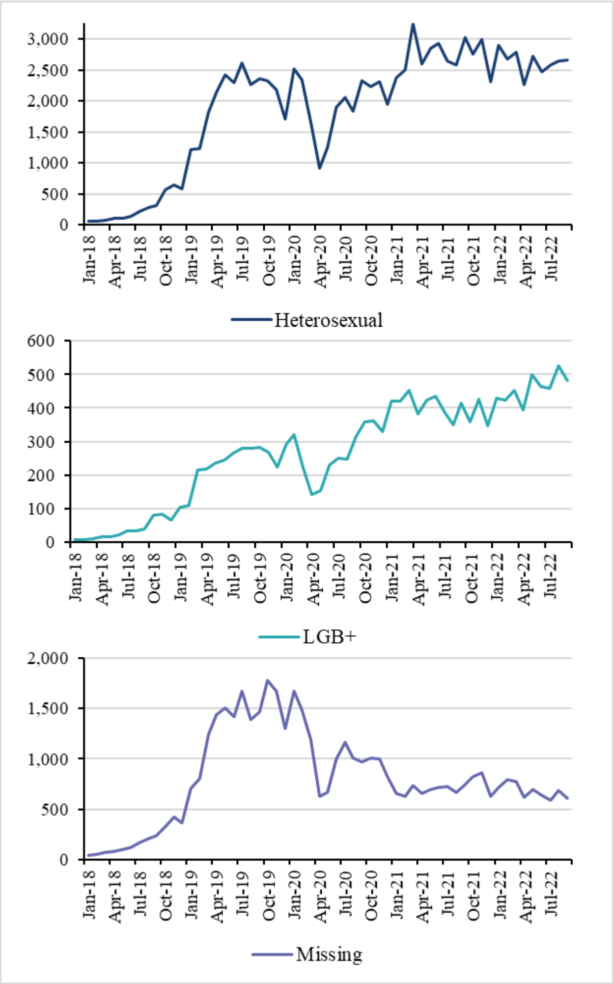


Figure 10. Monthly IAPT referrals from 1st January 2018 to 30th September 2022 by sexual orientation

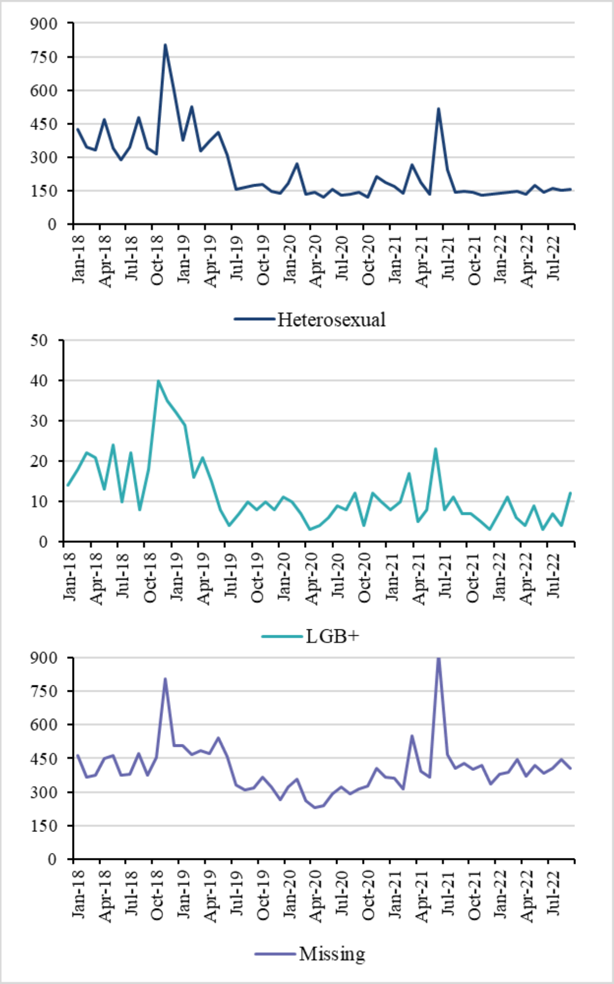


Figure 11. Monthly CMHT referrals from 1st January 2018 to 30th September 2022 by sexual orientation

Table 6. Number of IAPT and CMHT referrals by sexual orientation for the onset of the first COVID-19 lockdown (April 2020) and comparisons with the previous month (March 2020) and the same month in the previous year (April 2019) with chi-square tests

Service	**Sexual orientation**	**April 2020** (onset of first COVID-19 lockdown)	**March 2020** (% change to April 2020)	**X^2** (p value)	**April 2020** (onset of first COVID-19 lockdown)	**April 2019** (% change to April 2020)	**X^2** (p value)
IAPT	Heterosexual	917	1,658 (-45%)	2.298 (0.317)	917	2,145 (-57%)	13.740 **(<0.001)**
	LGB+	142	225 (-37%)		142	218 (-35%)	
	Missing	631	1,193 (-47%)		631	1,436 (-56%)	
CMHT	Heterosexual	145	135 (7%)	3.252 (0.197)	145	374 (-61%)	709.894 **(<0.001)**
	LGB+	<15	<15 (-57%)		<15	21 (-86%)	
	Missing	228	261 (-13%)		228	470 (-51%)	

*statistical significance based on value of $p<0.05$ (significant results highlighted in bold)

Table 7. Number of IAPT and CMHT referrals by sexual orientation for the onset of the second COVID-19 lockdown (November 2020) and comparisons with the previous month (October 2020) and the same month in the previous year (November 2019) with chi-square tests

Service	**Sexual orientation**	**November 2020** (onset of second COVID-19 lockdown)	**October 2020** (% change to November 2020)	**X^2** (p value)	**November 2020** (onset of second COVID-19 lockdown)	**November 2019** (% change to November 2020)	**X^2** (p value)
IAPT	Heterosexual	2,313	2,241 (3%)	0.579 (0.749)	2,313	2,187 (6%)	161.085 **(<0.001)**
	LGB+	363	358 (1%)		363	269 (35%)	
	Missing	1,001	1,010 (-1%)		1,001	1,674 (-40%)	
CMHT	Heterosexual	215	122 (76%)	8.549 **(0.014)**	215	149 (44%)	1.064 (0.587)
	LGB+	<15	<15 (200%)		<15	<15 (20%)	
	Missing	405	326 (24%)		405	320 (27%)	

*statistical significance based on value of $p<0.05$ (significant results highlighted in bold)

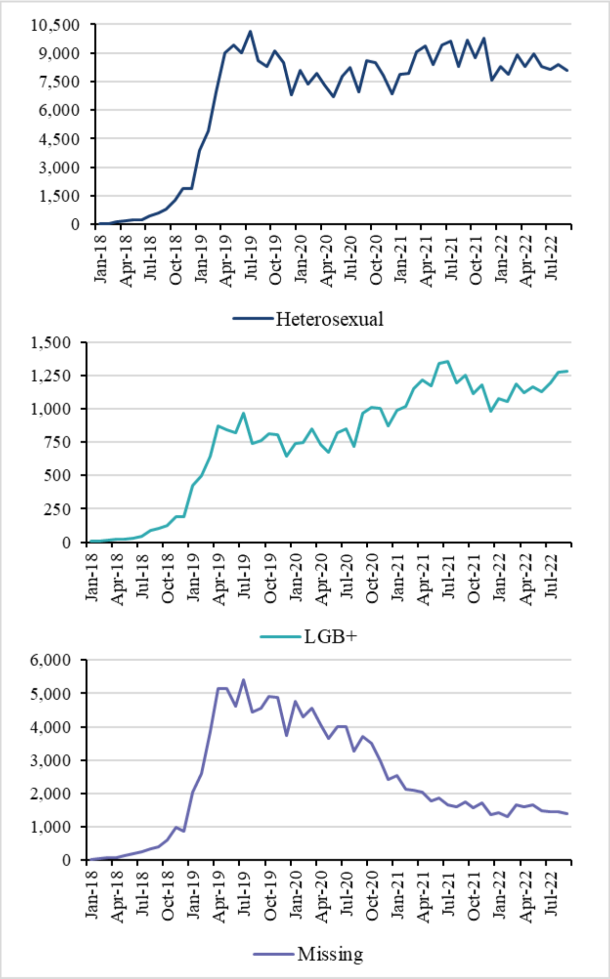


Figure 12. Monthly IAPT contacts from 1st January 2018 to 30th September 2022 by sexual orientation

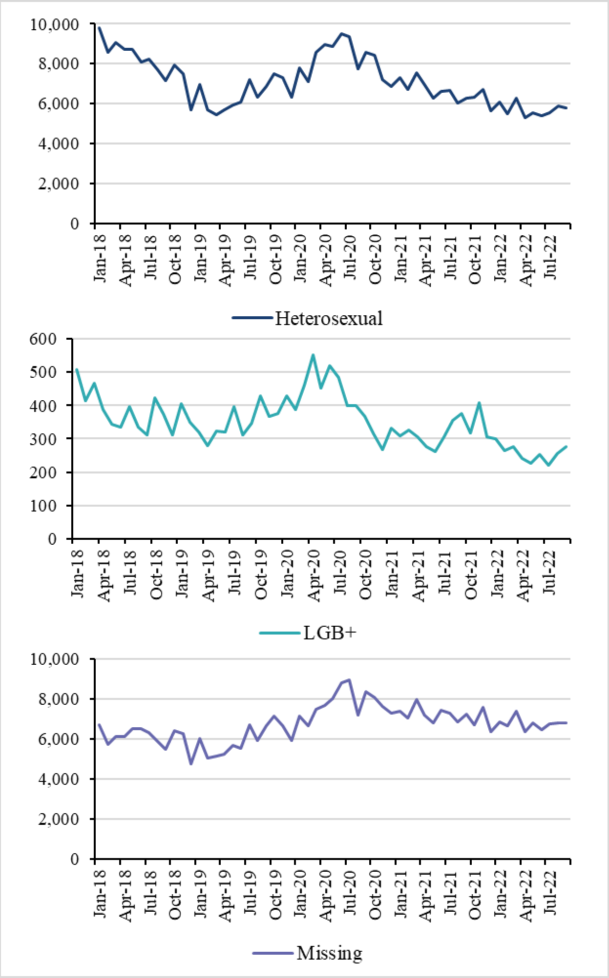


Figure 13. Monthly CMHT contacts from 1st January 2018 to 30th September 2022 by sexual orientation

Table 8. Number of IAPT and CMHT contacts by sexual orientation for the onset of the first COVID-19 lockdown (April 2020) and comparisons with the previous month (March 2020) and the same month in the previous year (April 2019) with chi-square tests

Service	**Sexual orientation**	**April 2020** (onset of first COVID-19 lockdown)	**March 2020** (% change to April 2020)	**X^2** (p value)	**April 2020** (onset of first COVID-19 lockdown)	**April 2019** (% change to April 2020)	**X^2** (p value)
IAPT	Heterosexual	7,317	7,950 (-8%)	2.850 (0.240)	7,317	9,002 (-19%)	1.898 (0.387)
	LGB+	731	849 (-14%)		731	873 (-16%)	
	Missing	4,049	4,561 (-11%)		4,049	5,132 (-21%)	
CMHT	Heterosexual	8,974	8,570 (5%)	6.693 **(0.035)**	8,974	5,715 (57%)	22.166 **(<0.001)**
	LGB+	552	460 (20%)		552	279 (98%)	
	Missing	7,674	7,519 (2%)		7,674	5,268 (46%)	

*statistical significance based on value of $p<0.05$ (significant results highlighted in bold)

Table 9. Number of IAPT and CMHT contacts by sexual orientation for the onset of the first COVID-19 lockdown (April 2020) and comparisons with the previous month (March 2020) and the same month in the previous year (April 2019) with chi-square tests

Service	**Sexual orientation**	**November 2020** (onset of second COVID-19 lockdown)	**October 2020** (% change to November 2020)	**X^2** (p value)	**November 2020** (onset of second COVID-19 lockdown)	**November 2019** (% change to November 2020)	**X^2** (p value)
IAPT	Heterosexual	7,847	8,516 (-8%)	11.090 **(0.004)**	7,847	8,487 (-8%)	297.617 **(<0.001)**
	LGB+	1,007	1,015 (-1%)		1,007	804 (25%)	
	Missing	2,981	3,494 (-15%)		2,981	4,874 (-39%)	
CMHT	Heterosexual	7,198	8,418 (-14%)	20.672 **(<0.001)**	7,198	7,297 (-1%)	47.880 **(<0.001)**
	LGB+	316	368 (-14%)		316	366 (-14%)	
	Missing	7,670	8,101 (-5%)		7,670	6,690 (-5%)	

*statistical significance based on value of $p<0.05$ (significant results highlighted in bold)

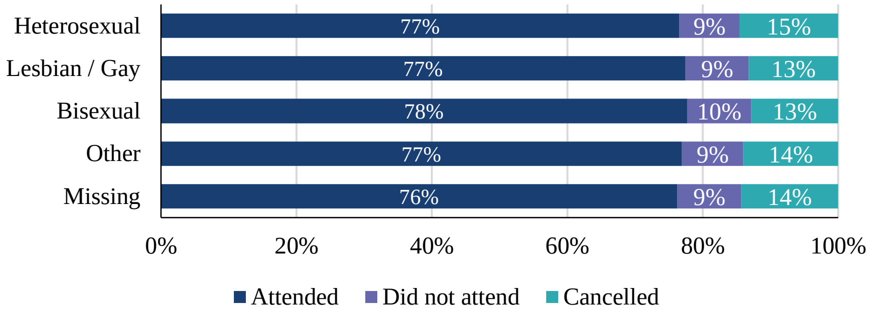


Figure 14. IAPT contact attendance grouped by sexual orientation

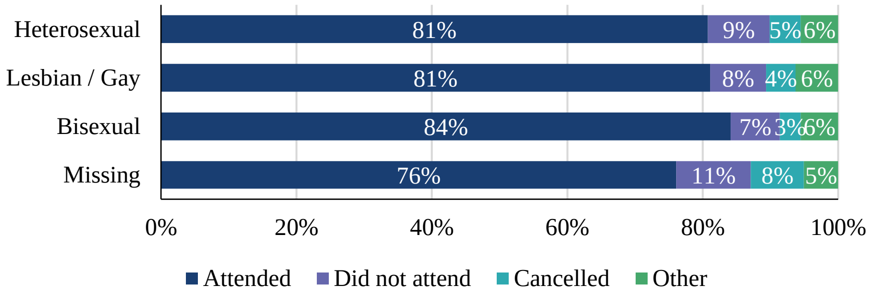


Figure 15. CMHT contact attendance grouped by sexual orientation

5.5. Discussion

5.5.1. Summary of key findings

To the authors' knowledge, this is the first study to date to use routinely collected data from NHS mental health services, beyond IAPT, to explore variations in access by sexual orientation, and focus specifically on the COVID-19 pandemic. The findings suggest that the representation of sexual minority groups is higher in IAPT and CMHTs than in the general population, suggesting that these groups are accessing mental health services and may reflect the higher mental health needs for LGB+ groups. Across the datasets, service user demographics differed by sexual orientation, indicating that only certain groups (e.g., younger age groups, females, White ethnic background, more deprived areas) might be accessing mental health services or disclosing their sexual orientation to services. The extent of missing sexual orientation data was considerable across all the datasets, but particularly for CMHTs, which caused issues with analyses in this study. Patterns of access differed by sexual orientation during COVID-19 for both IAPT and CMHTs, highlighting that COVID-19 may have had differential impacts on sexual minority groups, compared to heterosexual people. It is clear that significant improvements in the collection of sexual orientation data are needed to understand access to mental health services for LGB+ people to a greater extent. The study findings are discussed below in the context of existing literature.

5.5.2. Findings in the context of existing literature

This study found that the representation of sexual minorities in IAPT and CMHTs was higher than that observed in the Census 2021 general population for the same geographical area (207). This is not surprising given the higher prevalence of mental health conditions for LGB+ people compared to heterosexual people (4, 8, 198). The under-reporting of sexual orientation is likely to have hidden some LGB+ service users who weren't asked for their sexual orientation or did not want to disclose, and therefore representation could be even higher than that identified in this study. Whilst evidence suggests mental health need is higher in LGB+ groups (4) and that COVID-19 is likely to have exacerbated this (14, 15), the extent of mental health needs and whether the levels of service use are reflective of that higher need remains unclear. In addition, although LGB+ people may be accessing mental health services disproportionately more than heterosexual people (9), mental health inequalities continue to persist for these groups (209), and thus poses the question is access leading to improved mental health outcomes? Foy et al. (94) highlighted that within IAPT services, there are specific barriers that influence the experience of psychological treatments for sexual minorities (e.g., stigma and discrimination, therapist knowledge and understanding), which in turn influence treatment outcomes. Rimes et al. (210) found that sexual minority women experienced poorer recovery outcomes following access to IAPT than heterosexual women. Similar studies have not been conducted for CMHTs. Mental healthcare and associated psychological interventions are designed and delivered to meet the needs of a heteronormative society, and therefore may be less effective for LGB+ people. Training, such as that designed by Fish et al. (200), is needed to improve the competencies of the mental health workforce so that services are better tailored to meet the needs of underserved population groups, such as sexual minorities. For example, Lloyd et al. (211) found that a psychological intervention specifically adapted for sexual minorities was acceptable and helpful to LGB+ service users.

Demographic characteristics of IAPT and CMHT service users included in this study differed by sexual orientation. On the whole, sexual minority service users were more likely to be younger, female, White, and live in deprived areas. Whilst these demographics broadly reflect the mental health service user population as reduced service use is observed for older age groups, males, and ethnic minorities (131), from an intersectional perspective it may also highlight that certain groups may not be accessing services or disclosing their sexual orientation to services. Smyth et al. (192) highlighted differential access to mental health services based on multiple demographic characteristics (e.g., ethnicity, religion, and sexual orientation), and found that sexual minority males had a higher risk of disengagement than heterosexual males. The present study potentially identified intersectional groups who may be experiencing inequalities in access, such as LGB+ males, older sexual minorities, and LGB+ ethnic minorities. Stigma and discrimination are well-documented barriers to mental health help-seeking (196) and could potentially explain why LGB+ individuals from groups where stigma from mental health conditions intersects with stigma associated with being a sexual minority, are less likely to access mental health services. In addition, experiencing stigma and discrimination could have influenced disclosure of sexual orientation within services for these groups (203). The associations of missing sexual orientation data with ethnicity, age, gender, and deprivation identified in this study indicate that disclosure may be associated with an individual's demographic characteristics. A study conducted in the United States of America (USA) assessed relationships between disclosure of sexual orientation and demographic characteristics, identifying that non-disclosure to healthcare providers for sexual minorities was associated with gender, age, ethnicity, immigration status, and education level (212). To ensure that the needs of double marginalised groups are addressed, any intervention to improve data collection of sexual orientation needs to consider the intersectionality of service users and the reasons for non-disclosure (e.g., stigma, discrimination, trust).

The findings of this study reiterate the need for improvements in data collection in mental health services to enable the exploration of variations in access by sexual orientation. Missing data was considerable across the datasets, but more so with CMHTs which are more acute in their nature. IAPT services were introduced back in 2008, targeted at increasing access to psychological interventions, particularly for marginalised groups, and therefore collecting adequate monitoring data of service user demographics to understand variations in access was essential (213). This in part may explain why missing data was lower in IAPT than CMHTs. The option for self-referral within IAPT services is also likely to have played a significant role in the level of missing data. Studies have shown that self-referral, and thus disclosure of sexual orientation, is more acceptable for some LGB+ groups as it provides more opportunity for anonymity and avoids direct contact with healthcare professionals such as GPs (214, 215). Referral sources for CMHTs were more likely to be from GPs, community services, or other secondary care services, and as such the lack of self-referral options could have reduced the availability of sexual orientation data. In addition, acute services may not be able to prioritise data collection in the same way as IAPT due to potential heightened distress of the service user. In a survey of sexual minorities accessing IAPT services, Foy et al. (94) reported that 59% of participants were not asked about their sexual orientation, and 34% of those who were asked did not disclose their sexual orientation. Therefore, both data recording practices and service user disclosure rates have an influence on the availability of data within mental health services. Inadequate data recording practices may be associated with professionals' lack of knowledge about the importance of the data, concerns about causing discomfort or offence when asking service users about their sexual orientation, and heteronormative assumptions (216). In a systematic review, Brooks et al. (203) identified a range of barriers to sexual orientation disclosure in healthcare, including heteronormativity, concerns about confidentiality, poor responses from professionals, and discrimination. Evidence suggests that concealing sexual orientation can undermine the effectiveness of psychological treatment (93, 94). Missing sexual orientation in mental health services therefore continues to perpetuate inequalities for LGB+ groups and needs to be addressed.

The differences in patterns of access by sexual orientation found in this study indicate that COVID-19 made have had differential impacts on LGB+ people. Whilst the first COVID-19 lockdown caused decreases in mental healthcare seeking and utilisation for both LGB+ and heterosexual groups, the second COVID-19 lockdown caused larger increases in mental healthcare seeking and utilisation for LGB+ people compared with heterosexual people. LGB+ people may have potentially put off seeking help in the first instance and delayed accessing services but as the challenges of the pandemic, such as loss of social support or experiences of discrimination (64), persisted and exacerbated mental health difficulties, they were left with no choice and may have sought help with more acute mental health issues. This is evidenced by the considerable increase for referrals to CMHTs compared to IAPT in November 2020. Liberati et al. (115) reported that people with mental health conditions struggled to decipher their eligibility for mental healthcare during pandemic conditions. The Candidacy framework suggests that vulnerable groups, such as LGB+ people, may experience greater difficulties in seeking support as they fear judgement from professionals and are more likely to seek help at crisis point (138). These experiences could also have been exacerbated by the intensifying hostile attitudes towards LGB+ people during the pandemic (65). Despite reporting poorer experiences of mental health services (8), LGB+ people were no more likely to disengage with services than heterosexual people, but the group with missing sexual orientation had lower attendance rates than other groups, particularly for CMHT contacts. This could raise the question that are those who are more likely to disengage with services also those who didn't disclose their sexual orientation? This offers further evidence of the link between disclosure and treatment success.

5.5.3. Strengths and limitations

This study has a number of strengths and limitations. To the authors' knowledge, this study is the first to explore the feasibility of examining variations in access by sexual orientation using data which is routinely collected by mental health services. Previous studies have tended to discard data that is missing or of low quality, and thus have not sought to generate any insight into mental health service access for sexual minority groups. The study focused on improving understanding of access to mental health services for underserved population groups in an underserved geographical area of England. The perspectives of mental health professionals and service users were embedded into this research at every stage, to ensure that lived experience and contextual knowledge of the mental healthcare system were integrated into study design, and data analysis and interpretation. The data analysed covered a considerable period of time (4.5 years), which enabled exploration of access before, during, and after the COVID-19 pandemic. Multiple measures of access were examined in this study to explore the LGB+ service user journey, through the lens of an established framework (133).

Routinely collected mental health service data is unable to provide information about people who did not seek support or who sought support only via their GP or other services (e.g., third sector organisations). Therefore, in exploring inequalities in access for LGB+ people, this study was limited by its focus on two mental health services located within a single NHS Trust. As such, the findings may not be generalisable to other geographical areas or services. Issues with the quality of the data limited the analyses which could be conducted and so only descriptive statistics have been presented. Small sample sizes for sexual minority groups meant that groups had to be clumped together for some analyses, which may have meant that potential nuances between sexual minority groups may have been missed. Finally, it was difficult to delineate whether differences in access occur because of actual changes in access for sexual minority groups or whether differences occur due to changes in quality of the data (e.g., extent of missingness).

5.5.4. Implications for practice

This study ultimately raises an important implication that significant improvements in the routine collection of sexual orientation data in mental health services are needed to be able to examine variations in access in more depth and understand potential inequalities. Mental health services need to be able to effectively monitor changes in access for different population groups, particularly those that are underserved, to respond accordingly. Therefore, designing, delivering, and evaluating a training package to mental health service professionals and referrers (e.g., GPs, education/work, other acute and community services) targeted not only at improving knowledge, awareness, and competencies in supporting LGB+ people experiencing mental health conditions, but also at how to appropriately ask all service users for their sexual orientation and record this in the relevant systems, is needed. In addition, actions to visibly improve LGB+ inclusivity within services (e.g., changes to communications and marketing, rainbow badges, and pronouns), could enhance disclosure rates and access as with a more inclusive approach, LGB+ people are more likely to feel welcome to access services and share their identity with services. Making the NHS Sexual Orientation Monitoring Information Standard released in 2017 mandatory could enhance data collection with mental health services. However, without adequate training for referrers and mental health service professionals about how to collect this data sensitively, challenges in data accuracy may persist. Finally, it would be useful to learn from improvements made in collecting data for other demographic characteristics such as ethnicity (217), and implement some of the strategies recommended there for sexual orientation (e.g., embedding routine data collection within practice, creating standardised processes, developing comprehensive training, and ensuring the inclusion of LGB+ people in these actions).

5.5.5. Implications for research

This study specifically focused on Lancashire and South Cumbria, an area with similar representation of sexual minorities to the national figures, and one that is underserved within mental health service research. A national exploration of routinely collected mental health service data for LGB+ groups or alternatively drawing on comparisons with another geographical area that has had greater resources in terms of improving LGB+ inclusivity and monitoring (e.g., Greater Manchester) could further extend the findings of this study. As this study found differences in patterns of access during COVID-19 by sexual orientation, a qualitative exploration to capture the experiences of LGB+ people accessing mental health services during COVID-19 is recommended. This proposed study could explore whether LGB+ people did put off access at the beginning and sought help later as the data suggests, and explore experiences and perspectives of being asked about their sexual orientation and choosing to disclose (or not) their LGB+ identity to services. A qualitative exploration of the perspectives of mental health service professionals and referrers would also be valuable to understand the barriers to capturing the sexual orientation of mental health service users. This recommended future research could then be used to inform the development of the aforementioned training package to improve the knowledge, awareness, and competencies of mental health service professionals and referrers, and actions to improve LGB+ inclusivity within mental health services.

5.5.6. Conclusion

The findings of this study indicate that despite high levels of missing data, LGB+ people were over-represented in IAPT and CMHTs compared to the general population, and this may reflect the higher mental health needs for these groups. Differences in service user demographics by sexual orientation may indicate that inequalities in access are likely to be intersectional as only certain groups appear to be accessing services or disclosing their sexual orientation to services. Differences in patterns of access during the pandemic may highlight the differential impacts that

COVID-19 had on sexual minority groups. This study has outlined recommendations for both practice and research to improve the collection of sexual orientation data so that variations in access for sexual minority groups can be examined to a greater extent. Training for mental health professionals and referrers to collect this data alongside improving the inclusivity of mental health services should be considered to deliver on these improvements.

Chapter 6. LGBTQ+ experiences of accessing NHS adult mental health services during COVID-19 in an area of North West England: a qualitative interview study

6.1. Abstract

6.1.1. Background

Lesbian, gay, bisexual, transgender, and queer (LGBTQ+) people have a higher prevalence of mental health conditions than heterosexual and cisgender people, and report poor experiences of accessing mental health services. The COVID-19 pandemic may have had disproportionate impacts on socially disadvantaged groups, such as LGBTQ+ people, and their mental healthcare access. This study aimed to understand LGBTQ+ experiences of mental health and accessing mental health services during the COVID-19 pandemic.

6.1.2. Methods

Topic-guided qualitative interviews were conducted with twelve LGBTQ+ people who accessed or tried to access NHS mental health services in an area of North West England between March 2020 and February 2022. Levesque's Conceptual Framework for Healthcare Access was used as a framework to code the qualitative data. Reflexive thematic analysis was adopted to analyse the qualitative data from a critical realist perspective. Researchers with lived experience of being LGBTQ+ and accessing mental health services were embedded as part of the research team.

6.1.3. Results

Eight themes across five domains of the framework were identified from the qualitative data. LGBTQ+ participants shared the negative impacts the pandemic had on their mental health (e.g., worsening existing mental health conditions, experiences of isolation, and a loss of social connectedness with the LGBTQ+ community). LGBTQ+ participants experienced significant challenges accessing mental health services during COVID-19, associated with experiences of stigma and discrimination, concerns about disclosing their LGBTQ+ identity, living in unsupportive environments, and being unable to access mental health support remotely. Where positive experiences were identified, these highlighted important opportunities for change.

6.1.4. Conclusions

This study suggests that LGBTQ+ people may have been disproportionately affected by the COVID-19 pandemic, with an increased risk of mental ill health and isolation, and poor experiences of accessing mental health services. Opportunities to maximise protective factors and improve timely access to mental health support are needed to mitigate these effects for

LGBTQ+ people in the future. Recommendations to improve LGBTQ+ service inclusivity include implementing self-referral options, being more visibly LGBTQ+ inclusive, and improving staff knowledge and training on supporting LGBTQ+ service users.

6.2. Background

Lesbian, gay, bisexual, transgender, and queer (LGBTQ+) people have a higher prevalence of mental health conditions, when compared to heterosexual people (4, 8), and cisgender people (5). To date, these inequalities have largely been attributed to "minority stress" (6), whereby exposure to stress-inducing experiences of stigma and discrimination (e.g., homophobia, transphobia) can have a detrimental impact on mental health. Other factors that contribute to disproportionately higher levels of mental ill health for sexual and gender minority groups include experiences of violence and abuse (30), a lack of social support (30, 199), a lack of social safety (7), and societal cis-heteronormativity (29). These disparities are also maintained through ineffective mental healthcare that is not responsive and inclusive to the needs of diverse population groups (200). Despite being at a higher risk of mental health conditions, LGBTQ+ population groups are under-researched when considering access to and experience of mental health services in the United Kingdom (UK).

Fears about encountering stigma and discrimination when accessing mental health services (94), the potential pathologisation of their LGBTQ+ identity (98), or the view that healthcare professionals lack knowledge to effectively support LGBTQ+ people (8), may affect those who identify as LGBTQ+ and their ability to "seek", "reach", or "engage" with mental health services. Disclosure of sexual orientation and gender identity when accessing healthcare has been associated with poor responses from healthcare professionals, such as refusal of care, dismissal, and discrimination (203). On the other hand, when an individual's sexual orientation and/or gender identity are not asked for or not disclosed, psychological treatment and therapeutic relationships may be less effective and and associated with poorer outcomes (94). Mental healthcare is designed and delivered to meet the needs of a cis-heteronormative society (200), and as such LGBTQ+ people often report poor experiences of accessing mental health services (8).

The effects of the COVID-19 pandemic were not experienced equally in society, with inequalities in mental health identified for various population groups (e.g., young people, people from lower income backgrounds, ethnic minorities) (45, 47). Evidence suggests that the health and well-being of LGBTQ+ population groups was disproportionately affected by the COVID-19 pandemic (54), experiencing unique challenges such as increased exposure to discrimination, isolation, and loss of access to supportive spaces and affirmative care (14, 15). Bécares and

Kneale (58) analysed survey data from two waves of the UK Millenium Cohort Study, identifying significant inequalities in social support and self-rated physical and mental health among sexual minority young adults compared to heterosexual adults during COVID-19, Using a cross-sectional survey during the first UK lockdown, Kneale and Bécares (64) found that LGBTQ+ respondents had high levels of perceived stress and depressive symptoms when compared with standardised thresholds, which was in part explained by experiences of sexuality and gender-based discrimination during the pandemic. A secondary analysis of this survey highlighted how the COVID-19 pandemic exacerbated the "psychosocial hostility" experienced by LGBTQ+ people, in particular for transgender and non-binary individuals, resulting in a further detrimental impact on their mental health (65). The LGBT Foundation's "Hidden Figures" report in 2020 reported that 42% of their LGBTQ+ survey sample (n=555) wanted to access support for their mental health during the first COVID-19 lockdown (116), a disproportionately higher proportion than was anticipated across the general population (43). Beyond the UK, evidence indicates that the COVID-19 pandemic had negative psychological impacts on LGBTQ+ people globally (60, 204, 218).

Whilst there is evidence to highlight the disproportionate effects of COVID-19 on LGBTQ+ mental health (14, 15), there is limited research exploring the experiences of LGBTQ+ people accessing mental health services during the pandemic in the UK. To what extent the pandemic and associated restrictions impacted the lives of LGBTQ+ people and their healthcare access specifically has been largely absent from COVID-19 research, and sexual orientation and gender identity data were also omitted from any of the public health surveillance (54). Intensifying hostile attitudes towards LGBTQ+ people and UK political decisions to abandon the 2018 LGBT Action Plan (219) and to not mandate the 2017 NHS Sexual Orientation Monitoring Information Standard (202) during the pandemic have led to a lack of focus on improving the health and well-being of LGBTQ+ people and continue to perpetuate inequalities, which remain understudied. It is important to ascertain the healthcare experiences of underserved population groups during COVID-19 to inform future actions to improve the inclusivity and equity of mental health services and to mitigate against disproportionate effects if significant disruptions were to happen to services again. This qualitative interview study aimed to capture the experiences of people who identify as LGBTQ+ who accessed or tried to access adult NHS mental health services during the COVID-19 pandemic, to address the following research questions:

1) How did people who identify as LGBTQ+ experience the impacts of the COVID-19 pandemic on their mental health and their access to mental health services?
2) How were these experiences impacted by their LGBTQ+ identity?

6.3. Methods

6.3.1. Study design and setting

This was a qualitative topic-guided interview study conducted between September 2023 and April 2024. This study is reported in accordance with the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist (220), which is presented in *Table D1* in *Appendix D*. This study was conducted in Lancashire and South Cumbria, a large geographical area in the North West of England with a population of approximately 1.8 million people (74). There is considerable variation in the health and well-being across the region, with significant disparities in life expectancy (75), prevalence of mental and physical health conditions (76, 77), and concentration of social deprivation (78). NHS mental health services in Lancashire and South Cumbria are under-funded and under significant pressure due to the high rates of adults in contact with services compared with the national average (80), which has been compounded by the disproportionate impacts of the COVID-19 pandemic (e.g., higher rates of mortality and hospital pressures, longer periods of time under restrictions, larger reductions in self-reported mental well-being) (81). According to the Census 2021, in Lancashire and South Cumbria, 40,035 (2.9%) people identify as a sexual minority (207), and 5,608 (0.4%) people identify as a gender minority (221).

6.3.2. Theoretical framework

Levesque's Conceptual Framework for Healthcare Access (133) was drawn upon in this study to conceptualise a definition of "access". According to the framework, healthcare access is viewed as a multi-dimensional concept associated with healthcare systems and their approachability, acceptability, availability, affordability, and appropriateness, and with individuals and their ability to perceive, seek, reach, pay, and engage with healthcare services (133). Whilst other frameworks were considered for this study (e.g., Dixon-Woods' Candidacy framework (138)), Levesque's framework offered a lens through which dimensions of access related to the healthcare system, such as the availability of services during COVID-19, and the appropriateness of remote delivery during COVID-19, along with dimensions of access related to LGBTQ+ population groups' abilities to seek, reach, and engage with services during COVID-19, could be explored.

6.3.3. Study population and recruitment

Ethical approval was obtained for this study in June 2023 from Lancaster University's Faculty of Health and Medicine Research Ethics Committee (FHM-2023-3639-RECR-1). Convenience sampling was used to recruit participants who were aged 18 years and over, identified as LGBTQ+, and had accessed or tried to access NHS adult mental health services in Lancashire and South Cumbria between March 2020 and February 2022. The configuration of NHS mental health services across England is highly varied and so limiting to this geographical area meant that participant experiences could be compared more easily. Participants were recruited via electronic adverts shared on social media and with LGBTQ+ organisations and networks across Lancashire and South Cumbria, and via paper adverts placed in local spaces known to offer LGBTQ+ support sessions (*Figure D1* in *Appendix D*). Potential participants were asked to contact the researcher via email to check their eligibility, provide a copy of the participant information sheet (*Figure D2* in *Appendix D*), and a consent form (*Figure D3* in *Appendix D*), answer any questions, and arrange a suitable time for the interview. Prior to the interview, an online monitoring form was completed by participants in Qualtrics (222) to capture demographic information (*Figure D4* in *Appendix D*).

6.3.4. Data collection

One-to-one interviews were conducted by a researcher (HL) using videoconferencing software, Microsoft Teams. Due to the sensitive nature of the topic, interviews were considered more appropriate to facilitate an open and supportive discussion with participants than alternative methods (e.g., focus groups). Written and verbal consent was gained from all participants prior to the interview. A topic guide was used to guide the conversation (*Figure D5* in *Appendix D*), the development of which was informed by Levesque's Conceptual Framework for Healthcare Access (133). The topic guide was piloted with three people who have lived experience of accessing mental health services and/or being LGBTQ+ and was amended accordingly. The topic guide was also edited during data collection to better reflect key issues as they emerged from the data. Participants were asked to share their experiences of mental health and accessing mental health services during COVID-19, and to reflect on how their LGBTQ+ identity may have influenced their experiences. Interviews were audio-recorded, transcribed verbatim by HL, anonymised and imported into NVivo 12 (223) for data analysis. Field notes were also taken by HL during and after the interviews to supplement the transcripts and capture immediate reflections. At the end of the interview, participants were provided with a debrief sheet (*Figure D6* in *Appendix D*), and a £25 online shopping voucher for taking part.

6.3.5. Data analysis

Reflexive thematic analysis was used to analyse the qualitative data, following the six key stages as outlined by Braun and Clarke (163); familiarisation, data coding, initial theme generation, theme development and review, theme refinement, and writing up. Reflexive thematic analysis is a flexible approach to making sense of participants' lived experiences by identifying patterns of meaning within the qualitative data (163). Specifically, a hybrid approach to thematic analysis was adopted in this study (165), as it incorporated a data-driven inductive approach in coding and theme generation, and a deductive *a priori* template of codes from Levesque's Conceptual Framework for Healthcare Access (133); mental health needs, perception of mental health needs and desire for care, mental healthcare seeking, mental healthcare reaching, mental healthcare utilisation, and mental healthcare consequences (*Table 10*). The analysis was approached from a critical realist perspective (166), by both reflecting on the *a priori* knowledge and theories that the research team brought to the analysis, and by enabling the formulation of new knowledge which did not necessarily fit within existing theories. This approach was deemed appropriate as whilst there is a need to undertake theory-driven research in this area (131), there is also a considerable absence of research on LGBTQ+ experiences of accessing mental health services during COVID-19 to be informed by.

Table 10. Levesque's Conceptual Framework for Healthcare Access (133) domains and their descriptions used as a template of codes during data analysis

Name of framework domain	**Description of framework domain**
Mental health needs	An individual's need for mental health services and the mental health conditions and associated symptoms participants reported, alongside impacts of the COVID-19 pandemic on mental health.
Perception of mental health needs and desire for care	An individual's perception of their need for mental healthcare and their desire to access mental healthcare services; two concepts – the approachability of the healthcare system (can people facing mental health needs identify that services exist, can the services be reached, and will the services have an impact) and an individual's ability to perceive the need for mental healthcare services (determined by factors such as health literacy).
Mental healthcare seeking	If and how an individual sought mental healthcare services; two concepts – the acceptability of the healthcare system (cultural and social factors which determine the possibility of individuals to accept the services) and an individual's ability to seek mental healthcare services (personal autonomy and capacity to choose to seek mental healthcare and knowledge about services).
Mental healthcare reaching	If and how an individual reached mental healthcare services; two concepts – the availability and accommodation of the healthcare system (are services actually available, are services accessible both in a physical and timely manner) and an individual's ability to reach mental health services (personal mobility, availability, knowledge to physically reach services).
Mental healthcare utilisation	If and how an individual has utilised mental healthcare services; two concepts – the affordability of the healthcare system (economic capacity for people to spend resources and time to use services) and an individual's ability to pay for mental healthcare services (economic capacity to pay for healthcare services).
Mental healthcare consequences	The consequences of utilising mental healthcare services; two concepts – the appropriateness of the healthcare system (the fit between services and needs, and the adequacy, quality, and effectiveness of services) and an individual's ability to engage with mental healthcare (capacity and motivation to participate, decision making, health literacy, self-efficacy, communication).

HL familiarised herself with the data by transcribing the interview recordings and re-reading the transcripts several times whilst noting key reflections. HL generated initial codes by attaching short phrases to sections of the transcripts that resembled the lived experiences of participants relevant to the research questions (inductive, data-driven approach). These initial codes were then clustered by HL into candidate themes that reflected patterns of lived experiences across participants at a broader level than the initial codes and were categorised against the framework (deductive approach). These candidate themes were iteratively shared and discussed with the wider research team, who offered feedback and shared their perspectives on the data in regular meetings held during data analysis. The themes were reviewed, refined, and renamed where necessary as a result of these discussions.

6.3.6. Research team and reflexivity

Researcher subjectivity is not something to be removed or controlled within the process of reflexive thematic analysis (163). Generating knowledge is inherently influenced by the researcher and their experiences, and therefore reflexivity can be used as a resource to reflect on how the researcher shapes the research and their engagement with the data (163). Each member of the research team in this study wrote a reflexivity statement prior to data analysis, acknowledging their personal and professional experiences, and their expectations of the research findings. HL kept a reflexive diary throughout the study to capture a continuous awareness of her positionality and note any challenges that may have influenced the research.

HL held an “insider” status when undertaking this research (174), as she had personal experiences which closely align with those of the study participants. HL declared this “insider” status at the beginning of each interview to put participants at ease and create a safe space to share their experiences. This practice was viewed as particularly important for LGBTQ+ participants, due to the hostile conditions that LGBTQ+ people have been subjected to historically in mental health research and during COVID-19. The wider research team consisted of two individuals with experience of delivering mental health services (AB & FL), and two individuals with lived experience of being LGBTQ+ and accessing mental health services in Lancashire and South Cumbria (KH & NC). Their involvement ensured that a range of perspectives could be considered during analysis and created opportunities to highlight any personal biases and acknowledge researcher subjectivity.

6.4. Results

6.4.1. Participant characteristics

Twelve participants were recruited for this study. All interviews took place on Microsoft Teams and lasted an average of 59 minutes (range of 33 to 80 minutes). Participant characteristics are presented in *Table 11*. All participants were from a sexual minority group, three identified as a gender minority, and the majority were under 35 years, single, and White British. Participants accessed a range of NHS mental health services during COVID-19, including improving access to psychological therapies (IAPT) services, community mental health teams (CMHTs), and personality disorder (PD) services. Other mental health support was accessed by participants via education, work, and third sector organisations.

Table 11. Summary of participant characteristics

Demographic characteristic		**Number of participants (%)**
Age group	18-24	2 (17)
	25-34	7 (58)
	35-44	2 (17)
	45-54	1 (8)
Gender	Woman	8 (67)
	Man	2 (17)
	Non-binary	1 (8)
	Gender-fluid	1 (8)
Trans identity	Yes	3 (25)
	No	9 (75)
Sexual orientation	Gay / Lesbian	4 (33)
	Bisexual	4 (33)
	Queer	2 (17)
	Queer / Bisexual	1 (8)
	Asexual / Biromantic	1 (8)
Ethnicity	White – British	10 (83)
	White – Other	1 (8)
	Black / Black British - African	1 (8)
Disability	Yes	8 (67)
	No	3 (25)
	Prefer not to say	1 (8)
Marital status	Single	10 (83)
	Married	1 (8)
	Divorced	1 (8)
Service(s) accessed	IAPT service (NHS)	7 (58)
	Education / Work	4 (33)
	Community mental health team (NHS)	3 (25)
	Third sector (non-LGBTQ+ specific)	3 (25)
	Crisis line (NHS)	2 (17)
	Personality disorder service (NHS)	2 (17)
	Private sector	2 (17)
	Third sector (LGBTQ+ specific)	2 (17)

6.4.2. Thematic overview

Eight themes were generated in the analysis, under five domains of Levesque's Conceptual Framework for Healthcare Access (*Figure 16*). Themes were named using direct quotations from interview transcripts to ensure that they remained grounded in the accounts of study participants and meaningfully conveyed their experiences. Under the domain of 'mental healthcare needs', two themes were identified. The theme titled *"right back to square one"* describes how participants felt that the pandemic had exacerbated their existing mental health conditions and led to a deterioration in their mental health. The theme titled *"I felt so trapped"* captures how pandemic restrictions resulted in experiences of isolation and a loss of social connectedness with the LGBTQ+ community for participants. Both themes highlight increased mental healthcare needs for participants during COVID-19. *"Bottle it up, it'll all be okay"*, a theme capturing participants' 'perceptions of needs and desire for care' during the pandemic, represents the reluctance or hesitance that participants expressed about their desire for seeking mental healthcare. "*It felt a little bit anonymous"* highlights how self-referrals implemented during COVID-19 impacted on 'mental healthcare seeking' for participants. Under the domain of 'mental healthcare reaching', two themes were identified. The theme titled *"COVID-19 broke an already failing system"* presents the participants' perceptions of the availability and accessibility of services during COVID-19 and how this compared to their experiences pre-pandemic. The theme titled *"I didn't have the energy to get access"* describes how the pandemic influenced the ability of participants to reach mental health services. The final two themes, *"I don't want to explain everything again"* and *"am I not good enough, am I not normal enough"*, capture the consequences that accessing mental healthcare had on participants' mental health, particularly in relation to how a lack of continuity of care and service inclusivity affected their satisfaction with the care they received during the pandemic. The following section provides an in-depth description of these themes, presented with illustrative quotes from participants.

Theme 1: "Right back to square one"

All participants had experienced mental health conditions pre-pandemic, from depression and anxiety, through to bipolar and personality disorders. The pandemic had significant impacts on their mental health and well-being as it either exacerbated existing mental health conditions or set back any progress that had been made pre-pandemic. Initially the novelty of lockdown meant that adapting to the situation at the beginning felt relatively easy, with some participants finding it a welcome relief from the pressures of normal daily life. However, as time passed, coping with the ongoing pandemic and associated restrictions became more difficult and their mental health deteriorated as a result. The unpredictability of the pandemic, fear of the virus itself, and loss of control, caused significant distress for participants, particularly those with a diagnosis of anxiety.

> *"in the early part of the COVID-19 lockdown I felt like I was actually coping alright, it was very much one of those things where I felt like I was coping all right and it only later became apparent that I was doing worse than I thought I was" [bisexual, cisgender man]*

> *"COVID really obviously exacerbated that, and I felt like I couldn't think more than a couple of weeks ahead, that was a big thing for me as well, like being able to sort of imagine the future because I didn't, I just couldn't see" [gay/lesbian, cisgender woman]*

Most participants felt that their LGBTQ+ identity wasn't relevant to their mental health and so hadn't considered the impact of this during COVID-19. Three participants shared how the pandemic restrictions had provided them with space to undertake some self-reflection about their LGBTQ+ identity. One bisexual cisgender participant found the solitary time helped them become more confident in their LGBTQ+ identity, whilst two queer cisgender participants struggled with internalised homophobia and biphobia as a result of being shut away from the world. Interacting with negative social media about LGBTQ+ people being blamed for COVID-19 had a detrimental impact on how one bisexual cisgender participant was feeling about their identity at the time.

> *"I think I became more confident with my sexuality because it actually led me to know who I was a little bit more" [bisexual, cisgender woman]*

> *"that [social media] was really confronting [...] to see that people were so quick to look for someone to lay blame on for something that's happening all over the world [...] it's gay people's fault or it's trans people's fault [...] I'm not interested in hearing my identity attacked just because you don't want to wear a mask" [bisexual, cisgender woman]*

This theme captures how an intersecting effect of being LGBTQ+ and having pre-existing mental health conditions may have created conditions during the pandemic that led to greater mental healthcare needs for participants.

Theme 2: "I felt so trapped"

All participants specifically referred to experiencing isolation during the pandemic and the detrimental impact it had on their mental health. Those who lived alone during COVID-19 felt that before social bubbling was implemented, days would go by without human contact and this loss of social connection with others caused distress. They felt they had been let down because of the lack of consideration for people living alone and the extra burden that the loss of human contact had on them. Two participants highlighted that this was a particular oversight of the impact on LGBTQ+ people given that many people from the LGBTQ+ community may have lived alone during COVID-19.

> *"I think I struggled a lot with the social isolation that I suffered, I was living on my own and didn't see anybody [...] I literally spent days not taking to anybody and I found it really difficult and it had a massive prolonged effect on my mental health [bisexual, cisgender woman]*

> *"there was a big thing about the elderly being on their own which is fair enough, but you've got to realise that the elderly aren't the only people that live on their own [...] I think a lot more awareness that a lot of LGBT people might actually be living alone" [gay/lesbian, cisgender woman]*

Frustrations associated with lockdown restrictions meant that some participants struggled with unsupportive living environments and relationship breakdowns. The pandemic restrictions either stopped or reduced access to social support, and not being able to see or touch friends or family contributed to poor mental health through feeling the strains of isolation and loneliness. Participants lost access to social support from the LGBTQ+ community, with LGBTQ+ support groups being paused or moved online, LGBTQ+ spaces being temporarily closed, and loss of contact with LGBTQ+ friends. This loss of social connectedness with the LGBTQ+ community and with people whom participants could relate to caused isolation and exacerbated mental health symptoms. One gay cisgender participant was eager to get back to environments that were supportive of their LGBTQ+ identity (e.g., Pride events). The pandemic happened at a crucial time socially for two queer cisgender participants as they moved from further to higher education and this affected their ability to explore their LGBTQ+ identity with peers leading to confusion and internalised homophobia and biphobia.

> *"we're quite a queer community [...] I suppose social norms are not something we particularly abide by and a lot of people say we always like hold hands and hug, and I feel like the loss of that was quite difficult for a lot of us" [asexual biromantic, cisgender woman]*

> *"I just found that anything to do with sort of LGBTQ sort of went out of the window a little bit [...] I don't know whether people just saw it as less important because of what was going on in the world [...] for someone like me who struggles with the social side of it [sexuality], I guess it does make it extremely difficult when the ties that you had are then taken away" [bisexual, cisgender woman]*

This theme highlights how restrictions implemented to slow the spread of COVID-19 created an absence of opportunities to access much needed social support systems (e.g., family, friends, LGBTQ+ community), and with the resulting experiences of isolation, participants lost a major protective buffer for their mental health.

Theme 3: "Bottle it up, it'll all be okay"

Participants felt reluctant or hesitant to make that first step to seek help and felt they should try to continue to cope on their own. It was only when they realised that their mental health was continuing to deteriorate and they could no longer cope on their own, did participants view themselves as eligible for mental healthcare. Some participants observed the effects COVID-19 was having on the healthcare system and felt that they didn't want to be a burden on services. Participants lowered their expectations of services and anticipated being rejected by services or turned away because *"people have got it worse than me"*. Some participants shared that they would not have waited so long to access support outside of the pandemic. There was also recognition that mental health was not viewed on the same level as physical health during COVID-19 and that this impacted on their hesitance to seek mental health support. Some participants however, found the pandemic acted as a catalyst for them recognising their need for mental health support and challenged their beliefs that they were coping well without support pre-pandemic.

> *"I'd always thought that maybe I could be lucky and avoid having to formally access support [...] I guess it took the pandemic to kind of disabuse me of that notion" [bisexual, cisgender man]*

Feelings of low self-worth and shame, alongside fears of being judged by services, represented significant barriers to participants' desire for care and help-seeking behaviour. Some of which were associated with their LGBTQ+ identity.

> *"I felt then and sometimes do now a lot of shame about not being able to cope by myself" [bisexual, cisgender woman]*

> *"I felt like it made me feel like another, just like another mentally unwell gay person [...] it makes you feel a bit like a cliché maybe" [gay/lesbian, cisgender woman]*

> *"I think having to disclose those things to people in itself is so daunting, it puts you off wanting to access full stop [...] you don't know how they're going to react" [queer, cisgender woman]*

This theme captures participants' thoughts about their ineligibility for mental healthcare during the pandemic, arising from fears of being burdensome on a struggling healthcare system and not feeling deserving of care as a LGBTQ+ person.

Theme 4: "It felt a little bit more anonymous"

Many participants had completed a self-referral for IAPT services to access mental health support during COVID-19, with some being signposted to self-refer after consultation with their GP. Self-referral worked better for some participants, offering reasons around self-referral feeling more anonymous, meant they could disclose their LGBTQ+ identity prior to meeting a therapist, and self-referral was validating for their mental health. A bisexual cisgender participant shared how they were ashamed about how they were feeling and that self-referral offered them an opportunity to maintain some anonymity in asking for help.

> *"self-referral would have been very good as an option [...] if it's like over the phone or online to kind of do a referral with someone else, I feel like there's a possibility that some things might either get filled in wrong or misinterpreted" [gay/lesbian, gender-fluid]*

Some participants however, found the experience of self-referral to be impersonal and they would have preferred a conversation with a healthcare professional to access services rather than fill out a form. One queer cisgender participant felt fobbed off by their GP with a self-referral, and another queer cisgender participant was concerned that without a healthcare professional's support, a self-referral might be turned down or that they felt like they were making it up.

> *"that questionnaire made me feel like s**t [...] I think it really it forced me to confront like how bad I felt about things" [gay/lesbian, cisgender woman]*

This theme describes how changes to access (e.g., self-referral) during the pandemic influenced perceptions of anonymity, disclosure, and validation, which may have served or not served participants well in their mental healthcare seeking.

Theme 5: "COVID-19 broke an already failing system"

Most participants had accessed mental health services pre-pandemic and found them to be poor. Those who were already in services as of the start of the pandemic reported that their support either stopped entirely temporarily, the format of their support changed (e.g., moved to remote delivery), or the restart of their support was delayed. Participants who were familiar with services shared that once you're in services it can feel like you're getting somewhere, but that initial period of seeking support felt like going around in circles and COVID-19 made this worse. IAPT support was perceived as limited, in that it only included a short series of sessions which did not enable participants to build a relationship with the therapist. Waiting times and delays to access during COVID-19 and the impact they had on their deteriorating mental health were highlighted by nearly all participants. One gay genderfluid participant suggested that interim support for people on the waiting list could have really made an impact during COVID-19 on the hope that they held around getting support in the future. Most participants shared their perspectives about mental health services being under-resourced and under-funded, and appreciated that the pandemic was a challenging time.

> *"that's when they refer me to someone else and then I'll get referred on to someone else, I just end up going in a big circle [...] it [the pandemic] made the circle a lot longer with a lot more gaps in it because I was waiting for months" [asexual biromantic, cisgender woman]*

> *"after about the third or fourth time on the merry-go-round, you did start to think well I'm trying to access help but help doesn't seem to want to help me [...] it felt like it [the pandemic] made a system that was creaking a lot worse" [bisexual, cisgender man]*

This theme highlights participants' perceptions of not only the significant effects that the pandemic had on access, but also that these issues in reaching mental healthcare whilst worse during COVID-19, existed in a pre-pandemic world.

Theme 6: "I didn't have energy to get access"

Participants felt that they did not possess sufficient resources to access mental health services. They did not feel well enough to engage with support or feel that they had the energy to be persistent and advocate for themselves. Participants were having to fight harder at a time when they had less resources (e.g., social support) and were more in need of the support.

> *"I think the reason why I wasn't recovering was because I didn't have the energy to be persistent to get the access to the services that I needed [...] I didn't really want to help myself, so I needed like a service to kind of come in and step in" [bisexual queer, non-binary]*

A lack of knowledge and awareness of available services during COVID-19 and navigating how to go about gaining access to them acted as key barriers to seeking support. Whilst this was particularly pertinent during COVID-19, this was not a new challenge for many participants who also found navigating access pre-pandemic difficult. One bisexual cisgender participant shared their frustration about feeling like they were not taken seriously by services.

> *"by like the fifth or sixth time and sort of thinking, am I saying the wrong words, do I need to say different words in order to be taken more seriously" [bisexual, cisgender man]*

An inability to reach NHS mental health services during COVID-19 caused many participants to consider seeking support from private healthcare providers, but cost was reported as a barrier to this. Other resources that participants associated with accessing mental health services included anonymity and privacy. Almost all of the support received by participants during the pandemic was delivered in a remote format (e.g., telephone, video). Some participants enjoyed the anonymity and flexibility of remote delivery, whilst others struggled with being in unsupportive environments and fear of being overheard discussing their LGBTQ+ identity and/or mental health difficulties. A participant's openness with their LGBTQ+ identity seemed to influence this preference.

> *"something about that anonymity [...] I actually think that this iteration during the pandemic of everything being arms length phone calls rather than even video calls, that worked really well for me because then I didn't have to manage someone else's feelings about how I looked and how I presented" [bisexual, cisgender woman]*

> *"there were some aspects of my LGBT identity particularly my gender that I was not comfortable having my family know about [...] when I was asked questions [...] I did feel very restricted on how I could answer because I was worried that someone might overhear, I was worried that someone might walk in, and that was something that you didn't get when you had that like face to face appointment" [gay/lesbian, genderfluid]*

This theme provides insight into how the abilities of participants to reach mental healthcare were negatively affected by the impacts of the pandemic on their mental health and on the capacity and delivery of the healthcare system.

Theme 7: "I don't want to explain everything again"

Continuity of care was particularly important, and this was somewhat neglected during COVID-19. Participants had to repeatedly go over their mental health difficulties and relive the experience of sharing this with different professionals. It was also difficult to share their LGBTQ+ identity over and over again, and not having the opportunity to build a relationship with a professional who knew what they needed to know about them in the short timeframe. This lack of continuity of care worsened participants' mental health and influenced the extent to which they wished to continue to engage with services.

> *"now I need to start to get to know somebody else and that just seems like a lot of effort at the moment and then have to start explaining it all again and I don't want to explain everything again because that just gets me more upset" [gay/lesbian, cisgender woman]*

> *"it does make a big difference, it's just nice to know that you're getting to know someone who's getting to know you, it's not seeing a different person every week [...] I think just having someone who knows you on a personal level is just really beneficial [...] someone being able to work more therapeutically with you if they understand you a lot better" [bisexual, cisgender woman]*

This theme captures how participants' experiences of a lack of a continuity of care (e.g., being able to see the same professional, routine appointments) during COVID-19 fed into negative consequences of accessing mental healthcare.

Theme 8: "Am I not good enough, am I not normal enough"

Some participants reported receiving neutral responses to disclosure of their LGBTQ+ identity during COVID-19 and did not think it influenced their experiences. Others reported experiences of discrimination from staff, felt staff had a significant lack of awareness of LGBTQ+ issues, and thought that services were lacking in their inclusivity of LGBTQ+ service users.

> *"it was extremely difficult as someone who struggles with their mental health and their sexuality to be able to turn around and feel like a valid person in the middle of all that" [bisexual, cisgender woman]*

A gay/lesbian genderfluid participant requested to change therapist during their contact with mental health services as they felt that once they had disclosed their sexuality, the therapeutic space no longer felt safe for them.

> *"this person doesn't think that you deserve to access this service [...] yeah it did feel very much like do I have to go somewhere else, am I not good enough, am I not normal enough" [gay/lesbian, genderfluid]*

An asexual biromantic cisgender participant found that their sexuality directly influenced their mental health treatment and was offered sex therapy rather than therapy for the mental health difficulties they were experiencing.

> *"when you say you're asexual, people immediately go you're broken, we need to fix this*

> *and they focus on that rather than what I'm actually there for, which is mental health issues that are completely unrelated to my sexuality" [asexual biromantic, cisgender woman]*

Participants recommended a number of ways to improve LGBTQ+ service inclusivity, including more visibility about LGBTQ+ inclusivity (e.g., wearing rainbow badges, staff using pronouns), improving awareness of LGBTQ+ issues among staff, staff training on supporting LGBTQ+ people, challenging cis-heteronormative assumptions of staff, and employing LGBTQ+ professionals who participants thought would be easier to relate to and more validating.

> *"I just felt like I could be more open with her [...] wanting someone who sort of fits into similar categories to you because it helps have that relatability factor and you maybe think they can understand what's going on with you" [queer, cisgender woman]*

> *"acknowledge that LGBTQ people have this extra layer of things to consider and level of safety that they may not know [...] it's being very, very explicit and clear that it's a welcome, everybody's welcome, and to do things about pronouns and stuff like that" [bisexual, cisgender woman]*

The importance of inclusivity for LGBTQ+ service users is highlighted by this theme, as participants perceived mental health services as non-inclusive, and suggested improvements to enhance their experiences of access and subsequently the impact on their mental health.

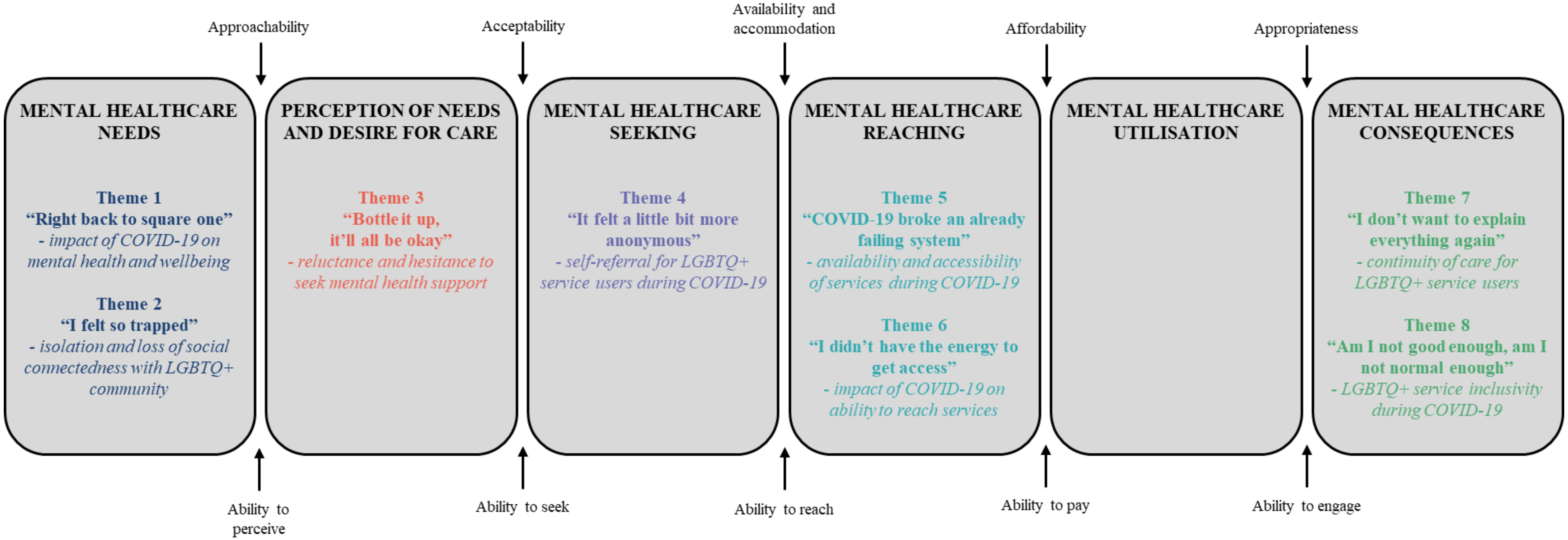


Figure 16. Themes mapped to the domains of Levesque’s Conceptual Framework for Healthcare Access (133)

6.5. Discussion

6.5.1. Summary of key findings

This study identified eight themes, under five domains of Levesque's Conceptual Framework for Healthcare Access (133), describing the experiences of LGBTQ+ people who accessed or tried to access NHS mental health services during the COVID-19 pandemic. The findings suggest that LGBTQ+ people experienced significant disruptions to their mental health and access to mental health services during COVID-19. The findings also convey a sense that LGBTQ+ people may have been disproportionately affected by the pandemic and associated restrictions through experiences of isolation and loss of social connectedness, and challenges associated with having sufficient resources to access mental health services. Participants felt let down both by a lack of support for LGBTQ+ people and a lack of support for mental health during a global crisis preoccupied with physical health. Whilst direct discriminatory experiences were rare, there was an overall perception that services lacked inclusivity and more could be done by services to improve LGBTQ+ people's experiences of accessing mental health services. The study findings are discussed below in the context of existing literature.

6.5.2. Findings in the context of existing literature

The findings of this study reiterate evidence that COVID-19 had potentially disproportionate effects on the mental health of LGBTQ+ people (14, 15). All participants reported mental health conditions that pre-dated the pandemic, which were exacerbated by the restrictions implemented to control the spread of the virus. Gillard et al. (52) found that people with pre-existing mental health conditions were unequally impacted by the pandemic as they were starting from a lower level of psychological well-being and social connection. Kneale and Bécares (65) highlighted that COVID-19 magnified systems of oppression and coincided with intensifying hostile attitudes about sexuality and gender identity on a global scale, which in turn partially explained the increased vulnerabilities to depression and perceived stress for LGBTQ+ people during COVID-19. In the context of the current study, the intersecting effect of being LGBTQ+ and having a pre-existing mental health condition may have created conditions during the pandemic that led to greater mental distress and poorer well-being for these population groups. Therefore, in times of crisis such as a pandemic, policy makers need to go beyond just identifying who is vulnerable and consider how existing societal structures (e.g., cis-heteronormativity) exacerbate inequalities and not only maintain vulnerabilities but produce them (70). The absence of social safety (e.g., inclusion, belonging, protection), which creates and maintains health disparities for stigmatised groups such as LGBTQ+ people (7), could have been amplified during pandemic conditions.

Isolation and loss of social connectedness with the LGBTQ+ community during COVID-19 caused significant distress for participants. Whilst this is not surprising given the pandemic caused isolation across the general population, this experience may have been more significant for LGBTQ+ people. Social support systems for LGBTQ+ people are more likely to exist outside of the home (224), with older LGBTQ+ people more likely to live alone and younger LGBTQ+ people more likely to live with family members who may be unsupportive of their identity. The concept of "chosen family" describes how LGBTQ+ people rely on friendship networks for support to compensate for a lack of familial support (224). In the context of COVID-19, whilst many people lived with at least some of their support network and as such had some protection against debilitating experiences of loneliness, LGBTQ+ people may have lost access to much of their support as they were less likely to live with those support networks. McElroy et al. (225) found that in the general population, those living alone during the pandemic had greater psychological distress and lower life satisfaction. A study conducted in the North West of England identified that LGBQ+ people were more greatly affected by isolation through the loss of social support networks during COVID-19, and more likely to believe that the government did not consider the impact on people like them when preparing COVID-19 guidance (61). When compared with non-LGBTQ+ identifying people, reduced social connectedness during COVID-19 partly mediated the higher mental health burden experienced by LGBTQ+ people in a cross-sectional survey conducted in Germany (205). This evidence resonates closely with the present study's findings, which also suggest that existing mental health inequalities for LGBTQ+ were compounded by pandemic restrictions through isolation and loss of social connectedness. Social connectedness with the LGBTQ+ community offers protection against stress and loneliness through the mechanism of reducing the impacts of marginalisation (226), but during the pandemic opportunities to connect with the LGBTQ+ community were diminished, and as such a major protective buffer for these population groups was removed.

Participants shared a reluctance and hesitance to seek mental health support during COVID-19. LGBTQ+ people with mental health conditions experience a double stigma as the stigma associated with being LGBTQ+ intersects with that associated with having a mental health condition (196). Stigma is a well-documented barrier to help-seeking behaviour (196), and could potentially explain why participants in this study were reluctant or hesitant. Some participants shared feelings of low self-worth and shame, and fears of being judged, which in previous evidence has been associated with unwillingness to seek support from mental health services (227). Perceived stigma, that which is created by the expectations of being stigmatised, is associated with low self-esteem and wishing to avoid events that have a high chance of experiencing rejection (214). The Candidacy framework describes how people assess their eligibility for care and suggests that vulnerable groups, such as LGBTQ+ people, may have a different identification of candidacy in that they are more likely to seek help at crisis point rather than earlier and put off seeking help initially in fear of being judged by professionals (138). Liberati et al. (115) found that the pandemic had significant impacts on the identification of candidacy for people with pre-existing mental health conditions, with service users reporting uncertainty about the level of distress that needed support, questioning whether they deserved access to support, and a low sense of self-worth accompanied by perceptions of being burdensome. Many of these experiences resonate with those shared by participants in the current study, however these were compounded by thoughts around ineligibility for mental healthcare as a result of issues associated with their LGBTQ+ identity (e.g., low self-worth, shame, fear of being judged).

Self-referral facilitated help-seeking for some participants during COVID-19 as it enabled a sense of anonymity which couldn't be achieved through typical access routes (e.g., GP). A self-referral option was introduced for IAPT services as a potential way to improve accessibility and close the access gap for marginalised groups (214). Within the context of the pandemic, self-referral for IAPT services was likely implemented at a greater extent due to the inaccessibility of GPs, previously viewed as the gatekeepers of access to psychological interventions. Habicht et al. (215) found that a self-referral chatbot for IAPT services increased referrals overall, but particularly increased referrals for minority groups (e.g., bisexual people, non-binary people); suggesting that the self-referral process may better facilitate help-seeking for minority groups. People from gender minority groups particularly valued the human-free nature of self-referral as it enabled them to seek support without fear of judgement or discrimination (215). Bisexual and gender minority participants in the present study also indicated a preference for self-referral, providing similar reasons around anonymity and avoiding judgement.

The COVID-19 pandemic had significant effects on the extent to which people could navigate seeking mental health support, and thus created conditions that required a higher degree of resources, commitment, perseverance, and competence to negotiate a point of entry to mental health services (115). LGBTQ+ people are less likely to possess the resources needed to navigate mental health service access during COVID-19. They have an increased risk of low self-esteem, shame, stigma, and discrimination (92, 227); all of which impact help-seeking behaviour and beliefs about eligibility for care, and less access to social support that is affirming of their identity, during a hostile time for sexual and gender minorities, to mitigate those risk factors (58). Findings from the current study suggest that LGBTQ+ people experienced deteriorating mental health from a lack of access and thus were unequally impacted by the pandemic. In addition to navigating a point of entry to services, COVID-19 also caused a dramatic shift in the way mental health services were delivered, where delivering care remotely rapidly became the default option (114). In the current study, remote delivery was not always appropriate for LGBTQ+ service users as they lacked privacy to engage in the therapeutic space when living in unsupportive environments. On the other hand, remote mental healthcare bypassed the stigma for some participants as they could retain some anonymity and were less concerned about being judged. Whaibeh et al. (228) suggested that telepsychiatry could help to address the mental health treatment gap for LGBTQ+ people by reducing the challenges faced by these population groups (e.g., stigma). However, the current study's findings indicate that offering a preference for LGBTQ+ service users to best meet their individual needs may be a more appropriate way of delivering inclusive mental health services.

Building a relationship with a therapist was important to participants in this study, as was continuity of care. The relationship between a mental health professional and LGBTQ+ service user has been shown to influence mental health service use for sexual minorities (93). Repeated disclosure of their LGBTQ+ identity and their mental health difficulties created discomfort for participants, with many choosing to stop disclosing their identity to services as a result. Filice and Meyer (93) suggest that concealing sexual orientation can undermine treatment success and so this may account for why many participants felt that their therapy did not improve their mental health. Continuity of care was specifically challenging during COVID-19 as mental health services had to reorganise and work within structures that weren't feasible in their usual practice. Continuity of care in mental health services increases trust, service user satisfaction, and disclosure of information, and can contribute to better treatment outcomes (229). The fragmentation of services and care discontinuity experienced by participants during COVID-19 is likely to have affected all service users, but could have had potentially disproportionate effects for LGBTQ+ people as they are less likely to trust healthcare professionals and so may not have disclosed information (94), and thus treatment may have been less effective. This also feeds into explaining why participants felt that the support they accessed during the pandemic did not improve their mental health.

Having mental health professionals and services that are competent in delivering care that is inclusive and responsive to the needs of LGBTQ+ people is critical to enhancing the effectiveness of mental health treatment for LGBTQ+ people, addressing mental health inequalities, and reducing risk of disengagement (200). A lack of knowledge and training on supporting LGBTQ+ people can perpetuate stigma through the maintenance of cis-heteronormative assumptions (200). A lack of LGBTQ+ service inclusivity was conveyed by participants as they felt that professionals needed better knowledge and training to work with LGBTQ+ people and that this would ultimately improve their experience of accessing services. Participants proposed a range of ways to improve LGBTQ+ service inclusivity (e.g., visibility, staff training, rainbow badges, pronoun use), many of which are reflected in the Health and Care LGBTQ+ Inclusion Framework published in 2022 (230). With a continued loss of focus on improving the health of LGBTQ+ people, progress has been slow in implementing these recommendations in England, and therefore services continue to be perceived as non-inclusive. In the USA, Fish et al. (200) established a "Sexual and Gender Diverse Learning Community" during COVID-19 to improve the mental health workforce's competence in supporting LGBTQ+ service users and found the programme's implementation to be both acceptable and feasible. Similar programmes are needed in England to assess the effects of implementing recommendations to improve LGBTQ+ service users' experiences of mental health services.

6.5.3. Strengths and limitations of the study

This study had a number of strengths and limitations. Few studies have conducted interviews with LGBTQ+ people about their experiences of mental health and accessing mental health services during COVID-19 in the UK, and most have relied on online surveys. This study captured in-depth experiences of population groups who are often seldom-heard within health research and has corroborated findings from survey studies (58, 61, 64, 65). The perspectives of people with lived experience of accessing services and being LGBTQ+, and of people with professional experience of delivering mental health support were embedded into this research at every stage from design, undertaking, through to analysis and interpretation. This meaningful stakeholder involvement enhanced reflexive practice and the validity of the findings. The researchers felt that declaring an insider perspective during interviews helped to put participants at ease and as a result, participants' accounts may have been more open and honest. One participant reflected on how refreshing it was for LGBTQ+ research *"being done by us rather than to us"*. A systematic analysis method was adopted in this study, alongside the use of an established framework of healthcare access to code the data. Whilst this approach may have helped to situate the findings within broader literature and helped to consider the complexity of access, it may have led to the oversimplification of concepts. This study captured experiences from a range of LGBTQ+ identities, with different mental health conditions, who accessed a range of mental health services in Lancashire and South Cumbria.

Despite efforts to recruit through LGBTQ+ networks and reach digitally excluded participants through the use of paper posters in the local area, recruitment for this study was challenging. It was a relatively small sample and was limited to a specific geographical area. Whilst relatively diverse in terms of sexual orientation and gender identity, the sample lacked diversity in age, ethnicity, and marital status, and therefore may not have captured the views of older people, ethnic minorities, or married people. Minority population groups, such as LGBTQ+ people, are under-represented in health research and are difficult to recruit, often due to a lack of trust

(231). To further address this issue, the insider perspective could have been declared on the study adverts to engender a sense of trust with potential participants from the outset. Lastly, the interviews were conducted two to four years after the experiences being explored. Some participants had difficulties recalling some details which is not surprising given the impact the pandemic and the length of time passed, and therefore this may have influenced participants' recollection of what happened. On the other hand, this may have also given participants time to reflect and make sense of their experiences.

6.5.4. Implications for practice

This study raises important implications for mental healthcare practices associated with supporting LGBTQ+ people experiencing mental ill health. Maximising protective factors (e.g., social support, social connectedness with the LGBTQ+ community) and encouraging timely access to mental health support is needed to mitigate the negative effects identified in this study for LGBTQ+ people. This is particularly important in the event of significant disruption to services (e.g., crisis conditions) to mitigate against the disproportionate effects for LGBTQ+ people. Stigma-reducing interventions for LGBTQ+ people who have mental health conditions could be considered to address the barriers to help-seeking. Mental health services need to adopt more flexibility where possible in offering options and preferences to improve equity of access for LGBTQ+ people. Self-referral options are particularly beneficial for enhancing access for bisexual and non-binary people. Not all service users are able to access mental health support remotely due to unsupportive living environments and so providing alternative support in-person or in safe dedicated spaces should be considered.

LGBTQ+ service users did not perceive mental health services as inclusive during COVID-19. Whilst reassuring that there were limited direct discriminatory experiences, this perceived lack of inclusivity is problematic for services. A range of recommendations that services could implement were suggested by participants to address this lack of inclusivity; actions which should not be neglected under pandemic or similar crisis conditions given the higher mental health burden for LGBTQ+ population groups. Services should be more visibly LGBTQ+ inclusive from the outset so that LGBTQ+ people feel that they are welcome to access services. Inclusive communications and marketing, staff wearing rainbow badges, and introducing themselves with their pronouns are just some of the suggested strategies that could improve the experiences of LGBTQ+ people. Rolling out a training programme or learning community to improve knowledge, awareness, and competences in supporting LGBTQ+ service users could challenge staff cis-heteronormative assumptions and improve the mental healthcare that LGBTQ+ people receive. Some participants shared their preference for a mental health professional who also identified as LGBTQ+ as they are more likely to empathise with their lived experience and so matching therapists and service users with shared experience could be beneficial if feasible.

6.5.5. Implications for research

As LGBTQ+ people continue to demonstrate an increased risk of mental health conditions and are having poor experiences of accessing mental health services, further research is needed to understand the ways in which services can better meet the needs of LGBTQ+ people and assess the impact of these changes. Capturing the perspectives of mental health professionals working with LGBTQ+ services users in mental health services would be valuable to generate insight of what barriers exist to delivering inclusive and responsive support for LGBTQ+ people. Ultimately, co-developing a training package or learning community with staff and LGBTQ+ service users, as recommended by this study's participants, which aims to address the lack of knowledge, awareness, and competencies of professionals working with LGBTQ+ people in mental health services, is a vital next step of research. With this, a comprehensive evaluation of the feasibility and acceptability of rolling out such a programme, and assessing the effectiveness of having more informed and trained staff on LGBTQ+ experiences of accessing mental health services, would be necessary.

6.5.6. Conclusion

The findings of this study validate earlier evidence that LGBTQ+ people may have been disproportionately affected by the COVID-19 pandemic, through an increased risk of mental ill health, isolation, and loss of social connectedness. This study captured novel findings around the challenges to accessing NHS mental health services during COVID-19, including experiences of stigma and discrimination, concerns about disclosing their LGBTQ+ identity, living in unsupportive environments and being unable to access support delivered remotely, and not possessing certain resources to navigate access. Where positive experiences of access were identified (e.g., offering self-referral options and treatment delivery format choices, continuity of care), these highlighted opportunities for change. In future planning for similar significant events, policy makers should not overlook the potential vulnerabilities of LGBTQ+ population groups and should endeavour to mitigate any disproportionate impacts. Beyond pandemic conditions, the inclusivity of mental health services requires improvement, and this paper has outlined a series of implications for both practice and research, which could be considered in order to improve the experiences of LGBTQ+ people accessing NHS mental health services.

Chapter 7. Discussion

7.1. Chapter introduction

This final chapter presents a detailed discussion of the research findings described in Chapters 4, 5, and 6. It begins with a summary of the key findings from each of the studies and then integrates the findings from all three studies using Levesque's Conceptual Framework for Healthcare Access to provide an overview of the overall contribution to knowledge of this thesis. The key findings are described in the context of wider literature in the area and the potential implications for future practice and research are outlined. The chapter concludes with a discussion of the strengths and limitations of the research conducted, and key reflections on the use of the theoretical framework, adopting a critical realist perspective, embedding patient and public involvement (PPI) and stakeholder engagement (SE) activities throughout the research, and the PhD researcher's insider status.

7.2. Summary of key findings

The research question this thesis intended to address was "how has access to adult mental health services changed during the COVID-19 pandemic for people who identify as lesbian, gay, bisexual, transgender, and queer (LGBTQ+), and how have changes in access differentially affected these population groups?". The aim was to 1) review existing literature to understand how inequalities in access to mental health services have been researched previously, 2) assess the feasibility of using routinely collected mental health service data to investigate differences in access for sexual minority and heterosexual service users during the COVID-19 pandemic, and 3) explore the experiences and perspectives of LGBTQ+ people who accessed or tried to access mental health services during the COVID-19 pandemic. The key findings from each study conducted as part of this thesis are summarised below.

7.2.1. Systematic mapping review (Chapter 4)

The systematic mapping review synthesised existing evidence of inequalities in access to adult mental health services within the UK context to understand how access has been measured, what research methods have been applied, and the variations in access between population groups (131). The review, which included 152 studies published between 2014 and 2022, showed that the evidence base of inequalities in access to mental health services remains complex and somewhat limited. The findings suggested that little has changed in the nature and extent of inequalities since 2014, despite the implementation of policies to improve access for underserved population groups. Attempts to understand variations between population groups were limited as studies typically relied on measuring mental healthcare utilisation using routinely collected data and did not tend to consider the extent of mental health needs, whether mental health services could be reached, or the potential reasons behind the variations observed. The review concluded with a recommendation that enhancing knowledge of inequalities in access to mental health services requires mixed methods research which attempts to contextualise access in a holistic way by considering multiple domains of access (e.g., mental health need, mental healthcare seeking, mental healthcare consequences).

Whilst this review did not specifically focus on inequalities in access to mental health services for sexual and/or gender minority groups, it did bring to light a significant lack of research in this area. Only four included studies (3%) focused specifically on access for sexual and/or gender minority groups (94-96, 232). These studies identified higher utilisation of mental health services for LGBTQ+ people than heterosexual and cisgender people, and poor experiences of accessing services due to anticipating or experiencing stigma and discrimination, non-disclosure of LGBTQ+ identity, and the perception that professionals lacked knowledge of LGBTQ+ identities (94-96, 232). One hundred and thirty seven studies (90%) and 142 studies (94%) included in the review did not report sexual orientation or gender identity data, respectively. Therefore, the absence of evidence of inequalities for these groups did not necessarily indicate that inequalities do not exist, but highlighted a poor understanding of access to mental health services for individuals who identify as a sexual and/or gender minority. The findings from the systematic mapping review emphasised this gap in the literature and informed the design of the subsequent quantitative and qualitative studies to examine access to mental health services for LGBTQ+ people.

7.2.2. Exploratory study using routinely collected data (Chapter 5)

Routinely collected data from an improving access to psychological therapies (IAPT) service and community mental health teams (CMHTs) in Lancashire and South Cumbria, were analysed in the second study to explore whether differences in access to mental health services could be measured for sexual and gender minority groups during the COVID-19 pandemic. There were no variables on gender identity or trans status available to analyse in the datasets, and so access for gender minority groups could not be explored. It is highly unlikely that people who identify as trans are not represented in mental health services at all. As there is currently no option to collect this data, the data services have collected on these individuals could be incorrect and may not accurately represent the gender they identify with. As a result, the study was unfortunately only able to focus on examining access for sexual minority groups.

This study found that sexual minority groups are represented in referrals to and contacts with mental health services. The higher representation of sexual minority groups identified in IAPT and CMHTs compared with the general population is unsurprising and likely to reflect the higher prevalence of mental health conditions for lesbian, gay, bisexual, and other sexual minority (LGB+) groups. Those who identified as a sexual minority across the datasets were more likely to be younger, female, from a White ethnic background, and live in deprived areas, indicating that other groups may be experiencing inequalities in access or may be less likely to disclose their sexual orientation (e.g., sexual minority males, LGB+ ethnic minorities, older LGB+ people). Missing sexual orientation data was considerable across all datasets used in this study and did not occur randomly, in that other variables were associated with missing sexual orientation data (e.g., less likely to be missing for younger age groups and females, more likely to be missing for ethnic minorities). Finally, patterns of access differed by sexual orientation for both IAPT and CMHTs during COVID-19, suggesting that the pandemic may have had differential impacts on sexual minority groups compared with heterosexual people. However, due to the extent of missing data, delineating whether observations in this study were driven by actual variations in access or just reflected issues in data quality is challenging. This quantitative study concluded that in order to examine access to mental health services for LGBTQ+ people with greater accuracy, significant improvements are needed in the routine collection of service users' sexual orientation and gender identity.

7.2.3. Qualitative interview study (Chapter 6)

Topic-guided qualitative interviews were conducted with people who identified as LGBTQ+ to explore their experiences of accessing or trying to access mental health services in Lancashire and South Cumbria during the COVID-19 pandemic. Levesque's Conceptual Framework for Healthcare Access (133) was used as a framework to code the data, and eight themes across five framework domains were identified. The study findings suggested that LGBTQ+ people experienced significant disruptions to their mental health and access to mental health services during COVID-19. The pandemic may have disproportionately affected these population groups due to an increased risk of deteriorating mental health, isolation, and a loss of social connectedness with the wider LGBTQ+ community (*Theme 1 "Right back to square one"; Theme 2 "I felt so trapped"*). LGBTQ+ participants shared a reluctance to seek mental health support initially and waited until their difficulties had surpassed their abilities to cope before trying to access services (*Theme 3 "Bottle it up, it'll all be okay"*), but that having the option to self-refer to services felt more comfortable and encouraged them to reach out (*Theme 4 "It felt a little bit more anonymous"*). LGBTQ+ people were also faced with challenges associated with having insufficient resources to access mental health services (*Theme 6 "I didn't have the energy to get access"*) and felt let down both by a lack of support for LGBTQ+ people specifically and a lack of support for mental health during the pandemic (*Theme 5 "COVID-19 broke an already failing system"; Theme 7 "I don't want to explain everything again"*). Participants shared an overall perception that mental health services lacked inclusivity and could have done more to challenge the cis-heteronormative assumptions of staff to improve the experiences of LGBTQ+ people both during pandemic conditions and beyond (*Theme 8 "Am I not good enough, am I not normal enough"*). The main implication of this qualitative study was that policy makers should not overlook the potential vulnerabilities of LGBTQ+ population groups and should endeavour to mitigate any disproportionate impacts of pandemic-like conditions in the future, whilst also implementing immediate improvements to the inclusivity of mental health services.

7.3. Integration of key findings

A core characteristic of mixed methods research is to integrate or combine qualitative and quantitative studies and their findings (126). This thesis is comprised of a systematic mapping review which extracted and analysed both quantitative and qualitative data from primary research studies, an analysis of quantitative data collected by mental health services, and an analysis of qualitative interview data collected by the PhD researcher. Whilst these studies had their own individual research questions as detailed in their respective chapters, they were conducted to contribute to developing an overall understanding of access to adult mental health services for LGBTQ+ people during the COVID-19 pandemic. The studies were conducted in a sequential pattern, with the findings from each study informing the design of the subsequent study as outlined in Chapter 3. All of the studies utilised Levesque's Conceptual Framework for Healthcare Access (133) within their study design and data analysis approach. As such, this framework has been used to integrate the key findings by mapping them to each of the framework domains; a mixed methods joint display is presented in *Table 12* and described in more detail below.

Table 12. Integration of key findings across the three studies mapped to the domains of Levesque's Conceptual Framework for Healthcare Access (133)

Name of framework domain	**Summary of key findings for framework domain**
Mental health needs	• Few studies examining inequalities in access to mental health services considered mental health needs and whether access was reflective of the mental health needs for that population group [1]. • Higher representation of sexual minorities within IAPT services and CMHTs compared with the general population may reflect higher mental health needs for LGB+ people [2]. • COVID-19 had a detrimental impact on LGBTQ+ people with pre-existing mental health conditions, through experiences of isolation and loss of social connectedness with the LGBTQ+ community [3].
Perception of mental health needs and desire for care	• Referrals to IAPT services and CMHTs increased in the second COVID-19 lockdown for LGB+ people compared with heterosexual people, suggesting they may have delayed accessing support [2]. • LGBTQ+ participants shared their initial reluctance and resistance to seek mental health support, felt they should be able to cope on their own, and only when their mental health significantly deteriorated did they seek help [3].

Mental healthcare seeking	• Two studies focused on sexual minority service user experiences of accessing IAPT services in terms of healthcare seeking (94, 95) – barriers included fears of prejudice/discrimination, practitioner's lack of understanding, non-disclosure of sexual orientation, and neglect of discussions around sexual orientation [1]. • The demographic characteristics of LGB+ people referred to services suggest that through the lens of intersectionality, some groups may be experiencing inequalities in access or less likely to disclose their sexual orientation [2]. • Changes in referrals during COVID-19 for LGB+ people may reflect help-seeking behaviour, with delays in accessing support and more acute presentations at a later stage (e.g., increase in CMHT referrals in the second lockdown) [2]. • Being able to self-refer to mental health services may have a positive impact of help-seeking behaviour for some LGBTQ+ groups, and so providing this as an option may encourage LGBTQ+ individuals to seek support sooner [3].
Mental healthcare reaching	• Studies quoted not including certain demographic variables (e.g., sexual orientation) within their analyses due to levels of missingness and therefore could not examine whether those groups are experiencing inequalities in reaching services [1]. • Being able to ascertain whether LGBTQ+ individuals are reaching mental healthcare is complicated by the insufficient recording and disclosure of sexual orientation and gender identity within mental health services [2]. • COVID-19 significantly impacted the availability and accessibility of mental health services, which may have disproportionately affected LGBTQ+ people as the pandemic reduced the resources they possessed to be able to reach services (e.g., energy, persistence, anonymity, privacy) [3].
Mental healthcare utilisation	• Most studies examining inequalities in access to mental health services measured mental healthcare utilisation using routinely collected data, and did not consider mental health needs and whether services could be reached by groups [1]. • Two studies focused on whether the use of mental health services was associated with sexual orientation and/or gender identity (96, 232) – higher use associated with being bisexual and with being transgender [1]. • Unable to ascertain much about the mental healthcare utilisation of gender minority groups as the data was not available within the datasets [2]. • The demographic characteristics of LGB+ people in contact with services suggest that through the lens of intersectionality, some groups may be experiencing inequalities in access or less likely to disclose their sexual orientation [2]. • Changes in contacts during COVID-19 for LGB+ people may reflect the disproportionate impact on the mental health of these groups as they may have needed more support from services [2]. • Whilst LGB+ people were no more likely to disengage with services than heterosexual people, those with missing sexual orientation had higher rates of non-attendance suggesting that disclosure may influence engagement [2]. • All interview participants had pre-existing mental health conditions and most had accessed mental health services pre-pandemic [3].
Mental healthcare consequences	• Concealing sexual orientation may influence experience of mental healthcare as those with missing sexual orientation data were more likely to disengage [2]. • Continuity of care during COVID-19 and beyond was particularly important for LGBTQ+ people; sharing their identity with multiple individuals was difficult and sometimes influenced their wish to continue to engage with services [3]. • Some LGBTQ+ participants experienced discrimination during accessing services, and felt that there was a significant lack of awareness of LGBTQ+ identities and services were lacking in their inclusivity of LGBTQ+ service users [3].

* [1] finding from systematic mapping review presented in Chapter 4; [2] finding from analysis of routinely collected data presented in Chapter 5, [3] finding from qualitative interview study presented in Chapter 6

7.3.1. Mental health needs

The quantitative and qualitative studies conducted for this thesis supported previous evidence that the COVID-19 pandemic had a detrimental impact on the mental health of LGBTQ+ people

(14, 15), particularly those with pre-existing mental health conditions. As suggested by Gillard et al. (52), these individuals were possibly starting from a lower level of psychological well-being and social connection and as such may have been unequally impacted by the pandemic. Interview participants' experiences of isolation and loss of social connectedness with the wider LGBTQ+ community resonated with existing studies which highlighted the increased vulnerabilities to mental ill health for LGBTQ+ people during COVID-19 (58, 61, 65). These findings resonate with theories developed by Diamond and Alley (7), of poor "social safety" (e.g., loss of reliable social connection, inclusion, and recognition) resulting in mental health inequalities for LGBTQ+ people and how this could have been exacerbated during the COVID-19 pandemic. A higher representation of sexual minority groups in referrals to and contacts with mental health services than in the general population during the pandemic, may have also reflected a higher prevalence of mental health needs for LGB+ people. The converging quantitative and qualitative evidence from this thesis contributes to wider literature on how the COVID-19 pandemic negatively impacted the mental health of LGBTQ+ people, possibly through the mechanisms of experiences of isolation, loss of social connectedness, and perceived stigma, and thus this absence of social safety may have increased their need to access mental health services.

7.3.2. Perception of mental health needs and desire for care

A converging finding from the quantitative and qualitative studies conducted in this research was that LGBTQ+ people may have been initially reluctant and hesitant to seek mental health support during the onset of the COVID-19 pandemic. A significant increase in referrals for LGB+ people during the second lockdown versus the first lockdown when compared with heterosexual people, was echoed in the experiences of interview participants. LGBTQ+ participants shared their reluctance and hesitance to seek support, feeling that they should try to cope on their own and not be a burden on services, and so delayed accessing services. Only when their mental health continued to deteriorate and they could no longer cope on their own, did they seek help. The increase in referrals observed in CMHTs was more substantial than in IAPT suggesting that LGB+ people could have also presented later with more acute mental health difficulties. Feelings of low self-worth and shame, and fears of being judged, have been reported to have influenced help-seeking behaviour for LGBTQ+ people in the past (227), and these concerns may have been exacerbated by hostile conditions during the pandemic (65). Those with pre-existing mental health conditions have also reported uncertainty about accessing mental health services during COVID-19, questioning whether they were unwell enough and perceptions about being burdensome during crisis conditions (115); much of which resonated with the experiences of LGBTQ+ people in this research.

7.3.3. Mental healthcare seeking

All three studies provided findings around mental healthcare seeking for LGBTQ+ people. The systematic mapping review identified two studies conducted pre-pandemic which focused specifically on sexual minority service user experiences of accessing IAPT services in terms of healthcare seeking (94, 95). The studies both highlighted barriers to seeking support from IAPT services associated with fears of prejudice and discrimination, mental health practitioners' lack of knowledge or understanding, non-disclosure of sexual orientation, and neglect of discussion around sexual orientation during treatment. In the qualitative study, self-referral options facilitated help-seeking for some participants during COVID-19 as it enabled a sense of anonymity which could not be achieved through typical access routes (e.g., GPs). This was particularly the case for bisexual and gender minority participants as they valued the opportunity to seek support without fear of judgement or discrimination from mental health service staff, echoing similar barriers to mental health help-seeking reported in previous studies (94, 95, 215). This research indicates that these barriers persisted for LGBTQ+ people during the COVID-19 pandemic. Finally, the frequency of certain demographic characteristics for LGB+ people referred to mental health services suggest that through the lens of intersectionality (28), some groups may be experiencing inequalities in seeking mental healthcare or are less likely to disclose their sexual orientation to services. Funer (28) states that it is important to look beyond one social identity characteristic (e.g., sexual orientation) as inequalities may be even more pronounced for multiple social identity characteristics (e.g., LGB+ males, older sexual minorities, LGB+ ethnic minorities). Perceived stigma and discrimination are well-documented barriers to seeking mental health support (196), and these may be further exacerbated for groups where stigma from mental health conditions intersects with stigma associated with being a sexual and/or gender minority. As a result, the quantitative study findings indicate, similarly to previous studies, that these double marginalised groups may be less likely to access mental health services (192), and less likely to disclose their sexual orientation to mental healthcare providers (212).

7.3.4. Mental healthcare reaching

All three studies contributed to knowledge around mental healthcare reaching for LGBTQ+ people. Many of the studies synthesised in the systematic mapping review quoted not including certain demographic variables (e.g., sexual orientation) within their analyses due to levels of missingness and therefore could not examine the extent to which some population groups were experiencing inequalities in reaching mental health services. Being able to ascertain whether LGBTQ+ individuals could reach mental healthcare in Lancashire and South Cumbria was complicated by the insufficient recording and disclosure of sexual orientation and gender identity within mental health services. Although representation of sexual minorities was higher for referrals and contacts than that in the Census 2021 population data, suggesting that LGB+ people are reaching mental health services, the considerable amount of missingness within the datasets created difficulties in any further interpretations about inequalities. As for gender minorities, there continues to be limited evidence on mental healthcare reaching. According to NHS colleagues, there currently isn't capacity within local data systems to capture gender identity or trans status data, which echoes the emotive concept presented in a 2021 report published by the LGBT Foundation (201); "if we're not counted, we don't count". The COVID-19 pandemic significantly impacted the availability and accessibility of mental health services and as such created conditions that required a higher degree of resources to negotiate access (115). Evidence demonstrates that LGBTQ+ people have an increased risk of low self-esteem, shame, stigma, and discrimination (92, 227), all of which are likely to have impacted the extent to which they could negotiate access to mental health services at a time when they most needed the support. Interview participants shared that they did not possess the resources that they needed to navigate access to mental health services during the COVID-19 pandemic (e.g., energy, persistence, anonymity, and privacy). The qualitative evidence in this thesis contributes to the evidence gap on how access to mental health services changed during COVID-19 for LGBTQ+ people; it is clear that mental health needs were unmet for LGBTQ+ people during the pandemic due to the difficulties in navigating access to reach necessary mental health support.

7.3.5. Mental healthcare utilisation

Findings around access in terms of mental healthcare utilisation came mostly from the systematic mapping review and quantitative study. Most studies included in the systematic mapping review measured mental healthcare utilisation using routinely collected data to examine inequalities in access, and did not consider mental health needs or whether services could be reached by population groups. Two studies in the review specifically focused on whether the use of mental health services was associated with sexual orientation and/or gender identity (96, 232), finding higher use was associated with being bisexual and with being transgender. LGB+ people have previously been shown to have higher rates of mental healthcare utilisation than heterosexual people (90, 91). It wasn't possible to ascertain the mental healthcare utilisation of gender minority groups using routinely collected mental health service data in this research as gender identity or trans status data was not available in the datasets. Similarly to referrals, the frequency of certain demographic characteristics of LGB+ people in contact with mental health services suggests that through the lens of intersectionality, some groups may be experiencing inequalities in access or are less likely to disclose their sexual orientation. As with mental healthcare seeking, it is important to consider multiple social identity characteristics when attempting to measure inequalities in access through the utilisation of services (28). Contacts with mental health services increased for LGB+ people during COVID-19 confirming earlier research indicating that they may have needed more support from services due to the detrimental impact the pandemic was having on their mental health. These findings are also supported by the LGBT Foundation's "Hidden Figures" report in 2020, which reported that 42% of their LGBTQ+ survey sample wanted to access support for their mental health (116), a disproportionately higher proportion than was anticipated across the general population (43). Whilst reassuring that LGB+ people were no more likely to disengage with services than heterosexual people, those with missing sexual orientation had higher rates of non-attendance suggesting that disclosure may influence levels of engagement with services. Previous research has highlighted that non-disclosure of sexual orientation can influence healthcare use (203). Finally, all interview participants reported pre-existing mental health conditions, and most had accessed mental health services pre-pandemic, highlighting that even within a small cohort of LGBTQ+ participants, the prevalence of mental health needs and experience of mental health services was high.

7.3.6. Mental healthcare consequences

Findings about the consequences of accessing mental healthcare came mostly from the qualitative study. However, it could be implied from the quantitative study findings that concealing sexual orientation may influence experiences of mental healthcare as those with missing sexual orientation data were more likely to disengage with services. Some interview participants suggested that they would have felt more understood if they had disclosed their LGBTQ+ identity to professionals and that their mental health treatment could have been more productive. Previous evidence corresponds with these findings as the non-disclosure of sexual orientation is thought to ultimately undermine the effectiveness of mental health treatments (93, 94). In the qualitative study, continuity of care, by building effective and trusting relationships with mental health professionals, was valued by LGBTQ+ people as sharing their identity with different people at multiple time points felt uncomfortable and influenced their wishes to continue to engage with services. The fragmentation of services and care discontinuity during COVID-19 in particular is likely to have affected all service users, but could have had potentially disproportionate effects for LGBTQ+ people as they are less likely to trust healthcare professionals and so may not have disclosed information (94), and thus treatment may have been less effective (203). A lack of LGBTQ+ service inclusivity was perceived by interview participants as they felt professionals needed better knowledge and awareness of working with LGBTQ+ people and that this would ultimately improve their experiences of accessing mental health services. This however is not a novel finding, with many previous studies highlighting similar perceptions about the competencies of mental health services working with LGBTQ+ people (94, 95, 200). Lastly, almost all interview participants found that the support they received during the COVID-19 pandemic did not improve their mental health. Similarly to existing studies on the appropriateness of existing mental healthcare for sexual and/or gender minorities (91, 211, 233), this finding poses the question as to whether current treatments are suitable for these population groups or whether tailored treatments are needed to address the mental health needs of LGBTQ+ people.

7.4. Additional findings in the context of wider literature

7.4.1. Challenges associated with researching inequalities in access

This thesis has drawn attention to the complexity associated with measuring access to mental health services, particularly for underserved population groups, in order to understand the inequalities that are present. How do we go about estimating what representation within mental health services should be for population groups to ascertain whether inequalities in access exist? Benchmarking against majority groups (e.g., heterosexual, cisgender) is not necessarily the right way to go about it, as it assumes the same level of mental health needs and thus measures equal access rather than equity of access (87). On the other hand, does disproportionately higher access for some groups necessarily suggest higher unmet need and does disproportionately lower access suggest difficulties in gaining access? The challenges realised during this research are not novel and are consistent with key theories in this area, the social determinants of mental health have to be considered to appreciate what causes disparities in access to mental health services (22).

The systematic mapping review identified that the most common approaches to measuring inequalities in access to mental healthcare were through proxy indicators from routinely collected data (e.g., referral rates) or through self-reported use of services in surveys (131). Whilst measures in the quantitative study for this thesis ended up somewhat replicating this approach, the use of qualitative interviews to understand lived experiences and the integration of the findings attempted to contextualise access in a holistic way by considering multiple domains of access. This mixed methods approach is advocated for in a guide to tackling inequalities in healthcare access, experience, and outcomes published by NHS England in 2022 (234). Any interventions to address inequalities in access need to be developed by contemplating how disparities are created and maintained. By appreciating where access is an issue, for example if help-seeking or reaching mental healthcare is affected for certain population groups, the underlying mechanisms of the causes of disparities can be theorised as was conducted in this thesis. This research has highlighted the benefit of using mixed methods research from a critical realist perspective in this context, as quantitative data can be used to develop a foundation understanding of variations between population groups and qualitative data can be used to understand the lived stories behind those disparities. It is however critical to extend research findings beyond identifying and monitoring inequalities to translating that knowledge into action to address inequalities.

7.4.2. Missing sexual orientation and gender identity data

According to the Census 2021, 3.3% of the UK population (~1.8 million people) identified as a sexual minority (207), and 0.5% of the UK population (~262,000 people) identified as a gender minority (221). The lack of administrative data we have on sexual orientation and gender identity is greatly concerning given what proportion of LGBTQ+ people make up the population. This is also likely to be an under-representation as a proportion of the population did not disclose their identity within the Census. It is possible that the lack of collection of sexual orientation and gender identity data could reflect a subtle form of institutional homophobia and transphobia (54), whereby structures enable institutionalised discrimination against the LGBTQ+ community to remain unchallenged. Despite convincing evidence of the usefulness of data to identify inequalities and inform actions to improve the health of LGBTQ+ people, particularly during COVID-19 (54), the collection of sexual orientation and gender identity data continues to be neglected. Saunders (235) suggests that improvements in the presence of sexual orientation and gender identity data have the potential to translate into improved health and health outcomes for these population groups, and that we must not overlook the improvements that have already been made in the last few decades in terms of data collection. The author also outlines the importance of involving LGBTQ+ people in these discussions (235). Recent NHS Digital guidance has set out to improve data quality for protected characteristics, including sexual orientation and gender identity, in mental health services, through enabling patient self-reporting, embedding inclusive ways of working and reducing staff assumptions, and sharing feedback on data quality (197). These planned improvements will hopefully enhance the utility of this routinely collected data to generate more reliable evidence of inequalities in access to mental health services than could be ascertained in the second study of this thesis. The quantitative study identified a considerable amount of missing sexual orientation data, particularly in secondary services (e.g., CMHTs, early intervention for psychosis, eating disorder services). It would be beneficial to learn from improvements made in collecting other demographic characteristics such as ethnicity (217), and implement some of the strategies recommended there for sexual orientation (e.g., embedding routine data collection within practice, creating standardised processes, developing comprehensive training, and ensuring the inclusion of LGB+ people in these actions).

On the whole, qualitative study participants were not asked about their sexual orientation or gender identity when accessing mental health services in Lancashire and South Cumbria during COVID-19. Only those that completed an online self-referral form were able to disclose their

LGBTQ+ identity. As expected, if an individual was open about their LGBTQ+ identity, they tended to be more comfortable to disclose to services if they had been asked. Participants shared that they were more likely to disclose if they thought the mental health professional was also LGBTQ+ or showed outward signs that they were a safe person to share their LGBTQ+ identity with (e.g., introducing themselves with their pronouns or wearing a rainbow badge). Participants shared wanting to avoid a poor response from a mental health professional. A systematic review identified similar barriers to disclosure of sexual orientation in healthcare (203). A key implication of this challenge is that previous evidence suggests that concealing sexual orientation and gender identity has been implicated in treatment effectiveness (203, 212) and so a perceived lack of inclusivity of mental health services could be leading to poorer treatment outcomes for LGBTQ+ people.

7.4.3. Access to mental health services for LGBTQ+ people

In terms of access to mental health services for LGBTQ+ people during the COVID-19 pandemic, this thesis considered variations in access compared with heterosexual people and the experiences of LGBTQ+ service users. Whilst little evidence exists on access during COVID-19, wider literature can be drawn upon to identify whether findings are consistent with ideas proposed previously. Higher representation of sexual minority groups in mental health services is not surprising given the higher prevalence of mental health conditions for these groups (90). The varied patterns in referrals to and contacts with mental health services compared with heterosexual populations during COVID-19 contribute to confirming the potential differential impacts of the pandemic on sexual minority groups (65). Although previous evidence shows that sexual minorities, particularly LGB+ males (192), are more likely to disengage with services, the quantitative study of this thesis did not find the same. It could be that during the COVID-19 pandemic LGBTQ+ people lost support from other avenues (e.g., the wider LGBTQ+ community, third sector organisations) and so engaging with mental health services, despite a lack of positive effect on their mental health, was their only option at the time. Many of the experiences shared by LGBTQ+ participants resonated with existing literature around mental health during COVID-19 and experiences of accessing mental healthcare pre-pandemic. LGBTQ+ people experienced poor mental health due to the isolation and loss of social connectedness experienced during the pandemic, consistent with other related research (14, 15, 64, 65). The COVID-19 pandemic had significant effects on the extent to which LGBTQ+ people could navigate seeking mental health support, and thus created conditions that required a higher degree of resources to negotiate a point of entry to mental health services (115). LGBTQ+ people were less likely to possess resources needed to navigate mental health service access pre-pandemic (92, 227) and more likely to have pre-existing mental health conditions (90), therefore these population groups were vulnerable to starting off at a lower level of psychological well-being and at a lower capacity to persevere with the fragmentation and discontinuity of services during the COVID-19 pandemic. The research conducted for this thesis has delivered some insight into how inequalities in mental health and access to mental health services for LGBTQ+ people may have been exacerbated by the conditions of the COVID-19 pandemic, and now provides some guidance for where future mental health practice and research could focus its attention.

7.5. Implications for practice

The findings of this thesis call for a shift in focus within mental health services and the wider policy making environment to prioritise the potential vulnerabilities of LGBTQ+ people during and beyond pandemic-like conditions. A continuous lack of attention to the experiences of these underserved population groups perpetuates inequalities as there are not only challenges in deciphering inequalities due to a lack of high-quality data or seldom-heard voices, but there has also been very little action on what we already know about the inequalities LGBTQ+ people experience. The LGBT Action Plan (219), released in 2018, already outlined many of the implications that the research in this thesis has identified, highlighting that these issues are enduring, and suggesting that improvements do not seem to have been implemented.

Significant improvements in the routine collection of sexual orientation and gender identity data in mental health services are required to enable providers to effectively monitor changes in access for LGBTQ+ population groups and respond accordingly. Just being able to record the gender identity or trans status of service users has particular urgency here as this is not currently possible within most NHS data systems. Implementing improvements to the inclusivity of mental health services for LGBTQ+ people, as suggested by the participants in this research (e.g., changes to communications and marketing, rainbow badges, use of pronouns), is likely to enhance disclosure rates and result in better experiences for LGBTQ+ service users. Within this move towards inclusive services, ensuring a flexible offer for different population groups based on their needs is also necessary. For example, self-referral options which better facilitate some LGBTQ+ groups (e.g., bisexual, non-binary) to reach out for support, and offering choice in the way that mental health treatment is received, particularly where remote delivery may not be safe and comfortable for LGBTQ+ service users. Enhancing disclosure rates could also improve the effectiveness of mental health treatments. It is recommended by the PhD researcher that developing and implementing a comprehensive training package or learning community within mental health services, similarly to that proposed by Fish et al. (200), could target the knowledge, awareness, and competencies, of mental health service staff and referrers (e.g., GPs), for working with LGBTQ+ people experiencing mental health conditions. These activities could equip mental health service staff and referrers with the knowledge and skills to appropriately ask all service users for their sexual orientation and gender identity and record this information in the relevant systems, challenge their cis-heteronormative assumptions, and implement changes which make mental health services more visibly inclusive for LGBTQ+ people. It is imperative that the views of LGBTQ+ people, particularly those who are seldom-heard in the design and delivery of healthcare services (e.g., trans and non-binary people), are embedded into any actions to improve data collection and service inclusivity. Ultimately, changing services in collaboration with LGBTQ+ service users could improve the accessibility and appropriateness of mental healthcare to meet the needs of these population groups and work towards improving equity of access.

In addition to the effects of the pandemic on access to services, this research confirmed earlier evidence on the disproportionate impacts COVID-19 had on the mental health of LGBTQ+ people. Enhancing protective factors, such as facilitating access to social support and maintaining social connectedness with the wider LGBTQ+ community, and encouraging timely access to mental health support is needed to mitigate the negative effects that this research captured for LGBTQ+ people. In the event of future significant disruptions to mental health services, the needs of vulnerable groups, including LGBTQ+ people, need to be prioritised in order to protect against the disproportionate effects. Stigma-reducing interventions may also be beneficial for LGBTQ+ population groups, such as individual support to overcome internalised stigma, or community outreach to challenge harmful attitudes towards having a mental health condition and being LGBTQ+. These interventions could help to address barriers to help-seeking and prevent LGBTQ+ people from seeking mental support at more acute stages.

7.6. Implications for research

The research for this thesis was conducted on a local scale, within Lancashire and South Cumbria, to explore the feasibility of using routinely collected data to explore access to mental health services for LGBTQ+ people and collecting qualitative interview data to expand on those findings. A national exploration of routinely collected mental health service data for LGB+ groups or alternatively drawing on comparisons with another geographical area that has had greater resources in terms of improving LGB+ inclusivity and monitoring (e.g., Greater Manchester) could further extend the findings of this study. This wider exploration could provide a unique opportunity to examine variations across geographical areas and identify any best practice examples of data recording and monitoring, which could be implemented elsewhere (e.g., Lancashire and South Cumbria) to improve sexual orientation and gender identity data collection within mental health services.

A qualitative exploration to capture the perspectives of mental health service professionals and referrers working with LGBTQ+ people who have mental health conditions would be valuable to generate insight into barriers that exist to delivering inclusive support for LGBTQ+ people and collecting sexual orientation and gender identity data within services. The learning from this study could then feed into the development of a training package or learning community, as mentioned above, which aims to address the lack of knowledge, awareness, and competencies of professionals working with LGBTQ+ people in mental health services. A comprehensive evaluation of the feasibility and acceptability of rolling out such a programme, and assessing the effectiveness of having more informed and trained staff on LGBTQ+ experiences of access and the quality of sexual orientation and gender identity data in mental health services, would be a vital component of this future suggested work.

Finally, LGBTQ+ people continue to demonstrate an increased risk of mental health conditions and are having poor experiences of accessing mental health services. Further research is needed to understand why these population groups are at greater risk and how we can reduce this risk upstream, for example interventions to improve social safety for LGBTQ+ people. Further research is also needed to understand the ways in which services can better meet the needs of LGBTQ+ people and assess the impact of these changes. Many participants shared that the support they accessed did not positively impact their mental health. Examining whether current mental health treatments are effective for LGBTQ+ people or whether developing alternative treatments or tailoring existing treatments specifically to the needs of these populations may better improve the mental health of people who identify as a sexual and/or gender minority is vital. Finally, further research could also be conducted to ascertain how the findings of this thesis might generalise to other marginalised groups (e.g., ethnic minorities, those with disabilities), with a greater emphasis on how COVID-19 affected access to mental health services from an intersectional perspective.

7.7. Strengths and limitations

7.7.1. Strengths

To the PhD researcher’s knowledge, this is the first mixed methods investigation of access to mental health services for LGBTQ+ people during the COVID-19 pandemic. Very few studies in and outside of the UK have used secondary care mental health service data, beyond IAPT services, and conducted interviews with LGBTQ+ service users to understand access to mental health services before, during, or after the pandemic. The mixed methods approach adopted enabled the construction of a comprehensive understanding of access to mental health services for LGBTQ+ people during COVID-19, addressing a gap identified in the systematic mapping review. One of the strengths of this approach was that the findings drew on both quantitative data about variations in access and qualitative data about experiences of access, both of which have strengths and weaknesses that are complementary. The explanatory sequential mixed methods design in particular facilitated the exploration of the reasons behind missing sexual orientation and gender identity data in mental health services and patterns in changes to access during COVID-19 identified in the quantitative study, from the perspectives of LGBTQ+ service users. As such, this approach strengthened any interpretations, particularly for findings where there was converging evidence from both studies. The quantitative study was an in-depth assessment of the quality of sexual orientation and gender identity data within mental health services, which to the PhD researcher's knowledge has not been done before. Existing research tends to disregard attempts to look at this type of data due to the extent of missingness. The datasets analysed for this study were challenging to work with given their size and complexity, but realising the potential for how analysing this data can inform where service improvements are needed and provide a foundation for further research was a strength of this research.

This research focused on capturing the experiences of population groups who are often seldom-heard within health research (231), in a geographical area which is underserved for mental health research. Despite evidence of inequalities associated with higher rates of mental ill health and adults in contact with services, and significant underfunding (80), very little mental health service research has previously been conducted in Lancashire and South Cumbria. PPI and SE activities were undertaken at each stage of the research to ensure that lived experience and contextual knowledge of the mental healthcare system were integrated into its design, analysis, and interpretation. The PhD researcher made every effort to ensure that these activities were meaningful and conducted in a way to maximise their impact on the research (further description is provided in *Table A1* and *Table A2* in *Appendix A*). PPI and SE activities were found to be invaluable as they enhanced the reflexive practice of the PhD researcher, challenged any bias held from her insider perspective, and enhanced the validity and credibility of the findings and their practical application to mental health services. The PhD researcher came from an insider perspective, which was viewed as a real strength of this research. It helped to engender a sense of trust with participants and public advisers through a shared understanding, and enabled the PhD researcher to authentically share the lived experiences of LGBTQ+ service users, which in turn motivated NHS colleagues to reflect on the application of the findings in their day-to-day roles.

A checklist for each study was completed to ensure that the research was conducted in line with existing guidelines for that methodology (148, 151, 220) and was reported adequately to support replicability (*Table B1* in *Appendix B*; *Table C1* in *Appendix C*; *Table D1* in *Appendix D*). The strengths of the individual studies conducted for this thesis have been described in their respective chapters (Chapter 4, Chapter 5, Chapter 6). This thesis embedded the novel use of an established framework (133) throughout the research to contextualise access to mental health services for LGBTQ+ people during COVID-19. As a result, each study was able to consider multiple stages of access and how these may have been affected for LGBTQ+ population groups during COVID-19 and thus conceptualise a much broader understanding of access than seen in previous studies. Access was presented as a multi-dimensional concept associated with healthcare systems and individuals, which was viewed as a useful lens to apply during COVID-19 as it was likely to have impacted both the healthcare system and individuals. The use of Levesque's Conceptual Framework for Healthcare Access also enabled the findings from each study to be easily integrated, as described above.

Another strength of this research is the varied ways in which the findings have been disseminated. Whilst the primary method of dissemination is and will be the published journal articles for each study and associated presentations at research conferences, the PhD researcher has also utilised many opportunities to disseminate knowledge and raise awareness with the potential end users of this research (e.g., at a local service user group, internal NHS Trust meetings, and a local LGBTQ+ charity training session). In addition to this, research summaries in the form of Applied Research Collaboration (ARC) Brokering Innovation Through Evidence (BITEs) have been and will be co-developed with public advisers for each study to communicate findings in a suitable format for lay audiences (e.g., public advisers, NHS Trust colleagues).

7.7.2. Limitations

The requirements of the explanatory sequential mixed methods design were not fully satisfied for this thesis as there was some overlap between the start of each study and the completion of the previous one. The timing of the studies was influenced by delays in securing access to the NHS Trust data and the overall time constraints of the PhD. Consequently, only preliminary findings of the systematic mapping review were used to support the design of the quantitative study and similarly for the qualitative study, preliminary findings from the quantitative study aided study design. Once all studies were completed however, the findings were integrated as per the mixed methods approach, using Levesque's Conceptual Framework for Healthcare Access, to generate an enhanced understanding of the research problem and are discussed above. The limitations of the individual studies conducted for this thesis have been described in their respective chapters (Chapter 4, 5, and 6).

The primary research in this thesis was conducted in a single NHS Trust based in Lancashire and South Cumbria. Whilst there has been limited mental health service research in this geographical area and therefore a call for local research, the findings may not be generalisable to other geographical areas or services. In addition, the findings from this thesis have been reached by analysing data that is subject to interpretation and is therefore subjective, rather than direct observations of real time attempts to access mental health services. The quantitative study relies on routinely collected data, which is generated through a relationship between the service user and the healthcare professional, and as such a range of factors influence what is shared and recorded. Similarly, the experiences captured by the qualitative interviews were generated through a relationship between the interviewer and the interviewee, which may have influenced what was shared in the interview. It cannot be assumed that these forms of data are true depictions of reality and are therefore subject to interpretation.

Due to the time constraints of the PhD, this thesis did not investigate staff perspectives on access to mental health services for LGBTQ+ people during COVID-19 and collecting sexual orientation and/or gender identity data when delivering care. This is a limitation of the research as staff play an integral role in recording service user data and in the experiences of access for service users. This was mitigated in some ways by engaging with various NHS colleagues (e.g., mental health professionals, service managers, analysts), about how COVID-19 influenced LGBTQ+ service user experiences and how sexual orientation and gender identity data is collected, to support interpretation. However, a formal qualitative study to understand staff perspectives is necessary to build on the research conducted for this thesis and for their views to be integrated into the recommendations for future research and practice.

This thesis specifically focused on the COVID-19 pandemic, which has had significant long-term impacts on the mental healthcare system and individuals with mental health conditions. Much of the research conducted for this thesis examined the effects of the COVID-19 pandemic three to four years since its onset. The research could have lost its potential relevance at this late stage, and it was often difficult to keep the momentum when stakeholders wanted to move on from just generating more learning from COVID-19. However, given the lack of evidence in this research area and the importance of generating lessons from pandemic conditions for underserved population groups, the PhD researcher persisted with the topic and framed the research and its importance to apply to current conditions within mental health services. Finally, despite efforts to engage with the LGBTQ+ community through local charities, social media, and the NHS Trust, the PhD researcher was unable to recruit a public adviser who identified as a gender minority (e.g., trans, non-binary). This was a limitation of the research as the perspectives of people from gender minority groups were not integrated into the design, analysis, or interpretation of this research.

7.8. Critical reflections

7.8.1. Use of Levesque’s Conceptual Framework for Healthcare Access

Levesque’s Conceptual Framework for Healthcare Access (133) was adopted as a theoretical framework throughout this research. How “access” was conceptualised remained the same across the three studies meaning that a consistent lens was applied in a systematic and structured way throughout the research. Using a framework supported the integration of study findings to present an overall narrative on access to mental health services for LGBTQ+ people during COVID-19 and thus maintained clarity on the research problem. Its application was particularly useful in the context of COVID-19 as it views access as a multi-dimensional concept jointly navigated by the healthcare system and the individual, both of which were likely to have been affected by pandemic conditions. For example, in the stages of data analysis, the PhD researcher reflected on the extent to which the pandemic had influenced the accessibility and appropriateness of mental health services for LGBTQ+ people during COVID-19, and the abilities of LGBTQ+ people to access mental health services during COVID-19.

When categorising qualitative data in the systematic mapping review and interview study, the framework broke down the analysis process so that data could be easily organised in a systematic and structured way, and reduced the time needed for data analysis tasks. Participants most often shared their experiences in a chronological fashion and this translated quite well into Levesque’s framework (133) as it captures the temporal nature of access (e.g., from mental health needs through to seeking, reaching, and utilising mental healthcare). Applying the framework in the quantitative study enabled the categorisation of outcomes in terms of the type of access they were measuring, which was useful in organising large and complex datasets. However, it often felt like trying to fit simplified outcomes (e.g., referral rates, contact rates, non-attendance) into a complex stage of access. In addition, in both the quantitative and qualitative studies, service user pathways weren’t always linear like the framework suggests. Separating access into distinct stages and not necessary considering access as a holistic process could have also led to oversimplification of concepts. The PhD researcher however, tried to minimise any bias the framework may have introduced into the analysis and think flexibly about concepts. Supervision meetings and PPI and SE activities with those who had less knowledge of the framework were also helpful in minimising any bias the framework may have introduced into the analysis.

Finally, when analysing the qualitative data, the usefulness of the alternative Candidacy framework (138) became apparent. LGBTQ+ participants shared perceptions of their ineligibility for mental healthcare during the COVID-19 pandemic. Exploration completed in earlier stages of the PhD reviewing possible theoretical frameworks before initiating the research was useful here as the Candidacy framework (138) could be applied in the interpretation of the qualitative study findings. Although Levesque's framework was a front-runner in its utility for this research, the PhD researcher upheld the belief that other frameworks could also be drawn upon where deemed useful.

7.8.2. Adopting a critical realist perspective

The philosophy of critical realism (123) was drawn upon in this thesis. As such, examining access to mental health services for LGBTQ+ people necessitated some theorising around the potential mechanisms and the contextual conditions through which inequalities may arise. Approaching the research from a critical realist perspective facilitated the consideration of potential underlying mechanisms (e.g., stigma and discrimination, marginalisation, minority stress, intersectionality), and how these played a role in creating the experiences of access to mental health services for LGBTQ+ people. It also enabled reflections about the contextual conditions in which LGBTQ+ people experienced the pandemic and the potential influence on their access to mental health services; for example, adopting a "syndemic" lens whereby one acknowledges that social systems of power can generate or exacerbate inequalities, and thus population groups can be disproportionately affected by the pandemic (65). These factors, alongside the recognition of the hostile conditions LGBTQ+ people have faced historically, were integrated into the interpretation of the research findings throughout this thesis. Despite quantitative and qualitative research possessing different philosophical assumptions, a critical realist perspective facilitated the use of these different methodologies to contribute to developing our knowledge of reality, specifically of access to mental health services for LGBTQ+ people during COVID-19. As in critical realism, it is noted that the knowledge derived from the research conducted for this thesis is not fixed and is therefore fallible, in that it does not provide a complete story of reality but generates some insight into the research problem by capturing both observations and experiences of the social phenomenon. The findings should be open to being challenged, changed, and extended due to the complex social world we live in and the ever changing contextual conditions through which inequalities in access to mental health services for LGBTQ+ people may arise.

7.8.3. The PhD researcher's insider status

This section is written in the first person to enable the PhD researcher to reflect on how her identity influenced the research and what she has learnt as a result. I held an "insider status" in this research as I share attributes and personal experiences with participants. I learnt about the value of this position in my research through not only being able to build an effective rapport with interview participants and public advisers, but also to consider the individuals behind the quantitative data and their stories. I realised that using this insider status may have also been helpful in maximising participant recruitment, possibly by sharing my identity on the advert.

Most of the findings confirmed my initial thoughts about what I would find, highlighting that things had not improved for the LGBTQ+ community since I accessed mental health support pre-pandemic. However, in the few instances where interview participants surprised me with positive experiences, I learnt to put these assumptions aside and reduce any biases towards the data. I don't think I had prepared myself for the emotional burden that comes with conducting research that aligns with your own personal experiences. I sometimes felt a sense of injustice that it was a surprise to so many that inequalities for LGBTQ+ people exist in this space. I was often frustrated with the lack of engagement and prioritisation of this type of research when I attempted to disseminate my findings. I valued opportunities to share this burden with my academic supervisors within supervision meetings and found engaging with other LGBTQ+ researchers both supportive and validating. My identity and experience of conducting this research has ignited a real desire in me to continue to progress work in this area where possible and create change for LGBTQ+ people experiencing mental health conditions.

7.8.4. Patient and public involvement (PPI)

The involvement of service users with lived experience, in this case being LGBTQ+ and accessing mental health services in Lancashire and South Cumbria, is quite unique in doctoral research (169). The PhD researcher was fortunately able to access funding for PPI activities through her doctoral studentship to ensure that the individuals involved were adequately reimbursed for their time. Regular meetings with public advisers with lived experience informed the development of research questions and study design, drafting of participant documentation, interpretation of research findings, and production of accessible outputs for lay audiences. PPI activities were invaluable to this research as they not only provided useful insight into the importance of the research and the potential challenges for LGBTQ+ people, but they helped to ensure that the research was conducted in a sensitive and inclusive way (e.g., making participant documentation accessible, using appropriate language, being sensitive to historical issues around LGBTQ+ mental health). The experience of working collaboratively with public advisers was positive and the PhD researcher found reassurance when her perspectives and interpretation of the findings resonated with those of the public advisers. There were some challenges associated with embedding PPI activities into the timeline of the PhD (e.g., time constraints, limited engagement), which meant that its impact was not always maximised. Only one public adviser was involved from the start of the PhD, another public adviser did not get involved until the start of the qualitative study; both of these public advisers identified as sexual minority cisgender males. As a result, there was no inclusion of a gender minority voice in the research despite efforts to recruit via various channels. The Guidance for Reporting the Involvement of Patients and the Public (GRIPP2) checklist presented in *Table A1* in *Appendix A* and was a useful tool to record PPI activities throughout the research. It helped the PhD researcher to continuously record and reflect on the purpose of the PPI, what happened, and how it influenced the research. The same tool was also used to record similar reflections for any SE activities (*Table A2* in *Appendix A*).

7.8.5. Stakeholder engagement (SE)

There was consistent inclusion of stakeholder perspectives throughout this PhD research. Intensive periods of SE were conducted at the beginning, to help formulate the research questions and study design, and towards the end, to support the dissemination of the findings and their interpretation. SE activities were conducted with a wide range of individuals including mental health professionals, service managers, analysts, public health consultants, and third sector staff. Collating these varied perspectives enabled the formulation of a gap in the evidence base within the local context of Lancashire and South Cumbria. Initially, SE was not always a rewarding or fruitful endeavour as stakeholders were sometimes naïve to existing evidence around the inequalities experienced by LGBTQ+ people or possessed a lack of knowledge and awareness around the collection of sexual orientation and gender identity data. From a lived experience perspective, this was sometimes disheartening for the PhD researcher as it didn't feel like the proposed research was of interest or benefit to service providers. When disseminating the findings however, interest increased and stakeholders were keen to receive recommendations that they could implement within their day-to-day roles. Hearing the lived stories of LGBTQ+ service users was particularly thought-provoking for stakeholders as it brought their experiences alive, alongside the calls to action on data quality so that the visibility of LGBTQ+ people within mental health services could be improved. This renewed sense of enthusiasm was reassuring as it helped to progress the PhD researcher's ideas for future plans to continue to work with the NHS Trust to improve sexual orientation and gender identity data collection and LGBTQ+ service inclusivity. The experience of working collaboratively with stakeholders was positive and the PhD researcher found that going to stakeholders (e.g., presenting within existing internal meetings) resulted in higher levels of engagement than trying to convene a separate forum for discussion.

7.9. Conclusion

A mixed methods approach was used to address a gap in the evidence base around understanding access to mental health services for LGBTQ+ people during the COVID-19 pandemic. Findings highlight the disproportionate effects that the pandemic may have had on sexual and gender minorities through an increased risk of mental ill health from isolation and loss of social connectedness, and unique challenges in negotiating access to mental health services under crisis conditions. Methodological insights from identifying high levels of missing demographic data within mental health services and adopting a theoretical framework to consider access in a more holistic way, facilitated recognition of the challenges associated with researching inequalities in access. Much work remains to be done within policy to prioritise the potential vulnerabilities of LGBTQ+ people and mitigate against any disproportionate effects in the event of future crises. For now, however, improvements in the collection of sexual orientation and gender identity data are necessary so variations in access can be examined to a greater extent, and improving mental health service inclusivity requires prioritisation to address the poor experiences of LGBTQ+ service users. All of which could be ultimately achieved through improving the knowledge, awareness, and competencies of professionals providing mental healthcare to LGBTQ+ people.

References

1. Boardman J. Social exclusion and mental health – how people with mental health problems are disadvantaged: an overview. Mental Health and Social Inclusion. 2011;15(3):112-21. https://doi.org/10.1108/20428301111165690.
2. McManus S, Bebbington P, Jenkins R, Brugha T. Mental health and wellbeing in England: Adult Psychiatric Morbidity Survey 2014. Leeds: NHS Digital; 2016. Available from: https://files.digital.nhs.uk/pdf/q/3/mental_health_and_wellbeing_in_england_full_report.pdf.
3. National Audit Office. Progress in improving mental health services in England. 2023. Available from: https://www.nao.org.uk/wp-content/uploads/2023/02/Progress-in-improving-mental-health-services-CS.pdf.
4. Pitman A, Marston L, Lewis G, Semlyen J, McManus S, King M. The mental health of lesbian, gay, and bisexual adults compared with heterosexual adults: results of two nationally representative English household probability samples. Psychological Medicine. 2021:1-10. https://doi.org.10.1017/s0033291721000052.
5. Reisner SL, Poteat T, Keatley J, Cabral M, Mothopeng T, Dunham E, et al. Global health burden and needs of transgender populations: a review. The Lancet. 2016;388(10042):412-36. https://doi.org/10.1016/S0140-6736(16)00684-X.
6. Meyer IH. Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. Psychological Bulletin. 2003;129(5):674-97. https://doi.org/10.1037/0033-2909.129.5.674.
7. Diamond LM, Alley J. Rethinking minority stress: A social safety perspective on the health effects of stigma in sexually-diverse and gender-diverse populations. Neuroscience and Biobehavioral Reviews. 2022;138:104720. https://doi.org/10.1016/j.neubiorev.2022.104720.
8. Hudson-Sharp N, Metcalf H. Inequality among lesbian, gay, bisexual and transgender groups in the UK: a review of evidence. National Institute of Economic and Social Research; 2016. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/539682/160719_REPORT_LGBT_evidence_review_NIESR_FINALPDF.pdf.
9. Government Equalities Office. National LGBT Survey: Research Report. 2018. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/721704/LGBT-survey-research-report.pdf.
10. Holmes EA, O'Connor RC, Perry VH, Tracey I, Wessely S, Arseneault L, et al. Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science. The Lancet Psychiatry. 2020;7(6):547-60. https://doi.org/10.1016/S2215-0366(20)30168-1.

11. NHS Reset. Mental health services and COVID-19: preparing for the rising tide. 2020. Available from: https://www.nhsconfed.org/sites/default/files/media/Mental-health-services-COVID-19_4.pdf.
12. Gibson B, Schneider J, Talamonti D, Forshaw M. The impact of inequality on mental health outcomes during the COVID-19 pandemic: a systematic review. Canadian Psychology/Psychologie Canadienne. 2021;62(1):101-26. https://doi.org/10.1037/cap0000272.
13. Moreno C, Wykes T, Galderisi S, Nordentoft M, Crossley N, Jones N, et al. How mental health care should change as a consequence of the COVID-19 pandemic. The Lancet Psychiatry. 2020;7(9):813-24. https://doi.org/10.1016/S2215-0366(20)30307-2.
14. Bleckmann C, Leyendecker B, Busch J. Sexual and gender minorities facing the coronavirus pandemic: a systematic review of the distinctive psychosocial and health-related impact. Journal of Homosexuality. 2022:1-22. https://doi.org/10.1080/00918369.2022.2074335.
15. Datta S, Mukherjee T. Impact of COVID-19 stress on the psychological health of sexual & gender minority individuals: a systematic review. Frontiers in Global Women's Health. 2023;4. https://doi.org/10.3389/fgwh.2023.1132768.
16. World Health Organisation. Mental health 2022 [Available from: https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response.
17. Dogra N, Cooper S. Defining mental health and mental illness. In: Dogra N, Lunn B, Cooper S, editors. Psychiatry by Ten Teachers. 2nd ed. United Kingdom: CRC Press LLC; 2011. p. 1-9.
18. Engel GL. The need for a new medical model: a challenge for biomedicine. Science. 1977;196(4286):129-36. https://doi.org/10.1126/science.847460.
19. World Health Organisation. Depression and other common mental disorders: global health estimates. Geneva; 2017. Available from: https://apps.who.int/iris/bitstream/handle/10665/254610/WHOMSD?sequence=1.
20. Public Health England. Severe mental illness (SMI) and physical health inequalities: briefing. 2018. Available from: https://www.gov.uk/government/publications/severe-mental-illness-smi-physical-health-inequalities/severe-mental-illness-and-physical-health-inequalities-briefing#fn:4.
21. The King's Fund. What are health inequalities? 2022 [Available from: https://www.kingsfund.org.uk/insight-and-analysis/long-reads/what-are-health-inequalities?gad_source=1&gclid=Cj0KCQiAire5BhCNARIsAM53K1jxK_SH3UBnjdoaTA_beNugrBjZ4NVeSffsmO5tyZqZD1mGEr36fiEaAlVbEALw_wcB.
22. Allen J, Balfour R, Bell R, Marmot M. Social determinants of mental health. International Review of Psychiatry. 2014;26(4):392-407. https://doi.org/10.3109/09540261.2014.928270.
23. Krieger N. A glossary for social epidemiology. Journal of Epidemiology & Community Health. 2001;55(10):693-700.

24. GBD 2019 Mental Disorders Collaborators. Global, regional, and national burden of 12 mental disorders in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. The Lancet Psychiatry. 2022;9(2):137-50. https://doi.org/10.1016/S2215-0366(21)00395-3.
25. NHS England. GP Patient Survey: Analysis tool 2024 [Available from: https://gp-patient.co.uk/analysistool?trend=0&nationaldata=1.
26. Alegría M, NeMoyer A, Falgàs Bagué I, Wang Y, Alvarez K. Social determinants of mental health: where we are and where we need to go. Current Psychiatry Reports. 2018;20(11):95. https://doi.org/10.1007/s11920-018-0969-9.
27. Commission for Equality in Mental Health. Determinants of mental health. 2020. Available from: https://www.centreformentalhealth.org.uk/sites/default/files/2020-01/Commission%20Briefing%201%20-%20Final.pdf.
28. Funer F. Admitting the heterogeneity of social inequalities: intersectionality as a (self-) critical framework and tool within mental health care. Philosophy, Ethics, and Humanities in Medicine. 2023;18(1):21. https://doi.org/10.1186/s13010-023-00144-6.
29. Zeeman L, Sherriff N, Browne K, McGlynn N, Mirandola M, Gios L, et al. A review of lesbian, gay, bisexual, trans and intersex (LGBTI) health and healthcare inequalities. European Journal of Public Health. 2019;29(5):974-80. https://doi.org/10.1093/eurpub/cky226.
30. Argyriou A, Goldsmith KA, Rimes KA. Mediators of the disparities in depression between sexual minority and heterosexual individuals: a systematic review. Archives of Sexual Behavior. 2021;50(3):925-59. https://doi.org/10.1007/s10508-020-01862-0.
31. Tan KKH, Treharne GJ, Ellis SJ, Schmidt JM, Veale JF. Gender minority stress: a critical review. Journal of Homosexuality. 2020;67(10):1471-89. https://doi.org/10.1080/00918369.2019.1591789.
32. Frost DM, Meyer IH. Minority stress theory: application, critique, and continued relevance. Current Opinion in Psychology. 2023;51:101579. https://doi.org/10.1016/j.copsyc.2023.101579.
33. Bai Y, Kim C, Levitskaya E, Burneiko N, Ienciu K, Chum A. Long-term trends in mental health disparities across sexual orientations in the UK: a longitudinal analysis (2010–2021). Social Psychiatry and Psychiatric Epidemiology. 2024. https://doi.org/10.1007/s00127-024-02751-w.
34. Watkinson RE, Linfield A, Tielemans J, Francetic I, Munford L. Gender-related self-reported mental health inequalities in primary care in England: a cross-sectional analysis using the GP Patient Survey. The Lancet Public Health. 2024;9(2):e100-e8. https://doi.org/10.1016/S2468-2667(23)00301-8.
35. Meads C, Carmona C, Kelly M. Lesbian, gay and bisexual people's health in the UK: a theoretical critique and systematic review. Diversity and Equality in Health and Care. 2012;9:19-32.

36. Kneale D, French R, Spandler H, Young I, Purcell C, Boden Z, et al. Conducting sexualities research: an outline of emergent issues and case studies from ten Wellcome-funded projects. Wellcome Open Research. 2019;4:137. https://doi.org/10.12688/wellcomeopenres.15283.1.
37. McDermott E, Nelson R, Weeks H. The politics of LGBT+ health inequality: conclusions from a UK scoping review. International Journal of Environmental Research and Public Health. 2021;18(2). https://doi.org/10.3390/ijerph18020826.
38. Sherriff N, Zeeman L, McGlynn N, Pinto N, Hugendubel K, Mirandola M, et al. Co-producing knowledge of lesbian, gay, bisexual, trans and intersex (LGBTI) health-care inequalities via rapid reviews of grey literature in 27 EU Member States. Health Expectations: An International Journal of Public Participation in Health Care and Health Policy. 2019;22(4):688-700. https://doi.org/10.1111/hex.12934.
39. Booker CL, Meads C. Sexual orientation and the incidence of COVID-19: evidence from Understanding Society in the UK Longitudinal Household Study. Healthcare (Basel). 2021;9(8). https://doi.org/10.3390/healthcare9080937.
40. Cucinotta D, Vanelli M. WHO declares COVID-19 a pandemic. Acta Biomedica Atenei Parmensis. 2020;91(1):157-60. https://doi.org/10.23750/abm.v91i1.9397.
41. Santomauro DF, Mantilla Herrera AM, Shadid J, Zheng P, Ashbaugh C, Pigott DM, et al. Global prevalence and burden of depressive and anxiety disorders in 204 countries and territories in 2020 due to the COVID-19 pandemic. The Lancet. 2021;398(10312):1700-12. https://doi.org/10.1016/S0140-6736(21)02143-7.
42. O'Shea N, Bell A. A spending review for wellbeing. 2020. Available from: https://www.centreformentalhealth.org.uk/wp-content/uploads/2020/08/CentreforMentalHealth_SpendingReviewForWellbeing.pdf.
43. O'Shea N. Covid-19 and the nation's mental health: forecasting needs and risks in the UK. 2020. Available from: https://www.centreformentalhealth.org.uk/wp-content/uploads/2021/05/CentreforMentalHealth_COVID_MH_Forecasting4_May21.pdf.
44. Daly M, Sutin AR, Robinson E. Longitudinal changes in mental health and the COVID-19 pandemic: evidence from the UK Household Longitudinal Study. Psychological Medicine. 2020:1-10. https://doi.org/10.1017/S0033291720004432.
45. Pierce M, Hope H, Ford T, Hatch S, Hotopf M, John A, et al. Mental health before and during the COVID-19 pandemic: a longitudinal probability sample survey of the UK population. The Lancet Psychiatry. 2020;7(10):883-92. https://doi.org/10.1016/S2215-0366(20)30308-4.
46. Niedzwiedz CL, Green MJ, Benzeval M, Campbell D, Craig P, Demou E, et al. Mental health and health behaviours before and during the initial phase of the COVID-19 lockdown: longitudinal analyses of the UK Household Longitudinal Study. Journal of Epidemiology and Community Health. 2021;75(3):224. https://doi.org/10.1136/jech-2020-215060.

47. O'Connor RC, Wetherall K, Cleare S, McClelland H, Melson AJ, Niedzwiedz CL, et al. Mental health and well-being during the COVID-19 pandemic: longitudinal analyses of adults in the UK COVID-19 Mental Health & Wellbeing study. British Journal of Psychiatry. 2021;218(6):326-33. https://doi.org/10.1192/bjp.2020.212.
48. Bambra C, Riordan R, Ford J, Matthews F. The COVID-19 pandemic and health inequalities. Journal of Epidemiology and Community Health. 2020;74(11):964-8. https://doi.org/10.1136/jech-2020-214401.
49. Di Gessa G, Maddock J, Green MJ, Thompson EJ, McElroy E, Davies HL, et al. Pre-pandemic mental health and disruptions to healthcare, economic and housing outcomes during the COVID-19 pandemic: evidence from 12 UK longitudinal studies. British Journal of Psychiatry. 2021:1-10. https://doi.org/10.1192/bjp.2021.132.
50. Bu F, Steptoe A, Fancourt D. Loneliness during a strict lockdown: trajectories and predictors during the COVID-19 pandemic in 38,217 United Kingdom adults. Social Science & Medicine. 2020;265:113521. https://doi.org/10.1016/j.socscimed.2020.113521.
51. Moreno-Agostino D, Fisher HL, Hatch SL, Morgan C, Ploubidis GB, Das-Munshi J. Generational, sex, and socioeconomic inequalities in mental and social wellbeing during the COVID-19 pandemic: prospective longitudinal observational study of five UK cohorts. Psychological Medicine. 2022:1-12. https://doi.org/10.1017/S0033291722003348.
52. Gillard S, Dare C, Hardy J, Nyikavaranda P, Rowan Olive R, Shah P, et al. Experiences of living with mental health problems during the COVID-19 pandemic in the UK: a coproduced, participatory qualitative interview study. Social Psychiatry and Psychiatric Epidemiology. 2021;56(8):1447-57. https://doi.org/10.1007/s00127-021-02051-7.
53. Moreno-Agostino D, Woodhead C, Ploubidis GB, Das-Munshi J. A quantitative approach to the intersectional study of mental health inequalities during the COVID-19 pandemic in UK young adults. Social Psychiatry and Psychiatric Epidemiology. 2023. https://doi.org/10.1007/s00127-023-02424-0.
54. McGowan VJ, Lowther HJ, Meads C. Life under COVID-19 for LGBT+ people in the UK: systematic review of UK research on the impact of COVID-19 on sexual and gender minority populations. BMJ Open. 2021;11(7):e050092. https://doi.org/10.1136/bmjopen-2021-050092.
55. Dietzel C, Bello B, O’Shea B, Cullum J, Numer M. Mental health of LGBTQ+ people during the COVID-19 pandemic: a scoping review. Advances in Mental Health. 2023:1-31. https://doi.org/10.1080/18387357.2023.2248299.
56. Lucas JJ, Bouchoucha SL, Afrouz R, Reed K, Brennan-Olsen SL. LGBTQ+ loss and grief in a cis-heteronormative pandemic: a qualitative evidence synthesis of the COVID-19 literature. Qualitative Health Research. 2022;32(14):2102-17. https://doi.org/10.1177/10497323221138027.

57. Sampogna G, Ventriglio A, Di Vincenzo M, Del Vecchio V, Giallonardo V, Bianchini V, et al. Mental health and well-being of LGBTQ+ people during the COVID-19 pandemic. International Review of Psychiatry. 2021:1-7. https://doi.org/10.1080/09540261.2021.2019686.
58. Bécares L, Kneale D. Inequalities in mental health, self-rated health, and social support among sexual minority young adults during the COVID-19 pandemic: analyses from the UK Millennium Cohort Study. Social Psychiatry and Psychiatric Epidemiology. 2022;57(10):1979-86. https://doi.org/10.1007/s00127-022-02291-1.
59. Edelman NL, Witzel TC, Samba P, Nutland W, Nadarzynski T. Mental well-being and sexual intimacy among men and gender diverse people who have sex with men during the first UK COVID-19 lockdown: a mixed-methods study. International Journal of Environmental Research and Public Health. 2022;19(12). https://doi.org/10.3390/ijerph19126985.
60. Gato J, Barrientos J, Tasker F, Miscioscia M, Cerqueira-Santos E, Malmquist A, et al. Psychosocial effects of the COVID-19 pandemic and mental health among LGBTQ+ young adults: a cross-cultural comparison across six nations. Journal of Homosexuality. 2021;68(4):612-30. https://doi.org/10.1080/00918369.2020.1868186.
61. Hope VD, Timpson H, Porcellato L, Brett CE, Harrison R, Hunt A, et al. Did the UK's COVID-19 restrictions during 2020 have a differential impact on the well-being of the LGBQ+ population: a mixed methods study. BMJ Open. 2023;13(10):e068818. https://doi/org/10.1136/bmjopen-2022-068818.
62. Jones BA, Bowe M, McNamara N, Guerin E, Carter T. Exploring the mental health experiences of young trans and gender diverse people during the COVID-19 pandemic. International Journal of Transgender Health. 2023;24(3):292-304. https://doi.org/10.1080/26895269.2021.1890301.
63. Kim C, Bai Y, Ienciu K, Corrado A, Eichenberg K, Chum A. Mental health disparities across sexual orientations during the COVID-19 pandemic: longitudinal analysis of a UK nationally representative cohort. Public Health. 2024;236:445-51. https://doi.org/10.1016/j.puhe.2024.09.009.
64. Kneale D, Bécares L. Discrimination as a predictor of poor mental health among LGBTQ+ people during the COVID-19 pandemic: cross-sectional analysis of the online Queerantine study. BMJ Open. 2021;11(6):e049405. https://doi.org/10.1136/bmjopen-2021-049405.
65. Kneale D, Bécares L. The influence of a hostile environment on a syndemic of depression, stress and chronic limiting illness among LGBTQ+ people during the COVID-19 pandemic. Sociology of Health & Illness. 2023. https://doi.org/10.1111/1467-9566.13689.
66. Stokes K, Houghton M, Gato J, Tasker F. Surveying psychological wellbeing in a post-pandemic world: the role of family and social support for LGBTQ+ and cisgender heterosexual adults in the UK. Healthcare. 2024;12(16). https://doi.org/10.3390/healthcare12161634.

67. Toze M, Westwood S, Hafford-Letchfield T. Social support and unmet needs among older trans and gender non-conforming people during the COVID-19 ‘lockdown’ in the UK. International Journal of Transgender Health. 2021:1-15. https://doi.org/10.1080/26895269.2021.1977210.

68. Westwood S, Hafford-Letchfield T, Toze M. Physical and mental well-being, risk and protective factors among older lesbians /gay women in the United Kingdom during the initial COVID-19 2020 lockdown. Journal of Women & Aging. 2021:1-22. https://doi.org/10.1080/08952841.2021.1965456.

69. Hafford-Letchfield T, Toze M, Westwood S. Unheard voices: a qualitative study of LGBT+ older people experiences during the first wave of the COVID-19 pandemic in the UK. Health & Social Care in the Community. 2022;30(4):e1233-e43. https://doi.org/10.1111/hsc.13531.

70. Haworth B, Barros Cassal L, de Paula Muniz T. "No-one knows how to care for LGBT community like LGBT do": LGBTQIA+ experiences of COVID-19 in the United Kingdom and Brazil. Disasters. 2023;47(3):584-607. https://doi.org/10.1111/disa.12565.

71. Malmquist A, Miscioscia M, Leal D, Tasker F, Bredenberg C, Gubello A, et al. “Under house arrest”: mental health and minority stress experiences of LGBTQ+ young adults during the COVID-19 pandemic in Europe. Sexuality Research and Social Policy. 2024;21(3):969-84. https://doi.org/10.1007/s13178-023-00916-x.

72. Ratcliffe J, Kanaan M, Galdas P. Men and loneliness in the COVID-19 pandemic: insights from an interview study with UK-based men. Health & Social Care in the Community. 2022;30(5):e3009-e17. https://doi.org/10.1111/hsc.13746.

73. Garratt K. Mental health policy and services in England. House of Commons Library; 2024. Available from: https://researchbriefings.files.parliament.uk/documents/CBP-7547/CBP-7547.pdf.

74. Healthier Lancashire and South Cumbria. Our integrated care system strategy. 2020. Available from: https://www.healthierlsc.co.uk/application/files/4915/7961/0291/LCS_ICS_Strategy_DRAFT_January2020.pdf.

75. Public Health England. Public Health England Fingertips: Local Authority health profiles 2021 [Available from: https://fingertips.phe.org.uk/profile/health-profiles/data#page/1/gid/1938132696/pat/15/ati/502/are/E10000017/iid/90366/age/1/sex/1/cat/-1/ctp/-1/yrr/3/cid/4/tbm/1.

76. Baker C. Health inequalities: income deprivation and north/south divides 2019 [Available from: https://commonslibrary.parliament.uk/health-inequalities-income-deprivation-and-north-south-divides/.

77. Baker C. Mental health statistics for England: prevalence, services and funding. 2020. Available from: https://researchbriefings.files.parliament.uk/documents/SN06988/SN06988.pdf.

78. Lancashire County Council. The English Indices of Deprivation, 2019 - supplementary report on Healthier Lancashire and South Cumbria. 2019. Available from: https://www.lancashire.gov.uk/media/913424/deprivation2019_ics_supplementaryreport.pdf.

79. Lancashire and South Cumbria NHS Foundation Trust. About us 2021 [Available from: https://www.lscft.nhs.uk/about-us.

80. Gee S, Keetley S. Lancashire urgent mental health pathway review: final report and recommendations. 2019. Available from: https://www.healthierlsc.co.uk/application/files/5715/5852/3841/Final_Report_Lancs_ICS_Urgent_Care_MH_Pathway_Review_May_2019.pdf.

81. Munford L, Khavandi S, Bambra C, Barr B, Davies H, Doran T, et al. A year of COVID-19 in the North: regional inequalities in health and economic outcomes. Newcastle: Northern Health Science Alliance; 2021. Available from: https://www.thenhsa.co.uk/app/uploads/2021/09/COVID-REPORT-2021-EMBARGO.pdf.

82. World Health Organisation. World mental health report: transforming mental health for all. 2022. Available from: https://www.who.int/teams/mental-health-and-substance-use/world-mental-health-report.

83. Commission for Equality in Mental Health. Access to mental health support. 2020. Available from: https://www.centreformentalhealth.org.uk/publications/commission-equality-mental-health-briefing-2.

84. Mitchell AJ, Hardy S, Shiers D. Parity of esteem: addressing the inequalities between mental and physical healthcare. BJPsych Advances. 2017;23(3):196-205. https://doi.org/10.1192/apt.bp.114.014266.

85. NHS England. Implementing The Five Year Forward View For Mental Health. 2016. Available from: https://www.england.nhs.uk/wp-content/uploads/2016/07/fyfv-mh.pdf.

86. NHS England. Advancing mental health equalities strategy. 2020. Available from: https://www.england.nhs.uk/wp-content/uploads/2020/10/00159-advancing-mental-health-equalities-strategy.pdf.

87. Asthana S, Gibson A, Bailey T, Moon G, Hewson P, Dibben C. Equity of utilisation of cardiovascular care and mental health services in England: a cohort-based cross-sectional study using small-area estimation. Health Services and Delivery Research. 2016;4(14). https://doi.org.uk/10.3310/hsdr04140.

88. Tudor Hart J. The inverse care law. The Lancet. 1971;297(7696):405-12. https://doi.org/10.1016/S0140-6736(71)92410-X.

89. Addison M, Scott S, Bambra C, Lhussier M. Stigma and the inverse care law: experiences of 'care' for people living in marginalised conditions. Sociology of Health & Illness. 2025;47(1):e70000. https://doi.org/10.1111/1467-9566.70000.

90. Chakraborty A, McManus S, Brugha TS, Bebbington P, King M. Mental health of the non-heterosexual population of England. British Journal of Psychiatry. 2011;198(2):143-8. https://doi.org/10.1192/bjp.bp.110.082271.
91. Rimes KA, Ion D, Wingrove J, Carter B. Sexual orientation differences in psychological treatment outcomes for depression and anxiety: national cohort study. Journal of Consulting and Clinical Psychology. 2019;87(7):577-89. https://doi.org/10.1037/ccp0000416.
92. Crawford RP, Schuller K. Functional, communicative, and hybrid barriers to accessing mental health care in LGBTQ+ communities. Psychology & Sexuality. 2023;14(3):513-27. https://doi.org/10.1080/19419899.2023.2181096.
93. Filice E, Meyer SB. Patterns, predictors, and outcomes of mental health service utilization among lesbians, gay men, and bisexuals: a scoping review. Journal of Gay & Lesbian Mental Health. 2018;22(2):162-95. https://doi.org/10.1080/19359705.2017.1418468.
94. Foy AAJ, Morris D, Fernandes V, Rimes KA. LGBQ+ adults' experiences of Improving Access to Psychological Therapies and primary care counselling services: informing clinical practice and service delivery. Cognitive Behaviour Therapist. 2019;12:23. https://doi.org/10.1017/S1754470X19000291.
95. Morris DDA, Fernandes V, Rimes KA. Sexual minority service user perspectives on mental health treatment barriers to care and service improvements. International Review of Psychiatry. 2022;34(3-4):230-9. https://doi.org/10.1080/09540261.2022.2051445.
96. Ellis SJ, Bailey L, McNeil J. Trans people's experiences of mental health and gender identity services: a UK study. Journal of Gay & Lesbian Mental Health. 2015;19(1):4-20. https://doi.org/10.1080/19359705.2014.960990.
97. Pitt M, Taylor P, Dunlop BJ. Bisexual women's experiences of receiving help for mental health difficulties through psychological therapy: A qualitative exploration. Psychology of Sexual Orientation and Gender Diversity. 2023.
98. Higgins A, Downes C, Murphy R, Sharek D, Begley T, McCann E, et al. LGBT + young people’s perceptions of barriers to accessing mental health services in Ireland. Journal of Nursing Management. 2021;29(1):58-67. https://doi.org/10.1111/jonm.13186.
99. Bishop J, Crisp D, Scholz B. The real and ideal experiences of what culturally competent counselling or psychotherapy service provision means to lesbian, gay and bisexual people. Counselling and Psychotherapy Research. 2022;22(2):429-38. https://doi.org/10.1002/capr.12469.
100. Moynihan R, Sanders S, Michaleff ZA, Scott AM, Clark J, To EJ, et al. Impact of COVID-19 pandemic on utilisation of healthcare services: a systematic review. BMJ Open. 2021;11(3):e045343. https://doi.org/10.1136/bmjopen-2020-045343.

101. World Health Organisation. The impact of COVID-19 on mental, neurological and substance use services: results of a rapid assessment. 2020. Available from: https://www.who.int/publications/i/item/978924012455.

102. British Medical Association. The impact of COVID-19 on mental health in England: Supporting services to go beyond parity of esteem. 2020. Available from: https://www.bma.org.uk/media/2750/bma-the-impact-of-covid-19-on-mental-health-in-england.pdf.

103. Byrne A, Barber R, Lim CH. Impact of the COVID-19 pandemic – a mental health service perspective. Progress in Neurology and Psychiatry. 2021;25(2):27-33b. https://doi.org/10.1002/pnp.708.

104. Bakolis I, Stewart R, Baldwin D, Beenstock J, Bibby P, Broadbent M, et al. Changes in daily mental health service use and mortality at the commencement and lifting of COVID-19 ‘lockdown’ policy in 10 UK sites: a regression discontinuity in time design. BMJ Open. 2021;11(5):e049721. https://doi.org/10.1136/bmjopen-2021-049721.

105. Chen S, Jones PB, Underwood BR, Moore A, Bullmore ET, Banerjee S, et al. The early impact of COVID-19 on mental health and community physical health services and their patients’ mortality in Cambridgeshire and Peterborough, UK. Journal of Psychiatric Research. 2020;131:244-54. https://doi.org/10.1016/j.jpsychires.2020.09.020.

106. Chen S, She R, Qin P, Kershenbaum A, Fernandez-Egea E, Nelder JR, et al. The medium-term impact of COVID-19 lockdown on referrals to secondary care mental health services: a controlled interrupted time series study. Frontiers in Psychiatry. 2020;11:585915. https://doi.org/10.3389/fpsyt.2020.585915.

107. Tromans S, Chester V, Harrison H, Pankhania P, Booth H, Chakraborty N. Patterns of use of secondary mental health services before and during COVID-19 lockdown: observational study. BJPsych Open. 2020;6(6):e117. https://doi.org/10.1192/bjo.2020.104.

108. Mukadam N, Sommerlad A, Wright J, Smith A, Szczap A, Solomou S, et al. Acute mental health presentations before and during the COVID-19 pandemic. BJPsych Open. 2021;7(4):e134. https://doi.org/10.1192/bjo.2021.970.

109. Mannion R, Konteh FH, Jacobs R. Impact of COVID-19 in mental health trusts. Journal of Health Services Research & Policy. 2022:13558196221116298. https://doi.org/10.1177/13558196221116298.

110. British Medical Association. Mental health pressures in England 2024 [Available from: https://www.bma.org.uk/advice-and-support/nhs-delivery-and-workforce/pressures/mental-health-pressures-data-analysis.

111. Bauer-Staeb C, Davis A, Smith T, Wilsher W, Betts D, Eldridge C, et al. The early impact of COVID-19 on primary care psychological therapy services: A descriptive time series of

electronic healthcare records. eClinicalMedicine. 2021;37:100939. https://doi.org/10.1016/j.eclinm.2021.100939.

112. Adams EA, Parker J, Jablonski T, Kennedy J, Tasker F, Hunter D, et al. A qualitative study exploring access to mental health and substance use support among individuals experiencing homelessness during COVID-19. International Journal of Environmental Research and Public Health. 2022;19(6):3459. https://doi.org/10.3390/ijerph19063459.

113. Gregson N, Randle-Phillips C, Delaney C. Delivering psychological services for people with learning disabilities during the COVID-19 pandemic: the experiences of psychologists in the UK. Journal of Mental Health Research in Intellectual Disabilities. 2022;15(2):168-96. https://doi.org/10.1080/19315864.2022.2047844.

114. Liberati E, Richards N, Parker J, Willars J, Scott D, Boydell N, et al. Remote care for mental health: qualitative study with service users, carers and staff during the COVID-19 pandemic. BMJ Open. 2021;11(4):e049210. https://doi.org/10.1136/bmjopen-2021-049210.

115. Liberati E, Richards N, Parker J, Willars J, Scott D, Boydell N, et al. Qualitative study of candidacy and access to secondary mental health services during the COVID-19 pandemic. Social Science & Medicine. 2022;296:114711. https://doi.org/10.1016/j.socscimed.2022.114711.

116. LGBT Foundation. Hidden Figures: The impact of the COVID-19 pandemic on LGBT communities in the UK. 2020. Available from: https://dxfy8lrzbpywr.cloudfront.net/Files/7a01b983-b54b-4dd3-84b2-0f2ecd72be52/Hidden%2520Figures-%2520The%2520Impact%2520of%2520the%2520Covid-19%2520Pandemic%2520on%2520LGBT%2520Communities.pdf.

117. Hudson N, Kersting F, Lynch-Higgins S, MacNaboe L, Sharrock S. The experiences of UK LGBT+ communities during the COVID-19 pandemic. NatCen; 2021. Available from: https://menrus.co.uk/wp-content/uploads/2020/08/The-experiences-of-UK-LGBTplus-communities-during-the-COVID-19-pandemic.pdf.

118. Strongylou DE, Flowers P, McKenna R, Kincaid RA, Clutterbuck D, Hammoud MA, et al. Understanding and responding to remote mental health help-seeking by gay, bisexual and other men who have sex with men (GBMSM) in the UK and Republic of Ireland: a mixed-method study conducted in the context of COVID-19. Health Psychology and Behavioral Medicine. 2022;10(1):357-78. https://doi.org/10.1080/21642850.2022.2053687.

119. Crotty MJ. The foundations of social research: meaning and perspective in the research process. London: Routledge; 1998. 1-256 p.

120. Raddon A. Early stage research training: epistemology and ontology in social science research. University of Leicester; 2010. Available from: https://edisciplinas.usp.br/pluginfile.php/6893698/mod_folder/content/0/Textos/Raddon%2C%2

0Early%20Stage%20Research%20Training%20-%20espitemology%20and%20ontology%20in%20social%20science%20research.pdf.

121. Bhaskar R. Philosophy and scientific realism. A realist theory of science. 2nd ed. London: Taylor & Francis Group; 2008.
122. Maxwell JA, Mittapalli K. Realism as a stance for mixed methods research. SAGE Handbook of Mixed Methods in Social & Behavioral Research. 2010;2:145-68. https://doi.org/10.4135/9781506335193.
123. Danermark B, Ekstrom M, Jakobsen L, Karlsson Jc. Explaining society: an introduction to critical realism in the social sciences. 1st ed. London: Routledge; 2002.
124. Haigh F, Kemp L, Bazeley P, Haigh N. Developing a critical realist informed framework to explain how the human rights and social determinants of health relationship works. BMC Public Health. 2019;19(1):1571. https://doi.org/10.1186/s12889-019-7760-7.
125. Bergin M, Wells JSG, Owen S. Critical realism: a philosophical framework for the study of gender and mental health. Nursing Philosophy. 2008;9(3):169-79. https://doi.org/10.1111/j.1466-769X.2008.00358.x.
126. Creswell JW, Plano Clark VL. Designing and conducting mixed methods research. 3rd ed. London: SAGE Publications; 2017.
127. Shannon-Baker P. Making paradigms meaningful in mixed methods research. Journal of Mixed Methods Research. 2016;10(4):319-34. https://doi.org/10.1177/1558689815575861.
128. Schoonenboom J, Johnson RB. How to construct a mixed methods research design. Kolner Z Soz Sozpsychol. 2017;69(Suppl 2):107-31. https://doi.org/10.1007/s11577-017-0454-1.
129. Walshe C, Brearley S. Handbook of theory and methods in applied health research: questions, methods and choices: Edward Elgar Publishing; 2020.
130. Greene JC, Caracelli VJ, Graham WF. Toward a conceptual framework for mixed-method evaluation designs. Educational Evaluation and Policy Analysis. 1989;11(3):255-74. https://doi.org/10.3102/01623737011003255.
131. Lowther-Payne HJ, Ushakova A, Beckwith A, Liberty C, Edge R, Lobban F. Understanding inequalities in access to adult mental health services in the UK: a systematic mapping review. BMC Health Services Research. 2023;23(1):1042. https://doi.org/10.1186/s12913-023-10030-8.
132. Ivankova NV, Creswell JW, Stick SL. Using mixed-methods sequential explanatory design: from theory to practice. Field Methods. 2006;18(1):3-20. https://doi.org/10.1177/1525822X05282260.
133. Levesque J-F, Harris MF, Russell G. Patient-centred access to health care: conceptualising access at the interface of health systems and populations. International Journal for Equity in Health. 2013;12(1):18. https://doi.org/10.1186/1475-9276-12-18.

134. Guetterman TC, Fetters MD, Creswell JW. Integrating quantitative and qualitative results in health science mixed methods research through joint displays. Annals of Family Medicine. 2015;13(6):554-61. https://doi.org/10.1370/afm.1865.

135. Morton J, O'Reilly M. Mental health, big data and research ethics: parity of esteem in mental health research from a UK perspective. Clinical Ethics. 2019;14(4):165-72. https://doi.org/10.1177/1477750919876243.

136. Andersen RM. Revisiting the behavioral model and access to medical care: does it matter? Journal of Health and Social Behavior. 1995;36(1):1-10. https://doi.org/10.2307/2137284.

137. Gelberg L, Andersen RM, Leake BD. The behavioral model for vulnerable populations: application to medical care use and outcomes for homeless people. Health Service Research. 2000;34(6):1273-302.

138. Dixon-Woods M, Cavers D, Agarwal S, Annandale E, Arthur A, Harvey J, et al. Conducting a critical interpretive synthesis of the literature on access to healthcare by vulnerable groups. BMC Medical Research Methodology. 2006;6(1):35. https://doi.org/10.1186/1471-2288-6-35.

139. Goddard M, Smith P. Equity of access to health care services: theory and evidence from the UK. Social Science & Medicine. 2001;53(9):1149-62. https://doi.org/10.1016/S0277-9536(00)00415-9.

140. Penchansky R, Thomas JW. The concept of access: definition and relationship to consumer satisfaction. Medical Care. 1981;19(2):127-40.

141. Mackenzie M, Conway E, Hastings A, Munro M, O'Donnell C. Is 'candidacy' a useful concept for understanding journeys through public services? a critical interpretive literature synthesis. Social Policy & Administration. 2013;47(7):806-25. https://doi.org/10.1111/j.1467-9515.2012.00864.x.

142. Cu A, Meister S, Lefebvre B, Ridde V. Assessing healthcare access using the Levesque's conceptual framework – a scoping review. International Journal for Equity in Health. 2021;20(1):116. https://doi.org/10.1186/s12939-021-01416-3.

143. Broadway-Horner M. Where are services regarding sexual minorities and psychological therapies post-COVID in 2024? a mixed-method systematised review. Mental Health and Social Inclusion. 2024. https://doi.org/10.1108/MHSI-03-2024-0039.

144. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. PLoS Medicine. 2021;18(3):e1003583. https://doi.org/10.1371/journal.pmed.1003583.

145. Smith SA, Duncan AA. Systematic and scoping reviews: a comparison and overview. Seminars in Vascular Surgery. 2022;35(4):464-9. https://doi.org/10.1053/j.semvascsurg.2022.09.001.

146. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. International Journal of Social Research Methodology. 2005;8(1):19-32. https://doi.org/10.1080/1364557032000119616.

147. Clapton J, Rutter D, Sharif N. SCIE Systematic mapping guidance. Social Care Institute for Excellence (SCIE),; 2009. Available from: https://lx.iriss.org.uk/sites/default/files/resources/rr03.pdf.

148. Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA extension for Scoping Reviews (PRISMA-ScR): checklist and explanation. Annals of Internal Medicine. 2018;169(7):467-73. https://doi.org/10.7326/M18-0850.

149. Casey JA, Schwartz BS, Stewart WF, Adler NE. Using electronic health records for population health research: a review of methods and applications. Annual Review of Public Health. 2016;37(1):61-81. https://doi.org/10.1146/annurev-publhealth-032315-021353.

150. RSA Open Public Services Network. Exploring how available NHS data can be used to show the inequality gap in mental healthcare. 2015. Available from: https://www.thersa.org/globalassets/pdfs/reports/rsa-opsn_getting-the-message-on-mental-health-report.pdf.

151. Benchimol EI, Smeeth L, Guttmann A, Harron K, Moher D, Petersen I, et al. The REporting of studies Conducted using Observational Routinely-collected health Data (RECORD) statement. PLoS Medicine. 2015;12(10):e1001885. https://doi.org/10.1371/journal.pmed.1001885.

152. Murad M, Asi N, Alsawas M, Alahdab F. New evidence pyramid. Evidence Based Medicine. 2016;21(4):125. https://doi.org/10.1136/ebmed-2016-110401.

153. National Institute for Health and Care Excellence (NICE). NICE real-world evidence framework. 2022. Available from: https://www.nice.org.uk/corporate/ecd9/resources/nice-realworld-evidence-framework-pdf-1124020816837.

154. Deeny S, Steventon A. Making sense of the shadows: priorities for creating a learning healthcare system based on routinely collected data. BMJ Quality & Safety. 2015;24(8):505. https://doi.org/10.1136/bmjqs-2015-004278.

155. Brinkmann S, Kvale S. Doing interviews. Second ed. London: SAGE Publications Ltd; 2018.

156. DeJonckheere M, Vaughn L. Semistructured interviewing in primary care research: a balance of relationship and rigour. Family Medicine and Community Health. 2019;7(2):e000057. https://doi.org/10.1136/fmch-2018-000057.

157. Ní Shé É, Morton S, Lambert V, Ní Cheallaigh C, Lacey V, Dunn E, et al. Clarifying the mechanisms and resources that enable the reciprocal involvement of seldom heard groups in health and social care research: A collaborative rapid realist review process. Health Expectations. 2019;22(3):298-306. https://doi.org/10.1111/hex.12865.

158. Keen S, Lomeli-Rodriguez M, Joffe H. From challenge to opportunity: virtual qualitative research during COVID-19 and beyond. International Journal of Qualitative Methods. 2022;21:16094069221105075. https://doi.org/10.1177/16094069221105075.

159. Ritchie J, Spencer L. Qualitative data analysis for applied policy research. Analyzing Qualitative Data: Routledge; 1994. p. 188-209.

160. Dixon-Woods M. Using framework-based synthesis for conducting reviews of qualitative studies. BMC Medicine. 2011;9(1):39. https://doi.org/10.1186/1741-7015-9-39.
161. Carroll C, Booth A, Leaviss J, Rick J. “Best fit” framework synthesis: refining the method. BMC Medical Research Methodology. 2013;13(1):37. https://doi.org/10.1186/1471-2288-13-37.
162. Booth A, Carroll C. How to build up the actionable knowledge base: the role of ‘best fit’ framework synthesis for studies of improvement in healthcare. BMJ Quality & Safety. 2015;24(11):700. https://doi.org/10.1136/bmjqs-2014-003642.
163. Braun V, Clarke V. Thematic analysis: a practical guide: SAGE Publications; 2021.
164. Flick U. The SAGE handbook of qualitative data analysis. London: SAGE Publications, Limited; 2013.
165. Proudfoot K. Inductive/deductive hybrid thematic analysis in mixed methods research. Journal of Mixed Methods Research. 2022;17(3):308-26. https://doi.org/10.1177/15586898221126816.
166. Meyer SB, Lunnay B. The application of abductive and retroductive inference for the design and analysis of theory-driven sociological research. Sociological Research Online. 2013;18(1):86-96. https://doi.org/10.5153/sro.2819.
167. Greenhalgh T, Hinton L, Finlay T, Macfarlane A, Fahy N, Clyde B, et al. Frameworks for supporting patient and public involvement in research: systematic review and co-design pilot. Health Expectations. 2019;22(4):785-801. https://doi.org/10.1111/hex.12888.
168. NIHR. Briefing notes for researchers: public involvement in NHS, health and social care research 2021 [Available from: https://www.nihr.ac.uk/documents/briefing-notes-for-researchers-public-involvement-in-nhs-health-and-social-care-research/27371.
169. Coupe N, Mathieson A. Patient and public involvement in doctoral research: impact, resources and recommendations. Health Expectations. 2020;23(1):125-36. https://doi.org/10.1111/hex.12976.
170. Okoroji C, Mackay T, Robotham D, Beckford D, Pinfold V. Epistemic injustice and mental health research: A pragmatic approach to working with lived experience expertise. Frontiers in Psychiatry. 2023;14:1114725. https://doi.org/10.3389/fpsyt.2023.1114725.
171. Staniszewska S, Brett J, Simera I, Seers K, Mockford C, Goodlad S, et al. GRIPP2 reporting checklists: tools to improve reporting of patient and public involvement in research. BMJ. 2017;358:j3453. https://doi.org/10.1136/bmj.j3453.
172. Boaz A, Hanney S, Borst R, O’Shea A, Kok M. How to engage stakeholders in research: design principles to support improvement. Health Research Policy and Systems. 2018;16(1):60. https://doi.org/10.1186/s12961-018-0337-6.
173. Olmos-Vega FM, Stalmeijer RE, Varpio L, Kahlke R. A practical guide to reflexivity in qualitative research: AMEE Guide No. 149. Medical Teacher. 2023;45(3):241-51. https://doi.org/10.1080/0142159X.2022.2057287.

174. Dwyer SC, Buckle JL. The space between: on being an insider-outsider in qualitative research. International Journal of Qualitative Methods. 2009;8(1):54-63. https://doi.org/10.1177/160940690900800105.

175. Nelson R. Questioning identities/shifting identities: the impact of researching sex and gender on a researcher's LGBT+ identity. Qualitative Research. 2020;20(6):910-26. https://doi.org/10.1177/1468794120914522.

176. Veldhuis CB. Doubly marginalized: addressing the minority stressors experienced by LGBTQ+ researchers who do LGBTQ+ research. Health Education Behaviour. 2022;49(6):960-74. https://doi.org/10.1177/10901981221116795.

177. Pieper D, Rombey T. Where to prospectively register a systematic review. Systematic Reviews. 2022;11(1):8. https://doi.org/10.1186/s13643-021-01877-1.

178. Różyńska J. The ethical anatomy of payment for research participants. Medicine, Health Care and Philosophy. 2022;25(3):449-64. https://doi.org/10.1007/s11019-022-10092-1.

179. NIHR. Payment guidance for researchers and professionals 2025 [Available from: https://www.nihr.ac.uk/payment-guidance-researchers-and-professionals#:~:text=When%20it%20comes%20to%20participation,approval%2C%20and%20might%20require%20justification.

180. NHS Health Research Authority. Payments and incentives in research 2024 [Available from: https://www.hra.nhs.uk/about-us/committees-and-services/nreap/payments-and-incentives-research/.

181. Central University Research Ethics Committee (CUREC). Payments and incentives in research: best practice guidance. University of Oxford; 2020. Available from: https://researchsupport.admin.ox.ac.uk/files/bpg05paymentsandincentivesinresearchv10pdf.

182. NHS England. The NHS Long Term Plan. 2019. Available from: https://www.longtermplan.nhs.uk/wp-content/uploads/2019/08/nhs-long-term-plan-version-1.2.pdf.

183. Garratt K, Laing J. Mental health policy in England. 2022. Available from: https://researchbriefings.files.parliament.uk/documents/CBP-7547/CBP-7547.pdf.

184. Grant MJ, Booth A. A typology of reviews: an analysis of 14 review types and associated methodologies. Health Information & Libraries Journal. 2009;26(2):91-108. https://doi.org/10.1111/j.1471-1842.2009.00848.x.

185. Welch V, Petkovic J, Jull J, Hartling L, Klassen T, Kristjansson E, et al. Chapter 16: Equity and specific populations. In: Higgins J, Thomas J, Chandler J, Cumpston M, Li T, Page M, et al., editors. Cochrane Handbook for Systematic Reviews of Interventions version 63: Cochrane; 2022.

186. The EndNote Team. EndNote. EndNote 20 ed. Philadeplhia, PA: Clarivate; 2013.

187. Ouzzani M, Hammady H, Fedorowicz Z, Elmagarmid A. Rayyan - a web and mobile app for systematic reviews. Systematic Reviews. 2016;5(1):210. https://doi.org/10.1186/s13643-016-0384-4.
188. Andersen RM. National health surveys and the behavioral model of health services use. Medical Care. 2008;46(7):647-53.
189. Kleinman A. Concepts and a model for the comparison of medical systems as cultural systems. Social Science & Medicine Part B: Medical Anthropology. 1978;12:85-93. https://doi.org/10.1016/0160-7987(78)90014-5.
190. Paul C, Holt J. Involving the public in mental health and learning disability research: can we, should we, do we? Journal of Psychiatric and Mental Health Nursing. 2017;24(8):570-9. https://doi.org/10.1111/jpm.12404.
191. Holman D, Salway S, Bell A, Beach B, Adebajo A, Ali N, et al. Can intersectionality help with understanding and tackling health inequalities? perspectives of professional stakeholders. Health Research Policy and Systems. 2021;19(1):97. https://doi.org/10.1186/s12961-021-00742-w.
192. Smyth N, Buckman JEJ, Naqvi SA, Aguirre E, Cardoso A, Pilling S, et al. Understanding differences in mental health service use by men: an intersectional analysis of routine data. Social Psychiatry and Psychiatric Epidemiology. 2022;57(10):2065-77. https://doi.org/10.1007/s00127-022-02256-4.
193. Dawkins B, Renwick C, Ensor T, Shinkins B, Jayne D, Meads D. What factors affect patients' ability to access healthcare? an overview of systematic reviews. Tropical Medicine & International Health. 2021;26(10):1177-88. https://doi.org/10.1111/tmi.13651.
194. Roberts T, Miguel Esponda G, Krupchanka D, Shidhaye R, Patel V, Rathod S. Factors associated with health service utilisation for common mental disorders: a systematic review. BMC Psychiatry. 2018;18(1):262. https://doi.org/10.1186/s12888-018-1837-1.
195. Arundell L-L, Greenwood H, Baldwin H, Kotas E, Smith S, Trojanowska K, et al. Advancing mental health equality: a mapping review of interventions, economic evaluations and barriers and facilitators. Systematic Reviews. 2020;9(1):115. https://doi.org/10.1186/s13643-020-01333-6.
196. Stangl AL, Earnshaw VA, Logie CH, van Brakel W, C. Simbayi L, Barré I, et al. The Health Stigma and Discrimination Framework: a global, crosscutting framework to inform research, intervention development, and policy on health-related stigmas. BMC Medicine. 2019;17(1):31. https://doi.org/10.1186/s12916-019-1271-3.
197. NHS Digital. Data quality of protected characteristics and other vulnerable groups 2022 [Available from: https://digital.nhs.uk/data-and-information/data-collections-and-data-sets/data-sets/mental-health-services-data-set/submit-data/data-quality-of-protected-characteristics-and-other-vulnerable-groups#aims-and-background.

198. Semlyen J, King M, Varney J, Hagger-Johnson G. Sexual orientation and symptoms of common mental disorder or low wellbeing: combined meta-analysis of 12 UK population health surveys. BMC Psychiatry. 2016;16(1):67. https://doi.org/10.1186/s12888-016-0767-z.

199. Jaspal R, Lopes B, Breakwell GM. Minority stressors, protective factors and mental health outcomes in lesbian, gay and bisexual people in the UK. Current Psychology. 2023;42(28):24918-34. https://doi.org/10.1007/s12144-022-03631-9.

200. Fish JN, King-Marshall EC, Turpin RE, Aparicio EM, Boekeloo BO. Assessing the implementation of an LGBTQ+ mental health services training program to determine feasibility and acceptability during the COVID-19 pandemic. Prevention Science. 2023. https://doi.org/10.1007/s11121-023-01505-5.

201. LGBT Foundation. If we're not counted, we don't count: good practice guide to monitoring sexual orientation and trans status. 2021. Available from: https://lgbt.foundation/wp-content/uploads/2023/12/If20WeE28099re20Not20Counted20We20DonE28099t20Count20FINAL-2.pdf.

202. NHS England. Sexual Orientation Monitoring Information Standard 2022 [Available from: https://www.england.nhs.uk/about/equality/equality-hub/patient-equalities-programme/equality-frameworks-and-information-standards/sexual-orientation-monitoring-information-standard/.

203. Brooks H, Llewellyn CD, Nadarzynski T, Pelloso FC, De Souza Guilherme F, Pollard A, et al. Sexual orientation disclosure in health care: a systematic review. British Journal of General Practice. 2018;68(668):e187. https://doi.org/10.3399/bjgp18X694841.

204. Moore SE, Wierenga KL, Prince DM, Gillani B, Mintz LJ. Disproportionate impact of the COVID-19 pandemic on perceived social support, mental health and somatic symptoms in sexual and gender minority populations. Journal of Homosexuality. 2021;68(4):577-91. https://doi.org/10.1080/00918369.2020.1868184.

205. Firk C, Großheinrich N, Scherbaum N, Deimel D. The impact of social connectedness on mental health in LGBTQ + identifying individuals during the COVID-19 pandemic in Germany. BMC Psychology. 2023;11(1):252. https://doi.org/10.1186/s40359-023-01265-5.

206. RStudio Team. RStudio: Integrated Development Environment for R Boston, MA: RStudio, PBC; 2021 [Available from: http://www.rstudio.com/.

207. Office for National Statistics. Sexual orientation, England and Wales: Census 2021 2023 [Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/sexuality/bulletins/sexualorientationenglandandwales/census2021.

208. Institute for Government Analysis. Timeline of UK government coronavirus lockdown and measures, March 2020 to December 2021. 2022. Available from: https://www.instituteforgovernment.org.uk/sites/default/files/2022-12/timeline-coronavirus-lockdown-december-2021.pdf.

209. LGBT Foundation. Hidden Figures: LGBT Health Inequalities in the UK. 2023. Available from: https://lgbt.foundation/wp-content/uploads/2023/12/Hidden-figures-LGBT-health-inequalities-in-the-UK.pdf.

210. Rimes KA, Broadbent M, Holden R, Rahman Q, Hambrook D, Hatch SL, et al. Comparison of treatment outcomes between lesbian, gay, bisexual and heterosexual individuals receiving a primary care psychological intervention. Behavioural and Cognitive Psychotherapy. 2018;46(3):332-49. https://doi.org/10.1017/S1352465817000583.

211. Lloyd CEM, Rimes KA, Hambrook DG. LGBQ adults' experiences of a CBT wellbeing group for anxiety and depression in an Improving Access to Psychological Therapies Service: a qualitative service evaluation. Cognitive Behaviour Therapist. 2021;13:e58. https://doi.org/10.1017/S1754470X20000598.

212. Durso LE, Meyer IH. Patterns and predictors of disclosure of sexual orientation to healthcare providers among lesbians, gay men, and bisexuals. Sexuality Research and Social Policy. 2013;10(1):35-42. https://doi.org/10.1007/s13178-012-0105-2.

213. NHS England. Advancing mental health equalities in NHS Talking Therapies for anxiety and depression services 2023 [Available from: https://www.england.nhs.uk/mental-health/adults/nhs-talking-therapies/advancing-mental-health-equalities/.

214. Brown JS, Boardman J, Whittinger N, Ashworth M. Can a self-referral system help improve access to psychological treatments? British Journal of General Practice. 2010;60(574):365-71. https://doi.org/10.3399/bjgp10X501877.

215. Habicht J, Viswanathan S, Carrington B, Hauser TU, Harper R, Rollwage M. Closing the accessibility gap to mental health treatment with a personalized self-referral chatbot. Nature Medicine. 2024;30(2):595-602. https://doi.org/10.1038/s41591-023-02766-x.

216. Pollard A, Bradley J, Cooper M, Sadhwani S, Northam A, Llewellyn C. The NHS England Fundamental Information Standard for Monitoring Sexual Orientation. British Journal of General Practice. 2019;69(679):94. https://doi.org/10.3399/bjgp19X701213.

217. Routen A, Akbari A, Banerjee A, Katikireddi SV, Mathur R, McKee M, et al. Strategies to record and use ethnicity information in routine health data. Nature Medicine. 2022;28(7):1338-42. https://doi.org/10.1038/s41591-022-01842-y.

218. Kidd JD, Jackman KB, Barucco R, Dworkin JD, Dolezal C, Navalta TV, et al. Understanding the impact of the COVID-19 pandemic on the mental health of transgender and gender nonbinary individuals engaged in a longitudinal cohort study. Journal of Homosexuality. 2021;68(4):592-611. https://doi.org/10.1080/00918369.2020.1868185.

219. Government Equalities Office. LGBT Action Plan: Improving the lives of lesbian, gay, bisexual and transgender people. 2018. Available from: https://assets.publishing.service.gov.uk/media/5b39e91ee5274a0bbef01fd5/GEO-LGBT-Action-Plan.pdf.

220. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. International Journal for Quality in Health Care. 2007;19(6):349-57. https://doi.org/10.1093/intqhc/mzm042.

221. Office for National Statistics. Gender identity, England and Wales: Census 2021 2023 [Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/genderidentity/bulletins/genderidentityenglandandwales/census2021.

222. Qualtrics. Qualtrics. May 2023 ed. Provo, Utah, USA2020.

223. QSR International Pty Ltd. NVivo. 12 ed2018.

224. Milton DC, Knutson D. Family of origin, not chosen family, predicts psychological health in a LGBTQ+ sample. Psychology of Sexual Orientation and Gender Diversity. 2023;10(2):269. https://doi.org/10.1037/sgd0000531.

225. McElroy E, Herrett E, Patel K, Piehlmaier DM, Gessa GD, Huggins C, et al. Living alone and mental health: parallel analyses in UK longitudinal population surveys and electronic health records prior to and during the COVID-19 pandemic. BMJ Mental Health. 2023;26(1):e300842. https://doi.org/10.1136/bmjment-2023-300842.

226. Elmer EM, van Tilburg T, Fokkema T. Minority stress and loneliness in a global sample of sexual minority adults: the roles of social anxiety, social inhibition, and community involvement. Archives of Sexual Behavior. 2022;51(4):2269-98. https://doi.org/10.1007/s10508-021-02132-3.

227. Cabral J, Pinto TM. Gender, shame, and social support in LGBTQI+ exposed to discrimination: a model for understanding the impact on mental health. Social Sciences. 2023;12(8). https://doi.org/10.3390/socsci12080454.

228. Whaibeh E, Mahmoud H, Vogt EL. Reducing the treatment gap for LGBT mental health needs: the potential of telepsychiatry. The Journal of Behavioral Health Services & Research. 2020;47(3):424-31. https://doi.org/10.1007/s11414-019-09677-1.

229. Royal College of Psychiatrists. It's time to restore continuity of care in our mental health services 2024 [Available from: https://www.rcpsych.ac.uk/news-and-features/blogs/detail/presidents-blog/2024/02/29/it-s-time-to-restore-continuity-of-care-in-our-mental-health-services.

230. NHS Confederation. Health and Care LGBTQ+ Inclusion Framework. 2022. Available from: https://www.nhsconfed.org/system/files/2022-10/Health-and-Care-LGBTQ%2B-Inclusion-Framework.pdf.

231. Routen A, Bodicoat D, Willis A, Treweek S, Paget S, Khunti K. Tackling the lack of diversity in health research. British Journal of General Practice. 2022;72(722):444-7. https://doi.org/10.3399/bjgp22X720665.

232. Gnan GH, Rahman Q, Ussher G, Baker D, West E, Rimes KA. General and LGBTQ-specific factors associated with mental health and suicide risk among LGBTQ students. Journal of Youth Studies. 2019;22(10):1393-408. https://doi.org/10.1080/13676261.2019.1581361.

233. Hambrook DG, Aries D, Benjamin L, Rimes KA. Group intervention for sexual minority adults with common mental health problems: preliminary evaluation. Behavioural and Cognitive Psychotherapy. 2022;50(6):575-89. https://doi.org/10.1017/S1352465822000297.

234. NHS England. Tackling inequalities in healthcare access, experience, and outcomes. 2022. Available from: https://www.england.nhs.uk/wp-content/uploads/2022/07/B1779-Actionable-Insights-Tackling-inequalities-in-healthcare-access-experience-and-outcomes-guidance-July-202.pdf.

235. Saunders CL. Using routine data to improve lesbian, gay, bisexual, and transgender health. Interactive Journal of Medical Research. 2024;13:e53311. https://doi.org/10.2196/53311.

Appendices

Appendix A – Guidance for Reporting Involvement of Patients and the Public (GRIPP2) reporting checklists (171)

Table A1. GRIPP2 reporting checklist describing the patient and public involvement (PPI) conducted as part of this research

Section and topic	Details
Aims and objectives of the PPI	The PPI activities conducted during this thesis ultimately aimed to ensure that the research was appropriate and sensitive to the context of LGBTQ+ mental health, and to enhance the validity and applicability of the research findings. The objectives of the PPI activities were to involve public advisers in; • defining research questions that are relevant and a priority to them, • reviewing a HIAT to embed an equity lens into the research, • designing the research to ensure methods are ethical and appropriate, • reviewing study documentation to improve the accessibility and inclusivity of participant materials, • identifying participant recruitment barriers and ways to overcome them, • the analysis and interpretation of research findings, • and the development and dissemination of outputs, including journal articles and lay summaries, to share research findings.
Methods used for PPI	The PPI activities conducted during this thesis were supported by the PhD researcher's studentship funding and included; • recruiting two public advisers with lived experience of being LGBTQ+ and accessing mental health services in Lancashire and South Cumbria, • presenting the initial research idea and questions to the ARC NWC public adviser forum and the LSCft service user research group for their review and feedback, • conducting three virtual meetings using Microsoft Teams with a public adviser to discuss the research questions, study design, and participant recruitment, • sharing an initial draft of the HIAT via email with a public adviser for their review and feedback, • sharing participant documentation for the qualitative study (e.g., study advert, participant information sheet, consent form, monitoring form, debrief sheet) via email with two public advisers for their review and feedback, • conducting pilot interviews using Microsoft Teams with two public advisers for feedback on the interview guide and interviewing technique, • conducting four hybrid meetings attended either virtually on Microsoft Teams or in-person at Lancaster University with two public advisers to share preliminary findings of the qualitative study and discuss their interpretation, • sharing a lay summary of the systematic mapping review findings via email with a public adviser for their review and feedback, • sharing a draft of the qualitative study journal article via email with two public advisers and including them as co-authors on the final version, • and presenting the findings to the ARC NWC public adviser forum for their review and feedback.
Results of the PPI	These PPI activities took place across different stages of the research and contributed to how the research was conducted in a variety of ways; • *Research questions:* Public advisers and LSCft service users confirmed the importance and relevance of the proposed research idea and questions from a lived experience perspective, particularly highlighting the need for the research in this geographical area. They suggested refining the research questions to not only consider access as a single time point but to also consider the complex journeys service users often experience when accessing mental health services. As such, the research questions were amended accordingly to incorporate an exploration of access beyond just referrals or contacts, and Levesque's Conceptual Framework for Healthcare Access was embedded into the research to enable the conceptualisation of access as a complex concept. • *Study design:* LSCft service users indicated that using de-identified routinely collected mental health service data to explore access for underserved population groups, such as LGBTQ+ people, was appropriate and ethical as long as stringent data security measures were followed. The PhD researcher subsequently applied for HRA ethical approval to ensure that the quantitative study had clear outlined procedures to protect the security of the data and the anonymity of service users. For the

	qualitative study, public advisers and LSCft service users suggested that interviews would be more appropriate for LGBTQ+ participants due to the sensitive nature of the research and would enable participants to be more open than alternative methods such as focus groups or surveys. They also suggested that giving participants the option of having the interview face-to-face or virtual would also be beneficial to improve participant experience, and did not believe that offering a £25 voucher as reimbursement for taking part was an undue inducement. The design of the qualitative study was subsequently informed by these recommendations. • *Participant recruitment:* A public adviser recommended expanding the LGBTQ+ initialism in the qualitative study advert to help potential participants identify themselves as eligible to take part. The advert was amended accordingly. A public adviser suggested putting up paper copies of the study advert rather than just relying on electronic methods (e.g., social media) to avoid digital exclusion of some participants and also recommended some additional LGBTQ+ specific spaces to potentially recruit participants from. Paper copies of the study adverts were placed in various cafes and LGBTQ+ specific spaces in areas local to the PhD researcher, which she believes may have contributed to the recruitment of four additional participants. • *Data collection:* Two public advisers reviewed participant documentation for the qualitative study and recommended changes to some of the wording used across the documents to improve accessibility and inclusivity (e.g., writing LGBTQ+ out in full so that potential participants felt included, adding that taking part will not affect the care participants receive from mental health services). Two public advisers took part in a pilot interview and recommended changes to the interview guide to reduce repetition and offer more opportunities to prompt participants to expand (e.g., using phrases such as "what was it like", not being too specific about the services accessed to allow participants to use their own terminology). The participant documentation and interview guide were amended as a result of the feedback from public advisers. • *Analysis and interpretation:* Two public advisers were included in the wider supervisory group for the qualitative study which met four times during the data analysis stage. Emerging findings were shared iteratively with the group to ensure that the PhD researcher had appropriately interpreted the meaning of participants' experiences. Public advisers shared their thoughts on the disproportionate impacts the pandemic may have had on the mental health of LGBTQ+ people and their access to mental health services, and reflected on how these resonated with the patterns emerging from the interview data; all of which added validity to the findings. • *Dissemination:* A public adviser provided feedback on a lay summary of the systematic mapping review, suggesting changes to the language to ensure its accessibility for people who were not familiar with the research area or methodology. Two public advisers were included in the authorship of the qualitative study journal article and provided feedback on the final draft, again suggesting a few changes to the language to ensure its accessibility for lay audiences.
Discussion and conclusion of the PPI	The knowledge and experience of public advisers and LSCft service users throughout this research was effective in helping to contextualise the complexities of accessing mental health services and the potential challenges LGBTQ+ people experience, during and beyond the COVID-19 pandemic. PPI activities were particularly supportive in ensuring that the research was conducted in a sensitive and inclusive manner, and raising issues that had not been considered by the PhD researcher. The PhD researcher found conducting pilot interviews with public advisers extremely valuable prior to data collection to practice professional interviewing skills. A number of changes were made to the research as a result of the input from public advisers and LSCft service users, which ultimately influenced not only the validity and applicability of the research findings, but also the practical undertaking of the research (e.g., participant recruitment, interviewing technique). In addition, the PhD researcher endeavoured throughout the research to feed back to public advisers how their involvement had influenced the studies.
Reflections/critical perspective of the PPI	The experience of working collaboratively with public advisers was overall positive and the PhD researcher found it both supportive and rewarding during the research. There were some challenges in embedding PPI activities into the timeline of the PhD (e.g., time constraints, engagement issues), which meant that the impact of PPI may not have always been maximised. For example, it was sometimes difficult to get a timely response from public advisers to arrange follow-up meetings or request feedback on documents, and so their views were not always adequately incorporated into the research. Only one public adviser was involved from the start of the PhD, another public adviser did not get involved until the start of the qualitative study; both of these public advisers identified as sexual minority cisgender males. As a result, there was no inclusion of a gender minority voice in the research despite efforts to recruit via various channels. Public advisers were asked for their views on how the PPI was conducted during the PhD; both highlighted that the PhD researcher was receptive to feedback and that they found it to be an interesting experience.

* *ARC NWC*, Applied Research Collaboration North West Coast; *HIAT*, health inequalities assessment tool; *HRA*, Health Research Authority; *LGBTQ+*, lesbian, gay, bisexual, transgender, and queer; *LSCft*, Lancashire and South Cumbria NHS Foundation Trust; *PPI*, patient and public involvement

Table A2. GRIPP2 reporting checklist describing the stakeholder engagement (SE) conducted as part of this research

Section and topic	Details
Aim and objectives of the SE	The SE activities conducted during this thesis ultimately aimed to ensure that the research was appropriate and sensitive to the wider context of the mental healthcare system and to enhance the validity and applicability of the research findings. The objectives of the SE activities were to involve stakeholders in: • defining research questions that are relevant and a priority to them and their organisations, • reviewing a HIAT to embed an equity lens into the research, • designing the research to ensure methods are ethical and appropriate, • the analysis and interpretation of research findings, • and the development and dissemination of outputs, including journal articles and lay summaries, to share research findings.
Methods used for SE	The SE activities conducted during this thesis were supported by the PhD researcher establishing a network of key stakeholders early on in the PhD and included; • recruiting a mental health practitioner with professional experience of delivering mental health services in Lancashire and South Cumbria, • conducting a series of initial meetings with interested stakeholders (e.g., mental health practitioners, service managers, analysts, public health consultants, third sector staff) to generate research ideas and questions, and options for study design, • sharing an initial draft of the HIAT via email with a mental health practitioner for their review and feedback, • involving two mental health practitioners in title, abstract, and full-text screening and data extraction for the systematic mapping review, • conducting regular meetings and email contact with LSCft colleagues (e.g., directors, service managers, analysts) to navigate the quantitative study (e.g., submitting the ethics application, gaining access to the Trust data, troubleshooting issues, analysis and interpretation of the Trust data), • sharing a draft of the systematic mapping review journal article via email with two mental health practitioners and including them as co-authors on the final version, • sharing drafts of the quantitative and qualitative study journal articles via email with a mental health practitioner and including them as a co-author on the final versions, • and seeking out opportunities to present at internal NHS Trust meetings (e.g., Research and Development Group, Population Health and Inequalities Group, Service User Experience Group) to disseminate findings and ask colleagues to feedback on their interpretation.
Results of the SE	These SE activities took place across different stages of the research and contributed to how the research was conducted in a variety of ways; • *Research questions:* Collating the varied perspectives of stakeholders enabled the formulation of a gap in the evidence base within the local context of Lancashire and South Cumbria. Whilst research on access for LGBTQ+ population groups was not necessarily prioritised by some stakeholders, understanding inequalities in access for underserved population groups as a whole was of interest to all stakeholders. A mental health practitioner recruited to be embedded in the PhD as an “expert-by-experience” indicated that in their practice they had seen a lack of sexual orientation and gender identity data collected by services and that improving inclusivity for LGBTQ+ service users was needed across services. As such, the proposed research idea and questions were deemed relevant and a priority to professionals and their organisations. • *Study design:* Regular meetings with LSCft colleagues helped to explore the feasibility of using routinely collected mental health service data to examine access for LGBTQ+ population groups during the COVID-19 pandemic. These meetings supported the development of the quantitative study protocol, ethics application, and statistical analysis plans. All of which benefitted from the input of those with contextual knowledge of mental health services and the availability and structure of the data collected by services. • *Data collection:* Regular meetings with LSCft colleagues supported the PhD researcher to securely access the routinely collected mental health service data and deal with any troubleshooting issues. The PhD researcher was not familiar with the electronic platform the data was stored on and so LSCft colleagues provided technical support where necessary. Two mental health practitioners were involved in the title, abstract, and full-text screening, and data extraction stages of the systematic mapping review. Neither of these individuals had been involved in this process before and so it helped to build their capacity in research. Discussions about what studies to include or exclude from a professional experience perspective helped to clarify the inclusion criteria (e.g., what services counted as secondary mental healthcare provided by the NHS). A mental health practitioner also reviewed participant documentation for the qualitative study and agreed with recommended

	changes to the wording used across the documents, particularly around taking part not being linked to the care participants would receive from mental health services. • *Analysis and interpretation:* Meetings with LSCft colleagues helped with clarifying issues with the analysis of the routinely collected mental health service data, such as defining variables and agreeing where variables needing collapsing (e.g., referral source, ethnicity) to make analysis easier. These meetings also supported the interpretation of the findings, particularly around changes over time where the recording on a system or of a service influenced changes in the data and so needed accounting for in the analysis. Emerging findings from the systematic mapping review were shared with the two mental health practitioners to ensure that the PhD researcher had appropriately interpreted data from the primary studies. Their involvement suggested that the findings resonated with their first-hand experiences of delivering mental health services. Findings from the quantitative and qualitative studies were also shared with a mental health practitioner to help the PhD researcher interpret the findings within the local context of mental health services. The mental health practitioner shared their thoughts on challenges to service delivery during the COVID-19 pandemic, how it influenced data collection, potential reasons for missing data, and this helped to contextualise the patterns emerging from both the quantitative and qualitative studies; all of which added validity and applicability to the findings. • *Dissemination:* Two mental health practitioners were included in the authorship of the systematic mapping review journal article and provided feedback on the final draft, suggesting a few opportunities to expand further on the interpretation of the findings. A mental health practitioner was included in the authorship of the quantitative and qualitative study journal articles and provided feedback on the final drafts, again suggesting a few changes to the discussion in particular around the implications for mental health service delivery. The PhD researcher presented at a number of internal NHS Trust meetings to not only disseminate the research findings, but to raise awareness of the challenges identified, and to co-produce a series of recommendations to improve sexual orientation and gender identity data collection in mental health services and LGBTQ+ service inclusivity. Themes arising from these meetings were integrated into the discussion chapter of this thesis.
Discussion and conclusion of the SE	The contextual knowledge and professional experience of stakeholders throughout this research was effective in helping to contextualise how COVID-19 influenced mental health service delivery and potential challenges underserved population groups experience accessing services. SE activities were particularly supportive in trying to understand the routinely collected mental health service data, and interpreting changes in the data and the reasons behind data quality issues. Many of the stakeholders involved raised issues that had not been considered by the PhD researcher and enhanced her knowledge of how the mental health system functions (or did not function in the context of the COVID-19 pandemic). The PhD researcher found disseminating the findings of the research extremely valuable as she felt it had an impact on their awareness of inequalities that LGBTQ+ population groups can experience and the current challenges associated with using routinely collected mental health services data to research inequalities. A number of changes were made to the research as a result of the input from stakeholders which ultimately influenced not only the validity and applicability of the research findings, but also the practical undertaking of the research (e.g., data cleaning and analysis). In addition, as part of their involvement in all three studies, the mental health practitioner had opportunities to build their research capacity and as a result, has secured a place on a PhD programme which they have since taken up to continue their development in research.
Reflections/critical perspective of the SE	SE activities were not always a rewarding or fruitful endeavour as stakeholders were sometimes naïve to existing evidence around the inequalities experienced by LGBTQ+ people or possessed a lack of knowledge and awareness around the collection of sexual orientation and gender identity data. From a lived experience perspective, this was sometimes disheartening for the PhD researcher as it didn't feel like the proposed research was of interest or benefit to service providers. Maximising the input from stakeholders was sometimes challenging due to a lack of time and resources for various colleagues to input into the design of the research, and the analysis and its interpretation. This lack of engagement was combatted by seeking out opportunities to go to stakeholders (e.g., presenting within existing internal meetings) rather than trying to convene a separate forum for discussion. When disseminating the findings, interest increased and stakeholders were keen to receive recommendations that they could implement within their day-to-day roles. Hearing the lived stories of LGBTQ+ service users was particularly thought-provoking for stakeholders for it brought their experience alive, alongside the calls to action on data quality so that the visibility of LGBTQ+ people within mental health services could be improved. This renewed sense of enthusiasm was reassuring as it helped to progress the PhD researcher's ideas for future plans to continue to work with the NHS Trust to improve sexual orientation and gender identity data collection and LGBTQ+ service inclusivity.

* *HIAT*, health inequalities assessment tool; *LGBTQ+*, lesbian, gay, bisexual, transgender, and queer; *LSCft*, Lancashire and South Cumbria NHS Foundation Trust; *NHS*, National Health Service; *SE*, stakeholder engagement

Appendix B - Supplementary material for systematic mapping review (Chapter 4)

Table B1. Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) checklist (148)

Section	Item no.	PRISMA-ScR checklist item	Reported of page no.
Title			
Title	1	Identify the report as a scoping review.	66
Abstract			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	66
Introduction			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	67-68
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualise the review questions and/or objectives.	68
Methods			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	63
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	70 Table 4
Information sources	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	69 Table B2
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	Table 3 Table B2
Selection of sources of evidence	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	70-71
Data charting process	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	71
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	71
Critical appraisal of individual sources of	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any	Not applicable

Section	Item no.	PRISMA-ScR checklist item	Reported of page no.
evidence		data synthesis (if appropriate).	
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	71
Results			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	72 Figure 4
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	73 Table B3
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	Not applicable
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	73-80 Table B3 Table B4
Synthesis of results	18	Summarise and/or present the charting results as they relate to the review questions and objectives.	73-80 Figure 5 Figure 6 Table B3 Table B4
Discussion			
Summary of evidence	19	Summarise the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	80-83
Limitations	20	Discuss the limitations of the scoping review process.	83
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	84
Funding			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	4

Table B2. Search strategies

Database (platform)	Search number	Search string	Number of results (date search conducted)
Academic Search Ultimate (EBSCOhost)	S1	(DE “MENTAL health services”) OR (TI (“mental health care” OR “mental healthcare” OR “mental health service*” OR “mental health therap*” OR “mental health treatment*” OR “psychological care” OR “psychological service*” OR “psychological therap*” OR “psychological treatment*” OR “psychiatric care” OR “psychiatric service*” OR “psychiatric therap*” OR “psychiatric treatment*”)) OR (AB (“mental health care” OR “mental healthcare” OR “mental health service*” OR “mental health therap*” OR “mental health treatment*” OR “psychological care” OR “psychological service*” OR “psychological therap*” OR “psychological treatment*” OR “psychiatric care” OR “psychiatric service*” OR “psychiatric therap*” OR “psychiatric treatment*”))	583 results (25/05/2022)
	S2	((DE “HEALTH services accessibility”) OR (DE “MENTAL health services use”)) OR (TI (“access” OR “accessibility” OR “availability” OR “consultation*” OR “contact*” OR “entry” OR “pathway*” OR “referral*” OR “utilisation” OR “utilization” OR “use” OR “uptake”)) OR (AB (“access” OR “accessibility” OR “availability” OR “consultation*” OR “contact*” OR “entry” OR “pathway*” OR “referral*” OR “utilisation” OR “utilization” OR “use” OR “uptake”))	
	S3	((DE “HEALTH equity”) OR (DE “DISCRIMINATION in medical care”) OR (DE “MEDICAL care of minorities”)) OR (TI (“barrier*” OR “determinant*” OR “difference*” OR “disadvantage*” OR “discriminat*” OR “disparit*” OR “equal*” OR “equit*” OR “facilitator*” OR “inequal*” OR “inequit*” OR “intersectional*” OR “minorit*” OR “unequal” OR “unfair” OR “variation*”)) OR (AB (“barrier*” OR “determinant*” OR “difference*” OR “disadvantage*” OR “discriminat*” OR “disparit*” OR “equal*” OR “equit*” OR “facilitator*” OR “inequal*” OR “inequit*” OR “intersectional*” OR “minorit*” OR “unequal” OR “unfair” OR “variation*”))	
	S4	(TI (“united kingdom” OR “uk” OR “england” OR “wales” OR “scotland” OR “northern ireland” OR “national health service” OR “nhs” OR “london”)) OR (AB (“united kingdom” OR “uk” OR “england” OR “wales” OR “scotland” OR “northern ireland” OR “national health service” OR “nhs” OR “london”))	
	S1 AND S2 AND S3 AND S4	Limited to English language Limited to 2014+	
CINAHL (EBSCOhost)	S1	((MH “Mental Health Services+”) OR (MH “Community Mental Health Services”)) OR (TI (“mental health care” OR “mental healthcare” OR “mental health service*” OR “mental health therap*” OR “mental health treatment*” OR “psychological care” OR “psychological service*” OR “psychological therap*” OR “psychological treatment*” OR “psychiatric care” OR “psychiatric service*” OR “psychiatric therap*” OR “psychiatric treatment*”)) OR (AB (“mental health care” OR “mental healthcare” OR “mental health service*” OR “mental health therap*” OR “mental health treatment*” OR “psychological care” OR “psychological service*” OR “psychological therap*” OR “psychological treatment*” OR “psychiatric care” OR “psychiatric service*” OR “psychiatric therap*” OR “psychiatric treatment*”))	614 results (25/05/2022)
	S2	((MH “Health Services Accessibility+”) OR (MH “Referral and Consultation+”)) OR (TI (“access” OR “accessibility” OR “availability” OR “consultation*” OR “contact*” OR “entry” OR “pathway*” OR “referral*” OR “utilisation” OR “utilization” OR “use” OR “uptake”)) OR (AB (“access” OR “accessibility” OR “availability” OR “consultation*” OR “contact*” OR “entry” OR “pathway*” OR “referral*” OR “utilisation” OR “utilization” OR “use” OR “uptake”))	
	S3	((MH “Healthcare Disparities”) OR (MH “Social Determinants of Health”)) OR (TI (“barrier*” OR “determinant*” OR “difference*” OR “disadvantage*” OR “discriminat*” OR “disparit*” OR “equal*” OR “equit*” OR “facilitator*” OR “inequal*” OR “inequit*” OR “intersectional*” OR “minorit*” OR “unequal” OR “unfair” OR “variation*”)) OR (AB (“barrier*” OR “determinant*” OR “difference*” OR “disadvantage*” OR “discriminat*” OR “disparit*” OR “equal*” OR “equit*” OR “facilitator*” OR “inequal*” OR “inequit*” OR “intersectional*” OR “minorit*” OR “unequal” OR “unfair” OR “variation*”))	

	S4	(MH “United Kingdom”) OR (TI (“united kingdom” OR “uk” OR “england” OR “wales” OR “scotland” OR “northern ireland” OR “national health service” OR “nhs” OR “london”)) OR (AB (“united kingdom” OR “uk” OR “england” OR “wales” OR “scotland” OR “northern ireland” OR “national health service” OR “nhs” OR “london”))	
	S1 AND S2 AND S3 AND S4	Limited to English language Limited to 2014+	
EMBASE (Ovid)	S1	1. “mental health care”.ab,kw,ti. 2. “mental healthcare”.ab,kw,ti. 3. “mental health service*””.ab,kw,ti. 4. “mental health therap*”.ab,kw,ti. 5. “mental health treatment*”.ab,kw,ti. 6. “psychological care”.ab,kw,ti. 7. “psychological service*”.ab,kw,ti. 8. “psychological therap*”.ab,kw,ti. 9. “psychological treatment*”.ab,kw,ti. 10. “psychiatric care”.ab,kw,ti. 11. “psychiatric service*”.ab,kw,ti. 12. “psychiatric therap*”.ab,kw,ti. 13. “psychiatric treatment*”.ab,kw,ti. 14. exp mental health service/ 15. exp community mental health service 16. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15	1,042 results (25/05/2022)
	S2	17. “access”.ab,kw,ti. 18. “accessibility”.ab,kw,ti. 19. “availability”.ab,kw,ti. 20. “consultation*”.ab,kw,ti. 21. “contact*”.ab,kw,ti. 22. “entry”.ab,kw,ti. 23. “pathway*”.ab,kw,ti. 24. “referral*”.ab,kw,ti. 25. “utilisation”.ab,kw,ti. 26. “utilization”.ab,kw,ti. 27. “use”.ab,kw,ti. 28. “uptake”.ab,kw,ti. 29. exp health care access/ 30. exp patient referral/ 31. 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30	
	S3	32. “barrier*”.ab,kw,ti. 33. “determinant*”.ab,kw,ti. 34. “difference*”.ab,kw,ti. 35. “disadvantage*”.ab,kw,ti. 36. “discriminat*”.ab,kw,ti. 37. “disparit*”.ab,kw,ti. 38. “equal*”.ab,kw,ti.	

		39. “equit*”.ab,kw,ti. 40. “facilitator*”.ab,kw,ti. 41. “inequal*”.ab,kw,ti. 42. “inequit*”.ab,kw,ti. 43. “intersectional*”.ab,kw,ti. 44. “minorit*”.ab,kw,ti. 45. “unequal” .ab,kw,ti. 46. “unfair” .ab,kw,ti. 47. “variation*”.ab,kw,ti. 48. exp health care disparity/ 49. exp health disparity/ 50. exp social inequality/ 51. exp social determinants of health/ 52. 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51	
	S4	53. “united kingdom”.ab,kw,ti. 54. “uk”.ab,kw,ti. 55. “england”.ab,kw,ti. 56. “wales”.ab,kw,ti. 57. “scotland”.ab,kw,ti. 58. “northern ireland”.ab,kw,ti. 59. “national health service”.ab,kw,ti. 60. “nhs”.ab,kw,ti. 61. “london”.ab.kw.ti 62. exp united kingdom/ 63. 53 or 54 or 55 or 56 or 57 or 58 or 59 or 60 or 61 or 62	
	S1 AND S2 AND S3 AND S4	64. 16 and 31 and 52 and 63 65. limit to (english language and yr=”2014 -Current”)	
MEDLINE Complete (EBSCOhost)	S1	((MH “Mental Health Services+”) OR (MH “Community Mental Health Services”)) OR (TI (“mental health care” OR “mental healthcare” OR “mental health service*” OR “mental health therap*” OR “mental health treatment*” OR “psychological care” OR “psychological service*” OR “psychological therap*” OR “psychological treatment*” OR “psychiatric care” OR “psychiatric service*” OR “psychiatric therap*” OR “psychiatric treatment*”)) OR (AB (“mental health care” OR “mental healthcare” OR “mental health service*” OR “mental health therap*” OR “mental health treatment*” OR “psychological care” OR “psychological service*” OR “psychological therap*” OR “psychological treatment*” OR “psychiatric care” OR “psychiatric service*” OR “psychiatric therap*” OR “psychiatric treatment*”))	722 results (25/05/2022)
	S2	((MH “Health Services Accessibility+”) OR (MH “Referral and Consultation+”)) OR (TI (“access” OR “accessibility” OR “availability” OR “consultation*” OR “contact*” OR “entry” OR “pathway*” OR “referral*” OR “utilisation” OR “utilization” OR “use” OR “uptake”)) OR (AB (“access” OR “accessibility” OR “availability” OR “consultation*” OR “contact*” OR “entry” OR “pathway*” OR “referral*” OR “utilisation” OR “utilization” OR “use” OR “uptake”))	
	S3	((MH “Healthcare Disparities”) OR (MH “Health Inequities+”) OR (MH “Social Determinants of Health”)) OR (TI (“barrier*” OR “determinant*” OR “difference*” OR “disadvantage*” OR “discriminat*” OR “disparit*” OR “equal*” OR “equit*” OR “facilitator*” OR “inequal*” OR “inequit*” OR “intersectional*” OR “minorit*” OR “unequal” OR “unfair” OR “variation*”)) OR (AB (“barrier*” OR “determinant*” OR “difference*” OR “disadvantage*” OR “discriminat*” OR “disparit*” OR “equal*” OR “equit*” OR “facilitator*” OR “inequal*” OR “inequit*” OR “intersectional*” OR “minorit*” OR “unequal” OR “unfair” OR “variation*”))	

	S4	(MH “United Kingdom”) OR (TI (“united kingdom” OR “uk” OR “great britain” OR “england” OR “wales” OR “scotland” OR “northern ireland” OR “national health service” OR “nhs” OR “london”)) OR (AB (“united kingdom” OR “uk” OR “england” OR “wales” OR “scotland” OR “northern ireland” OR “national health service” OR “nhs” OR “london”))	
	S1 AND S2 AND S3 AND S4	Limited to English language Limited to 2014+	
PsycINFO (EBSCOhost)	S1	((DE “Mental Health Services”) OR (DE “Community Mental Health Services”)) OR (TI (“mental health care” OR “mental healthcare” OR “mental health service*” OR “mental health therap*” OR “mental health treatment*” OR “psychological care” OR “psychological service*” OR “psychological therap*” OR “psychological treatment*” OR “psychiatric care” OR “psychiatric service*” OR “psychiatric therap*” OR “psychiatric treatment*”)) OR (AB (“mental health care” OR “mental healthcare” OR “mental health service*” OR “mental health therap*” OR “mental health treatment*” OR “psychological care” OR “psychological service*” OR “psychological therap*” OR “psychological treatment*” OR “psychiatric care” OR “psychiatric service*” OR “psychiatric therap*” OR “psychiatric treatment*”))	471 results (25/05/2022)
	S2	((DE “Health Care Access”) OR (DE “Health Care Utilization”)) OR (TI (“access” OR “accessibility” OR “availability” OR “consultation*” OR “contact*” OR “entry” OR “pathway*” OR “referral*” OR “utilisation” OR “utilization” OR “use” OR “uptake”)) OR (AB (“access” OR “accessibility” OR “availability” OR “consultation*” OR “contact*” OR “entry” OR “pathway*” OR “referral*” OR “utilisation” OR “utilization” OR “use” OR “uptake”))	
	S3	((DE “Health Disparities”) OR (DE “Mental Health Disparities”) OR (DE “Mental Health Stigma”)) OR (TI (“barrier*” OR “determinant*” OR “difference*” OR “disadvantage*” OR “discriminat*” OR “disparit*” OR “equal*” OR “equit*” OR “facilitator*” OR “inequal*” OR “inequit*” OR “intersectional*” OR “minorit*” OR “unequal” OR “unfair” OR “variation*”)) OR (AB (“barrier*” OR “determinant*” OR “difference*” OR “disadvantage*” OR “discriminat*” OR “disparit*” OR “equal*” OR “equit*” OR “facilitator*” OR “inequal*” OR “inequit*” OR “intersectional*” OR “minorit*” OR “unequal” OR “unfair” OR “variation*”))	
	S4	(TI (“united kingdom” OR “uk” OR “england” OR “wales” OR “scotland” OR “northern ireland” OR “national health service” OR “nhs” OR “london”)) OR (AB (“united kingdom” OR “uk” OR “england” OR “wales” OR “scotland” OR “northern ireland” OR “national health service” OR “nhs” OR “london”))	
	S1 AND S2 AND S3 AND S4	Limited to English language Limited to 2014+	
Scopus (Scopus)	S1	TITLE-ABS-KEY (“mental health care” OR “mental healthcare” OR “mental health service*” OR “mental health therap*” OR “mental health treatment*” OR “psychological care” OR “psychological service*” OR “psychological therap*” OR “psychological treatment*” OR “psychiatric care” OR “psychiatric service*” OR “psychiatric therap*” OR “psychiatric treatment*”)	1,062 results (27/05/2022)
	S2	TITLE-ABS-KEY (“access” OR “accessibility” OR “availability” OR “consultation*” OR “contact*” OR “entry” OR “pathway*” OR “referral*” OR “utilisation” OR “utilization” OR “use” OR “uptake”)	
	S3	TITLE-ABS-KEY (“barrier*” OR “determinant*” OR “difference*” OR “disadvantage*” OR “discriminat*” OR “disparit*” OR “equal*” OR “equit*” OR “facilitator*” OR “inequal*” OR “inequit*” OR “intersectional*” OR “minorit*” OR “unequal” OR “unfair” OR “variation*”)	
	S4	TITLE-ABS-KEY (“united kingdom” OR “uk” OR “england” OR “wales” OR “scotland” OR “northern ireland” OR “national health service” OR “nhs” OR “london”)	
	S1 AND S2 AND S3 AND S4	Limited to English language Limited to 2014+	
Web of Science	S1	TS= (“mental health care” OR “mental healthcare” OR “mental health service*” OR “mental health therap*” OR “mental health treatment*” OR “psychological care” OR “psychological service*” OR “psychological therap*” OR “psychological treatment*” OR “psychiatric care” OR	742 results

(Clarivate)		“psychiatric service*” OR “psychiatric therap*” OR “psychiatric treatment*”)	(25/05/2022)
	S2	TS= (“access” OR “accessibility” OR “availability” OR “consultation*” OR “contact*” OR “entry” OR “pathway*” OR “referral*” OR “utilisation” OR “utilization” OR “use” OR “uptake”)	
	S3	TS= (“barrier*” OR “determinant*” OR “difference*” OR “disadvantage*” OR “discriminat*” OR “disparit*” OR “equal*” OR “equit*” OR “facilitator*” OR “inequal*” OR “inequit*” OR “intersectional*” OR “minorit*” OR “unequal” OR “unfair” OR “variation*”)	
	S4	TS= (“united kingdom” OR “uk” OR “england” OR “wales” OR “scotland” OR “northern ireland” OR “national health service” OR “nhs” OR “london”)	
	S1 AND S2 AND S3 AND S4	Limited to English language Limited to 2014+	

Table B3. Summary of included studies

Author	Year	Study location	Study aim	Study setting	Study type - design	Evidence of PPI	Used routinely collected data	Measuring access – using Levesque framework	Main dimensions of inequality studied	Ref
Fernandez de la Cruz et al.	2016	London, England	to explore illness perceptions, help-seeking attitudes, knowledge about the disorder, and causal attributions in individuals from four different ethnic groups	Secondary care	Quantitative – Questionnaire / survey	No	No	Perception of needs and desire for care	Race, ethnicity, culture, and language	(1)
Liberati et al.	2022	England	to use the candidacy construct to enable a theoretically informed examination of access to secondary MH services during COVID-19	Secondary care	Qualitative – Interview	Yes	No	Perception of needs and desire for care	Multiple / exploratory	(2)
Adams et al.	2022	North East England	to understand the experiences of people who experienced homelessness during the COVID-19 with accessing MH support	Other	Qualitative – Interview	Yes	No	Healthcare seeking	Multiple / exploratory	(3)
Arday	2018	UK	to examine the impact of negotiating racial inequality and discrimination at university and the impact on MH	Other	Qualitative – Questionnaire / survey	No	No	Healthcare seeking	Race, ethnicity, culture, and language	(4)
Bailey & Tribe	2021	UK	to explore experiences that underlie help-seeking among UK resident older Black Caribbean adults, and to explore barriers experienced by participants in seeking help from MH services	Other	Qualitative – Interview	No	No	Healthcare seeking	Race, ethnicity, culture, and language	(5)
Bellesi et al.	2020	London, England	to understand why individuals of Black Caribbean origin benefit less from therapy, and what changes could be made to make service provision more culturally relevant	IAPT	Qualitative – Focus group	No	No	Healthcare seeking	Race, ethnicity, culture, and language	(6)
Berry et al.	2020	North West England	to identify the barriers to accessing psychological therapies for severe MH difficulties in later life	Multiple	Qualitative – Interview	Yes	No	Healthcare seeking	Age	(7)
Brooks et al.	2017	London, England	to explore patients' views about accessing and experiencing treatment	Other	Qualitative – Interview	No	No	Healthcare seeking	Occupation	(8)
Brown et al.	2014	London, England	to contrast patterns of informal and formal help-seeking using data from a community psychiatric morbidity survey	Other	Quantitative – Questionnaire / survey	No	No	Healthcare seeking	Multiple / exploratory	(9)
Bryant et al.	2022	Midlands, England	to examine which variables best predict help-seeking from informal and formal	Other	Quantitative – Questionnaire / survey	No	No	Healthcare seeking	Education	(10)

			sources of MH support							
Bu et al.	2021	UK	to examine how engagement with both formal MH support and informal MH support during COVID-19 varied amongst individuals	Other	Quantitative – Questionnaire / survey	No	No	Healthcare seeking	Multiple / exploratory	(11)
Chui et al.	2021	London, England	to identify inequalities in referral source by age, ethnicity, migration status and gender, and to examine differences in referral destination by age, ethnicity, migration status and gender	Secondary care	Quantitative – Observational	No	Yes	Healthcare seeking	Multiple / exploratory	(12)
Daniels et al.	2021	UK	to understand the experiences of psychologically distressed doctors working on the frontline during COVID-19	Other	Qualitative – Interview	Yes	No	Healthcare seeking	Occupation	(13)
Dockery et al.	2015	London, England	to establish the frequency of stigma and non-stigma related treatment barriers to MH care, and investigate demographic and clinical variables associated with stigma-related MH care barriers	Secondary care	Mixed – Multiple	No	No	Healthcare seeking	Multiple / exploratory	(14)
Ennis et al.	2019	Northern Ireland	to assess treatment access, intentions to seek help, and perceived barriers to help-seeking, considering gender	Other	Quantitative – Questionnaire / survey	No	No	Healthcare seeking	Gender	(15)
Fertout et al.	2015	UK	to carry out a PCA of a stigma/BTC scale and assess the association of the derived components with MH symptoms and help-seeking activity	Other	Quantitative – Questionnaire / survey	No	No	Healthcare seeking	Occupation	(16)
Foy et al.	2019	England	to identify LGBQ+ adults' experiences of accessing and receiving psychological interventions from IAPT services	IAPT	Mixed – Questionnaire / survey	No	No	Healthcare seeking	Sexual orientation	(17)
Gillard et al.	2021	UK	to explore the experiences of a range of people with pre-existing MH problems during COVID-19	Other	Qualitative – Interview	Yes	No	Healthcare seeking	Multiple / exploratory	(18)
Gondek & Kirkbride	2018	UK	to assess the association between predictors (predisposing, enabling, need) and past help-seeking behaviours and intentions of future help-seeking	Other	Quantitative – Questionnaire / survey	No	No	Healthcare seeking	Race, ethnicity, culture, and language	(19)
Harrop et al.	2021	UK	to investigate bereavement support needs and experiences in the UK during COVID-19	Other	Mixed – Questionnaire / survey	No	No	Healthcare seeking	Multiple / exploratory	(20)

Islam et al.	2015	Birmingham, England	to examine cultural appropriateness, accessibility, and acceptability of EIP services in Birmingham for BME patients	Secondary care	Qualitative – Focus group	Yes	No	Healthcare seeking	Race, ethnicity, culture, and language	(21)
Kanakam	2022	London, England	to understand therapists' perspectives on how ethnic minority females diagnosed with ED access specialist services	Secondary care	Qualitative – Interview	No	No	Healthcare seeking	Race, ethnicity, culture, and language	(22)
Kennedy et al.	2016	UK	to evaluate feasibility of self-referral to MH services within a military environment	Tertiary care	Quantitative – Observational	No	Yes	Healthcare seeking	Occupation	(23)
Khanom et al.	2021	Wales	to identify barriers and facilitators to access to healthcare for asylum seekers and refugees in Wales	Other	Qualitative – Focus group	Yes	No	Healthcare seeking	Refugees and asylum seekers	(24)
McGrath et al.	2020	South England	to investigate barriers to accessing psychological treatment for male young offenders detained in UK prison	Other	Quantitative – Multiple	Yes	Yes	Healthcare seeking	Contact with criminal justice system	(25)
Mellotte et al.	2017	England	to understand the barriers and enablers to seeking professional help for veterans	Tertiary care	Mixed – Interview	No	No	Healthcare seeking	Occupation	(26)
Memon et al.	2016	South East England	to determine perceived barriers to accessing MH services among people from BME backgrounds	Other	Qualitative – Focus group	No	No	Healthcare seeking	Race, ethnicity, culture, and language	(27)
Millett et al.	2018	England	to investigate how women view IAPT support for perinatal MH	IAPT	Qualitative – Interview	No	No	Healthcare seeking	Pregnancy and maternity	(28)
Moller et al.	2016	North England	to explore attitudes and beliefs that second-generation South Asian women living in Britain hold about counselling, and how these beliefs impact on help-seeking for psychological distress	Other	Qualitative – Questionnaire / survey	No	No	Healthcare seeking	Race, ethnicity, culture, and language	(29)
Morris et al.	2022	UK	to investigate the experiences of sexual minorities who attempted to access and receive IAPT services for mild to moderate psychological problems	IAPT	Qualitative – Interview	No	No	Healthcare seeking	Sexual orientation	(30)
Murphy et al.	2014	South East England	to examine the factors which facilitate UK military personnel with PTSD to engage in help-seeking behaviours	Tertiary care	Qualitative – Interview	Yes	No	Healthcare seeking	Occupation	(31)
Ogueji et al.	2022	UK	to explore factors restricting professional help-seeking practices among Black family members in low and middle socioeconomic groups in the UK and Nigeria	Other	Mixed – Questionnaire / survey	Yes	No	Healthcare seeking	Race, ethnicity, culture, and language	(32)

Paudyal et al.	2021	South East England	to explore the mental well-being of Syrian refugees and their coping mechanisms and pathways towards community integration	Other	Qualitative – Interview	No	No	Healthcare seeking	Refugees and asylum seekers	(33)
Pilav et al.	2022	London, England	to explore the multi-level barriers Black, Asian, and minority ethnic women experience when accessing MH services in the perinatal period	Secondary care	Qualitative – Interview	No	No	Healthcare seeking	Race, ethnicity, culture, and language	(34)
Pilav et al.	2022	London, England	to explore minority ethnic women's experience of perinatal MH services during COVID-19	Secondary care	Qualitative – Interview	No	No	Healthcare seeking	Race, ethnicity, culture, and language	(35)
Rabiee & Smith	2014	Birmingham, England	to examine understanding of MH and the extent to which statutory and voluntary MH services in Birmingham are meeting the needs of a range of Black African and African Caribbean communities	Other	Qualitative – Multiple	No	No	Healthcare seeking	Race, ethnicity, culture, and language	(36)
Rafferty et al.	2019	UK	to explore the barriers and facilitators to accessing professional MH support for veterans	Other	Qualitative – Interview	Yes	No	Healthcare seeking	Occupation	(37)
Reader et al.	2017	North Wales	to describe the experiences of Deaf people who have used MH services in North Wales	Other	Qualitative – Interview	No	No	Healthcare seeking	Disability	(38)
Sagar-Ouriaghli et al.	2020	London, England	to identify potential approaches that would be relevant to improving MH help-seeking in male students	Other	Qualitative – Focus group	Yes	No	Healthcare seeking	Gender	(39)
Salaheddin & Mason	2016	UK	to investigate why young adults may choose not to seek any support for an emotional or MH difficulty	Other	Mixed – Questionnaire / survey	Yes	No	Healthcare seeking	Age	(40)
Sancho & Larkin	2020	London, England	to understand barriers and facilitators to accessing MH services in the UK for Afro-Caribbean undergraduate students	Other	Qualitative – Focus group	No	No	Healthcare seeking	Race, ethnicity, culture, and language	(41)
Shah et al.	2022	England & Wales	to explore whether and how participants' day-to-day experiences and MH difficulties changed or stayed the same for participants since their first interview during COVID-19	Other	Qualitative – Interview	Yes	No	Healthcare seeking	Multiple / exploratory	(42)
Simkhada et al.	2021	South England	to explore the relationship between culture and access to MH services among Nepali and Iranian migrants in the UK	Other	Qualitative – Interview	No	No	Healthcare seeking	Race, ethnicity, culture, and language	(43)
Spiers et al.	2017	England	to establish what might help or hinder GPs	Other	Qualitative – Interview	No	No	Healthcare seeking	Occupation	(44)

			experiencing mental distress as they consider seeking help for their symptoms							
Stevelink et al.	2019	UK	to examine and describe sources of support, prevalence, and associates of help-seeking among UK serving and ex-serving personnel	Other	Quantitative – Interview	No	No	Healthcare seeking	Occupation	(45)
Thompson et al.	2022	UK	to explore the MH support needs of Gypsy, Roma, and Traveller people within the British Isles	Other	Qualitative – Interview	No	No	Healthcare seeking	Race, ethnicity, culture, and language	(46)
Watson & Soltani	2019	North England	to investigate ethnic minority women's experiences and opinions of perinatal MH problems and the provision support services	Other	Mixed – Questionnaire / survey	Yes	No	Healthcare seeking	Pregnancy and maternity	(47)
Williamson et al.	2019	UK	to examine whether perceptions of stigma and barriers to care differed in a UK military sample between those with and without a current likely MH diagnosis	Other	Quantitative – Interview	No	No	Healthcare seeking	Occupation	(48)
Williamson et al.	2021	UK	to examine how UK military veterans with complex PTSD engage with psychological services	Other	Qualitative – Interview	No	No	Healthcare seeking	Occupation	(49)
Yeung et al.	2017	England	to examine how Chinese populations make sense of mental distress, and how this influences their pathways to MH care	Other	Qualitative – Interview	No	No	Healthcare seeking	Race, ethnicity, culture, and language	(50)
Butterworth et al.	2017	West Midlands, England	to understand weaknesses in the current MH and social care pathway to inform development of transition support services	Other	Qualitative – Interview	Yes	No	Healthcare reaching	Age	(51)
Carroll et al.	2021	London, England	to explore therapists' perceptions of barriers and facilitators to uptake and engagement with therapy in long-term conditions	Other	Qualitative – Interview	No	No	Healthcare reaching	Disability	(52)
Chinn & Abraham	2016	England	to examine how the legitimacy of claims by people with intellectual disabilities to use IAPT services is impeded or facilitated	IAPT	Mixed – Multiple	Yes	No	Healthcare reaching	Disability	(53)
Gregson et al.	2022	UK	to understand the experiences of psychologists delivering psychological services to people with learning disabilities during COVID-19	Secondary care	Qualitative – Interview	Yes	No	Healthcare reaching	Disability	(54)
Plugge et al.	2014	Berkshire, England	to explore issues around health and access to health services for those on probation	Other	Qualitative – Focus group	No	No	Healthcare reaching	Contact with criminal justice	(55)

									system	
Potter et al.	2022	UK	to synthesise experiences of professionals who work with street sex workers and what healthcare services are available, and how accessible and effective they are	Other	Mixed – Questionnaire / survey	Yes	No	Healthcare reaching	Trafficked and street sex workers	(56)
Sakellariou & Rotarou	2017	UK	to investigate differences in access to healthcare between people with and without disabilities in the UK	Other	Quantitative – Questionnaire / survey	No	No	Healthcare reaching	Disability	(57)
van der Kamp	2018	Scotland	to describe the barriers and facilitators to an effective transition from CAMHS to AMHS	Secondary care	Qualitative – Interview	No	No	Healthcare reaching	Age	(58)
Watson & Daley	2015	London, England	to determine the incidence of the use of section 135 of the MHA in a London borough and describe the main features of the population subject in that section	Secondary care	Quantitative – Observational	No	Yes	Healthcare reaching	Multiple / exploratory	(59)
Williamson et al.	2019	England & Scotland	to investigate barriers that hinder healthcare providers from identifying, providing care and making necessary referrals for trafficked people in the UK	Multiple	Qualitative – Interview	No	No	Healthcare reaching	Trafficked and street sex workers	(60)
Ajnakina et al.	2017	London, England	to investigate clinical and social outcomes in Black African and Caribbean ethnic groups compared with White British MH patients	Secondary care	Quantitative – Multiple	No	Yes	Healthcare utilisation	Race, ethnicity, culture, and language	(61)
Anselmi et al.	2020	England	to produce a revised formula to inform CCG allocations for secondary MH care provision	Multiple	Quantitative – Observational	No	Yes	Healthcare utilisation	Multiple/exploratory	(62)
Bansal et al.	2014	Scotland	to use linked data to investigate ethnic variations in psychiatric hospitalisations and compulsory treatment under MHA in Scotland	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Race, ethnicity, culture, and language	(63)
Bebbington et al.	2017	London, England	to report the frequency of psychiatric morbidity by sex and sentencing status	Other	Quantitative – Interview	No	No	Healthcare utilisation	Contact with criminal justice system	(64)
Bhavsar et al.	2021	London, England	to assess ethnic and migration-related differences in IAPT-based psychological treatment use	Other	Quantitative – Multiple	No	Yes	Healthcare utilisation	Race, ethnicity, culture, and language	(65)
Brown et al.	2014	London, England	to assess whether an IAPT service is delivering an equitable service in a London borough, by comparing socio-demographic and socio-economic	IAPT	Quantitative – Multiple	No	Yes	Healthcare utilisation	Multiple / exploratory	(66)

			characteristics of patients using IAPT services with those who had MH needs identified in a community psychiatric study							
Butler et al.	2021	London, England	to characterise referrals made to inpatient liaison psychiatry service before and during COVID-19	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Multiple / exploratory	(67)
Byrne et al.	2019	London, England	to understand if when offered treatment, do Black and ethnic minority service users at risk for psychosis engage in the same way as White British service users	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Race, ethnicity, culture, and language	(68)
Carr et al.	2016	England	to examine primary care clinical management following an episode of self-harm using data from GPs	Primary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Multiple / exploratory	(69)
Carruthers & Oakeshott	2019	South London, England	to understand how often refugees and asylum seekers consult primary care doctors, what they consult primary care doctors about, and if secondary care referrals are made	Primary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Refugees and asylum seekers	(70)
Chaplin et al.	2015	England & Wales	to calculate relative access of older adults in comparison to adults of working age to psychological services, and assess treatment experiences and outcomes	IAPT	Mixed – Observational	No	Yes	Healthcare utilisation	Age	(71)
Chen et al.	2020	Cambridge & Peterborough, England	to investigate the impact of lockdown on referrals to secondary care MH clinical services, and perform sub-group analyses for vulnerable groups	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Multiple / exploratory	(72)
Clement et al.	2015	England	to test the hypothesis that experienced MH-related discrimination is associated with low engagement among adults receiving care from CMHTs	Secondary care	Quantitative – Interview	No	Yes	Healthcare utilisation	Multiple / exploratory	(73)
Colling et al.	2017	London, England	to examine whether demographic characteristics differentially predicted receipt of CBTp	Secondary care	Quantitative – Observational	Yes	Yes	Healthcare utilisation	Multiple / exploratory	(74)
Cullen et al.	2018	London, England	to determine the demographic, clinical and behavioural predictors of PICU and seclusion	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Multiple / exploratory	(75)
Dagnan et al.	2022	England	to present national IAPT data to explore outcomes for people with learning disabilities compared with people without	IAPT	Quantitative – Observational	No	Yes	Healthcare utilisation	Disability	(76)

			learning disabilities							
Das-Munshi et al.	2018	England & Wales	to assess access to evidence-based treatments for psychosis amongst main ethnic minority groups	Secondary care	Quantitative – Multiple	No	Yes	Healthcare utilisation	Race, ethnicity, culture, and language	(77)
Day et al.	2021	London, Oxford, & Newcastle, England	to explore the extent and nature of treatment gaps experienced by a sample of patients with established treatment-resistant depression	Multiple	Quantitative – Observational	No	No	Healthcare utilisation	Multiple / exploratory	(78)
Delgadillo et al.	2016	England	to examine the relationships between socioeconomic deprivation with referrals, access to therapy, and clinical outcomes in IAPT services in England	IAPT	Quantitative – Observational	No	Yes	Healthcare utilisation	Socio-economic status	(79)
Delgadillo et al.	2018	England	to gather workforce size estimates for a representative sample of IAPT services and investigate associations between socio-economic deprivation, workforce size, and treatment access	IAPT	Mixed – Questionnaire / survey	No	Yes	Healthcare utilisation	Multiple / exploratory	(80)
Di Bona et al.	2014	Doncaster & Newham, England	to analyse socio-demographic and clinical data on patients referred to IAPT services by their GP and whether or not they accessed IAPT services	IAPT	Quantitative – Multiple	No	Yes	Healthcare utilisation	Multiple / exploratory	(81)
Domoney et al.	2015	London, England	to understand how people are identified as trafficked within MH services and challenges associated with responding to trafficked people's MH needs	Secondary care	Qualitative – Observational	No	Yes	Healthcare utilisation	Trafficked and street sex workers	(82)
Dorrington et al.	2021	London, England	to explore the extent to which people receiving fit notes access MH treatment across primary and secondary care, and demographic variations	Primary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Multiple / exploratory	(83)
Ellis et al.	2015	UK	to gain a better understanding of experiences of trans people as a whole and evaluate MH services and GIC services for trans clients	Other	Mixed – Questionnaire / survey	Yes	No	Healthcare utilisation	Gender	(84)
Fernandez de la Cruz et al.	2015	London, England	to explore whether individuals with OCD from ethnic minorities are under-represented in secondary and tertiary services within a large MH trust in South London	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Race, ethnicity, culture, and language	(85)
Firth et al.	2020	North England	to investigate impact of socio-demographic similarity on the probability	IAPT	Quantitative – Observational	No	Yes	Healthcare utilisation	Multiple / exploratory	(86)

			of an adequate dose of a psychoeducational group intervention							
Forrester et al.	2017	London, England	to describe demographic and clinical characteristics of the first consecutive cohort of referrals over an 18-month period	Tertiary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Contact with criminal justice system	(87)
Gajwani et al.	2016	Birmingham, England	to examine ethnic differences in patients assessed for detention and explore the effect of ethnicity after controlling for confounders	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Race, ethnicity, culture, and language	(88)
Gazard et al.	2018	London, England	to investigate differences in health service use and examine the role of discrimination experiences	Other	Quantitative – Questionnaire / survey	No	No	Healthcare utilisation	Multiple / exploratory	(89)
Giebel et al.	2014	North West England	to investigate the demographic and clinical characteristics of subgroups of veterans attending IAPT services	IAPT	Quantitative – Observational	No	Yes	Healthcare utilisation	Occupation	(90)
Giebel et al.	2020	North West England	to explore whether access to MH treatments differed by socio-economic status	Other	Quantitative – Questionnaire / survey	Yes	No	Healthcare utilisation	Socio-economic status	(91)
Gnan et al.	2019	UK	to investigate general and LGBTQ+ specific factors associated with having a current MH problem, use of MH services, suicide risk and self-harm in university students	Other	Quantitative – Questionnaire / survey	No	No	Healthcare utilisation	Sexual orientation	(92)
Godier-McBard et al.	2022	UK	to provide a preliminary investigation of gender differences in engagement and barriers to MH care in a sample of UK veterans	Other	Mixed – Questionnaire / survey	No	No	Healthcare utilisation	Gender	(93)
Harwood et al.	2021	London, England	to examine variation by ethnicity in source of referral, receipt of an initial assessment, and receipt of at least one treatment session within an IAPT service	IAPT	Quantitative – Observational	No	Yes	Healthcare utilisation	Race, ethnicity, culture, and language	(94)
Holman	2014	England	to understand the underuse of talking treatments by working class people	IAPT	Mixed – Multiple	No	No	Healthcare utilisation	Socio-economic status	(95)
Hopkin et al.	2020	London, England	to investigate differences in characteristics between homeless and non-homeless people within a population of people referred to MH services in police custody	Tertiary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Place of residence	(96)
Jakobowitz et	2017	London,	to quantify overall levels of the need for MH care and treatment in prisoners, and	Other	Quantitative – Interview	No	No	Healthcare	Contact with criminal justice	(97)

al.		England	assess how far these needs were met by the various MH facilities in prison					utilisation	system	
Jankovic et al.	2020	England	to explore access rates to community MH services, rates of inpatient psychiatric hospital admissions and rates of involuntary inpatient psychiatric hospital admissions, and explore whether a higher density of ethnic minority populations is linked to lower access rates	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Pregnancy and maternity	(98)
Kapadia et al.	2018	England	to investigate association between ethnic group and MH service usage for women in England	Other	Quantitative – Questionnaire / survey	No	No	Healthcare utilisation	Race, ethnicity, culture, and language	(99)
Kirkbride et al.	2017	East England	to estimate waiting times to EIP services in a large, representative epidemiological cohort in England	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Multiple / exploratory	(100)
Kothari et al.	2022	London, England	to evaluate impact of integrated MH and substance misuse service within a prison setting	Tertiary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Contact with criminal justice system	(101)
Lappin et al.	2016	London & Nottingham, England	to test the hypothesis that those who develop psychosis at a younger age have worse outcomes than those who develop psychosis at an older age	Secondary care	Quantitative – Multiple	No	Yes	Healthcare utilisation	Age	(102)
Lawrence et al.	2021	London & Nottingham, England	to investigate the long-term experience of living with psychosis and navigating MH services within different ethnic groups	Secondary care	Qualitative – Interview	No	No	Healthcare utilisation	Race, ethnicity, culture, and language	(103)
Lawrence et al.	2021	London & Nottingham, England	to explore the journey through MH services from the perspective of individuals from Black Caribbean and majority White British population to help understand variation in the use of MH services	Secondary care	Qualitative – Interview	No	No	Healthcare utilisation	Race, ethnicity, culture, and language	(104)
Leavey et al.	2019	Northern Ireland	to examine the pathways and determinants of transition, including the role of social class	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Age	(105)
Livanou et al.	2020	England	to examine clinical characteristics, transition pathways, and psychosocial indicators of transition outcomes for young people in forensic secure services discharged to adult services	Tertiary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Age	(106)
Livanou et al.	2020	England	to map a national sample of young people	Tertiary care	Mixed – Questionnaire /	No	Yes	Healthcare	Age	(107)

			across all adolescent forensic medium secure units to understand discharge placements and transition timelines		survey			utilisation		
Livanou et al.	2021	England	to explore the views and experiences of key professionals involved in the transition process from adolescent medium secure units to adult secure and community services in England	Tertiary care	Qualitative – Interview	No	No	Healthcare utilisation	Age	(108)
Maconick et al.	2021	England	to investigate association between area level factors and number of people in contact with secondary MH services by CCG in England	Other	Quantitative – Observational	No	Yes	Healthcare utilisation	Multiple / exploratory	(109)
Majid et al.	2016	Birmingham, England	to explore repetition, service provision and service engagement following presentation of young people to emergency services with self-harm	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Age	(110)
Manescu et al.	2020	England	to examine the relationship between attitudes to mental illness, symptoms of CMD, seeking help, and receiving medication	Other	Quantitative – Questionnaire / survey	No	No	Healthcare utilisation	Multiple / exploratory	(111)
Mankiewicz et al.	2021	London, England	to investigate equality of access to family intervention for psychosis, and subsequent treatment uptake and engagement	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Multiple / exploratory	(112)
Mann et al.	2014	London, England	to explore ethnic differences in compulsory detention and hospitalisation rates for EIS patients	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Race, ethnicity, culture, and language	(113)
Mansour et al.	2020	London, England	to compare symptoms and types of treatment between ethnic groups in patients with late-life depression	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Race, ethnicity, culture, and language	(114)
Mark et al.	2020	London, England	to investigate the utility and feasibility of identifying veterans accessing secondary MH services using EHRs	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Occupation	(115)
Matthew Prina et al.	2014	East England	to explore differences in referrals and waiting time to access IAPT services between younger and older adults	IAPT	Quantitative – Observational	No	Yes	Healthcare utilisation	Age	(116)
McKenzie et al.	2019	London, England	to present findings for treatment needs and how far these needs are met for Black and minority ethnic prisoners compared to White prisoners	Other	Quantitative – Interview	No	No	Healthcare utilisation	Contact with criminal justice system	(117)

McNamara et al.	2017	England	to explore issues associated with referrals to AMHS from CAMHS from a social identity perspective	Secondary care	Qualitative – Interview	No	No	Healthcare utilisation	Age	(118)
Meddings et al.	2019	Sussex, England	to explore if different groups of people access Recovery College equitably, and if students are representative of the local population and those using MH services	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Multiple / exploratory	(119)
Mercer et al.	2019	London, England	to explore differences in access to, and outcomes of, psychological therapy for different ethnic groups across secondary MH care	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Race, ethnicity, culture, and language	(120)
Mirza et al.	2019	North England	to examine cultural differences in causal beliefs and stigma toward MH	Other	Quantitative – Questionnaire / survey	No	No	Healthcare utilisation	Race, ethnicity, culture, and language	(121)
Moore et al.	2019	England	to explore the relationship between ethnicity, migration and MH indicators among mothers participating in a large nationally representative cohort study	Other	Quantitative – Interview	No	No	Healthcare utilisation	Race, ethnicity, culture, and language	(122)
Morgan	2014	London, England	to provide information regarding the extent to which the process of clustering using the MH clustering tool captures the complexity of patient need across different geographical areas	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Multiple / exploratory	(123)
Morgan et al.	2017	London & Nottingham, England	to investigate patterns and determinants of long-term course and outcome of psychosis by ethnic group following a first episode	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Race, ethnicity, culture, and language	(124)
Nicholson & Hotchin	2015	Glasgow & Clyde, Scotland	to investigate the relationship between area deprivation and contact with ID psychiatry	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Socio-economic status	(125)
Nilforooshan et al.	2017	London, England	to investigate the differences in service utilisation and costs between working age adults and older adults across five mental health healthcare providers in and around London	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Age	(126)
Oates & Firth	2020	Derby, England	to evaluate the extent to which IMD predicted access to treatment, attendance, treatment completion and clinical outcomes in a British health psychology clinic	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Socio-economic status	(127)

Oduola et al.	2019	London, England	to investigate whether disparities in pathways to care for those from minority ethnic groups continue	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Multiple / exploratory	(128)
Pettit et al.	2017	South West England	to accurately estimate differences in referral and access rates to the IAPT services and compare the pathway through treatment across age bands	IAPT	Quantitative – Questionnaire / survey	No	Yes	Healthcare utilisation	Age	(129)
Prady et al.	2016	Bradford, England	to examine the quantity and types of treatment offered to women with CMD before, during and up to one year postnatally, and assess psychological treatment variation by ethnic group	Secondary care	Quantitative – Multiple	No	Yes	Healthcare utilisation	Pregnancy and maternity	(130)
Reichert & Jacobs	2018	England	to investigate inequalities in duration of untreated psychosis associated with socioeconomic deprivation in England	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Socio-economic status	(131)
Rhead et al.	2022	England	to examine MH service use and treatment at the intersections of multiple advantaged and disadvantaged social statuses	Other	Quantitative – Questionnaire / survey	No	No	Healthcare utilisation	Multiple / exploratory	(132)
Ride et al.	2020	England	to estimate annual healthcare costs for people with SMI in England across primary and secondary care settings	Multiple	Quantitative – Observational	No	Yes	Healthcare utilisation	Multiple / exploratory	(133)
Saini et al.	2021	Liverpool, England	to compare help-seeking among younger and older men who attended a therapeutic centre for men in suicidal crisis	Other	Quantitative – Observational	No	Yes	Healthcare utilisation	Age	(134)
Singh et al.	2015	Birmingham, England	to understand if ethnic groups significantly differ in culturally mediated illness attributions during FEP, and if ethnic groups significantly differ in their pathways to care during FEP	Secondary care	Quantitative – Multiple	No	Yes	Healthcare utilisation	Race, ethnicity, culture, and language	(135)
Sizmur & McCullough	2016	England	to analyse survey variables describing treatment offered to respondents for evidence of differential access to services associated with ethnicity	Secondary care	Quantitative – Questionnaire / survey	No	No	Healthcare utilisation	Race, ethnicity, culture, and language	(136)
Smyth et al.	2022	London, England	to explore the association between sociodemographic and socioeconomic indicators and the use of psychological treatment services	IAPT	Quantitative – Observational	No	Yes	Healthcare utilisation	Multiple / exploratory	(137)
Steeg et al.	2022	UK	to examine the impact of COVID-19 on clinical management within 3 months of a self-harm episode	Primary care	Quantitative – Observational	Yes	Yes	Healthcare utilisation	Multiple / exploratory	(138)

Thomas et al.	2020	South West England	to examine IAPT referrals made by GPs and how these referrals are perceived and acted on by patients from low-income backgrounds	Other	Qualitative – Interview	Yes	No	Healthcare utilisation	Socio-economic status	(139)
Tseliou et al.	2017	London, England	to explore gender differences for first-presentation psychosis patients at the time of referral to inner-city EIS and one year later	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Gender	(140)
Tucker et al.	2015	England	to identify the characteristics of community dwelling older people supported by CMHTs in England	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Age	(141)
Tyler et al.	2019	South England	to measure the prevalence and comorbidity of MH needs across a representative sample of both men and women across 13 prisons	Other	Quantitative – Questionnaire / survey	No	No	Healthcare utilisation	Contact with criminal justice system	(142)
Valmaggia et al.	2015	London, England	to compare sociodemographic features, DUP, hospital admission, and frequency of compulsory treatment in the first year after the onset of psychosis in patients who present to services with patients who did not present	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Multiple / exploratory	(143)
Volkert et al.	2018	London, England	to identify factors associated with service utilisation in the elderly	Other	Quantitative – Interview	No	No	Healthcare utilisation	Age	(144)
Walters et al.	2018	England	to investigate variation in treatment patterns for depression by age, gender, deprivation, and neighbourhood in primary care treatment for depression in older adults in England	Primary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Age	(145)
Watson et al.	2021	London, England	to assess whether technology, accessibility, and demographic factors influence remote therapy uptake among individuals with psychosis	Secondary care	Quantitative – Questionnaire / survey	No	Yes	Healthcare utilisation	Multiple / exploratory	(146)
Weich et al.	2017	England	to describe and model spatial variation in compulsory admissions in England using national patient-level data	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Multiple / exploratory	(147)
White et al.	2014	England	to explore socio-economic equity of hospital care utilisation for patients with SMI and how it has changed over time	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Socio-economic status	(148)
Wilberforce et al.	2015	England	to determine the extent to which services provided to older people via CMHTs vary	Secondary care	Quantitative – Observational	No	Yes	Healthcare utilisation	Age	(149)

			in duration, composition, and intensity, and identify to what extent differences are due to case mix							
Yasmin-Qureshi & Ledwith	2020	England	to explore South Asian women's experiences of accessing psychological therapy	IAPT	Qualitative – Interview	No	No	Healthcare utilisation	Race, ethnicity, culture, and language	(150)
Liberati et al.	2021	England	to report a large interview-based study involving people with direct experience of seeking and providing MH care in England during COVID-19	Secondary care	Qualitative – Interview	Yes	No	Healthcare consequences	Multiple / exploratory	(151)
Wiginton et al.	2021	England & Wales	to report the prevalence of unmet peer support, psychological care, management of chronic health condition, and isolation help needs in people living with HIV	Other	Quantitative – Questionnaire / survey	No	No	Healthcare consequences	Disability	(152)

* *AMHS*, adult mental health services; *BME*, black and minority ethic; *BTC*, barriers to care; *CAMHS*, child and adolescent mental health services; *CBTp*, cognitive behavioural therapy for psychosis; *CCG*, clinical commissioning group; *CMD*, common mental disorder; *CMHT*, community mental health team; *DUP*, duration of untreated psychosis; *ED*, eating disorder; *EHR*, electronic health record; *EIP*, early intervention for psychosis; *EIS*, early intervention services; *FEP*, first episode of psychosis; *GIC*, gender identity clinic; *GP*, general practitioner; *HIV*, human immunodeficiency virus; *IAPT*, improving access to psychological therapies; *ID*, intellectual disability; *IMD*, index of multiple deprivation; *LGBQ+*, lesbian gay bisexual queer and other sexual minority identities; *LGBTQ+*, lesbian gay bisexual transgender queer and other sexual and gender minority identities; *MH*, mental health; *MHA*, mental health act; *OCD*, obsessive compulsive disorder; *PCA*, principal components analysis; *PICU*, psychiatric intensive care unit; *PPI*, patient and public involvement; *PTSD*, post-traumatic stress disorder; *SMI*, severe mental illness; *UK*, United Kingdom

List of included studies references for Table B3

1. Fernandez de la Cruz L, Kolvenbach S, Vidal-Ribas P, Jassi A, Llorens M, Patel N, et al. Illness perception, help-seeking attitudes, and knowledge related to obsessive-compulsive disorder across different ethnic groups: a community survey. Social Psychiatry and Psychiatric Epidemiology. 2016;51(3):455-64. https://doi.org/10.1007/s00127-015-1144-9.
2. Liberati E, Richards N, Parker J, Willars J, Scott D, Boydell N, et al. Qualitative study of candidacy and access to secondary mental health services during the COVID-19 pandemic. Social Science & Medicine. 2022;296:114711. https://doi.org/10.1016/j.socscimed.2022.114711.
3. Adams EA, Parker J, Jablonski T, Kennedy J, Tasker F, Hunter D, et al. A Qualitative Study Exploring Access to Mental Health and Substance Use Support among Individuals Experiencing Homelessness during COVID-19. International Journal of Environmental Research and Public Health. 2022;19(6):3459. https://doi.org/10.3390/ijerph19063459.
4. Arday J. Understanding Mental Health: What Are the Issues for Black and Ethnic Minority Students at University? Social Sciences. 2018;7(10):196.

https://doi.org/10.3390/socsci7100196.

5. Bailey NV, Tribe R. A qualitative study to explore the help-seeking views relating to depression among older Black Caribbean adults living in the UK. International Review of Psychiatry. 2021;33(1-2):113-8. https://doi.org/10.1080/09540261.2020.1761138.
6. Bellesi G, Jeraj S, Manley J, Tekes S, Basit H, McNulty N, editors. Why do Black Caribbean women benefit less from talking therapies? A pilot study in an inner London IAPT service. Clinical Psychology Forum. 2020;2020(326):24-9. https://doi.org/10.53841/bpscpf.2020.1.326.5.
7. Berry K, Sheardown J, Pabbineedi U, Haddock G, Cross C, Brown LJE. Barriers and facilitators to accessing psychological therapies for severe mental health difficulties in later life. Behavioural and Cognitive Psychotherapy. 2020;48(2):216-28. https://doi.org/10.1017/S1352465819000596.
8. Brooks SK, Gerada C, Chalder T. The specific needs of doctors with mental health problems: qualitative analysis of doctor-patients' experiences with the Practitioner Health Programme. Journal of Mental Health. 2017;26(2):161-6. https://doi.org/10.1080/09638237.2016.1244712.
9. Brown JSL, Evans-Lacko S, Aschan L, Henderson MJ, Hatch SL, Hotopf M. Seeking informal and formal help for mental health problems in the community: a secondary analysis from a psychiatric morbidity survey in South London. BMC Psychiatry. 2014;14(1):275. https://doi.org/10.1186/s12888-014-0275-y.
10. Bryant A, Cook A, Egan H, Wood J, Mantzios M. Help-seeking behaviours for mental health in higher education. Journal of Further and Higher Education. 2022;46(4):522-34. https://doi.org/10.1080/0309877X.2021.1985983.
11. Bu F, Mak HW, Fancourt D. Rates and predictors of uptake of mental health support during the COVID-19 pandemic: an analysis of 26,720 adults in the UK in lockdown. Social Psychiatry and Psychiatric Epidemiology. 2021. https://doi.org/10.1007/s00127-021-02105-w.
12. Chui Z, Gazard B, MacCrimmon S, Harwood H, Downs J, Bakolis I, et al. Inequalities in referral pathways for young people accessing secondary mental health services in south east London. European Child & Adolescent Psychiatry. 2021;30(7):1113-28. https://doi.org/10.1007/s00787-020-01603-7.
13. Daniels J, Ingram J, Pease A, Wainwright E, Beckett K, Iyadurai L, et al. The COVID-19 Clinician Cohort (CoCCo) Study: Empirically Grounded Recommendations for Forward-Facing Psychological Care of Frontline Doctors. International Journal of Environmental Research and Public Health. 2021;18(18):18. https://doi.org/10.3390/ijerph18189675.
14. Dockery L, Jeffery D, Schauman O, Williams P, Farrelly S, Bonnington O, et al. Stigma- and non-stigma-related treatment barriers to mental healthcare reported by service users and caregivers. Psychiatry Research. 2015;228(3):612-9. https://doi.org/10.1016/j.psychres.2015.05.044.
15. Ennis E, McLafferty M, Murray E, Lapsley C, Bjourson T, Armour C, et al. Readiness to change and barriers to treatment seeking in college students with a mental disorder. Journal of Affective Disorders. 2019;252:428-34. https://doi.org/10.1016/j.jad.2019.04.062.

16. Fertout M, Jones N, Keeling M, Greenberg N. Mental health stigmatisation in deployed UK Armed Forces: a principal components analysis. Journal of the Royal Army Medical Corps. 2015;161 Suppl 1:i69-i76. https://doi.org/10.1136/jramc-2015-000587.
17. Foy AAJ, Morris D, Fernandes V, Rimes KA. LGBQ+ adults' experiences of Improving Access to Psychological Therapies and primary care counselling services: informing clinical practice and service delivery. Cognitive Behaviour Therapist. 2019;12:e42. https://doi.org/10.1017/S1754470X19000291.
18. Gillard S, Dare C, Hardy J, Nyikavar, a P, Rowan Olive R, et al. Experiences of living with mental health problems during the COVID-19 pandemic in the UK: a coproduced, participatory qualitative interview study. Social Psychiatry and Psychiatric Epidemiology. 2021;56(8):1447-57. https://doi.org/10.1007/s00127-021-02051-7.
19. Gondek D, Kirkbride JB. Predictors of mental health help-seeking among polish people living the United Kingdom. Bmc Health Services Research. 2018;18:12. https://doi.org/10.1186/s12913-018-3504-0.
20. Harrop E, Goss S, Farnell D, Longo M, Byrne A, Barawi K, et al. Support needs and barriers to accessing support: Baseline results of a mixed-methods national survey of people bereaved during the COVID-19 pandemic. Palliative Medicine. 2021;35(10):1985-97. https://doi.org/10.1177/02692163211043372.
21. Islam Z, Rabiee F, Singh SP. Black and minority ethnic groups' perception and experience of early intervention in psychosis services in the United Kingdom. Journal of Cross-Cultural Psychology. 2015;46(5):737-53. https://doi.org/10.1177/0022022115575737.
22. Kanakam N. Therapists' experiences of working with ethnic minority females with eating disorders: a qualitative study. Culture Medicine and Psychiatry. 2022;46(2):414-34. https://doi.org/10.1007/s11013-021-09721-w.
23. Kennedy I, Whybrow D, Jones N, Sharpley J, Greenberg N. A service evaluation of self-referral to military mental health teams. Occupational Medicine. 2016;66(5):394-8. https://doi.org/10.1093/occmed/kqw044.
24. Khanom A, Alanazy W, Couzens L, Evans BA, Fagan L, Fogarty R, et al. Asylum seekers' and refugees' experiences of accessing health care: a qualitative study. BJGP Open. 2021;5(6). https://doi.org/10.3399/bjgpo.2021.0059.
25. McGrath K, Shaw J, Farquharson L. Barriers to accessing psychological treatment for medium to high risk male young offenders. Journal of Forensic Psychiatry & Psychology. 2020;31(4):596-612. https://doi.org/10.1080/14789949.2020.1782969.
26. Mellotte H, Murphy D, Rafferty L, Greenberg N. Pathways into mental health care for UK veterans: a qualitative study. European Journal of Psychotraumatology. 2017;8(1):11. https://doi.org/10.1080/20008198.2017.1389207.
27. Memon A, Taylor K, Mohebati LM, Sundin J, Cooper M, Scanlon T, et al. Perceived barriers to accessing mental health services among black and minority ethnic (BME) communities: a qualitative study in Southeast England. BMJ Open. 2016;6(11):9. https://doi.org/10.1136/bmjopen-2016-012337.

28. Millett L, Taylor BL, Howard LM, Bick D, Stanley N, Johnson S. Experiences of improving access to psychological therapy services for perinatal mental health difficulties: a qualitative study of women's and therapists' views. Behavioural and Cognitive Psychotherapy. 2018;46(4):421-36. https://doi.org/10.1017/S1352465817000650.
29. Moller N, Burgess V, Jogiyat Z. Barriers to counselling experienced by British South Asian women: A thematic analysis exploration. Counselling & Psychotherapy Research. 2016;16(3):201-10. https://doi.org/10.1002/capr.12076.
30. Morris DDA, Fernandes V, Rimes KA. Sexual minority service user perspectives on mental health treatment barriers to care and service improvements. International Review of Psychiatry. 2022;34(3-4):230-9. https://doi.org/10.1080/09540261.2022.2051445.
31. Murphy D, Hunt E, Luzon O, Greenberg N. Exploring positive pathways to care for members of the UK Armed Forces receiving treatment for PTSD: a qualitative study. European Journal of Psychotraumatology. 2014;5:8. https://doi.org/10.3402/ejpt.v5.21759.
32. Ogueji IA, Okoloba MM. Seeking professional help for mental illness: a mixed-methods study of Black family members in the UK and Nigeria. Psychological Studies. 2022;67(2):164-77. https://doi.org/10.1007/s12646-022-00650-1.
33. Paudyal P, Tattan M, Cooper MJF. Qualitative study on mental health and well-being of Syrian refugees and their coping mechanisms towards integration in the UK. BMJ Open. 2021;11(8):9. https://doi.org/10.1136/bmjopen-2020-046065.
34. Pilav S, De Backer K, Easter A, Silverio SA, Sundaresh S, Roberts S, et al. A qualitative study of minority ethnic women's experiences of access to and engagement with perinatal mental health care. BMC Pregnancy Childbirth. 2022;22(1):421. https://doi.org/10.1186/s12884-022-04698-9.
35. Pilav S, Easter A, Silverio SA, De Backer K, Sundaresh S, Roberts S, et al. Experiences of perinatal mental health care among minority ethnic women during the COVID-19 pandemic in London: a qualitative study. International Journal of Environmental Research and Public Health. 2022;19(4):15. https://doi.org/10.3390/ijerph19041975.
36. Rabiee F, Smith P. Understanding mental health and experience of accessing services among African and African Caribbean Service users and carers in Birmingham, UK. Diversity and Equality in Health and Care. 2014;11(2):125-34.
37. Rafferty LA, Wessely S, Stevelink SAM, Greenberg N. The journey to professional mental health support: a qualitative exploration of the barriers and facilitators impacting military veterans' engagement with mental health treatment. European Journal of Psychotraumatology. 2019;10(1):14. https://doi.org/10.1080/20008198.2019.1700613.
38. Reader D, Foulkes H, Robinson C. Investigating barriers to mental health care experienced by the Deaf community in North Wales. Mental Health Nursing. 2017;37(3):14-9.

39. Sagar-Ouriaghli I, Brown JSL, Tailor V, Godfrey E. Engaging male students with mental health support: a qualitative focus group study. BMC Public Health. 2020;20(1):1159. https://doi.org/10.1186/s12889-020-09269-1.
40. Salaheddin K, Mason B. Identifying barriers to mental health help-seeking among young adults in the UK: a cross-sectional survey. British Journal of General Practice. 2016;66(651):E686-E92. https://doi.org/10.3399/bjgp16X687313.
41. Sancho TN, Larkin M. "We need to slowly break down this barrier": understanding the barriers and facilitators that Afro-Caribbean undergraduates perceive towards accessing mental health services in the UK. Journal of Public Mental Health. 2020;19(1):63-81. https://doi.org/10.1108/Jpmh-12-2019-0099.
42. Shah P, Hardy J, Birken M, Foye U, Olive RR, Nyikavaranda P, et al. What has changed in the experiences of people with mental health problems during the COVID-19 pandemic: a coproduced, qualitative interview study. Social Psychiatry and Psychiatric Epidemiology. 2022;57(6):1291-303. https://doi.org/10.1007/s00127-022-02254-6.
43. Simkhada B, Vahdaninia M, van Teijlingen E, Blunt H. Cultural issues on accessing mental health services in Nepali and Iranian migrants communities in the UK. International Journal of Mental Health Nursing. 2021;30(6):1610-9. https://doi.org/10.1111/inm.12913.
44. Spiers J, Buszewicz M, Chew-Graham CA, Gerada C, Kessler D, Leggett N, et al. Barriers, facilitators, and survival strategies for GPs seeking treatment for distress: a qualitative study. British Journal of General Practice. 2017;67(663):e700-e8. https://doi.org/10.3399/bjgp17X692573.
45. Stevelink SAM, Jones N, Jones M, Dyball D, Khera CK, Pernet D, et al. Do serving and ex-serving personnel of the UK armed forces seek help for perceived stress, emotional or mental health problems? European Journal of Psychotraumatology. 2019;10(1):1556552. https://doi.org/10.1080/20008198.2018.1556552.
46. Thompson RM, Stone BV, Tyson PJ. Mental health support needs within Gypsy, Roma, and Traveller communities: a qualitative study. Mental Health and Social Inclusion. 2022;26(2):144-55. https://doi.org/10.1108/mhsi-09-2021-0066.
47. Watson H, Soltani H. Perinatal mental ill health: the experiences of women from ethnic minority groups. British Journal of Midwifery. 2019;27(10):642-8.
48. Williamson V, Greenberg N, Stevelink SAM. Perceived stigma and barriers to care in UK Armed Forces personnel and veterans with and without probable mental disorders. BMC Psychology. 2019;7(1):75. https://doi.org/10.1186/s40359-019-0351-7.
49. Williamson V, Pearson EJ, Shevlin M, Karatzias T, Macmanus D, Murphy D. Experiences of veterans with ICD-11 complex PTSD in engaging with services. Journal of Loss & Trauma. 2021;26(2):166-78. https://doi.org/10.1080/15325024.2020.1749784.
50. Yeung EYW, Irvine F, Ng SM, Tsang KMS. How people from Chinese backgrounds make sense of and respond to the experiences of mental distress: thematic analysis. Journal of Psychiatric and Mental Health Nursing. 2017;24(8):589-99. https://doi.org/10.1111/jpm.12406.
51. Butterworth S, Singh SP, Birchwood M, Islam Z, Munro ER, Vostanis P, et al. Transitioning care-leavers with mental health needs: "they set you up to fail!". Child and

Adolescent Mental Health. 2017;22(3):138-47. https://doi.org/10.1111/camh.12171.

52. Carroll S, Moss-Morris R, Hulme K, Hudson J. Therapists' perceptions of barriers and facilitators to uptake and engagement with therapy in long-term conditions. British Journal of Health Psychology. 2021;26(2):307-24. https://doi.org/10.1111/bjhp.12475.
53. Chinn D, Abraham E. Using 'candidacy' as a framework for understanding access to mainstream psychological treatment for people with intellectual disabilities and common mental health problems within the English Improving Access to Psychological Therapies service. Journal of Intellectual Disability Research. 2016;60(6):571-82. https://doi.org/10.1111/jir.12274.
54. Gregson N, Randle-Phillips C, Delaney C. Delivering psychological services for people with learning disabilities during the Covid-19 pandemic: the experiences of psychologists in the UK. Journal of Mental Health Research in Intellectual Disabilities. 2022;15(2):168-96. https://doi.org/10.1080/19315864.2022.2047844.
55. Plugge E, Pari AAA, Maxwell J, Holl, S. When prison is “easier”: probationers’ perceptions of health and wellbeing. International Journal of Prisoner Health. 2014;10(1):38-46. https://doi.org/10.1108/IJPH-01-2013-0001.
56. Potter LC, Horwood J, Feder G. Access to healthcare for street sex workers in the UK: perspectives and best practice guidance from a national cross-sectional survey of frontline workers. BMC Health Services Research. 2022;22(1):178. https://doi.org/10.1186/s12913-022-07581-7.
57. Sakellariou D, Rotarou ES. Access to healthcare for men and women with disabilities in the UK: secondary analysis of cross-sectional data. BMJ Open. 2017;7(8):e016614. https://doi.org/10.1136/bmjopen-2017-016614.
58. van der Kamp J. The transition between mental health services in Scotland. Mental Health Review Journal. 2018;23(1):12-24. https://doi.org/10.1108/mhrj-05-2017-0020.
59. Watson J, Daley S. The use of section 135(1) of the Mental Health Act in a London borough. Mental Health Review Journal. 2015;20(3):133-43. https://doi.org/10.1108/mhrj-02-2015-0007.
60. Williamson V, Borschmann R, Zimmerman C, Howard LM, Stanley N, Oram S. Responding to the health needs of trafficked people: A qualitative study of professionals in England and Scotland. Health and Social Care in the Community. 2020;28(1):173-81. https://doi.org/10.1111/hsc.12851.
61. Ajnakina O, Lally J, Di Forti M, Kolliakou A, Gardner-Sood P, Lopez-Morinigo J, et al. Patterns of illness and care over the 5 years following onset of psychosis in different ethnic groups; the GAP-5 study. Social Psychiatry and Psychiatric Epidemiology. 2017;52(9):1101-11. https://doi.org/10.1007/s00127-017-1417-6.
62. Anselmi L, Everton A, Shaw R, Suzuki W, Burrows J, Weir R, et al. Estimating local need for mental healthcare to inform fair resource allocation in the NHS in England: cross-sectional analysis of national administrative data linked at person level. British Journal of Psychiatry. 2020;216(6):338-44. https://doi.org/10.1192/bjp.2019.185.
63. Bansal N, Bhopal R, Netto G, Lyons D, Steiner MFC, Sashidharan SP. Disparate patterns of hospitalisation reflect unmet needs and persistent ethnic inequalities in mental

health care: the Scottish health and ethnicity linkage study. Ethnicity & Health. 2014;19(2):217-39. https://doi.org/10.1080/13557858.2013.814764.

64. Bebbington P, Jakobowitz S, McKenzie N, Killaspy H, Iveson R, Duffield G, et al. Assessing needs for psychiatric treatment in prisoners: 1. Prevalence of disorder. Social Psychiatry and Psychiatric Epidemiology. 2017;52(2):221-9. https://doi.org/10.1007/s00127-016-1311-7.
65. Bhavsar V, Jannesari S, McGuire P, MacCabe JH, Das-Munshi J, Bhugra D, et al. The association of migration and ethnicity with use of the Improving Access to Psychological Treatment (IAPT) programme: a general population cohort study. Social Psychiatry and Psychiatric Epidemiology. 2021;56(11):1943-56. https://doi.org/10.1007/s00127-021-02035-7.
66. Brown JSL, Ferner H, Wingrove J, Aschan L, Hatch SL, Hotopf M. How equitable are psychological therapy services in South East London now? A comparison of referrals to a new psychological therapy service with participants in a psychiatric morbidity survey in the same London borough. Social Psychiatry and Psychiatric Epidemiology: The International Journal for Research in Social and Genetic Epidemiology and Mental Health Services. 2014;49(12):1893-902. https://doi.org/10.1007/s00127-014-0900-6.
67. Butler M, Delvi A, Mujic F, Broad S, Pauli L, Pollak TA, et al. Reduced activity in an inpatient liaison psychiatry service during the first wave of the COVID-19 pandemic: comparison with 2019 data and characterization of the SARS-CoV-2 positive cohort. Frontiers in Psychiatry. 2021;12. https://doi.org/10.3389/fpsyt.2021.619550.
68. Byrne A, Barber R, Lim CH. Impact of the COVID-19 pandemic – a mental health service perspective. Progress in Neurology and Psychiatry. 2021;25(2):27-33b. https://doi.org/10.1002/pnp.708.
69. Carr MJ, Ashcroft DM, Kontopantelis E, While D, Awenat Y, Cooper J, et al. Clinical management following self-harm in a UK-wide primary care cohort. Journal of Affective Disorders. 2016;197:182-8. https://doi.org/10.1016/j.jad.2016.03.013.
70. Carruthers E, Oakeshott P. Refugee and asylum seeker usage of primary care: medical student survey at two inner-city general practices. Education for Primary Care. 2019;30(4):248-50. https://doi.org/10.1080/14739879.2019.1613676.
71. Chaplin R, Farquharson L, Clapp M, Crawford M. Comparison of access, outcomes and experiences of older adults and working age adults in psychological therapy. International Journal of Geriatric Psychiatry. 2015;30(2):178-84. https://doi.org/10.1002/gps.4122.
72. Chen SQ, She R, Qin P, Kershenbaum A, Fern, ez-Egea E, et al. The medium-term impact of COVID-19 lockdown on referrals to secondary care mental health services: a controlled interrupted time series study. Frontiers in Psychiatry. 2020;11:11. https://doi.org/10.3389/fpsyt.2020.585915.
73. Clement S, Williams P, Farrelly S, Hatch SL, Schauman O, Jeffery D, et al. Mental health-related discrimination as a predictor of low engagement with mental health

services. Psychiatric Services. 2015;66(2):171-6. https://doi.org/10.1176/appi.ps.201300448.

74. Colling C, Evans L, Broadbent M, Chandran D, Craig TJ, Kolliakou A, et al. Identification of the delivery of cognitive behavioural therapy for psychosis (CBTp) using a cross-sectional sample from electronic health records and open-text information in a large UK-based mental health case register. BMJ Open. 2017;7(7):e015297. https://doi.org/10.1136/bmjopen-2016-015297.
75. Cullen AE, Bowers L, Khondoker M, Pettit S, Achilla E, Koeser L, et al. Factors associated with use of psychiatric intensive care and seclusion in adult inpatient mental health services. Epidemiology and Psychiatric Sciences. 2018;27(1):51-61. https://doi.org/10.1017/S2045796016000731.
76. Dagnan D, Rodhouse C, Thwaites R, Hatton C. Improving Access to Psychological Therapies (IAPT) services outcomes for people with learning disabilities: national data 2012-2013 to 2019-2020. Cognitive Behaviour Therapist. 2022;15:15. https://doi.org/10.1017/S1754470X21000404.
77. Das-Munshi J, Bhugra D, Crawford MJ. Ethnic minority inequalities in access to treatments for schizophrenia and schizoaffective disorders: findings from a nationally representative cross-sectional study. BMC Medicine. 2018;16(1):55. https://doi.org/10.1186/s12916-018-1035-5.
78. Day E, Shah R, Taylor RW, Marwood L, Nortey K, Harvey J, et al. A retrospective examination of care pathways in individuals with treatment-resistant depression. BJPsych Open. 2021;7(3):e101. https://doi.org/10.1192/bjo.2021.59.
79. Delgadillo J, Asaria M, Ali S, Gilbody S. On poverty, politics and psychology: the socioeconomic gradient of mental healthcare utilisation and outcomes. British Journal of Psychiatry. 2016;209(5):431-2. https://doi.org/10.1192/bjp.bp.115.171017.
80. Delgadillo J, Farnfield A, North A. Social inequalities in the demand, supply and utilisation of psychological treatment. Counselling & Psychotherapy Research. 2018;18(2):114-21. https://doi.org/10.1002/capr.12169.
81. Di Bona L, Saxon D, Barkham M, Dent-Brown K, Parry G. Predictors of patient non-attendance at Improving Access to Psychological Therapy services demonstration sites. Journal of Affective Disorders. 2014;169:157-64. https://doi.org/10.1016/j.jad.2014.08.005.
82. Domoney J, Howard LM, Abas M, Broadbent M, Oram S. Mental health service responses to human trafficking: a qualitative study of professionals' experiences of providing care. BMC Psychiatry. 2015;15(1):289. https://doi.org/10.1186/s12888-015-0679-3.
83. Dorrington S, Carr E, Stevelink S, Ashworth M, Broadbent M, Madan I, et al. Access to mental healthcare in the year after first fit note: a longitudinal study of linked clinical records. BMJ Open. 2021;11(11):e044725. https://doi.org/10.1136/bmjopen-2020-044725.
84. Ellis SJ, Bailey L, McNeil J. Trans people's experiences of mental health and gender identity services: a UK study. Journal of Gay & Lesbian Mental Health. 2015;19(1):4-20. https://doi.org/10.1080/19359705.2014.960990.

85. Fernández de la Cruz L, Llorens M, Jassi A, Krebs G, Vidal-Ribas P, Radua J, et al. Ethnic inequalities in the use of secondary and tertiary mental health services among patients with obsessive–compulsive disorder. British Journal of Psychiatry. 2015;207(6):530-5. https://doi.org/10.1192/bjp.bp.114.154062.
86. Firth N, Delgadillo J, Kellett S, Lucock M. The influence of socio-demographic similarity and difference on adequate attendance of group psychoeducational cognitive behavioural therapy. Psychotherapy Research. 2020;30(3):362-74. https://doi.org/10.1080/10503307.2019.1589652.
87. Forrester A, Samele C, Slade K, Craig T, Valmaggia L. Demographic and clinical characteristics of 1092 consecutive police custody mental health referrals. Journal of Forensic Psychiatry & Psychology. 2017;28(3):295-312. https://doi.org/10.1080/14789949.2016.1269357.
88. Gajwani R, Parsons H, Birchwood M, Singh SP. Ethnicity and detention: are Black and minority ethnic (BME) groups disproportionately detained under the Mental Health Act 2007? Social Psychiatry and Psychiatric Epidemiology. 2016;51(5):703-11. https://doi.org/10.1007/s00127-016-1181-z.
89. Gazard B, Chui Z, Harber-Aschan L, MacCrimmon S, Bakolis I, Rimes K, et al. Barrier or stressor? The role of discrimination experiences in health service use. BMC Public Health. 2018;18(1):1354. https://doi.org/10.1186/s12889-018-6267-y.
90. Giebel CM, Clarkson P, Challis D. Demographic and clinical characteristics of UK military veterans attending a psychological therapies service. Psychiatric Bulletin. 2014;38(6):270-5. https://doi.org/10.1192/pb.bp.113.046474.
91. Giebel C, Corcoran R, Goodall M, Campbell N, Gabbay M, Daras K, et al. Do people living in disadvantaged circumstances receive different mental health treatments than those from less disadvantaged backgrounds? BMC Public Health. 2020;20(1):10. https://doi.org/10.1186/s12889-020-08820-4.
92. Gnan GH, Rahman Q, Ussher G, Baker D, West E, Rimes KA. General and LGBTQ-specific factors associated with mental health and suicide risk among LGBTQ students. Journal of Youth Studies. 2019;22(10):1393-408. https://doi.org/10.1080/13676261.2019.1581361.
93. Godier-McBard LR, Cable G, Wood AD, Fossey M. Gender differences in barriers to mental healthcare for UK military veterans: a preliminary investigation. BMJ Military Health. 2022;168(1):70-5. https://doi.org/10.1136/bmjmilitary-2020-001754.
94. Harwood H, Rhead R, Chui Z, Bakolis I, Connor L, Gazard B, et al. Variations by ethnicity in referral and treatment pathways for IAPT service users in South London. Psychological Medicine. 2021:1-12. https://doi.org/10.1017/S0033291721002518.
95. Holman D. What help can you get talking to somebody?' Explaining class differences in the use of talking treatments. Sociology of Health & Illness. 2014;36(4):531-48. https://doi.org/10.1111/1467-9566.12082.
96. Hopkin G, Chaplin L, Slade K, Craster L, Valmaggia L, Samele C, et al. Differences between homeless and non-homeless people in a matched sample referred for mental health reasons in police custody. International Journal of Social Psychiatry. 2020;66(6):576-83. https://doi.org/10.1177/0020764020920904.

97. Jakobowitz S, Bebbington P, McKenzie N, Iveson R, Duffield G, Kerr M, et al. Assessing needs for psychiatric treatment in prisoners: 2. Met and unmet need. Social Psychiatry and Psychiatric Epidemiology. 2017;52(2):231-40. https://doi.org/10.1007/s00127-016-1313-5.

98. Jankovic J, Parsons J, Jovanović N, Berrisford G, Copello A, Fazil Q, et al. Differences in access and utilisation of mental health services in the perinatal period for women from ethnic minorities—a population-based study. BMC Medicine. 2020;18(1):245. https://doi.org/10.1186/s12916-020-01711-w.

99. Kapadia D, Nazroo J, Tranmer M. Ethnic differences in women's use of mental health services: do social networks play a role? Findings from a national survey. Ethnicity & Health. 2018;23(3):293-306. https://doi.org/10.1080/13557858.2016.1263283.

100. Kirkbride JB, Hameed Y, Wright L, Russell K, Knight C, Perez J, et al. Waiting time variation in Early Intervention Psychosis services: longitudinal evidence from the SEPEA naturalistic cohort study. Social Psychiatry and Psychiatric Epidemiology. 2017;52(5):563-74. https://doi.org/10.1007/s00127-017-1343-7.

101. Kothari R, White D, Craster L, Vicianova E, Dennard S, Bailey F, et al. The impact of integrating mental health services within a prison setting. Mental Health Review Journal. 2022;27(2):146-57. https://doi.org/10.1108/mhrj-03-2021-0024.

102. Lappin JM, Heslin M, Jones PB, Doody GA, Reininghaus UA, Demjaha A, et al. Outcomes following first-episode psychosis - Why we should intervene early in all ages, not only in youth. The Australian and New Zealand Journal of Psychiatry. 2016;50(11):1055-63. https://doi.org/10.1177/0004867416673454.

103. Lawrence V, McCombie C, Nikolakopoulos G, Morgan C. Navigating the mental health system: Narratives of identity and recovery among people with psychosis across ethnic groups. Social Science & Medicine. 2021;279:9. https://doi.org/10.1016/j.socscimed.2021.113981.

104. Lawrence V, McCombie C, Nikolakopoulos G, Morgan C. Ethnicity and power in the mental health system: experiences of White British and Black Caribbean people with psychosis. Epidemiology and Psychiatric Sciences. 2021;30:e12. https://doi.org/10.1017/S2045796020001043.

105. Leavey G, McGrellis S, Forbes T, Thampi A, Davidson G, Rosato M, et al. Improving mental health pathways and care for adolescents in transition to adult services (IMPACT): a retrospective case note review of social and clinical determinants of transition. Social Psychiatry and Psychiatric Epidemiology. 2019;54(8):955-63. https://doi.org/10.1007/s00127-019-01684-z.

106. Livanou MI, Lane R, D'Souza S, Singh SP. A retrospective case note review of young people in transition from adolescent medium secure units to adult services. Journal of Forensic Practice. 2020;22(3):161-72. https://doi.org/10.1108/Jfp-02-2020-0007.

107. Livanou M, Singh SP, Liapi F, Furtado V. Mapping transitional care pathways among young people discharged from adolescent forensic medium secure units in England. Medicine, Science and the Law. 2020;60(1):45-53. https://doi.org/10.1177/0025802419887287.

108. Livanou M, D'Souza S, Lane R, La Plante B, Singh SP. Challenges and Facilitators During Transitions from Adolescent Medium Secure Units to Adult Services in

England: Interviews with Mental Healthcare Professionals. Administration and Policy in Mental Health and Mental Health Services Research. 2021;48(6):1089-104. https://doi.org/10.1007/s10488-021-01115-9.

109. Maconick L, Sheridan Rains L, Jones R, Lloyd-Evans B, Johnson S. Investigating geographical variation in the use of mental health services by area of England: a cross-sectional ecological study. BMC Health Services Research. 2021;21(1):951. https://doi.org/10.1186/s12913-021-06976-2.

110. Majid M, Tadros M, Tadros G, Singh S, Broome MR, Upthegrove R. Young people who self-harm: a prospective 1-year follow-up study. Social Psychiatry and Psychiatric Epidemiology. 2016;51(2):171-81. https://doi.org/10.1007/s00127-015-1149-4.

111. Manescu EA, Robinson EJ, Henderson C. Attitudinal and demographic factors associated with seeking help and receiving antidepressant medication for symptoms of common mental disorder. BMC Psychiatry. 2020;20(1):579. https://doi.org/10.1186/s12888-020-02971-9.

112. Mankiewicz PD, Reid J, Hughes EA, Attard A. Management of demographic equality of access to family intervention for psychosis in specialist community mental healthcare teams. British Journal of Healthcare Management. 2021;27(8):1-11. https://doi.org/10.12968/bjhc.2020.0136.

113. Mann F, Fisher HL, Major B, Lawrence J, Tapfumaneyi A, Joyce J, et al. Ethnic variations in compulsory detention and hospital admission for psychosis across four UK Early Intervention Services. BMC Psychiatry. 2014;14(1):256. https://doi.org/10.1186/s12888-014-0256-1.

114. Mansour R, Tsamakis K, Rizos E, Perera G, Das-Munshi J, Stewart R, et al. Late-life depression in people from ethnic minority backgrounds: Differences in presentation and management. Journal of Affective Disorders. 2020;264:340-7. https://doi.org/10.1016/j.jad.2019.12.031.

115. Mark KM, Leightley D, Pernet D, Murphy D, Stevelink SAM, Fear NT. Identifying veterans using electronic health records in the United Kingdom: a feasibility study. Healthcare. 2020;8(1):13. https://doi.org/10.3390/healthcare8010001.

116. Matthew Prina A, Marioni RE, Hammond GC, Jones PB, Brayne C, Dening T. Improving access to psychological therapies and older people: findings from the Eastern Region. Behaviour Research and Therapy. 2014;56(100):75-81. https://doi.org/10.1016/j.brat.2014.03.008.

117. McKenzie N, Killaspy H, Jakobowitz S, Faranak H, Bebbington P. Assessing needs for psychiatric treatment in prisoners: 3. Comparison of care received by Black and minority ethnic prisoners and by White prisoners. Social Psychiatry and Psychiatric Epidemiology. 2019;54(7):883-6. https://doi.org/10.1007/s00127-019-01663-4.

118. McNamara N, Coyne I, Ford T, Paul M, Singh S, McNicholas F. Exploring social identity change during mental healthcare transition. European Journal of Social Psychology. 2017;47(7):889-903. https://doi.org/10.1002/ejsp.2329.

119. Meddings S, Walsh L, Patmore L, McKenzie KLE, Holmes S. To what extent does Sussex Recovery College reflect its community? An equalities and diversity audit. Mental Health and Social Inclusion. 2019;23(3):136-44. https://doi.org/10.1108/mhsi-04-2019-0011.

120. Mercer L, Evans LJ, Turton R, Beck A. Psychological therapy in secondary mental health care: access and outcomes by ethnic group. Journal of Racial and Ethnic Health Disparities. 2019;6(2):419-26. https://doi.org/10.1007/s40615-018-00539-8.

121. . Mirza A, Birtel MD, Pyle M, Morrison AP. Cultural differences in psychosis: the role of causal beliefs and stigma in White British and South Asians. Journal of Cross-Cultural Psychology. 2019;50(3):441-59. https://doi.org/10.1177/0022022118820168.

122. Moore L, Jayaweera H, Redshaw M, Quigley M. Migration, ethnicity and mental health: evidence from mothers participating in the Millennium Cohort Study. Public Health. 2019;171:66-75. https://doi.org/10.1016/j.puhe.2019.03.022.

123. Morgan J. Does a cluster always equal a cluster? Geographical variation of cluster populations. Psychiatric Bulletin. 2014;38(6):294-8. https://doi.org/10.1192/pb.bp.113.045237.

124. Morgan C, Fearon P, Lappin J, Heslin M, Donoghue K, Lomas B, et al. Ethnicity and long-term course and outcome of psychotic disorders in a UK sample: the AESOP-10 study. British Journal of Psychiatry. 2017;211(2):88-94. https://doi.org/10.1192/bjp.bp.116.193342.

125. Nicholson L, Hotchin H. The relationship between area deprivation and contact with community intellectual disability psychiatry. Journal of Intellectual Disability Research. 2015;59(5):487-92. https://doi.org/10.1111/jir.12149.

126. Nilforooshan R, Benson L, Gage H, Williams P, Zoha M, Warner J. Comparison of service utilisation and costs of working age adults and older adults receiving treatment for psychosis and severe non-psychotic conditions in England: implications for commissioning. International Journal of Geriatric Psychiatry. 2017;32(1):110-5. https://doi.org/10.1002/gps.4455.

127. Oates LL, Firth N. Deprivation, access and outcomes in health psychology treatment. Mental Health Review Journal. 2020;25(2):139-51. https://doi.org/10.1108/mhrj-02-2020-0010.

128. Oduola S, Craig TKJ, Das-Munshi J, Bourque F, Gayer-Anderson C, Morgan C. Compulsory admission at first presentation to services for psychosis: does ethnicity still matter? Findings from two population-based studies of first episode psychosis. Social Psychiatry and Psychiatric Epidemiology. 2019;54(7):871-81. https://doi.org/10.1007/s00127-019-01685-y.

129. Pettit S, Qureshi A, Lee W, Stirzaker A, Gibson A, Henley W, et al. Variation in referral and access to new psychological therapy services by age: an empirical quantitative study. British Journal of General Practice. 2017;67(660):e453-e9. https://doi.org/10.3399/bjgp17X691361.

130. Prady SL, Pickett KE, Gilbody S, Petherick ES, Mason D, Sheldon TA, et al. Variation and ethnic inequalities in treatment of common mental disorders before, during and after pregnancy: combined analysis of routine and research data in the Born in Bradford cohort. BMC Psychiatry. 2016;16(1):99. https://doi.org/10.1186/s12888-016-

0805-x.

131. Reichert A, Jacobs R. Socioeconomic inequalities in duration of untreated psychosis: evidence from administrative data in England. Psychological Medicine. 2018;48(5):822-33. https://doi.org/10.1017/S0033291717002197.

132. Rhead RD, Woodhead C, Ahmad G, Das-Munshi J, McManus S, Hatch SL. A comparison of single and intersectional social identities associated with discrimination and mental health service use: data from the 2014 Adult Psychiatric Morbidity Survey in England. Social Psychiatry and Psychiatric Epidemiology. 2022;57(10):2049-63. https://doi.org/10.1007/s00127-022-02259-1.

133. Ride J, Kasteridis P, Gutacker N, Aragon Aragon MJ, Jacobs R. Healthcare Costs for People with Serious Mental Illness in England: An Analysis of Costs Across Primary Care, Hospital Care, and Specialist Mental Healthcare. Applied Health Economics and Health Policy. 2020;18(2):177-88. https://doi.org/10.1007/s40258-019-00530-2.

134. Saini P, Chopra J, Hanlon CA, Boland JE. A case series study of help-seeking among younger and older men in suicidal crisis. International Journal of Environmental Research and Public Health. 2021;18(14):14. https://doi.org/10.3390/ijerph18147319.

135. Singh SP, Brown L, Winsper C, Gajwani R, Islam Z, Jasani R, et al. Ethnicity and pathways to care during first episode psychosis: the role of cultural illness attributions. BMC Psychiatry. 2015;15:287. https://doi.org/10.1186/s12888-015-0665-9.

136. Sizmur S, McCulloch A. Differences in treatment approach between ethnic groups. Mental Health Review Journal. 2016;21(2):73-84. https://doi.org/10.1108/mhrj-05-2015-0016.

137. Smyth N, Buckman JEJ, Naqvi SA, Aguirre E, Cardoso A, Pilling S, et al. Understanding differences in mental health service use by men: an intersectional analysis of routine data. Social Psychiatry and Psychiatric Epidemiology. 2022;57(10):2065-77. https://doi.org/10.1007/s00127-022-02256-4.

138. Steeg S, Carr M, Trefan L, Ashcroft D, Kapur N, Nielsen E, et al. Primary care clinical management following self-harm during the first wave of COVID-19 in the UK: population-based cohort study. BMJ Open. 2022;12(2):e052613. https://doi.org/10.1136/bmjopen-2021-052613.

139. Thomas F, Hansford L, Ford J, Wyatt K, McCabe R, Byng R. How accessible and acceptable are current GP referral mechanisms for IAPT for low-income patients? Lay and primary care perspectives. Journal of Mental Health. 2020;29(6):706-11. https://doi.org/10.1080/09638237.2019.1677876.

140. Tseliou F, Johnson S, Major B, Rahaman N, Joyce J, Lawrence J, et al. Gender differences in one-year outcomes of first-presentation psychosis patients in inner-city UK Early Intervention Services. Early Intervention in Psychiatry. 2017;11(3):215-23. https://doi.org/10.1111/eip.12235.

141. Tucker S, Wilberforce M, Brand C, Abendstern M, Crook A, Jasper R, et al. Community mental health teams for older people: variations in case mix and service receipt

(I). International Journal of Geriatric Psychiatry. 2015;30(6):595-604. https://doi.org/10.1002/gps.4191.

142. Tyler N, Miles HL, Karadag B, Rogers G. An updated picture of the mental health needs of male and female prisoners in the UK: prevalence, comorbidity, and gender differences. Social Psychiatry and Psychiatric Epidemiology. 2019;54(9):1143-52. https://doi.org/10.1007/s00127-019-01690-1.

143. Valmaggia LR, Byrne M, Day F, Broome MR, Johns L, Howes O, et al. Duration of untreated psychosis and need for admission in patients who engage with mental health services in the prodromal phase. British Journal of Psychiatry. 2015;207(2):130-4. https://doi.org/10.1192/bjp.bp.114.150623.

144. Volkert J, Andreas S, Harter M, Dehoust MC, Sehner S, Suling A, et al. Predisposing, enabling, and need factors of service utilization in the elderly with mental health problems. International Psychogeriatrics. 2018;30(7):1027-37. https://doi.org/10.1017/S1041610217002526.

145. Walters K, Falcaro M, Freemantle N, King M, Ben-Shlomo Y. Sociodemographic inequalities in the management of depression in adults aged 55 and over: an analysis of English primary care data. Psychological Medicine. 2018;48(9):1504-13. https://doi.org/10.1017/S0033291717003014.

146. Watson A, Mellotte H, Hardy A, Peters E, Keen N, Kane F. The digital divide: factors impacting on uptake of remote therapy in a South London psychological therapy service for people with psychosis. Journal of Mental Health. 2022;31(6):825-32. https://doi.org/10.1080/09638237.2021.1952955.

147. Weich S, McBride O, Twigg L, Duncan C, Keown P, Crepaz-Keay D, et al. Variation in compulsory psychiatric inpatient admission in England: a cross-classified, multilevel analysis. The Lancet Psychiatry. 2017;4(8):619-26. https://doi.org/10.1016/S2215-0366(17)30207-9.

148. White J, Gutacker N, Jacobs R, Mason A. Hospital admissions for severe mental illness in England: Changes in equity of utilisation at the small area level between 2006 and 2010. Social Science & Medicine. 2014;120:243-51. https://doi.org/10.1016/j.socscimed.2014.09.036.

149. Wilberforce M, Tucker S, Brand C, Abendstern M, Jasper R, Stewart K, et al. Community mental health teams for older people: variations in case mix and service receipt (II). International Journal of Geriatric Psychiatry. 2015;30(6):605-13. https://doi.org/10.1002/gps.4190.

150. Yasmin-Qureshi S, Ledwith S. Beyond the barriers: South Asian women's experience of accessing and receiving psychological therapy in primary care. Journal of Public Mental Health. 2021;20(1):3-14. https://doi.org/10.1108/Jpmh-06-2020-0058.

151. Liberati E, Richards N, Parker J, Willars J, Scott D, Boydell N, et al. Remote care for mental health: qualitative study with service users, carers and staff during the COVID-19 pandemic. BMJ Open. 2021;11(4):e049210. https://doi.org/10.1136/bmjopen-2021-049210.

152. Wiginton JM, Maksut JL, Murray SM, Augustinavicius JL, Kall M, Delpech V, et al. Brief report: HIV-related healthcare stigma/discrimination and unmet needs among persons living with HIV in England and Wales. Preventive Medicine Reports. 2021;24:101580. https://doi.org/10.1016/j.pmedr.2021.101580.

Table B4. Summary of key findings associated with dimensions of inequality

Dimension of inequality	Studies reported data for dimension	Studies did not report data for dimension	Studies which only included specific population groups	Differences in levels of access to mental health services (e.g., referrals, service use)	Differences in ways of accessing mental health services (e.g., pathways, referral sources)	Barriers to accessing mental health services – using Levesque framework
Age	117 (77%)	35 (23%)	• Young adults (n=11) • Older adults (n=4)	• **no differences in access** – by age (1-6) • **MH costs** – increased for younger adults (7, 8), increased for older adults (7-9) • **formal MH help-seeking** – less likely for younger adults (10), more likely for middle age adults (11), less likely for older adults (12), more likely for older adults (13) • **referrals to MH services** – those referred during COVID-19 were younger (14), more likely to be of working age (15), vary by age (16-19), males more likely to be younger at referral (20) • **access to MH services** – lower for younger adults (21), higher for younger adults (22-27), lower for older adults (28), IAPT patients more likely to be younger (29) • **engagement with MH treatment** – lower for younger adults (30), higher for older adults (28, 31)	• **referral source** – GP-referred and self-referred IAPT patients more likely to be younger (29) , older adults less likely to be referred by GP and more likely to self-refer (31) • **compulsory MH treatment** – those aged over 35 (32) and aged 40-54 (33) more likely to be subjected to an MHA section, risk of compulsory admission higher in those aged 18-35 (34) • **waiting times** – older adults lower waiting times for MH treatment (28, 31, 35) • **service provision** – significant variation for older adults (36, 37) • **service delivery** – remote MH care accessed by younger adults (38)	• **ability to perceive** – difficulty in recognising a MH problem (39, 40), eligibility (40, 41), illness identity (42), trust (43) • **ability to seek** – awareness of services (42), autonomy (39, 42), self-reliance (40), stigma and discrimination (39-42, 44) • **ability to reach** – availability of services (43, 45, 46), flexibility (43, 46), technology (38, 47, 48) transition (43, 45, 46, 49-51) • **ability to engage** – appropriateness of services (36, 37, 41) continuity of care (41, 43, 46), joint working (43, 46), family/carer involvement (41, 42, 50)
Disability	27 (18%)	125 (82%)	• Learning / intellectual disabilities (n=3) • Long-term conditions (n=1) • Physical health conditions (n=1) • Deaf people (n=1) • Living with HIV (n=1)	• **no differences in access** – by disability (4, 26, 52, 53) • **MH costs** – increased for people with physical health conditions (7, 8) • **formal MH help-seeking** – more likely for people with long-term conditions (11) • **referrals to MH services** – increased for people with existing conditions following COVID-19 (15) • **access to MH services** – lower for people in receipt of fit note (26), lower	-	• **ability to percieve** – eligibility (55, 56) • **ability to seek** – awareness of services (56, 57), stigma and discrimination (55, 56, 58) • **ability to reach** – availability of services (58, 59), flexibility (58), language and communication (57), technology (47, 59, 60), transport (47, 58) • **ability to engage** – appropriateness of services (56, 57), coordination of MH and physical health care (58),

				disclosure of disability (27) • **engagement with MH treatment** – lower IAPT uptake and higher IAPT dropout rate for people with learning disabilities (52) • **unmet MH needs** – high for people with disabilities (54), high for people living with HIV (55)		family/carer involvement (56, 57)
Education	36 (24%)	116 (76%)	• University students (n=6)	• **no differences in access** – by education (13, 39) • **formal MH help-seeking** – less likely for people with no qualifications (11), less likely for people with higher educational levels (13, 61), more likely for people with higher educational levels (12) • **referrals to MH services** – males more likely to have less qualifications at referral (20) • **access to MH services** – lower for people with no qualifications (62), higher for university students (61, 63), ethnic minority MH patients more likely to be educated at GCSE or above (64)	-	• **ability to seek** – stigma and discrimination (44, 65)
Gender and sex	125 (82%)	27 (18%)	• Females (n=11) • Males (n=7) • Transgender (n=1)	• **no differences in access** – by gender or sex (1, 3, 4, 6, 13-15, 20, 23, 24, 26, 30, 32, 33, 35, 38, 66-68) • **MH costs** – increased for males (8) • **formal MH help-seeking** – less likely for males (11, 61), more likely for females (10) • **referrals to MH services** – lower for males (49), higher for females (16) • **access to MH services** – lower for males (3, 39, 61), access to secondary MH services higher for males (26), IAPT patients more likely to be male (29), higher for females (27, 44, 62, 63, 69, 70), access to IAPT services higher for females (26), lower for transgender	• **referral source** – GP-referred IAPT patients more likely to be male, and no differences by gender in self-referred IAPT patients (29), males more likely to be referred by social/criminal justice services (68) • **referral destination** – males more likely to be referred to inpatient and emergency services than outpatient (68) • **compulsory treatment –** more likely for males (34, 73), more likely for females (20)	• **ability to percieve** – difficulty in recognising MH problem (74), eligibility (71), trust (69, 74) • **ability to seek** – awareness of services (74), stigma and discrimination (61, 65, 69) • **ability to reach** – technology (38) • **ability to engage** – appropriateness of services (71, 74)

				people (27), high for transgender people (63, 71) • **unmet MH needs** – high for males (70, 72)		
Occupation	57 (38%)	95 (62%)	• UK Armed Forces / veterans (n=11) • Doctors / GPs (n=3)	• **no differences in access** – by employment (13, 35, 75) • **formal MH help-seeking** – more likely for unemployed people (11) • **referrals to MH services** – males less likely to be employed full-time at referral (20) • **access to MH services** – lower for employed people (76), higher for unemployed people (44, 49, 62, 77, 78), IAPT patients more likely to be unemployed or full-time homemakers/ carers and less likely to be students or retired (29), Black MH patients more likely to be unemployed (79) • **engagement with MH treatment** – less likely for unemployed people (30), higher risk of disengaging for unemployed males (75)	• **referral source** – GP-referred IAPT patients more likely to be unemployed or full-time homemakers/carers and less likely to be students or retired (29), self-referred IAPT patients more likely to be unemployed and less likely to be students or retired (29), UK armed forces personnel benefit from availability of a self-referral pathway (80) • **referral destination** – unemployed males higher risk of being deemed unsuitable by MH services, and higher risk of being referred elsewhere (75), veterans use mainstream NHS services rather than veteran specific services (69) • **compulsory treatment** – more likely for unemployed people (81) • **waiting times** – MH treatment waiting times longer for unemployed people (6, 25, 82) and students (6)	• **ability to perceive –** difficulty in recognising MH problem (83-89), eligibility (84, 89), trust (69, 84, 88-90) • **ability to seek** – awareness of services (83-85, 88, 89), autonomy (86), stigma and discrimination (44, 69, 83-91) • **ability to reach** – availability of services (83, 85, 87-89), flexibility (83, 85, 91), language and communication (87), social support (86, 89), time (83, 84, 88, 91), • **ability to engage** – appropriateness of services (83, 88, 89)
Place of residence	51 (33%)	101 (67%)	• Homeless (n=1)	• **no differences in access** – by area of living (12, 18, 33, 35), or by accommodation type (6, 35) • **MH costs** – increased for those living alone or in communal households (7), decreased for greater distance between GP and MH services (8) • **formal MH help-seeking** – more likely for those living alone (12) • **referrals to MH services** – lower for homeless people (53) • **access to MH services** – lower for homeless people (53), higher for those living alone (36), higher for those with housing problems (21), male MH	• **compulsory treatment** – more likely for those living alone (81), more likely for those living in supported accommodation (32) • **service provision** – significant geographical variations in MH resources (92)	• **ability to percieve** – unable to prioritise MH (93) • **ability to seek** – awareness of services (93) • **ability to reach** – location (7), privacy (94), safety (47), technology (47, 93), transport (93) • **ability to engage** – appropriateness of services (93)

				patients more likely to be living with relatives (20), female MH patients more likely to be living alone (20), geographical variations in access (1, 39, 78) • **engagement with MH treatment** – lower for homeless people (53)		
Pregnancy and maternity	8 (5%)	144 (95%)	• Women in the pre-natal / post-natal period (n=6 • Mothers (n=1)	-	-	• **ability to percieve** – difficulty in recognising MH problem (95) • **ability to seek** – awareness of services (96), stigma and discrimination (95, 96) • **ability to reach** – flexibility (95) • **ability to engage** – appropriateness of services (94, 95)
Race, ethnicity, culture, and language	116 (76%)	38 (24%)	• Ethnic minority groups (n=17)	• **no differences in access** – by ethnicity (1-3, 6, 11, 14, 30, 33, 38, 53, 76, 92, 97-100), or migration status (11, 68, 77) • **MH costs** – increased for White people (8), increased for ethnic minority groups (7) • **formal MH help-seeking** – more likely for Black university students (101) • **access to MH services** – less likely for ethnic minority groups (13, 24, 26, 27, 44, 62, 64, 77, 102-107), less likely for migrants (62, 102, 108), more likely for White people (23, 109), increased access for White people following COVID-19 (15), IAPT patients more likely to be White (29) • **engagement with MH treatment** – higher risk of disengagement for ethnic minority males (75) • **unmet MH needs** – high for ethnic minority groups (24, 64)	• **referral source** – GP-referred IAPT patients more likely to be White (29), no differences by ethnicity in self-referred IAPT patients (29), Black people higher rates of criminal justice system involvement (32, 68, 79, 110-112), lower MH access via GP for migrants (62) • **referral destination** – ethnic minority males higher risk of being deemed unsuitable by MH services, and higher risk of being referred elsewhere (75), ethnic minority groups more likely to be referred to inpatient and emergency services than outpatient (68) • **compulsory treatment** – more likely for Black people (34, 79, 81, 105, 110-113), more likely for ethnic minority groups (32, 33) • **waiting times** – lower for ethnic minority groups (35), ethnic minority groups more likely to present later to MH services (82)	• **ability to percieve** – difficulty in recognising MH problem (114-120), eligibility (121), illness attributions (109, 111, 118, 120, 122), illness identity (123), trust (115-117, 122, 124-128) • **ability to seek** – autonomy (123, 125), awareness of services (116, 117, 119, 127-129), culture (60, 96, 114-117, 119, 121-125, 127, 128, 130, 131), stigma and discrimination (44, 65, 96, 97, 109, 114-117, 119-124, 126-131) • **ability to reach** – availability of services (115, 119, 121, 128, 132, 133), flexibility (121), language and communication (47, 96, 114, 116, 119, 131, 132), social support (114, 117, 119, 124, 127, 130), technology (38, 133) • **ability to engage** – appropriateness of services (60, 96, 117, 119, 121, 125, 127, 129, 130, 133), continuity of care (116, 126), family/carer involvement (124, 126, 131), power (114, 119, 124, 125)

Religion	12 (8%)	140 (92%)	-	• **no differences in access** – by religion (3) • **access to MH services** – higher for Christian people (27), lower for non-religious people (27) • **engagement with MH treatment** – higher risk of disengagement for Muslim males (75), lower risk of disengagement for Christian males (75)	-	• **ability to perceive** – illness attributions (111, 117) • **ability to seek** – culture (131)
Sexual orientation	15 (10%)	137 (90%)	• Sexual minority groups (n=3)	• **access to MH services** – lower for sexual minority groups (27), higher for sexual minority groups (44, 63), lower for heterosexual people (101) • **engagement with MH treatment** – higher risk of disengagement for sexual minority males (75)	-	• **ability to percieve** – disclosure of sexual orientation (67, 134) • **ability to seek** – stigma and discrimination (44, 63, 67, 134) • **ability to reach** – social support (63) • **ability to engage** – appropriateness of services (67, 94, 134)
Social capital	6 (4%)	146 (96%)	-	• **no differences in access** – by social capital (11, 12) • **formal MH help-seeking** – more likely for increased sense of belonging (101), more likely for increased social support (10) • **access to MH services** – lower for those with adequate social support (77)	-	• **ability to reach** – social support (10, 101)
Socio-economic status	39 (26%)	113 (74%)	• Low income patients (n=1)	• **no differences in access** – by socio-economic status (16, 18, 26, 35, 75, 76, 128, 135) • **MH costs** – increased for people from more deprived areas (7, 8) • **formal MH help-seeking** – more likely for lower income patients (11) • **referrals to MH services** – less likely for people from more deprived areas (136, 137) • **access to MH services** – lower for people from more deprived areas (30, 92), higher for people from more deprived areas (44, 78, 138-140)	• **referral source** – GP-referred IAPT patients less likely to be in reciept of benefits (29), no differences for self-referred IAPT patients on benefit status (29) • **compulsory treatment** – more likely for people from more deprived areas (34) • **waiting times** – lower for people from least deprived areas (6)	• **ability to perceive** – eligibility (141) • **ability to seek** – self-reliance (141) • **ability to reach** – technology (47, 48, 60, 142), availability of services (141) • **ability to engage** – appropriateness of services (141, 143)

				- **engagement with MH treatment** – higher risk of disengagement for males from more deprived areas (75)		
*Contact with criminal justice system	8 (5%)	144 (95%)	- Prisoners (n=5) - Probationers (n=1)	- **access to MH services** – high for prisoners (64, 70, 73) - **unmet MH needs** – high for prisoners (64, 72)	-	- **ability to perceive** – trust (97), unable to prioritise MH (144) - **ability to seek** – self-reliance (97), stigma and discrimination (97) - **ability to reach** – availability of services (72, 97, 144) - **ability to engage** – appropriateness of services (72, 144)
*Refugees and asylum seekers	3 (2%)	149 (98%)	- Refugees and asylum seekers (n=3)	-	- **referral destination** – despite refugee/asylum seekers presenting at GP, very few referred to IAPT or MH services (145)	- **ability to perceive** – health beliefs and practices (146) - **ability to seek** – stigma and discrimination (146) - **ability to reach** – availability of services (132), language and communication (132, 146)
*Trafficked people and street sex workers	3 (2%)	149 (98%)	- Trafficked people (n=2) - Street sex workers (n=1)	-	-	- **ability to percieve** – disclosure of being trafficked (147), eligibility (148), trust (148) - **ability to reach** – availability of services (147-149) - **ability to engage** – appropriateness of services (147-149)
*Marital or relationship status	35 (23%)	117 (77%)	-	- **no differences in access** – by marital or relationship status (6, 13, 23, 35) - **formal MH help-seeking** – more likely for non-married/non-cohabiting people (11) - **referrals to MH services** – males more likely to be single at referral (20) - **access to MH services** – increased for non-cohabiting people following COVID-19 (15), Black MH patients more likely to be single (79) - **engagement with MH treatment** – IAPT uptake less likely for those	- **compulsory treatment** – more likely for single people (33)	-

				previously cohabiting (1)		

* *GP*, general practitioner; *HIV*, human immunodeficiency virus; *IAPT*, improving access to psychological therapies; *MH*, mental health; *NHS*, National Health Service; *UK*, United Kingdom

List of included studies references for Table B4

1. Di Bona L, Saxon D, Barkham M, Dent-Brown K, Parry G. Predictors of patient non-attendance at Improving Access to Psychological Therapy services demonstration sites. Journal of Affective Disorders. 2014;169:157-64. https://doi.org/10.1016/j.jad.2014.08.005.
2. Kothari R, White D, Craster L, Vicianova E, Dennard S, Bailey F, et al. The impact of integrating mental health services within a prison setting. Mental Health Review Journal. 2022;27(2):146-57. https://doi.org/10.1108/mhrj-03-2021-0024.
3. Mankiewicz PD, Reid J, Hughes EA, Attard A. Management of demographic equality of access to family intervention for psychosis in specialist community mental healthcare teams. British Journal of Healthcare Management. 2021;27(8):1-11. https://doi.org/10.12968/bjhc.2020.0136.
4. Morgan J. Does a cluster always equal a cluster? Geographical variation of cluster populations. The Psychiatric Bulletin. 2014;38(6):294-8. https://doi.org/10.1192/pb.bp.113.045237.
5. Saini P, Chopra J, Hanlon CA, Boland JE. A case series study of help-seeking among younger and older men in suicidal crisis. International Journal of Environmental Research and Public Health. 2021;18(14):14. https://doi.org/10.3390/ijerph18147319.
6. Reichert A, Jacobs R. Socioeconomic inequalities in duration of untreated psychosis: evidence from administrative data in England. Psychological Medicine. 2018;48(5):822-33. https://doi.org/10.1017/S0033291717002197.
7. Anselmi L, Everton A, Shaw R, Suzuki W, Burrows J, Weir R, et al. Estimating local need for mental healthcare to inform fair resource allocation in the NHS in England: cross-sectional analysis of national administrative data linked at person level. British Journal of Psychiatry. 2020;216(6):338-44. https://doi.org/10.1192/bjp.2019.185.
8. Ride J, Kasteridis P, Gutacker N, Aragon MJA, Jacobs R. Healthcare costs for people with serious mental illness in England: an analysis of costs across primary care, hospital care, and specialist mental healthcare. Applied Health Economics and Health Policy. 2020;18(2):177-88. https://doi.org/10.1007/s40258-019-00530-2.
9. Nilforooshan R, Benson L, Gage H, Williams P, Zoha M, Warner J. Comparison of service utilisation and costs of working age adults and older adults receiving treatment for psychosis and severe non-psychotic conditions in england: Implications for commissioning. International Journal of Geriatric Psychiatry. 2017;32(1):110-5. https://doi.org/10.1002/gps.4455.
10. Stevelink SAM, Jones N, Jones M, Dyball D, Khera CK, Pernet D, et al. Do serving and ex-serving personnel of the UK armed forces seek help for perceived stress,

emotional or mental health problems? European Journal of Psychotraumatology. 2019;10(1):1556552. https://doi.org/10.1080/20008198.2018.1556552.

11. Brown JSL, Evans-Lacko S, Aschan L, Henderson MJ, Hatch SL, Hotopf M. Seeking informal and formal help for mental health problems in the community: a secondary analysis from a psychiatric morbidity survey in South London. BMC Psychiatry. 2014;14(1):275. https://doi.org/10.1186/s12888-014-0275-y.
12. Bu FF, Mak HW, Fancourt D. Rates and predictors of uptake of mental health support during the COVID-19 pandemic: an analysis of 26,720 adults in the UK in lockdown. Social Psychiatry and Psychiatric Epidemiology. 2021;56(12):2287-97. https://doi.org/10.1007/s00127-021-02105-w.
13. Gondek D, Kirkbride JB. Predictors of mental health help-seeking among polish people living the United Kingdom. BMC Health Services Research. 2018;18:12. https://doi.org/10.1186/s12913-018-3504-0.
14. Butler M, Delvi A, Mujic F, Broad S, Pauli L, Pollak TA, et al. Reduced activity in an inpatient liaison psychiatry service during the first wave of the COVID-19 pandemic: comparison with 2019 data and characterization of the SARS-CoV-2 positive cohort. Frontiers in Psychiatry. 2021;12. https://doi.org/10.3389/fpsyt.2021.619550.
15. Chen SQ, She R, Qin P, Kershenbaum A, Fern, ez-Egea E, et al. The medium-term impact of COVID-19 lockdown on referrals to secondary care mental health services: a controlled interrupted time series study. Frontiers in Psychiatry. 2020;11:11. https://doi.org/10.3389/fpsyt.2020.585915.
16. Oates LL, Firth N. Deprivation, access and outcomes in health psychology treatment. Mental Health Review Journal. 2020;25(2):139-51. https://doi.org/10.1108/mhrj-02-2020-0010.
17. Steeg S, Carr M, Trefan L, Ashcroft D, Kapur N, Nielsen E, et al. Primary care clinical management following self-harm during the first wave of COVID-19 in the UK: population-based cohort study. BMJ Open. 2022;12(2):e052613. https://doi.org/10.1136/bmjopen-2021-052613.
18. Walters K, Falcaro M, Freemantle N, King M, Ben-Shlomo Y. Sociodemographic inequalities in the management of depression in adults aged 55 and over: an analysis of English primary care data. Psychological Medicine. 2018;48(9):1504-13. https://doi.org/10.1017/S0033291717003014.
19. Pettit S, Qureshi A, Lee W, Byng R, Gibson A, Stirzaker A, et al. Variation in referral and access to new psychological therapy services by age: An empirical quantitative study. British Journal of General Practice. 2017;67(660):e453-e9. https://doi.org/10.3399/bjgp17X691361.
20. Tseliou F, Johnson S, Major B, Rahaman N, Joyce J, Lawrence J, et al. Gender differences in one-year outcomes of first-presentation psychosis patients in inner-city UK Early Intervention Services. Early Intervention in Psychiatry. 2017;11(3):215-23. https://doi.org/10.1111/eip.12235.
21. Majid M, Tadros M, Tadros G, Singh S, Broome MR, Upthegrove R. Young people who self-harm: a prospective 1-year follow-up study. Social Psychiatry and Psychiatric Epidemiology. 2016;51(2):171-81. https://doi.org/10.1007/s00127-015-1149-4.

22. Lappin JM, Heslin M, Jones PB, Doody GA, Reininghaus UA, Demjaha A, et al. Outcomes following first-episode psychosis - Why we should intervene early in all ages, not only in youth. The Australian and New Zealand Journal of Psychiatry. 2016;50(11):1055-63. https://doi.org/10.1177/0004867416673454.
23. Colling C, Evans L, Broadbent M, Ch, ran D, Craig TJ, et al. Identification of the delivery of cognitive behavioural therapy for psychosis (CBTp) using a cross-sectional sample from electronic health records and open-text information in a large UK-based mental health case register. BMJ Open. 2017;7(7):e1002141. https://doi.org/10.1136/bmjopen-2016-015297.
24. Sizmur S, McCulloch A. Differences in treatment approach between ethnic groups. Mental Health Review Journal. 2016;21(2):73-84. https://doi.org/10.1108/mhrj-05-2015-0016.
25. Day E, Shah R, Taylor RW, Marwood L, Nortey K, Harvey J, et al. A retrospective examination of care pathways in individuals with treatment-resistant depression. BJPsych Open. 2021;7(3):11. https://doi.org/10.1192/bjo.2021.59.
26. Dorrington S, Carr E, Stevelink S, Ashworth M, Broadbent M, Madan I, et al. Access to mental healthcare in the year after first fit note: a longitudinal study of linked clinical records. BMJ Open. 2021;11(11):e044725. https://doi.org/10.1136/bmjopen-2020-044725.
27. Meddings S, Walsh L, Patmore L, McKenzie KLE, Holmes S. To what extent does Sussex Recovery College reflect its community? An equalities and diversity audit. Mental Health & Social Inclusion. 2019;23(3):136-44. https://doi.org/10.1108/mhsi-04-2019-0011.
28. Chaplin R, Farquharson L, Clapp M, Crawford M. Comparison of access, outcomes and experiences of older adults and working age adults in psychological therapy. International Journal of Geriatric Psychiatry. 2015;30(2):178-84. https://doi.org/10.1002/gps.4122.
29. Brown J, Ferner H, Wingrove J, Aschan L, Hatch S, Hotopf M. How equitable are psychological therapy services in South East London now? A comparison of referrals to a new psychological therapy service with participants in a psychiatric morbidity survey in the same London borough. Social Psychiatry & Psychiatric Epidemiology. 2014;49(12):1893-902. https://doi.org/10.1007/s00127-014-0900-6.
30. Firth N, Delgadillo J, Kellett S, Lucock M. The influence of socio-demographic similarity and difference on adequate attendance of group psychoeducational cognitive behavioural therapy. Psychotherapy Research. 2020;30(3):362-74. https://doi.org/10.1080/10503307.2019.1589652.
31. Matthew Prina A, Marioni RE, Hammond GC, Jones PB, Brayne C, Dening T. Improving access to psychological therapies and older people: Findings from the Eastern Region. Behaviour Research & Therapy. 2014;56:75-81. https://doi.org/10.1016/j.brat.2014.03.008.
32. Gajwani R, Parsons H, Birchwood M, Singh SP. Ethnicity and detention: are Black and minority ethnic (BME) groups disproportionately detained under the Mental Health Act 2007? Social Psychiatry and Psychiatric Epidemiology. 2016;51(5):703-11. 10.1007/s00127-016-1181-z. https://doi.org/10.1007/s00127-016-1181-z.

33. Watson J, Daley S. The use of section 135(1) of the Mental Health Act in a London borough. Mental Health Review Journal. 2015;20(3):133-43. https://doi.org/10.1108/mhrj-02-2015-0007.
34. Weich S, McBride O, Twigg L, Duncan C, Keown P, Crepaz-Keay D, et al. Variation in compulsory psychiatric inpatient admission in England: a cross-classified, multilevel analysis. Lancet Psychiatry. 2017;4(8):619-26. https://doi.org/10.1016/S2215-0366(17)30207-9.
35. Kirkbride J, Hameed Y, Wright L, Russell K, Knight C, Perez J, et al. Waiting time variation in early intervention psychosis services: longitudinal evidence from the SEPEA naturalistic cohort study. Social Psychiatry & Psychiatric Epidemiology. 2017;52(5):563-74. https://doi.org/10.1007/s00127-017-1343-7.
36. Wilberforce M, Tucker S, Brand C, Abendstern M, Jasper R, et al. Community mental health teams for older people: Variations in case mix and service receipt (II). International Journal of Geriatric Psychiatry. 2015;30(6):605-13. https://doi.org/10.1002/gps.4190.
37. Tucker S, Wilberforce M, Brand C, Abendstern M, Crook A, et al. Community mental health teams for older people: Variations in case mix and service receipt (I). International Journal of Geriatric Psychiatry. 2015;30(6):595-604. https://doi.org/10.1002/gps.4191.
38. Watson A, Mellotte H, Hardy A, Peters E, Keen N, Kane F. The digital divide: factors impacting on uptake of remote therapy in a South London psychological therapy service for people with psychosis. Journal of Mental Health. 2021. https://doi.org/10.1080/09638237.2021.1952955.
39. Volkert J, Andreas S, Harter M, Dehoust MC, Sehner S, Suling A, et al. Predisposing, enabling, and need factors of service utilization in the elderly with mental health problems. International Psychogeriatrics. 2018;30(7):1027-37. https://doi.org/10.1017/S1041610217002526.
40. Salaheddin K, Mason B. Identifying barriers to mental health help-seeking among young adults in the UK: a cross-sectional survey. British Journal of General Practice. 2016;66(651):E686-E92. https://doi.org/10.3399/bjgp16X687313.
41. Berry K, Sheardown J, Pabbineedi U, Haddock G, Cross C, Brown LJE. Barriers and facilitators to accessing psychological therapies for severe mental health difficulties in later life. Behavioural and Cognitive Psychotherapy. 2020;48(2):216-28. https://doi.org/10.1017/S1352465819000596.
42. McNamara N, Coyne I, Ford T, Paul M, Singh S, McNicholas F. Exploring social identity change during mental healthcare transition. European Journal of Social Psychology. 2017;47(7):889-903. https://doi.org/10.1002/ejsp.2329.
43. Butterworth S, Singh SP, Birchwood M, Islam Z, Munro ER, Vostanis P, et al. Transitioning care-leavers with mental health needs: "they set you up to fail!". Child and Adolescent Mental Health. 2017;22(3):138-47. https://doi.org/10.1111/camh.12171.
44. Rhead RD, Woodhead C, Ahmad G, Das-Munshi J, McManus S, Hatch SL. A comparison of single and intersectional social identities associated with discrimination and mental health service use: data from the 2014 Adult Psychiatric Morbidity Survey in England. Social Psychiatry and Psychiatric Epidemiology. 2022:15.

https://doi.org/10.1007/s00127-022-02259-1.

45. Livanou M, Singh SP, Liapi F, Furtado V. Mapping transitional care pathways among young people discharged from adolescent forensic medium secure units in England. Medicine, Science and the Law. 2019;60(1):45-53. https://doi.org/10.1177/0025802419887287.
46. van der Kamp J. The transition between mental health services in Scotland. Mental Health Review Journal. 2018;23(1):12-24. https://doi.org/10.1108/mhrj-05-2017-0020.
47. Liberati E, Richards N, Parker J, Willars J, Scott D, Boydell N, et al. Remote care for mental health: Qualitative study with service users, carers and staff during the COVID-19 pandemic. BMJ Open. 2021;11(4):49210. https://doi.org/10.1136/bmjopen-2021-049210.
48. Shah P, Hardy J, Birken M, Foye U, Rowan Olive R, Nyikavar, et al. What has changed in the experiences of people with mental health problems during the COVID-19 pandemic: a coproduced, qualitative interview study. Social Psychiatry & Psychiatric Epidemiology. 2022;57(6):1291-303. https://doi.org/10.1007/s00127-022-02254-6.
49. Leavey G, McGrellis S, Forbes T, Thampi A, Davidson G, Rosato M, et al. Improving mental health pathways and care for adolescents in transition to adult services (IMPACT): a retrospective case note review of social and clinical determinants of transition. Social Psychiatry and Psychiatric Epidemiology. 2019;54(8):955-63. https://doi.org/10.1007/s00127-019-01684-z.
50. Livanou M, D'Souza S, Lane R, La Plante B, Singh SP. Challenges and Facilitators During Transitions from Adolescent Medium Secure Units to Adult Services in England: Interviews with Mental Healthcare Professionals. Administration and Policy in Mental Health. 2021;48(6):1089-104. https://doi.org/10.1007/s10488-021-01115-9.
51. Livanou MI, Lane R, D'Souza S, Singh SP. A retrospective case note review of young people in transition from adolescent medium secure units to adult services. Journal of Forensic Practice. 2020;22(3):161-72. https://doi.org/10.1108/Jfp-02-2020-0007.
52. Dagnan D, Rodhouse C, Thwaites R, Hatton C. Improving Access to Psychological Therapies (IAPT) services outcomes for people with learning disabilities: national data 2012-2013 to 2019-2020. Cognitive Behaviour Therapist. 2022;15:15. https://doi.org/10.1017/S1754470X21000404.
53. Hopkin G, Chaplin L, Slade K, Craster L, Valmaggia L, Samele C, et al. Differences between homeless and non-homeless people in a matched sample referred for mental health reasons in police custody. International Journal of Social Psychiatry. 2020;66(6):576-83. https://doi.org/10.1177/0020764020920904.
54. Sakellariou D, Rotarou ES. Access to healthcare for men and women with disabilities in the UK: secondary analysis of cross-sectional data. BMJ Open. 2017;7(8):9. https://doi.org/10.1007/s40258-019-00530-2.
55. Wiginton JM, Maksut JL, Murray SM, Augustinavicius JL, Kall M, Delpech V, et al. Brief report: HIV-related healthcare stigma/discrimination and unmet needs among persons living with HIV in England and Wales. Preventive Medicine Reports. 2021;24:101580. https://doi.org/10.1016/j.pmedr.2021.101580.

56. Chinn D, Abraham E. Using 'candidacy' as a framework for understanding access to mainstream psychological treatment for people with intellectual disabilities and common mental health problems within the English Improving Access to Psychological Therapies service. Journal of Intellectual Disability Research. 2016;60(6):571-82. https://doi.org/10.1111/jir.12274.
57. Reader D, Foulkes H, Robinson C. Investigating barriers to mental health care experienced by the Deaf community in North Wales. Mental Health Nursing. 2017;37(3):14-9.
58. Carroll S, Moss-Morris R, Hulme K, Hudson J. Therapists' perceptions of barriers and facilitators to uptake and engagement with therapy in long-term conditions. British Journal of Health Psychology. 2021;26(2):307-24. https://doi.org/10.1111/bjhp.12475.
59. Gregson N, Randle-Phillips C, Delaney C. Delivering psychological services for people with learning disabilities during the Covid-19 pandemic: the experiences of psychologists in the UK. Journal of Mental Health Research in Intellectual Disabilities. 2022;15(2):168-96. https://doi.org/10.1080/19315864.2022.2047844.
60. Gillard S, Dare C, Hardy J, Nyikavar, a P, Rowan Olive R, et al. Experiences of living with mental health problems during the COVID-19 pandemic in the UK: a coproduced, participatory qualitative interview study. Social Psychiatry & Psychiatric Epidemiology. 2021;56(8):1447-57. https://doi.org/10.1007/s00127-021-02051-7.
61. Ennis E, McLafferty M, Murray E, Lapsley C, Bjourson T, Armour C, et al. Readiness to change and barriers to treatment seeking in college students with a mental disorder. Journal of Affective Disorders. 2019;252:428-34. https://doi.org/10.1016/j.jad.2019.04.062.
62. Bhavsar V, Jannesari S, McGuire P, MacCabe JH, Das-Munshi J, Bhugra D, et al. The association of migration and ethnicity with use of the Improving Access to Psychological Treatment (IAPT) programme: a general population cohort study. Social Psychiatry and Psychiatric Epidemiology. 2021;56(11):1943-56. https://doi.org/10.1007/s00127-021-02035-7.
63. Gnan GH, Rahman Q, Ussher G, Baker D, West E, Rimes KA. General and LGBTQ-specific factors associated with mental health and suicide risk among LGBTQ students. Journal of Youth Studies. 2019;22(10):1393-408. https://doi.org/10.1080/13676261.2019.1581361.
64. McKenzie N, Killaspy H, Jakobowitz S, Faranak H, Bebbington P. Assessing needs for psychiatric treatment in prisoners: 3. Comparison of care received by Black and minority ethnic prisoners and by White prisoners. Social Psychiatry and Psychiatric Epidemiology. 2019;54(7):883-6. https://doi.org/10.1007/s00127-019-01663-4.
65. Dockery L, Jeffery D, Schauman O, Williams P, Farrelly S, Bonnington O, et al. Stigma- and non-stigma-related treatment barriers to mental healthcare reported by service users and caregivers. Psychiatry Research. 2015;228(3):612-9. https://doi.org/10.1016/j.psychres.2015.05.044.
66. Forrester A, Samele C, Slade K, Craig T, Valmaggia L. Demographic and clinical characteristics of 1092 consecutive police custody mental health referrals. Journal of Forensic Psychiatry & Psychology. 2017;28(3):295-312. https://doi.org/10.1080/14789949.2016.1269357.

67. Foy AAJ, Morris D, Fern, es V, Rimes KA. LGBQ+ adults' experiences of Improving Access to Psychological Therapies and primary care counselling services: informing clinical practice and service delivery. Cognitive Behaviour Therapist. 2019;12:23. https://doi.org/10.1017/S1754470X19000291.
68. Chui Z, Gazard B, MacCrimmon S, Harwood H, Downs J, Bakolis I, et al. Inequalities in referral pathways for young people accessing secondary mental health services in south east London. European Child & Adolescent Psychiatry. 2021;30(7):1113-28. https://doi.org/10.1007/s00787-020-01603-7.
69. Godier-McBard LR, Cable G, Wood AD, Fossey M. Gender differences in barriers to mental healthcare for UK military veterans: a preliminary investigation. BMJ Military Health. 2022;168(1):70-5. https://doi.org/10.1136/bmjmilitary-2020-001754.
70. Tyler N, Miles HL, Karadag B, Rogers G. An updated picture of the mental health needs of male and female prisoners in the UK: prevalence, comorbidity, and gender differences. Social Psychiatry and Psychiatric Epidemiology. 2019;54(9):1143-52. https://doi.org/10.1007/s00127-019-01690-1.
71. Ellis SJ, Bailey L, McNeil J. Trans people's experiences of mental health and gender identity services: a UK study. Journal of Gay & Lesbian Mental Health. 2015;19(1):4-20. https://doi.org/10.1080/19359705.2014.960990.
72. Jakobowitz S, Bebbington P, McKenzie N, Iveson R, Duffield G, Kerr M, et al. Assessing needs for psychiatric treatment in prisoners: 2. Met and unmet need. Social Psychiatry and Psychiatric Epidemiology. 2017;52(2):231-40. https://doi.org/10.1007/s00127-016-1313-5.
73. Bebbington P, Jakobowitz S, McKenzie N, Killaspy H, Iveson R, Duffield G, et al. Assessing needs for psychiatric treatment in prisoners: 1. Prevalence of disorder. Social Psychiatry and Psychiatric Epidemiology. 2017;52(2):221-9. https://doi.org/10.1007/s00127-016-1311-7.
74. Sagar-Ouriaghli I, Brown JSL, Tailor V, Godfrey E. Engaging male students with mental health support: a qualitative focus group study. BMC Public Health. 2020;20(1):14. https://doi.org/10.1186/s12889-020-09269-1.
75. Smyth N, Buckman JEJ, Naqvi SA, Aguirre E, Cardoso A, Pilling S, et al. Understanding differences in mental health service use by men: an intersectional analysis of routine data. Social Psychiatry and Psychiatric Epidemiology. 2022:13. https://doi.org/10.1007/s00127-022-02256-4.
76. Manescu EA, Robinson EJ, Henderson C. Attitudinal and demographic factors associated with seeking help and receiving antidepressant medication for symptoms of common mental disorder. BMC Psychiatry. 2020;20(1):11. https://doi.org/10.1186/s12888-020-02971-9.
77. Kapadia D, Nazroo J, Tranmer M. Ethnic differences in women's use of mental health services: do social networks play a role? Findings from a national survey. Ethnicity & Health. 2018;23(3):293-306. https://doi.org/10.1080/13557858.2016.1263283.
78. Maconick L, Rains LS, Jones R, Lloyd-Evans B, Johnson S. Investigating geographical variation in the use of mental health services by area of England: a cross-sectional ecological study. BMC Health Services Research. 2021;21(1):10. https://doi.org/10.1186/s12913-021-06976-2.

79. Morgan C, Fearon P, Lappin J, Heslin M, Donoghue K, Lomas B, et al. Ethnicity and long-term course and outcome of psychotic disorders in a UK sample: the AESOP-10 study. British Journal of Psychiatry. 2017;211(2):88-94. https://doi.org/10.1192/bjp.bp.116.193342.
80. Kennedy I, Whybrow D, Jones N, Sharpley J, Greenberg N. A service evaluation of self-referral to military mental health teams. Occupational Medicine-Oxford. 2016;66(5):394-8. https://doi.org/10.1093/occmed/kqw044.
81. Oduola S, Craig TKJ, Das-Munshi J, Bourque F, Gayer-Anderson C, Morgan C. Compulsory admission at first presentation to services for psychosis: does ethnicity still matter? Findings from two population-based studies of first episode psychosis. Social Psychiatry and Psychiatric Epidemiology. 2019;54(7):871-81. https://doi.org/10.1007/s00127-019-01685-y.
82. Valmaggia LR, Byrne M, Day F, Broome MR, Johns L, Howes O, et al. Duration of untreated psychosis and need for admission in patients who engage with mental health services in the prodromal phase. British Journal of Psychiatry. 2015;207(2):130-4. https://doi.org/10.1192/bjp.bp.114.150623.
83. Brooks SK, Gerada C, Chalder T. The specific needs of doctors with mental health problems: qualitative analysis of doctor-patients' experiences with the Practitioner Health Programme. Journal of Mental Health. 2017;26(2):161-6. https://doi.org/10.1080/09638237.2016.1244712.
84. Daniels J, Ingram J, Pease A, Wainwright E, Beckett K, Iyadurai L, et al. The COVID-19 Clinician Cohort (CoCCo) Study: Empirically Grounded Recommendations for Forward-Facing Psychological Care of Frontline Doctors. International Journal of Environmental Research and Public Health. 2021;18(18):18. https://doi.org/10.3390/ijerph18189675.
85. Mellotte H, Murphy D, Rafferty L, Greenberg N. Pathways into mental health care for UK veterans: a qualitative study. European Journal of Psychotraumatology. 2017;8(1):11. https://doi.org/10.1080/20008198.2017.1389207.
86. Murphy D, Hunt E, Luzon O, Greenberg N. Exploring positive pathways to care for members of the UK Armed Forces receiving treatment for PTSD: a qualitative study. European Journal of Psychotraumatology. 2014;5:8. https://doi.org/10.3402/ejpt.v5.21759.
87. Rafferty LA, Wessely S, Stevelink SAM, Greenberg N. The journey to professional mental health support: a qualitative exploration of the barriers and facilitators impacting military veterans' engagement with mental health treatment. European Journal of Psychotraumatology. 2019;10(1):14. https://doi.org/10.1080/20008198.2019.1700613.
88. Spiers J, Kessler D, Leggett N, Taylor AK, Thornton G, Buszewicz M, et al. Barriers, facilitators, and survival strategies for GPs seeking treatment for distress: A qualitative study. British Journal of General Practice. 2017;67(663):e700-e8. https://doi.org/10.3399/bjgp17X692573.
89. Williamson V, Pearson EJ, Shevlin M, Karatzias T, Macmanus D, Murphy D. Experiences of veterans with ICD-11 complex PTSD in engaging with services. Journal of

Loss & Trauma. 2021;26(2):166-78. https://doi.org/10.1080/15325024.2020.1749784.

90. Fertout M, Jones N, Keeling M, Greenberg N. Mental health stigmatisation in deployed UK Armed Forces: a principal components analysis. Journal of the Royal Army Medical Corps. 2015;161:69-76. https://doi.org/10.1136/jramc-2015-000587.
91. Williamson V, Greenberg N, Stevelink SAM. Perceived stigma and barriers to care in UK Armed Forces personnel and veterans with and without probable mental disorders. BMC psychology. 2019;7(1):75. https://doi.org/10.1186/s40359-019-0351-7.
92. Delgadillo J, Farnfield A, North A. Social inequalities in the demand, supply and utilisation of psychological treatment. Counselling & Psychotherapy Research. 2018;18(2):114-21. https://doi.org/10.1002/capr.12169.
93. Adams EA, Parker J, Jablonski T, Kennedy J, Tasker F, Hunter D, et al. A Qualitative Study Exploring Access to Mental Health and Substance Use Support among Individuals Experiencing Homelessness during COVID-19. International Journal of Environmental Research and Public Health. 2022;19(6):3459. https://doi.org/10.3390/ijerph19063459.
94. Harrop E, Goss S, Farnell D, Longo M, Byrne A, Barawi K, et al. Support needs and barriers to accessing support: Baseline results of a mixed-methods national survey of people bereaved during the COVID-19 pandemic. Palliative Medicine. 2021;35(10):1985-97. https://doi.org/10.1177/02692163211043372.
95. Millett L, Taylor BL, Howard LM, Bick D, Stanley N, Johnson S. Experiences of improving access to psychological therapy services for perinatal mental health difficulties: a qualitative study of women's and therapists' views. Behavioural and Cognitive Psychotherapy. 2018;46(4):421-36. https://doi.org/10.1017/S1352465817000650.
96. Watson H, Soltani H. Perinatal mental ill health: the experiences of women from ethnic minority groups. British Journal of Midwifery. 2019;27(10):642-8.
97. McGrath K, Shaw J, Farquharson L. Barriers to accessing psychological treatment for medium to high risk male young offenders. Journal of Forensic Psychiatry & Psychology. 2020;31(4):596-612. https://doi.org/10.1080/14789949.2020.1782969.
98. Byrne M, Codjoe L, Morgan C, Stahl D, Day F, Fearon P, et al. The relationship between ethnicity and service access, treatment uptake and the incidence of psychosis among people at ultra high risk for psychosis. Psychiatry Research. 2019;272:618-27. https://doi.org/10.1016/j.psychres.2018.12.111.
99. Cullen AE, Bowers L, Khondoker M, Pettit S, Achilla E, Koeser L, et al. Factors associated with use of psychiatric intensive care and seclusion in adult inpatient mental health services. Epidemiology and Psychiatric Sciences. 2018;27(1):51-61. https://doi.org/10.1017/S2045796016000731.
100. Mansour R, Tsamakis K, Rizos E, Perera G, Das-Munshi J, Stewart R, et al. Late-life depression in people from ethnic minority backgrounds: Differences in presentation and management. Journal of Affective Disorders. 2020;264:340-7. https://doi.org/10.1016/j.jad.2019.12.031.

101. Bryant A, Cook A, Egan H, Wood J, Mantzios M. Help-seeking behaviours for mental health in higher education. Journal of Further and Higher Education. 2022;46(4):522-34. https://doi.org/10.1080/0309877X.2021.1985983.

102. Moore L, Jayaweera H, Redshaw M, Quigley M. Migration, ethnicity and mental health: evidence from mothers participating in the Millennium Cohort Study. Public Health. 2019;171:66-75. https://doi.org/10.1016/j.puhe.2019.03.022.

103. Prady SL, Pickett KE, Gilbody S, Petherick ES, Mason D, Sheldon TA, et al. Variation and ethnic inequalities in treatment of common mental disorders before, during and after pregnancy: combined analysis of routine and research data in the Born in Bradford cohort. BMC Psychiatry. 2016;16(1):99. https://doi.org/10.1186/s12888-016-0805-x.

104. Das-Munshi J, Bhugra D, Crawford MJ. Ethnic minority inequalities in access to treatments for schizophrenia and schizoaffective disorders: findings from a nationally representative cross-sectional study. BMC Medicine. 2018;16(1):55. https://doi.org/10.1186/s12916-018-1035-5.

105. Jankovic J, Parsons J, Jovanovic N, Berrisford G, Copello A, Fazil Q, et al. Differences in access and utilisation of mental health services in the perinatal period for women from ethnic minorities-a population-based study. BMC Medicine. 2020;18(1):12. https://doi.org/10.1186/s12916-020-01711-w.

106. Fernández de la Cruz L, Llorens M, Jassi A, Krebs G, Vidal-Ribas P, Radua J, et al. Ethnic inequalities in the use of secondary and tertiary mental health services among patients with obsessive–compulsive disorder. The British Journal of Psychiatry. 2015;207(6):530-5. https://doi.org/10.1192/bjp.bp.114.154062.

107. Mercer L, Evans LJ, Turton R, Beck A. Psychological therapy in secondary mental health care: access and outcomes by ethnic group. Journal of Racial and Ethnic Health Disparities. 2019;6(2):419-26. https://doi.org/10.1007/s40615-018-00539-8.

108. Harwood H, Rhead R, Chui Z, Bakolis I, Connor L, Gazard B, et al. Variations by ethnicity in referral and treatment pathways for IAPT service users in South London. Psychological Medicine. 2021:1-12. https://doi.org/10.1017/S0033291721002518.

109. Mirza A, Birtel MD, Pyle M, Morrison AP. Cultural differences in psychosis: the role of causal beliefs and stigma in White British and South Asians. Journal of Cross-Cultural Psychology. 2019;50(3):441-59. https://doi.org/10.1177/0022022118820168.

110. Mann F, Fisher HL, Major B, Lawrence J, Tapfumaneyi A, Joyce J, et al. Ethnic variations in compulsory detention and hospital admission for psychosis across four UK Early Intervention Services. BMC Psychiatry. 2014;14(1):256. https://doi.org/10.1186/s12888-014-0256-1.

111. Singh SP, Brown L, Winsper C, Gajwani R, Islam Z, Jasani R, et al. Ethnicity and pathways to care during first episode psychosis: the role of cultural illness attributions. BMC Psychiatry. 2015;15:8. https://doi.org/10.1186/s12888-015-0665-9.

112. Ajnakina O, Lally J, Di Forti M, Kolliakou A, Gardner-Sood P, Lopez-Morinigo J, et al. Patterns of illness and care over the 5 years following onset of psychosis in

different ethnic groups; the GAP-5 study. Social Psychiatry and Psychiatric Epidemiology. 2017;52(9):1101-11. https://doi.org/10.1007/s00127-017-1417-6.

113. Bansal N, Bhopal R, Netto G, Lyons D, Steiner MFC, Sashidharan SP. Disparate patterns of hospitalisation reflect unmet needs and persistent ethnic inequalities in mental health care: the Scottish health and ethnicity linkage study. Ethnicity & Health. 2014;19(2):217-39. https://doi.org/10.1080/13557858.2013.814764.

114. Arday J. Understanding mental health: What are the issues for Black and ethnic minority students at University? Social Sciences. 2018;7(10). https://doi.org/10.3390/socsci7100196.

115. Bailey NV, Tribe R. A qualitative study to explore the help-seeking views relating to depression among older Black Caribbean adults living in the UK. International Review of Psychiatry. 2021;33(1):113-8. https://doi.org/10.1080/09540261.2020.1761138.

116. Islam Z, Rabiee F, Singh SP. Black and minority ethnic groups' perception and experience of early intervention in psychosis services in the United Kingdom. Journal of Cross-Cultural Psychology. 2015;46(5):737-53. https://doi.org/10.1177/0022022115575737.

117. Sancho TN, Larkin M. "We need to slowly break down this barrier": understanding the barriers and facilitators that Afro-Caribbean undergraduates perceive towards accessing mental health services in the UK. Journal of Public Mental Health. 2020;19(1):63-81. https://doi.org/10.1108/Jpmh-12-2019-0099.

118. Fernandez de la Cruz L, Kolvenbach S, Vidal-Ribas P, Jassi A, Llorens M, Patel N, et al. Illness perception, help-seeking attitudes, and knowledge related to obsessive-compulsive disorder across different ethnic groups: a community survey. Social Psychiatry and Psychiatric Epidemiology. 2016;51(3):455-64. https://doi.org/10.1007/s00127-015-1144-9.

119. Memon A, Taylor K, Mohebati LM, Sundin J, Cooper M, Scanlon T, et al. Perceived barriers to accessing mental health services among Black and minority ethnic (BME) communities: a qualitative study in Southeast England. BMJ Open. 2016;6(11):9. https://doi.org/10.1136/bmjopen-2016-012337.

120. Yeung EYW, Irvine F, Ng SM, Tsang KMS. How people from Chinese backgrounds make sense of and respond to the experiences of mental distress: thematic analysis. Journal of Psychiatric and Mental Health Nursing. 2017;24(8):589-99. https://doi.org/10.1111/jpm.12406.

121. Yasmin-Qureshi S, Ledwith S. Beyond the barriers: South Asian women's experience of accessing and receiving psychological therapy in primary care. Journal of Public Mental Health. 2020;20(1):3-14. https://doi.org/10.1108/Jpmh-06-2020-0058.

122. Moller N, Burgess V, Jogiyat Z. Barriers to counselling experienced by British South Asian women: A thematic analysis exploration. Counselling & Psychotherapy Research. 2016;16(3):201-10. https://doi.org/10.1002/capr.12076.

123. Lawrence V, McCombie C, Nikolakopoulos G, Morgan C. Navigating the mental health system: Narratives of identity and recovery among people with psychosis across ethnic groups. Social Science & Medicine. 2021;279:9. https://doi.org/10.1016/j.socscimed.2021.113981.

124. Pilav S, De Backer K, Easter A, Silverio SA, Sundaresh S, Roberts S, et al. A qualitative study of minority ethnic women's experiences of access to and engagement with perinatal mental health care. BMC Pregnancy and Childbirth. 2022;22(1):421. https://doi.org/10.1186/s12884-022-04698-9.

125. Lawrence V, McCombie C, Nikolakopoulos G, Morgan C. Ethnicity and power in the mental health system: experiences of White British and Black Caribbean people with psychosis. Epidemiology and Psychiatric Sciences. 2021;30:7. https://doi.org/10.1017/S2045796020001043.

126. Rabiee F, Smith P. Understanding mental health and experience of accessing services among African and African Caribbean Service users and carers in Birmingham, UK. Diversity and Equality in Health and Care. 2014;11(2):125-34.

127. Thompson RM, Stone BV, Tyson PJ. Mental health support needs within Gypsy, Roma, and Traveller communities: a qualitative study. Mental Health and Social Inclusion. 2022;26(2):144-55. https://doi.org/10.1108/mhsi-09-2021-0066.

128. Ogueji IA, Okoloba MM. Seeking professional help for mental illness: A mixed-methods study of Black family members in the UK and Nigeria. Psychological Studies. 2022;67:164-177. https://doi.org/10.1007/s12646-022-00650-1.

129. Bellesi G, Jeraj S, Manley J, Tekes S, Basit H, McNulty N. Why do Black Caribbean women benefit less from talking therapies? A pilot study in an inner London IAPT service. Clinical Psychology Forum. 2020;2020(326):24-9. https://doi.org/10.53841/bpscpf.2020.1.326.5.

130. Kanakam N. Therapists' experiences of working with ethnic minority females with eating disorders: a qualitative study. Culture Medicine and Psychiatry. 2022;46(2):414-34. https://doi.org/10.1007/s11013-021-09721-w.

131. Simkhada B, Vahdaninia M, vanTeijlingen E, Blunt H. Cultural issues on accessing mental health services in Nepali and Iranian migrants communities in the UK. International Journal of Mental Health Nursing. 2021;30(6):1610-9. https://doi.org/10.1111/inm.12913.

132. Khanom A, Alanazy W, Couzens L, Evans BA, Fagan L, Fogarty R, et al. Asylum seekers' and refugees' experiences of accessing health care: a qualitative study. BJGP Open. 2021;5(6). https://doi.org/10.3399/bjgpo.2021.0059.

133. Pilav S, Easter A, Silverio SA, De Backer K, Sundaresh S, Roberts S, et al. Experiences of perinatal mental health care among minority ethnic women during the COVID-19 pandemic in London: a qualitative study. International Journal of Environmental Research and Public Health. 2022;19(4):15. https://doi.org/10.3390/ijerph19041975.

134. Morris DDA, Fern, es V, Rimes KA. Sexual minority service user perspectives on mental health treatment barriers to care and service improvements. International Review of Psychiatry. 2022;34(3-4):230-239. https://doi.org/10.1080/09540261.2022.2051445.

135. Nicholson L, Hotchin H. The relationship between area deprivation and contact with community intellectual disability psychiatry. Journal of Intellectual Disability

Research. 2015;59(5):487-92. https://doi.org/10.1111/jir.12149.

136. Carr MJ, Ashcroft DM, Kontopantelis E, While D, Awenat Y, Cooper J, et al. Clinical management following self-harm in a UK-wide primary care cohort. Journal of Affective Disorders. 2016;197:182-8. https://doi.org/10.1016/j.jad.2016.03.013.

137. Delgadillo J, Asaria M, Ali S, Gilbody S. On poverty, politics and psychology: the socioeconomic gradient of mental healthcare utilisation and outcomes. British Journal of Psychiatry. 2016;209(5):431-2. https://doi.org/10.1192/bjp.bp.115.171017.

138. Gazard B, Chui Z, Harber-Aschan L, MacCrimmon S, Bakolis I, Rimes K, et al. Barrier or stressor? The role of discrimination experiences in health service use. BMC Public Health. 2018;18(1):1354. https://doi.org/10.1186/s12889-018-6267-y.

139. White J, Gutacker N, Jacobs R, Mason A. Hospital admissions for severe mental illness in England: Changes in equity of utilisation at the small area level between 2006 and 2010. Social Science & Medicine. 2014;120:243-51. https://doi.org/10.1016/j.socscimed.2014.09.036.

140. Giebel C, Corcoran R, Goodall M, Campbell N, Gabbay M, Daras K, et al. Do people living in disadvantaged circumstances receive different mental health treatments than those from less disadvantaged backgrounds? BMC Public Health. 2020;20(1):10. https://doi.org/10.1186/s12889-020-08820-4.

141. Thomas F, Hansford L, Ford J, Wyatt K, McCabe R, Byng R. How accessible and acceptable are current GP referral mechanisms for IAPT for low-income patients? Lay and primary care perspectives. Journal of Mental Health. 2020;29(6):706-11. https://doi.org/10.1080/09638237.2019.1677876.

142. Liberati E, Richards N, Parker J, Willars J, Scott D, Boydell N, et al. Qualitative study of candidacy and access to secondary mental health services during the COVID-19 pandemic. Social Science and Medicine. 2022;296:114711. https://doi.org/10.1016/j.socscimed.2022.114711.

143. Holman D. What help can you get talking to somebody?' Explaining class differences in the use of talking treatments. Sociology of Health & Illness. 2014;36(4):531-48. https://doi.org/10.1111/1467-9566.12082.

144. Plugge E, Pari AAA, Maxwell J, Holl, S. When prison is “easier”: probationers’ perceptions of health and wellbeing. International Journal of Prisoner Health. 2014;10(1):38-46. https://doi.org/10.1108/IJPH-01-2013-0001.

145. Carruthers E, Oakeshott P. Refugee and asylum seeker usage of primary care: medical student survey at two inner-city general practices. Education for Primary Care. 2019;30(4):248-50. https://doi.org/10.1080/14739879.2019.1613676.

146. Paudyal P, Tattan M, Cooper MJF. Qualitative study on mental health and well-being of Syrian refugees and their coping mechanisms towards integration in the UK. BMJ Open. 2021;11(8):9. https://doi.org/10.1136/bmjopen-2020-046065.

147. Domoney J, Howard LM, Abas M, Broadbent M, Oram S. Mental health service responses to human trafficking: a qualitative study of professionals’ experiences of

providing care. BMC Psychiatry. 2015;15(1):289. https://doi.org/10.1186/s12888-015-0679-3.

148. Potter LC, Horwood J, Feder G. Access to healthcare for street sex workers in the UK: perspectives and best practice guidance from a national cross-sectional survey of frontline workers. BMC Health Services Research. 2022;22(1):11. https://doi.org/10.1186/s12913-022-07581-7.

149. Williamson V, Borschmann R, Zimmerman C, Howard LM, Stanley N, Oram S. Responding to the health needs of trafficked people: A qualitative study of professionals in England and Scotland. Health & Social Care in the Community. 2019;28(1):173-81. https://doi.org/10.1111/hsc.12851.

Appendix C - Supplementary material for quantitative study (Chapter 5)

Table C1. REporting of studies Conducted using Observational Routinely collected Data (RECORD) checklist (151)

Section	Item no.	STROBE items	Reported of page no.	RECORD items	Reported on page no.
Title and abstract					
	1	(a) Indicate the study’s design with a commonly used term in the title or the abstract (b) Provide in the abstract an informative and balanced summary of what was done and what was found	85	RECORD 1.1: The type of data used should be specified in the title or abstract. When possible, the name of the databases used should be included. RECORD 1.2: If applicable, the geographic region and timeframe within which the study took place should be reported in the title or abstract. RECORD 1.3: If linkage between databases was conducted for the study, this should be clearly stated in the title or abstract.	85
Introduction					
Background rationale	2	Explain the scientific background and rationale for the investigation being reported	86-88	-	-
Objectives	3	State specific objectives, including any prespecified hypotheses	88	-	-
Methods					
Study design	4	Present key elements of study design early in the paper	89	-	-
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	89-90	-	-
Participants	6	*(a) Cohort study* - Give the eligibility criteria, and the sources and methods of	89-90	RECORD 6.1: The methods of study population selection (such as codes or algorithms used to identify subjects)	89-90

		selection of participants. Describe methods of follow-up *Case-control study* - Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls *Cross-sectional study* - Give the eligibility criteria, and the sources and methods of selection of participants *(b) Cohort study* - For matched studies, give matching criteria and number of exposed and unexposed *Case-control study* - For matched studies, give matching criteria and the number of controls per case		should be listed in detail. If this is not possible, an explanation should be provided. RECORD 6.2: Any validation studies of the codes or algorithms used to select the population should be referenced. If validation was conducted for this study and not published elsewhere, detailed methods and results should be provided. RECORD 6.3: If the study involved linkage of databases, consider use of a flow diagram or other graphical display to demonstrate the data linkage process, including the number of individuals with linked data at each stage.	
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable.	89-90	RECORD 7.1: A complete list of codes and algorithms used to classify exposures, outcomes, confounders, and effect modifiers should be provided. If these cannot be reported, an explanation should be provided.	89-90
Data sources/ measurement	8	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	89-90	-	-
Bias	9	Describe any efforts to address potential sources of bias	Not applicable	-	-
Study size	10	Explain how the study size was arrived at	92	-	-
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen, and why	89-91	-	-

Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed (d) *Cohort study* - If applicable, explain how loss to follow-up was addressed *Case-control study* - If applicable, explain how matching of cases and controls was addressed *Cross-sectional study* - If applicable, describe analytical methods taking account of sampling strategy (e) Describe any sensitivity analyses	90-91	-	-
Data access and cleaning methods		-	-	RECORD 12.1: Authors should describe the extent to which the investigators had access to the database population used to create the study population. RECORD 12.2: Authors should provide information on the data cleaning methods used in the study.	89-90
Linkage		-	-	RECORD 12.3: State whether the study included person-level, institutional-level, or other data linkage across two or more databases. The methods of linkage and methods of linkage quality evaluation should be provided.	89-90
Results					
Participants	13	(a) Report the numbers of individuals at each stage of the study (*e.g.*, numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed) (b) Give reasons for non-participation at each stage.	92 Table C2 Table C3 Table C4 Table C5	RECORD 13.1: Describe in detail the selection of the persons included in the study (*i.e.*, study population selection) including filtering based on data quality, data availability and linkage. The selection of included persons can be described in the text and/or by means of the study flow diagram.	92 Table C2 Table C3 Table C4 Table C5

		(c) Consider use of a flow diagram			
Descriptive data	14	(a) Give characteristics of study participants (*e.g.*, demographic, clinical, social) and information on exposures and potential confounders (b) Indicate the number of participants with missing data for each variable of interest (c) *Cohort study* - summarise follow-up time (*e.g.*, average and total amount)	96-97 Figure 8 Figure 9 Table C2 Table C3 Table C4 Table C5	-	-
Outcome data	15	*Cohort study* - Report numbers of outcome events or summary measures over time *Case-control study* - Report numbers in each exposure category, or summary measures of exposure *Cross-sectional study* - Report numbers of outcome events or summary measures	97-99 Figure 10 Figure 11 Figure 12 Figure 13 Table 6 Table 7 Table 8 Table 9	-	-
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (e.g., 95% confidence interval). Make clear which confounders were adjusted for and why they were included (b) Report category boundaries when continuous variables were categorized (c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	Not applicable	-	-
Other analyses	17	Report other analyses done—e.g., analyses of subgroups and interactions, and sensitivity analyses	Table C6 Table C7 Table C8	-	-

			Table C9		
Discussion					
Key results	18	Summarise key results with reference to study objectives	104-105	-	-
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	107-108	RECORD 19.1: Discuss the implications of using data that were not created or collected to answer the specific research question(s). Include discussion of misclassification bias, unmeasured confounding, missing data, and changing eligibility over time, as they pertain to the study being reported.	107-108
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	104-110	-	-
Generalisability	21	Discuss the generalisability (external validity) of the study results	107-108	-	-
Other Information					
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	4	-	-
Accessibility of protocol, raw data, and programming code		-	-	RECORD 22.1: Authors should provide information on how to access any supplemental information such as the study protocol, raw data, or programming code.	63-64

Table C2. Study population characteristics by sexual orientation for referrals received by IAPT between 1st January 2018 and 30th September 2022

Variables		**Sexual orientation recorded at referral – n (%)**					**Total**
		Heterosexual	Lesbian / Gay	Bisexual	Other	(Missing)	
Improving access to psychological therapies (IAPT)							
Referrals		107,611 (64)	3,859 (3)	5,544 (3)	5,917 (4)	45,869 (27)	168,800
Service users		69,654 (61)	2,390 (2)	3,256 (3)	3,697 (3)	34,441 (30)	113,438
Referral year (X^2 = 6,947.369, **$p < 0.001$**)	2018	3,145 (3)	124 (3)	147 (3)	144 (2)	2,185 (5)	5,745 (3)
	2019	24,587 (23)	849 (22)	1,017 (18)	859 (15)	16,398 (36)	43,710 (26)
	2020	23,327 (23)	840 (22)	1,255 (23)	1,134 (19)	12,626 (28)	39,182 (23)
	2021	32,828 (31)	1,192 (31)	1,782 (32)	1,846 (31)	8,536 (19)	46,184 (27)
	2022	23,724 (22)	854 (22)	1,343 (24)	1,934 (33)	6,124 (13)	33,979 (20)
Referral source (X^2 = 10,456.443, **$p < 0.001$**)	A&E / Ambulance	556 (1)	15 (0)	35 (1)	/	187 (0)	802 (1)
	Community Services	341 (0)	/	/	/	226 (1)	592 (0)
	Criminal Justice / Forensic	90 (0)	/	/	/	115 (0)	225 (0)
	Education / Work	28 (0)	0 (0)	0 (0)	/	60 (0)	97 (0)
	Family / Friend / Carer	7 (0)	0 (0)	0 (0)	/	19 (0)	28 (0)
	GP / Primary Care	4,905 (5)	116 (3)	149 (3)	343 (6)	3,956 (9)	9,469 (6)
	Independent Sector	217 (0)	/	/	51 (1)	439 (1)	724 (0)
	Secondary Care (MH)	6,777 (6)	279 (7)	390 (7)	1,441 (24)	8,631 (19)	17,518 (10)
	Secondary Care (not MH)	1,966 (2)	60 (2)	71 (1)	310 (5)	1,782 (4)	4,189 (3)
	Self-Referral	92,636 (86)	3,368 (87)	4,878 (88)	3,725 (63)	30,398 (66)	135,005 (80)
	Social Care / Local Authority	36 (0)	0 (0)	/	/	19 (0)	61 (0)
	Other	52 (0)	0 (0)	0 (0)	/	37 (0)	90 (0)
Age group (X^2 = 8,980.828, **$p < 0.001$**)	16-17	2,392 (2)	194 (5)	489 (9)	379 (6)	2,216 (5)	5,670 (3)
	18-24	19,434 (18)	1,252 (32)	2,883 (52)	1,357 (23)	8,330 (18)	33,256 (20)
	25-34	32,115 (30)	1,367 (35)	1,538 (28)	1,312 (22)	10,590 (23)	46,922 (28)
	35-44	22,453 (21)	584 (15)	454 (8)	1,067 (18)	7,853 (17)	32,411 (19)
	45-54	15,734 (15)	281 (7)	130 (2)	868 (15)	7,453 (16)	24,466 (15)
	55-64	10,074 (9)	132 (3)	49 (1)	661 (11)	5,774 (13)	16,690 (10)
	>65	5,409 (5)	49 (1)	/	273 (5)	3,653 (8)	9,385 (6)
Gender (X^2 = 3,847.113, **$p < 0.001$**)	Female	71,516 (67)	2,220 (58)	4,500 (81)	3,671 (62)	26,982 (59)	108,889 (65)
	Male	36,014 (34)	1,597 (41)	925 (17)	2,098 (36)	18,815 (41)	59,449 (35)
	Other	34 (0)	/ (0)	/ (0)	16 (0)	/ (0)	69 (0)
	(Missing)	47 (0)	41 (1)	112 (2)	132 (2)	61 (0)	462 (0)
Deprivation (X^2 = 380.594, **$p < 0.001$**)	IMD 1 – 3	47,488 (44)	1,893 (49)	2,679 (48)	3,046 (52)	21,871 (48)	76,977 (46)
	IMD 4 -7	36,088 (34)	1,277 (33)	1,831 (33)	1,745 (29)	14,343 (31)	55,284 (33)
	IMD 8 – 10	23,141 (23)	660 (17)	993 (18)	1,095 (19)	9,443 (21)	35,332 (21)
	(Missing)	894 (1)	29 (1)	41 (1)	31 (1)	212 (1)	1,207 (1)
Ethnicity (X^2 = 18,448.678, **$p < 0.001$**)	Asian / Asian British	6,191 (6)	35 (2)	125 (2)	380 (6)	2,603 (6)	9,334 (6)
	Black / Black British	498 (1)	/	/	44 (1)	212 (1)	781 (1)
	Mixed	1,538 (1)	91 (2)	143 (3)	100 (2)	403 (1)	2,275 (1)
	White	96,898 (90)	3,654 (95)	5,177 (93)	4,435 (75)	32,784 (72)	142,948 (85)
	Other	593 (0)	/	23 (0)	46 (1)	535 (1)	1,210 (1)
	(Missing)	1,893 (2)	52 (1)	63 (1)	912 (15)	9,332 (20)	12,252 (7)

* statistical significance based on Bonferroni correction value of $p<0.002$ (significant results highlighted in bold)
* counts under 15 have been marked with / to reduce identifiability of service users within the datasets
* *A&E*, accident and emergency; *GP*, general practitioner; *IMD*, index of multiple deprivation; *MH*, mental health

Table C3. Study population characteristics by sexual orientation for referrals received by CMHTs between 1st January 2018 and 30th September 2022

Variables		**Sexual orientation recorded at referral – n (%)**					**Total**
		Heterosexual	Lesbian / Gay	Bisexual	Other	(Missing)	
Community mental health teams (CMHTs)							
Referrals		14,044 (37)	487 (1)	197 (1)	0 (0)	23,042 (61)	37,770
Service users		5,506 (33)	183 (1)	72 (0)	0 (0)	10,747 (65)	16,508
Referral year (X^2 = 982.843, **$p < 0.001$**)	2018	5,088 (36)	168 (35)	77 (39)	0 (0)	5,478 (24)	10,811 (29)
	2019	3,292 (23)	123 (25)	45 (23)	0 (0)	4,846 (21)	8,306 (22)
	2020	1,950 (14)	75 (15)	21 (11)	0 (0)	3,718 (16)	5,764 (15)
	2021	2,362 (17)	78 (16)	34 (17)	0 (0)	5,355 (23)	7,829 (21)
	2022	1,352 (10)	43 (9)	20 (10)	0 (0)	3,645 (16)	5,060 (13)
Referral source (X^2 = 2,323.125, **$p < 0.001$**)	A&E / Ambulance	46 (0)	0 (0)	0 (0)	0 (0)	91 (0)	137 (0)
	Community Services	3,810 (27)	147 (30)	52 (26)	0 (0)	6,121 (27)	10,130 (27)
	Criminal Justice / Forensic	140 (1)	/	0 (0)	0 (0)	172 (1)	316 (1)
	Education / Work	0 (0)	0 (0)	0 (0)	0 (0)	/	/
	Family / Friend / Carer	25 (0)	0 (0)	0 (0)	0 (0)	/	39 (0)
	GP / Primary Care	901 (6)	21 (4)	/	0 (0)	5,551 (24)	6,482 (17)
	Independent Sector	62 (0)	0 (0)	/	0 (0)	170 (1)	234 (1)
	Secondary Care (MH)	8,072 (58)	282 (58)	118 (60)	0 (0)	9,166 (40)	17,638 (47)
	Secondary Care (not MH)	63 (0)	/	/	0 (0)	148 (1)	215 (1)
	Self-Referral	144 (1)	/	0 (0)	0 (0)	207 (1)	353 (1)
	Social Care / Local Authority	89 (1)	/	0 (0)	0 (0)	149 (1)	242 (1)
	Other	692 (5)	25 (5)	/	0 (0)	1,252 (5)	1,983 (5)
Age group (X^2 = 1,408.311, **$p < 0.001$**)	18-24	838 (6)	67 (14)	29 (15)	0 (0)	4,345 (19)	5,279 (14)
	25-34	3,376 (24)	141 (29)	74 (38)	0 (0)	5,806 (25)	9,397 (25)
	35-44	3,464 (25)	111 (23)	50 (25)	0 (0)	4,894 (21)	8,519 (23)
	45-54	3,507 (25)	92 (19)	29 (15)	0 (0)	4,299 (19)	7,927 (21)
	55-64	2,400 (17)	67 (14)	/	0 (0)	2,922 (13)	5,401 (14)
	>65	459 (3)	/	/	0 (0)	776 (3)	1,247 (3)
Gender (X^2 = 33.665, **$p < 0.001$**)	Female	7,394 (53)	269 (55)	129 (66)	0 (0)	12,592 (55)	20,384 (54)
	Male	6,650 (47)	218 (45)	68 (35)	0 (0)	10,437 (45)	17,373 (46)
	(Missing)	0 (0)	0 (0)	0 (0)	0 (0)	/	/
Deprivation (X^2 = 395.155, **$p < 0.001$**)	IMD 1 - 3	8,553 (61)	285 (59)	129 (66)	0 (0)	11,962 (52)	20,929 (55)
	IMD 4 -7	3,938 (28)	129 (27)	61 (31)	0 (0)	7,185 (31)	11,313 (30)
	IMD 8 - 10	1,445 (10)	73 (15)	/	0 (0)	3,567 (16)	5,089 (14)
	(Missing)	108 (1)	0 (0)	/	0 (0)	328 (1)	439 (1)
Ethnicity (X^2 = 1,410.136, **$p < 0.001$**)	Asian / Asian British	792 (6)	/	/	0 (0)	732 (3)	1,533 (4)
	Black / Black British	114 (1)	/	0 (0)	0 (0)	117 (1)	232 (1)
	Mixed	169 (1)	/	0 (0)	0 (0)	160 (1)	336 (1)
	White	11,804 (84)	410 (84)	184 (93)	0 (0)	16,906 (73)	29,304 (78)
	Other	131 (1)	/	/	0 (0)	265 (1)	409 (1)
	(Missing)	1,034 (7)	53 (11)	/	0 (0)	4,862 (21)	5,956 (16)

* statistical significance based on Bonferroni correction value of $p<0.002$ (significant results highlighted in bold)
* counts under 15 have been marked with / to reduce identifiability of service users within the datasets
* *IMD*, index of multiple deprivation

Table C4. Study population characteristics by sexual orientation for contacts with IAPT between 1st January 2018 and 30th September 2022

Variables		**Sexual orientation recorded at contact – n (%)**					**Total**
		Heterosexual	Lesbian / Gay	Bisexual	Other	(Missing)	
Improving access to psychological therapies (IAPT)							
Contacts		375,280 (68)	11,668 (2)	17,295 (3)	15,184 (3)	135,987 (25)	555,414
Service users		58,932 (63)	1,978 (2)	2,731 (3)	2,912 (3)	26,897 (29)	93,450
Contact year (X^2 = 23,495.531, **p < 0.001**)	2018	7,730 (2)	245 (2)	295 (2)	311 (2)	4,002 (3)	12,583 (2)
	2019	94,567 (25)	2,798 (24)	3,433 (20)	2,598 (17)	51,323 (38)	154,719 (28)
	2020	92,163 (25)	2,904 (25)	3,805 (22)	3,283 (22)	45,187 (33)	147,342 (27)
	2021	105,682 (28)	3,302 (28)	5,567 (32)	5,107 (34)	22,051 (16)	141,709 (26)
	2022	75,138 (20)	2,419 (21)	4,195 (24)	3,885 (26)	13,424 (10)	99,061 (18)
Contact type (X^2 = 9,690.380, **p < 0.001**)	Face-to-face	96,009 (26)	2,805 (24)	3,434 (20)	2,827 (19)	48,377 (36)	153,452 (28)
	Telephone	223,599 (60)	6,905 (60)	10,563 (61)	10,133 (67)	74,137 (55)	325,337 (59)
	Video	44,578 (12)	1,621 (14)	2,802 (16)	1,900 (13)	8,035 (6)	58,936 (11)
	Other	10,366 (3)	316 (3)	454 (3)	293 (2)	5,033 (4)	16,462 (3)
	(Missing)	728 (0)	21 (0)	42 (0)	31 (0)	405 (0)	1,227 (0)
Attendance status (X^2 = 100.661, **p < 0.001**)	Attended	287,257 (77)	9,035 (77)	13,433 (78)	11,679 (77)	103,650 (76)	425,054 (77)
	Did not attend	33,366 (9)	1,096 (9)	1,646 (10)	1,381 (9)	12,878 (10)	50,367 (9)
	Cancelled	54,657 (15)	1,537 (13)	2,216 (13)	2,124 (14)	19,459 (14)	79,993 (14)
Age group (X^2 = 32,806.766, **p < 0.001**)	16-17	6,812 (2)	462 (4)	1,293 (8)	840 (6)	6,762 (5)	16,169 (3)
	18-24	63,517 (17)	3,650 (31)	9,225 (53)	3,635 (24)	21,573 (16)	101,600 (18)
	25-34	109,307 (29)	3,838 (33)	4,816 (28)	3,269 (22)	29,414 (22)	150,644 (27)
	35-44	77,045 (21)	2,073 (18)	1,409 (8)	2,539 (17)	23,311 (17)	106,377 (19)
	45-54	58,100 (16)	877 (8)	397 (2)	2,337 (15)	23,065 (17)	84,776 (15)
	55-64	39,566 (11)	563 (5)	154 (1)	1,819 (12)	19,459 (14)	61,561 (11)
	>65	20,933 (6)	205 (2)	/	745 (5)	12,403 (9)	34,287 (6)
Gender (X^2 = 11,883.166, **p < 0.001**)	Female	256,691 (68)	6,841 (59)	13,880 (80)	9,817 (65)	85,002 (63)	372,231 (67)
	Male	118,379 (32)	4,726 (41)	2,997 (17)	4,943 (33)	50,796 (37)	181,841 (33)
	(Missing)	210 (0)	101 (1)	418 (2)	424 (3)	189 (0)	1,342 (0)
Deprivation (X^2 = 2,612.439, **p < 0.001**)	IMD 1 - 3	135,871 (36)	4,575 (39)	7,118 (41)	6,937 (46)	58,025 (43)	212,526 (38)
	IMD 4 -7	141,135 (38)	4,818 (41)	6,370 (37)	4,903 (32)	44,996 (33)	202,222 (36)
	IMD 8 - 10	95,728 (26)	2,186 (19)	3,681 (21)	3,275 (22)	32,327 (24)	137,197 (25)
	(Missing)	2,546 (1)	89 (1)	126 (1)	69 (1)	639 (1)	3,469 (1)
Ethnicity (X^2 = 30,984.139, **p < 0.001**)	Asian / Asian British	16,706 (5)	60 (1)	295 (2)	1,032 (7)	7,673 (6)	25,766 (5)
	Black / Black British	1,488 (0)	39 (0)	57 (0)	81 (1)	652 (1)	2,317 (0)
	Mixed	4,435 (1)	204 (2)	352 (2)	277 (2)	1,132 (1)	6,400 (1)
	White	345,700 (92)	11,190 (96)	16,344 (95)	12,121 (80)	109,433 (81)	494,788 (89)
	Other	1,804 (1)	24 (0)	92 (1)	150 (1)	1,507 (1)	3,577 (1)
	(Missing)	5,174 (1)	151 (1)	155 (1)	1,523 (10)	15,590 (12)	22,566 (4)

* statistical significance based on Bonferroni correction value of $p<0.002$ (significant results highlighted in bold)
* counts under 15 have been marked with / to reduce identifiability of service users within the datasets
* *IMD*, index of multiple deprivation

Table C5. Study population characteristics by sexual orientation for contacts with CMHTs between 1st January 2018 and 30th September 2022

Variables		**Sexual orientation recorded at contact – n (%)**					**Total**
		Heterosexual	Lesbian / Gay	Bisexual	Other	(Missing)	
Community mental health teams (CMHTs)							
Contacts		404,121 (50)	14,620 (2)	5,438 (1)	0 (0)	385,397 (48)	809,576
Service users		7,971 (37)	263 (1)	95 (0)	0 (0)	13,208 (61)	21,537
Contact year (X^2 = 4,722.907, **p < 0.001**)	2018	97,202 (24)	3,251 (22)	1,357 (25)	0 (0)	72,961 (19)	174,771 (22)
	2019	77,453 (19)	2,999 (21)	1,220 (22)	0 (0)	71,912 (19)	153,584 (19)
	2020	99,018 (25)	3,754 (26)	1,284 (24)	0 (0)	93,529 (24)	197,585 (24)
	2021	79,074 (20)	2,935 (20)	943 (17)	0 (0)	86,038 (22)	168,990 (21)
	2022	51,374 (13)	1,681 (12)	634 (12)	0 (0)	60,957 (16)	114,646 (14)
Contact type (X^2 = 3,848.648, **p < 0.001**)	Face-to-face	158,959 (39)	5,824 (40)	2,089 (38)	0 (0)	143,144 (37)	310,016 (38)
	Telephone	138,570 (34)	5,142 (35)	2,015 (37)	0 (0)	120,309 (31)	266,036 (33)
	Video	6,307 (2)	235 (2)	81 (2)	0 (0)	9,216 (2)	15,839 (2)
	Other	24,086 (6)	704 (5)	397 (7)	0 (0)	21,937 (6)	47,124 (6)
	(Missing)	76,199 (19)	2,715 (19)	856 (16)	0 (0)	90,791 (24)	170,561 (21)
Attendance status (X^2 = 5,017.800, **p < 0.001**)	Attended	326,283 (81)	11,853 (81)	4,575 (84)	0 (0)	293,286 (76)	635,997 (79)
	Did not attend	37,007 (9)	1,212 (8)	395 (7)	0 (0)	42,436 (11)	81,050 (10)
	Cancelled	18,544 (5)	638 (4)	167 (3)	0 (0)	30,226 (8)	49,575 (6)
	Other	22,287 (6)	917 (6)	301 (6)	0 (0)	19,449 (5)	42,954 (5)
Age group (X^2 = 39,773.478, **p < 0.001**)	18-24	14,136 (4)	904 (6)	921 (17)	0 (0)	57,339 (15)	73,300 (9)
	25-34	80,923 (20)	3,365 (23)	1,251 (23)	0 (0)	90,743 (24)	176,282 (22)
	35-44	92,502 (23)	4,325 (30)	1,242 (23)	0 (0)	85,966 (22)	184,035 (23)
	45-54	114,683 (28)	3,808 (26)	1,461 (27)	0 (0)	82,305 (21)	202,257 (25)
	55-64	79,363 (20)	1,845 (13)	499 (9)	0 (0)	55,476 (14)	137,183 (17)
	>65	22,514 (6)	373 (3)	64 (1)	0 (0)	13,568 (4)	36,519 (5)
Gender (X^2 = 1,188.341, **p < 0.001**)	Female	212,345 (53)	8,314 (57)	3,546 (65)	0 (0)	212,729 (55)	436,934 (54)
	Male	191,760 (48)	6,306 (43)	1,892 (35)	0 (0)	172,369 (45)	372,327 (46)
	(Missing)	16 (0)	0 (0)	0 (0)	0 (0)	299 (0)	315 (0)
Deprivation (X^2 = 5,987.696, **p < 0.001**)	IMD 1 - 3	257,076 (64)	9,587 (66)	3,965 (73)	0 (0)	216,347 (56)	486,975 (60)
	IMD 4 -7	103,488 (26)	3,184 (22)	1,160 (21)	0 (0)	111,578 (29)	219,410 (27)
	IMD 8 - 10	40,424 (10)	1,750 (12)	280 (5)	0 (0)	52,893 (14)	95,347 (12)
	(Missing)	3,133 (1)	99 (1)	33 (1)	0 (0)	4,579 (1)	7,844 (1)
Ethnicity (X^2 = 11,715.446, **p < 0.001**)	Asian / Asian British	25,778 (6)	/	72 (1)	0 (0)	16,179 (4)	42,042 (5)
	Black / Black British	4,023 (1)	/	/	0 (0)	2,390 (1)	6,416 (1)
	Mixed	4,213 (1)	318 (2)	0 (0)	0 (0)	2,804 (1)	7,335 (1)
	White	331,276 (82)	12,473 (85)	4,901 (90)	0 (0)	300,288 (78)	648,938 (80)
	Other	3,301 (1)	113 (1)	15 (0)	0 (0)	5,781 (2)	9,210 (1)
	(Missing)	35,530 (9)	1,702 (12)	448 (8)	0 (0)	57,955 (15)	95,635 (12)

* statistical significance based on Bonferroni correction value of p<0.002 (significant results highlighted in bold)
* counts under 15 have been marked with / to reduce identifiability of service users within the datasets
* *IMD*, index of multiple deprivation

Table C6. Logistic regression results, modelling a binary variable of sexual orientation data missing or not missing, for IAPT referrals

Variable	Reference		OR	CI Low	CI High	p value
(Intercept)			0.80	0.74	0.87	**<0.001**
Referral year	2018	2019	0.89	0.84	0.94	**<0.001**
		2020	0.68	0.64	0.72	**<0.001**
		2021	0.28	0.26	0.30	**<0.001**
		2022	0.24	0.23	0.26	**<0.001**
Referral source	GP / Primary Care	A&E / Ambulance Services	0.44	0.36	0.53	**<0.001**
		Community Services	1.21	1.00	1.46	**0.045**
		Criminal Justice / Forensic	1.70	1.26	2.29	**0.001**
		Education / Work	1.31	0.81	2.16	0.274
		Family / Friend / Carer	3.67	1.61	8.94	**0.003**
		Independent Sector	4.60	3.90	5.44	**<0.001**
		Secondary Care (MH)	1.17	1.07	1.27	**<0.001**
		Secondary Care (not MH)	1.60	1.51	1.69	**<0.001**
		Self-Referral	0.59	0.56	0.62	**<0.001**
		Social Care / Local Authority	0.97	0.52	1.74	0.918
		Other	1.18	0.74	1.88	0.476
Age group	35-44	16-17	1.72	1.61	1.83	**<0.001**
		18-24	1.02	0.98	1.06	0.402
		25-34	0.91	0.88	0.94	**<0.001**
		45-54	1.32	1.26	1.37	**<0.001**
		55-64	1.72	1.64	1.80	**<0.001**
		>65	2.26	2.14	2.38	**<0.001**
Gender	Male	Female	0.74	0.73	0.76	**<0.001**
		Other	0.48	0.23	0.90	**0.032**
		(Missing)	0.54	0.40	0.72	**<0.001**
Deprivation (IMD)	IMD 4 - 7	IMD 1 - 3	1.18	1.15	1.21	**<0.001**
		IMD 8 - 10	0.99	0.95	1.02	0.462
		(Missing)	0.73	0.62	0.86	**<0.001**
Ethnicity	White	Asian / Asian British	1.49	1.42	1.56	**<0.001**
		Black / Black British	1.37	1.16	1.62	**<0.001**
		Mixed	0.85	0.75	0.95	**0.004**
		Other	2.98	2.63	3.36	**<0.001**
		(Missing)	9.94	9.48	10.42	**<0.001**

* statistical significance based on value of p<0.05 (significant results highlighted in bold)
* *A&E*, accident and emergency; *CI*, confidence interval; *GP*, general practitioner; *IMD*, index of multiple deprivation; *MH*, mental health; *OR*, odds ratio

Table C7. Logistic regression results, modelling a binary variable of sexual orientation data missing or not missing, for CMHT referrals

Variable	**Reference**		**OR**	**CI Low**	**CI High**	**p value**
(Intercept)			3.37	3.04	3.73	**<0.001**
Referral year	2018	2019	1.20	1.12	1.27	**<0.001**
		2020	1.42	1.31	1.53	**<0.001**
		2021	1.90	1.76	2.05	**<0.001**
		2022	2.08	1.91	2.26	**<0.001**
Referral source	GP / Primary Care	A&E / Ambulance Services	0.31	0.22	0.46	**0.015**
		Community Services	0.22	0.20	0.24	**<0.001**
		Criminal Justice / Forensic	0.19	0.15	0.24	**<0.001**
		Education / Work	NA	NA	NA	0.974
		Family / Friend / Carer	0.11	0.05	0.21	**<0.001**
		Independent Sector	0.41	0.30	0.55	**0.001**
		Secondary Care (MH)	0.24	0.22	0.26	**<0.001**
		Secondary Care (not MH)	0.32	0.23	0.44	**<0.001**
		Self-Referral	0.24	0.19	0.30	**<0.001**
		Social Care / Local Authority	0.27	0.21	0.36	**<0.001**
		Other	0.28	0.25	0.32	**<0.001**
Age group	35-44	18-24	3.19	2.93	3.48	**<0.001**
		25-34	1.16	1.09	1.23	**<0.001**
		45-54	0.89	0.83	0.95	**<0.001**
		55-64	0.86	0.80	0.92	**<0.001**
		>65	1.04	0.91	1.18	0.601
Gender	Male	Female	0.95	0.90	0.99	**0.016**
		(Missing)	NA	NA	NA	0.881
Deprivation (IMD)	IMD 4 - 7	IMD 1 - 3	0.85	0.81	0.90	**<0.001**
		IMD 8 - 10	1.33	1.23	1.43	**<0.001**
		(Missing)	1.82	1.45	2.30	**<0.001**
Ethnicity	White	Asian / Asian British	0.85	0.76	0.95	**0.003**
		Black / Black British	1.04	0.80	1.36	0.745
		Mixed	0.74	0.59	0.93	**0.010**
		Other	1.46	1.18	1.81	**<0.001**
		(Missing)	2.76	2.57	2.97	**<0.001**

* statistical significance based on value of p<0.05 (significant results highlighted in bold)

* *A&E*, accident and emergency; *CI*, confidence interval; *GP*, general practitioner; *IMD*, index of multiple deprivation; *MH*, mental health; *OR*, odds ratio

Table C8. Logistic regression results, modelling a binary variable of sexual orientation data missing or not missing, for IAPT contacts

Variable	**Reference**		**OR**	**CI Low**	**CI High**	**p value**
(Intercept)			0.37	0.36	0.39	**<0.001**
Contact year	2018	2019	1.04	1.00	1.08	0.063
		2020	0.91	0.88	0.95	**<0.001**
		2021	0.38	0.37	0.40	**<0.001**
		2022	0.31	0.30	0.33	**<0.001**
Contact type	Face-to-face	Telephone	1.01	1.00	1.03	0.112
		Video	0.82	0.80	0.85	**<0.001**
		Other	1.04	1.00	1.07	0.060
		(Missing)	1.25	1.10	1.42	**<0.001**
Attendance status	Attended	Cancelled	1.00	0.98	1.01	0.667
		Did not attend	1.01	0.99	1.04	0.304
Age group	35-44	16-17	2.45	2.36	2.54	**<0.001**
		18-24	0.97	0.95	1.00	**0.017**
		25-34	0.87	0.85	0.89	**<0.001**
		45-54	1.30	1.27	1.33	**<0.001**
		55-64	1.72	1.68	1.76	**<0.001**
		>65	2.22	2.16	2.29	**<0.001**
Gender	Male	Female	0.79	0.78	0.80	**<0.001**
		Other	0.56	0.37	0.82	**0.004**
		(Missing)	0.47	0.39	0.55	**<0.001**
Deprivation (IMD)	IMD 4 - 7	IMD 1 - 3	1.32	1.30	1.34	**<0.001**
		IMD 8 - 10	1.04	1.02	1.05	**<0.001**
		(Missing)	0.95	0.86	1.04	0.251
Ethnicity	White	Asian / Asian British	1.59	1.54	1.64	**<0.001**
		Black / Black British	1.55	1.41	1.71	**<0.001**
		Mixed	0.86	0.81	0.92	**<0.001**
		Other	2.95	2.75	3.17	**<0.001**
		(Missing)	8.56	8.30	8.83	**<0.001**

* statistical significance based on value of $p<0.05$ (significant results highlighted in bold)

* *CI*, confidence interval; *IMD*, index of multiple deprivation; *OR*, odds ratio

Table C9. Logistic regression results, modelling a binary variable of sexual orientation data missing or not missing, for CMHT contacts

Variable	**Reference**		**OR**	**CI Low**	**CI High**	**P value**
(Intercept)			0.76	0.75	0.78	**<0.001**
Contact year	2018	2019	1.24	1.22	1.25	**<0.001**
		2020	1.29	1.27	1.30	**<0.001**
		2021	1.39	1.37	1.41	**<0.001**
		2022	1.51	1.49	1.53	**<0.001**
Contact type	Face-to-face	Telephone	0.88	0.87	0.89	**<0.001**
		Video	1.23	1.18	1.27	**<0.001**
		Other	0.90	0.89	0.92	**<0.001**
		(Missing)	0.94	0.92	0.95	**<0.001**
Attendance status	Attended	Cancelled	1.74	1.70	1.78	**<0.001**
		Did not attend	1.31	1.28	1.33	**<0.001**
		Other	1.16	1.14	1.18	**<0.001**
		(Missing)	1.78	1.54	2.05	**<0.001**
Age group	35-44	18-24	3.85	3.77	3.93	**<0.001**
		25-34	1.18	1.17	1.20	**<0.001**
		45-54	0.79	0.78	0.80	**<0.001**
		55-64	0.76	0.75	0.77	**<0.001**
		>65	0.65	0.63	0.66	**<0.001**
Gender	Male	Female	0.93	0.92	0.94	**<0.001**
		(Missing)	16.35	10.22	28.24	**<0.001**
Deprivation (IMD)	IMD 4 - 7	IMD 1 - 3	0.79	0.78	0.80	**<0.001**
		IMD 8 - 10	1.18	1.17	1.20	**<0.001**
		(Missing)	1.25	1.20	1.32	**<0.001**
Ethnicity	White	Asian / Asian British	0.77	0.76	0.79	**<0.001**
		Black / Black British	0.80	0.76	0.84	**<0.001**
		Mixed	0.76	0.72	0.79	**<0.001**
		Other	1.91	1.83	2.00	**<0.001**
		(Missing)	1.61	1.59	1.64	**<0.001**

* statistical significance based on value of p<0.05 (significant results highlighted in bold)
* *CI*, confidence interval; *IMD*, index of multiple deprivation; *OR*, odds ratio

Appendix D - Supplementary material for qualitative study (Chapter 6)

Table D1. Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist (220)

Topic	Item no.	Guide questions / descriptions	Reported on page no.
Domain 1: Research team and reflexivity			
Personal characteristics			
Interviewer/facilitator	1	Which author/s conducted the interview or focus group?	115
Credentials	2	What were the researcher's credentials? (e.g., PhD, MD)	59-62
Occupation	3	What was their occupation at the time of the study?	59-62
Gender	4	Was the researcher male or female?	59-62
Experience and training	5	What experience or training did the researcher have?	59-62
Relationship with participants			
Relationship established	6	Was a relationship established prior to study commencement?	114-115
Participant knowledge of the interviewer	7	What did the participants know about the researcher? (e.g., personal goals, reasons for doing the research)	117
Interviewer characteristics	8	What characteristics were reported about the interviewer/facilitator? (e.g., bias, assumptions, reasons, and interests in the research topic)	117
Domain 2: Study design			
Theoretical framework			
Methodological orientation and theory	9	What methodological orientation was stated to underpin the study? (e.g., grounded theory, discourse analysis, ethnography, phenomenology, content analysis)	114-116
Participant selection			
Sampling	10	How were participants selected? (e.g., purposive, convenience, consecutive, snowball)	114-115
Method of approach	11	How were participants approached? (e.g., face-to-face, telephone, mail, email)	114-115
Sample size	12	How many participants were in the study?	117-118 Table 11
Non-participation	13	How many people refused to participate or dropped out?	Not applicable
Setting			
Setting of data collection	14	Where was the data collected? (e.g., home, clinic, workplace)	115
Presence on non-participants	15	Was anyone else present besides the participants and researchers?	Not applicable
Description of sample	16	What are the important characteristics of the sample? (e.g., demographic data, date)	117-118 Table 11
Data collection			

Interview guide	17	Were questions, prompts, guides provided by the authors? Was it pilot tested?	115 Figure D5
Repeat interviews	18	Were repeat interviews carried out? If yes, how many?	Not applicable
Audio/visual recording	19	Did the research use audio or visual recording to collect the data?	115
Field notes	20	Were field notes made during and/or after the interview or focus group?	115
Duration	21	What was the duration of the interviews or focus group?	117-118
Data saturation	22	Was data saturation discussed?	Not applicable
Transcripts returned	23	Were transcripts returned to participants for comment and/or correction?	Not applicable
Domain 3: Analysis and findings			
Data analysis			
Number of data coders	24	How many data coders coded the data?	115-117
Description of coding tree	25	Did authors provide a description of the coding tree?	Not applicable
Derivation of themes	26	Were themes identified in advance or derived from the data?	115-117
Software	27	What software, if applicable, was used to manage the data?	115
Participant checking	28	Did participants provide feedback on the findings?	Not applicable
Reporting			
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? (e.g., participant number)	119-127
Data and findings consistent	30	Was there consistency between the data presented and the findings?	119-127
Clarity of major themes	31	Were major themes clearly presented in the findings?	119-127 Figure 16
Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	119-127 Figure 16

Figure D1. Study advert

LGBTQ+ EXPERIENCES OF ACCESSING MENTAL HEALTH SERVICES DURING COVID-19

Research Participant Opportunity

Do you identify as lesbian, gay, bisexual, transgender, and/or queer (LGBTQ+)?

Are you aged 18 years or over?

Have you accessed or tried to access mental health services in Lancashire and South Cumbria during the COVID-19 pandemic?

Research study aiming to explore LGBTQ+ experiences of accessing mental health services in Lancashire and South Cumbria during the COVID-19 pandemic. Participants will be asked to take part in an individual interview with a researcher to discuss their experiences. Information shared will be confidential and participants will remain anonymous. You will be given a £25 shopping voucher as a thank you for your time.

This research is being undertaken as part of a PhD qualification at Lancaster University and has received ethical approval from the University's Research Ethics Committee.

For more information about taking part, please contact:
Hayley Lowther-Payne at h.j.lowther3@lancaster.ac.uk or **01524 522114**

NIHR | Applied Research Collaboration North West Coast

Health & Medicine | Lancaster University

Figure D2. Participant information sheet

NIHR | Applied Research Collaboration North West Coast

Health & Medicine | Lancaster University

Participant Information Sheet

Title of study: LGBTQ+ experiences of accessing adult mental health services during COVID-19

Who is organising the research?

This research is being undertaken by Hayley Lowther-Payne, a PhD student in Lancaster Medical School at Lancaster University, with support from experienced researchers. The study forms part of a PhD, which is a piece of in-depth research into a specific research question, exploring the impact of the COVID-19 pandemic on access to adult mental health services for lesbian, gay, bisexual, transgender, and queer (LGBTQ+) people in Lancashire and South Cumbria. This research is funded by the National Institute for Health and Care Research (NIHR) Applied Research Collaboration North West Coast (ARC NWC), a collaboration of organisations across the North West Coast of England supporting health and care research to improve patient outcomes and the delivery of health and care services, and reduce inequalities.

What is this study about?

The purpose of this study is to explore the experiences of people identifying as LGBTQ+ on access to adult mental health services, and how the COVID-19 pandemic and their LGBTQ+ identity may have influenced those experiences. The findings from this study will provide insight into the experiences of LGBTQ+ people for which limited research currently exists, and will be used to develop a series of recommendations aimed at improving mental health services for LGBTQ+ people.

Why am I being asked to take part?

You have been invited to take part in this study as you identify as LGBTQ+ and you have experience of accessing or trying to access adult mental health services in Lancashire and South Cumbria during the COVID-19 pandemic (between March 2020 and February 2022).

Do I have to take part?

No, it is completely up to you whether you decide to take part in this study. If you decide to take part, you will be given this information sheet to keep and will be asked to provide written consent by signing a consent form.

What will happen if I agree to take part?

You are being asked to participate in an individual interview with a PhD student from Lancaster University, to share your experiences of accessing or trying to access adult mental health services in Lancashire and South Cumbria during the COVID-19 pandemic. If you decide to take part, you will be asked to attend a short meeting, either over the telephone or on Microsoft Teams, with the PhD student to confirm that you have read this information sheet and signed the consent form, and to check your eligibility to take part in the interview. The PhD student will then arrange a date and time for the interview that is convenient for you. You will also be sent a short online monitoring form to complete, which will gather some information about who took part (e.g., age, gender, sexual orientation). This information will be kept anonymous and not linked to you personally.

The interview will last between 30 to 60 minutes. The interview will be conducted remotely using Microsoft Teams, over the telephone, or face-to-face, depending on your preference. If conducted face-to-face, reasonable travel expenses will be reimbursed after the interview. During the interview, the PhD student will ask you to share your experiences of accessing or trying to access mental health services in Lancashire and South Cumbria, and how you feel the COVID-19 pandemic and your LGBTQ+ identity influenced your experiences. If there are any questions that you feel uncomfortable answering, you will be able to move on from these questions without answering. With your permission, the interview will be audio recorded and typed up as a written record of the discussion. Please note that even if you have agreed to take part, you can withdraw at any stage of the research without giving any reason.

Will my data be identifiable?

The research data collected from you for this study will be stored securely using university approved secure cloud storage and only the PhD student and their academic supervisors will have access to this data. All files stored on laptops/computers will be encrypted, the laptops/computers will be password protected, and only the PhD student and their academic supervisors will have access to the files. The information you provide in the study will be made anonymous using participant identification numbers and people who do not need to know who you are will not be able to see your name or contact details. All personal identifiable information (e.g., name, email addresses) will be kept confidential and will be stored separately from your interview responses. The PhD student will ensure that the written transcript of your interview will be made anonymous by removing all information that could identify you. Anonymous direct quotations from your interview may be used in reports or publications from the study, so that your name will not be attached to these. After the study has been completed, research data will be kept for up to ten years. At the end of this period, it will be destroyed.

The PhD student will aim to uphold confidentiality at all times, the only exception to this will be if you disclose that there is a risk of harm to yourself or others. In this case, the PhD student will need to inform their academic supervisor in order to keep you or others safe, and contact relevant agencies if necessary. If possible, the PhD student will tell you that they have to do this.

What will happen to the findings?

The results of this study will be summarised and reported in the PhD student's doctoral thesis, and may be submitted for publication in an academic journal. Findings from this research may also be shared in other ways, such as presentations at conferences or events, and in lay summaries. Any quotations used in the doctoral thesis, articles, reports, and presentations, will be anonymised. If you are interested, you can request to receive a summary of the study findings, once the research has been completed, by contacting the PhD student.

What will happen to my data?

Only the PhD student and their academic supervisors will have access to your data and will be able to use the data that is collected from you in this study. Lancaster University will be the data controller for any personal information that is collected from you and will be responsible for handling your data and managing it properly. For further information about how Lancaster University processes personal data for research purposes and your data rights, please visit Lancaster University's webpage: www.lancaster.ac.uk/research/data-protection.

Are there any benefits to taking part?

You will be provided with a £25 voucher for taking part in the interview. You may find it useful and interesting to discuss and reflect on your experiences when taking part in this research. Your participation will help to provide an insight into LGBTQ+ experiences of accessing or trying to access mental health services for which limited research currently exists, and inform the development of recommendations aimed to improving services.

Are there any risks in taking part?

There are no serious risks anticipated with participating in this study. During or after the interview, you may find discussing and reflecting on your experiences of accessing or trying to access mental health services distressing. In these circumstances, you are encouraged to inform the PhD student and/or contact the resources provided at the end of this information sheet.

Who has reviewed this study?

This study has been reviewed and approved by the Faculty of Health and Medicine Research Ethics Committee at Lancaster University.

Where can I obtain further information about the study if I need it?

If you have any questions about this study, you can contact the PhD student or their academic supervisors;

- **Hayley Lowther-Payne** (PhD Student) – Lancaster Medical School, Faculty of Health and

Medicine, Lancaster University, Lancaster, LA1 4YW (h.j.lowther3@lancaster.ac.uk) (01524 522114)

- **Professor Fiona Lobban** (Academic Supervisor) – Division of Health Research, Faculty of Health and Medicine, Lancaster University, Lancaster, LA1 4YW (f.lobban@lancaster.ac.uk)
- **Dr Anastasia Ushakova** (Academic Supervisor) – Lancaster Medical School, Faculty of Health and Medicine, Lancaster University, Lancaster, LA1 4YW (a.ushakova@lancaster.ac.uk)

Making a complaint

If you wish to make a complaint or raise concerns about any aspect of this study and do not want to speak to the PhD student or their academic supervisors, you can contact;

- **Dr Laura Machin** (Chair of the Faculty Ethics Committee) – Lancaster Medical School, Faculty of Health and Medicine, Lancaster University, Lancaster, LA1 4YW (l.machin@lancaster.ac.uk)

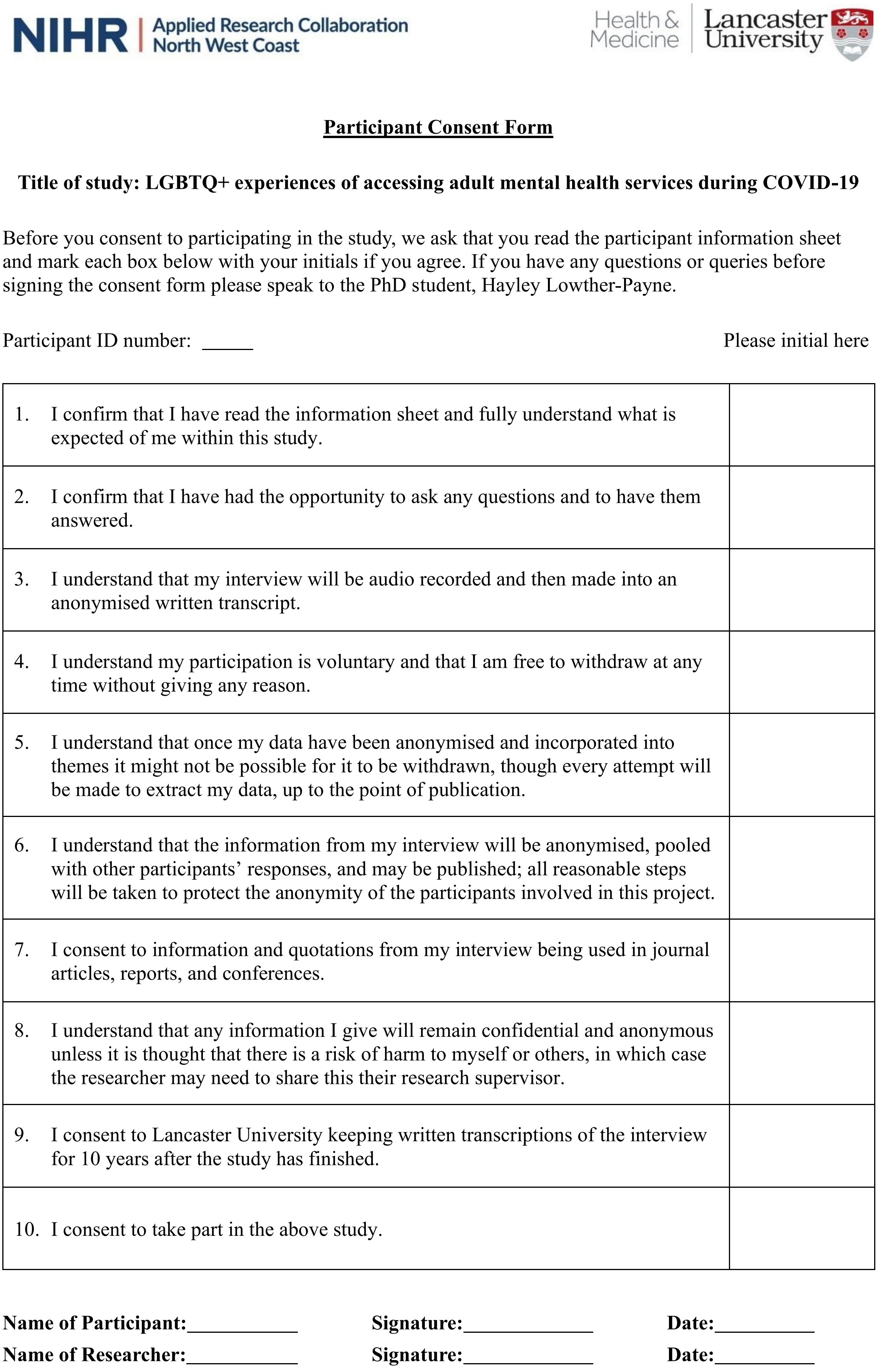
Thank you for taking the time to read this information sheet.

Resources in the event of distress

We understand that discussing and reflecting on your experiences of accessing or trying to access mental health services may be potentially distressing. Should you feel distressed after taking part in the research, or in the future, the following resources may be of assistance.

National resources	**MIND Infoline –** open 9am to 6pm, Monday to Friday Telephone: 0300 123 3393Email: info@mind.org.uk **Samaritans** – open 24 hours a day, 365 days a year Telephone: 116 123 Email: jo@samaritans.org
Local resources	**Lancashire and South Cumbria NHS Foundation Trust** – wellbeing service, open 9am to 11pm Monday to Friday, and 12pm to midnight Saturday to Sunday Telephone: 0800 915 4640Text: 07860 022 846 **Lancashire and South Cumbria NHS Foundation Trust** – mental health crisis line, open 24 hours a day, 365 days a year Telephone: 0800 953 0110
LGBTQ+ specific resources	**Switchboard** – LGBTQ+ specific helpline, open 10am to 10pm every day Telephone: 0300 330 0630 Email: chris@switchboard.lgbt **MindOut** – LGBTQ+ specific support (https://mindout.org.uk/get-support/) Telephone: 01273 234839 Email: info@mindout.org.uk

Figure D3. Participant consent form



NIHR | Applied Research Collaboration North West Coast

Health & Medicine | Lancaster University

Participant Consent Form

Title of study: LGBTQ+ experiences of accessing adult mental health services during COVID-19

Before you consent to participating in the study, we ask that you read the participant information sheet and mark each box below with your initials if you agree. If you have any questions or queries before signing the consent form please speak to the PhD student, Hayley Lowther-Payne.

Participant ID number: _____

Please initial here

1. I confirm that I have read the information sheet and fully understand what is expected of me within this study.	
2. I confirm that I have had the opportunity to ask any questions and to have them answered.	
3. I understand that my interview will be audio recorded and then made into an anonymised written transcript.	
4. I understand my participation is voluntary and that I am free to withdraw at any time without giving any reason.	
5. I understand that once my data have been anonymised and incorporated into themes it might not be possible for it to be withdrawn, though every attempt will be made to extract my data, up to the point of publication.	
6. I understand that the information from my interview will be anonymised, pooled with other participants' responses, and may be published; all reasonable steps will be taken to protect the anonymity of the participants involved in this project.	
7. I consent to information and quotations from my interview being used in journal articles, reports, and conferences.	
8. I understand that any information I give will remain confidential and anonymous unless it is thought that there is a risk of harm to myself or others, in which case the researcher may need to share this their research supervisor.	
9. I consent to Lancaster University keeping written transcriptions of the interview for 10 years after the study has finished.	
10. I consent to take part in the above study.	

Name of Participant:___________ **Signature:**_____________ **Date:**__________

Name of Researcher:___________ **Signature:**_____________ **Date:**__________

Figure D4. Participant monitoring form

NIHR | Applied Research Collaboration North West Coast

Health & Medicine | Lancaster University

Participant Monitoring Form

Title of study: LGBTQ+ experiences of accessing adult mental health services during COVID-19

Q1. What best describes your gender?

☐ Woman (incl. trans woman)
☐ Man (incl. trans man)
☐ Non-binary
☐ Prefer not to say
☐ Prefer to self-describe
____

Q2. Is your gender identity the same as the sex you were assigned at birth?

☐ Yes
☐ No
☐ Prefer not to say

Q3. What is your sexual orientation?

☐ Bisexual
☐ Gay / Lesbian
☐ Heterosexual / Straight
☐ Prefer not to say
☐ Prefer to self-describe
____

Q4. What is your age group?

☐ 18-24
☐ 25-34
☐ 35-44
☐ 45-54
☐ 55-64
☐ 65+
☐ Prefer not to say

Q5. Do you consider yourself to have a disability?

☐ Yes
☐ No
☐ Prefer not to say

Q6. What is your marital status?

☐ Single (never married)
☐ Married / Civil Partnership
☐ Separated
☐ Divorced
☐ Widowed
☐ Prefer not to say

Q7. What is your ethnic group?

a. White

☐ English / Scottish / Welsh / Northern Irish / British

☐ Irish

☐ Gypsy, Roma, or Irish Traveller

☐ Any other White background, please specify;

____

b. Asian or Asian British

☐ Bangladeshi

☐ Chinese

☐ Indian

☐ Pakistani

☐ Any other Asian background, please specify;

____

c. Black or Black British

☐ African

☐ Caribbean

☐ Any other Black background, please specify;

____

d. Mixed

☐ White and Asian

☐ White and Black African

☐ White and Black Caribbean

☐ Any other mixed background, please specify;

____

e. Other ethnic group

☐ Arab

☐ Any other ethnic background, please specify;

____

☐ Prefer not to say

Figure D5. Interview topic guide

Interview Guide

Title of study: LGBTQ+ experiences of accessing adult mental health services during COVID-19

Pre-interview contact to check participant meets eligibility criteria, check receipt of participant information sheet, check completion of consent form and monitoring form

Introduction checklist

☐ **Introduce myself** – Hayley, PhD student in the Medical School at Lancaster University, pronouns are she/her, part of the LGBTQ+ community (bisexual cis woman)

☐ **Provide a brief overview of the purpose of the interview** – thank for agreeing to take part, interviews are part of a PhD project to understand LGBTQ+ experiences of accessing or trying to access adult mental health services during COVID-19, interview will involve asking you a series of questions about your experiences of mental health during COVID-19, accessing or trying to access services during COVID-19, and being LGBTQ+, the findings will hopefully help to inform changes to mental health services to improve access for LGBTQ+ people and add to the literature of how COVID-19 affected LGBTQ+ people

☐ **Provide a brief description of how the interview data will be used and stored** – the data collected from this interview will by anonymised and stored securely at Lancaster University, will contribute to completion of PhD, will be published in journal articles and doctoral thesis, all data will be destroyed after 10 years, check understanding at this stage and any questions

☐ **State approximately how long the interview will take** – approximately 60 minutes

☐ **Remind participant about confidentiality and its exceptions** – will uphold confidentiality unless there is a risk of harm to you or others, will need to inform academic supervisor in this case, if possible will let you know if need to do this

☐ **Confirm informed consent to participate in the interview** – check you are happy to continue

☐ **Confirm right to withdraw at any point during the interview –** remind that you can withdraw from the interview at any time without providing a reason, you can stop the interview at any time without providing a reason, interview will be discussing sensitive issues and experiences, you do not have to answer any questions you do not want to answer

☐ **Confirm consent for the interview to be recorded (start recording at this stage)** – check you are happy to be recorded (if participant does not consent confirm consent, PhD student to takes notes during the interview), switch on recording and just re-confirm you are happy to be recorded whilst recording

☐ **Ask if participant has any questions before the interview starts**

Interview questions

1) **Perception of mental health needs and desire for care** *(experience of need for mental healthcare)*
   - Can you tell me about how your mental health was during the COVID-19 pandemic (*between March 2020 and February 2022*).
     - *Prompts:* How did this differ to pre-pandemic (*before March 2020*)? Did the pandemic and associated restrictions (*e.g., lockdowns*) specifically affect your experience of mental health, if so how?
     - *Prompts:* What help did you feel you needed at this time? What sort of help were you hoping for? What help did you access?

2) **Healthcare seeking** *(experience of seeking mental healthcare)*

- Can you tell me about your experience of seeking help for your mental health during the pandemic.
    - *Prompts:* What did you do? Where did you go first for help with your mental health (*e.g., GP, A&E, LGBTQ+ organisation, direct to mental health services, online resources*)? Why did you go here first? How did you contact them?
    - *Prompts:* Did the pandemic affect your choice in where you went to for help, if so how? If you have sought help before, how did your choice differ from pre-pandemic?
    - *Prompts:* Did your LGBTQ+ identity affect your choice in where you went to for help, if so how?
    - *Prompts:* Was there anything else that affected your choice in where you went to for help?

3) **Healthcare reaching** *(experience of gaining or not gaining access to mental health services)*

- Can you tell me about what happened after seeking help for your mental health during the pandemic.
    - *Prompts:* What was it like when you tried to get help for your mental health?
    - *Prompts:* Were you referred to mental health services (*e.g., IAPT, CMHTs, CRHTs EIS*)? What contact did you receive from this service/s? What form did this contact take (e.g., face-to-face, telephone, video)?
    - *Prompts:* Did the pandemic impact on what happened after seeking help for your mental health, if so how?
    - *Prompts:* Did your LGBTQ+ identity impact what happened after seeking help for your mental health, if so how? During contact with services, were you asked about your sexual orientation and/or gender identity? If so, what was your experience of this?
    - *Prompts:* Was there anything else you feel impacted what happened after seeking help for your mental health?

4) **Healthcare utilisation** *(experience of using mental health services once accepted)*

- (*if referred to/accepted by mental health services*) Can you tell me about your experience of using mental health services during the pandemic.
    - *Prompts:* Did you have regular contact with the service/s? What form did this contact take (e.g., face-to-face, telephone, video)?
    - *Prompts:* Were you already in contact with this service or other mental health services before the pandemic? If so, how did your experience differ before and during the pandemic?
    - *Prompts:* Did the pandemic affect how you used this service/s, if so how?
    - *Prompts:* Did your LGBTQ+ identity affect how you used this service/s, if so how? Were you asked about your sexual orientation and/or gender identity? If so, what was your experience of this?
    - *Prompts:* Was there anything else you feel impacted how you used mental health services?
- (*if not referred to/accepted by mental health services*) Did you use any other sources of support during the pandemic (*e.g., LGBTQ+ organisations, third sector organisations, online forums, friends, and family*)? What were these sources of support like?

5) **Healthcare consequences** *(outcomes and satisfaction with mental health services)*

- Can you tell me about your overall experience of accessing or trying to access mental health services during the pandemic.
    - *Prompts:* Were you satisfied with the contact you had with services? How did it help (*or not help*) your mental health? Were there any particularly positive or negative experiences?
    - *Prompts:* Are there any changes you would recommend to improve access to services from your experience of using mental health services during a pandemic? Are there any changes you would recommend to improve access specifically for LGBTQ+ people?
    - *Prompts:* If you had to access services again (*either during a pandemic or not*), would you do anything differently next time? If so, what?

6) **Other;**

- Is there anything further we haven’t talked about that you would to add?

Debrief checklist

☐ **Thank for participation in the interview and summarise the next steps (stop recording at this stage)** – the recording of the interview will now be transcribed and any identifiable data will be anonymised, all stored securely and deleted after 10 years, data will be combined with other participants' responses and analysed, findings will be written up and published in journal articles and doctoral thesis

☐ **Provide the participant with the £25 shopping voucher** – send via email if interview conducted remotely (check receipt), or give in person if interview conducted face-to-face

☐ **Confirm the participant is happy to be contacted after the interview if necessary** – check what method

☐ **Ensure the participant is happy with the interview and there are no safeguarding/well-being concerns**

☐ **Provide the participant with the debrief sheet** – highlighting the resources at the end of the sheet and the relevant contact details if the participant has any further questions or queries

Figure D6. Participant debrief sheet

NIHR | Applied Research Collaboration North West Coast

Health & Medicine | Lancaster University

Participant Debrief Sheet

Title of study: LGBTQ+ experiences of accessing adult mental health services during COVID-19

Thank you taking part in this study, which aimed to explore the experiences of people identifying as LGBTQ+ on accessing adult mental health services, and how the COVID-19 pandemic and their LGBTQ+ identity influenced those experiences. The findings from this study will provide insight into the experiences of LGBTQ+ people for which limited research currently exists, and will be used to develop a series of recommendations aimed at improving mental health services for LGBTQ+ people. The information you have provided has also helped the PhD student to complete their PhD project and develop their research skills.

What happens now?

The information you have provided during your interview will be anonymised, transcribed, and analysed alongside other participants' responses. A summary of the study findings will be reported in the PhD student's doctoral thesis, and may be submitted for publication in an academic journal. If you are interested, you can request to receive a summary of the study findings, once the research has been completed, by contacting the PhD student, Hayley Lowther-Payne: h.j.lowther3@lancaster.ac.uk.

Up to two weeks after the date your interview took place, you can ask to withdraw if you would not like your data to be included in the study. After this time, it will be difficult for the PhD student to remove your data as analysis and write-up of the findings will have started. If you would like to withdraw your data from this study, please contact the PhD student, Hayley Lowther-Payne: h.j.lowther3@lancaster.ac.uk.

What if I need support following my participation?

We understand that discussing and reflecting on your experiences of accessing or trying to access mental health services may be potentially distressing. Should you feel distressed after taking part in the research, or in the future, the following resources may be of assistance.

National resources	**MIND Infoline –** open 9am to 6pm, Monday to Friday Telephone: 0300 123 3393 Email: info@mind.org.uk **Samaritans** – open 24 hours a day, 365 days a year Telephone: 116 123 Email: jo@samaritans.org
Local resources	**Lancashire and South Cumbria NHS Foundation Trust** – wellbeing service, open 9am to 11pm Monday to Friday, and 12pm to midnight Saturday to Sunday Telephone: 0800 915 4640 Text: 07860 022 846 **Lancashire and South Cumbria NHS Foundation Trust** – mental health crisis line, open 24 hours a day, 365 days a year Telephone: 0800 953 0110
LGBTQ+ specific resources	**Switchboard** – LGBTQ+ specific helpline, open 10am to 10pm every day Telephone: 0300 330 0630 Email: chris@switchboard.lgbt **MindOut** – LGBTQ+ specific support (https://mindout.org.uk/get-support/) Telephone: 01273 234839 Email: info@mindout.org.uk

If you have any further questions about the study, please contact the PhD student, Hayley Lowther-Payne: h.j.lowther3@lancaster.ac.uk.

Thank you again for your participation in this study.