Which groups in Wolverhampton were most disadvantaged by the impact of the Covid-19 pandemic?

A semi-systematic evidence review undertaken by the Institute of Community Research and Development, University of Wolverhampton for the City of Wolverhampton Council's Empowering Communities programme.

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Contents

Executive Summary

The emergence of Sars-Cov-2 in Wuhan, China in December 2019 led to unprecedented epidemiological containment measures to be introduced across the globe. In the UK, the first national lockdown was announced on the 23rd March 2020. Citizens were legally obliged to 'stay at home' unless engaged in critical employment, taking daily exercise or obtaining essential supplies. It was clear that these extreme (albeit necessary) measures to contain the spread of Covid-19 would have a significant impact on the mental health and wellbeing of the population.

This evidence review, conducted by the Institute for Community Research and Development (ICRD) at the University of Wolverhampton, synthesises the findings of recent studies and reports on the impact of Covid-19 on mental health and wellbeing. It is part of a wider project which aims to engage local communities in co-creative research projects, in order to facilitate and support a community response to Covid-19. The primary aim of the review was to identify nine sub-populations or community groups within Wolverhampton, who would benefit from participating in these co-creation activities.

A semi-systematic literature review (combining traditional academic reviewing strategies alongside methods more commonly associated with rapid systematic or scoping reviews) was undertaken to identify literature relevant to the project. There were two primary springboards used as an entry point to the literature review: the UCL Covid-19 social study (a study of 70,000 people living in the UK which aims to map the psychological and social impact of Covid-19); and three reports published by the House of Commons Women and Equalities Committee. We also digested a wide range of academic articles, policy reports, charity reports and briefings from think tanks.

The literature review confirms that people who were experiencing disadvantage prior to the Covid-19 pandemic were subject to further challenges as a result of Covid-19, and this had a negative impact on the mental health of these population groups. These groups included, but were not limited to: ethnic minorities[1]; people living with disabilities; and refugees and migrants. Economic and social factors related to Covid-19 lockdowns placed additional pressure on these groups. Children and young people (0-25), those living in poverty, women, and critical workers also faced significant additional stressors as a result of the Covid-19 pandemic. The particular challenges faced by these seven groups are discussed in the following evidence review.

The review also provides key data specific to Wolverhampton and the West Midlands region, in order to make sense of the impact of Covid-19 in a local and regional context. After London, the West Midlands is the most ethnically diverse region in England and, after London, suffered the highest number of hospitalisations and deaths among ethnic minority people during the first wave of the Covid-19 pandemic. Wolverhampton is ranked the 24th most deprived Local Authority in England, and 21% of people living in Wolverhampton live in the top 10% most deprived areas of the country. Issues of ethnicity, poverty, and their relationship to poor mental health during the Covid-19 crisis are therefore particularly relevant to the City of Wolverhampton.

[1] When referring to ethnic minority groups in this document, we use the terminology used by the government during the time of publication, available in the style guide *Writing about Ethnicity* (Gov.uk, 2022). In doing so, we understand that the language used to describe ethnicity can be contentious and politicised, and that there are alternative ways of referring to ethnic minority people which some individuals may prefer to the terms used in this document. On occasion, when material has been directly sourced from an older document, different terminology may be used (such as BAME); in these cases, we supplement these terms with those used in *Writing about Ethnicity* in square brackets [].

The report ends with a recommendation to engage nine groups in co-creation activities, across three stages of the life-course. These groups are as follows: Children; children and young people with Special Educational Needs and Disabilities (SEND); young, unemployed people; refugees and migrants; ethnic minorities; women; critical workers; older people with long-term physical health conditions or disabilities; and older people with a pre-existing mental health condition. These nine groups cover population sub-groups who experienced mental health inequalities prior to Covid-19, alongside sub-groups for whom Covid-19 significantly increased their risk of poor mental health.

1
Introduction

The emergence of the Sars-Cov-2 virus in Wuhan, China in the latter months of 2019 has had an impact on everyone's lives in the UK, whether directly impacted by exposure to the virus itself or not. Unprecedented public health measures, implemented to slow the spread of the virus, led to the closure of schools, shops, pubs, restaurants and leisure facilities and required the population to 'stay at home' unless exercising or collecting essential goods. Data is emerging to suggest that although the mental health of the general population recovered following the initial shock of the first lockdown, some groups have been disproportionately impacted by the Covid-19 pandemic and it is likely that their experiences of the Covid-19 pandemic will have a negative effect on their mental health for some time into the future.

This report forms the first part of the *Empowering Communities* project, which seeks to better understand the impact of the Covid-19 pandemic on the mental health of people living, working and studying in Wolverhampton. The aim of the evidence review was to inform the selection of nine population groups within Wolverhampton, who would be invited to participate in co-creative research activities which will ultimately seek to address the disproportionate impact of Covid-19 on certain population groups.

A semi-systematic literature review was conducted, within which a broad range of academic literature, policy reports and other appropriate findings (most notably, reports from charities advocating for different population groups considered vulnerable) were synthesised. The review found that there is no consensus within the literature on the groups most disadvantaged by the Covid-19 pandemic in terms of mental health. However, findings support the argument that several population sub-groups who were previously experiencing disadvantage in terms of mental health prior to the Covid-19 pandemic were doubly disadvantaged by the health, social and economic impacts of Covid-19 in the UK. These groups include: ethnic minorities; people living with disabilities (including long-term mental and physical health conditions); and certain population groups of people living in poverty or destitution (homeless people, migrants, refugees and asylum seekers). These groups map loosely on to a number of population subgroups considered pre-pandemic to be at disproportionately high risk of mental health problems (PHE, 2019). Four further groups are also discussed: Children and young people; women; people living in poverty defined in broader terms (those on low incomes, in receipt of benefits, and living in social housing etc.); and workers in critical occupations providing a response to Covid-19 (also known as 'key' or 'frontline' workers). The literature supports a conclusion that mental health of these four groups was placed under increased and often severe strain as a result of issues associated with the Covid-19 pandemic. The impact of Covid-19 on the mental health of each of these subgroups is discussed in detail.

The report uses key data from the West Midlands and Wolverhampton to develop a picture of mental health concerns which should be most pressing to this geographical region. Both the West Midlands and the City of Wolverhampton specifically are areas of high ethnic diversity, so the disproportionate impact on the mental health of ethnic minority people during the Covid-19 crisis is of most concern. Key regional and local statistics on the other population sub-groups identified as being at high risk of mental health problems are discussed in Section 5, before a justification for the choice of nine groups to target for co-creation activities is provided in Section 6.

2
Methodology

The ICRD undertook a semi-systematic rapid desk-based evidence review of national and regional reports and briefings, which was intended to balance efficacy with the available funding and project timescale. We took a hybrid approach, aiming to combine elements from a traditional academic literature review with responses from a call for evidence and key data from local and regional organisations and stakeholders, as set out in the original project proposal. The evidence review was undertaken primarily by Dr James Rees, Dr Rachel Hopley and Dr Kathryn Spicksley in the ICRD, with additional input from Dr Sojka Bozena in the ICRD, Dr Darren Chadwick and Dr Niall Galbraith in the Centre for Psychological Research (CPR) and Clare Dickens.

Why a semi-systematic review?

There are many different types of literature reviews which can be conducted to shed light on current evidence concerning a particular topic (Grant & Booth, 2009). These include (but are not limited to): systematic reviews; scoping reviews; semi-systematic reviews; narrative (also called traditional) reviews; and rapid reviews. Considerations which come into play when determining which type of review to undertake are based on practical issues (most notably, the type and amount of resources required to undertake each type of review) and issues of scope (essentially, whether the research question is too broad or too narrow to be answered using a more systematic approach).

'Full' systematic reviews are very labour intensive. A study by Borah et al. (2014) estimated that the mean estimated time to complete a systematic review was 67.3 weeks, with the mean number of authors being five. The Cochrane protocol for conducting systematic reviews also states that reviewers should 'work closely […] with an experienced medical/healthcare librarian or information specialist' (Higgins & Thomas, 2022, n.p.). It is for this reason that other approaches to evidence reviews have proliferated in recent years (Khangura et al., 2012), as the temporal and human resources required to conduct a full systematic review are often inappropriately suited to the project. In the case of the *Empowering Communities* project, a need to progress quickly with the project was the main barrier to implementing a systematic literature review.

There were also challenges with the broad scope of the *Empowering Communities* research project which, combined with timescales, meant that a systematic review would not be the most appropriate type of evidence review to conduct for the *Empowering Communities* project. The aims of the evidence review were to:

1. Provide an overview of the impact of the pandemic on mental health in the UK;
2. To identify groups whose mental health had been disproportionately affected by the Covid-19 pandemic;
3. To explore the impact of the Covid-19 pandemic on the mental health of groups in the West Midlands;
4. To explore the impact of the Covid-19 pandemic on the mental health of groups in Wolverhampton.

The extensive scope did not, therefore, meet the criteria for a systematic review. The broad scope of the project also prevented us from undertaking a scoping review (Arksey & O'Malley, 2005).

A semi-systematic literature review process was therefore identified by the research team as the most appropriate method for reviewing the extant literature to inform the *Empowering Communities* project. Semi-systematic literature reviews are 'designed for topics that have been conceptualized differently and studied by various groups of researchers within diverse disciplines' (Snyder, 2019, 335), therefore allowing us to combine insights from psychology, medicine, sociology, and education. Semi-systematic reviews are also called 'meta-narrative reviews' as they seek to 'illuminate a heterogenous topic area by highlighting the contrasting and complementary ways researchers have studied the same or a similar topic' (Wong et al. 2013, 987). Semi-systematic reviews are more appropriate than systematic reviews in cases where a broad range of topics are being investigated, as systematic reviews 'expressly seek to filter out all variance' (Otte-Trojel & Wong, 2016, 275). In the case of the *Empowering Communities* project, the risk would therefore be that certain vulnerable groups would be backgrounded in the literature review process, as a result of efforts to meet the criteria of an effective scoping strategy.

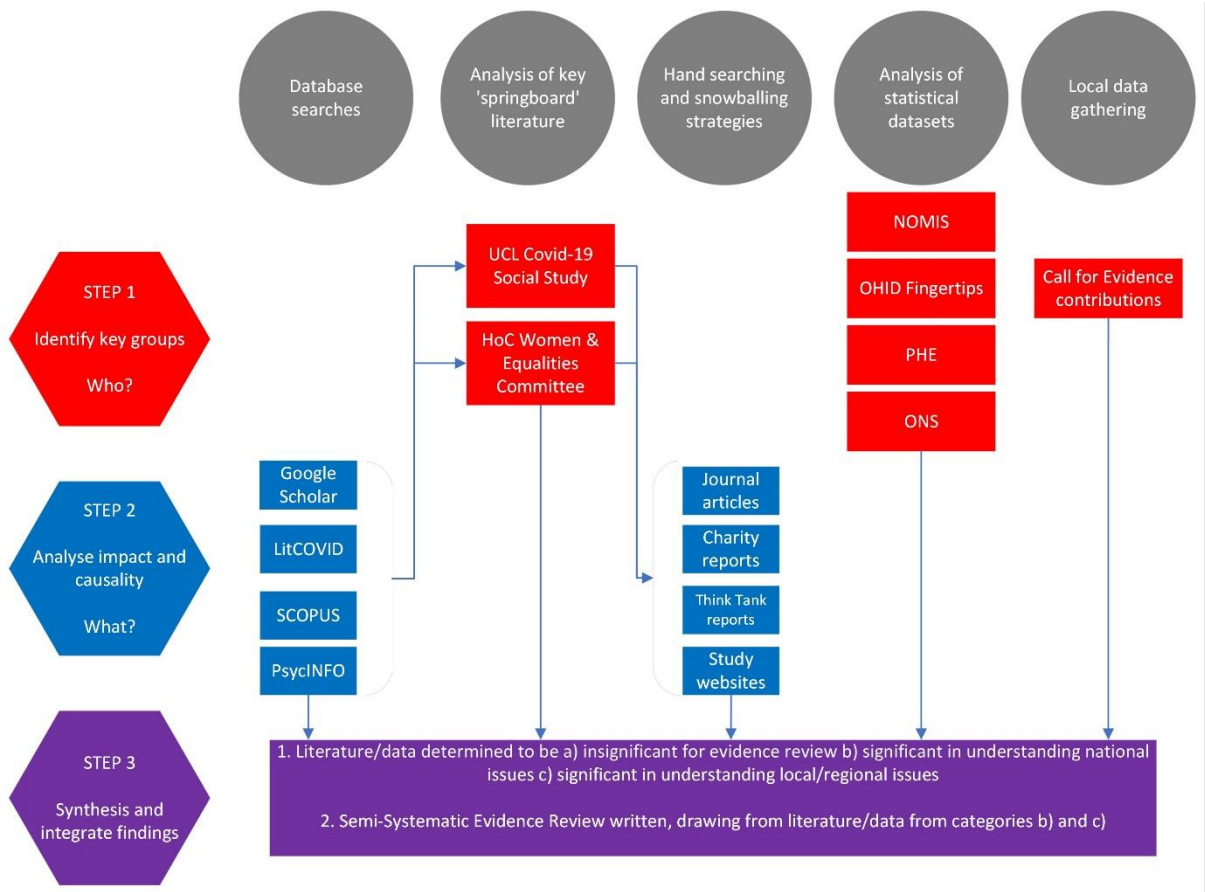
The benefit of a semi-systematic approach is that approaches from traditional academic literature reviews - such as providing historical context, or highlighting thematic similarities or differences between reports - can be incorporated within an approach which recognises the need to provide a transparent account of the process undertaken to search, retrieve and include literature (Snyder, 2019). A semi-systematic approach allowed us as a team to rapidly identify key groups at risk of mental health deterioration as a result of the Covid-19 pandemic from literature sources across a range of academic disciplines, and to use this information to inform the decision to approach certain groups within Wolverhampton to engage in further research activities.

Key stages in the review process

There were several stages to the review process, as detailed in Figure 1. As a semi-structured literature review, the process involved the synthesis of methods associated with both systematic and traditional literature reviews. The process was non-linear and iterative, facilitating the emergence of relevant literature across a wide range of sources and academic disciplines, and included:

- Database searches
- Snowballing techniques
- 'Hand-searching' relevant web sources of grey literature
- Drawing on the knowledges of existing networks; local Call for Evidence
- Analysis of local demographics

Figure 1: Search strategy employed for Empowering Communities Evidence Review



Database searches, primarily associated with systematic or scoping reviews, were conducted to provide an indication of the scope of the study and the range of academic literature which could inform the evidence review (Table 1). Four databases were searched, each with contrasting characteristics.

The disparity in returns across different database types indicates a significant issue with the scope of the project; too narrow for LitCovid and SCOPUS which returned zero results during one search, and too broad for Google Scholar and PsycINFO to be useful for a small-scale project, returning results in the thousands which would require significant narrowing in order to be achievable by a small team of researchers in a limited period of time. We were also aware that certain key studies (most notably, those published as part of the UCL Covid-19 Social Study) - which we would expect to foreground as a key text within this evidence review - were (figuratively) buried under articles which we felt were far less relevant. We did, however, identify 50 key articles through this process to be subject to further review. These were drawn from amongst the most relevant 100 articles on the Google Scholar and PsycINFO databases, based on their title and any available information about the location of the study in the title or abstract.

Table 1: Search returns on key databases

Search A (specific): Covid-19 (OR Coronavirus/Sars-Cov-2) AND Mental Health OR Wellbeing AND disproportionate(ly) OR disadvantage(d) OR vulnerable AND Wolverhampton OR West Midlands

Search B (general): Covid-19 (OR Coronavirus/Sars-Cov-2) AND Mental Health OR Wellbeing AND disproportionate(ly) OR disadvantage(d) OR vulnerable

SEARCH	Google Scholar	LitCovid	SCOPUS	PsycINFO
	Crawler-based web search engine	Sub-database of bibliographic database (PubMed); all articles open access	Large and multidisciplinary bibliographic database; peer-reviewed academic literature only	Bibliographic database with a narrow focus on a single research domain
Articles retrieved under search A (specific):	2, 960	0	0	53, 685
Articles retrieved under search B (general):	95, 200	7	2,101	94, 455
Articles selected for further review/inclusion	28	1	10	11

Having undertaken these database searches, we decided to use the database searches as a supplementary resource for the review; a recognised strategy when limitations with databases are identified (Gusenbauer & Haddaway, 2020). Instead, we decided to use the findings of the UCL Covid-19 Social Study as the primary academic springboard for identifying key groups for further exploration and analysis, after considering the quality of the data offered by the UCL study in comparison with that of many other studies identified through the database search. As the UCL study is longitudinal and involves more than 70,000 participants in the UK, it provided the most reliable form of data regarding the social impact of the Covid-19 pandemic in the UK. 39 scientific reports have been published from the UCL Covid-19 study, of which 16 were judged to be directly relevant to the *Empowering Communities* project based on their titles, and were therefore subjected to further analysis. The primary springboard from the grey literature were the three published reports by the *House of Commons Women and Equalities Select Committee*. These reports provide important evidence of the impact of Covid-19 on BAME people [ethnic minorities] (HOCWEC, 2020a); people living with disabilities (HOCWEC, 2020b); and women (HOCWEC, 2021). Reports from the Women and Equalities Committee were chosen over other Select Committee reports because this particular Select Committee is specifically focused on exploring issues of social, economic and health inequalities and their impact on minority and vulnerable groups.

Snowballing techniques, most often associated with traditional literature reviews (although also utilised in systematic and scoping reviews) were employed to reach reports and briefings which were rendered invisible by bibliographic or curated academic databases (such as charity reports). Snowballing involved the process of identifying relevant literature in the reference lists of publications, seeking this literature out and subjecting it to analysis within the review process.

'Hand-searching' for key documents was also utilised (Arksey & O'Malley, 2005); in the digital age, this referred to the process of manually seeking out key sources of information based on the prior knowledge of the research team. Throughout the search process, we were aware of the requirement (as set out in the ICRD's response to the *Empowering Communities* tender process) to focus on 'national and regional reports and briefings', indicating that 'grey' literature would be privileged

over academic papers and articles. Targeted searches of grey literature, including policy documents and reports by think tanks and charities, therefore formed a significant part of our search strategy. Such publications were only retrieved by Google Scholar during database searches, as it was the only web crawler-based database used to identify documents; bibliographic databases such as PubMed and SCOPUS are instead collections of academic literature and therefore excluded grey literature. It is worth noting that Google Scholar is not considered a reliable or precise system for systematically retrieving academic literature (Gusenbauer & Haddaway, 2000). Hand-searching the websites of key organisations, such as charities and think tanks, was therefore a key strategy for ensuring that appropriate information was identified about the lived experiences of key groups of interest.

In order to gather evidence on the impact of Covid-19 on the mental health and wellbeing of people living in Wolverhampton specifically, the project team conducted a rapid Call for Evidence via a targeted email, disseminated on 9 February 2022. The academic networks of members of the research team were also used to gather key information about factors local to Wolverhampton. Response to the Call for Evidence was small, perhaps reflecting a focus on the national picture during 2020 and 2021, but significant contributions included:

- City of Wolverhampton Council (2021);
- Dickson et al. (2020);
- West Midlands Combined Authority (2020a; 2020b);
- West Midlands Women's Voice (ComRes, 2020);
- Black Country Healthcare NHS Foundation Trust (2022);
- Royal Wolverhampton NHS Trust (2022).

Statistics relating to the demographics of Wolverhampton and groups at increased risk of developing mental health problems as a result of Covid-19 were also retrieved from national and local databases and statistical repositories and reports, including (but not limited to):

- NOMIS (Official Labour Market Statistics);
- Office for Health Improvement and Disparities (OHID) Fingertips;
- Public Health England (PHE);
- Office for National Statistics (ONS).

As the review was semi-systematic, there was no defined inclusion and exclusion criteria which determined whether a report, article or briefing could be included in the report. Each piece of data was assessed by one of the research team and determined to either a) provide no relevant contribution to the *Empowering Communities* evidence review; b) provide significant, relevant information about national issues relevant to the *Empowering Communities* project; or c) provide significant, relevant information about regional or local issues relevant to the *Empowering Communities* project. The majority of papers relating to international studies were therefore excluded, however, in certain cases comparative studies were considered to be relevant (e.g., Wade et al., 2021).

In line with the short time frame and semi-systematic nature of the review, it was not possible to tabulate all sources of evidence or to conduct a quality review of the literature included. Quality assessment tools typically judge methodological quality, detail, replicability and risk of bias. For many of the reports utilised for this evidence synthesis these details would not be included as they are policy and third sector reports rather than peer-reviewed empirical literature. Comments on the strength of evidence therefore were based upon the size and scope of investigations and the magnitude consistency of findings regarding the wellbeing impacts for specific groups. When synthesising and integrating the findings of these national, regional and local reports, we were

repeatedly made aware of the issue of intersectionality which rendered the process of drawing easy, succinct and discrete conclusions about the relative disadvantage of different population groups extremely challenging, if not obsolete.

3
Context: Mental Health, Inequalities and the Covid-19 Pandemic in the UK

Prior to the Covid-19 pandemic, Public Health England (PHE) had identified ten population sub-groups at high risk of mental health problems. These population groups are (PHE, 2019):

- black and minority ethnic groups (BAME) [ethnic minorities]
- people living with physical disabilities
- people living with learning disabilities
- people with alcohol and/or drug dependence
- prison population, offenders and victims of crime
- LGBT (lesbian, gay, bisexual and transgender) people
- carers
- people with sensory impairment
- homeless people
- refugees, asylum seekers and stateless persons

PHE also identified number of additional groups as having specific mental health needs or risks at certain points across the life-course. These include:

- Students transitioning to living in a new area
- women who are pregnant or have a child aged under 12 months
- children living at a socio-economic disadvantage
- children with parents who have mental health or substance misuse problems
- looked-after children
- adults with a history of violence of abuse
- people with poor physical health
- older people living in care homes
- isolated older people

Our review of literature on the relationship between Covid-19 and mental health sought in part to identify whether these previously identified groups at high risk of mental health problems were further disadvantaged by Covid-19, or whether other population groups had been particularly impacted by the Covid-19 pandemic. The literature we reviewed strongly suggested that those at high risk of mental health problems prior to the Covid-19 pandemic were additionally disadvantaged by Covid-19. However, as Covid-19 created new economic and social barriers to wellbeing not experienced pre-pandemic (for example, school closures), a number of other sub-population groups were also identified as being disadvantaged by the particular circumstances of Covid-19.

Mental Health, Wellbeing and the Covid-19 Pandemic

The COVID-19 pandemic, and associated lockdowns and social restrictions, have significantly impacted the populations' mental health and wellbeing. As Fancourt et al. (2021) point out, it was expected at the outset of the pandemic that there would be a major impact on mental health globally, and internationally several research projects using representative cohort studies have found an increase in mental illness as the pandemic began (Pierce et al., 2020; Shanahan et al.

2020). A systematic review of 65 studies exploring the relationship between mental health and Covid-19 found a significant increase in mental health conditions during the first lockdowns, which gradually eased over time for most people (Robinson et al., 2022); another of 3537 studies found anxiety to be higher in 2020 than in previous years (Saeed et al., 2022). There is also some evidence that mental wellbeing worsened before the start of lockdowns, because of fear and anxiety about the threat to personal health and family (Banks et al., 2021). The pandemic has impacted on the mental health and wellbeing by: increasing health related anxiety of being infected or losing loved ones; increasing concerns about the financial and economic impact of the pandemic; exacerbating housing insecurity and quality; causing a decrease in social contact and increasing isolation; having a negative impact on adaptive coping mechanisms; and reducing access to mental health services (Banks et al., 2021; Marshall et al., 2020; WMCA, 2020a; 2020b). Research conducted in the West Midlands described four main themes for deteriorating mental health: 'loneliness and isolation, increased anxiety due to the pandemic, increased family and relationship tensions, and grief and loss.' (Wilson et al., 2021).

An important national study has been the UCL Covid-19 Social Study: a panel study weighted to population proportions involving 70,000 people in the UK. Starting in March 2020, the study sought to understand how levels of anxiety and depression changed over time following the onset of lockdown in March 2020. The research tracks the trajectories of anxiety and depressive symptoms following the lockdown period and the research team consider differences within the population. The key findings of the study are that the highest levels of anxiety and depression occurred in the early stages of lockdown, but levels of anxiety and depression both decreased at first quite rapidly (between weeks 2 and 5), and continued to improve but much more slowly as lockdown measures were eased (between weeks 16 and 20). This suggests that for all populations groups, individuals adapted to the challenges facing them. Looking at differences between groups within the population, '[a]t the beginning of the lockdown, women, younger adults, people with lower levels of educational attainment, people from lower-income households, and people with pre-existing mental health conditions reported higher levels of anxiety and depressive symptoms' (Fancourt et al., 2021, 145). But contrasting with this, across the 20-week research period women, younger adults, people with lower educational attainment and people living with children saw faster improvements in mental health than men, older adults and people with higher educational attainment, and people without children – this represented a narrowing of some of the gaps in experience at the start of lockdown. Although in the early months of the pandemic anxiety, depression and distress increased, rates of suicide, life satisfaction and loneliness remained stable through the first year of the pandemic (Aknin et al., 2022).

The UCL Covid-19 Social Study has also highlighted some of the coping strategies employed by people during the Covid-19 pandemic. Social support was an important factor in maintaining mental health during this challenging time, with 45% of people reporting that they talked to family or friends in order to support their mental health, in comparison with only 8% seeking help from a health professional and 8% from a helpline or online service (Bu et al., 2021a). In terms of efficacy, socially-supported coping was associated with a faster decrease in mental health symptoms including anxiety and depression than other coping strategies (Fluharty et al., 2021). Social support was found to buffer self-harm behaviours, whereas loneliness exacerbated self-harm during the Covid-19 pandemic (Paul & Fancourt, 2021). These findings have implications for understanding the different ways that individuals accessed support and processed mental health difficulties during Covid-19, and how community organisations and projects can support individuals during challenging circumstances. People who were more readily able to access and draw from social support were rendered less vulnerable than people who were isolated (Spicksley et al., 2021; Hendrikx et al., 2022; Filippetti et al., 2022).

Inequalities and the Covid-19 Pandemic

As the Office for Health Improvement and Disparities (OHID) has stated, 'The mental health and wellbeing impact of the Covid-19 pandemic has been different for different groups of people' (2021a, n.p.). Covid-19 has exposed and exacerbated existing health and social inequalities. Addressing the negative effects of the COVID-19 pandemic on mental health is an international public health priority (Xiong, 2020; Campion et al., 2020). The World Health Organization (WHO, 2021), although recognising the 'theoretical and practical challenge' (5) of defining such groups, highlighted several populations as being particularly vulnerable to mental health impacts as a result of the pandemic. These included children, adolescents, older adults, women, migrants, refugees and displaced people, health and social care workers, newly unemployed workers, people with long-term health conditions or disabilities, and those with pre-existing mental health or cognitive difficulties. As the WHO also emphasised, there are well-understood inequalities in mental health that predate the pandemic, and research suggests that those most at risk from mental ill health are women, younger adults, people with a lower socioeconomic position, and those from ethnic minority groups. These groups, 'already at risk for poor mental health before the pandemic have remained at risk throughout lockdown' (Fancourt et al., 2021, 148), but crucially, as mentioned above, some groups saw their symptoms of mental ill health improve more quickly. These disparities suggest that it is important to understand more about the varying experiences of lockdowns and the challenges associated with the pandemic, as different groups with different vulnerabilities may benefit from different responses from public services and other sources of welfare.

Through regular surveillance of the mental health and wellbeing of the population in England, OHID identified the following groups who were more likely to experience declines in mental health during the pandemic:

- Women
- Young adults (aged 18-34)
- Adults with pre-existing mental or physical conditions
- Those experiencing loss of employment
- Those living in neighbourhoods with disproportionate poverty or disadvantage
- Black, Asian and Minority Ethnic (BAME) populations [ethnic minorities]
- Children and young people

The groups listed above have also been identified as being disproportionately impacted in further research by Allwood and Bell (2020), ONS (2021a), Dias & Bunn (2021), Fancourt et al. (2021), Gilleard (2020), O'Connor et al. (2021) and Daly et al., (2020). Some of these groups map precisely on to those identified as groups at a high risk of experiencing mental health problems pre-pandemic (PHE, 2019), whereas other suggest that the Covid-19 pandemic has had a negative impact on groups beyond these previously identified population sub-groups.

Focussing specifically on depression, unemployed adults were twice as likely to experience some form of depression to those employed or self-employed (31% vs. 15%); as were those living in the most deprived areas of England compared to the least deprived (24% v 12%) (ONS, 2021a). Based on analysis of longitudinal survey data across the UK exploring the impact on a range of mental health factors including suicidal ideation, self-harm, depression, anxiety, wellbeing and loneliness, people from socially disadvantaged backgrounds and those with pre-existing mental health conditions reported the worst mental health outcomes (O'Connor et al., 2021). Analysis of data from the UK Household Longitudinal Survey was able to compare mental health problems to pre-pandemic and concluded that gender (females) and age (younger adults aged 18-34) were linked to

worsening mental health problems (Daly et al., 2020; UCL, 2020). Alongside increased mental health problems, the UCL Covid-19 Social Study identified increased use of maladaptive coping strategies or risky behaviours amongst certain vulnerable groups; in a study of gambling during lockdown, ethnic minorities, smokers and people with lower education levels were identified as being at risk of increased gambling (Fluharty et al., 2022).

The findings of the UCL Covid-19 Social Study support findings from other studies which have highlighted particular groups as being acutely vulnerable to stressors associated with the Covid-19 pandemic, however, there is no clear consensus across the academic literature as to which groups should be considered the most vulnerable. Akay (2022), using data from the UK Household Longitudinal Survey, estimated that the average reduction in mental health during the first two lockdowns could be as high as 9.6%, supporting findings from the UCL study on the impact of the Covid-19 pandemic on mental health. However, findings in this study highlighted different groups than those identified in the UCL study as being particularly vulnerable, including: the older people with chronic health conditions; those with job security concerns; and those living alone or with limited or no private space. Minihan et al. (2020) identified three groups as being at high risk of mental health deterioration during the Covid-19 pandemic: healthcare workers; those with pre-existing mental health conditions; and people with learning difficulties or cognitive impairments. Manchia et al. (2022) instead argue that children and adolescents are the most vulnerable, alongside healthcare workers; this study argues that older people, although more vulnerable to negative physical health effects of Covid-19, reported lower psychopathology as a result of the Covid-19 pandemic than other groups. Mak et al. (2021), in a large sample longitudinal study of informal carers, reported higher levels of depression and anxiety levels throughout the pandemic. However, loneliness was not greater during the pandemic amongst this group and informal carers did experience a great sense of their life being worthwhile. These complex and seemingly contradictory findings in the academic literature are echoed in studies conducted by charities supporting vulnerable groups. For example, whereas the suicide prevention and mental health charity Samaritans (2021) highlighted those with pre-existing mental health conditions, young people, middle-aged men, healthcare workers and people in prison as being the most vulnerable groups, the mental health charity Mind (2020) instead advocated for women, people with disabilities, those living in social housing, those with eating disorders, obsessive compulsive disorder (OCD) and personality disorders, and frontline workers as being most at risk.

Other evidence of groups more likely to have disproportionate declines in mental health resulting from the pandemic, which emerged during the evidence review, included:

- older adults, in part, due to their fear of physical vulnerability to the virus and indirect effects of social distancing increasing experiences of social isolation and loneliness (Allwood and Bell, 2020; WMCA, 2020b);
- groups at risk of violence and abuse, with more families confined to home environments during lockdowns and increased levels of violence reported (Allwood and Bell, 2020; PHE, 2020a; Wilson et al, 2021; Dias & Bunn, 2021);
- frontline health and social care workers, due to fears of exposure and consequent transmission to others and stresses of increased workloads (Dias & Bunn, 2021; MIND, 2020; PHE, 2020a; Wilson et al., 2021);
- people living with disabilities (ONS, 2021a);
- people living with multi-morbidities who were therefore required to shield during the pandemic (Allwood and Bell, 2020);
- excluded groups such as refugees, asylum seekers, and people who are homeless (DOTW, 2020; Wilson et al., 2021);

- Carers, including carers of older people (Tuijt et al., 2021); carers of people with intellectual or cognitive disabilities (Willner et al., 2020; Doody & Keenan, 2021; Sheerin et al., 2022) and carers of children with disabilities (Willner et al., 2020; Disabled Children's Partnership, 2020; Family Fund, 2021).

Therefore, although similarities can be identified between the construction of the most vulnerable groups across different studies, there are significant inconsistencies which must be taken into account. A review of the literature highlights the complexity and, perhaps, the ultimate futility of any attempt to define the most vulnerable groups in terms of mental health and Covid-19.

At the beginning of the Covid-19 crisis, the Institute for Fiscal Studies (IFS) stated that there 'is no one measure of vulnerability that can summarise which areas will be hardest hit during the crisis' (Davenport et al., 2020). Although referring to different geographical areas, research on the impact of Covid-19 on mental health suggests the same sentiment is true when analysing the comparative vulnerabilities of different population groups. In order to explain the different types of challenge faced by different communities during the Covid-19 crisis, the IFS groups vulnerabilities into three categories:

- Health vulnerabilities (pre-existing health conditions and disabilities which increase the risk of negative physical health outcomes from contracting Covid-19, or increase the risk of negative mental health outcomes from the impact of epidemiological measures such as shielding);
- Labour market vulnerabilities (negative impact of Covid-19 lockdowns on employment, including redundancy or reduced hours; these can be understood as economic consequences of the Covid-19 pandemic);
- Family vulnerabilities (such as the impact of school closures and the increased exposure risk of living in multi-generational households).

These three categories are a useful way of conceptualising three different but interrelated ways in which the Covid-19 pandemic had an impact on different population groups.

However, although it is generally accepted that the impact of the COVID-19 pandemic has exacerbated existing inequalities (Bemme et al., 2020; Bezzo et al., 2021; Cheshmehzangi et al., 2022; HOCWEC 2020a; 2020b; 2021; Thomas, 2021), there is some evidence to suggest that the mental health impact was the greatest on those who had previously felt well (Murphy & Elliot, 2021). In contrast to findings of OHID (2021a) and Dias & Bunn (2021), Daly et al. (2020) found higher Socio-Economic Status (SES) to be associated with an increase in mental health problems, possibly as a result of not having experienced job instability and childcare difficulties to the same extent as those of lower SES prior to the pandemic. This is consistent with the findings of the UCL Covid Social Study (Fancourt et al., 2021), in that people with lower SES saw their mental health improve more quickly after the initial lockdown.

4
Groups disproportionately impacted by Covid-19: A national picture

Ethnic Minorities

Entrenched social, economic and health inequalities which impacted on both the physical and mental wellbeing of ethnic minorities were exacerbated by the Covid-19 pandemic (HOCWEC, 2020a; CSJ, 2020; Platt & Warwick, 2020; Bemme et al., 2020). As a result, Covid-19 had a disproportionate impact on the health and wellbeing of people from ethnic minorities. National and regional evidence has shown ethnic minorities were more at risk of contracting Covid-19, in part due to their occupation, deprivation and likelihood of accessing primary care services (PHE, 2020; WMCA, 2020a). Both hospitalization and mortality rates have been higher amongst people from ethnic minorities than white British people, with people from Black and south Asian ethnic groups more likely to suffer adverse outcomes as a consequence of contracting Covid-19 (PHE, 2020; ONS, 2022). Data provided by the Intensive Care National Audit and Research Centre (ICNARC) in 2020 stated that 34% of Covid-19 admissions were BAME people [people from ethnic minorities], compared to an 11.6% admission rate for BAME people [people from ethnic minorities] for viral pneumonia between 2017-19 (NHS Confederation, 2020).

Three key explanations have been offered as to why Covid-19 has had such a devastating effect on ethnic minorities: a higher prevalence of genetic and physiological vulnerabilities (such as higher risk of diabetes) within ethnic minority groups made individuals within these groups more vulnerable to the physical effects of the virus; cultural and behavioural factors increased the risk of infection for some ethnic minority groups; and the production of sociological and structural health inequalities has had a disproportionate impact on ethnic minority groups (Kapilashrami & Bhui, 2020). The rate of overcrowding in ethnic minority households, for example, greatly exceeds that of white British households, increasing the risk of infection. The rate of overcrowding in Bangladeshi households is 30%, in Pakistani households 16%, and black African households 15%; in contrast, the rate of overcrowding in white British households stands at 2%. Asian households are more likely to be multi-generational, increasing both risk of infection and concomitant anxieties during the Covid-19 pandemic (Paton et al., 2020). People from ethnic minority groups have poorer access to healthcare, experience poorer treatment and care once in the healthcare system, and have an increased risk of co-morbidities (NHS Confederation, 2020). The impact of the Covid-19 pandemic on ethnic minorities is a result of complex biological, cultural, social and economic issues which cannot easily be disentangled from one another.

A number of studies have moved away from the umbrella label of 'ethnic minorities' and taken a more granular approach to analysing the impact of Covid-19 on ethnic minority groups, which reveals that members of certain minority ethnic groups were more at risk of experiencing an adverse impact of Covid-19 than others. In terms of mortality rates, risks for different ethnic groups shifted across different waves of the Covid-19 pandemic, with black African men having the highest mortality rate in Wave 1, and Bangladeshi men and women having the highest mortality rates in Waves 2 and 3 (ONS, 2022). In their 'Ethnicity Spotlight', OHID found Bangladeshi, Indian and Pakistani men to have reported statistically significant declines in their mental health (OHID, 2021b). Underlying health conditions such as cardiovascular disease were also more prominent amongst older Pakistani, Bangladeshi and black Caribbean people, but occupational

exposure risks were higher for black African women and Indian men (Platt & Warwick, 2020). Gender and age also had an impact on these outcomes, with women and young people from ethnic minority groups more likely to experience adverse impacts on their employment prospects and financial situation (Fawcett Society, 2020). Older men in black and south Asian ethnic groups were more likely to experience co-morbidities which increased their risk of hospitalisation if they contracted Covid-19 (Platt & Warwick, 2020). Individuals who contracted Covid-19 also had a higher risk of developing related mental health issues than the general population, including post-traumatic stress disorder (PTSD), anxiety, depression, and specific neuropsychiatric problems which have been identified as linked to the Covid-19 virus (Smith et al., 2020). The additional risks of exposure and hospitalization faced by ethnic minorities as a result of trends in geographical location, employment, occupation and co-morbidities therefore had a direct impact on the mental health of ethnic minority people.

There is evidence to suggest that financial pressures and changes in employment during the course of the pandemic had particular impact on ethnic minority groups. Young workers from the Pakistani and black African ethnic groups are more likely to be employed on zero-hours or other forms of precarious work than white workers of the same age, placing them more at risk of financial stress in the economic context of the pandemic (Bowyer & Henderson, 2020). Risk of occupational exposure and the concomitant mental health consequences of such exposure was disproportionately felt by black African women and Indian men, as both groups are significantly overrepresented in Health and Social Care roles (Platt & Warwick, 2020). Work-related anxiety for people working outside the home was highest for BAME [ethnic minority] people, with 65% of BAME [ethnic minority] women and 73% of BAME [ethnic minority] men reporting anxiety as a result of having to go out to work during the pandemic (Fawcett Society, 2020).

As well as the disproportionate impact of increasing mental health issues in ethnic minority groups, there are also inequalities in accessing mental health support that were in existence pre-pandemic. These included differences in the point of presentation to mental health services between ethnic groups, with ethnic minority people more likely to initially present with higher severity of mental health need, leading to increased risk of detention when seeking support for mental health issues amongst ethnic minorities, and disproportionate barriers to accessing mental health services (Bowyer & Henderson, 2020). These barriers were exacerbated by the reduction in face-to-face mental health services during pandemic lockdowns (Smith et al., 2020). Research with frontline healthcare workers and faith leaders representing ethnic minority groups has also highlighted an important issue surrounding cultural differences and the taboo of discussing mental health and wellbeing which can stop people seeking support when needed (Mahmood et al., 2021; Wilson et al., 2021).

Refugee and Migrants

Migrants, asylum seekers and refugees were a population sub-group recognised as being at high risk of mental health problems prior to the Covid-19 pandemic (PHE, 2019). Although the body of research on the impact of the Covid-19 pandemic on migrants, asylum seekers and refugees is smaller than that of other groups discussed in this evidence review, this does not necessarily indicate a lack of need. The impact of the Covid-19 pandemic on People with No Recourse to Public Funds (NRPF), has been the focus of discussion by policymakers (HOCWEC, 2020a; Migrants Organise & NEF, 2020). The No Recourse to Public Funds (NRPF) condition is a provision in the Immigration and Asylum Act 1999 which removes entitlement to several social security benefits and other welfare provisions until they are granted leave to remain. Evidence is emerging that this group were significantly impacted by the economic impact of the Covid-19 crisis, with people struggling to access food, shelter or support during the pandemic (Dickson et

al., 2020). There have been substantial increases in the number of people requesting advice on NRPF during the pandemic (Smith et al., 2021), suggesting that financial pressures associated with the pandemic was particularly damaging to this population sub-group. Strategies introduced under the 'Hostile Environment Policy' contributed to some migrants' decisions not to seek healthcare for fear of being either refused care or charged, despite Covid-19 being an 'exempt' condition (Worthing et al., 2021). Research involving 53 migrant associations documented denial of mental health care to migrants during the coronavirus crisis, as well as indicating that the Covid-19 crisis had a negative impact on migrants' willingness to access healthcare (Migrants Organise and NEF, 2020). The need for further action and research to address the mental health needs of migrants has been corroborated by Lessard-Phillips (2021) and Spiritus-Beerden (2021). These articles highlighted inadequate and insecure housing and lack of access to GPs and remote healthcare services to be key areas affecting mental health of refugees and migrants during the pandemic.

Inadequate housing is an issue which particularly impacts on refugee and migrant groups, and was associated with poorer mental health during the Covid-19 pandemic. For homeless people and people living in temporary accommodation, lockdown was particularly challenging. People living in temporary accommodation reported feeling unsafe as it was difficult to socially distance from others, and struggling to access basic facilities such as cooking facilities, laundry and internet to enable their children to participate in remote learning. These challenges had a negative impact on people's mental wellbeing, and also on their physical health (Pennington & Rich, 2020). The UCL Covid-19 Social Study identified behaviours involving outdoor activities, such as gardening and exercising, to have a positive impact on mental health during lockdown (Bu et al., 2021b). Engaging in such activities was more difficult for people who had limited access to outdoor space, further disadvantaging those living in unsuitable housing.

The Women and Equalities Select Committee's hearings on BAME [ethnic minority] people and coronavirus gathered substantial anecdotal evidence from stakeholders that suggested people with NRPF were being severely disadvantaged by the effect of the Covid-19 pandemic, and called for further research to systematically investigate these issues (HOCWEC, 2020a).

People Living with Disabilities

The Covid-19 pandemic had an immediate, disproportionate and negative impact on the wellbeing and mental health of people living with disabilities, and on the families and carers of disabled people. As the Women and Equalities Select Committee found in their 2020 review *Coronavirus, disability and access to services*, disabled people 'suffered a range of profoundly adverse effects from the pandemic, including starkly disproportionate and tragic deaths' (HOCWEC, 2020b, 3). For people living with disabilities, the health implications of living through a pandemic had a particularly severe impact; many disabled people had underlying health conditions which meant they were classed as Clinically Extremely Vulnerable (CEV) and were required to shield from March 2020. The additional risk posed to disabled people meant that even those who were not required to shield or formally identified as CEV chose to isolate themselves (Scope, 2020; Taggart et al., 2021; RNIB, 2020). In the early stages of the pandemic, Scope (2020) found that 59% of disabled adults were not leaving their homes at all. The impact of being at higher risk of hospitalisation or mortality if exposed to Covid-19 meant that many disabled people experienced more extreme and prolonged levels of isolation from family, friends and community support networks than the general public.

The Equality Act 2010 defines a disability as a 'physical or mental impairment' which 'has a substantial and long-term adverse effect on your ability to carry out normal day-to-day activities.' The broad category of disability therefore encompasses a wide range of conditions at different

levels of severity, including: physical disabilities such as mobility, hearing and vision impairments; neurodiversities such as learning difficulties and autism; mental health conditions; and having a diagnosis of a disease which is likely to impact on day-to-day activity, such as cancer. People with different conditions experienced different challenges and barriers to their wellbeing during the Covid-19 pandemic; however, a commonality amongst disabled people managing diverse conditions was the negative impact that issues linked to the Covid-19 pandemic had on their mental health and wellbeing. Research undertaken by Scope, the disability equality charity, found that 86% of disabled people were either worried or very worried about the effect the pandemic was having on their lives, with 63% concerned that they would not receive the medical treatment they needed if they were to become ill during the pandemic (Scope, 2020). Mind, the mental health charity, reported that people with disabilities and with pre-existing mental health conditions (eating disorders, obsessive compulsive disorder or personality disorders) were more likely to report a decline in mental health during the Covid-19 pandemic than the general population (Mind, 2020).

There have been concerns raised about a tendency observed during the pandemic to group different disabilities together under the category of 'vulnerable', when people with different disabilities faced different challenges. Research conducted with specific groups of disabled people further emphasises the impact that the pandemic has had on disabled people, but can highlight some of the specific barriers faced by those with different medical conditions and needs. A study interviewing over 400 people with learning disabilities from across the UK found that nearly two thirds reported feeling 'angry or frustrated, sad, or down, and worried or anxious' at least some of the time in the previous four weeks (Flynn et al., 2021; Taggart et al., 2021). The same study approached family and carers to explore the impact of the Covid-19 pandemic on people living with severe or profound mental disabilities, who were living in supported accommodation. It found that visitor restrictions imposed during the pandemic had led to experiences of isolation, boredom, frustration and confusion which had negatively impacted on the wellbeing of people with severe and complex mental disabilities. Deaf people and people with hearing loss had particular anxieties around communication, as mandated mask wearing created a profound barrier to signing and lip-reading as a form of communication (Signhealth, 2020; HOCWEC, 2020b; Wilson et al., 2021).

People registered as sight impaired reported their lives being significantly impacted by Covid-19, with requirements to socially distance causing many to avoid public spaces, therefore increasing feelings of loneliness and isolation and leading to a loss of independence (Doyle & Cooper, 2020; RNIB, 2020). People living with mental health conditions prior to the pandemic have also been identified by a number of organisations as being disproportionately impacted by the pandemic (Barnardos, 2020; Mind, 2020; Samaritans, 2021; Young Minds, 2021). An analysis of email and telephone contacts with the Samaritans between March 2019 and March 2021, identified people with pre-existing mental health conditions as a particular group of concern with regard to wellbeing and suicidality during the pandemic (Samaritans, 2021); research conducted with young people with prior mental health needs identified similar trends amongst this group (Barnardos, 2020; Young Minds, 2021). Although records of mental illness and self harm presentations reduced to a quarter of the expected rate in April 2020, this was likely to have had an impact on later presentations at a greater severity (Carr et al., 2020).

The immediate change in access to healthcare provision was an aspect of the pandemic which had a disproportionate impact on people living with disabilities who, prior to the pandemic and as a result of their pre-existing conditions, were more likely to be systematically or regularly supported by healthcare professionals or to seek healthcare support than members of the general population. People living with pre-diagnosed medical conditions including lung conditions, diabetes, cancer, and heart conditions suffered disruption to medical services, increased waiting times and reduced

availability of services as staff were redeployed to support the Covid-19 response (Cumella & Farrington-Douglas 2020; Diabetes UK, 2020; Macmillan Cancer Support, 2020; Cancer Research UK, 2021; British Heart Foundation, 2021). Such delays in treatment caused significant additional stressors to people living with pre-existing health conditions; in a small-scale study with 32 participants living with long term conditions including cancer, respiratory and cardiovascular disease, those sampled reported Covid-19 causing high levels of fear and anxiety, with requirements to shield increasing isolation and causing fears about the future (Fisher et al., 2021). A survey with people living with cancer found that those who had experienced disruption or delays to their treatment during Covid-19 were more likely to report feeling 'stressed, anxious or depressed' (Macmillan Cancer Support, 2020). Challenges in accessing healthcare was a common issue for disabled people during the pandemic (Signhealth, 2020; Disabled Children's Partnership, 2020; Family Fund, 2021; Roscoe et al., 2021). There is evidence to suggest that people living with disabilities also suffered acute anxiety about what would happen if they were to contract Covid-19. Such anxiety partially stemmed from an awareness of disproportionate mortality amongst disabled people; in the first wave of the pandemic, 6 in 10 people who died as a result of Covid-19 were considered to be disabled (ONS, 2020a).

Finally, people living with disabilities often experience complex disadvantage, compounding the impact of the pandemic on their mental health and wellbeing. One example of such compound disadvantage was discussed in a study by Hendrikx et al. (2022) who found that service veterans who experienced more Covid-19 stressors were likely to experience increases in PTSD, and that those with less social support experienced more difficulties managing their anger. Factors such as finances interacted with the additional challenges of Covid-19 creating additional stressors for many disabled people. 42% of people living in families which rely on disability benefits are living in poverty (Oakley, 2021), and thus the financial impact of the pandemic was particularly devastating for people living with disabilities. Disabled workers were one of five groups highlighted as being most affected by employment changes during the pandemic in a recent parliamentary briefing (Powell & Francis-Devine, 2021). Changes in employment had a direct impact on mental health and wellbeing, with 65% of people whose employment status changed as a result of the pandemic reporting a decline in their mental health (Mind, 2020). The pandemic had an impact on the work of 71% of employed disabled people, with 20% of disabled people working reduced hours, 20% experiencing a loss of income, and 11% reporting feeling at risk of redundancy (Leonard Cheshire, 2020). Families raising disabled children felt the financial strain of the pandemic even more acutely, with 76% of families caring for a disabled child reporting a worsening financial situation as a result of the pandemic, and 45% of these families reporting a significant fall in income of more than £200 per month (Family Fund, 2021).

People Living in Poverty

The link between poverty, disadvantage and mental health problems is firmly established, with people living in deprived areas more likely to be diagnosed with mental health issues and to have poor mental health outcomes (Bemme et al., 2020). As the Mental Health Foundation state, 'those who face the greatest disadvantages in life also face the greatest risk to their mental health' (MHF, 2020, 3). During the pandemic, patterns of financial hardship and changes in employment mapped closely onto previous societal inequalities, meaning that 'the poorer you were before this crisis, the more likely you were to struggle during it' (Demos, 2021, 25). People with lower socioeconomic position were more likely to experience adverse events, financial hardship and difficulty in accessing food and medicine. As Fancourt and Bradbury (2021, n.p.) have summarised elsewhere: 'Low household income, in particular, correlates with higher rates of depression and anxiety. Levels of anxiety and depression on average improved for adults in the UK across the first lockdown and the summer of 2020, but levels remained consistently higher among people with

low household income.' The UCL Covid-19 Social Study identified those in a low socioeconomic position as being significantly more at risk of experiencing moderate to severe depressive symptoms during the Covid-19 pandemic (Iob et al., 2020). This is likely explained, at least in part, by the disproportionate number of adverse events suffered by those in a low socio-economic position; although these did not always relate directly to the virus, people in a low socio-economic position were more likely to suffer adverse events such as loss of employment or income or challenges accessing basic needs, such as food or medication, than people in a higher socio-economic position (Wright et al., 2020a). People who suffered adversities such as financial difficulty, loss of paid work, and difficulties accessing food were more likely to have increased anxiety and therefore poorer mental health (Wright et al., 2021). People with low household incomes were also subject to the mental health consequences of being on the wrong side of the digital divide. With many services moving online as a result of lockdowns, persons and households who could not afford internet access were placed at higher risk of stress, anxiety and distress, and were more likely to feel excluded from their community and from mental health support (Cheshmehzangi et al., 2022).

Middle class people were more likely to report positives from the Covid-19 crisis, whereas for those living in poverty prior to the crisis, the pandemic further exacerbated their financial challenges and barriers to wellbeing (Demos, 2021). The pandemic had a significant impact on many household incomes, pushing people and families who had previously experienced stable finances into financial difficulty (Turn2us, 2021) and, for many, leading to an increase in household debt (Round et al., 2020). Many families who had previously been able to balance their household expenditure against their income suddenly faced an unexpected 'income shock' as a result of the Covid-19 pandemic, and this shock was most keenly felt by those whose employment situation significantly changed as a result of the Covid-19 response, notably young people (aged 16-29), ethnic minorities, and people working in jobs with lower incomes (Round et al., 2020; Powell and Francis-Devine 2021).

A survey of over 16,000 people found that 65% of people whose employment status had changed as a result of the pandemic reported their mental health becoming worse (Mind, 2020). Analysis of the UK Household Longitudinal Study reported higher rates of poor mental health for unemployed people (43%) compared to those in employment (27%) or on furlough (35%) (The Health Foundation, 2021). Reduced work during the Covid-19 pandemic was strongly associated with greater mental distress (Wolfe & Patel, 2021).

Prior to the pandemic, 22% of people in the UK lived in families experiencing poverty (Legatum, 2020a). The pandemic not only exacerbated challenges faced by those experiencing poverty before the Covid-19 crisis, but also led to people facing sudden and unexpected financial difficulties. Many more households became reliant on welfare benefits (Mackley, 2021) and charity support (Turn2us, 2021) as a result of the Covid-19 crisis. The Turn2us impact report stated that the charity gave £4.1 million in grants to 5,581 families between April 2020 and March 2021, with over 81,000 people supported through telephone consultations advising how to access financial support; the Trussell Trust distributed 1,239,399 emergency food parcels between April and September 2020, and received over 19,000 calls to its national helpline. Financial concerns were associated with increased likelihood of self-harm thoughts and behaviours during the Covid-19 pandemic (Paul & Fancourt, 2021).

The financial shock of the Covid-19 crisis was felt most acutely by those who were already living in poverty, which included a disproportionate number of disabled people; young workers; ethnic minorities; and workers in the sectors which were hardest hit by Covid-19 restrictions, notably hospitality and retail (Legatum, 2020a; Young Women's Trust, 2020). Workers in hospitality, for

example, were more likely to be financially disadvantaged by the Covid-19 crisis than workers in finance (Legatum, 2020b). There are, therefore, significant issues of intersectionality which are particularly relevant when discussing issues of financial hardship. Groups who were more likely to suffer financial disadvantage prior to the pandemic were doubly disadvantaged by the negative economic impact of the Covid-19 pandemic. The experience of sudden financial hardship had a negative impact on wellbeing, with 35% of people who experienced being unable to afford an unexpected expense reporting moderate to severe symptoms of depression during the crisis, in comparison to 21% of this group reporting such symptoms prior to Covid-19 (Legatum, 2020a). Where a person lived had a significant impact on their risk of developing mental health problems during the pandemic. Geographical location had a significant impact on their risk of dying from Covid-19, with an average of 21 per 100,000 more Covid-19 related deaths in the 20% most deprived neighbourhoods in the UK, in comparison with the least deprived (Legatum, 2020b). People living in deprived areas were therefore subject to a higher number of deaths within their immediate communities, meaning that 'in mental health terms, this further suggests that the burden of excess bereavement and trauma will fall most heavily on those who are already most disadvantaged' (Mental Health Foundation, 2020, p.6). As well as geographic location, housing had an impact on an individuals' risk of mental health deterioration during the pandemic. People who rented (rather than owned) their homes were more likely to be concerned about struggling financially during the pandemic (Round et al., 2020), and people living in social housing were identified as a group more likely to report a decline in mental health during the pandemic (Mind, 2020). A study exploring the combined effect of neighbourhood deprivation and Covid-19 found that levels of wellbeing decreased more for people living in these areas than those living in areas with higher socio-economic advantage (Bezzo et al., 2021).

Children from disadvantaged backgrounds had the most learning loss as a result of the move to remote/online learning ('school closures') (EPI, 2021). The impact of remote learning rendered children living in 'mobile only homes' at a distinct educational disadvantage. A lack of access to gardens and green space also had an impact on the physical and mental health and wellbeing of children experiencing lockdown in small flats and bedsits (McNeil et al., 2020; Pennington & Rich, 2020). Households with children were more likely to experience food insecurity during the pandemic. During the first two weeks of the pandemic, 21% of households with children under 18 experienced food insecurity, in comparison with 14% of households without children. By January 2021 this had reduced to 10% of households with children experiencing food insecurity, in comparison with 7% of households without (The Food Foundation, 2021). For families who relied on Free School Meals, having to provide an additional meal during term time while children were not at school was an unexpected expense which caused stress and anxiety to parents (Family Fund, 2021). There is evidence to suggest that families with children were more significantly impacted by the Covid-19 pandemic and more likely to rely on charitable or welfare support, with 13% of households with children reporting using a foodbank or food charity during the pandemic, in comparison with 7% of people in the general population (Tyler, 2021). Households raising children were therefore more likely to suffer financial hardship during the course of the pandemic.

Children and Young People

The adverse impact of Covid-19 on the wellbeing of children and young people is of concern given their developmental stage in life and has therefore become a high priority for policymakers (CSJ, 2020; EPI, 2021; OHID, 2021c). Although children and young people as a group had lower mortality statistics and less severe outcomes than adults (PHE, 2020a; Hagell, 2021), containment measures to mitigate the spread of Covid-19 amongst the general population had a significant impact on the lives of children and young people. Most notably, the physical closure of schools to

the majority of children between March to July 2020, and then again between January and March 2021, had a significant impact on the educational attainment and wellbeing of many children and young people (Lee, 2020; OHID, 2021c). Indeed, a small-scale case study conducted in 2021 in one school setting found that concerns about the risk of Covid-19 transmission in school was greatly outweighed by perceived risks of missed learning (Lorenc et al., 2021). There is strong evidence to suggest a rise in anxiety amongst young people due to their perception that the pandemic would have an impact on their future employment prospects. Almost half of young people (aged 16 - 25) surveyed by The Prince's Trust during the pandemic (46%) stated that finding a job felt 'impossible' (The Prince's Trust & YouGov, 2020). There have also been concerns raised that children and young people may suffer stigmatization in the wider community, following media reports of asymptomatic transmission amongst young people and outbreaks in schools (Wright et al., 2021a).

Young people, and specifically students, were identified as one group placed at increased risk of loneliness as a result of Covid-19 lockdowns (Bu et al., 2020). Jaspal (2021) conducted a small-scale study with British South Asian Gay Men (BSAGM), aged between 19 and 26 who returned to their family homes during lockdown; many reported fears of stigma and anxiety about relationships. This study, although focused on a specific ethnic group, speaks of the difficulties experienced by many young people who had to return home during lockdown. Some of the coping strategies employed by young people have also been identified as maladaptive, placing them at increased risk of mental health issues; an analysis of drinking behaviours during the first Covid-19 lockdown associated being young with an increased risk of drinking more than usual (Garnett et al., 2021).

Studies conducted with those supporting young people during the pandemic reported an increase in issues relating to mental health and wellbeing (Barnardos, 2020; NSPCC 2020). During telephone counselling sessions delivered by the NSPCC through Childline, many young people used the word 'trapped' to talk about their life at home during lockdown; children also spoke about struggling with feelings of depression and anxiety, having more frequent panic attacks, suffering from sleep issues and feeling isolated. 68% of frontline practitioners working for Barnardos reported supporting a young person with increased mental health needs as a result of the Covid-19 crisis (Barnardos, 2020). An Adoption UK survey of 674 parents and carers reported that they had seen 50% more emotional distress in their children (Adoption UK, 2020).
Evidence suggests some groups of young people may be at greater risk of developing mental health problems (Hagell et al., 2021). The impact of the Covid-19 pandemic was most severe on children with special educational needs and disabilities (SEND), those living in poverty, and those with pre-existing mental health conditions (OHID, 2021c). The *Ask, Listen, Act Study* conducted research with 55 children and young people with SEND, using emojis to access their views about the pandemic. When asked how the pandemic made them feel, 23% chose an angry emoji and 13% a crying emoji (Ashworth et al., 2021). In addition, studies have also reported concerns for young carers (Carers Trust, 2020), LGBT+ young people (Sachs and Rigby, 2020; Jones et al., 2021), and young people from ethnic minority groups (Kooth, 2020b; Gilleard, 2020). As with the general population, it seems children who were already experiencing some form of inequality were those for whom the Covid-19 pandemic had the most negative impact, exacerbating previous inequalities (Hagell, 2021; OHID, 2021c). Bemme et al. (2020) point to 2.3 million children in the UK living in vulnerable family circumstances, and 4 million living in poverty, and argue that these are the groups of children most likely to be disproportionately disadvantaged by the Covid-19 pandemic.

Families of children with SEND reported a significant decrease in support over the period of the Covid-19 pandemic (Disabled Children's Partnership, 2020; Family Fund 2021). The Coronavirus Act 2021 changed regulations around Education, Health and Care Plans (EHCPs), relaxing the

time limits on Local Authorities to both assess and, if required, provide educational, health and care support for children considered to have SEND (HOCWEC, 2020). As a result, many families and children awaiting assessment and support faced lengthy delays. For children already identified as having SEND (usually through an EHCP), both formal and informal support networks became more challenging to access during the Covid-19 pandemic. As a result of these difficulties in accessing care, many parents reported deteriorations in the motor skills and physical activity of children with physical disabilities, and educational deterioration in children with cognitive delays and learning difficulties (Family Fund, 2021).

Children and young people with pre-existing mental health conditions were also disproportionately impacted by the Covid-19 pandemic. An ongoing study by Young Minds (2020a; 2020b; 2020c; 2021a) has repeatedly shown that for children and young people living with mental health conditions, lockdown measures to contain the Covid-19 virus had a negative impact on their already fragile mental health. Compounding this issue, children with existing mental health needs received reduced support for their conditions during the pandemic (Hefferon et al., 2020; NSPCC, 2020; Gilleard, 2020). 67% of young people with mental health conditions surveyed by Young Minds in January 2021 reported that they believed the pandemic would have a long-term impact on their mental health. Nearly a quarter of those surveyed in the same study reported having looked for mental health support but not having received any; 48% did not agree that their school had an increased focus on mental health and wellbeing, despite the challenges students had faced over the course of the pandemic. Groups of children who were more likely to suffer from a mental health condition prior to Covid-19 were doubly disadvantaged by the pandemic. For example, 68% of LGBT+ young people said their mental health had 'got worse' since the pandemic, in contrast to 49% of non-LGBT+ young people (Just Like Us, 2021). This is particularly alarming considering the high rates of mental health problems amongst LGBT+ young people prior to the pandemic (Bradlow et al., 2017). A further group worthy of particular attention are children living in homes where domestic abuse took place, who witnessed increased abuse as a result of stay-at-home orders. Limited access to support networks outside the home made these incidents less noticeable to authorities, placing these children at more risk of both physical harm and mental distress than before the pandemic. Furthermore, access to therapies for child survivors of domestic abuse were also limited as a result of lockdown restrictions, exacerbating the negative impact of domestic abuse on these children's mental health (Women's Aid, 2020; Hefferon et al. 2020).

Children from low-income families, those living in poverty, and those living in temporary accommodation were disproportionately impacted by measures to contain the Covid-19 virus, experiencing the most learning loss (EPI, 2021), a lack of access to gardens and green spaces for physical recreation (McNeil et al., 2020), and limited access to digital provision which, during lockdown, provided the means to both socialise and manage schoolwork at home (McNeil et al., 2020; Pennington & Rich, 2020). Household income appeared to have a significant impact on the mental health and wellbeing of children and young people; parents and carers with low annual incomes were more likely to report that their children experienced symptoms of behavioural, emotional and attention difficulties than parents and carers with a higher annual income (OHID, 2021c).

Women

Several studies have indicated that women were more likely to suffer from a deterioration in mental health than men as a consequence of the Covid-19 pandemic (Mind, 2020; Jia et al., 2020; Morgan et al., 2022). The ONS study of Coronavirus and depression found that women were more likely than men to have moderate to severe depressive symptoms during July 2020, with 23% of women reporting depressive symptoms at this time in comparison to 12% in 2019 (ONS, 2021a). Similarly,

the Covid-19 Stress and Health Study found that women were significantly more likely to be at increased risk of mental health problems and that being female was associated with greater levels of stress, anxiety and depression (Jia et al., 2020). Findings from a survey of 14,421 adults conducted by the mental health charity Mind listed women as a key group more likely to report a decline in mental health as a result of the pandemic (Mind, 2020). Pre-pandemic, women were considered more at risk of loneliness than other population groups (Bu et al., 2020), and the pandemic therefore heightened the isolation experienced by many women. As with being young, being female was also associated with a higher risk of drinking more than usual over the Covid-19 lockdown (Garnett et al., 2021).

A survey of the literature on women's mental health during the pandemic indicates that there were three key issues which had a disproportionate impact on women during this time: issues concerning employment and finances; childcare, caring and maternity responsibilities; and violence against women and girls (VAWG). Certain groups of women have been affected more than others, with young women (Young Women's Trust, 2020), women from ethnic minority groups (Fawcett Society, 2020), pregnant women (Pregnant then Screwed, 2020; Papworth et al., 2020) and women with childcare responsibilities (UCL, 2020; Fawcett Society, 2020; Gingerbread, 2021) having been most severely impacted by the pandemic.

Financial challenges faced by women have been exacerbated by employment changes during the pandemic, which have disproportionately impacted on people in part-time, low-paid and insecure jobs; in such jobs, female workers outnumber males. 55% of workers on zero-hours contracts prior to the pandemic were women, and 58% of those in involuntary part-time employment (HOCWEC, 2021). The consequences of the pandemic on employment therefore hit women particularly hard. 78% of people who lost their jobs in the first few months of the Coronavirus crisis were women (Young Women's Trust, 2020) and 72% of 19,950 mothers and pregnant women surveyed in 2020 reported having to work fewer hours (Pregnant then Screwed, 2020). Reduced hours went hand-in-hand with increased anxiety about household finances (Women's Budget Group, 2020; Young Women's Trust, 2020). In the West Midlands, three in ten women stated they were 'struggling' or 'worse' financially than prior to the pandemic (WMWV, 2020). Changes in employment during the pandemic had a disproportionately negative impact on women's mental health for a number of reasons. Women were more likely to be employed in sectors such as hospitality which were closed during lockdowns in order to limit the spread of Covid-19 (Joyce & Xu, 2020); women with parental responsibilities were more likely than men to experience employment challenges associated with reductions in formal and informal childcare during the pandemic, as women took on more caring responsibilities than their male counterparts (HOCWEC, 2021). BAME women [women from ethnic minority groups] were most likely to report struggling to manage paid work and childcare (Fawcett Society, 2020).

Concern about the possibility of exposure to, contracting, or passing on Covid-19 to others has been identified as a key stressor during Covid-19 (Samaritans, 2021). Women are also overrepresented in occupations such as care work, which carries a greater risk of occupational exposure than other professions (Women's Budget Group, 2020). Concerns about becoming infected with Covid-19 were felt acutely by pregnant women, who have been subject to 'misleading and changing advice and gaps in official guidance' over the course of the pandemic (Maternity Action, 2021, p.1). Although pregnant women were classified as clinically vulnerable, many women who were working outside the home were not provided with an individualised risk assessment (Pregnant then Screwed, 2020; Maternity Action, 2021). Pregnant then Screwed (2020) found that 46% of women who were working outside their home during pregnancy reported feeling unsafe. These concerns also impacted on women after they had given birth; the Covid-19 New Mum Study

at UCL identified significantly worse mental health amongst new mums who travelled to work (UCL, 2020).

Prior to the pandemic, the perinatal period had been identified as a risky time for women's mental health, and these issues were further exacerbated by the Covid-19 pandemic. A systematic review exploring maternal mental health in light of the pandemic found the pandemic to significantly increase the risk of anxiety for pregnant women (Hessami et al., 2020). A rapid evidence review and research with frontline maternal mental health workers, conducted by the Centre for Mental Health, identified several issues during the pandemic which further increased the risk to women's mental health during this time. These issues included difficulties accessing mental health support (Papworth et al., 2020); changes to hospital regulations which impacted on maternity and birthing plans, including most notably restrictions on partners' access during birth and pre-natal appointments (Baptie et al., 2020; Papworth et al., 2020); and increased concerns amongst mothers about the health and wellbeing of their infants (Baptie et al., 2020). New mothers who were able to access support for their mental health, and those who accessed community infant support groups, were less likely to report experiencing mental health difficulties, indicating the protective effects of building and developing relationships with peers and with healthcare workers (UCL, 2020). However, the pandemic caused widespread disruption to healthcare services available to women during pregnancy and childbirth, which prevented many women from being able to access such support (Papworth et al., 2020). The disruption caused by Covid-19 led to increased prevalence of depression, anxiety, and stress amongst pregnant women during Covid-19 (Filippetti et al., 2022), and more adverse childbirth experiences than prior to Covid-19 (Wade et al., 2021).

The social restrictions put in place to limit the spread of Covid-19 had a particularly damaging impact on women and children who were at risk of domestic abuse. Southall Black Sisters reported a 49% increase in calls a week before lockdown, and a 16% rise in calls during May 2020 as opposed to the previous month, indicating an escalation of domestic violence as the country went into lockdown (Sapkota et al., 2020). As Women's Aid noted, 'being in lockdown meant being confined to our homes, with those in our household, almost 24 hours a day', and for many women and children, home was not a safe place to be (2020, p.4). Women who were experiencing domestic abuse reported this abuse getting worse during the pandemic and this deterioration having a negative impact on their mental health; for those who had experienced domestic abuse in the past, 53% reported the pandemic had triggered memories of past abuse which had led to worsening mental health. 67% of the women surveyed by Women's Aid reported that their abuser had used Covid-19 or concomitant restrictions as part of their abuse (Women's Aid, 2020). Problems with the welfare system also had a negative impact on survivors of domestic abuse. The pandemic 'exacerbated perceived weaknesses in the Universal Credit (UC) system' (HOCWEC, 2021, 15). The payment of UC in to one bank account, coupled with the often lengthy delay from application to first payment (in some cases, up to five weeks), was shown prior to the pandemic to increase risk of physical, emotional or economic harm to women in abusive relationships (Howard, 2019). With more applications for UC during the pandemic, these historic problems with the UC system impacted on a greater number of women; the number of people receiving UC in 2020 increased from 3 million in March to 5.2 million in May (Mackley, 2021).

Critical Workers

The Covid-19 pandemic engendered new understandings of the type of work considered to be essential, requiring the publication of a critical workers list (Cabinet Office and Department for Education, 2022). Critical workers included those working across eight distinct areas:

- Health and social care
- Education and childcare

- Key public services
- Local and national government
- The production and distribution of food and other necessary goods
- Public safety and national security
- Transport
- Utilities, communications and financial services.

The mental health of critical workers, whose roles have been directly impacted by the pandemic, appear to have been disproportionately impacted by the Covid-19 pandemic. As a result of working in critical roles, these critical workers have been afforded less opportunity to mitigate the risks of catching the virus, and passing it on to others (ONS, 2020b); age-standardised mortality rates amongst frontline healthcare and some essential workers (notably, transport workers) was therefore higher than that of the general public (Nafilyan et al., 2021).

Considering the additional risks undertaken by healthcare workers during the global pandemic, it is perhaps unsurprising that various studies have highlighted the disproportionate negative impact that Covid-19 had on the mental wellbeing of health and care workers (Debski et al., 2020; Nyashanu et al., 2020; Greene et al., 2021; Roberts et al., 2021; Al-Ghunaim et al., 2021; Baldwin & George, 2021). 69% of emergency responders reported that their mental health had deteriorated since the start of the pandemic (Mind, 2021). Analysis by the Samaritans found that those working in frontline healthcare roles raised concerns about their work in 51% of email and telephone contacts between 23 March 2020 and 22 March 2021, in comparison with 10% of non-healthcare workers. However, it is not only healthcare workers and workers in roles which, pre-pandemic, had been considered to be 'frontline' workers whose mental health deteriorated during the Covid-19 pandemic. Although significant attention has been paid to the impact on healthcare workers, a number of studies have suggested that the mental health of critical workers in general decreased as a result of having to go to work during a global pandemic (May et al., 2021; Sumner & Kinsella, 2021; Bu et al., 2022).

The majority of research on the impact of the Covid-19 pandemic on the mental health of critical workers has focused exclusively on those employed in health and social care. However, the few studies which have researched with those employed in non-healthcare critical roles strongly indicates that those working in non-healthcare critical roles experienced similar (if not worse) mental health challenges as a result of the Covid-19 pandemic. Data analysed by those working on the University College London (UCL) Covid-19 Social Study has indicated that adverse mental health conditions were reported as a result of the Covid-19 pandemic across different sectors of critical occupations (Bu et al., 2022). Findings suggested that workers in health care may not be the group most impacted in terms of mental health, with specific concern raised about the impact of the pandemic on those working in essential services (for example, food production and distribution, and transport). Workers in essential professions were found to experience severe anxiety at the beginning of the lockdown, although this decreased with time (Saunders et al., 2021). One of the specific problems facing non-healthcare critical workers during the pandemic was a lack of both institutional and public recognition of the importance of their roles and the increased risk of exposure to Covid-19 that working in these roles created (May et al., 2021; Sumner & Kinsella, 2021).

There are also issues of intersectionality which are important to recognise when analysing the impact of the pandemic on different occupations. Ethnic minorities – specifically Indian, black Caribbean and black African people – are overrepresented in most keyworker roles, including critical Health and Social Care roles (Fawcett Society, 2020). Indeed, Paton et al (2020) estimate that over 50% of critical workers are from ethnic minorities (Paton et al., 2020). Significantly more

women than men make up the teaching workforce - 76% of teachers in state-funded schools in England are female. However, 86% of this workforce identify as white British (DfE, 2021). Issues of gender and ethnicity are therefore closely intertwined with occupational status, and during the Covid-19 pandemic this had a significant impact on potential exposure to Covid-19 and concomitant anxieties.

5
Local and Regional Data

Covid-19, Mental Health and the West Midlands

There have been a number of research studies conducted in the West Midlands area during the Covid-19 pandemic which are relevant to the *Empowering Communities* project. According to a WMCA survey in the West Midlands Region, almost half of people (47.9%) reported high levels of anxiety in 2020, compared to one in five (21.9%) in 2019 (WMCA, 2020a). Research conducted in nearby Stoke on Trent highlighted a surge in demand for advice services during the pandemic, and a 500% increase in food bank use (Etherington et al., 2021). A mixed-methods study of over 1000 adults focused on diet, mental health and Covid-19 in the West Midlands region found that subjective wellbeing and mental health reduced during, and that some participants faced barriers which prevented them from accessing fresh fruit and vegetables, indicating that responses to the Covid-19 pandemic had a negative impact on some individuals' lifestyle (Van Rens et al., 2021). Research with health and social care workers in the West Midlands region highlighted increased feelings of anxiety and fear amongst these frontline workers, mirroring findings of national studies (Nyashanu et al., 2020a; 2020b). It is clear, therefore, that individuals living in the West Midlands were not shielded from the negative consequences of the Covid-19 pandemic and its impact on mental health.

The disproportionate impact of Covid-19 on ethnic minorities is of particular relevance to policymakers in the West Midlands, as after London, the West Midlands is the most ethnically diverse region in England (Jolly et al. 2020; Dickson et al. 2020). This has been offered as an explanation of the high excess mortality rate in the region. During the first lockdown, this pattern of diversity exactly mapped onto Covid-19 infection and mortality rates. The highest infection rates for Covid-19 during the first lockdown in 2020 were in London followed by the Midlands, and this same pattern occurred again with infection rates (NHS Confederation, 2020). A qualitative research study conducted with 19 community and religious leaders in the West Midlands region highlighted some of the specific difficulties and barriers to accessing mental health support that ethnic minorities faced during the pandemic (Mahmood et al., 2021). Whereas the study reported increased anxiety amongst ethnic minority groups during the Covid-19 pandemic, taboos around mental health in some communities prevented members of these communities from seeking support. Mistrust of the government and health services was fuelled by social media, and in some cases exacerbated peoples' fear of dying away from friends and relatives, creating a barrier to support-seeking behaviours. Confusion over government messaging and the unavailability of guidelines in languages other than English was a significant issue for many ethnic minority groups, and goes some way to explaining some of the reliance on social media platforms. However, the pandemic also revealed a digital divide which had a significant impact on some members of ethnic minorities, leading to isolation during repeated lockdowns. This study found an increase in hate crime and racism experienced during the Covid-19 pandemic by ethnic minority groups.

In line with national findings, Covid-19 is having a disproportionately greater negative impact on the mental health of those vulnerable, marginalised and disadvantaged groups already facing inequality in the West Midlands (Rees et al., 2021; WMCA, 2020). Primary research in the West Midlands has found evidence to suggest 'ethnic minority groups, those with pre-existing mental health issues, adults with complex support needs, populations that are marginalised, disadvantaged or isolated, people living in social housing, people living in poverty, and people living with physical

disabilities and mental illness have also been disproportionately impacted.' (Wilson et al., 2021, p.4). In terms of population sub-groups recognised as being at high risk of mental health issues prior to the Covid-19 pandemic (PHE, 2019), research on migrant populations in the authority has shown that refugees, migrants and asylum seekers are disproportionately more likely to live in areas where levels of disadvantage are highest and poverty is felt the most (Iafrati et al., 2018), placing them at an additional risk to their mental health during Covid-19. Furthermore, statistics on disability across the UK indicate that the prevalence of disability in the region (23%) is broadly in line with the UK average (22%) (Statista, 2021); this population sub-group also needs to be taken into account when designing interventions to support groups in the region likely to be disadvantaged as a result of the Covid-19 pandemic. Studies in the region have highlighted poor communication strategies used by local, regional and national government to support disabled groups during the pandemic, increasing individuals' levels of anxiety about their health and wellbeing (Wilson et al., 2021; Healthwatch Wolverhampton, 2020).

In terms of population sub-groups identified as being at high risk of mental health problems specifically in the context of Covid-19 pandemic, findings from studies data gathered in the West Midlands again support findings from national studies. In line with national studies, women living in the West Midlands reported negative mental health outcomes as a result of the Covid-19 pandemic; 37% of women surveyed on behalf of West Midlands Women's Voice stated that their mental health had become worse as a result of the pandemic (ComRes, 2020). A study on post-partum support for women involving a high percentage (48%) of participants from the West Midlands region found that many women received no face-to-face medical or psychological support after birth, having a profound impact on women's anxiety and isolation. One women reported being asked over the telephone whether their uterus had returned to the correct position, highlighting the inappropriate nature of remote support for post-partum care. Primary research in the West Midlands (Wilson et al., 2021) has highlighted the impact of the pandemic on the wellbeing of children and young people, particularly the lack of normal support services being able to notice emotional struggles, and the impact on children who had witnessed domestic violence (Wilson et al., 2021). The rise in suicidal thoughts of young people in the Midlands is of particular concern (Kooth, 2020a).

Covid-19 has had a significant, negative impact on employment in the West Midlands region, with 39% of people in the West Midlands reporting that the Covid-19 pandemic had some negative impact on their employment, 26% reporting reduced hours or pay, 19% furloughed and 7% having lost their job. In contrast with other regions, the West Midlands was the 4th highest nationally in terms of negative financial impact after Northern Ireland, the South-West and London (Legatum, 2020b). Although London and Wales have been identified as the regions with the highest risk of financial difficulty during the pandemic, the West Midlands was 'not far behind' (Round et al., 2020, 4). Research conducted in the West Midlands reported "concerns around unemployment for young people causing depression and anxiety due to job loss, and not being able to access welfare benefits." (Wilson et al., 2021, p.30). This supports national data analysis of the Opinions and Lifestyle Survey that Local Authority areas with higher unemployment rates had reported higher levels of loneliness (ONS, 2021b). Other indicators of social deprivation are also significant; in the West Midlands, homelessness has more than tripled since 2015, with the number of people in temporary accommodation standing at 16,120 (equivalent to 1 in 368 people).

Covid-19, Mental Health and Wolverhampton

There is little research specific to Wolverhampton concerning mental health and the Covid-19 pandemic. It should be noted that academic studies are often vague about their exact research location in order to protect the anonymity of participants, therefore compounding the problem of

identifying research which is directly relevant to small localities. However, contextual data about the city can be combined with findings from national research and data, and extrapolated to make informed judgements about the issues which are likely to be of most relevance to Wolverhampton.

Wolverhampton is ranked the 24th most deprived local authority out of 317 (MHCLG, 2019), and 21% of people living in Wolverhampton live in the top 10% most deprived areas of the country (City of Wolverhampton Council, 2021). This is important as the highest excess mortality rate for Covid-19 outside London has been in poorer regions, including the West Midlands, North West and North East (The Lancet Public Health, 2021). The disproportionate impact of Covid-19 on ethnic minority groups is also highly relevant to policymakers in Wolverhampton. Wolverhampton has a higher percentage of people from ethnic minorities (27.6%) compared to both the West Midlands region (15.9%) and England (13.6%) (PHE, 2016). Issues surrounding the disproportionate impact of Covid-19 on the mental health of ethnic minority groups, and of people living in poverty, are therefore likely to be of high importance to policymakers in the city.

National research which has highlighted the impact of the pandemic on children and young people should also be considered particularly relevant to Wolverhampton, as research conducted in Wolverhampton (Healthwatch Wolverhampton, 2020) has highlighted the impact of the pandemic on children and young people's mental health. In Wolverhampton, 31.6% of children aged 0-15 years lived in income deprived households, above the regional average (25.7%) and significantly higher than the level seen nationally (19.1%). The findings of national studies which have linked child poverty and poor mental health during the pandemic should therefore be considered acutely relevant within Wolverhampton's local context.

School performance in Wolverhampton also suggests that targeting children should be at the forefront of efforts to support Wolverhampton's population moving forward. 64% of primary school children met the expected standard, slightly lower than the 65% average across all state-funded primary schools in England. Similarly, the percentage of primary school children in Wolverhampton achieving a higher than average standard at the end of primary school is 10%, just below the 11% average across all English state-funded primary schools. This gap widens, however, in secondary education - in Wolverhampton secondary schools, 35% of students achieve a level 5 or above in English and Maths at GCSE, falling quite far behind the average of 43% across all state-funded secondary schools in England. Eleven schools in the local authority are rated as either Requires Improvement or Inadequate, approximately 10% of the total number of state-funded schools in the city. (DfE, 2019). There is a proven link between mental health and educational outcomes (Rothon et al., 2011; Brännlund et al., 2017), so improving the mental health of children and young people across Wolverhampton is likely to have effects beyond public health and into education and employment. In Wolverhampton, although 96.2% of 16-17 years olds are in employment, education or training (exceeding the national average of 93.3%), there are significant disparities across ethnic groups. Those identifying as 'other ethnicity' are least likely to be in employment, education or training post-16 (86.5%), significantly below the national average (DfE, 2022). 92% of school leavers in Wolverhampton (at age 18) remain in education or enter employment, in comparison with 94% as the average across England. The highest rates of unemployment in Wolverhampton are for 18-24 year olds (9.9%) which exceeds the 6.2% regionally and 5.1% nationally (NOMIS, January 2022).

Recent data from the Adult Improving Access to Psychological Therapies (IAPT) programme in the region indicates the significant pressure NHS resources are currently under when supporting people with mental health issues. The number of patients waiting for assessment in October 2021 was 390, with 740 awaiting treatment; the longest waiting time was 8 months (Black Country Healthcare NHS Foundation Trust, 2022). Acute and inpatient data received from Royal Wolverhampton NHS Trust indicates a monthly average of 45 inpatient admissions for mental health issues, which although lower than surrounding areas in the West Midlands (Dudley, Sandwell, and Walsall) indicates a significant need for mental health support in the City (Royal Wolverhampton NHS Trust, 2022). Bed occupancy in Wolverhampton for the year to date in December 2021 stood at 95%, indicating the high need for mental health services in the Wolverhampton area. These figures also suggests a sub-group of people within Wolverhampton with pre-existing mental health needs who will have experienced barriers to accessing mental health support during the Covid-19 pandemic.

6
Bringing the Literature Together: Identifying nine groups for intervention across the life-course

The purpose of the evidence review was to identify nine groups in Wolverhampton, whose mental health has been impacted during the Covid-19 pandemic across the life-course to be invited to participate in co-creation activities. Having reviewed national, regional and local research studies, reports, and briefings, the ICRD recommends targeting the following groups for intervention.

Life-course group 1: Children and Young People

Three groups will be targeted within this broad category of life-course group 1: a) children; b) children and young people with special educational needs and/or disabilities (SEND); and c) young unemployed adults. The potential social, emotional and economic impact of the Covid-19 pandemic on children and young people is well-established in the academic literature. Furthermore, it is clear from policy reports that children and young people are a national priority in terms of recovery from Covid-19.

We will ensure that within Group A, 'children', the sample includes children from ethnic minority groups and from disadvantaged postcodes, in recognition of the fact that children from ethnic minority groups and low socio-economic status households were likely to have been disproportionately disadvantaged by the Covid-19 pandemic. Children in lower secondary school will be recruited (aged 12-15), as secondary schools in Wolverhampton have lower performance statistics than primary schools.

Group B in this category, 'children and young people with SEND' will include 12 – 25 year olds with special educational needs and disabilities, in recognition that the impact of the Covid-19 pandemic on children and young people with SEND have been both significant and wide-ranging, impacting on educational, physical, cognitive and emotional development. We hope to include family members of children with SEND in this group, recognising that caring for children with SEND during the Covid-19 pandemic was even more challenging than under normal circumstances.

Group C will engage young people (aged 18 - 25) who are finding it difficult to secure employment. Findings from the evidence review suggest that a significant stressor for young people during the Covid-19 pandemic was the impact of the crisis on employment opportunities, and the possible damage that the pandemic might have on future careers or earning potential.

Life-course group 2: Working-age adults

Four groups will be targeted within the category of working-age adults (25 – 67 years): d) People from ethnic minority groups; e) Refugees, asylum seekers, migrants, and people with No Recourse to Public Funds (NRPF); f) Women; and g) Critical workers. These groupings were chosen in order to provide a balance between sub-population groups which had been identified as having

inequitable access to mental health services prior to Covid-19 (ethnic minorities and refugees, asylum seekers and migrants) and sub-population groups identified as a concern during the Covid-19 pandemic (women and critical workers).

Recognising the significance of the ethnic minority population within Wolverhampton and the wider West Midlands, and also issues of intersectionality with regard to employment and nationality, we would seek to prioritise participation across all four groups in this category of people from ethnic minorities. So, alongside having Group D exclusively comprised of working-age adults from ethnic minority groups, we would also seek to encourage the participation of women from ethnic minority groups in Group F and critical workers from ethnic minority groups in Group G. Given the particular demographics of refugees, migrants, asylum seekers and those with NRPF, we believe it is likely that Group E will also include a significant proportion of participants from ethnic minority groups. In this way, we hope to foreground the voices and needs of people from ethnic minority groups within Wolverhampton.

Life-course group 3: Older people

Two groups will be targeted in this life-course group: h) older people with long-term health conditions and/or disabilities; and i) older people with mental health conditions which had been diagnosed prior to the Covid-19 pandemic. This evidence review has indicated that although older people were more at risk of mortality and of severe physical effects of Covid-19 were they to contract the virus, their mental health was perhaps not placed at as great a risk as that of younger people. It is for this reason we have chosen to focus on two groups from this life-course category, rather than three, in order to foreground the voices of those population sub-groups who – according to the literature reviewed – were more at risk of mental health deterioration as a result of Covid-19.

The voices of older people with long-term health conditions and/or disabilities (Group H) and pre-existing mental health concerns (Group I) will not only enable us to better understand *older* people with these conditions, but will also be valuable in understanding how people with disabilities *amongst the general population* are making sense of the Covid-19 pandemic. It is likely that the anxieties and barriers faced by older people living with pre-existing health conditions and disabilities will be shared by working-age adults and children with similar conditions and barriers to wellbeing.

7
Conclusion

The purpose of this evidence review was to identify nine groups across the life-course, who should be targeted for intervention through co-creative research activities focused on improved mental health and wellbeing in the wake of the Covid-19 pandemic.

A semi-structured literature review was conducted, primarily by the Institute for Community Research and Development (ICRD) and with support from colleagues in the Centre for Psychological Research (CPR). Conducted at a rapid pace, the literature review combined scoping techniques from traditional academic literature reviews and from systematic reviews to identify national, regional and local studies and data relevant to the *Empowering Communities* project. The emerging findings illustrate how Covid-19 both exacerbated previous inequalities experienced by certain population sub-groups (e.g., ethnic minority groups), as well as creating new inequalities and barriers to robust mental health for other groups (e.g., children and young people).

Prior to Covid-19, several sub-population groups had been identified as being at high risk of mental health inequalities. Three of these groups were also foregrounded in literature on mental health and Covid-19 as being disproportionately impacted by the challenges of Covid-19, including: people from ethnic minoruty groups; people living with disabilities (both physical, mental and cognitive); and refugees, migrants and stateless persons. We have detailed the barriers faced by these three groups during Covid-19 in detail in this report, and it is clear that these pre-existing health inequalities were compounded by the Covid-19 pandemic. These sub-population groups, who prior to Covid-19 were already at high risk of mental health issues and concomitant deprivation factors linked to increased risk of mental health problems (such as inadequate housing, low income, job insecurity, and barriers accessing mental health support).

In light of research studies conducted on the national and local populations during Covid-19, we have also highlighted four population sub-groups whose mental health was negatively impacted by the particular circumstances of the Covid-19 pandemic: people living in poverty; children and young people; women; and critical workers. The commonality amongst these four groups is that Covid-19 brought about new challenges. For children and young people, schools were closed and employment opportunities post-18 significantly reduced. Women took on increased caring responsibilities, exacerbating previous inequalities across genders, but also faced new challenges – pregnant women were denied birthing partners and partners to support at appointments, and new mothers lacked face-to-face support for basic issues such as post-partum recovery and breastfeeding. Critical workers in healthcare faced the difficulties of containing and mitigating the impact of a new, unknown pathogen, and critical workers outside healthcare faced new anxieties about the risks posed to them in employment roles previously considered low risk Issues of intersectionality cannot be ignored here, and across these three groups, people from ethnic minority groups and people with disabilities were most disproportionately impacted.

In light of research analysed and data gathered during the evidence review, the ICRD recommends the following nine groups as target populations for intervention:

- Children;
- Children and Young People with Special Educational Needs and Disabilities (SEND);
- Young unemployed adults;
- People from ethnic minority groups;

- Refugees, migrants and asylum seekers;
- Women;
- Critical Workers;
- Older people with long term physical health conditions and/or disabilities;
- Older people with mental health conditions diagnosed prior to Covid-19.

The decision to target these groups aimed to strike a balance between including sub-population groups considered to be at high-risk of mental health problems prior to the Covid-19 pandemic (PHE, 2019), and those whose circumstances were likely to have changed significantly as a result of the Covid-19 pandemic, engendering new mental health challenges. The particular demographics of Wolverhampton and the West Midlands were also taken into account when isolating groups for intervention.

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