



Public mental health implementation

A new centre and
new opportunities

Briefing paper
March 2022

Acknowledgements

The Public Mental Health Implementation Centre (PMHIC) would like to thank Dr Adrian James (President of the Royal College of Psychiatrists), Dr Trudi Seneviratne (Registrar of the Royal College of Psychiatrists), Prof. Jeremy Coid (Emeritus Professor of Forensic Psychiatry, Queen Mary University of London), the PMHIC Patient and Carer Representatives and the PMHIC Advisory Board members for their support in setting up the PMHIC and their contributions to this briefing.

Contact the PMHIC at: public.MH@rcpsych.ac.uk.

The Royal College of Psychiatrists, 2022.

Summary

Mental disorders account for at least 18% of global and 21% of UK disease burden. This is due to a combination of high prevalence, early onset during the life course, and a broad range of associated impacts. Effective interventions exist to prevent onset of mental disorders, treat mental disorders, prevent associated impacts, and promote mental wellbeing and resilience.

However, only a minority of people with a mental disorder in the UK receive treatment, and far fewer receive interventions to prevent associated impacts. Furthermore, there is negligible provision of interventions to prevent mental disorders or promote mental wellbeing and resilience. The implementation gap is even greater in low- and -middle-income countries and results in population-scale preventable suffering, broad impacts and associated economic costs. The gap breaches the right to health, reflects lack of parity and has further widened with the COVID-19 pandemic.

The implementation gap can be addressed sustainably through a public mental health approach. The Public Mental Health Implementation Centre (PMHIC) of the Royal College of Psychiatrists was established in 2021 to work in partnership with relevant bodies to support improved implementation of evidence-based public mental health interventions, both nationally and internationally. This will support sustainable and equitable reduction of disease burden from mental disorders and promotion of population mental wellbeing and resilience.

Contents

Glossary	5
1. What is public mental health?	6
2. The role of the Public Mental Health Implementation Centre	7
2. The role of the Public Mental Health Implementation Centre	7
3. Why is a public mental health approach important?.....	8
4. Determinants of mental disorders.....	11
5. Mental wellbeing, protective factors and resilience	12
6. Higher-risk groups.....	14
7. Public mental health interventions.....	15
8. The implementation gap of public mental health interventions.....	18
9. Public mental health policy development and associated work	20
10. Opportunities to address the public mental health implementation gap	22
Members of the PMHIC team and Advisory Board	23
Stakeholders and partners: current and potential	25
References.....	26

Glossary

Mental disorders: These include common mental disorders (depressive and anxiety disorders), bipolar disorder, psychotic disorder including schizophrenia, eating disorder, personality disorder, substance use disorders, dementia, intellectual disabilities, and neurodevelopmental disorders including autism.

Mental wellbeing: Different conceptualisations of wellbeing include affective wellbeing, which refers to present state satisfaction, pleasure and mood, and evaluative wellbeing, which refers to global, longer-term aspects including meaning and development¹. Resilience (below) is also related to mental wellbeing.

Primary-level interventions: These address risk factors to prevent mental disorders from arising and promote protective factors associated with mental wellbeing and resilience. This includes the full range of determinants such as socioeconomic inequalities and structural racism.

Protective factors: These are attributes (including genetic, demographic, socioeconomic, environmental, social and educational) that support mental health and wellbeing, and so protect against the likelihood of poor mental health and wellbeing. Protective factors are crucial to resilience (below).

Resilience: A process of positive adaptation in response to life events. Considered to be a dynamic process influenced by individual, family, school and community factors, as well as wider support structures and systems, which can be important to mitigate impacts of adversity and promote mental wellbeing^{2,3}.

Secondary-level interventions: These involve early intervention for mental disorders and poor mental wellbeing to minimise impact.

Subthreshold symptoms: Conditions with symptoms not meeting full diagnostic criteria for mental disorders.

Tertiary-level interventions: Interventions for people with established mental disorders and/or poor mental wellbeing to promote recovery, prevent associated inequalities and minimise disability.

1. What is public mental health?

Public mental health:

- a. involves a population-based approach that seeks to improve the level and distribution of mental ill-health and mental wellbeing in society.
- b. supports improved implementation of public mental health interventions at primary, secondary and tertiary levels.
- c. includes more targeted approaches to prevent widening of inequalities for groups at increased risk of mental disorder, poor mental wellbeing and/or reduced access to interventions. Such targeted approaches are supported by, for example, being culturally appropriate.
- d. promotes coordinated and intersectoral approaches between providers of different types of intervention, including social, educational, workplace, health, economic and policy.
- e. involves people with experience of mental disorders and their carers, communities, providers, commissioners, policymakers and industry (public, non-profit and for-profit institutions) in the development and implementation of evidence-based interventions.

2. The role of the Public Mental Health Implementation Centre

The role of the PMHIC is to support improved implementation of evidence-based public mental health interventions both nationally and internationally in the following ways:

- a. Support collaboration and leadership on public mental health with a broad range of stakeholders (see list of [stakeholders and partners](#)).
- b. Promote public mental health as an intrinsic part of psychiatry, and support College members in developing their public mental health knowledge and skills through training⁴, evidence briefings, publications and conference presentations.
- c. Work with other professional groups to integrate public mental health training into their teaching programmes: for example, in nursing, medical schools, medical specialties, general practice and public health training.
- d. Provide high-quality evidence, advice and recommendations about public mental health to government, and other policy-making bodies at local, national and international levels.
- e. Support mental health needs assessment at the national level to estimate the size, impact and cost of the implementation gap of effective public mental health interventions. This work will take into account issues such as COVID-19 and includes:
 - o highlighting the most suitable options to address the gap, associated economic benefits and ways to improve scale coverage
 - o facilitating transparent agreement about acceptable levels of coverage of different public mental health interventions taking account the right to health, the impact and cost of implementation failure, and the UN Sustainable Development Goal target of universal coverage by 2030.
 - o supporting the translation of needs assessment into improved implementation across populations.
- f. Support identification of public mental health research priorities, including implementation research.

3. Why is a public mental health approach important?

National and global burden of mental disorders

Mental disorders account for 18% of global and 21% of UK disease burden measured by years lived with disability⁵, although even this underestimates the true burden by at least a third⁶. The associated annual economic cost is at least £118 billion to the UK economy equivalent to 5% of GDP⁷. By 2030, the global annual cost is projected to exceed US\$6 trillion⁸. The burden of mental disorders is so large because of: (a) the high prevalence of mental disorders, (b) the early onset of lifetime mental disorders, (c) the broad range of impacts associated with mental disorders, and (d) the low coverage of public mental health interventions. Subthreshold mental disorders are also common and associated with poor outcomes, including impaired functioning, increased health service use and increased risk of developing a mental disorder, as well as physical health and psychiatric comorbidity⁹⁻¹¹.

The impact of the COVID-19 pandemic

The COVID-19 pandemic has placed considerable strain on mental health and services¹², highlighting the lack of mental health preparedness during emergencies and the urgent need for public mental health interventions to address and prevent mental disorders according to population need¹³.

Reasons for the impact of mental disorders

a) Prevalence of mental disorders

Approximately 50% of the population experience a mental disorder during their lifetime¹⁴ while almost a quarter of the population experience at least one mental disorder each year¹⁵.

b) Early age of onset of mental disorders

Mental disorders can affect individuals across the lifespan, from preschool to old age^{16,17}. However, approximately 50% of mental disorders emerge by age 14, and 75% of mental disorders emerge by age 24 years^{14,18}, making childhood and adolescence the most important stage of the life course for early treatment and prevention. The mental health of children and adolescents has been disproportionately affected by COVID-19, with a 50% increased prevalence in England^{17,19,20}.

c) Impact of mental disorders

Mental disorders result in broad impacts across health, educational, occupational and social outcomes. Since the majority of lifetime mental disorders arise before adulthood, many impacts of mental disorders occur during childhood and adolescence but also extend into adulthood²¹⁻²³. Childhood mental disorders are associated with a three-fold increased risk for adult mental disorders²⁴⁻²⁶. Health impacts of mental disorder include increased health-risk behaviours¹⁷, such as self-harm, physical inactivity, obesity and tobacco, alcohol and drug use²¹.

Smoking is the single largest cause of preventable death and occurs at much higher rate in those with a mental disorder compared with the general population^{27,28}. A combination of greater levels of risk behaviours, risk factors for chronic disease²⁹ and disparities in access to physical health care³⁰ drive poor physical health and premature mortality among those with a mental disorder³¹. There is high comorbidity between mental disorders, physical illness and substance use^{15,17,32}.

Mortality and mental disorders

The life expectancy of individuals with different mental disorders is reduced on average by between 7 and 25 years^{21,33}. The largest proportion of reduced life expectancy is due to associated physical illness^{33,34}, with an estimated 60% of excess mortality being avoidable in those with schizophrenia and bipolar disorder³⁵. The majority of people who die by suicide have a pre-existing mental disorder³⁶⁻³⁸. Drug and alcohol use disorders are also associated with significantly reduced life expectancy^{39,40}. In 2020, there were 4,561 deaths related to drug poisoning in England and Wales⁴¹ and 1,339 drug-related deaths in Scotland^{42,43}, which are the highest since records began. People with mental disorder also experience higher rates of COVID-19 infection and associated mortality⁴⁴⁻⁴⁶.

Case study: Minimum unit pricing of alcohol in Scotland

[Evaluation of minimum unit pricing \(MUP\) - Alcohol - Health topics - Public Health Scotland](#)

Minimum unit pricing (MUP) of alcohol is an effective way of reducing alcohol consumption⁴⁷. In May 2018, Scotland became the first country in the European Union to introduce MUP for alcohol, set at 50p per unit of alcohol sold. MUP targets low-cost products, which tend to be consumed by drinkers who are at greatest risk of harm.

The introduction of MUP in Scotland has resulted in a sustained decrease in the purchase of alcohol. In 2020, compared with English households, Scottish households had a purchase decrease of 7g of alcohol per adult per day when an alcohol purchase was made⁴⁸.

Ongoing research will evaluate the impact of MUP on health and social harms, including the impact on people who are alcohol dependent and accessing services as well as the impact on hospital admissions and deaths.

Wales also introduced a MUP of 50p per unit of alcohol sold in March 2020.

Broader impacts of mental disorders include poorer educational, occupational, economic and social outcomes. Mental disorders among children and young people is associated with truancy, exclusion and drop out from school^{17,26,49,50}, antisocial behaviour and offending²¹. In England, truancy from school was 10

times more common in 11–16-year-olds with a mental disorder compared to those without mental disorder¹⁷ while, in Wales, absenteeism from school was between 2 and 5.5 times more likely among children and adolescents with diagnosed neurodevelopmental disorder, a mental disorder and recorded self-harms⁵¹. Mental disorders in adulthood are associated with presenteeism, absenteeism and victimisation in work⁵², reduced social functioning and poorer social relationships¹⁷, crime²¹, as well as experience of violence both as victims and perpetrators^{53,54}. Individuals with a mental disorder are more likely to experience reduced quality of life¹⁵, as well as discrimination and stigma^{55,56}

4. Determinants of mental disorders

A range of social, economic, biological and genetic factors are associated with increased risk of mental disorder^{21,57–62}. These include:

- sociodemographic factors
- family structure and dynamics
- child adversity, experience of trauma and violence
- physical illness and frailty
- health-risk behaviours
- employment conditions
- housing and neighbourhood factors such as crime⁶³
- economic conditions
- government policies and legislation^{21,64}.

Many key determinants of mental health are outside the realm of mental health practitioners and services, but are important targets for public mental health interventions.

These factors interact and operate at individual, family, community and structural level⁶⁴, and account for the unequal distribution of mental disorders and poor mental wellbeing across the population. They also cluster in particular groups of people, rendering them at much higher risk of developing a mental disorder²¹.

The overall population impact of a risk factor depends on both the size of impact at individual level and the proportion of population affected. Risk factors with large population impact that can be successfully addressed through evidence-based interventions are important prevention opportunities. Given that most lifetime mental disorders arise before adulthood, such factors are particularly significant during pregnancy, childhood and adolescence.

The impact of socioeconomic inequalities, childhood adversity and conflict

Socioeconomic inequalities underlie several other factors^{21,65}, and are further exacerbated by onset of mental disorder. For instance, socioeconomically disadvantaged children are 2–3 times more likely to develop mental disorder^{66,67}, and 31% of children in the UK were living in poverty in 2019/20⁶⁸. Suicide rates in Scotland in people from the most deprived 10% of the population (decile) were four times greater than in the least deprived decile in 2021⁶⁹.

Similarly, child adversity, including maltreatment, abuse and bullying^{21,70}, accounts for 30% of adult mental disorder⁷¹, with half of children globally experiencing emotional, physical or sexual violence each year⁷². Other overarching factors include environmental factors such as pandemics^{13,73}, climate change^{74,75} and disasters⁷⁶, as well as conflict and humanitarian emergencies^{22,77}. The Troubles in Northern Ireland, encompassing over 30 years of conflict, have impacted on mental health^{78,79}, where higher rates of post-traumatic stress disorder as well as anxiety, mood and impulse-control disorders among individuals exposed to conflict have been recorded⁸⁰.

5. Mental wellbeing, protective factors and resilience

Although several definitions exist, recognised constituents of mental wellbeing include satisfaction, relationships, engagement, pleasure, meaning and achievement¹.

Benefits of mental wellbeing

Health benefits of mental wellbeing include reduction and prevention of mental disorders, suicide, health-risk behaviour, healthcare utilisation and mortality²¹. Broader impacts include improved educational and employment outcomes, reduced burnout, improved social relationships and networks, and reduced antisocial behaviour, crime and violence.

Relationship between mental wellbeing and mental disorders

Mental disorders and wellbeing can be seen as two related yet distinct spectra, so that mental wellbeing is associated with reduced risk of mental disorders, while mental disorders are associated with increased risk of poor mental wellbeing. For instance, people with a mental disorder are 5–30 times more likely to have lower mental wellbeing levels compared with those without a mental disorder¹⁵.

Protective factors

Protective factors promote mental wellbeing and include genetic, demographic, socioeconomic and parental factors, personality traits, educational attainment, physical health, employment, social relationships, living environment and access to green space, adequate sleep, participation in leisure activities, culture and the arts as well as helping others, and having meaning, gratitude, self-compassion, autonomy and values²¹.

Case study: Early child development in Greater Manchester

[Health Equity in England: The Marmot Review 10 Years On - The Health Foundation](#)

In the past decade, significant effort has been made by schools and children's services in Greater Manchester to improve school readiness (an established marker of early child development and wellbeing). In Greater Manchester, the percentage of children achieving a good level of development increased from 47.3% in 2013 to 68.2% in 2018/19, showing a faster rate of improvement than England as a whole⁸¹.

Particular programmes included developing an [Early Years Workforce Academy](#) to support workforce development and collaboration among early years practitioners, the [I-THRIVE](#) programme to promote children's and young people's wellbeing, and delivery of evidence-based parenting and child development programmes, such as the [Solihull Approach](#) and [Incredible Years](#). Furthermore, Early Years Pathways were implemented at scale to support speech, language and communication, parental and infant mental health, physical development, and social, emotional and behavioural needs.

Resilience

Resilience is also important, to mitigate the impacts of adversity and to promote mental wellbeing^{2,82}. Resilience is considered to be a dynamic process influenced by individual, family, school and community factors³. Cognitive skills, emotion regulation, family and peer support, relationship with caregivers, academic engagement, supportive school environment, spirituality, and neighbourhood cohesion appear to be associated with more resilient outcomes^{3,83}.

To promote resilience, it is important to increase the efficacy of existing systems and support structures to provide trauma-informed care to those who are affected by adversity. However, there is a need to reduce adversity at individual and community levels, and not only focus on promoting resilience to deal with greater adversity.

6. Higher-risk groups

Some groups of people are at several-fold increased risk of a mental disorder and poor mental wellbeing^{21,84,85}. Such groups require proportionately more targeted treatment, prevention and promotion, to prevent widening of inequalities. Examples of groups at increased risk of a mental disorder include marginalised groups (outlined below), people with physical health conditions and young women. Many people will belong to more than one group.

Marginalised groups

Examples of marginalised groups who are at greater risk of mental disorder and poor mental wellbeing include:

- looked-after and adopted children⁸⁶
- people with intellectual disability and neurodevelopmental disorder⁸⁷
- people who are homeless^{88,89}
- people who are unemployed or on low incomes¹⁵
- people in contact with the criminal justice system⁹⁰
- refugees and asylum seekers⁹¹
- particular ethnic groups^{15,92,93}
- gypsy, Roma and traveller populations⁹⁴
- people who identify as LGBTQ+^{95,96}.

Underlying societal causes of mental health disparities among different marginalised groups include experience of discrimination, uncertain employment and financial insecurity, housing and food insecurity, and experience of other forms of adversity and stress, such as violence and trauma^{92,97-106}. These groups may also find it harder to access support and have poorer outcomes when they do access support.

People with chronic physical health conditions

People with chronic physical health conditions, such as cancer, asthma, COPD, irritable bowel syndrome, heart disease, diabetes or musculoskeletal problems, are at increased risk of developing mental disorder¹⁰⁷⁻¹⁰⁹ and report lower levels of wellbeing^{15,110}. People with comorbid depression and physical illness tend to have more severe symptoms of both, and increased use of mental health services¹¹¹, as well as worse physical health outcomes¹⁰⁹.

Women

Young women have also been identified as a higher-risk group with increasingly poor mental health outcomes^{15,17,20}. The gap between young men and young women's mental health appears to have increased over recent years, with 16–24 year old women in 2014 being three times more likely than men to experience a common mental disorder¹⁵. Rates of self-harm among young women have tripled between 2000 and 2014¹². Several factors may account for this increase¹¹², including gender-based violence, harassment, and experience of trauma^{113,114}.

7. Public mental health interventions

A range of effective public mental health interventions exist to prevent mental disorders from arising, treat established mental disorders and prevent associated impacts, and promote mental wellbeing and resilience²¹. [Table 1](#) sets out public mental health interventions at primary, secondary and tertiary levels.

Primary level interventions address risk factors to prevent mental disorder from arising and promote protective factors associated with resilience and mental wellbeing. Secondary level involves early intervention for mental disorder and poor mental wellbeing to minimize impact. Tertiary level interventions are for those with established mental disorder and/or poor mental wellbeing to promote recovery, prevent associated inequalities, and minimise disability.

Many effective public mental health interventions also have cost-benefit evaluations, highlighting economic returns even in the short term²¹. Public mental health interventions need to target higher-risk groups, to prevent the widening of inequalities. Such targeted approaches are supported by being accessible and culturally appropriate.

Public mental health interventions are provided by a range of providers including primary care, secondary mental health care, local government/public health, social care, voluntary sector, third sector, schools/preschools, employers, housing, criminal justice, carers and others. This highlights the importance of coordination between providers.

Table 1: Examples of public mental health interventions at primary, secondary and tertiary levels^{21,22}

	Prevention of mental disorders and associated impacts	Promotion of wellbeing
Primary-level interventions	<ul style="list-style-type: none"> Addressing socioeconomic inequalities: Including poverty, fuel poverty, food insecurity, debt, financial capability, and more active labour market and welfare programmes^{115,116} Parental interventions: Addressing risk factors during pregnancy (alcohol/tobacco/drug use, prematurity, low birth weight), parental mental disorders, parenting interventions and poor infant/parent attachment Preschool and school-based programmes: Including social and emotional learning programmes, academic support and life-skills training Childhood adversity prevention: Through parenting programmes, 	<ul style="list-style-type: none"> Starting wellbeing, including parenting programmes, promotion of infant parent attachment Developing well, including preschool and school-based interventions Living well, including physical activity, housing interventions, social

	<p>school-based interventions, prevention of domestic violence, and early intervention to address adversity</p> <ul style="list-style-type: none"> • Health-risk behaviour reduction: Including smoking, alcohol/drug use, physical inactivity, screen time and insufficient sleep • Prevention of alcohol-related harm: Through action on price, availability, marketing, licensing, screening and brief interventions • Physical illness prevention and treatment • Insomnia prevention • Employment-related stress and mental disorder prevention • Prevention of social isolation, especially among older adults • Prevention of particular mental disorders • Dementia prevention: Through childhood education, physical activity, social engagement, smoking cessation, limiting alcohol use, prevention of air pollution and head trauma, addressing insomnia and hearing loss, and management of hypertension, hearing loss, depression, diabetes and obesity • Suicide prevention • Prevention and mitigation of climate change, air pollution, flooding and pandemics • Conflict and humanitarian emergency mitigation 	<p>interaction, neighbourhood intervention, access to green space, arts and creativity, and other interventions including mindfulness</p> <ul style="list-style-type: none"> • Working well, including increased employee control and rights, training, online interventions, and mindfulness • Ageing well, including psychosocial interventions, cognitive activities, reminiscence, addressing hearing loss and physical activity
<p>Secondary-level interventions</p>	<ul style="list-style-type: none"> • Early identification and treatment of mental disorders and subthreshold mental disorders • Addressing associated health-risk behaviours: Including tobacco, alcohol and drug use, poor nutrition and diet, physical inactivity, poor dental health and sexual risk behaviours • Prevention, monitoring and optimisation of treatment for physical health conditions in people with a mental disorder 	<ul style="list-style-type: none"> • Early intervention for people with recent reduction in mental wellbeing, with primary interventions, outlined above

-
- Interventions to address the socioeconomic impact of mental disorders, such as poverty, debt, unemployment and homelessness
 - Targeted approaches to suicide prevention in those with a mental disorder: Including through treatment optimisation, reducing access to lethal means, and responsible media reporting
 - Prevention of violence and abuse
 - Interventions to reduce stigma and discrimination, both for general population and those with a mental disorder

Tertiary-level interventions

- Prevention of relapse through evidence-based treatment
 - Interventions to address health-risk behaviours, including smoking/alcohol/drug use, poor diet and physical inactivity
 - Prevention of premature death: Prevention, early detection, treatment and monitoring of physical illness in individuals with a mental disorder. Smoking is the single largest cause of preventable death, so people with a mental disorder who smoke require targeted smoking cessation and reduction
 - Prioritisation of COVID-19 vaccination for people with a mental disorder, given their increased risk of infection and associated mortality
 - Tailoring of self-management components of treatment
 - Suicide prevention: Optimisation of treatment and coverage, reducing access to lethal means and responsible reporting
- Mental wellbeing can be promoted through psychosocial interventions, social skills training, physical activity promotion, supported employment and skills-based training, supported housing, positive psychology interventions, arts, music, mindfulness, and yoga

8. The implementation gap of public mental health interventions

Despite the existence of effective, evidence-based public mental health interventions, only a minority of people with a mental disorder in the UK receive treatment^{17,27}, with far less treatment coverage in low-and middle-income countries¹¹⁷. There is even less coverage for interventions that prevent associated impacts of mental disorders, prevent mental disorders, or promote mental wellbeing and resilience²¹.

Inequalities in access to interventions

The proportion of people receiving treatment also varies by type of mental disorder, ranging from 81% for psychotic disorder, 41% for bipolar disorder, 37% for common mental disorders, 29% for dependence on drugs other than cannabis, 27% for personality disorder, 24% for eating disorders, 6% for alcohol dependence, 6% for cannabis dependence and to 4% for autism spectrum disorder¹⁵. Factors associated with accessing treatment for common mental disorders include being female, white British and in midlife¹⁵. Socioeconomic inequalities in people who receive treatment are less evident and more mixed with employed people with common mental disorders less likely to receive treatment than those who were economically inactive¹⁵. However, people with common mental disorder living in lower income households were more likely to have an unmet treatment request than those living in higher income households.

Causes of the implementation gap

Causes of the public mental health implementation gap are important to identify in order to address the gap^{21,22}. They include insufficient knowledge of the current level of provision and unmet need, insufficient transparency about policy decision regarding acceptable levels of coverage of interventions, insufficient public mental health knowledge and training, and insufficient use of evidence in population health programmes or policies.

Specific causes of the treatment gap include lack of staff, skills and training, low demand for treatment due to poor mental health literacy and perceived need among the general population, stigma and discrimination associated with mental health treatment, and treatment not meeting minimal standards^{21,22}.

Underlying these causes is a lack of resources: despite accounting for at least 21% of UK disease burden⁵, mental health (including learning disability and dementia) was allocated only 9.9% of total NHS England expenditure in 2020/21 compared to 11.1% in 2018/19¹¹⁸⁻¹²⁰. Furthermore, only 2% of total expenditure on public health by local authorities in England was allocated to public mental health in 2020/21¹²¹. Although not directly comparable, there appears to be variation in expenditure across the four nations: spending on mental health accounted for 5.9% of the overall health budget in Northern Ireland in 2018/19 (excluding learning disabilities and old age psychiatry)^{122,123}, 13.4% of expenditure by NHS Wales in 2019/20 (including learning disabilities)¹²⁴ and 10.6% of expenditure by NHS Scotland in 2019/20 (including learning disabilities)¹²⁵.

Case study: NEST in Wales

[The NEST Framework - NHS Wales Health Collaborative](#)

The NEST Framework for child and adolescent mental health services has been developed in Wales to increase access to advice, support and treatment for children and young people utilising a 'whole system' approach. It aims to make expertise and advice quicker to access, and to facilitate transference of knowledge to the wider public, especially to parents and adults working closely with infants, children and adolescents. The NEST framework aims to take a 'no wrong door' approach so that families can access timely support in a way that is right for them.

The NEST framework has been developed with young people, parents, carers and professionals, including teachers, social workers, nurses, doctors, therapists and youth workers. NEST is also linked with services for adults, and with housing, police, ambulance, sports and leisure services, as well as policy makers in Welsh Government, regional partnership boards and health boards across Wales.

9. Public mental health policy development and associated work

In the UK, various documents and policies have supported the development of public mental health policy including:

- No Health Without Public Mental Health (Royal College of Psychiatrists, 2010)¹²⁶
- Confident Communities, Brighter Futures (HM Government, 2010)¹²⁷
- No Health Without Mental Health Implementation Framework (HM Government, 2012)¹²⁸
- Mental Health Strategy, Scotland (The Scottish Government, 2017)¹²⁹
- Mental Health Strategy 2021–2031, Northern Ireland (Department of Health, Northern Ireland, 2021)¹²².

At a global level, organisations have emphasised the need for commitment to public mental health strategies:

- WHO's Mental Health Action Plan 2013–2020 highlighted the need to promote mental wellbeing, prevent and treat mental disorders and prevent associated outcomes; provide comprehensive, integrated, and responsive mental health and social care services in community-based settings; and strengthen information systems⁸⁵.
- The United Nations Sustainable Development Goals committed to the treatment and prevention of non-communicable disease, including mental disorders, as well as promotion of mental wellbeing¹³⁰. This includes a target of universal coverage for the treatment and prevention of mental disorders, and promotion of mental wellbeing, by 2030.
- The World Psychiatric Association made public mental health a key part of its 2021–2023 Action Plan. This included raising awareness, recognising the value and increasing acceptance and prioritisation of public mental health in national health policies; conducting and supporting national assessments of unmet need and required actions to inform policy development and implementation; public mental health training; integrated approaches to disease management and prevention through engagement with primary and general health systems¹³¹.

Previous work undertaken by the Royal College of Psychiatrists relating to public mental health includes:

- Providing expert knowledge and advice on matters relating to welfare reform since the introduction of Employment Support Allowance in 2008, in line with concerns about the impact of these changes on people with mental disorders and learning disabilities. The College has produced published guidance for clinicians to support mental health professionals writing reports for PIP (Personal Independence Payment) claims¹³², and has published research evidencing relative disadvantages in accessing welfare payments for people with psychiatric conditions compared with physical health conditions¹³³.

- Contributing to the establishment of the Violence Reduction Unit in 2005 in Scotland; the unit took a public health approach to reduce knife carrying among young men outside the home. A sustained fall in homicide rate has since been observed, from 26.3 per million in 2005 to 10.65 per million in 2015–2016¹³⁴.
- The Fair Deal campaign; a 3-year campaign to tackle inequalities in mental health that included a call for more funding of research into mental disorders, better access to services, better inpatient care, better provision for recovery and rehabilitation, an end to discrimination and stigma, more engagement with users and carers, and better access to psychological therapies¹³⁵.
- [Choose Psychiatry](#); an ongoing campaign that has helped to increase the proportion of psychiatry training positions being filled by doctors from 67.3% in 2017 to 99.4% in 2020¹³⁶.
- An ongoing commitment to tackle inequalities and racism across mental health services and in the mental health workforce. The National Collaborating Centre for Mental Health (NCCMH) within the College developed the Advancing Mental Health Equality resource, and in 2021, the College published an [Equality Action Plan](#) to address inequalities and discrimination that can lead to mental health problems. The College published a clear position statement on racism and mental health in 2018, which highlights the impact of structural and institutional racism on mental health.

10. Opportunities to address the public mental health implementation gap

Public mental health practice involves undertaking national and local mental health needs assessments, identifying ways to improve the implementation of public mental health interventions by various sectors (including for higher-risk groups), and estimating the impact and associated economic benefits resulting from improved coverage^{21,22,137}.

This information can be used to inform public mental health strategies and policy development of different sectors, transparent agreement between stakeholders about minimum acceptable levels of coverage for different interventions, required resources for implementation of agreed intervention coverage and coordination between providers of different public mental health interventions. A public mental health approach supports the operationalisation of implementation through coordinated planning, as well as evaluation of intervention coverage and outcomes, including for higher-risk groups.

Other opportunities to improve implementation of public mental health interventions include:

- coordinated leadership and advocacy for resources
- public mental health training
- improving population knowledge about mental health
- setting-based and integrated approaches
- digital technology
- maximising existing resources
- use of existing legislation and adopting a rights approach
- implementation research.

Members of the PMHIC team and Advisory Board

Members of the PMHIC team

Tom Ayers, Director, NCCMH

Dr Peter Byrne, Joint Clinical and Strategic Director of the PMHIC, Consultant Liaison Psychiatrist, East London NHS Foundation Trust

Dr Jonathan Champion, Joint Clinical and Strategic Director of the PMHIC, Director for Public Mental Health and Consultant Psychiatrist, South London and Maudsley NHS Foundation Trust

Dr Kim Donoghue, Senior Research Fellow, NCCMH

Nuala Ernest, Editor, NCCMH

Prof. Steve Pilling, Academic and Strategic Director, NCCMH

Joanna Popis, Project Manager, NCCMH

Dr Katie Sampson, Research Assistant, NCCMH

Dr Jean Strelitz, Senior Researcher, NCCMH

Dr Clare Taylor, Head of Quality and Research Development, NCCMH

Dr Hanna Tu, Secondment / Training Placement, South London and Maudsley NHS Foundation Trust

Members of the PMHIC Advisory Board

Prof. Kamaldeep Bhui, CBE MD FRCPsych FRCP(E) FRSA PFHEA, Department of Psychiatry & Nuffield Department of Primary Care Health Sciences, Medical Sciences Division, University of Oxford

Dr Jed Boardman, PhD FRCPsych, Consultant Psychiatrist/ Senior Lecturer in Social Psychiatry. Social Policy Advisor, Centre for Mental Health, London

Laura Caton, Senior Policy Adviser (Community Wellbeing), Local Government Association

Prof. Dame Clare Gerada, President of the Royal College of General Practitioners

Prof. Ann John, Population Data Science, Medical School, Swansea University

Abiola Johnson, Carer Representative

Prof. Peter Jones, FRCPsych FMedSci, Department of Psychiatry, University of Cambridge. Director, NIHR Applied Research Collaboration, East of England. Hon consultant psychiatrist, CPFT

Prof. James Kirkbride, Professor of Psychiatric and Social Epidemiology, Division of Psychiatry, Faculty of Brain Sciences, University College London

Dr Elaine Lockhart, Chair of the Child and Adolescent Faculty, Royal College of Psychiatrists

Dr Sarah Markham, Patient Representative

Prof. Sir Michael Marmot, FBA, FMedSci, FRCP, Professor of Epidemiology and Public Health, University College London

Prof. Jim McManus, President of the UK Association of Directors of Public Health and Director of Public Health for Hertfordshire

Dr Jane Morris, Consultant Medical Psychotherapist and Child & Adolescent Psychiatrists. Clinical Lead for North of Scotland Managed Clinical Network for Eating Disorders. Honorary Senior Lecturer, University of Aberdeen

Dr Ciaran Mulholland, Consultant Psychiatrist with the Northern Health and Social Care Trust and Senior Lecturer in Psychiatry at Queen's University

Sian Ogle, Patient Representative

Prof. Maggie Rae, President of the Faculty of Public Health

George Roycroft, Director of Strategic Communications (interim), Royal College of Psychiatrists

Janet Seale, Carer Representative

Dr Trudi Seneviratne, Registrar, Royal College of Psychiatrists

Lucy Thorpe, Head of Policy, Mental Health Foundation

Dr Peter Trimble, Psychiatrist, Belfast City University

Stakeholders and partners: current and potential

These are organisations and groups of people doing important work in public mental health. The PMHIC aims to collaborate with them and complement their work in the future. See also the affiliations of the [PMHIC Advisory Board members](#).

- College members and trainees across all UK nations and worldwide
- Faculties at the College
- Patients and carers
- Other medical Royal Colleges:
 - Royal College of General Practitioners
 - Royal College of Nursing
 - Royal College of Physicians
- Health organisations:
 - British Psychological Society
 - Department of Health and Social Care
 - NHS Benchmarking
 - NHS Digital
 - NHS England/Improvement
- Public health organisations:
 - Association of Directors of Public Health
 - Faculty of Public Health
 - Institute of Health Equity
 - Office for Health Improvement and Disparities
 - Public Health Agency Northern Ireland
 - Public Health Wales
 - Public Health Scotland
 - Royal Society for Public Health
- Local Government Association, Convention of Scottish Local Authorities
- Commissioners
- Third sector organisations, including:
 - Centre for Mental Health
 - Equally Well
 - Mental Health Foundation
 - Mind
 - Scottish Association for Mental Health
- Internationally, through College members based outside the UK and the College's [international strategy](#), and organisations such as:
 - Organisation for Economic Co-operation and Development
 - United Nations
 - World Psychiatric Association
 - World Health Organization (WHO)

References

- 1 Seligman M. Flourish - a New Understanding of Happiness and Well-Being - and How to Achieve Them. London: Nicholas Brealey Publishing; 2011.
- 2 Fritz J, de Graaff AM, Caisley H, van Harmelen A-L, Wilkinson PO. A systematic review of amenable resilience factors that moderate and/or mediate the relationship between childhood adversity and mental health in young people. *Frontiers in Psychiatry*. 2018;9:230.
- 3 Gartland D, Riggs E, Muyeen S, Giallo R, Afifi TO, MacMillan H, et al. What factors are associated with resilient outcomes in children exposed to social adversity? a systematic review. *BMJ Open*. 2019;9:e024870.
- 4 Champion J. Public mental health. minded e-learning programme (469-0001). 2020. Available from: <https://www.minded.org.uk/Component/Details/632895>.
- 5 Global Burden of Disease Collaborative Network. Global burden of disease study 2019 (gbd 2019) data resources. Available from: <http://ghdx.healthdata.org/gbd-2019> Accessed: 3 Feb 2022.
- 6 Vigo D, Thornicroft G, Atun R. Estimating the true global burden of mental illness. *The Lancet Psychiatry*. 2016;3:171–8.
- 7 McDaid D, Park A. The Economic Case for Investing in the Prevention of Mental Health Conditions in the UK. Mental Health Foundation; 2022.
- 8 Bloom D, Cafiero ET, Jané-Llopis E, Abrahams-Gessel S, Bloom LR, Fathima S, et al. The Global Economic Burden of Noncommunicable Diseases. Geneva: World Economic Forum; 2011.
- 9 Wesselhoeft R, Sørensen MJ, Heiervang ER, Bilenberg N. Subthreshold depression in children and adolescents – a systematic review. *Journal of Affective Disorders*. 2013;151:7–22.
- 10 Rodríguez MR, Nuevo R, Chatterji S, Ayuso-Mateos JL. Definitions and factors associated with subthreshold depressive conditions: a systematic review. *BMC Psychiatry*. 2012;12:181.
- 11 Lee YY, Stockings EA, Harris MG, Doi SAR, Page IS, Davidson SK, et al. The risk of developing major depression among individuals with subthreshold depression: a systematic review and meta-analysis of longitudinal cohort studies. *Psychological Medicine*. 2019;49:92–102.
- 12 WHO. The Impact of COVID-19 on Mental, Neurological and Substance Use Services. World Health Organisation; 2020.
- 13 Champion J, Javed A, Sartorius N, Marmot M. Addressing the public mental health challenge of covid-19. *The Lancet Psychiatry*. 2020;7:657–9.
- 14 Jones PB. Adult mental health disorders and their age at onset. *British Journal of Psychiatry*. 2013;202:s5–10.

- 15 McManus S, Bebbington P, Jenkins R, Brugha T. Mental Health and Wellbeing in England: Adult Psychiatric Morbidity Survey 2014. Leeds: NHS Digital; 2016.
- 16 WHO. Mental Health of Older Adults. World Health Organisation; 2017 Available from: <https://www.who.int/news-room/fact-sheets/detail/mental-health-of-older-adults>.
- 17 NHS Digital. Mental Health of Children and Young People in England, 2017. 2018.
- 18 Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and age-of-onset distributions of dsm-iv disorders in the national comorbidity survey replication. *Archives of General Psychiatry*. 2005;62:593.
- 19 NHS Digital. Mental Health of Children and Young People in England 2021 - Wave 2 Follow up to the 2017 Survey. 2021.
- 20 NHS Digital. Mental Health of Children and Young People in England: Wave 1 Follow up to the 2017 Survey. 2020 Available from: https://files.digital.nhs.uk/AF/AECD6B/mhcyp_2020_rep_v2.pdf.
- 21 Campion J. Public Mental Health: Evidence, Practice and Commissioning. Royal Society for Public Health; 2019 Available from: <https://www.rsph.org.uk/our-work/policy/wellbeing/public-mental-health-evidence-practice-and-commissioning.html>.
- 22 Campion J, Javed A, Lund C, Sartorius N, Saxena S, Marmot M, et al. Public mental health: required actions to address implementation failure in the context of covid-19. *Lancet Psychiatry*. 2022;9:169–82.
- 23 Department of Health and Social Care and Department for Education. Transforming Children and Young People’s Mental Health Provision: A Green Paper. 2017.
- 24 Copeland WE, Adair CE, Smetanin P, Stiff D, Briante C, Colman I, et al. Diagnostic transitions from childhood to adolescence to early adulthood. *Journal of Child Psychology and Psychiatry*. 2013;54:791–9.
- 25 Bevilacqua L, Hale D, Barker ED, Viner R. Conduct problems trajectories and psychosocial outcomes: a systematic review and meta-analysis. *European Child & Adolescent Psychiatry*. 2018;27:1239–60.
- 26 Erskine HE, Norman RE, Ferrari AJ, Chan GCK, Copeland WE, Whiteford HA, et al. Long-term outcomes of attention-deficit/hyperactivity disorder and conduct disorder: a systematic review and meta-analysis. *Journal of the American Academy of Child & Adolescent Psychiatry*. 2016;55:841–50.
- 27 McManus S, Meltzer H, Campion J. Cigarette Smoking and Mental Health in England. Data from the Adult Psychiatric Morbidity Survey. London: National Centre for Social Research; 2010.

- 28 Richardson S, McNeill A, Brose LS. Smoking and quitting behaviours by mental health conditions in great britain (1993–2014). *Addictive Behaviors*. 2019;90:14–9.
- 29 Thornicroft G. Physical health disparities and mental illness: the scandal of premature mortality. *British Journal of Psychiatry*. 2011;199:441–2.
- 30 De Hert M, Cohen D, Bobes J, Cetkovich-Bakmas M, Leucht S, Ndeti DM, et al. Physical illness in patients with severe mental disorders. ii. barriers to care, monitoring and treatment guidelines, plus recommendations at the system and individual level. *World Psychiatry*. 2011;10:138–51.
- 31 PHE. *Health Matters: Reducing Health Inequalities in Mental Illness*. London: Public Health England; 2018 Available from: <https://www.gov.uk/government/publications/health-matters-reducing-health-inequalities-in-mental-illness/health-matters-reducing-health-inequalities-in-mental-illness>.
- 32 Saha S, Lim CC, Degenhardt L, Cannon DL, Bremner M, Prentis F, et al. Comorbidity between mood and substance-related disorders: a systematic review and meta-analysis. *Australian & New Zealand Journal of Psychiatry*. 2021;:000486742110547.
- 33 Das-Munshi J, Chang C-K, Dregan A, Hatch SL, Morgan C, Thornicroft G, et al. How do ethnicity and deprivation impact on life expectancy at birth in people with serious mental illness? observational study in the uk. *Psychological Medicine*. 2021;51:2581–9.
- 34 Walker ER, McGee RE, Druss BG. Mortality in mental disorders and global disease burden implications: a systematic review and meta-analysis. *JAMA Psychiatry*. 2015;72:334.
- 35 Hoang U, Goldacre MJ, Stewart R. Avoidable mortality in people with schizophrenia or bipolar disorder in england. *Acta Psychiatrica Scandinavica*. 2013;127:195–201.
- 36 Too LS, Spittal MJ, Bugeja L, Reifels L, Butterworth P, Pirkis J. The association between mental disorders and suicide: a systematic review and meta-analysis of record linkage studies. *Journal of Affective Disorders*. 2019;259:302–13.
- 37 Moitra M, Santomauro D, Degenhardt L, Collins PY, Whiteford H, Vos T, et al. Estimating the risk of suicide associated with mental disorders: a systematic review and meta-regression analysis. *Journal of Psychiatric Research*. 2021;137:242–9.
- 38 Ferrari AJ, Norman RE, Freedman G, Baxter AJ, Pirkis JE, Harris MG, et al. The burden attributable to mental and substance use disorders as risk factors for suicide: findings from the global burden of disease study 2010. *PLoS ONE*. 2014;9:e91936.
- 39 Chang C-K, Hayes RD, Perera G, Broadbent MTM, Fernandes AC, Lee WE, et al. Life expectancy at birth for people with serious mental illness and other

major disorders from a secondary mental health care case register in london. PLoS ONE. 2011;6:e19590.

- 40 Hayes RD, Chang C-K, Fernandes A, Broadbent M, Lee W, Hotopf M, et al. Associations between substance use disorder sub-groups, life expectancy and all-cause mortality in a large british specialist mental healthcare service. *Drug and Alcohol Dependence*. 2011;118:56–61.
- 41 Office for National Statistics. Deaths Related to Drug Poisoning in England and Wales: 2020 Registrations. 2020 Available from: <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsrelatedtodrugpoisoninginenglandandwales/2020>.
- 42 Walsh D, McCartney G, Minton J, Parkinson J, Shipton D, Whyte B. Deaths from ‘diseases of despair’ in britain: comparing suicide, alcohol-related and drug-related mortality for birth cohorts in scotland, england and wales, and selected cities. *Journal of Epidemiology and Community Health*. 2021;75:1195–201.
- 43 National Records of Scotland. Drug-Related Deaths in Scotland in 2020. 2021.
- 44 Wang Q, Xu R, Volkow ND. Increased risk of COVID -19 infection and mortality in people with mental disorders: analysis from electronic health records in the united states. *World Psychiatry*. 2021;20:124–30.
- 45 Yang H, Chen W, Hu Y, Chen Y, Zeng Y, Sun Y, et al. Pre-pandemic psychiatric disorders and risk of covid-19: a uk biobank cohort analysis. *The Lancet Healthy Longevity*. 2020;1:e69–79.
- 46 Fond G, Nemani K, Etchecopar-Etchart D, Loundou A, Goff DC, Lee SW, et al. Association between mental health disorders and mortality among patients with covid-19 in 7 countries: a systematic review and meta-analysis. *JAMA Psychiatry*. 2021;78:1208.
- 47 NICE. Alcohol-Use Disorders: Prevention. Public Health Guidance. National Institute for Health and Care Excellence; 2010 Available from: www.nice.org.uk/guidance/ph24.
- 48 Anderson P, O’Donnell A, Kaner E, Llopis EJ, Manthey J, Rehm J. Impact of minimum unit pricing on alcohol purchases in scotland and wales: controlled interrupted time series analyses. *The Lancet Public Health*. 2021;6:e557–65.
- 49 Esch P, Bocquet V, Pull C, Couffignal S, Lehnert T, Graas M, et al. The downward spiral of mental disorders and educational attainment: a systematic review on early school leaving. *BMC Psychiatry*. 2014;14:237.
- 50 Whear R, Marlow R, Boddy K, Ukoumunne OC, Parker C, Ford T, et al. Psychiatric disorder or impairing psychology in children who have been excluded from school: a systematic review. *School Psychology International*. 2014;35:530–43.

- 51 John A, Friedmann Y, DelPozo-Banos M, Frizzati A, Ford T, Thapar A. Association of school absence and exclusion with recorded neurodevelopmental disorders, mental disorders, or self-harm: a nationwide, retrospective, electronic cohort study of children and young people in wales, uk. *The Lancet Psychiatry*. 2022;9:23–34.
- 52 Skagen K, Collins AM. The consequences of sickness presenteeism on health and wellbeing over time: a systematic review. *Social Science & Medicine*. 2016;161:169–77.
- 53 Khalifeh H, Johnson S, Howard LM, Borschmann R, Osborn D, Dean K, et al. Violent and non-violent crime against adults with severe mental illness. *British Journal of Psychiatry*. 2015;206:275–82.
- 54 Fazel S, Smith EN, Chang Z, Geddes JR. Risk factors for interpersonal violence: an umbrella review of meta-analyses. *The British Journal of Psychiatry*. 2018;213:609–14.
- 55 Clement S, Schauman O, Graham T, Maggioni F, Evans-Lacko S, Bezborodovs N, et al. What is the impact of mental health-related stigma on help-seeking? a systematic review of quantitative and qualitative studies. *Psychological Medicine*. 2015;45:11–27.
- 56 Corker E, Hamilton S, Robinson E, Cotney J, Pinfold V, Rose D, et al. Viewpoint survey of mental health service users' experiences of discrimination in england 2008-2014. *Acta Psychiatrica Scandinavica*. 2016;134:6–13.
- 57 Fryers T, Brugha T. Childhood determinants of adult psychiatric disorder. *Clinical Practice & Epidemiology in Mental Health*. 2013;9:1–50.
- 58 CDGPGC. Identification of risk loci with shared effects on five major psychiatric disorders: a genome-wide analysis. *The Lancet*. 2013;381:1371–9.
- 59 Serretti A, Fabbri C. Shared genetics among major psychiatric disorders. *The Lancet*. 2013;381:1339–41.
- 60 Thapar A, Cooper M, Rutter M. Neurodevelopmental disorders. *The Lancet Psychiatry*. 2017;4:339–46.
- 61 Lund C, Brooke-Sumner C, Baingana F, Baron EC, Breuer E, Chandra P, et al. Social determinants of mental disorders and the sustainable development goals: a systematic review of reviews. *The Lancet Psychiatry*. 2018;5:357–69.
- 62 WHO. Risks to Mental Health: An Overview of Vulnerabilities and Risk Factors. Background Paper by WHO Secretariat for the Development of a Comprehensive Mental Health Action Plan. World Health Organisation; 2012.
- 63 Baranyi G, Di Marco MH, Russ TC, Dibben C, Pearce J. The impact of neighbourhood crime on mental health: a systematic review and meta-analysis. *Social Science & Medicine*. 2021;282:114106.
- 64 NIHR. Conceptual Framework for Public Mental Health: Online Tool. London, UK: NIHR School for Public Health Research Available from: <https://www.publicmentalhealth.co.uk/home>.

- 65 Champion J, Bhugra D, Bailey S, Marmot M. Inequality and mental disorders: opportunities for action. *The Lancet*. 2013;382:183–4.
- 66 Reiss F. Socioeconomic inequalities and mental health problems in children and adolescents: a systematic review. *Social Science & Medicine*. 2013;90:24–31.
- 67 Spencer NJ, Blackburn CM, Read JM. Disabling chronic conditions in childhood and socioeconomic disadvantage: a systematic review and meta-analyses of observational studies. *BMJ Open*. 2015;5:e007062.
- 68 Department for Work and Pensions. Households Below Average Income, Statistics on the Number and Percentage of People Living in Low Income Households for Financial Years 1994/95 to 2019/20. Table 4.3tr. 2021.
- 69 ScotPHO. Suicide: deprivation. The Scottish Public Health Observatory. 2021. Available from: <https://www.scotpho.org.uk/health-wellbeing-and-disease/suicide/data/deprivation> Accessed: 21 Feb 2022.
- 70 Hughes K, Bellis MA, Hardcastle KA, Sethi D, Butchart A, Mikton C, et al. The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. *The Lancet Public Health*. 2017;2:e356–66.
- 71 Kessler RC, McLaughlin KA, Green JG, Gruber MJ, Sampson NA, Zaslavsky AM, et al. Childhood adversities and adult psychopathology in the who world mental health surveys. *British Journal of Psychiatry*. 2010;197:378–85.
- 72 Hillis S, Mercy J, Amobi A, Kress H. Global prevalence of past-year violence against children: a systematic review and minimum estimates. *Pediatrics*. 2016;137:e20154079.
- 73 Champion J, Javed A, Marmot M, Valsraj K. The need for a public mental health approach to covid-19. *World Social Psychiatry*. 2020;2:77.
- 74 Rocque RJ, Beaudoin C, Ndjaboue R, Cameron L, Poirier-Bergeron L, Poulin-Rheault R-A, et al. Health effects of climate change: an overview of systematic reviews. *BMJ Open*. 2021;11:e046333.
- 75 Lawrance E, Thompson R, Fontana G, Jennings N. The Impact of Climate Change on Mental Health and Emotional Wellbeing: Current Evidence and Implications for Policy and Practice. Graham Institute Briefing Paper No 36. 2021.
- 76 Jenkins R, Meltzer H. *The Mental Health Impacts of Disasters*. London: Government Office of Science; 2012.
- 77 WHO. Mental health in emergencies. 2019. Available from: <https://www.who.int/news-room/fact-sheets/detail/mental-health-in-emergencies> Accessed: 22 Nov 2021.
- 78 O'Reilly D. Mental health in northern ireland: have 'the troubles' made it worse? *Journal of Epidemiology & Community Health*. 2003;57:488–92.

- 79 O'Neill S, Rooney N. Mental health in northern Ireland: an urgent situation. *The Lancet Psychiatry*. 2018;5:965–6.
- 80 Bunting BP, Murphy SD, O'Neill SM, Ferry FR. Lifetime prevalence of mental health disorders and delay in treatment following initial onset: evidence from the northern Ireland study of health and stress. *Psychological Medicine*. 2012;42:1727–39.
- 81 PHE. Child Development Outcomes at 2 to 2 and a Half Years: 2019 to 2020. Public Health England; 2019 Available from: <https://www.gov.uk/government/statistics/child-development-outcomes-at-2-to-2-and-a-half-years-2019-to-2020>.
- 82 Fenwick-Smith A, Dahlberg EE, Thompson SC. Systematic review of resilience-enhancing, universal, primary school-based mental health promotion programs. *BMC Psychology*. 2018;6:30.
- 83 Cosco TD, Kaushal A, Hardy R, Richards M, Kuh D, Stafford M. Operationalising resilience in longitudinal studies: a systematic review of methodological approaches. *Journal of Epidemiology and Community Health*. 2017;71:98–104.
- 84 Davies S. Annual Report of the Chief Medical Officer 2013, Public Mental Health Priorities: Investing in the Evidence. London: Department of Health; 2014.
- 85 World Health Organization. Mental Health Action Plan 2013-2020. Geneva: World Health Organization; 2013 Available from: <https://apps.who.int/iris/handle/10665/89966> Accessed: 26 Nov 2021.
- 86 Ford T, Vostanis P, Meltzer H, Goodman R. Psychiatric disorder among British children looked after by local authorities: comparison with children living in private households. *British Journal of Psychiatry*. 2007;190:319–25.
- 87 Hughes-McCormack LA, Rydzewska E, Henderson A, MacIntyre C, Rintoul J, Cooper S-A. Prevalence of mental health conditions and relationship with general health in a whole-country population of people with intellectual disabilities compared with the general population. *BJPsych Open*. 2017;3:243–8.
- 88 Fazel S, Khosla V, Doll H, Geddes J. The prevalence of mental disorders among the homeless in western countries: systematic review and meta-regression analysis. *PLoS Medicine*. 2008;5:e225.
- 89 Rees S. Mental Ill Health in the Adult Single Homeless Population: A Review of the Literature. London: Crisis; 2009.
- 90 Walker J, Illingworth C, Canning A, Garner E, Woolley J, Taylor P, et al. Changes in mental state associated with prison environments: a systematic review. *Acta Psychiatrica Scandinavica*. 2014;129:427–36.
- 91 Blackmore R, Boyle JA, Fazel M, Ranasinha S, Gray KM, Fitzgerald G, et al. The prevalence of mental illness in refugees and asylum seekers: a systematic review and meta-analysis. *PLOS Medicine*. 2020;17:e1003337.

- 92 Ahmad G, McManus S, Cooper C, Hatch SL, Das-Munshi J. Prevalence of common mental disorders and treatment receipt for people from ethnic minority backgrounds in England: repeated cross-sectional surveys of the general population in 2007 and 2014. *The British Journal of Psychiatry*. 2021;:1–8.
- 93 Halvorsrud K, Nazroo J, Otis M, Brown Hajdukova E, Bhui K. Ethnic inequalities in the incidence of diagnosis of severe mental illness in England: a systematic review and new meta-analyses for non-affective and affective psychoses. *Social Psychiatry and Psychiatric Epidemiology*. 2019;54:1311–23.
- 94 Millan M, Smith D. A comparative sociology of gypsy traveller health in the UK. *International Journal of Environmental Research and Public Health*. 2019;16:379.
- 95 Williams AJ, Jones C, Arcelus J, Townsend E, Lazaridou A, Michail M. A systematic review and meta-analysis of victimisation and mental health prevalence among LGBTQ+ young people with experiences of self-harm and suicide. *PLOS ONE*. 2021;16:e0245268.
- 96 Chakraborty A, McManus S, Brugha TS, Bebbington P, King M. Mental health of the non-heterosexual population of England. *British Journal of Psychiatry*. 2011;198:143–8.
- 97 Rafferty J, Abelson J, Bryant K, Jackson J. Discrimination. In: *The Social Determinants of Mental Health*. Washington: American Psychiatric Publishing; 2015.
- 98 Bachmann C, Gooch B. *LGBT in Britain: Health Report*. London: Stonewall; 2018 Available from: https://www.stonewall.org.uk/system/files/lgbt_in_britain_health.pdf.
- 99 Bhavsar V, Jannesari S, McGuire P, MacCabe JH, Das-Munshi J, Bhugra D, et al. The association of migration and ethnicity with use of the Improving Access to Psychological Treatment (IAPT) programme: a general population cohort study. *Social Psychiatry and Psychiatric Epidemiology*. 2021;56:1943–56.
- 100 Harwood H, Rhead R, Chui Z, Bakolis I, Connor L, Gazard B, et al. Variations by ethnicity in referral and treatment pathways for IAPT service users in South London. *Psychological Medicine*. 2021;:1–12.
- 101 Chui Z, Gazard B, MacCrimmon S, Harwood H, Downs J, Bakolis I, et al. Inequalities in referral pathways for young people accessing secondary mental health services in South East London. *European Child & Adolescent Psychiatry*. 2021;30:1113–28.
- 102 Hatch SL, Dohrenwend BP. Distribution of traumatic and other stressful life events by race/ethnicity, gender, SES and age: a review of the research. *American Journal of Community Psychology*. 2007;40:313–32.
- 103 Ahmad G, McManus S, Bécares L, Hatch SL, Das-Munshi J. Explaining ethnic variations in adolescent mental health: a secondary analysis of the Millennium Cohort Study. *Social Psychiatry and Psychiatric Epidemiology*. 2021. doi:10.1007/s00127-021-02167-w.

- 104 SELCoH Study Team, Hatch SL, Gazard B, Williams DR, Frissa S, Goodwin L, et al. Discrimination and common mental disorder among migrant and ethnic groups: findings from a south east london community sample. *Social Psychiatry and Psychiatric Epidemiology*. 2016;51:689–701.
- 105 Woodhead C, Gazard B, Hotopf M, Rahman Q, Rimes KA, Hatch SL. Mental health among uk inner city non-heterosexuals: the role of risk factors, protective factors and place. *Epidemiology and Psychiatric Sciences*. 2016;25:450–61.
- 106 Rimes KA, Broadbent M, Holden R, Rahman Q, Hambrook D, Hatch SL, et al. Comparison of treatment outcomes between lesbian, gay, bisexual and heterosexual individuals receiving a primary care psychological intervention. *Behavioural and Cognitive Psychotherapy*. 2018;46:332–49.
- 107 Lotfaliany M, Bowe SJ, Kowal P, Orellana L, Berk M, Mohebibi M. Depression and chronic diseases: co-occurrence and communality of risk factors. *Journal of Affective Disorders*. 2018;241:461–8.
- 108 Ronaldson A, Arias de la Torre J, Prina M, Armstrong D, Das-Munshi J, Hatch S, et al. Associations between physical multimorbidity patterns and common mental health disorders in middle-aged adults: a prospective analysis using data from the uk biobank. *The Lancet Regional Health - Europe*. 2021;8:100149.
- 109 Moussavi S, Chatterji S, Verdes E, Tandon A, Patel V, Ustun B. Depression, chronic diseases, and decrements in health: results from the world health surveys. *The Lancet*. 2007;370:851–8.
- 110 Raj D, Stansfeld S, Weich S, Stewart R, McBride A, Brugha T, et al. Chapter 13: comorbidity in mental and physical illness. In: *Mental Health and Wellbeing in England: Adult Psychiatric Morbidity Survey 2014*. Leeds: NHS Digital; 2016.
- 111 Harber-Aschan L, Hotopf M, Brown JSL, Henderson M, Hatch SL. Longitudinal patterns of mental health service utilisation by those with mental-physical comorbidity in the community. *Journal of Psychosomatic Research*. 2019;117:10–9.
- 112 Bezerra H de S, Alves RM, Nunes AD d., Barbosa IR. Prevalence and associated factors of common mental disorders in women: a systematic review. *Public Health Reviews*. 2021;42:1604234.
- 113 Riecher-Rössler A. Sex and gender differences in mental disorders. *The Lancet Psychiatry*. 2017;4:8–9.
- 114 Yapp E, Booth T, Davis K, Coleman J, Howard LM, Breen G, et al. Sex differences in experiences of multiple traumas and mental health problems in the uk biobank cohort. *Social Psychiatry and Psychiatric Epidemiology*. 2021. doi:10.1007/s00127-021-02092-y.
- 115 Ridley M, Rao G, Schilbach F, Patel V. Poverty, depression, and anxiety: causal evidence and mechanisms. *Science*. 2020;370:eaay0214.

- 116 Marmot M, Allen J, Boyce T, Goldblatt P, Morrison J. Health Equity in England: The Marmot Review Ten Years On. London: Institute of Health Equity; 2020.
- 117 WHO. Mental Health Atlas 2020. Geneva: World Health Organisation; 2021.
- 118 NHSE. NHS Mental Health Dashboard. 2021 Available from: <https://www.england.nhs.uk/publication/nhs-mental-health-dashboard/> Accessed: 22 Nov 2021.
- 119 NHS England. NHS Annual Report 2018/19. 2019 Available from: <https://www.england.nhs.uk/publication/nhs-england-annual-report-2018-19/>.
- 120 NHS England. NHS Commissioning Board: Annual Report and Accounts 2020 to 2021. 2022 Available from: <https://www.england.nhs.uk/publication/nhs-commissioning-board-annual-report-and-accounts-2020-to-2021/>.
- 121 Department for Levelling Up, Housing and Communities. Local Authority Revenue Expenditure and Financing England: 2020 to 2021 Individual Local Authority Data - Outturn. 2022 Available from: <https://www.gov.uk/government/statistics/local-authority-revenue-expenditure-and-financing-england-2020-to-2021-individual-local-authority-data-outturn>.
- 122 Northern Ireland Department of Health. Mental Health Strategy 2021-2031. Belfast: Department of Health; 2021.
- 123 Health and Social Care Board. Health and Social Care Board Annual Report & Accounts for the Year Ended 31 March 2019. Belfast: Department of Health; 2019.
- 124 StatsWales. NHS Expenditure by Programme Budget Category. Welsh Government; 2021 Available from: <https://statswales.gov.wales/Catalogue/Health-and-Social-Care/Health-Finance/NHS-Programme-Budget/nhsexpenditure-by-budgetcategory-year> Accessed: 18 Mar 2022.
- 125 Public Health Scotland. Reports for financial year 2019 to 2020. 2020. Available from: <https://beta.isdscotland.org/topics/finance/file-listings-fy-2019-to-2020/> Accessed: 18 Mar 2022.
- 126 RCPsych. No Health without Public Mental Health: The Case for Action. Position Statement PS4/2010. London: Royal College of Psychiatrists; 2010.
- 127 HM Government. Confident Communities, Brighter Futures: A Framework for Developing Well-Being. London: HM Government; 2010.
- 128 HM Government. No Health without Mental Health: Implementation Framework. London: HM Government; 2012.
- 129 The Scottish Government. Mental Health Strategy: 2017-2027. Edinburgh: The Scottish Government; 2017.

- 130 United Nations. Transforming Our World: The 2030 Agenda for Sustainable Development. United Nations; 2015 Available from: <https://sdgs.un.org/2030agenda>.
- 131 WPA. 2021-23 Action Plan: A Way Forward. World Psychiatric Association; 2020.
- 132 The Royal College of Psychiatrists. Guidance for Mental Health Professionals Providing Clinical Evidence for the Personal Independence Payment Claims. London: Royal College of Psychiatrists; 2019 Available from: https://www.rcpsych.ac.uk/docs/default-source/mental-health/work-and-mental-health-library/pip-guidance-for-mental-health-clinicians.pdf?sfvrsn=78ca3e0_4.
- 133 Pybus K, Pickett KE, Prady SL, Lloyd C, Wilkinson R. Discrediting experiences: outcomes of eligibility assessments for claimants with psychiatric compared with non-psychiatric conditions transferring to personal independence payments in England. *BJPsych Open*. 2019;5:e19.
- 134 Crichton JHM. Falls in Scottish homicide: lessons for homicide reduction in mental health patients. *BJPsych Bulletin*. 2017;41:185–6.
- 135 Eaton L. Psychiatrists call for fair deal on mental health. *BMJ*. 2008;337:a631–a631.
- 136 Royal College of Psychiatrists. Another strong year for psychiatric recruitment. 2020. Available from: <https://www.rcpsych.ac.uk/news-and-features/latest-news/detail/2020/07/21/statement-on-near-100-fill-rate-for-psychiatric-trainees#:~:text=21%20July%202020.%20New%20figures%20released%20today%20show,2020%2C%20figures%20published%20by%20Health%20Education%20England%20show>. Accessed: 31 Jan 2022.
- 137 Campion J, Knapp M. The economic case for improved coverage of public mental health interventions. *The Lancet Psychiatry*. 2018;5:103–5.