

# NCMH

National Centre for Mental Health  
Canolfan Iechyd Meddwl Genedlaethol



Ymchwil Iechyd  
a Gofal Cymru  
Health and Care  
Research Wales



Ariennir gan  
Lywodraeth Cymru  
Funded by  
Welsh Government

## 2019-20 Annual Report





# Foreword



## **I'm pleased to present our 2019-20 annual report following another exciting and rewarding year at the National Centre for Mental Health (NCMH).**

Most importantly, we have been successful in our bid for funding for the next five years and we are delighted to be able to continue the work we are doing through 2025 and hopefully beyond.

We want to thank Health and Care Research Wales for the continued funding, and all those who have worked with us in recent years, colleagues in the NHS and the third sector, our research champions and P&R members, and academics from the wider research community.

Most of all we would like to thank those with lived experience of mental health conditions who have participated in our research, or contributed to our involvement and engagement activity.

Together we really can make a difference for mental health.

At the end of our current funding period and at the start of the next phase of NCMH, we reflect on the way we work, our achievements to date and priorities for the future.

We have continued to make excellent progress in each of our work packages.

You can read some examples of our work over the past year, including how we've now recruited more than 22,000 people from across the UK to take part in our research.

From collaborating on an eye-catching animated ADHD resource to launching the results of a study into a new treatment for PTSD, we've had a busy year of involvement and engagement activities.

We hadn't expected a pandemic to be one of this year's challenges but I have been very proud of how our team has responded and adapted to this new world we all suddenly found ourselves in.

I'm pleased to say we will continue our research, perhaps not as we expected to, and are also planning to investigate the impact of the pandemic on our mental health.

I hope you enjoy reading this report and if you have any questions about our work, please feel free to contact us.

**Professor Ian Jones**  
Director, National Centre for Mental Health

# Who we are

The National Centre for Mental Health (NCMH) brings together leading researchers from Cardiff, Swansea and Bangor University



## Our mission

To improve the mental health and wellbeing of the people of Wales

## Aims

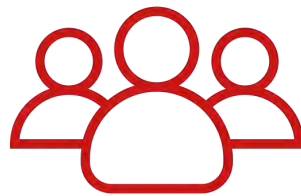
- To advance mental health and learning disability research in Wales
- To engage with patients, their families, the wider public and third sector organisations in Wales to increase understanding of mental illness and the need for research
- To change the research culture in health and social care services



# How we work

Our areas of research are organised into three work packages. Each work package is led by an expert in the field and represented on the NCMH Executive Board.

## Knowledge transfer



### **Cohorts and Smart assessments**

One of our main purposes is to recruit thousands of people to help with our research. Our participants also agree for us to contact them about future research opportunities.

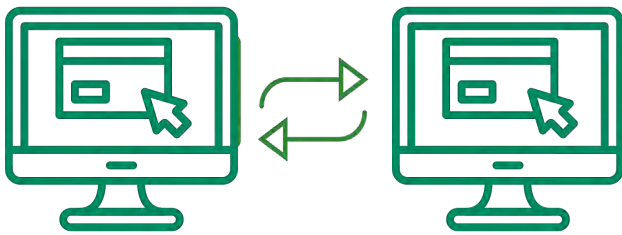
## Public engagement

## Public involvement



### Intervention development

Continuing our excellent track record of intervention developments, now with a focus on areas such as postpartum psychosis, ADHD and suicidal behaviours.



### Electronic data linkage

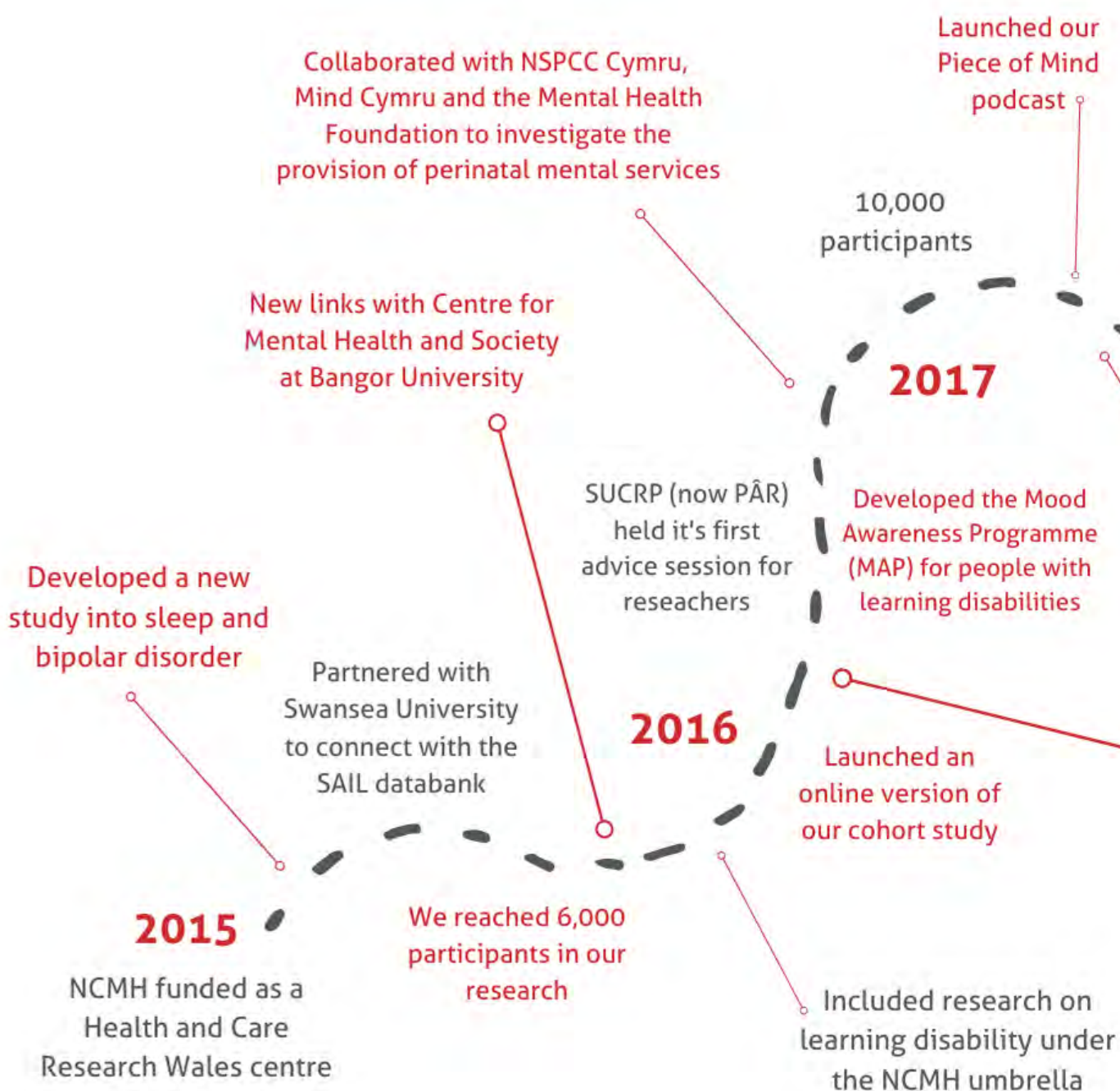
This area of work aims to link up routinely collected patient information to support our research.

## Informing policy

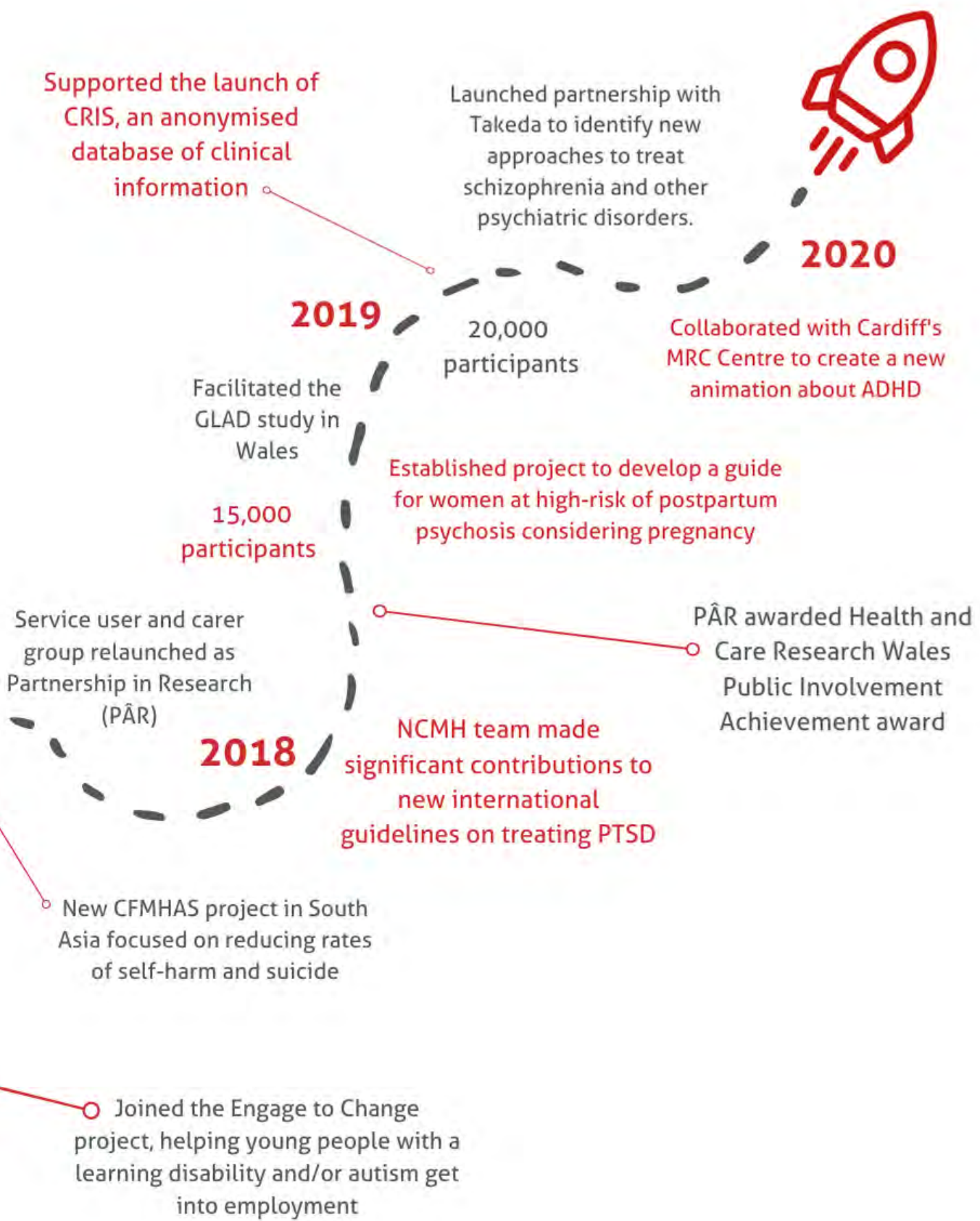
# NCMH: Our journey so far

The last five years has seen our team involved in breakthrough research; award-winning public involvement; the development of much needed resources for people with mental health problems, learning disabilities, autism and ADHD; and brilliant collaborations with inspiring third sector organisations and our fellow research centres.

We can't wait to see where the next five years takes us.







# Who's who

The NCMH team is made up of academics, clinicians and professional support staff from three of Wales' leading universities - Cardiff, Swansea and Bangor.

## NCMH Board

- Professor Ian Jones
- Professor Jonathan Bisson
- Professpr James Walters
- Professor Sir Michael Owen
- Professor Keith Lloyd
- Dr Michael Jackson
- Professor Mike Kerr
- Professor Debbie Cohen
- Professor Nick Craddock
- Professor David Ford
- Dr Elizabeth Forty
- Professor William Gray
- Dr Stephen Beyer
- Professor Jeremy Hall
- Professor Peter Holmans
- Professor Ann John
- Professor Meng Li
- Professor Michael O'Donovan
- Professor Catherine Robinson
- Professor Anita Thapar
- Professor Rob Poole
- Professor Marianne van den Bree
- Professor Peter Huxley

## Administration Team

- Mark Coles
- Jessica Pickin
- Rebecca Lynch
- John Tredget\*
- Paul Gauci\*
- Catrin Hopkins\*
- Dr Sarah Rees
- Dr Sarah Knott
- Naomi Marfell
- Tyler Savory
- Andrew Worsey

## Phenotyping Field Team

- Dr Catrin Lewis
- Dr Lawrence Raisanen
- Natalie Richards
- Christine Fraser
- Holly Pearce
- Grace Woolway
- Alice Roberts
- Rachael Adams
- Elin Lewis
- Danielle Kitney
- Dr Katie Lewis

## PhD students

- Elen Thomas

## Laboratory Team

- Ngoc-Nga Vinh\*
- Dr Alex Evans
- Matthew Bareford
- Shane Wainwright\*

## SAIL Team

- Dr Marcos del Pozo Banos
- Dr Sze Chim Lee

## Postdoc Analysts

- Amy Lynham\*
- Leon Hubbard

## Engage to Change

- Andrea Meek
- Elisa Vigna

## Placement Students

- Daniel Oakes
- Kira Taiwo
- Rita Martins
- Barnaby Thorne

\* Not directly employed by NCMH, but part funded in some cases

## Developing the NCMH cohort



This year we celebrated our 20,000th participant.

This incredible number of volunteers has enabled us to build the NCMH cohort as a world-leading resource for mental health research.

It underpins our research programmes aimed at better understanding biological, psychological and social factors contributing to mental health problems.

Volunteers are asked questions around a range of topics, including mental and physical health, lifestyle, employment and education.

People either take part online or through an interview with a research nurse or psychology assistant.

For participants with mental health conditions where we have active programs of research our psychology assistants carry out a more in-depth assessment.

These assessments also include the collection of a blood or saliva sample.



**1,920**

volunteers have provided a biological sample this year



I'm part of the NCMH field team. I spend the majority of my time visiting participants who have experienced mental health problems and neurological conditions.

Alice Roberts  
Psychology Assistant

# Advancing learning disability research

The Engage to Change project has been operating for four years.

During that time it has worked with 812 people with a learning disability (LD) or Autism Spectrum Disorder (ASD), it has worked with 587 employers, provided 388 paid placements and 224 paid jobs, achieving an employment rate of 58% from placements.

National employment levels are only 5.9% for learning disability and 32% for autism pre-COVID-19.

The programme has also provided five, one-year supported internship programs with health, University, and local authority employers, with 57% gaining a paid job at the end.

We have produced two reports on internships and qualitative reactions to the programme from families and young people.

Achieving a sustainable system for employing these young people was one of the goals of this project.

## Sharing what we've learned

We are using data from the project to inform policy through membership of Welsh Government's Disabled People's Employment Group, their working party on developing Inclusive Apprenticeships, and through presentations to Welsh Government Learning Disability and Autism Strategy groups.

Using data from the project, our learning disabilities team have delivered keynote speeches to Swedish Supported Employment practitioners on employment for people with LD in Wales in Stockholm and at the European Association of Services for People with Disabilities (EASPD) Hearing on Employment in Brussels.

The Hearing involved representatives of European umbrella groups for social care organisations under EASPD's stewardship to agree employment policy positions for negotiation with the European Commission.

Dr Steve Beyer presenting in Stockholm





Left to right: Engage to Change graduates 2019, previous graduate and now NCMH staff member Tyler speaking at the ceremony



**Looking to the future**

In the next phase of our learning disability work we intend to broaden the clinical cohorts of people with a learning disability or with ASD to referrals from social care organisations, self-advocacy groups representing people, and self-referral.

We aim to structure the cohort as a panel who we can poll regularly on issues of health and social concern to people and their families.

This will supplement applications by external researchers to work with genetic data and survey responses from the existing cohort.

We have developed a strong relationship with the All-Wales People First self-advocacy group where we have collaborated on the co-production of surveys and interpretation of evaluation results.

We have also broadened our relationship with Learning Disability Wales, the umbrella group for social care delivery organisations in Wales, building on our joint work on the Engage to Change project.

We will work together with these organisations to develop relevant polls on social and health issues, and to ensure results from this work go on to influence policy.

We will continue to engage clinical and social researchers in Wales to use the learning disability and ASD cohorts to answer relevant research questions and to contribute the the general NCMH mission.



I'm part of the NCMH admin team and support the information outreach work, like creating packs for the remote and internal research teams.

Tyler Savory  
Admin Assistant

Andrew Worsley  
Admin Assistant

I'm also part of the NCMH admin team and I'm responsible for updating and archiving the research database.

# Centre for Mental Health and Society

An update from the centre at Bangor University



The Centre for Mental Health and Society (CFMHAS) is based at Bangor University.

CFMHAS is a collaboration between researchers from social science and health backgrounds. It has a strong focus on social factors and social interventions in mental health.

CFMHAS has continued to thrive in 2019-2020, with an increased depth and breadth of research, and links with other UK and south Asian higher education institutes continue to be fruitful.

## SASHI

CFMHAS' largest project is the South Asian Self-Harm Initiative, which is funded by UKRI-GCRF.

It is a research capacity building project that was initially devised and led from within the centre.

Although the Chief Investigator, Professor Catherine Robinson has since moved to the University of Manchester, there are three co-investigators based in CFMHAS, as well as the project management team. The project runs until the end of 2021.

Prior to the Covid-19 crisis, data collection had commenced in the surveillance arm of the project.

The centre have established new partnerships and specific research plans with the Aga Khan University in Karachi for further work in Pakistan and with the Centre for Pesticide Suicide

Prevention at Edinburgh University for work in Sri Lanka.

They have also developed research on burns, self-harm and domestic violence in India, and an emergency medicine trainee of the Welsh Clinical Academic Training Scheme will shortly commence work for a doctorate on this. Two further PhD projects are linked to SASHI.

In May 2020, Rob Poole, with Professors Murad Khan (President of the International Association for Suicide Prevention) secured a contract with RCPsych Publications/Cambridge University Press to prepare a handbook on suicide prevention entitled 'Preventing suicide: and evidence-based approach'.

This project has developed as a direct result of SASHI.

## Prescribed opioids

Over the past decade, CFMHAS has developed clinical and research expertise in chronic pain and the problems caused by the prescription of long-term high-dose opioids.

They have assembled a group of interested clinicians and researchers, and have secured small research grants.

Studies within this programme of work include:

- a qualitative study to capture patient and carers' experiences of high-dose opioid regimes and the impact of discontinuing them
- a longitudinal community prevalence study
- a related study on prescribing patterns that lead to high-dose use
- a qualitative study to capture GPs experience of prescribing opioids in primary care
- a paper setting out a theoretical framework to understand high dose opioid use in chronic pain
- a study evaluating a medicines management regime in a Welsh prison to minimise inappropriate use of psychoactive prescribed medicines.

Rob Poole will be delivering a Prestigious Presidential Lecture to the Royal College of Psychiatrists about prescribed opioids and psychiatrists in June 2020.

## Social factors in mental ill-health

CFMHAS have developed items concerning social environment for people participating in the NCMH cohort.

A research post has been established at CFMHAS, funded by the NCMH grant and by Betsi Cadwaladr University Health Board. An appointment will be made in 2020, and the researcher will analyse the social data from the cohort study.

This member of staff will be responsible for the development of new studies on social factors and mental health within the cohort project.

One particularly exciting opportunity is to examine biological and social risk factors for psychosis within a single study, in other words, without a prior assumption that one or the other has the prime role.

Peter Huxley is leading on a systematic review to update the work by Richard Warner on recovery in schizophrenia and is a co-applicant on several proposals.

There are also projects in progress on a range of other social factor themes, including social care and social assessment instruments.

## Other areas of research at the centre

CFMHAS has a range of other active themes, including:

- people with mental health problems who appear without representation in the civil justice system
- ethics and human rights
- substance misuse
- the care of people in long stay psychiatric facilities
- the mental health of musicians

Members of the centre also supervise a number of Postgraduates in a range of topic areas.

Examples of completed and ongoing projects include:

- Mindfulness and Self-Compassion in Health and Social Care Students
- Experiences of children who lose a sibling to suicide
- Third sector perceptions of substance misuse services for adults on methadone prescription programmes.



ADHD Open Day attendee playing a JAMMIND project videogame



The infographic below highlights some of the key figures across our work packages from 2019-20

# 2019-20

## 4,924

people volunteered for our research



## 1,920

biological samples collected



Reached

## 6,516

social media followers



## 174

papers published



Piece of Mind podcast listened to

## 24,210

 times

## 7,135

leaflets ordered from our website



## 31

research awards



## 7,223

visits to our blog



## 108

Healthcare professionals trained to raise awareness of Postpartum Psychosis



## 4

new research sites recruited



## 30+

engagement events held and attended



## Involvement

At NCMH we understand the importance of putting people with lived experience at the centre of research.

Once such initiative that we're very proud to have in the NCMH family is the Partnership in Research (PÂR).

PÂR brings together members of the public with lived experience of mental health problems to be actively involved in research in Wales, and for researchers to benefit from the unique perspective of service users and carers.

Our collaborative approach to public involvement in research was recognised and celebrated in 2018 when PÂR was announced as the winner of the Health and Care Research Wales Public Involvement Achievement Award, an accolade we were incredibly proud to receive.

Other fantastic examples of collaborative working between researchers and people with lived experience are the PTSD Public Advisory group which inform the Traumatic Stress Research Group and have been instrumental in the development of research and new interventions for Post-traumatic Stress Disorder.

There are also groups currently working with PhD student Elen Thomas on developing and testing a pregnancy planning guide for women with bipolar disorder.

Elen has been working closely with women with lived experience of bipolar or previous postpartum psychosis, and professionals from various clinical backgrounds, to develop the first prototype of the guide.

**I maintain the NCMH website, blog and social media channels as well as organising events and designing all our materials.**

Catrin Hopkins  
Communications Officer



# Innovative events

We attended more than 30 awareness raising events in 2019-20 and collaborated with partners to host a number of our own events. From animation screenings and sports days to research fairs and live podcasts, our varied programme of events has helped us reach a wide audience and spread the message about our research.



Left to right: our activity at the Let's Talk Research festival in July 2019, a slide from the ADHD animation launched in October 2019.

In April 2019, we supported Go Tri, an event run by Cardiff University which was designed to give people of all abilities their first taste of a triathlon. More than 100 people took part!

We were delighted to team up with Nathan Filer, author of Finding and Losing Schizophrenia, in September for a live episode of our Piece of Mind podcast, hosted by our deputy director Professor James Walters. The episode has been listened to over 7,200 times.

October saw us supporting the tour of Gods and Kings, a play about writer and co-director Paul Whitaker's experience of bipolar disorder. The show, which was also co-directed by Tamsin Griffiths, released a print edition of the play which included some resources from our Bipolar Education Programme Cymru (BEPC).

We also hosted an open day and screening for a new animation about Attention Deficit



Hyperactivity Disorder (ADHD). More than 30 children and their families and carers joined us for some brain games and to watch the new resource for children newly diagnosed with ADHD.

October was a busy month for the team when we also helped to launch the results of the 3MDR trial. Read more on page 22.

In November, we made our way to London to host a stand and give a talk at the Bipolar UK conference.

# Co-production in perinatal mental health

## Bipolar disorder and pregnancy

Mental health problems are common during pregnancy or within the first year of giving birth (the perinatal period), affecting more than 1 in 10 women.

For women with bipolar disorder, the risks of experiencing an episode of illness in the perinatal period increases to 1 in 2, with some women needing inpatient care.

One of the most serious illnesses women can experience is postpartum psychosis, which

affects around 20% of women with bipolar disorder following childbirth.

As a result, women with bipolar disorder have some very difficult decisions to make around pregnancy, including stopping, switching or continuing medications.

Each option has its own potential risks and benefits, so finding the right option can be difficult.

Our project, in partnership with Action on Postpartum Psychosis (APP) and funded by Health and Care Research Wales, aims to develop and test a pregnancy planning guide for women with bipolar.

Over the last year, we have conducted a series of interviews with women with lived experience of bipolar or previous postpartum psychosis, and professionals from various clinical backgrounds (e.g. perinatal psychiatrist, perinatal community nurse, midwife, health visitor, general practitioner) to inform the development of the guide.

They were asked for their opinions on the contents, presentation and use of a guide for women with bipolar to help them plan pregnancy.

The information gained from these interviews was then analysed to inform the initial prototype of the pregnancy planning guide.

We are in the final stages of reviewing the initial prototype of the guide with the help of an advisory group of women with lived experience of bipolar and/or postpartum psychosis.

We are nearing the stage of being ready to test the guide.

This will involve women with bipolar or previous postpartum psychosis who are currently planning



Elen Thomas is working on the project as part of her Health and Care Research Wales Studentship.

a pregnancy using the guide and providing us with feedback on how they found it.

### What's next?

Within the next year, our objectives for the project are to carry out two pilot studies to test the guide, before we share the final prototype of the guide more widely through NCMH and APP for women nationwide to access.

Our long-term aim for the project is to seek further funding that will allow us to test the use of the guide in clinical practice on a larger scale as part of another trial.

We are also planning to explore further developments such as an electronic version of the guide.



## Knowledge mobilisation

Through a continued partnership with Action on Postpartum Psychosis, we are sharing our expertise in perinatal mental health and delivering training to healthcare professionals across the UK.

Working with Sally Wilson (above), a training coordinator at APP, and other members of the APP team, NCMH Director Professor Ian Jones has supported the development of a whole-day workshop programme.

This year six workshops have been held across the UK, reaching 108 health care professionals.

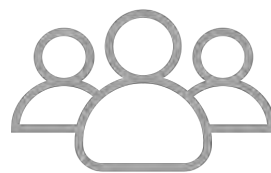
*"I feel much more equipped and knowledgeable... on how to identify, manage and support women and their families as well as signpost them to the right resources."*

Workshop attendee

In each workshop, an expert by experience and a consultant perinatal psychiatrist work with the attendees to increase their understanding of postpartum psychosis.

By utilising clinical experience, cutting-edge research, and the real experiences of affected women and families, the course looks to develop expertise and empathetic understanding.

The workshops cover the common symptoms of postpartum psychosis, which can include high or low mood, confusion, abnormal beliefs, and hearing or seeing things that are not there.



**108**

Healthcare professionals trained

# Big data and mental health

Through our partnership with Swansea University's SAIL data bank and with additional funding from the Medical Research Council and the research charity MQ, we are involved in a number of projects that use large-scale data sharing.

In recent years, major progress has been made in understanding the genetic basis of many mental health problems, and a large part of this has been due to large-scale data sharing.

## Developing guidance for self-harm support

The Adolescent Data Platform aims to improve the speed and effectiveness of research into young people's mental health with an unprecedented new resource for scientists and policy makers.

Each day, thousands of pieces of data are collected in schools, GP surgeries and hospitals.

Funded by MQ and led by Professor Ann John, this project is working to anonymously bring this data together under one roof, making it easy to work with and speed up research.

Through the platform, we supported a linked e-cohort study of self-harm in young people aged 10-24 years accessing healthcare and looked at data from GPs, emergency care departments and outpatient clinics, as well as hospital admissions for the years 2003 to 2015 in Wales.

Led by Professor Ann John, the study showed that rates of self-harm were much higher in those from deprived areas and that although most youngsters accessed primary care services, the number of young people attending emergency care and subsequently being admitted to hospital has increased.

Boys who attended emergency care after harming themselves were much less likely to be admitted to hospital than girls.

These advances offer great opportunities for improving stratification and treatment responses in mental disorders.

To capitalise on this progress there is now a need to extend this large-scale data driven approach forward by integrating genetic information with clinical, environmental, developmental and biological data at scale in mental health to transform the management of psychiatric disorders.

The findings highlighted the opportunities for early intervention when young people attend or are brought into contact with health services for self-harm, especially in primary care and emergency departments.

Following on from this work Ann was asked to write guidance on self-harm to support schools.

When a young person reveals they are self-harming it's a huge opportunity to help.

Teachers and other school staff are often at the front line of having these conversations with young people but many worry they will say the wrong thing.

Teachers in Wales said they wanted practical advice on how to help. This guidance does that.

The guidance was issued by Welsh Government, launched by the Minister for Education and issued to all schools in Wales (pictured below).





Launch of CRIS and Participate

## Clinical Record Interactive Search System (CRIS)

In November 2019 we helped to launch the Clinical Record Interactive Search System (CRIS), in collaboration with Cardiff and Vale University Health Board (CAVUHB).

The overall aim of CRIS is to maximise the use of the Health Board’s mental health clinical records, by allowing authorised users to search an anonymised database of clinical information derived from the Health Board’s electronic clinical record system.

CRIS removes any information that can identify someone, meaning that an individual’s clinical information can be searched, but their personal details cannot.

CRIS will enable us to look at up-to-date clinical information in large numbers of people. This will make it easier to identify patterns and trends, such as what treatments work for some and don’t work for others.

This will help us to better understand the causes of physical and mental illness and how best to treat them.

CRIS can also be used for clinical audit and service evaluation to help improve the services provided by the Health Board.

The implementation of CRIS in CAVUHB has also led to the development of other exciting initiatives to increase participation in mental health research, such as Participate, which was also launched in November.

Participate is CAVUHB’s approach to informing service users about research they may be interested in, with the aim of increasing awareness of research and facilitating participation.

The project is funded by a grant to Cardiff University from the Medical Research Council as part of their Mental Health Data Pathfinder award to Professors Jeremy Hall and James Walters, in which the main objective was to support the development of a Mental Health Data Platform to enhance the UK’s research capability in mental health.

We hope the implementation of CRIS within CAVUHB will place Cardiff at the forefront of clinical and research innovation and develop a health informatics platform that will be of great benefit to people with mental health problems and the services that they receive.

# Developing interventions

The NCMH Intervention Development Workstream was set up to facilitate the development and evaluation of interventions to prevent and treat mental health problems.

In addition to 3MDR and RAPID, a range of other interventions are being developed and evaluated by NCMH.

These include:

- Bipolar Education Programme Cymru
- pregnancy planning for bipolar and postpartum psychosis
- treating anxiety to prevent relapse in psychosis
- antidepressants for the prevention of depression in first episode psychosis
- MoodHwb, a digital programme for mood and wellbeing in young people
- reducing neuroinflammation to treat depression in people who have not fully responded to standard antidepressant drugs
- the Rewind Technique for PTSD
- guided self help for the disturbances in self-organisation symptoms of complex PTSD

## Post-traumatic Stress Disorder

Post-traumatic stress disorder (PTSD) is a common mental health condition that a person may experience following severe traumatic events, like abuse, accidents, assaults, disasters and military combat.

It is estimated that around 7% of the population will have PTSD at some point in their lives.

It often causes major suffering to those affected and the people around them and can become a chronic and enduring condition.

Better understanding the causes of PTSD is an area of priority for our research. We ask all NCMH participants who tell us they have experienced a major traumatic event whether they experience typical symptoms of PTSD like:

- flashbacks
- nightmares
- hyper vigilance
- avoiding thoughts and reminders about the event
- an increased startle reaction

## Finding new treatments for PTSD

We have completed two clinical trials which aimed to evaluate new treatments for PTSD; 3MDR and RAPID.

### 3MDR

3MDR, or modular motion-assisted memory desensitisation and reconsolidation, is a treatment that aims to reduce cognitive avoidance and augment engagement in therapy.

During each session, participants are asked to walk on a treadmill in front of a large video screen which displays images they have chosen, that relate to their trauma.

Working closely with NHS Wales, NCMH's Traumatic Stress Research Group recently completed a randomised controlled trial (RCT) of 3MDR with 42 military veterans living in South Wales who continued to experience service-related PTSD following treatment.

Participants were randomised to receive 3MDR immediately or after a delay of 14 weeks, with follow-up assessments occurring at 12 and 26 weeks after randomisation.

At the 12-week follow-up point, the participants who received immediate treatment showed a better improvement of symptoms than the group who received delayed treatment.





A participant and therapist using 3MDR

The team saw a 19% greater reduction in PTSD symptoms for the immediate treatment group over the delayed treatment group at that point.

The delayed treatment group experienced an average 28% further PTSD symptom reduction following 3MDR and the immediate treatment group maintained their improvement at the 26-week follow-up.

This study has shown evidence of 3MDR being effective for treatment resistant PTSD and with further research has the potential to make a difference for ex-service personnel with PTSD that have not responded to standard treatments.

### **RAPID**

We have also developed an online programme which combines the use of self-help materials with regular guidance from trained healthcare professionals.

Our aim was to determine whether this intervention can provide faster and more accessible treatment for PTSD than individual trauma-focused cognitive behavioural therapy (TFCBT), whilst being just as effective.

It is targeted towards people who have developed PTSD after experiencing a single traumatic event, like a car accident, rather

than those with complex PTSD who have been exposed to multiple traumatic events over a period of time.

After an initial positive small trial, Spring is now being tested against face-to-face TFCBT in a large RCT (RAPID) funded by the National Institute for Health Research.

196 participants have been recruited from sites in England, Scotland and Wales. The final follow-up of RAPID participants will take place in January 2021, with the results expected in March 2021.

In the meantime, informed by the results of the original Spring RCT, specific treatment recommendations for guided self-help for PTSD are now included in two key guideline documents for the management of PTSD, the National Institute for Health and Care Excellence (NICE) guidelines and the International Society for Traumatic Stress Studies (ISTSS) guidelines.

We are collaborating on a new service improvement project to consider the implementation of Spring at scale across NHS Wales as part of the Welsh Government funded All Wales Traumatic Stress Quality Improvement Initiative, directed by NCMH principal investigator Professor Jon Bisson.

## Psychosis, cognition and mental health



Nathan and James at the live podcast

Some people who have experienced mental health problems have difficulties with their memory, concentration and problem-solving abilities (collectively known as cognition).

It is important that we learn more about these difficulties, as they can impact on people's day-to-day lives.

In 2017, we launched an online study to examine the relationship between cognition and a range of mental health disorders.

To date, over 1,200 participants from NCMH have completed this study, which assessed nine types of cognitive abilities. We are currently undergoing analyses of this data.

In the last year, we have also redesigned our study assessment based on feedback from our participants.

Our new assessment includes a more user-friendly interface and a shorter completion time.

Many of our participants have expressed an interest in receiving feedback on their performance on the tasks.

Therefore, we have been working with colleagues in the NHS and members of the public, including P&R members, to develop a plan for implementing feedback on the study website, in a way that we hope will be interesting and informative.

### **New psychosis assessment**

As part of the renewed NCMH funding, we are establishing UK-wide recruitment of participants with psychosis through clinical services like Early Intervention Services.

To do this, we are developing a bespoke online psychosis assessment to measure risk factors, onset, treatment and outcomes.

These assessments will also include the collection of a blood or saliva sample.

We hope this new assessment will help us understand more about the biological, psychological and social factors that contribute to the development of psychosis and how these symptoms impact on patients' lives.

# New approaches to treating schizophrenia

In April 2019, Cardiff University launched a new partnership with Takeda Pharmaceutical Company Limited (Takeda).

The partnership offers a drug discovery collaboration to identify new approaches for treating schizophrenia and other psychiatric disorders.

Schizophrenia and psychosis genetics research is a cornerstone of the work of the MRC Centre for Neuropsychiatric Genetics and Genomics (MRC CNGG) at Cardiff University and is providing new insights into the nature of schizophrenia.

Led by Professors Mick O'Donovan, James Walters and Sir Michael Owen, all principal investigators at NCMH, the group of over 20 researchers is one of the leading research teams in schizophrenia genetics in the world.

The team have played a lead role across the last decade in establishing how differences in people's genetics can increase risk of developing psychosis and schizophrenia.

These insights hold hope for developing new treatments for schizophrenia and the potential

of this work has been developed in the last year through the new partnership with Takeda.

The collaboration, which will see £4m invested in four years, combines the University's large scale genomic data and world-class expertise in psychiatric genetics, genomics, clinical and basic neuroscience with Takeda's extensive drug discovery and clinical development capabilities.

The collaboration allows Takeda access to world-leading biological psychiatry research and the related infrastructure across the University, including NCMH, the MRC CNGG, the Neuroscience and Mental Health Research Institute and the Brain Repair and Intracranial Neurotherapeutics Unit.

All this work has been made possible through the help of our research participants, their families and NHS health professionals.

We are very excited about these developments and hope they can help deliver more effective treatments, with fewer side effects, a priority for patients, families and clinicians.

## Finding and losing schizophrenia

Schizophrenia is a contentious diagnosis and the source of often heated debate across the various professions and stakeholders associated with mental health.

Some argue that it has outlasted its usefulness as a single diagnosis and should instead be viewed as the extreme end of a 'psychosis spectrum disorder'.

To unpick the issues, we hosted a live discussion at Bigmoose Coffee Co. in Cardiff.

Professor James Walters, deputy director at NCMH, interviewed Nathan Filer (pictured

Listen on iTunes, Spotify and your normal podcast app



above), an author and former mental health nurse, about his book *The Heartland: Finding and Losing Schizophrenia*.

Nathan and James discussed the difficulties of language when talking about mental illness, including the term mental illness, and went on to discuss 'so-called schizophrenia', the problems around diagnosis, mental health services, medication and research.

## Responding to the COVID-19 crisis

The COVID-19 crisis has impacted on all our lives.

At NCMH the team have had to adjust to working at home and while we have had to pause our face-to-face recruitment of research participants, we began developing new online resources and opportunities to take part in research.

We also supported new ways to help people through the crisis: developing online groups for people with lived experience of Bipolar Disorder, and providing support for Health for Health Professionals Wales, a new confidential service to help health professionals and healthcare students working on the frontline in NHS Wales.

### Investigating the impact of the crisis on people living with mental health problems

We have launched an online study to survey the impact that the COVID-19 crisis is having on people with mental health conditions.

Our survey looks at the impact on mental health and wellbeing, and the practical impacts on finances and contacts with mental health and primary care services.

We hope the findings of this study will help us understand better the particular issues faced by those with mental illness and inform the NHS and

We're very concerned about the impact of this crisis on those living with mental health conditions.

As such, we developed a new survey to investigate the impact the pandemic has had on people with a diagnosed mental health condition.

We also thought it was important to offer support and guidance during these difficult times.

We set to work creating new videos, guides, links to helpful information and offering webinars for specific mental health conditions, such as bipolar and PTSD.

policy makers in responding to the challenges the crisis brings.

In addition to the general study, we are also launching surveys for particular groups such as those with learning disabilities and women in the perinatal period.

## Bipolar Disorder booster sessions

One other way we have responded to the COVID-19 crisis is to build on the achievements of the Bipolar Education Programme Cymru (BEPC) with a series of 'booster' sessions for those who have been through the programme.

We have offered the online group sessions to the more than 700 participants that have completed the BEPC course with excellent take up and feedback.

The two session 'booster' revisits the key self-management messages covered in the course and how they may be applied to the new normal of self-distancing and lockdown.

In addition, we are delivering a series of 'webinars' in collaboration with Bipolar UK to a wider audience, introducing some of the principles of self-management and psychoeducation.

Lastly, during the last year we have received funding from the NHS in Wales to work with Virtual College to produce an online training package for those wishing to facilitate local BEPC groups.

Our goal now is to promote this widely, to ensure that this vital evidence-based approach to helping people with bipolar is available through the NHS in Wales and beyond.



## Experiences of people with learning disability or ASD during the crisis

We have worked with All-Wales People First, Learning Disability Wales to develop an accessible (Easy Read) web-survey of the experiences of people with a learning disability or ASD during the COVID-19 restrictions.

This is targeted at the existing NCMH cohort but is also being signposted to new participants through relevant organisations.

We are inviting additional survey participants to join the NCMH cohort.

Further, we have worked together to develop a similar survey of people in work or paid placements supported by the Engaged to Change project to discover their work status, their experiences and the challenges they have faced during the COVID-19 lockdown.

We have been invited to join the UK COVID-19 Learning Disability Research Collaboration to promote research for this group during the COVID-19 emergency.

## Extending a mental health support scheme for all frontline NHS Wales staff

We're pleased to be supporting the Health for Health Professionals Wales (HHP Wales) initiative as they extend their to offer support to all frontline health professionals in NHS Wales, during the COVID-19 pandemic.

Set up and run by Cardiff University, HHP Wales offers support and advice to all healthcare professionals, including doctors, nurses, medical/healthcare students, paramedics, therapists, dentists and medical volunteers.

NHS Wales staff can contact the free, confidential service, staffed by healthcare professionals, to access psychological and mental health support.

➔ [HHPwales.co.uk](https://www.hhpwales.co.uk)

# The way forward: NCMH over the next five years

We are very proud of all that NCMH has achieved to date, but very aware that we have only been able to do this by working closely in collaboration with all our stakeholders – academic partners, clinical services, the third sector and, most importantly, those with lived experience of mental health conditions.

As I hope has become clear as you have read through this report, there is much to celebrate and fantastic examples of work that will genuinely make a difference.

## Developing our activity

The perspectives and ideas of our stakeholders have been vital to the development of NCMH.

We invited our colleagues in the NHS, third sector, wider community of researchers, and members of the public – including our Research Champions and P&R members – to share their views on our future direction and resulting from this work we are delighted to have a clear way forward.

Over the next five years we hope to develop our activity in three key ways:

- 1** we will link our activity more closely with the priorities of NHS Wales, focusing recruitment, policy and intervention work in areas of new service development that map onto our areas of research excellence
- 2** we will move to less labour-intensive models of recruitment and assessment that work at scale, at distance and at lower cost
- 3** we will increase focus on translating our research activity into real world impact, building on our excellent track record of intervention development to improve the health and wealth of those in Wales and internationally.

For much of what we do, however, it will take some time, decades perhaps, to see the its full impact. Mental illness is complex, multifactorial, and there are no easy answers.

What we are particularly proud of at NCMH is the work we are doing to understand biological, social and psychological factors and how they interact and then take this understanding further into interventions that will truly make a difference.

## New work package structure

In order to meet these aims we have also simplified our work package structure, focussing our activity in three areas.

### NCMH cohorts and 'smart' assessments

We will continue to develop innovative and cost-effective methods of recruitment and assessment which we have successfully developed to date.

This will involve maximising the use of online recruitment and assessment, reaching more people to join in with NCMH research. In addition, we will recruit via the NHS more widely, throughout Wales and beyond.

Building on our use of online, wearable, and mobile technology to gather rich data from participants, we will continue to work collaboratively to grow our work in smart methodologies. This includes online neurocognitive assessment and online symptom monitoring.

It will also involve developing our methods of obtaining biological samples remotely such as saliva samples for DNA collected through the post.

### Electronic data linkage

Linking our cohorts to the SAIL data bank has enabled us to conduct a number of informative studies, addressing important issues like trends in prescribing to children and young people and self-harm trends and healthcare contacts prior to suicide.



We plan to analyse SAIL data to learn more about long-term outcomes for the people in our cohort, including understanding better the causes of premature mortality in those with severe mental illness.

### **Intervention development**

Our excellent track record of intervention development includes the work of the Traumatic Stress Research Group on novel treatments for PTSD and 'guided self-help', in addition to our award-winning psychoeducation programme for bipolar disorder, the Bipolar Education Programme Cymru (BEPC).

We plan to develop new intervention programmes covering areas like postpartum psychosis, first episode psychosis, adolescent depression, ADHD, suicidal behaviours, mood symptoms in learning disabilities and employment interventions to deliver better outcomes.

### **Next steps**

We at NCMH are thrilled to continue what we believe is such important work and are delighted to have received five years further funding from Welsh Government. However, we start the next phase of NCMH in difficult times.

The COVID-19 crisis has impacted on us all, not least those with mental health conditions, but at NCMH we are committed to understanding the impact on mental health and to conducting research that will impact the lives of those who are living with these conditions.

As true in the coming years as it has ever been: together we can make a difference for mental health.

**Professor Ian Jones** Director, National Centre for Mental Health

## **Involving and engaging people with lived experience**

The voice of lived experience has always been central to our activity.

We are proud of our public involvement and engagement activity to date but recognise that we can improve in this area and need to ensure that this work has an even greater priority in the next funding phase.

It's key that people with lived experience of a mental health condition have input at all stages of the research process, from the early stages of development to shaping how we disseminate our research, and everything in between.



**NCMH**  
National Centre for Mental Health

**Mental Health Research:  
Help us change lives**



Ymchwil Iechyd  
a Gofal Cymru  
Health and Care  
Research Wales






Ariennir gan  
Lywodraeth Cymru  
Funded by  
Welsh Government

The National Centre for Mental Health is funded by Welsh Government through Health and Care Research Wales.

Mae'r adroddiad hwn hefyd ar gael yn Gymraeg. I ofyn am gopi, cysylltwch â [info@ncmh.info](mailto:info@ncmh.info)



 /walesmentalhealth  
 @ncmh\_wales  
 @thencmh