CHANGING THE DIRECTION OF YOUNG PEOPLE'S MENTAL HEALTH

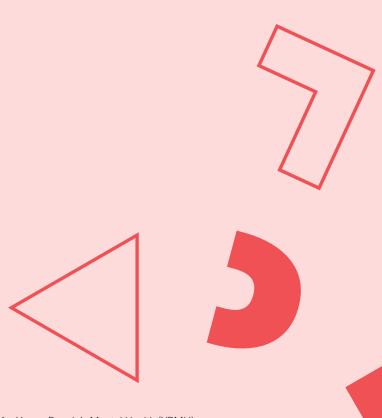


How **you** can help to prevent and reduce depression and other mental health conditions



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Mental health is heading in the wrong direction

Be part of the vital change required

Good mental health is crucial to personal, community and socio-economic development. The economic cost of mental ill-health is projected to be \$16 trillion globally by 2030, with an estimated 12 billion working days lost due to mental illness every year. In 2019, mental health problems cost the UK economy at least £117.9 billion annually, or about 5% of GDP. Evidence indicates that rates of mental illness are growing at a faster rate in children and young people than amongst adults.

A better approach is needed to change the current trajectory of young people's mental health, so as to improve personal outcomes, community outcomes, and socio-economic development.



A focus on depression

Depression is a common mental disorder that involves low mood and can include loss of pleasure or interest over a long period of time. It affects a person's ability to study and work, and their quality of life. In young people, it can contribute to lower educational attainment, self-harm and suicide.

How much of a problem is depression?

Around 300 million people globally suffer from depression. Depression accounts for the largest share of the world's burden of disease measured by years lost to disability. The condition currently occurs in about 2.1% of 5–19-year-olds and has risen sharply in the last decade.

Surely, there are treatments for depression?

- Existing treatments for depression in under-18s are effective in only 60% of cases. Even after successful treatment, between 50% and 75% of patients experience a relapse.
- In the UK, the gap between demand for Child and Adolescent Mental Health Services (CAMHS) and the number of doctors in the service is widening. According to the British Medical Association, "since 2016 the number of children and young people in contact with these services has expanded at over 3 and a half times the pace of the psychiatry workforce." This leads to difficulties accessing the service and long waits for treatment.

We need to develop – and implement – better approaches to prevent depression and to intervene early

Depression in adolescence is associated with a nearly three-times higher risk of depression in adulthood. Over time, the growing rate of mental ill-health in children will result in an even greater number of adults with the condition. Our mental health systems are already overloaded. As a society, we need to find effective ways to prevent, detect and intervene early before the condition becomes established, improving outcomes for individuals, reducing demand for specialist services so that those with complex needs can be seen more quickly, and reducing depression's impact on society.

New knowledge – and barriers to be overcome

Over the last 20 years, research has enabled significant breakthroughs in the understanding of the social, psychological and biological factors that can lead to mental health conditions such as depression. Despite this promising new knowledge, mental ill-health continues to increase across society.

It is clear that research alone is not sufficient. There remain significant barriers to effective innovation and widespread implementation of new evidence-based approaches to prevention, detection, diagnosis, management and treatment of mental health conditions.



We have built the foundations to transform mental health

- and need your help to enable the vital change of direction required

Since its formation in 2019, with a focus on depression in young people, The William Templeton Foundation for Young People's Mental Health (YPMH) has built the foundations to transform how mental health conditions are addressed.

YPMH's approach is to:

Understand:

How mental health conditions develop through a 'joined-up' understanding of social, psychological, and biological factors; and from this systematic understanding, identify opportunities to improve prevention, detection and diagnosis, and personalised management and treatment for key conditions.

Innovate:

Creating scientifically robust and user-acceptable solutions for prevention, early detection, diagnosis, and personalised management and treatment, including tailored innovations for schools, universities, employers, public health and others influencing young people's mental health.

Implement innovations:

Supporting behaviour change in individuals, change within organisations, and systemic change across ecosystems to help stakeholders to deliver effective improvements.

The Understand: Innovate: Implement approach has been developed in detail for depression in young people and is being piloted now. The approach can be applied for other mental health conditions that develop as a result of a complex range of social, psychological and biological factors, and where innovations for prevention and early intervention need to be implemented with a broad range of organisations.



BE PART OF THE TRANSFORMATION

Support YPMH in reducing mental health issues among young people, enhancing their resilience and reducing the number who take their own lives.

You can help by:

Providing grants and donations to enable YPMH to:

- Develop and disseminate educational materials and training.
- Help co-develop and validate interventions to prevent, detect and reduce depression.

Collaborating with YPMH to:

- Pilot and refine the structured methods to Understand: Innovate: Implement new ways of improving young people's mental health – and that of adults, too.
- Use YPMH resources to support your own and others' mental wellbeing.
- Co-develop and implement education and innovations in your organisation.

Peter Templeton Founder

Professor Tim Minshall

Chair, Board of Trustees
The William Templeton Foundation
for Young People's Mental Health

Dr John C. Taylor Professor of Innovation University of Cambridge



What has YPMH accomplished so far?

2019

YPMH started working with researchers around the world on developing its ground-breaking, joined-up approach to mental health.

YPMH began its collaboration with the University of Cambridge Institute for Manufacturing to apply its innovation and ecosystem management approaches to address mental health conditions.

2020

YPMH used root cause analysis to identify the links between the biological mechanisms that can lead to depression; psychological factors; individuals' options and choices regarding food, exercise and sleep; a person's underlying conditions; early-life factors; and social and societal factors.

12 online workshops brought together a community of ~150 specialists, young people and parents to develop evidence-based ideas for innovations.

2021

Research co-funded by YPMH published in Brain Science, December 2021, 'Biological, psychological, and social determinants of depression: a review of recent literature.'



Changing Hearts, Changing Minds published. It describes:

- How social, psychological and biological factors can lead to depression in young people.
- Some 200 opportunities for intervention, including prevention, prediction, detection, diagnosis and treatment.



workshops



150 specialists, young people and their carers involved



200 opportunities identified

which can make a difference to people's lives

2022

A further 12 online workshops and individual consultations with people and organisations from across the mental health ecosystem helped:

- Understand and validate unmet needs.
- Evaluate, prioritise and select innovation and education projects.
- Identify how groups that influence an individual's mental health can protect young people from developing depression and help those who have developed the condition.

2023

Research co-funded by YPMH published in The Lancet Psychiatry in May 2023, 'Gone Too Soon: priorities for action to prevent premature mortality associated with mental illness and mental distress.'

10 roadmaps developed with collaborators for priority innovations.



Changing Minds, Changing Lives published, describes:

- Our model of vulnerability factors and mechanisms for the development of depression in young people over the life course.
- Forty-five unmet needs and over 50 projects to help enable the prevention, early detection, diagnosis, management and treatment of depression.
- How actors across society can work more effectively to prevent and intervene early to address depression.

2024

YPMH developed its Understand: Innovate: Implement approach.



Depression – It's really not all in the mind published. The booklet brings together the research and innovation that YPMH has conducted since 2019. It is presented in a form that we hope will be helpful to young adults, parents and non-medical people across organisations such as educational institutions, employers and charities that work with young people.

YPMH began to put its plans into action...



45unmet needs and50 projects prioritised



project roadmaps developed



200+
citations for academic papers

Next steps

Approach, key needs and projects to address them

Approach for translating research into impactful innovations used at scale

To address the barriers outlined earlier, YPMH has collaborated with the University of Cambridge Institute for Manufacturing to configure and apply its structured methods for innovation and ecosystem management (which are used widely in industry) to help accelerate the translation of research into innovations that are applied at scale.



The Understand: Innovate: Implement approach comprises the following:











Understand:

How mental health conditions develop, through a 'joined-up' understanding of social and psychological factors and biological mechanisms across the life course.
-See YPMH's vulnerability factor and mechanisms model for depression which is shown on page 15.

How to identify opportunities to improve prevention, early detection, diagnosis, and personalised management and treatment for key conditions.

How this understanding and method of identifying opportunities can lead to a more strategic approach improving prevention through to personalised treatment of complex conditions, such as depression.

Innovate:

Useful, scientifically robust and user-acceptable solutions to address specific needs.

Portfolios of innovations for each stage of care, such as primary prevention, early detection, diagnosis, and personalised treatment.

Portfolios of innovations for organisations engaging with young people, such as schools, universities, employers and prisons to enable more effective prevention and early intervention. Similarly, portfolios may be developed for key actors across the health and social care system, such as public health and primary care.

Implement

innovations, considering:

The factors needed to support behaviour change in individuals, combining this with

Change within organisations, and

Change across ecosystems, helping stakeholders to understand their roles in delivering effective change.

Key needs addressed by YPMH's work

During its evaluation of unmet needs and projects in 2021-2023, and published as *Changing Minds, Changing Lives*, YPMH identified four key groups of needs, which comprise the following themes for our work:

- The need for information, education and training to equip and motivate people and organisations to effect positive change.
- 2. The need for vulnerability assessment, early detection and diagnosis of conditions and causes to identify an individual's vulnerability factors and underlying causes of depression and to enable the development of personalised plans for management and treatment.
- 3. The need for prevention, management and treatment interventions to address specific mechanisms of depression. These interventions fall into several broad categories:
 - **a.** Intervention pathways and systems for prevention, management and treatment.
 - **b.** Food and nutrition needed to ensure that biological systems, such as the gut microbiome, produce the range and balance of chemicals needed to sustain mental wellbeing.

- c. Exercise and movement necessary for proper functioning of biological systems that support mental health; psychosocial factors, including enjoyment, mastery, social connectedness; and behavioural factors supporting wider lifestyle factors, e.g. diet, sleep.
- **d.** Sleep, which plays a vital role in resetting our biological systems, helping our cognitive performance and regulating our emotions.
- **e.** Psychological interventions to help improve protective factors, increase resilience, treat depression, and even potentially mitigate the effects of early-life adversity.
- **f.** Treatments to mitigate biological conditions that can contribute to depression.
- 4. The need for societal change, policies and regulations to address cultural, societal, economic, environmental and community factors associated with depression.



For more information

Descriptions of unmet needs and projects to address them are described in *Changing Minds, Changing Lives*, which is available from www.ypmh.org/ypmh-publications

YPMH priorities and projects

Our priorities going forward are to:

 Provide accessible, scientifically robust information, education and training for people and organisations seeking to prevent and reduce mental health conditions, especially depression in young people. "Depression – it's really not all in the mind" is YPMH's first publication of this type.

Example project

YPMH is working with young people to co-create useful, age-appropriate and scientifically robust educational materials in a range of formats for those in education, employment or custodial settings. These materials will be disseminated through a number of channels, one example being via academy trusts which manage a number of schools. Such collaborations will inform and educate pupils, parents and staff so as to enable prevention. It is intended that our work will serve as a foundation for projects and programmes across the schools in the trust, as well the wider community.



2. Facilitate projects across the mental health ecosystem to innovate and implement interventions that can be widely used to improve the prevention, early detection, diagnosis and the personalised management and treatment of depression and other mental health conditions in young people.

Example project

Food and nutrition to reduce depression

Expanding on a positive trial conducted by Deakin
University and collaborators with adults in Australia,
YPMH is working with partners to develop a dietary
intervention to support young people with depression in
the UK. We have recognised the need to not only inform
young people what a mentally healthful diet is, but also
to teach them to plan, buy (or otherwise access) and
prepare mentally healthful food. Working in collaboration
with partners already delivering community food and
cooking education, we are co-designing with young
people the programme of food and cooking education,
and how best to test its effectiveness. We then plan to
run this trial to test how well it is accepted by users and
gain an early indication of its effect on mood.

Example project

Online psychosocial intervention to reduce mental health service waiting lists

YPMH is collaborating in a project to test the application of an online version of a validated face-to-face psychosocial intervention for depression in young people up to 18-years old. If successful, the online intervention could be used as the first intervention for young people on the service's waiting list. YPMH's role is to help ensure the usability of the online tool by the groups involved in applying it. These include referral agencies, clinical and other users, service managers, as well as the young patients. YPMH's input aims to inform the operating procedures and additional functionality required to ensure effective use.

 In the medium to longer term, facilitate development of policies and regulations to help prevent and reduce mental health conditions such as depression in young people.

Resources needed to deliver our work

To deliver its plans for:

Information, education and training

YPMH needs to:

- Design and develop education and training materials. This includes engaging representatives of key audiences, such as 16 to 18-year-olds, or employers of young people, in co-creation of the materials.
- Configure and package information and educational resources in audience-appropriate formats, such as social media, print, video, webinars, and in-person delivery.
- Disseminate the information, promote the education and training, train individuals to teach the material, and deliver programmes to achieve the desired learning outcomes and enable positive change.

Innovation and implementation projects

YPMH needs to:

- Facilitate collaborations to define, design, develop, pilot and validate novel interventions that address clear unmet needs. The innovation projects include the two categories of projects described earlier, (1) vulnerability assessment, early detection and diagnosis and (2) prevention, management and treatment of individual vulnerability factors and biological mechanisms.
- Understand the key requirements for implementation to ensure that innovations not only meet the needs of the young person, but also meet the needs of the people and/or organisations helping to deliver the intervention.

- Facilitate the definition of portfolios of innovations for key care stages, such as early detection, and their application within particular contexts, such as schools.
- Work with collaborators to implement innovations at pilot scale, document case studies, and learn from and codify insights from the pilot to enable effective widespread implementation at scale.

Resources needed:

The resources needed to deliver this work include:

- Staff, collaborators and associates with expertise in:
 - Education design, development and delivery;
 - Development, validation and implementation of interventions.
- Contributors and experts with lived experience from target audiences, to co-create and co-design educational materials and innovations.
- Development and production of information and education content in a range of audience-appropriate formats, e.g. print, webinars, videos.

There is much work to do. Our progress is enabled by funding of the resources needed to deliver our work. Please help YPMH to improve the mental health and wellbeing of children and young people – and to change the direction of young people's mental health.

How you can help

Individuals

Donations and fundraising

Since its inception in 2019, individuals from around the world have generously supported YPMH through donations and fundraising activities, such as running half- and full marathons, walking great distances, sky-diving, requesting donations as celebration gifts, and organising and performing at concerts. Your contributions are greatly appreciated!

Please donate or fundraise at www.justgiving.com/ypmh or if you are in the USA, you may also donate tax-efficiently via CAF America.



QR code for YPMH's JustGiving page



QR code for YPMH's CAF America page



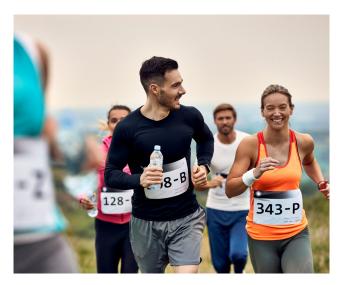


Patrons

We are seeking Patrons to help build and maintain relationships with donors and develop opportunities for press and media coverage to raise the profile of YPMH's work.

Give in memory and legacy gifts

If you would like to give in memory of a loved one, discuss a legacy or have any questions, please email contact@ypmh.org





Grant-giving foundations and funders of research and innovation

Grant-giving foundations and charities

YPMH works with grant-giving foundations and charities to help them to further their aims. Examples to date include foundations focusing on issues such as young people's mental health, suicide, and helping people to prepare and eat mentally healthful food.

We would welcome exploratory discussions about how YPMH can help you to achieve your goal of creating a better society enabled by better mental health.

Funders of research and innovation

YPMH is pleased to work with funders of research and innovation to explore how the Understand: Innovate:

Implement model and its underpinning methods can help:

- Increase the impact of research investments.
- Enhance and accelerate the translation of research into impactful innovations.
- Develop a more effective and impactful research and innovation portfolio.

Researchers and innovators

YPMH works with researchers to understand further how social, psychological and biological factors contribute to the development of depression, and how this understanding can provide the basis for innovations to help prevent, detect and reduce the condition in young people. We are also interested to work with researchers focusing on implementation of innovations for mental health and wellbeing, and on mental health innovation policy.

We work with innovators -from start-ups to corporationsto explore opportunities for cooperation that can lead to effective prevention, detection and mitigation of depression. Potential areas for cooperation include:

- Information, education and training
- Prediction, early detection and diagnostics
- Food and nutrition, exercise and movement, sleep, stress, psychological interventions, and treatments for biological conditions that contribute to depression.

Organisations engaging with young people

Collaboration

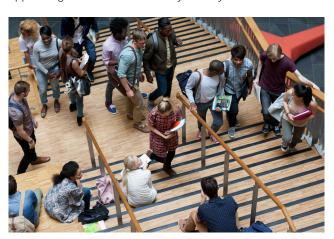
YPMH is pleased to share its key findings and information with organisations engaging with young people – such as educational institutions, employers, custodial organisations, faith groups, sports clubs and youth groups – to help inform the organisations' strategies for the prevention, identification and reduction of depression and other conditions.

We also collaborate with young people in these organisations to identify what will make a successful solution that is acceptable and attractive to use.

Fundraising

Students, staff and charity teams in schools and universities have generously supported YPMH with fundraising activities, including sponsored rowing, running, donations and summer balls.

Employers kindly support YPMH by making donations, matching employee fundraising, including YPMH in their charity fundraising activities, providing in-kind support, and appointing YPMH as their 'charity of the year'.



Please do get in touch if you would like to discuss collaboration or fundraising ideas.

We thank all of our fundraisers and donors for their continuing support.

About YPMH's approach

The following are key parts parts of YPMH's Understand: Innovate: Implement approach

Vulnerability factors and mechanisms (VFM) model for how depression develops in young people

YPMH's vulnerability factors and mechanisms model is a powerful tool for understanding how depression develops and for exploring where to intervene to mitigate key risks.

YPMH used engineering 'root-cause analysis' to identify the links between social, individual, psychological risk factors and biological mechanisms that can lead to depression. The risk factors and mechanisms were identified through a detailed review of the research literature and discussions with researchers. More details of the

model are provided in *Changing Minds, Changing Lives* and explanations of the biological mechanisms and the factors that are understood to cause them may be found in *Changing Hearts, Changing Minds*. Both publications are available from www.ypmh.org/ypmh-publications.

The VFM model can also be applied to understand how other complex mental health conditions involving social, psychological and biological factors develop.

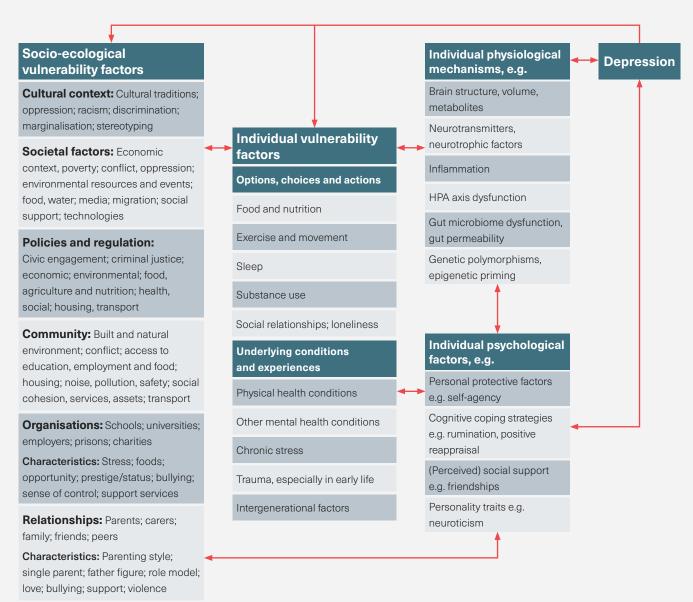


Figure 1. Vulnerability factors and mechanisms for the development of depression in young people over the life course

The 'individual vulnerability factors' offer a useful lens through which to understand the consequences of, say, poor diet or chronic stress, identify their causes, and identify opportunities for prevention, vulnerability assessment, diagnosis, and prevention, management and treatment.

Care stages

Figure 2 represents the key care stages in the prevention, diagnosis, management and treatment of mental health conditions, such as depression. A shift towards increased prevention is desirable, and potentially achievable by addressing the vulnerability factors and early physiological mechanisms of the condition. Additionally, it is valuable to

diagnose the causes of an individual's condition in order to develop and implement a personalised plan for management and/or treatment. Different stakeholder groups, such as schools or primary care, will have specific roles at different stages of care.

Primordial prevention	Primary prevention	Prediction	Personal prevention	Early detection	Diagnosis – condition	Diagnosis - causes	Personalised plan	Management	Treatment	
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Figure 2. Care stages

The mental health ecosystem

Figure 3 shows a model of the mental health ecosystem. We have identified five key 'stakeholder groups' (the darker circles) that an individual young person engages with who have an impact on their mental health and wellbeing. Each stakeholder group comprises actors that are specific people or organisations. Some actors interact directly with

the young person, such as parents, schools and primary care. Others interact indirectly, their decisions and actions affecting the young person's context and the stakeholder groups with which they engage. These include national and local government, research funders and researchers.

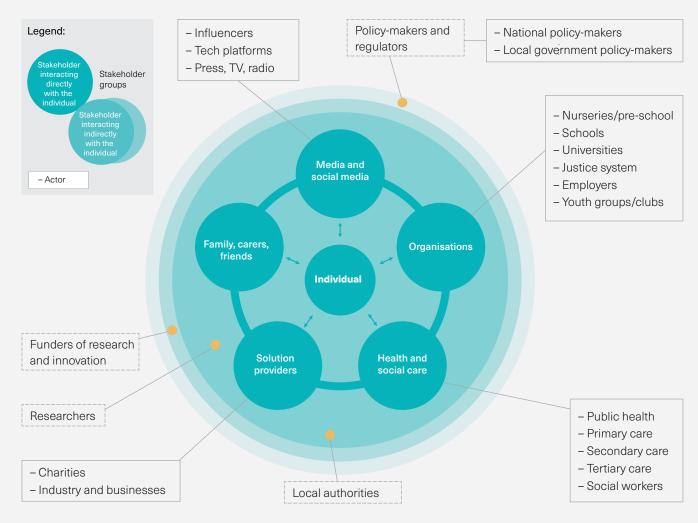


Figure 3. The mental health ecosystem

For each of the actors, e.g. schools, public health, we have developed:

- A summary of the core competencies of the actor, i.e. the key focus of their activities;
- A vision of the desired competencies for the actor regarding depression in young people; and

■ The vision for the actor mapped across the care stages.

These have been validated with people from the relevant stakeholder group. Details of the care stage model and ecosystem may be found in *Changing Minds, Changing Lives*.







The William Templeton Foundation for Young People's Mental Health (YPMH) is a charitable foundation working to improve the lives of young people by facilitating innovative approaches to resolve mental health conditions.

YPMH was established in memory of Will Templeton, by his parents Anne and Peter and his brother John. The family's aspiration is to enable the 'joining-up' of excellent research and practice across the many fields associated with young people's mental health to improve the prevention, identification, diagnosis and treatment of conditions such as depression and anxiety.



Changing the direction of young people's mental health



Explains:

- Why young people's mental health is presently heading in the wrong direction.
- Over the last 20 years, research has enabled significant breakthroughs in the understanding of the social, psychological and biological factors that can lead to mental health conditions such as depression. Despite this promising new knowledge, mental ill-health continues to increase across society.
- It is clear that research alone is not sufficient. There remain significant barriers to effective innovation and widespread implementation of new evidence-based approaches to prevention, detection, diagnosis, management and treatment of mental health conditions, such as depression.

- A better approach is needed to change the current trajectory of young people's mental health.
- YPMH has built the foundations to transform mental health.
- How you can help to prevent and reduce depression and other mental health conditions.

BE PART OF THE TRANSFORMATION

Help YPMH to improve outcomes for individuals, for communities, and for society

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