Mental health data research hub

Opportunity status: Open
Funders: Medical Research Council (MRC)
Funding type: Grant
Total fund: £2,000,000
Maximum award: £2,000,000
Publication date: 16 November 2020
Opening date: 7 December 2020
Closing date: 29 January 2021 16:00 UK time

Last updated: 7 December 2020

Start application

Apply for funding to set up a mental health data research hub in partnership with Health Data Research UK.

The hub will underpin original research by providing innovative, high-value data resources for research and innovation. It will not directly support original research.

To lead a proposal, you must be a UK research organisation eligible for Medical Research Council funding. This includes:

- higher education institutions
- approved independent research organisations
- approved NHS bodies
- research council institutes.

You and your team must show:

- appropriate scientific and clinical leadership
- a track record of using health data for public benefit
- the ability to process health data for research and innovation.
Funding is available for the development of one hub over three years. We’ll cover 80% of the full economic costs.

We expect the hub to develop into an ongoing national resource for mental health research.

Who can apply

This funding opportunity is open to applicants from eligible UK-based organisations in accordance with standard UKRI practice.

See our general guidance for applicants for more details on institutional and individual eligibility.

Applications must be able to demonstrate appropriate scientific and clinical leadership, a track record of the use of health data for public benefit and the ability to process health data for research and innovation. The hub must deliver a national service that will be financially sustainable in the long-term.

Recognising the value of regional data sets and leadership, it is expected that proposals will involve one, or more, multi-institutional collaborations across the UK. However, proposals must be submitted by a single lead organisation.

Institutions may be partners to more that one application but should only act as lead institution for one.

At least one member of the partnership must have a demonstrable track record in acting as a data custodian with the ability to make data accessible for research, development and innovation taking place across academia, industry and the NHS.

We strongly encourage collaboration across sectors, including NHS organisations, academia, industry and other partners. Collaborations with industry should be managed via an MRC industry collaboration agreement. You can also include international co-investigators if they provide expertise that is not available in the UK.

What we're looking for

Specification of the mental health data research hub

The specification for the hub has been informed by the outputs from:

- the MRC Mental Health Data Pathfinder scheme
- the Digital Innovation Hub programme (funded by UKRI through the Industrial Strategy Challenge Fund and in partnership with HDR UK)
a consultation webinar and survey conducted November 2020.

For further details see ‘additional info’ and links to relevant documents below.

The call is open to all eligible applicants; however, proposals will be expected to demonstrate how the work emerging from the Mental Health Pathfinder initiative is being built upon. A document containing further details on the awards made under that scheme can be found below.

This call for funding is to support the establishment of a mental health data hub over 3 years. It is anticipated that the hub will continue to grow in scale and ambition beyond the 3 years, evolving into a sustainable coordinated and integrated national resource for mental health research.

The hubs vision is expected to be driven by progressing a precision approach to mental health – providing the evidence base to help us understand what is most effective at an individual, community or population level to prevent, treat and manage mental health problems and to intervene at an earlier stage. As such the hub should include a broad range of data sources to reflect the multi-dimensional determinants of mental health and their inter-related longitudinal impacts. Additionally, the hub should include a focus on the following critical aspects:

- mental health across the life course, including children and young people
- the interface of physical health with mental health
- those with severe mental health problems and other vulnerable groups often under-represented in research studies.

The data hub will:

- act as a centre of excellence for curation of mental health data at scale, provide UK wide expert data research services and helping users navigate the mental health data landscape
- improve the discoverability, quality, breadth, depth and utilisation of datasets and provide a repeatable curation approach or open source tooling that can be used to enable UK-scale research and interoperability across key data sets
- develop and maintain an appropriate infrastructure that enables data linkage and analysis
- create world leading data sets and make these discoverable and accessible to researchers and other users. The hub will be expected to define the key needs and research/innovation opportunities that will drive its strategic approach to data selection
- provide services to meet the needs of researchers, NHS, industry, charities, innovators and ultimately people with mental health problems and the public
- be national in outreach, engaging key stakeholders, data custodians and users in the Hubs vision and facilitating mental health data science that benefits the whole of the UK
- be clearly driven by strong exemplar cases that demonstrate the potential to enable real world insights, innovations and improvements in care not currently possible without data at this scale
- improve secure access to data at a broader policy level through membership of the UK Health Data Research Alliance (the ‘Alliance’) and use of the UK Health Data Research Innovation Gateway (the ‘Gateway’)
build on the relevant outputs and learnings generated by the MRC Data Pathfinder awards and link to/complement relevant existing investments, nationally and internationally. Harness opportunities to work across the HDR UK Hub network

- involve PPI in development of the hub to ensure it is driven by the needs of the population and considers key ethical issues pertinent to mental health data
- have strong leadership, deep domain expertise and governance, including plans for including people with lived experience of mental health problems and members of the public in decision-making and governance and how the Hub will ensure that research outcomes from its work are linked to patient benefits
- contribute to efforts for harmonisation of procedures for prospective measurement of mental health problems and symptoms in studies (including cohorts and longitudinal studies) and measurement of outcomes
- be designed with capacity to evolve, respond to changing needs and opportunities, bring in additional funding and grow in ambition. Incorporate plans for sustainability of the investment, including through grants, industry investment and service provision
- meet delivery milestones and to sign up to the Digital Innovation Hub Programme Principles for Participation – this includes the FAIR data principles (Findable, Accessible, Interoperable and Reusable).

The purpose of the hubs is not to perform original research itself, but to underpin research activities supported through other routes. The funding available to applicants will create “data as infrastructure” that improves access to and quality of data and increases the UK’s future research and innovation capability.

**Timeline for Hub delivery**

Milestone 1: hub established. (within 3 months of becoming a Hub)

- make datasets available in accordance with the principles for participation and discoverable through the Gateway
- provide a description of the number of datasets, and their scale and quality
- demonstrate the hub physical environment is operational
- set out a plan for public and patient involvement in the hub’s work, specifically including issues around access to, use of and security of patient data.

Milestone 2: Service Delivery. (within 18 months of becoming a hub)

- evidence that the quality of the datasets has been improved (curated) and that the curated data is discoverable through the Gateway
- provide publishable enhanced service case studies (e.g. from industry, academia and NHS) that demonstrate impact (and expected impact) and value to researchers and innovators from a range of sectors, and to people with mental health problems and populations. Focusing on building towards a sustainable business model for the hub
- provide evidence that public involvement is at the centre of the hub’s governance processes, that the hub is implementing its plan for meaningful public and patient involvement and demonstrate its effects on the hub’s activities.

Milestone 3: Impact, sustainability and scalability. (within 2.5 years of becoming a hub)
- evidence enhanced service delivery through additional publishable case studies that demonstrate further impact and value to researchers, innovators, people with mental health problems and populations
- evidence a sustainable business case to support the future service offering of the hub
- provide evidence that the hub’s plan for meaningful public and patient involvement continues to be delivered effectively and involves and engaged people with mental health problems and the public.

Additional funding conditions

The funded hub will be expected to adopt the HDR UK principles of participation and subscribe to HDR UK values and policies, including EDI and attribution policies.

The funded hub will be expected to align with branding and communications guidelines that will be set out in the award offer letter.

How to apply

Please complete the intention to submit form and email it to mentalhealth@mrc.ukri.org by 29 January 2021, 16:00. This is mandatory. Proposals will not be accepted from applicants who have failed to provide an intention to submit.

Please include the names of the principal investigators, co-investigators and any collaborating organisations confirmed at this stage. This is to help us manage conflicts at the panel assessment stage and will not involve any expert assessment.

The full proposal should be submitted via Je-S by 25 February 2021, 16:00.

The proposal should consist of a completed Je-S form and the following five attachments:

Case for support (max 12 sides A4)

The case for support forms the main body of your proposal and should contain the following sections

- An overview of the hub including its vision, objectives, goals, key partnerships and interfaces and expected outputs;
- The datasets to be included within the hub. This should describe the datasets that will be brought to the HDR Alliance over the course of the award and include the data custodians, modes and sizes of datasets (number of records, populations covered), the current quality of the data (coverage, completeness, validity, timeliness and accuracy) and the environment in which they are currently stored (process and governance for access). Please describe why these datasets are particularly valuable for research and innovation and which
datasets will be immediately ready to become part of the Alliance and discoverable through the Gateway, including the associated metadata to support discoverability;

- Describe the technical infrastructure, including demonstrating that the level of security and “safe haven” capability that you host/have access is appropriate for the data and services that the hub will be providing;
- The curation approach that you will be using to improve the quality of the datasets and what improvements these will enable. Please describe what new research and innovation uses will be created by this improvement in quality, supported by evidence for the demand;
- The expert services that will be provided in the hub and the distinct value that the hub will provide to academic and clinical users, industry and other users;
- The unmet needs and demand for the curated data and services that the hub will provide should be clearly described, including how the hub will be driven by continuous assessment of user needs;
- Positioning in the wider landscape. How the proposed hub will add value to, and build on, existing investments and activities. In particular, how the outputs of the MRC Data Pathfinder initiative are being brought to bear. Read more about the Pathfinder initiative in ‘additional info’ below. Describe how the services provided by the hub will be uniquely valuable, address a currently unmet need and provide additional capability over and above the existing components of the national data and mental health research landscape. Indicate potential opportunities to collaborate with relevant activities internationally and any activities to be undertaken during this award to facilitate that;
- Delivery feasibility and risk management. This section should describe how the delivery milestones laid out in the above section will be met. This answer should be supported by an overall project plan and a discussion of the risks with mitigating actions (Gantt Chart – separate attachment). Describe the project management process that will provide assurance that the delivery milestones and goals will be achieved;
- Capabilities and Partnership. This section should describe the leadership team and key roles, including a named hub Director and a named Chief Data Officer. Each will be expected to have a track record of working with and across organisations and sectors to deliver common goals and objectives, and of building deep collaborative partnerships. Demonstrate the leadership team’s expertise and track record in governance, management systems and achieving outcomes at pace in clinical digital research and innovation. We recognise the diversity of skills necessary for a successful team and encourage proposals to recognise the contribution of technical professionals. This section should also describe how clinical leadership will be a part of leadership and governance to ensure decisions on data and services are benefiting people with mental health problems, the NHS and public. How the hub will harness the partnership capabilities to deliver outcomes that could not be achieved by a single organisation;
- Governance and management. Describe how the Lead Organisation will govern and manage the partnership and how the partnership will deliver to meet user timescale expectations. Describe the systems, processes and organisational behaviours in place to provide assurance that data will be secure and that all access will be appropriate, proportionate and subject to robust governance in
line with National Data Guardian and Information Commissioner’s Office recommendations;

- The partnership’s track record in engaging and involving members of the public, including those with lived experience of mental health problems, in health data research and the underpinning data services;
- The partnership’s plan for public and patient involvement and engagement, detailing how people with lived experience of mental health problems will be involved in the governance of the Hub, including developing systems for, and decisions about access to, use and security of their data;
- The outreach plans of the hub to facilitate impact and drive improvement of the hub through feedback from data users;
- How the hub will work in partnership with other hubs in the HDR UK network and other components of the national data infrastructure to deliver a national offer in line with HDR UK’s Principles for Participation;
- The physical environment the partnership will provide as a hub base to support collaboration and innovations across a range of users (e.g. data scientists, clinicians) from industry, NHS and academia;
- Your plan for sustainability of the Hub (through, for example, a robust portfolio of grants funding, service charges, commercial funding) while continuing to adhere to the Principles for Participation and a commitment to open access of methodologies, code and findings.

Further documents that are required:

- Justification of Resources (max 2 sides A4)
- Gantt Chart (max 1 side A4) – including a project plan and risk register with mitigating actions.
- CVs (max 2 sides A4) and list of publications (max 1 side A4) for the principal investigator and each co-investigator
- Letters of support from Project Partners and Collaborators

MICA form and Heads of Terms (if applicable). These attachments apply to applications with an industrial project partner. Please read the MRC guidance to understand if this applies to your proposal.

All proposals must be completed and submitted through the Je-S system by 25 February 2021, 16:00.

All applications need to be submitted through the lead research organisation (RO) which in turn must be Je-S registered. All applicants should consult the team responsible for proposal submissions at their RO to confirm how much time they will need to process the application and complete the submission process. Please leave enough time to ensure that all co-investigators are fully registered on the system, this process from start to finish can take up to a month.

Any public or patient collaborators should be included as project partners.

Should applicants require assistance with any Je-S related matter, please contact the Je-S Helpdesk:

Email: JeSHelp@rcuk.ac.uk
The Je-S Helpdesk is staffed Monday to Friday 8.30am – 5pm (excluding bank holidays and other holidays).

If you have a query about the scientific aspects of your proposal, please contact mentalhealth@mrc.ukri.org.

Creating your Je-S application

All investigators (principal Investigator and co-investigators) are required to have a verified Je-S account type. New Je-S users should select 'Create account – Terms and conditions' to commence the create account process and gain access to the Je-S system.

Please follow the steps below.

1. Login to Je-S, select ‘Documents’ from your account ‘Home’ page and then select ‘Add New Document’.
2. Select MRC as the Council.
5. Select Create Document.

You must provide an intention to submit form.

How we will assess your application

All eligible proposals that are in scope of the call will be reviewed and assessed by a specially convened independent, multidisciplinary expert panel against the criteria below.

The panel will include representatives from a range of fields including lived experience representation (and will be a joint panel with the current call for a Pain Data Platform). Shortlisted applicants will receive feedback and be invited to attend a virtual interview with the panel mid/late-March 2021. Interview dates will be updated on this webpage when confirmed. Decisions will be confirmed shortly after.

Applicants invited to interview will be required to give a presentation (using Microsoft PowerPoint and no more than 20 minutes). Up to five people representing the application can attend the interview, ensuring appropriate coverage across multiple partners.

After the interview there will be 20 minutes of questions, which will be based on the application, the panel feedback from the shortlisting stage and the presentation.

The criteria by which hub applications will be assessed are summarised below.

Scope and vision
- Clarity of vision, including clearly specified goals and expected outputs that align with the scope of the call and will accelerate the use of health data for research and innovation
- Clearly positioned in the wider landscape and providing additional unique capability. Builds on relevant outputs from the MRC Mental Health Data Pathfinders initiative
- Evidence that the proposed hub, the data it plans to gather and the resources it will provide are guided by the needs of users and stakeholders, including people with lived experience of mental health problems and the public
- Evidence that the proposed hub will gather data that aim to improve our ability to prevent, diagnose, manage or treat mental health problems more effectively and allow improved access to well-phenotyped human populations.

Feasibility and quality

- Importance of the unmet needs to be addressed and how these will be continually assessed to shape the hubs strategy
- Appropriateness and feasibility of the proposed approach
- Evidence that plans for curating data will improve the quality of existing data for research and innovation
- Evidence of access to the distinct data to be made discoverable through the HDR UK Gateway to complement existing national datasets and investments

Impact and engagement

- Coherent plans for making hub data and services nationally available to users for research and innovation taking place across academia, industry, the NHS and charities.
- Evidence that the applicants provide an existing environment of cross-sector collaboration, with strong relationships with multiple key stakeholder groups, including industry, and academic consortium members to support research and innovation.
- Quality of the plans for meaningful patient and public involvement throughout the award, including plans to allow access to data.
- Potential for clinical, economic and societal impact that would otherwise not be possible without the establishment of a Data Research Hub.

Leadership, management and governance

- Convincing and coherent leadership, management and governance plans. Evidence of the team’s research and clinical leadership, effective integration of expertise and skills, experience of effective service delivery and a track record of the use of health data for research, innovation and public benefit.
- Quality and feasibility of plans to involve key stakeholders, people with lived experience of mental health problems and members of the public in the governance of the hub.
- Demonstration that the context for hub delivery, including the environment, will be suitable.
- Quality of the approach to management, including identification and evaluation of risks with appropriate mitigations in place.
- Appropriate identification and management of ethical issues.
- Clear evidence of hub sustainability planning.
- Justification of resources requested and value for money.
- Clear confirmation that the Hub will become a member of the UK Health Data Research Alliance, adhere to the Principles for Participation, and adhere to all of the existing terms of access for the data.

Contact details

Email to: spfpain@mrc.ukri.org

Additional info

Supporting documents

- Mental Health Data Research Hub – Survey results (PDF, 297KB)
- Mental Health Pathfinder Awards (PDF, 238KB)
- Intention to submit form (DOC, 51KB)

Background

Mental health problems have a huge impact on the UK’s health, wealth and wellbeing. An estimated one in six of us are affected by mental illness each year in the UK and it costs the economy £70-100 billion annually as a consequence of lost productivity, time off work, social benefits and health care.

Mental health and illness stem from a multidimensional interplay of biological, psychological, social and environmental factors which influence risk and resilience to illness and response to treatment.

The UK has several rich and unique data assets – including well-phenotyped population and patient cohorts, NHS health records and routinely collected administrative data. Integrating biological, clinical, epidemiological, lifestyle-related, social, educational, environmental and other data sources (e.g. apps, wearables) offers the potential to accelerate the development of new treatments and approaches for:

- mental health problems
- facilitate biomarker and target discovery
- deliver insights into the aetiology of mental ill-health
- increase our understanding of the complex interactions between physical and mental health
- inform more effective and targeted early intervention and prevention strategies for mental illness.

The development of a coordinated and integrated informatics resource for mental health research was identified as a key priority within the 2017 MRC Strategy for Lifelong Mental Health (PDF, 761KB). In 2018 the MRC funded nine leading
Universities from across the UK to develop methods, systems, infrastructure and insight that would help researchers to harness the power of data for mental health research and inform the establishment of an integrated resource. Funding for these Data Pathfinder awards, which totalled £10M, was secured as part of the government’s National Productivity Investment Fund (NPIF). As the Data Pathfinder initiative comes to completion, we are looking to build on the learnings that have emerged and enter the next phase of development.

Health Data Research UK (HDR UK) was established in 2017 and is the national institute for health data science. It aims to unite the UK’s health data to enable discoveries that improve people’s lives. This call is for funding to establish a mental health data research hub in partnership with HDR UK, providing complementary activities to the existing portfolio of Health Data Research hubs.

Embedding the mental health data research hub within the established infrastructure of HDR UK provides a number of benefits, not least the access to a range of relevant expertise and the participation in development of standardised processes to improve safe access to health data and data linkages. The hub will adopt the HDR UK brand, offering a trustworthy approach for the public that is recognised by industry and at a national level in policy development. Partnership with other hubs in the network will also be facilitated, providing opportunities to share best practice and deliver collaborative projects.

**About the UK Health Data Research Alliance & Innovation Gateway**

The UK Health Data Research Alliance was established in February 2019.

The purpose of the Alliance is to bring together and facilitate partnership working across NHS organisations and other health data custodians, leading to an ethical, consistent approach to data provision and public engagement.

The Alliance coordinates the identification and adoption of standardised tools, techniques, conventions and technologies for the use of healthcare data for research and innovation in a trustworthy way.

The members agree, with public participation, best practice and standards for governance and privacy. The Alliance is working closely with NHSX, NHS Digital and NHS bodies in the devolved nations to support alignment of policy for health data research.

The Data custodian organisations that contribute to the Mental Health Data Hub will be required to become members of the Alliance, adhering to Alliance principles of participation. In this way, membership of the Alliance will continue to grow, and the new data assets produced by the Hub will be discoverable and accessible through the common UK Health Data Research Innovation Gateway (the ‘Gateway’).

The UK Health Data Research Innovation Gateway provides a common access point for industry, academia and NHS for discovering, accessing, linking and analysing data for research and innovation. This includes national aggregated data
(from existing Alliance members) and new curated data provided by Hubs and other members of the Alliance.

The Gateway supports interoperability, common standards and secure data provision across the Hubs. The Gateway contains no personal identifiable information (PII). All PII is retained by the Data custodians to ensure General Data Protection Regulation compliance.

The Gateway is underpinned by a consistent governance framework. It links with Safe Havens (also known as Trusted Research Environments) which provide secure access to de-identified data for further analysis of sensitive data within the NHS. It provides opportunities for research and innovation, in a safe and ethical manner, that protects privacy and creates a range of possibilities for linking this data with others to develop even greater insight.

The Mental Health Data Hub will be funded directly through MRC, however it is expected to align with the overall vision of Health Data Research UK and to become part of its wider network. This involves aligning with the Principles of Participation (PDF, 258KB) and contributing to the Alliance and the Gateway. This approach builds on the Digital Innovation Hub scheme funded by MRC through the Industrial Strategy Challenge Fund.

The newly established Mental Health Data Hub will be expected to work collaboratively with the other Health Data Research Hubs in a single UK-wide network and with other components of the relevant national health data landscape.

---

**Timeline**

- **December 2020**
  - Opening date

- **29 January 2021 16:00**
  - Mandatory intention to submit deadline

- **25 February 2021 16:00**
  - Full proposal deadline

- **Mid-March 2021**
  - Shortlisting panel

- **Mid-March 2021**
  - Invitations to interview
Late March 2021
Interview panel

April 2021
Decisions communicated

Related content
Introductory webinar

NOTE  This is the first phase of our new website – let us know if you have feedback or would like to help us test new developments.

© 2020 Copyright UKRI  Cookie policy  Privacy notice  Terms of use