NHS England

Research demand signalling

National Mental Health Programme

Version 1.0, September 2022

Contents

Foreword

Mental ill-health is one of the most important health problems of our time, with major life and economic consequences. People with serious mental ill-health have a reduced life-expectancy, by 15–20 years: men with schizophrenia die at an average age of 60 and women at an average age of 65. Mental health problems cost UK economy at least £117.9 billion per year (5% of UK GDP in 2019)[1] (DM 2022). This includes indirect costs of lost employment, as well as direct costs relating to health and care provision and reduced quality of life. Then there are the families and carers who are also impacted.

The NHS Long Term Plan has laid out an ambitious transformation plan to improve mental healthcare provision across England, with the largest investment into community mental health in the history of the NHS. The Community Mental Health Framework is supported by an extra £1.3 billion per year, inclusive of mental health crisis services based in the community. In 2020 Lord Simon Stevens, then Chief Executive of NHS England, introduced the Mental Health Investment Standard, meaning that total funding for mental health would increase more than that for physical health in each of the next five years. To help achieve the transformation plan for mental healthcare, targeted research and innovation are needed.

The National Mental Health Programme is broad ranging and there are many care pathways in mental health for children and in adults. In comparison to other NHS England programmes such as Stroke or Cancer, it has been challenging to develop a succinct list of the research priorities for all the mental health policy areas (demand signalling). The list we give in this report is the joint response from service users, mental health charities, clinicians, researchers and policy developers; the overarching research needs to underpin implementation of the Mental Health Long Term Plan spanning the decade from 2019.

---

[1] David McDaid and A-La Park (2022) *The economic case for investing in the prevention of mental health conditions in the UK* https://www.mentalhealth.org.uk/sites/default/files/MHF_Investing_In_Prevention_FULLReport_FINAL.pdf

NHS England with our Arms-Length Body organisations will strive to work together to stimulate research activity in these areas for the benefit of the mental health community and the people who use the services we provide.

Professor Tim Kendall
National Clinical Director for Mental Health
NHS England

Alison Austin
Deputy Director of Research
NHS England

Summary

The NHS Long Term Plan sets the priorities and ambitions of the NHS until the end of the decade, with the detailed ambitions for mental health to be delivered by 2023/24 set out in the NHS Mental Health Implementation Plan 2019/20 – 2023/24. In some areas existing research evidence and clinical guidelines provide frameworks on which policy can be based, but in others, more research is required to inform policy decisions.

The NHS England Demand Signalling team developed the research demand signalling process to identify, prioritise and articulate the research questions that NHS services need answers to for them to deliver against the ambitions in the NHS Long Term Plan. The team brought together clinicians, academics, policy experts and people with lived experience from the mental health community to identify the high-priority areas for research. These are:

- **Challenges around collecting, using and implementing outcome data.**

- **Pervasive inequalities across the system:** how do we advance equality and reduce inequalities; how do we ensure equity of access to services and equitable care outcomes.

- **Workforce:** capabilities of the current workforce to meet future demand; understanding the most efficient use of current skills; translating needs into competencies and competencies into workforce monitoring; understanding the people who choose to be in the medical workforce and structuring curricula around this; learning from non-health areas (research in education).

- **Children and young people:** interventions needed at prevention stage and early identification.

- Effectiveness, equity and efficiency of **technology-enabled interventions** in mental health in the context of the cultures and practices of the 'internet age'; emerging changes to the environment in which children develop and what constitutes normal development in the internet age; the existing cultures and practices of the healthcare workforce who will be expected to support and deliver potential new technology-enabled interventions.
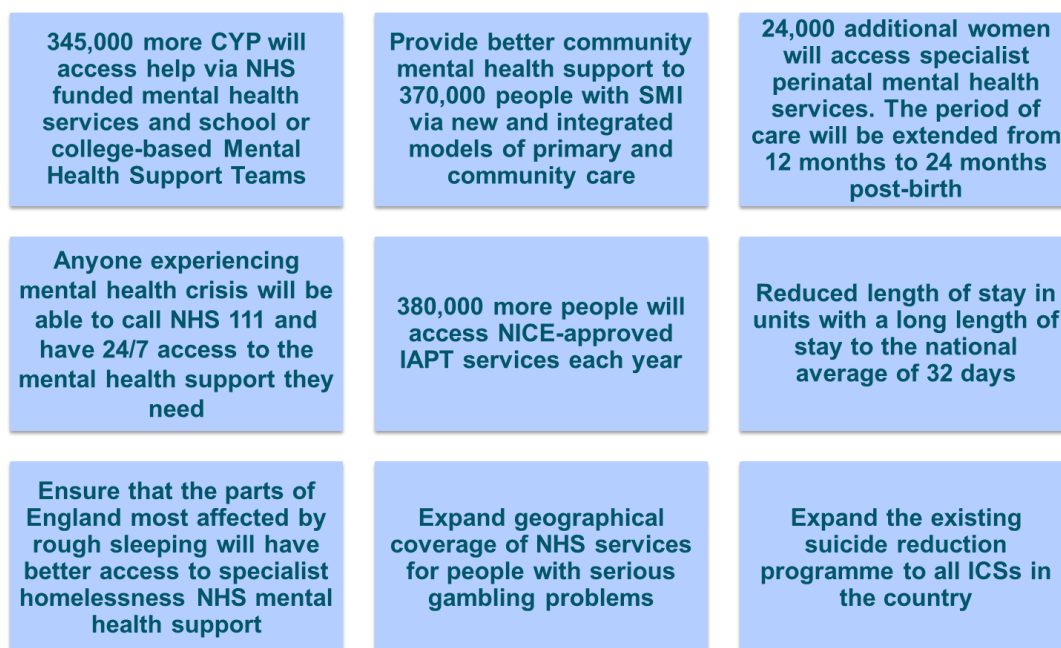
These high-level priority areas were chosen because they are overarching across all mental health policy areas and will have highest impact on supporting most programmes across mental health.

This report presents the research questions we have identified through our demand signalling process, alongside the key evidence gaps. These will be used to influence research activity, funding calls, and support the delivery of other national strategic priorities, such as the Government's Life Sciences Vision, which plans to invest in expanding research infrastructure for mental health, with the aim of accelerating new products to market that address areas of significant unmet in the service.

NHS Long Term Plan ambitions for mental health services

1.   The NHS Long Term Plan has committed to improving mental healthcare across the entire pathway, with specific mental health commitments detailed in the NHS Mental Health Implementation Plan 2019/20–2023/24. Figure 1 outlines some of the mental health NHS Long Term Plan key ambitions.

2.   By 2023/24, the NHS will provide high-quality, evidence-based mental health services to an extra two million people (see Figure 1). By 2023/24, at least 370,000 adults and older adults with severe mental illness will receive care from integrated primary and community mental health services (including care for people with eating disorders, mental health rehabilitation needs and a 'personality disorder' diagnosis). An additional 345,000 children and young people aged 0–25 will have access to support via NHS-funded mental health services and school- or college-based mental health support teams. Access to Increased Access to Psychological Therapies (IAPT) services will be expanded to a total of 1.9 million adults and older adults. The NHS will continue to expand access to IAPT services for adults and older adults with common mental health problems and focus on those with long-term conditions. Twenty high-need areas will have established new specialist mental health provision for rough sleepers.

Figure 1: Key ambitions for mental health in the NHS Long Term Plan

345,000 more CYP will access help via NHS funded mental health services and school or college-based Mental Health Support Teams	**Provide better community mental health support to 370,000 people with SMI via new and integrated models of primary and community care**	**24,000 additional women will access specialist perinatal mental health services. The period of care will be extended from 12 months to 24 months post-birth**
Anyone experiencing mental health crisis will be able to call NHS 111 and have 24/7 access to the mental health support they need	**380,000 more people will access NICE-approved IAPT services each year**	**Reduced length of stay in units with a long length of stay to the national average of 32 days**
Ensure that the parts of England most affected by rough sleeping will have better access to specialist homelessness NHS mental health support	**Expand geographical coverage of NHS services for people with serious gambling problems**	**Expand the existing suicide reduction programme to all ICSs in the country**

3. Since the publication of the NHS Long Term Plan, the NHS England Mental Health Taskforce have developed the Advancing Mental Health Equalities Strategy, which outlines the core actions required to bridge the gaps for communities fairing worse than others in mental health services.

4. The NHS Long Term Plan made a commitment that funding for mental health services will grow faster than the overall NHS budget, with a ringfenced investment worth at least £2.3 billion a year by 2023/24.

5. The National Mental Health Programme continues to work closely with Health Education England, to support workforce expansion; an estimated 27,000 more staff are required by 2023/ to deliver the NHS Long Term Plan ambitions, in addition to the workforce growth outlined in Stepping forward to 2020/21.

6. While there has been progress since the publication of the NHS Long Term Plan, we recognise there are gaps in understanding best practice for mental healthcare; it is these areas that the research demand signalling process has focused on.

Research demand signalling

7. Numerous methods have been widely adopted for the purposes of priority setting, from the traditional Delphi method through to the more recently developed and increasingly popular CHNRI method. All are systematic in nature and iterative in design, with an aim to build consensus and ownership among the community they serve.The method underpinning the research demand signalling process developed by the NHS England's Demand Signalling team is adapted from the Delphi method. It uses a series of workshops and evidence gathering to iteratively refine areas for research of unmet need (see Annex 1). The Demand Signalling team led the process, working in partnership with the National Clinical Director for Mental Health and the NHS England Mental Health Policy Team.

9. Senior stakeholders from a range of professional backgrounds and those with lived experience of mental ill-health (see Annex 2) identified and prioritised five high-level areas for research, to meet the NHS Long Term Plan objectives.

10. The evidence was then reviewed, followed by further stakeholder engagement (see Annex 2) to develop 14 detailed research questions in areas of unmet need.

11. By following this iterative process and involving a breadth of representatives from across the mental health community, the agreed outputs can be mapped back to the relevant NHS Long Term Plan ambitions.

12. Detailed considerations, captured from stakeholder workshops for each of the priority areas, are also presented.

1. Challenges around collecting, using and implementing outcome data

Table 1: Summary of outputs from the demand signalling process related to 'Challenges around collecting, using and implementing outcome data': detailed research questions alongside the relevant evidence gap and NHS Long Term Plan commitment

NHS Long Term Plan ambition	Detailed research questions (outputs from workshop 2)	Key evidence gaps (findings from the evidence review)
The NHS Long Term Plan makes a commitment towards outcome-focused, data-driven strategic commissioning which demonstrates an understanding of local health inequalities and their impact on service delivery and transformation.	Learning from other services (such as IAPT), how can we ensure that better quality data (completeness, content and transparency) is collected and used to improve the effectiveness of other mental health services?	There is a lack of published data on the outcomes achieved in many mental health services.
		Lack of a consensus statement on the desirability of outcome monitoring.
		Need to understand the best outcome that can be achieved in each sector of mental health.
	What do patients/service users/survivors and their family and friends/carers define as meaningful outcomes?	There is a paucity of information about patients' attitudes to outcome measurement.
		Need to understand the types of outcome information service users find most helpful and how it should be displayed.

Detailed considerations

- Newly established services, such as IAPT (which primarily deals with common adult mental illnesses such as depression and anxiety), have been able to embed outcome measures into practice with equitable user involvement, and have established the use of outcome measures. There is a lack of use of outcome measures in other areas of mental health, those services caring for people with more complex or more long-standing mental health conditions. This presents implementational issues that need to be considered.

- The experiences of patients using mental health services can depend on their diagnosis, and a key challenge is that any data collected may not accurately reflect the experience of those who are more marginalised, eg patients with personality disorder or addiction.

- There is a need to understand patients' health-related quality of life using patient-reported outcome measures (PROMs) and patients' personal experience of the healthcare received through patient-reported experience measures (PREMs).

- How services choose what to measure and then collect data need to be considered as these may impact on the understanding of how effectively a mental health service is meeting the needs of patients.

- Complex mental health needs will be more challenging to measure. Consideration needs to be given to how data will be captured in different populations such as marginalised groups.

2. Pervasive inequalities across the system

Table 2: Summary of outputs from the demand signalling process related to 'Pervasive inequalities across the system': detailed research questions alongside the relevant evidence gap and NHS Long Term Plan commitment

NHS Long Term Plan ambition	Detailed research questions (outputs from workshop 2)	Key evidence gaps (findings from the evidence review)
All local health systems to set out how they will specifically reduce health inequalities	How to enable people from marginalised groups to access community and primary mental health services at the earliest opportunities?	Marginalised groups tend to access services when at crisis level.
		Early access to community and primary mental health services is associated with good outcomes.
		There is a need to understand the ways that services approach marginalised groups.
	How do we continue to develop and implement culturally competent interventions that can address the needs of a diverse population and consequently reduce health inequalities?	There is a need to understand how to develop culturally competent interventions and whether these types of interventions work.
	How do we develop, and integrate, cultural competence training and generate a more diverse pipeline of mental health professionals?	The workforce needs to reflect the population it serves and there is a need to develop appropriate training that supports the diverse pipeline of professionals.

Detailed considerations

- There are significant evidence gaps around how to address mental health inequalities.

- Inequalities is underpinned by an acute understanding of the protected characteristics in the [Equality Act 2010](). Research has shown that earlier access to services is associated with better outcomes.

- There is a need to explore why marginalised groups tend to access services when at crisis level and understand the most effective way to address this.

- The workforce needs to include staff from multicultural communities and reflect the population it serves, to adequately address pervasive inequalities.

- There is limited evidence whether the needs of marginalised groups are met by services and, subsequently, what service models may benefit most marginalised groups.

3. Workforce

Table 3: Summary of outputs from the demand signalling process related to 'workforce': detailed research questions alongside the relevant evidence gap and NHS Long Term Plan commitment

NHS Long Term Plan ambition	Detailed research questions (outputs from workshop 2)	Key evidence gaps (findings from the evidence review)
Cross-cutting areas addressed across the NHS Long term Plan	What are the most appropriate service delivery models (in terms of staff competences and interventions) to effectively treat mild-to-moderate eating disorders in community settings?	There is a need for a workforce with specialist training in the physical and mental health implications of eating disorders, in particular in community settings.
	What type of post-qualification training programmes are associated with the development and maintenance of cultural and organisational competences in the mental health workforce?	There is a need for training to address ongoing support of the mental health workforce and the development of skills to competence.
	What are the organisational factors associated with the effective implementation of a peer support work programme in mental health services?	Lack of consensus of what effective peer support should look like.

Detailed considerations

- Workforce considerations typically follow-on from the evaluation development of particular interventions. Therefore, there may need to be a stronger emphasis on competencies.

- Many patients, including both adults and children and young people, do not currently meet the threshold for specialist services to treat eating disorders. Those who find it difficult to access these specialist services may benefit from services in community settings. However, the best model to deliver these across adults and children and young people is not understood. More research is needed to understand and agree on what is the best model.

- A culturally competent workforce needs to engage with the community. Current research suggests that organisational changes are as important as changes in individual staff skills. For example, modelling studies could be undertaken to better characterise what the future demand for services may look like and what competencies are needed in the workforce to deliver mental health interventions. This could also include developing structured career pathways for the mental health workforce.

- There is overlap with the mental health inequalities research question, which highlights the importance of a culturally competent workforce to address the mental health needs of the diverse population that services treat.

- The peer support worker programme continues to be developed but where this fits into mental health services needs to be explored. Organisational factors include service development.

4. Children and young people: interventions needed at prevention stage and early identification

Table 4: Summary of outputs from the demand signalling process related to 'children and young people: interventions needed at prevention stage and early identification': detailed research questions alongside the relevant evidence gap and NHS Long Term Plan commitment

NHS Long Term Plan ambition	Detailed research questions (outputs from workshop 2)	Key evidence gaps (findings from the evidence review)
Children and young people's mental health	Can interventions at community level, targeted at particular demographics, reduce inequalities in mental health for children and young people measured against a broad range of outcomes?	Prevention programmes focused at community level and on health inequalities need to capture inequalities; however, interventions available at community level are not well known.
	Developing tailored intervention and integrated models of care, to improve the mental health and wellbeing of children and young people with co-occurring long-term medical conditions and mental health problems	There is a gap in knowledge around the best model of care for children and young people with co-occurring long-term medical conditions and mental health problems.
	Models of intervention to reduce the prevalence of personality disorder diagnoses by developing and evaluating new models of care for emerging	Lack of understanding around the best way to identify those at high risk of personality disorder.

NHS Long Term Plan ambition	Detailed research questions (outputs from workshop 2)	Key evidence gaps (findings from the evidence review)
	emotionally unstable and antisocial personality disorder	

Detailed considerations

- There is a need to understand at what point in the developmental pathway these interventions are most useful, as this is not currently understood.

- Addressing particular demographics, to address inequalities and to prevent the development of mental health disorders, is an important step in the prevention and early identification of children and young people with mental health disorders.

- Tailored interventions need to be developed for those with co-occurring long-term conditions regardless of the casual pathway, as the prevalence of mental health disorders is higher in this population.

- The question of how we best identify those at high risk of personality disorder or missed by the mental health services needs to be addressed.

- There is overlap in research priority areas identified by the UKRI Emerging Minds Network, which further underlines the existing evidence gaps and research needs.

5. Effectiveness, equity and efficiency of technology-enabled interventions in mental health in the context of the cultures and practices of the 'internet age'

Table 5: Summary of outputs from the demand signalling process related to 'effectiveness, equity and efficiency of technology-enabled interventions in mental health in the context of the cultures and practices of the 'internet age': detailed research questions alongside the relevant evidence gap and NHS Long Term Plan commitment

NHS Long Term Plan ambition	Detailed research questions (outputs from workshop 2)	Key evidence gaps (findings from the evidence review)
100% of mental health providers meet required levels of digitisation Local systems offer a range of self-management apps, digital consultations and digitally enabled models of therapy	How can patients benefit more from integrating digital mental health assessments and/or interventions with existing care provision? (This research question has been derived from the James Lind Alliance (JLA) areas.)	Important to integrate digital with existing mental health treatments; however, how this can be maximised is unknown.
	What impacts (positive and negative) will the adoption of digital technology in mental health services have on access to services, capacity,	Lack of evidence on whether incorporating digital technology into mental health services impacts on access to services, capacity, waiting times, attendance and cost-effectiveness.

NHS Long Term Plan ambition	Detailed research questions (outputs from workshop 2)	Key evidence gaps (findings from the evidence review)
	waiting times, preferred appointment times, attendance and cost-effectiveness?	
	How can digital health interventions increase reach, access and outcomes for marginalised groups (eg Black and ethnic minorities)?	There is a lack of knowledge about whether digital interventions increase reach and outcomes for marginalised groups, as well as whether increased access leads to patient benefit.

Detailed considerations

- The priority research questions identified from the workshop closely align with the top 10 research priorities identified in the digital technology for mental health James Lind Alliance Priority Setting Partnership (JLA PSP).

- A significant barrier to the widespread use of digitally assisted therapies in mental health is the lack of a single digital platform available to therapists and clinicians.

- Digital interventions already exist, such as virtual reality and augmented reality; however, there is limited understanding of the key barriers to blending these with other treatment options. The implementation of digital interventions needs to consider how not to further exacerbate digital inequalities and isolate patients, such as older age patients, those living in rural areas, those with specific access needs and those who are economically deprived.

Overarching themes

13.   The key overarching themes that emerged for the five priority areas were:

- The importance of addressing inequalities and the mental health workforce; highlighted as a cross-cutting theme across all the identified priority areas. In view of the continuing increase in number of people with mental disorders, the potential impact of peer support worker involvement, and particularly their specific role, on all mental health services needs to be considered.

- The importance for adequately addressing research gaps to include lived experience and service user input.

- Digital therapies need to complement existing service delivery if they are to be used most effectively.

- Several implementation challenges need to be considered across mental health services. Knowledge mobilisation is an important component.

Further ranking of research questions

14.   Participants ranked the importance of the 14 research questions identified in workshop 2. The top one for each of the five mental health priority areas is shown in Table 6.

Table 6: Top five research questions across the five mental health priority areas from the demand signalling process

Mental health priority area	Top five research questions
Priority area 1: Challenges around collecting, using and implementing outcome data	Learning from other services (such as IAPT), how can we ensure that better quality data (completeness, content and transparency) is collected and used to improve the effectiveness of other mental health services?

Mental health priority area	Top five research questions
Priority area 2: Pervasive inequalities across the system	How to enable people from marginalised groups to access community and primary mental health services at the earliest opportunities?
Priority area 3: Workforce	What are the organisational factors associated with the effective implementation of a peer support work programme in mental health services?
Priority area 4: Children and young people: interventions needed at prevention stage and early identification	Can interventions at community level targeted at particular demographics reduce inequalities in mental health for CYP measured against a broad range of outcomes?
Priority area 5: Effectiveness, equity and efficiency of technology-enabled interventions in mental health in the context of the cultures and practices of the 'internet age'	How can digital health interventions increase reach, access, and outcomes for marginalised groups (eg Black and ethnic minorities)?

Next steps

15. This document has outlined the systematic approach to identification and prioritisation of research questions and articulates the outputs for mental health services in England. The next stage is to undertake a signalling campaign, targeting and tailoring the signals according to audience; this work is being led by NHS England's Demand Signalling team.

16. There are three distinct communities for whom this work is relevant or of interest, namely those with a lived experience of mental health disorders, those who are conducting research into mental health and those who fund studies related to mental health.

17. Working with the Mental Health Policy Team, the Demand Signalling team will engage with these communities to raise awareness of this report. This should include work to ensure these priority areas are considered in the delivery of the Life Sciences Vision Mental Health Mission.

18. Signalling to researchers and innovators will be targeted through special interest groups, such as the [NIHR CRN Mental Health Specialty Group](#) and online portals, eg the Accelerated Access Collaborative (AAC) Innovation Service.

19. With regard to funders, for areas where relevant research is ongoing, the Demand Signalling team will work with the NIHR to establish a route for getting the latest evidence to policymakers in a timely manner. Better use of existing and emerging evidence is often called for.

20. For funding calls that are already in development but could potentially be aligned, the Demand Signalling team will encourage funders to tailor their calls accordingly, be that as a highlight note as part of the call, or as reference material to better inform decision-making at selection and funding committees.

21. For priority areas that are underserved, and evidence is lacking, the Demand Signalling team will work closely with funders to design bespoke calls or programmes to address them.

22. Progress and impact will be tracked and monitored, with the aim of establishing a bi-directional feedback loop between the NHS England and Improvement National Mental Health Programme, the funders and the research community.

Annex 1: Methodology

Research generates new knowledge and guides best practice. Innovation explores different ways of doing things to improve the quality of care provided to patients.

Demand signalling is the process of characterising the research questions and making researchers and funders aware of them. A separate process will be developed to understand and signal the innovation challenges that link to the NHS Long Term Plan. The final stage of demand signalling is the use of commercial and policy levers to realise the benefits of research and innovation for the NHS (Figure A1.1).

Figure A1.1: Aims of demand signalling
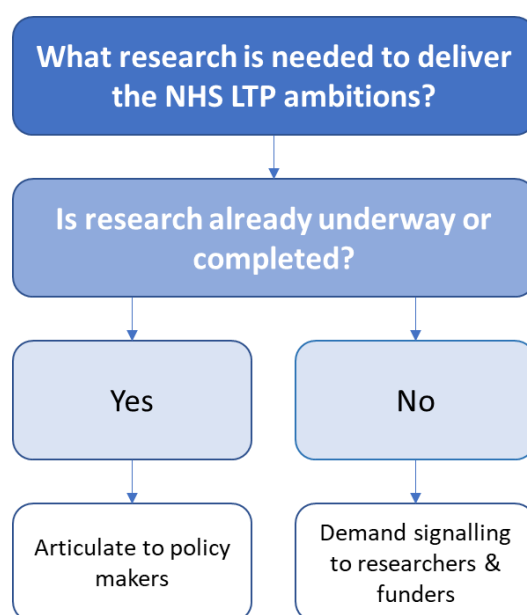
The research demand signalling process developed by the NHS England Demand Signalling team involves stakeholders from across the heath and care system including: the national clinical director, policy leads, clinical leads, allied health professionals, analysts, leading academics, charities and people with lived experience (Figure A1.2).

Figure A1.2: Overview of the systematic and iterative approach taken for demand signalling

Long Term Plan

National Priority Programmes derived from the Long Term Plan

Workshop 1

Facilitated by NHS England and NHS Improvement: Policy experts, clinicians, academics, patients, people with lived experience, charity and advocacy groups (Identification Stage Stakeholders) meet to discuss and agree Research and Innovation priority areas

Priority areas outlined

Horizon Scan NIHRIO

National Institute for Health Research Innovation Observatory conduct a horizon scan to see what current research and innovations align with these priority areas

Population Level Analysis

Literature review on identified gaps to determine the current state of evidence and what is outstanding

Analysis of evidence and identification of gaps related to the priority areas

PICO development

Patient / Population, Intervention, Comparison, Outcome forms: Workshop invitees asked to submit PICOs.

Workshop 2

Facilitated by NHS England and NHS Improvement: Led by priority area specialist. Identification Stage Stakeholders meet to discuss and refine Research Questions and Innovation Challenges from PICO submissions

Refined research questions and innovation challenges agreed

Check against NIHR portfolio

Phase 1: Identification

Check the National Institute of Health Research Portfolio to ensure that these are unique questions which have not already received funding

National Research & Innovation needs signalled

Phase 2: Signalling

Research questions and innovation challenges are signalled to academics, funders e.g. NIHR, innovators, charity and advocacy groups and others as appropriate

Impact analysis and review

Workshop 1

Through targeted engagement with senior strategic stakeholders from across a range of organisations, the objective of workshop 1 was to determine and agree the high-level priority areas where more research is needed to deliver against the ambitions for mental health services in England, as is outlined in the NHS Long Term Plan (Figure 1).

Facilitated by the Demand Signalling team, 28 senior stakeholders from a range of professional backgrounds and those with lived experience of mental ill-health (see Figure A2.1) identified 14 high-level areas for research needed to meet NHS Long Term Plan objectives, and agreed the five highest priority among these.

Following workshop 1, an evidence review was undertaken to help detail areas of unmet need associated with each of the high-level priority areas. The evidence gaps therein were cross-referenced and mapped against the outputs from workshop 1.

Clinical and policy leads from the National Mental Health Programme worked with the authors of this evidence review to ensure that recent developments within policy and the mental health pathway were included and considered as part of the gap analysis.

Additionally, the National Institute for Health Research Innovation Observatory (NIHR IO) carried out a horizon scan to identify any innovations in the pipeline that may meet the needs identified in workshop 1. The results of this scan will also be useful to the National Mental Health Programme, as it considers wider mental health policy.

Workshop 2

In advance of workshop 2, delegates were provided with evidence summaries related to each of the high-level priority areas. Delegates were then invited to submit detailed patient/population, intervention, comparison, outcomes (PICO)-style research questions related to the evidence gaps therein.

Research questions were screened for duplicates, filtered against their relevance to the high-level priority areas and prioritised against key cross-cutting themes in NHS Long Term Plan and the Academic Health Science Network (AHSN) National Survey of Local Innovation and Research Needs of the NHS (see Annex 3).

In instances where the research questions were a comment about service delivery, the relevant teams were notified.

In total, 72 research questions were received, 44 or which were from people with lived experience of mental ill-health.

The objective of workshop 2 was to bring clinicians, academics and those with lived experience together to discuss the evidence gaps highlighted by the evidence review, build consensus and further refine the short-list of PICOs into researchable questions.

Workshop 2 involved over 106 stakeholders from a range of professional backgrounds and over 32 participants with lived experience of mental ill-health (see Annex 2). A total of 14 research questions were identified from workshop 2 and these were ranked by workshop participants questions (see Table 6).
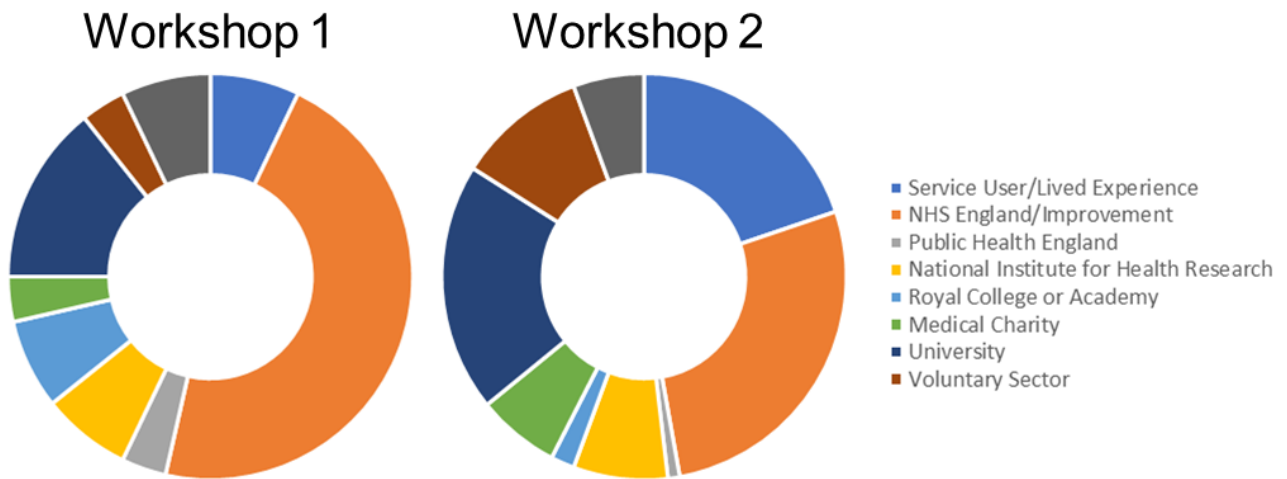
Annex 2: Summary of stakeholder engagement

Workshop 1 involved senior stakeholders representing a wide range of organisations from across the health sector (Figure A2.1), with most participants identifying as either non-clinical leaders or academics (Figure A2.1).
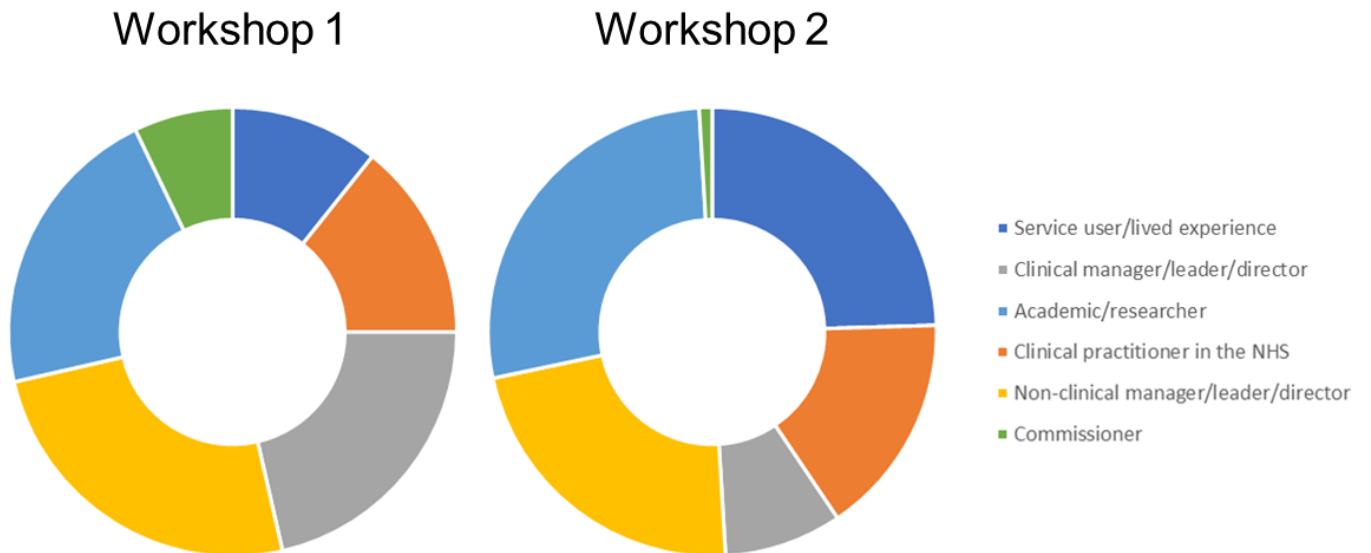
Similarly, workshop 2 involved a range of different people from across the health sector (Figure A2.1). However, in contrast to workshop 1, there was a significant increase in the proportion of participants with a lived experience of mental health disorders (Figure A2.1). This shift was intentional and was implemented to ensure that the final outputs reflected the needs of service users, survivors and their families, while still having relevance to the strategic objectives of NHS England . It is also worth mentioning that workshop 1 was delivered face to face, whereas workshop 2 was held virtually, due to the pandemic, which may partly explain the noticeable difference in participation.

Figure A2.1: Participants who attended workshop 1 (total 28) and workshop 2 (total 106)

By organisation

Workshop 1 | Workshop 2

- Service User/Lived Experience
- NHS England/Improvement
- Public Health England
- National Institute for Health Research
- Royal College or Academy
- Medical Charity
- University
- Voluntary Sector

By job role

Workshop 1 | Workshop 2

- Service user/lived experience
- Clinical manager/leader/director
- Academic/researcher
- Clinical practitioner in the NHS
- Non-clinical manager/leader/director
- Commissioner

Annex 3: Prioritisation criteria for PICOs

In advance of workshop 2, delegates were provided with evidence summaries related to each of the high-level priority areas. Delegates were then invited to submit detailed, PICO-style research questions related to the evidence gaps therein.

After screening for duplicates and grouping broadly similar questions, these were filtered and prioritised internally against a set of predefined criteria.

An initial sift assessed the overall alignment of the proposed questions with the Research Demand Signalling process. Mindful of potential bias, questions were dismissed if they did not relate to a high-level priority area identified in workshop 1, did not address a well-articulated evidence gap or were unlikely to be amenable to research (Table A3.1).

Table A3.1: Criteria used to assess PICO submissions during the initial sift

Criterion	Agree	Neither agree nor disagree	Disagree
The research question aligns with the high-level priority area identified in workshop 1			
There is a well-articulated evidence gap and/or need for new original research			
The question is amenable to research			

The NHS Long Term Plan focuses on well-defined clinical pathways and priority programmes of work where changes are needed to ensure that we have a health service that is fit for the future. This includes clear ambitions for improved mental health services, with specific commitments laid out. However, there are also cross-cutting ambitions that are relevant to all aspects of the NHS Long Term Plan: prevention, patient-centred care and reducing health inequalities.

Given the importance of these overarching themes to the delivery of the NHS Long Term Plan, and the inherent responsibility of all programmes of work to address them, they were chosen as prudent second-layer criteria to prioritise PICOs against (Table A3.2).

Table A3.2: Criteria used to prioritise PICO submissions following the initial sift, as part of a second-line assessment

Criterion	Yes	Somewhat	No
Does the research question address any of the cross-cutting priorities of the NHS Long Term Plan?			
Population health			
Prevention			
Personalised or person-centred care			
Health equality			
Does the research question align with any of the common priorities from the AHSN National Survey of Local Innovation and Research Needs of the NHS?			
Workforce			
Multi-morbidities			
Mental health			
Digital/AI			

In addition to the cross-cutting priorities of the NHS Long Term Plan, it was important to recognise, and build on the hard work of other priority setting exercises, wherever applicable. It is noteworthy that some of the outputs of this research demand signalling overlap with those of the recent JLA PSP on mental health in children and young people and digital technology for mental health, where research should focus.

The other notable priority setting exercise that complements the demand signalling process is the AHSN National Survey of Local Innovation and Research Needs of the

NHS. This survey explores the views of clinicians and managers within the NHS, focusing on the local research needs in each AHSN region. The priorities common to each region included workforce, multi-morbidities, mental health and digital/artificial Intelligence (Table A3.2).