Full Title: New Roles, New Challenges: Understanding boundary work to support the implementation of new roles in mental health Trusts

Short Title: Implementing new roles in mental health Trusts

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This protocol does not have regard to the HRA guidance and order of content

Version Control Record

Amend-ment number	Protocol version	Date issued	Author of changes	Details of changes made
1	1.1	2/8/23	JL	Data Management Plan added to end of document and to list of contents
2	1.2	18/1/24	JL	Addition of carers throughout as potential beneficiaries and participants. Some minor updates to timing of activities. Clarification and additional detail of processes for data collection in WP3: observations and interviews. Amendment to reflection group numbers Updating of minor details regarding project management processes Addition of Data Management Plan for WP3
3	1.3	14/2/24	JL	Addition of explicit definition of end point for study
4	1.4	16/5/24	DH	Additional detail about the recruitment of service users and carers to participate in interviews. Clarification regarding the inclusion of children and adolescents as service users (cases not interviewees). Clarification of the rationale for and purpose of carer interviews. Further clarity on numbers to be recruited at each site and the variable balance between service users and carers depending on circumstances. Clarification that information collected during observations will not be shared with those who are observed.

Research title
New Roles, New Challenges: Understanding boundary work to support the implementation of new roles in mental health Trusts

Summary of Research

Research question: How can mental health Trusts implement new roles to maximise benefits for staff, service users, carers and organisations?

Background: New roles are being introduced in mental health services to help with the staffing crisis and provide new career pathways for clinicians. However, the introduction of new roles can be disruptive and have unintended consequences for teams where the new role is placed. There is a need to understand the dynamic effects of reorganisation to ensure that new roles and skill-mix change can benefit service users and carers and both the new and existing workforce and avoid negative impacts.

Aims and objectives: To understand how mental health services can implement new roles to maximise benefits for staff, service users and carers, and organisations.

Objectives:

1. Identify new roles introduced to secondary mental health services (WP1)
2. Generate national overview of new roles implemented, using adapted typology of skill-mix change (WP2)
3. Identify the cultural, service, and professional contexts in which roles are implemented and how these affect the wider functioning of the service (WP2)
4. Identify and describe the boundary work that occurs in practice as a result of the introduction of new roles into the mental healthcare workforce (WP3)
5. Examine the effects of the new roles on (i) service users and carers, (ii) professionals in new roles and (iii) professionals in existing roles bordering the new roles (WP3)
6. Use the findings to produce both generic and role-/context-specific guidance on how to effectively implement new professional roles in NHS mental healthcare services (WP4)

Methods: WP1 is a mapping exercise to discover what new roles have been implemented in mental health services across the country. This involves conducting telephone interviews with heads of HR or workforce leads in all 56 English mental health Trusts. WP2 is a stakeholder engagement exercise with 20 key informants including policymaker, Trust, clinical and service user input to test/refine a typology of skill-mix change in mental health services and generate logic models. WP3 includes 8 case studies across 4 Trusts, involving non-participant observation of teams where the new roles are implemented. Case studies also involve semi-structured interviews of clinicians, managers and service users or carers affected by the change. WP4 integrates findings and involves cross-case analysis as well as dissemination activities.

Timelines for delivery: The project will last 26 months. A 3-month Set-up phase will lead into WP1 which will overlap with WP2. WP1 and 2 will be completed before the start of the WP3 case studies in month 11. The 4 case studies in WP3 take place over 12 months with the final 3 months (WP4)

dedicated to completing the analysis, dissemination, and impact activities. PPI will be embedded throughout.

Anticipated impact and dissemination: New knowledge generated by this study will facilitate skill-mix change in mental health and in other healthcare settings, to the benefit of service users, carers and both new and existing staff. The study findings will refine models of skill-mix change and generate rich evidence on forms of boundary work. Findings will be disseminated through varied activities to share findings with public/patients, plus focused briefing documents and interactive workshops to explain skill-mix change in practice and offer structured guidance to multiple stakeholders leading or affected by workforce transformation in mental health services and across the NHS.

Background and Rationale

The challenge of recruiting and retaining an NHS workforce capable of managing demand for care is widely recognised (1–3), and many argue this presents a greater threat to health services in England than funding challenges (4). This workforce crisis is most acute in mental health services, which suffers from a higher turnover of staff and more vacant positions than the rest of the NHS (5,6). Demand for mental health services has risen significantly in recent years (7), exacerbated by the mental health impact of the COVID-19 pandemic (8) and particularly in areas of economic inequality (9). Service pressures extend beyond mental health services, as people with mental health problems are over-represented among users of primary care and urgent and emergency services (10).

In response, new investment has been committed for mental health services in England (11,12). The success of this investment depends on ensuring there are sufficient qualified staff to deliver safe and effective care (12,13). However limited progress has been made to date in recruiting and retaining mental health staff (1,14), and the resulting staffing gap is severely undermining the delivery of care, as well as increasing staff stress and turnover (7,14). Facing similar workforce difficulties, primary care has sought to redesign delivery models (15) supported by the introduction of new roles and changing skill-mix (16). A similar approach has been initiated in mental health services in England where Health Education England (HEE) is expanding the workforce through new roles, including direct funding for some posts and supporting innovative delivery models (12,13), referred to as New Ways of Working (NWW). While the dominant need is clearly to fill workforce gaps, these new roles also offer opportunities for more integrated working (12), aligned with concurrent developments in Primary Care Networks (17) and Integrated Care Systems (18) in England.

In mental health services, new (or expanded) roles have been prioritised in most professional groups. These include Nursing Associates, Clinical Associate Psychologists, Peer Support Workers, Advanced Clinical Practitioners and Physician Associates (12). This list is not exhaustive: new roles are continually being developed, for example, Mental Health and Wellbeing Practitioners, Family Ambassadors and Youth Intensive Psychological Practitioners, which are all planned but not yet implemented. These roles may not be entirely "new"; they may be new to the NHS but used in other healthcare systems, present elsewhere in the NHS but new to mental health services, new to a particular Trust or region, or new in terms of the novel ways in which they are deployed within a particular team/service.

As has been observed in other parts of the healthcare system, introducing new roles and changing skill-mix inevitably disrupts existing systems (15,19–21). This generates organisational challenges as the change of skill-mix requires redesign of patient pathways and workload allocation models (22,23), and the renegotiation of organisational and professional boundaries (19,24), referred to as 'boundary work' or 'boundary organising' (25). Understanding and managing skill-mix changes and the resultant boundary work requires attention to context as well as skilled leadership and management (24,26,27) especially as these changes typically happen in a context of severe pressure and under-staffing (21). There is currently little evidence to help clinicians, leaders and managers in mental health services ensure that skill-mix change and boundary work achieve

positive ends. Previous research largely considers new and reconfigured roles individually (28,29), and while some studies consider the perceptions of other professionals (30), there are calls for research on the broader effects of introducing multiple new roles on teams or whole systems (24,26).

The proposed research aims to address this evidence gap by analysing the system effects of introducing new roles and redesigning delivery models in mental health services. We propose a whole-system approach in which the impact of individual new roles must be understood by examining skill-mix and boundary changes generated by their introduction. In doing so, we will identify ways in which disruptive effects can be managed to ensure that benefits are maximised for service users and staff alike.

There has been little research examining the wider effects of introducing new roles on the workings of whole systems, including impacts on relationships within teams and between staff and service users and/or carers (15,31). Previous reviews note the lack of good quality research on changing skill-mix in the healthcare workforce (24,26). However, the literature on service transformation shows that there can be significant benefits to workforce innovation and positive disruption (32–34). The potential benefits of new roles are also well established (15,35–38). The prevalent policy driver is typically the need to increase workforce supply but systematic reviews suggest other benefits, including greater collaboration between staff, reductions in fragmentation and greater continuity of care (24,26). Other reviews identify benefits such as introducing new treatments of proven efficacy; removing unhelpful demarcations between roles; improved training and development; more appropriate pay and rewards, and better strategic and human resource planning (16,34–36).

Introducing new roles implies different kinds of skill-mix change, including role enhancement (roles given greater depth and take on more complex or important activities), substitution (one role taking on some of the work of another), delegation (tasks assigned to more junior staff) and innovation (entirely new tasks taken on by a role) (16,20,35) (see Table 1).

Table 1: Categorization of skill-mix initiatives

MODE	ACTION
Changing Roles	
Enhancement	Increasing the depth of a job by extending the role or skills of a particular group of workers
Substitution	Expanding the breadth of a job – in particular, by working across professional divides or by exchanging one type of worker for another
Delegation	Moving a task up or down a traditional unidisciplinary ladder
Innovation	Creating new jobs by introducing a new type of worker
Changing the interface between services	
Transfer	Moving the provision of a service from one health care setting to another – for example, by substituting community care for hospital care
Relocation	Shifting the venue from which a service is provided from one health care setting to another, without changing the people who provide it (such as running a hospital clinic in a primary care facility)

Liaison	Using specialists in one health care sector to educate and support staff working in another sector (e.g. hospital outreach facilitators in primary care).

Source: Sibbald, Shen & McBride (16)

Each of these changes has different effects, and the collective impact of introducing multiple new roles, and adjusting existing roles to accommodate these changes, results in complex and unpredictable effects on service delivery and morale (15,19,20). This complexity presents challenges for management and clinical leadership, professional regulation, workload design and allocation, and inter-professional communication and collaboration (22–24). Narrow evaluations of the contribution of individual roles in isolation have overlooked the system effects of new roles on all staff, and the broader disruptive impact of changing professional boundaries on patients and the healthcare system as a whole (28,29).

Studies of skill-mix change in other health and social care settings point to the disruptive effects on other professionals and the system as a whole (15,19,20). Even where there is high demand and a shortfall of qualified staff, introducing new roles and changing skill-mix can lead to jurisdictional conflict between professionals, particularly where there is role ambiguity (19,20,39). Greater system complexity generates new managerial work (to ensure appropriate workload allocation, for example) and demands more sophisticated management and leadership skills (22,40,41). This increased complexity also can make it more difficult for staff and service users to navigate the system, generating additional work and requiring staff to have in-depth knowledge of roles other than their own (32–34). Frontline staff and service users may also feel threatened, or may not understand the rationale for change, which can lead to anxiety, demotivation, resistance, and staff leaving or retiring early (31), further exacerbating acute workforce challenges. When poorly managed, this disruption and related role change can destabilise established teams, cause problems with continuity and effectiveness of care, and undermine patient and service user experience (15,19,24,26).

Our own ongoing research (the Retention of Mental Health Staff (RoMHS study) https://sites.google.com/sheffield.ac.uk/romhs/home) shows the importance of role clarity and communication when implementing change in mental health services. As part of the RoMHS study, we interviewed over 200 staff from six mental health Trusts. We found that when staff did not know why change was happening, or if they felt it was solely a money-saving exercise, they resisted change, causing tension in teams and leading some staff to consider leaving the organisation. Similarly, when service users did not understand the rationale for change, or had not been informed about this, they had worse experiences of care (42,43). The risk of losing key staff, of undermining team cohesion and impairing service user experience is a particular concern especially when change is implemented because of staffing shortages and concerns about staff and service user satisfaction. If staff do not perceive value in new roles, or see such changes as driven by a need to reduce costs, this may generate tension and undermine team cohesion. Where the scope of new roles and the impact on other staff and service users is uncertain or not communicated, these concerns are often amplified with greater disruption. Understanding the wider effects of skill-mix change thus requires rich, engaged research to understand the influence of context, culture and infrastructure in mental health and other service settings (27).

Disruption arising from the introduction of new roles in healthcare and skill-mix change has been conceptualised as boundary work (44,45), focusing on the boundaries between roles and professions. Boundary work offers a framework for studying (and managing) dynamics within and between professional groups during periods of change. While boundary organising (25) addresses the implications of all kinds of boundaries in social interaction, boundary work has a more specific focus on the actions of individuals to construct, move, enact, challenge, dismantle or traverse boundaries between different spheres of activity, such as professional jurisdictions (46). The focus on 'work' in boundary work draws attention to the individual or collective labour required and the

potential for unhealthy competition and struggle between individuals or groups working together, often triggered when organisational changes threaten to destabilise existing boundaries.

To take one influential formulation, the introduction of new roles represents a kind of "configurational" boundary work where boundaries are deliberately reshaped by managers to reallocate work and encourage better inter-professional working (47). This intervention can engender two other forms of boundary work: competitive (where groups battle over jurisdictions and control to gain advantage and status); and collaborative (where groups work co-operatively at their boundaries to achieve shared goals) (46,47). Other research with particular relevance here examines leadership (in mental health services) as involving opening, closing and contesting boundaries (44), while recent work explores more nuanced instances of boundary work including barricade, facade, taboo and phantom boundary work (48), largely in settings where staff with overlapping expertise interact and collaborate (49).

To date, where the lens of boundary work has been used in healthcare, research has largely concentrated on competitive boundary work, often viewed either as a barrier to implementing role change (44) or as a threat to professional integrity (20), reflecting long-established studies of jurisdictional conflict in studies of the healthcare professions (50,51). Studies of collaborative forms of boundary work, however, represent an opportunity to understand the constructive processes of negotiation and adjustment between staff in different roles and with different knowledge bases and practices (40,52). Detailed research is needed to generate knowledge on how conditions are created for constructive boundary work in healthcare settings at a time when many areas are undergoing radical skill-mix transformation. The introduction of new roles in mental health services (45,46), and the changes to skill-mix which result, offer an invaluable opportunity to better understand how boundary work occurs in mental health services and to identify effective (or indeed ineffective) practices.

New knowledge generated by this study will facilitate skill-mix change in mental health and in other health and social care settings, to the benefit of service users and both new and existing staff. Study findings will update and refine models of skill-mix change and generate rich evidence on the forms of boundary work enacted in the context of new role introduction and skill-mix change. The research will generate targeted guidance for service users, charities, mental health professionals, Trusts, ICSs and national bodies such as HEE and NHSE on effective approaches to implement and adapt to skill-mix change.

Evidence why research is needed now

A recent report from the Health and Social Care Committee (3) and a letter from the Chief Nurse (52) to NHS Trusts highlighted in the most urgent terms the critical challenges facing recruitment and retention of staff in the NHS, and the threat this poses to staff and patient safety. In this context, recruiting to new roles and changing skill-mix offers a valuable response. Introducing new roles can relieve pressure on staff directly and at the same time expand the labour pool of potential staff to deliver a more sustainable workforce. Evidence shows that changing skill-mix has the potential to expand service capacity in the face of labour supply issues (37,41), improve patient satisfaction, offer more rewarding roles for staff and support innovations in how services are provided (23,26,34–36,38).

However, implementing skill-mix change is challenging. The disruptive effects of introducing new roles and changing existing roles are often diminished in the face of urgent pressures to relieve staff and cope with demand. Within mental health trusts, where a large number of new roles of different types are being implemented simultaneously, there is a pressing need to ensure not only that the right roles are implemented, but that their introduction improves and does not worsen the situation for staff and service users. Understanding how staff new and old respond to changes in skill-mix is therefore vital to help policymakers, workforce leads, and both new and existing clinical and non-clinical staff to adapt to the reorganisation of work. As new ICSs and ICBs assume responsibility for addressing regional challenges, workforce issues will be among the highest priorities. Timely

research-led guidance is essential for enabling and supporting skill-mix change in mental health services.

The proposed research matters to staff but equally to service users and carers (31,37,41). Where mental health services lack continuity, service users must repeatedly build new relationships which undermines trust, negatively affecting service experiences and outcomes (33,53). Our stakeholder work has highlighted that in mental health services, continuity of care and role clarity is crucial for service users. Many mental health treatments and interventions depend on therapeutic relationships, trust and clarity of expectation, which are often the most highly valued aspects of care (53,54).

Aims and Objectives

Aim: To understand how NHS mental health services can implement new roles to maximise benefits for staff, service users and carers, and organisations.

Research questions:

1. How and why are new roles introduced into secondary mental health services?
2. What changes in skill-mix result from the introduction of new roles into secondary mental health services?
3. What forms of boundary work between roles are generated in practice by the introduction of new roles and skill-mix change?
4. How does this boundary work facilitate or impede the adjustment of the system to new roles and models of delivery?

Research objectives:

1. Identify new roles introduced to secondary mental health services in England (WP1)
2. Produce an overview of new roles implemented in mental health services, using adapted typology of skill-mix change (WP2)
3. Identify the cultural, service, and professional contexts in which new roles are implemented and the ways in which these affect the wider functioning of services (WP2)
4. Identify and describe the boundary work that occurs in practice as new roles are introduced in the mental healthcare workforce (WP3)
5. Examine the effects of new roles on (i) service users and/or carers, (ii) professionals in new roles and (iii) professionals in existing roles bordering new roles (WP3)
6. Use the findings to produce generic and role-specific and context-specific guidance on how to effectively implement new professional roles in NHS mental healthcare services. (WP4)

Research Plan/Methods

The project will comprise a national scoping exercise (WP1), typology validation and logic model development with stakeholders (WP2), followed by case studies using embedded researchers in 4 NHS Trusts providing mental health services (WP3), and a final round of integrative analysis and validation of findings (WP4).

Set-up (months 1-6)

Researchers will conduct an online search of mental health Trust websites across England to identify Directors of Human Resources, People Management or equivalent in each Trust and confirm their identity via telephone or email. We will also use CRN contacts in each region to help where it is difficult to identify the appropriate contact in an organisation.

We will apply for ethical approval for WP1 interviews, HRA approval to conduct interviews in each Trust and secure research passports for researchers. In months 4-6 we will secure ethical and HRA approval for the 4 case studies in WP3.

Work Package 1: National scoping of new roles in mental health

(Led by Dr Wood, months 4-9)

We will conduct semi-structured telephone or online interviews with workforce/OD/HR leads in all mental health trusts across England (currently 56 organisations). Trusts will be identified from the most recent CQC list to ensure we have full coverage, as reconfiguration of mental health services is common.

We will approach identified Trust workforce leads by email to request an interview with telephone follow-up, before sharing information sheets and consent forms. Workforce leads in all mental health trusts in England will be approached, rather than a sample as data on the implementation or location of new roles is not well recorded so there is no clear framework from which to create a sampling strategy. We have allowed 6 months for WP1. If unable to arrange interviews, we will circulate an online questionnaire to Trusts where no workforce leads are available for interview, to capture basic information on workforce change.

Through the interviews, we will identify which new roles have been introduced in each Trust and in which teams/services. For the purposes of this study, recognising that 'new roles' is a widely used but elastic term, we will define "new roles" as roles which have been introduced to NHS mental health services in the last 5 years. We will elicit basic information on the rationale for introducing specific new roles, the intended impact of introducing new roles, and any available information on approaches taken to embedding and supporting these roles and the effectiveness of these approaches. The interview schedule will therefore include questions about the number and types of new roles each Trust have implemented, including Agenda for Change banding and what relevant training the Trust is hosting. We will also ask about where these new roles are sited (e.g. community, inpatient, specialist services), what the strategic or policy aim was for the new role and how implementation decisions were made. We will not be asking for any personally identifiable information on individual staff members, only for aggregate descriptions of roles and their implementation. In interviews we will also identify people interested in being key informants in WP2 and will seek consent from all interviewees to keep them informed of project outputs.

Interviews will be recorded but not transcribed, with recordings used only to confirm accuracy of notes. We will enter information collected on a standardised template, so that it can be collated and mapped to present a picture of new roles as implemented across England. This will enable the identification of variations or patterns of activity across trusts/regions. We will also compare notes on rationale for introduction of the various roles, intended impact, and approaches taken to embed/support roles, again looking for consistencies and patterns by region, Trust or role.

WP1 will be led by EWo, supported by DH, the clerical assistant (CA) and research associates (RAs), and assisted by colleagues in regional CRNs, and will address Research Question 1 and Objective 1.

Work Package 2: Validate skill-mix typology and develop logic models

(Led by Prof Hodgson, months 8-10)

We will develop a role-based typology of skill-mix change in mental health services. This will be done using WP1 data and mapping this to the typology of skill-mix originally developed by Sibbald et al (16) as it is the most widely used and highly cited typology for skill-mix change. We have used this typology in previous funded research (21) and found it to be effective in categorising change in primary care skill-mix but with some limitations. To test this typology, we will first as a research team attempt to categorise new roles as identified and described in WP1 onto the model. This is likely to generate areas of uncertainty of two kinds: roles which could plausibly be allocated to multiple categories, and roles which do not fit any categories, both of which will be noted as anomalous and for further investigation.

We will then validate this typology and its application through consultation with approximately 3 stakeholder reflection groups of 6/7 participants, drawn from a list of approximately 20 "key

informants". These key informants will be experts on new roles in mental health services and will include representatives of all key stakeholders, including NHS England, HEE, professional bodies (including Royal College of Psychiatrists and the Royal College of Nursing), mental health charities, and regional (ICS) workforce leads. Some of these informants have been identified already in our developmental discussions developing the research proposal. We will also invite selected workforce leads from mental health providers interviewed in WP1 to participate as stakeholders in WP2.

In these reflection groups, we will present the typology and roles categorisation and ask participants to reflect and comment on the appropriateness of each. We will also introduce the anomalous roles/categorisations and invite participants to discuss in detail. Group discussions will be recorded and transcribed to aid reflective analysis. Systematic analysis of reflection group discussions will be conducted by examining in turn all categories in the Sibbald et al model (16), and all new roles identified and explored in WP1 and WP2. We will remain open to adapting or amending the typology in light of the WP1 findings and the WP2 validation process and see an amended skill-mix typology to be a potentially valuable output from the first two work packages.

The emergent typology will form the basis of a WP1/2 briefing output, to be shared in an online round-table workshop in Month 13 or 14. The typology will also be used to inform and structure in-depth case studies of the introduction of new roles in England (WP3). Through this process, we will also develop preliminary (role-specific) logic models for use (and further iteration) in WP3, identifying the intended impact of each kind of new role.

This work package will overlap with WP1 as we will commence our categorisation of roles as a research team while WP1 interviews in Trusts are continuing, as we expect to reach a point of saturation mid-way through WP1 (as we will have encountered most kinds of new roles by then). WP2 will be led by DH, supported by EWo and the RAs and will address Research Question 1 and Objectives 2 and 3.

Work Package 3: Case studies

(Led by Dr Wood, months 11-23)

WP3 will consist of 8 in-depth "nested" case studies across 4 partner Trusts delivering mental health services, hence two cases in each Trust, to understand the implementation of each role in practice. Our partners are; Sheffield Health and Social Care (SHSC), South West Yorkshire Foundation Trust (SWYFT), Rotherham, Doncaster and South Humber NHS Foundation Trust (RDaSH), and Sheffield Children's NHS Foundation Trust (SCFT).

Each case will focus on the experience of a specific mental health team which has incorporated one or more new roles in the previous 24 months. The typology in WP2 will be used to help us identify the teams for observation. The research team will work closely with the local PI and clinical leads to ensure the sites chosen meet the needs of the research question but do not put undue pressure on the clinicians or service users. The team leader or ward manager will be invited to have their team host a researcher, if they agree they will sign a consent form on behalf of the team detailing the expectations of both team and researcher.

Research associates (2.0FTE) will undertake observation and interviews as embedded researchers, as well as identifying other data sources in trusts. Key stakeholders will be the staff in new roles, staff in existing roles, team managers and clinical leads, senior managers, and service users. Case studies will involve one of the RAs embedded two days a week in a clinical team to conduct ethnographically informed observations. The RA will observe the interactions between people in new roles, team members, managers and service users. This may include team or other meetings, supervision sessions or case reviews, but not any direct treatment interactions with service users.

During observations, the researchers will approach relevant team members and managers for interviews. They will also work with clinicians to identify service users to approach for interviews. Service users will be approached about the interviews by their clinician in the first instance before follow-up by the researcher, and service user interviews will be conducted by peer interviewers, with support from RAs. The peer interviewer will receive training from our PPI lead (EWi) on interviewing

skills (1 hr), informed consent (2hrs) and GCP (8hrs), and will be reimbursed for this training time. They will work closely with the RAs to ensure continuity and constant comparison across all interviews.

To ensure minimal disruption to the host teams, the clinicians will be given in-depth information about the research, what it will involve, what they can do to help (for example bringing relevant meetings to the attention of the researcher). They will also be informed that they can state when they would prefer not to be observed, and that in this instance any data relating to them will be destroyed or removed from the researchers's notes. The researcher will be given details about the team and the service user group, informed of risks and what to do in the event of an incident. They will not be given any personal, identifiable information in relation to service users. They will be informed if there is anything they should not observe and will never observe interactions with service users without express permission. The effect of hosting the RA will be regularly discussed by EWo, the site PI and team leader and modifications made to the protocol where necessary and possible.

Through our case studies, we will examine the rationale for new role introduction and skill-mix change and compare this with the actual implementation in practice. We will observe and analyse the processes used to integrate new roles in existing teams and the interactions between staff in new roles and other staff and take structured fieldnotes which will be stored on a secure University server with password protection.

We will also interview staff and service users or their carers on their experiences of the introduction of new roles. We anticipate approximately 25 semi-structured interviews (18 staff and 7 service users) will be undertaken at each site (i.e. two teams) i.e. 100 in total across the four sites. Interviews with staff will be undertaken by the RA or other members of the team, and we will recruit and train a team of peer interviewers to conduct the interviews with service users or carers.

Observation notes and interview transcriptions will be analysed to examine the impact of skill-mix change, the forms of boundary work which are observed in practice or discussed in interviews, and experiences of the impact on staff and service users in context through observation, interviews and documentary analysis.

WP3 will be led by EWo, supported by the whole team (in particular the site PIs) but with day-to-day work by the RAs and CA. WP3 will address Research Question 2 and 3 and Objectives 5 and 6.

Work Package 4: Integrative analysis, validation of findings and report writing
(Led by Prof Hodgson, months 21-26)

WP4 will include the cross-case analysis, validation of findings with the four Trusts and development of targeted guidance for policymakers, managers, and clinicians, as well as report writing and national online workshop to disseminate findings.

The final work package will address research question 3, and 4 and objective six and be led by DH, assisted by the entire research team.

Design and Theoretical/Conceptual Framework

The study adopts a mixed-methods approach which combines a national scoping survey of mental health trusts, a structured process of model validation, and qualitative, ethnographically informed case studies, composed of 8 nested cases across 4 Trusts. The analysis is informed by models of skill-mix change and boundary work, drawing on the broader theories and paradigms of health services research, employment studies, the sociology of the professions and organisation studies.

Sampling

WP1: All 56 mental health Trusts in England will be invited to participate.

WP2: Stakeholder reflection groups of 6/7 participants plus RA leads. Participants will be drawn from a list of around 20 key informants; these will be experts on new roles in mental health services and will represent key stakeholder groups, including leaders in mental health providers, professional bodies and other stakeholders such as HEE and NHSE/I. Some of these key informants will be identified as part of WP1, others have already been identified from our contacts at HEE, RCPsych, RCN and NHSE/I. We will ensure that attention is paid to diversity in the selection of key informants.

WP3:

A. Selection of sites: Four Trusts delivering mental health in the North of England have agreed to participate; SHSC, SWYFT, RDaSH and SCFT). All 4 trusts have recently implemented new roles within their inpatient and community mental health teams. The rationale for choosing these 4 Trusts is as follows;

- Diversity: All 4 Trusts serve extensive areas of cultural diversity and socio-economic deprivation where the highest mental health need and greatest recruitment/retention challenges occur. We therefore expect sufficient diversity of population and demographics, with the Trusts covering a region with a population of 1.5 million in inner city, suburban and rural areas.

- Trust characteristics: Furthermore, there is significant variation between the Trusts in terms of size, services provided, strategies and cultures to allow a wide range of variation between Trusts and in the range of potential teams to choose from as nested cases. SCFT is distinctive in that it is not a MH Trust but delivers a substantial range of MH services, including providing inpatient child and young person (CYP) MH wards for the entire region and deploying CYP MH practitioners to primary care and schools.

- Regional policy consistency/impact: The 4 Trusts represent all secondary mental health service provision within one ICS;South Yorkshire and Bassetlaw (SYB ICS). Selecting Trusts within one ICS enables a coherent and thorough understanding of the effect of regional policy and commissioning influences and facilitates regional engagement.

- Economic efficiency: Embedded researchers require regular access to sites and spatially-distanced sites increase research costs significantly, while adding substantial 'wasted' travel time.

B. Selection of teams (nested cases): At each site, two teams delivering mental health care will be selected where new roles have been introduced in the past two years. Each team will represent a separate 'nested case'. Selection will be based on the scoping and typology development in WP1 and WP2, so we have extensive or complete coverage of (a) categories of skill-mix change, and (b) new roles. Beyond these key criteria, and if complete coverage is not viable, we will prioritise teams based on national patterns of new role adoption identified in WP1. Other issues to be considered when selecting nested cases will include anticipated team workload pressure, potential for disruption to the team, and training required to access the team. Furthermore, we will be guided by pragmatism and clinical advice where there are teams or services in which access will be challenging or will require extensive authorisation processes which might compromise project timelines.

We will agree access with both senior management and team leads in all cases and ensure they have conveyed information about the research to all relevant staff within the team. As seeking informed consent from every member of staff and service user is not feasible and would potentially obstruct staff working and undermine patient care, we will prepare an information leaflet and poster to be distributed and placed in appropriate locations within the setting explaining about the research, and informing people that they can choose not to be observed. We will also be guided by clinical advice on appropriate and effective ways to approach service users in each nested case.

Involvement of patients/SUs as research participants

Approximately 28 service users or carers will be recruited for interview, around 7 in each trust, a number that should allow information power (55). The embedded researcher will work with teams to identify potential service user participants receiving care from the person in the new role and have been assessed by a clinician as having capacity to participate in this study. For all participants we will collect data on geographical location, age, disability, sex and ethnicity. No one will be excluded on these characteristics. The only exclusion criterion is that a service user whose mental health acuity means they currently lack capacity to participate in research will not be approached. This will be a clinical, not a research decision.

Based on the nature of the trusts included in this research, we will cover services provided to children aged 0 to 16. Service users aged 16 or over who meet the criteria above will be interviewed directly. Where service users are under 16 years of age, we would approach their carers to participate in interviews on behalf of the service user.

We anticipate that the clinical need will be different at each site/team, meaning for some sites/teams there will be fewer service users who could be interviewed. In this case we will interview a greater number of carers. Decisions on exact numbers will be made in negotiation with the clinical team whilst being mindful of the need to ensure we can answer the research questions.

At each trust there will be between 1-7 service users interviewed and 1-7 carers interviewed, totalling approximately 28 interviews across the whole study. The main inclusion criterion is that the person has experience of working with the person in the new role. As this research is observational, not interventional, there is no requirement for the participants to have any specific health conditions so carers or service users will both be eligible. As the nature of qualitative research is to gain an in-depth knowledge of the situation, we will use a constant comparative approach to recruitment, and analysis and ensure that each new recruit is adding to the data set. We will end when data saturation has been reached. We estimate this will be at 28 interviews but it may be slightly more or slightly less.

Service users and carers will be reported separately during reporting and analysis.

The first approach to service users/carers will be made by a member of the care team who will provide information about the study and the information sheet. With agreement, the service user's details will be passed to the research team who will make contact before securing informed consent.

The information sheet and consent form will be written in plain English with the PPI co-app (EWi) to ensure readability. Some service users or carers may not speak English and may use an interpreter to interact with the service. We can interview these participants in the same way. In this circumstance we will make sure the interpreter also has a copy of the participant information sheet and consent forms so they can help the service user understand them. In circumstances where potential participants may be cognitively impaired, we will use a facilitative approach similar to that described by Murphy et al (56). Where possible, we will also make appropriate provision for participants with sensory impairment, e.g. using meeting space with hearing loop.

Service user or carer participants will be invited to a single interview that may be up to one hour, although could be significantly shorter. Where possible, the interview will be undertaken by a peer interviewer, with an RA at hand for support. Interviews will be offered online, by phone or in person at suitable NHS premises to aid accessibility. Peer interviewers will be based at SHSC offices for online or phone interviews to ensure they are appropriately supported.

All interview participants will be able to stop the interview at any time and the recording will be deleted; they can also withdraw their interview from the research up to 1 month after it has taken place.

A summary of the findings will be made available to all interview participants. We will ask participants if they would prefer a copy to be emailed or posted to them. Service user/carer participants will be offered a thank you voucher for £25 for participating in the interview.

Data Collection

This project has three data collection periods; W1 (M4-9), WP2 (M8-10) and WP3 (M11-23).

In WP1 we will collect data on the types and numbers of new roles employed in all 56 mental health Trusts across England, on the rationale for their introduction and how new roles fit within Trusts' broader workforce strategies. All mental health Trusts in England will be approached and in each we will identify a senior person with workforce responsibility (for example Directors of HR, People Management or Nursing) to interview. We will use desk research and regional CRN networks to identify the appropriate person using their Trust contacts at senior levels. WP1 will need research ethics and HRA approval and an OID for each participating Trust, which will be arranged during the Project Set-up period.

WP1 interviews will be conducted by RAs via telephone or an online platform (such as Google Meet/Zoom/MS Teams) for convenience and to minimise cost. Interviews will be semi-structured for consistency of data collection, working to a template but allowing a necessary degree of adaptability for follow-up questions. Interviews have been chosen rather than a questionnaire to generate richer data than a survey would allow, for example to enable clarification of the definition of 'new roles', or exploration of Trust decision-making, including where initiatives have not been successful.

Interviews are anticipated to last up to 60 minutes and will be recorded to aid the production of accurate notes. The interview schedule will be designed to enable collection of factual information on listed new roles and any other roles not listed which have been created in particular Trusts. This will enable us to map the roll-out of new roles in English mental health services and collect insights into the rationale for their introduction in each setting. Part of the interview process will also be to identify people who are interested in remaining involved as stakeholders (in WP2 and WP4). Where interviews cannot be arranged, however, we will seek to gather basic data from a workforce lead through an online survey (via Qualtrics).

WP2 will involve approximately 3 stakeholder reflection groups (or individual stakeholder interviews where larger groups are not feasible given diary clashes) of 6-7 participants drawn from around 20 selected key informants with expertise in new roles in mental health, representing key stakeholders. Informants will be asked to reflect on the mapping and typology developed in WP1 and to discuss its application to new roles in mental health. Reflection groups will be conducted virtually and are anticipated to last 60-90 minutes. They will be recorded electronically, transcribed and anonymised. WP2 will require research ethics and HRA approval, which will be secured during WP1.

In WP3, 8 case studies will be conducted across 4 Trusts. In each, an RA will be embedded within a clinical team. This researcher will observe how the wider team, management and service users interact with the person or people in new roles. These observations will be handwritten as fieldnotes before being typed up as soon as possible. There are no plans to share data about specific individuals with those individuals after the research. This is because the individual is not the unit of analysis. We are not investigating if a particular individual in a new role is doing a 'good' job, but in the staff and service users' experience of that role becoming part of the team.

Once the researcher is embedded in the team, they will identify key actors to interview. These will be other team members, team leaders, management, and service users/carers. The purpose of these interviews will be to investigate the forms of boundary work enacted as new roles are introduced, how this has been managed, how boundary work has impacted staff and service users and what lessons could be learnt for the future. We anticipate 25 semi-structured interviews (18 staff and 7 service users/carers) at each site, totalling approximately 100 interviews. However, due to the nature of qualitative research and the need to be guided by data saturation it may not be exactly 100. We will use a constant comparative approach to constantly analyse for saturation as the interviews progress. Interviews will be recorded, transcribed and anonymised. Interview location for staff is likely to be in-person on site although phone and electronic media could be used where necessary; interview location for service users may be on-site or remote. The presence of

embedded researchers will allow maximum flexibility in the timing of interviews to minimise impact on service delivery.

Data Analysis

In WP1, interviewees will use a standard template to collate factual information on new roles employed (titles, grading, numbers and location in Trust) with open space to collate more qualitative insights into rationale for employing each new role, explanations of rationale within broader workforce strategies, plus additional emergent discussions (of implementation failure, additional support programmes, etc). This will allow easy collation of factual data across Trusts for mapping purposes. The qualitative notes taken will be similarly collated and coded using qualitative data analysis software to group these roles and identify consistencies and variations in rationales or other aspects of new role implementation. The output will be a national map of new role implementation and a discussion document on patterns of rationales and modes of implementation with infographics to enhance impact.

In WP2 stakeholder reflection groups will be presented with a typology of skill-mix change and an initial attempt to map new roles in mental health services onto this typology, including any anomalous cases. The data collected will therefore be discussions with (and between) expert key informants where the application of the model, and thus the model itself, is validated or refinements suggested. Transcriptions of these discussions will be used to inform and structure discussions by the research team to refine the typology, attending in particular to places where the typology is questioned or contradicted by participants. The output will be a refined typology and application to new roles in mental health services, to review in a round-table event with stakeholders, before dissemination in a theoretical academic publication and as an infographic or animated video. This will also inform the selection of nested case studies in WP3.

WP3: Documents, fieldnotes, and interview transcripts generated through fieldwork will be anonymised before uploading to a qualitative data analysis software package. We will then use thematic analysis (per Braun and Clarke (57)) to identify patterns and themes in data. Thematic analysis has the advantage of being transparent, comprehensive, flexible and allowing the opportunity for both semantic and latent analysis. Analysis will capture how implementation and adoption of roles and skill-mix change is experienced on the frontline and how that compares with the original policy intentions and inferred logic models (WP1/2), and to identify and understand how boundary work affects this implementation.

In a first round of analysis, each case will be looked at individually and examples of skill-mix change and boundary work will be identified and explored in a local context. Secondly, we will conduct a comparison of codes between cases, to reveal patterns in phenomena observed and discussed across cases and sites. A final round of analysis from a realist standpoint will explore organisational, clinical or personal circumstances in each case.

WP4: Integrative analysis will be conducted through a sequence of structured data review workshops attended by all research team members, initially 4 case-by-case meetings. Cross-site comparison of data will be facilitated by (i) use of one embedded researcher on each site who will meet regularly with the other researchers to compare research notes during WP3; (ii) use of shared tools of data collection in WP3; and (iii) shared theoretical frameworks such as the skill-mix typology, draft logic models (from WP2) and boundary work.

Outputs from the case workshops will be shared with each partner Trust for validation. We will then conduct thematic analysis workshops, focused on themes derived from WP3 analysis including; skill-mix change, boundary work phenomena, and contextual factors. We will then share emergent findings from the thematic workshops with the PSG, PPIE group and the Advisory Group before a final national online workshop. The tools and frameworks developed through WP1/2 will be used in WP4 to answer the overall research question, seeking to show both in general what works in new role implementation, but also in different contexts, what works for whom and how.

Dissemination, Outputs and Impact

- What do you intend to produce?

The project will generate new knowledge and practical guidance for service users and the public, professionals and professional bodies, managers, policy-makers and researchers. We therefore anticipate;

- Policy impact, including guidelines for implementation of new roles.

- Economic impact, through more effective recruitment and retention in mental health services (of both new roles and existing roles)

- Well-being impact, through improved job satisfaction for staff and improved care for those who use mental health services.

- Education impact, by influencing curriculum change for HEI providers, and informing HEE and professional bodies (including RCPsych, RCN, and RCGP) in their guidelines to HEI and other providers of CPD for mental health professionals.

- Scientific impact, through academic papers in leading journals and conferences on new models of care, workforce transformation, skill-mix and boundary work.

- International impact, through briefings and international conferences, as most countries are experimenting with skill mix to address healthcare workforce shortages.

Through a project website we will communicate with service users and the public, using blogs, infographics, animated videos, live scribing of key meetings, and podcasts. These will be produced regularly though the project informed by emerging findings, with focused activity to disseminate the findings of WP1/2, which will deliver a national stocktake of the implementation of new roles in mental health by region, with vignettes of notable practice.

The key mode of dissemination for professional bodies, managers and policy makers will be through targeted briefings, tailored to address the concerns of specific stakeholder groups. We will also conduct two interactive workshops with key stakeholder groups and our partner Trusts at the end of WP2 and of WP4. The WP2 workshop will be an online, round-table event to validate WP2 findings and will be live scribed. The final online workshop will be open to all stakeholders, and invitations will also be sent to other bodies, such as RCN, RCGP and to healthcare thinktanks such as the Health Foundation, the King's Fund and the Nuffield Trust to share learning on new roles and skill mix change outside of mental health services.

In these briefings and through these workshops, we will share;

- Grounded insights into the reality and impacts of new role implementation and new ways of working to inform policymaking at national and regional levels;

- Structured and realistic guidance on workforce planning for changing skill-mix for Trust leadership, both managerial and clinical;

- Recommendations on good practice to inform education and training for staff in new and changing roles for HEE and Trust clinical and OD leads; and

- Accessible explanations of the changes to staffing in mental health services and its implications for service users and carers.

We will present findings at UK and international conferences such as HSRUK, OBHC, British Sociological Society (MedSoc), EGOS and/or the Academy of Management (Healthcare Management Division). We will also generate academic papers for health services research and broader sociological and management journals, focusing on generalisable knowledge on skill-mix change, workforce transformation, dynamics of professional change and boundary work in healthcare organisations. The final report will be accompanied by a short, accessible key finding briefing intended for service users which we will make available online

- How will you inform patients/SUs, NHS, social care and wider pop?

We have identified a range of stakeholders at local, regional, and national levels and have already begun to liaise with these actively. As a research team, we are experienced in working with policymakers, leadership, staff, and service users in co-produced research and will draw on this experience to communicate findings.

At a local level, we will engage directly with our partner Trusts, facilitated by the site PIs in each location, to ensure WP1/2/3 briefings and the final report is presented in appropriate forums, including boards and staff/service/team meetings. We will liaise with each Trust to agree the most meaningful way to communicate findings to their service user population e.g. pre-existing service user groups, specific workshops, infographics, animated videos and/or social media (to be decided in consultation with local service user representatives).

Regionally, we have already engaged with HEE and ICS mental health and workforce leads and agreed to share WP1/2/3 findings at meetings of the ICS Mental Health Programme Board and the HEE North East and Yorkshire Mental Health Provider Collaborative.

At a national level, we have also engaged with leads at NHS England (Tim Kendall, National Clinical Director for Mental Health) and HEE (Naheem Akhtar, Programme Lead, HEE National Mental Health Programme) and agreed to share WP1/2/3 briefings with both organisations. We will also share these findings with the workforce leads in the MH Trusts approached in WP1 to ensure national dissemination to employers and Trust leadership.

We will inform relevant Professional bodies and mental health charities of the findings including but not limited to the Royal College of Psychiatry, The Royal College of Nursing, Royal College of Occupational Therapists, British Psychological Society, MIND, Rethink, and The Mental Elf. Professional bodies will be sent briefing papers. Mental health charities will receive a plain English summary with an infographic or animated video to be shared publicly.

- How will your outputs enter our health and care system?

Given the pressing nature of the challenge, it is vital that our findings are shared in a timely and accessible manner with policymakers, employers, managers/clinical leads, staff and service users.

We recognise from our previous work that effective impact relies upon an understanding of the pressing questions faced by different stakeholders. We have therefore already engaged extensively with leaders in this area; in NHSE, HEE, the local ICS and with research, clinical and management leaders in all four partner Trusts. In these discussions, stakeholders articulated their pressing concerns and research needs. These were as follows;

- NHSE: Seeking insight into how new roles are actually used in practice (variation, adaptation and impacts)HEE: Hoping for evidence of the competencies/behavioural skills needed by those in new roles (e.g. negotiation, collaboration, advocacy) and by those working with new roles, as well as guidance on how to successfully plan and implement new roles/change skill-mix in mental health, reflecting local labour markets and recruitment/retention challenges.

- ICS: Looking for guidance on how to effectively implement new roles and support teams and leadership in delivering skill-mix change and innovation.

- MH Trusts: Seeking advice on how to integrate and evaluate new roles, support new and existing staff through change, recognise variation between teams/services.

In discussions with NHSE, HEE and SYB ICS, we established that short briefing documents, supplemented by interactive presentations at standard boards/meetings, is the preferred way to allow decision-makers to engage collectively with findings, as this maximises reach without adding commitments to the busy diaries of clinicians, managers, staff and policymakers. We also have experience communicating findings to professional bodies such as the RCN and RCGP and will benefit from co-applicant HC's active role in RCPsych.

- What further funding is needed to maximise impact?

We have costed for professional production of materials to share findings from WP1/2 and WP3 through professionally produced briefing materials. Both the WP2 round-table event and the final national online workshop will be live-scribed and we have costed a creative agency (https://www.niftyfoxcreative.com/) to live-scribe both events, producing a visual representation of each event to share the outcome of stakeholder reflections . We also will use annual subscriptions to Videoscribe (www.videoscribe.co) to produce animated videos and Riverside (www.riverside.com) for podcast editing facilities. As effective communication requires researcher time, we will appoint a dedicated and experienced RA (0.4FTE) with expertise in dissemination to lead on these activities.

We will also apply for internal University funding to amplify our communication of findings. Various modes of funding are available annually at the University of Sheffield to support knowledge exchange and impact activities, such as online engagement events. As a research team we have experience of utilising this funding effectively and are confident of securing substantial funding in this way, reducing the cost to NIHR.

- Barriers to further research, adoption and implementation?

The key barrier to the adoption and implementation of research findings in mental health services is time, specifically the time required from staff at all levels to engage with, reflect upon and act upon research findings in the face of very high levels of demand and underfunding. Recognising this, we have ensured we will produce concise and accessible briefings in a form which can be included in ongoing forums and directed towards the most pressing questions for each of our stakeholders. Another key barrier is the need to translate findings to fit local contexts and conditions; here, the role of our site PIs will be critical, drawing on local knowledge to make sense of research insights, adapting these insights to make sense in local settings and communicating these to key decision-makers in each Trust.

- What will be the impact of research, and for whom?

The research will have the following focused impacts for our several stakeholder groups.

- For mental health charities, service users and carers, the research will improve awareness of local/regional variation (WP1), the different kinds of skill-mix change (WP2), and awareness of opportunities for improved care through skill-mix change (and threats to care if poorly implemented) (WP3/4). This will empower service users by informing them about impacts on

their own care, so they can engage actively in changes and advocate for desired outcomes. Impact visible in measures of patient awareness and service user experience/outcomes.

- For mental health professionals, the research will clarify opportunities and threats presented by new roles and new ways of working in mental health and will identify the competencies and behavioural skills required for constructive boundary work and effective collaboration (WP3/4). Impact visible in job satisfaction and retention rates.

- For mental health Trusts as employers, the study will clarify rationales, choices and trade-offs (WP1/2) to enable more successful workforce planning, offer guidance on how to implement and evaluate new roles more effectively and also guidance on how to support existing staff through change (WP3/4), including recommendations for recruitment, training and development and OD. Impact visible in changes to workforce strategy and training and development policies and direct feedback.

- For local ICS workforce leads, the research will directly contribute to regional MH workforce strategies, highlighting national/regional variation (WP1/2) and informing guidance they may provide and initiatives they may support (WP3/4). Impact visible in changes to regional workforce strategy and training and development policies.

- For HEE, the study will generate knowledge on the variation in workforce strategies in MH trusts across England to help HEE direct support (WP1/2) and will identify the capabilities and behaviours to be developed in education for staff in new and established roles in MH (WP3/4). Impact visible in changes to training guidelines or curricula.

- For NHSE, the research will provide grounded knowledge of the impact of policies to encourage appropriate uptake of new roles in mental health and ensure policy in this area is informed by practical realities of the complexity of skill-mix change (WP3/4). Impact visible in changes to national policy and policy debates in relevant panels.

Findings from WP1/2 will be shared within the first year of the study. We will conduct a short survey in WP4 of all MH Trusts to evaluate whether they have made changes to their workforce policies in light of our WP1/2 findings. Findings from WP3/4 will be shared at the end of year 2 (after study completion) and will require time to generate widespread impact.

- How will you share progress/findings with study participants?

Emergent findings will be shared at the quarterly Project Steering Group meetings, attended by site PIs on behalf of partner Trusts, and a Patient and Public Involvement and Engagement (PPIE) group will also meet quarterly to consider progress and findings. Beyond this, dissemination of findings will be facilitated by the site PIs in each location, who can relate WP1/2/3 findings to local context and ensure briefings (including accessible summaries) are transmitted and presented to the appropriate forums in each Trust, including leadership boards, workforce committees and staff/service/team meetings. We will liaise with each Trust to agree the most meaningful way to communicate findings through service user groups in each location.

Project timetable

The project will take place over 26 months through five main phases; **Set-up** (months 1-6), **WP1** (Trust survey, months 4-9), **WP2** (Typology validation, months 8-10), **WP3** (Case studies, months 11-23) and **WP4** (Integrative analysis and report writing, months 22-26). Figure 1 provides a diagram of these phases.

The timetable has been designed to include overlaps between phases as some activities can take place in parallel, deploying the full research team. The sole exception is the WP2/WP3 transition, where a validated typology from WP2 is necessary to identify the teams to be studied in each Trust

in WP3 hence these work packages are sequential. We have built in time in the first six months for project set up and to secure ethical and HRA approvals, although we expect to start data collection in WP1 by month 4. We have summarised the project timeline below with dates: a visual breakdown is available in the attached Gantt chart.

Apr-Jun 2023: Undertake set-up tasks: confirm protocol and interview schedule, apply for HRA and ethics permissions to interview workforce leads in all mental health Trusts in WP1.

Jul-Dec 2023 WP1 starts: identify, contact and interview relevant Trust workforce leads. Analysis will occur concurrently. In parallel, secure ethics, HRA approval and RA research passports/honorary contracts for WP3 case studies,

Nov-Dec 2023: Identify, contact and confirm membership of expert panels for WP2. Develop typology of skill-mix change in mental health Trusts.

Dec 2023-Jan 2024: Conduct meetings with expert panels to discuss, refine and validate typology of skill-mix change. Draft logic models to inform WP3.

Feb-Mar 2024: WP3 starts. Using typology and logic models from WP2, identify 2 teams in each partner trust for study. Secure agreement from senior leadership and team leads in each case. EWi to train peer interviewers in preparation for WP3.
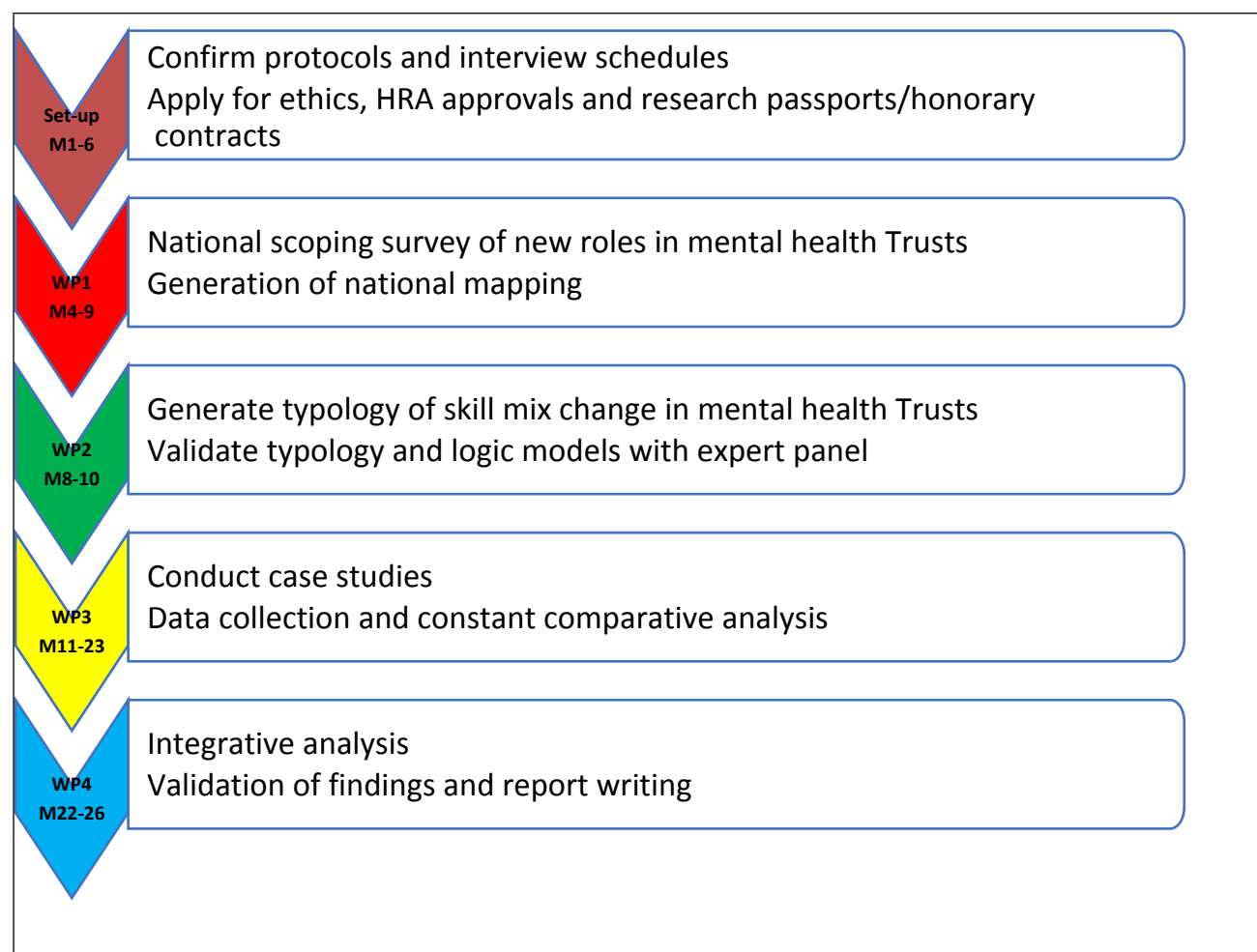
Mar 2024-Feb 2025: Case study data collection. We will complete all case studies over this 12-month period, studying 2 teams in each Trust as nested cases. Each RA will be allocated to 2 Trusts and will have responsibility for observations and interviews in 2 teams in each Trust. The ideal structure would be for each RA to initially focus on 2 teams in one Trust in the first 6 months, and another 2 teams in the second Trust in the subsequent 6 months. However, given pressures on mental health services, we will need to be flexible to minimise impact on staff and service users and may not be able to bound the cases so neatly, for example by conducting some interviews outside the intended period of time. Analysis will run alongside the case studies which will allow a constant comparative method to ensure early findings are followed up in later interviews and observations. Field work will begin with observations in each setting, this will be used to identify potential participants among staff who will be approached by the researcher and service users who will be approached by a clinician. Interviews will take place throughout the case study period.

Jan-May 2025: Complete WP3 empirical work. Integrative cross case analysis conducted collectively by the research team before workshops to share and validate emergent findings. Report writing and final dissemination events delivered. Findings to be validated at further validation workshops and dissemination events at partner Trusts and with key stakeholders as identified above (NHSE, HEE, ICS, MH charities and professional bodies).

Definition of endpoint of study

The study endpoint will be when all data collection and analysis is complete, and the funding period ends i.e. 31/5/25.

Figure 1: Flow chart of project phases

Set-up M1-6	Confirm protocols and interview schedules Apply for ethics, HRA approvals and research passports/honorary contracts
WP1 M4-9	National scoping survey of new roles in mental health Trusts Generation of national mapping
WP2 M8-10	Generate typology of skill mix change in mental health Trusts Validate typology and logic models with expert panel
WP3 M11-23	Conduct case studies Data collection and constant comparative analysis
WP4 M22-26	Integrative analysis Validation of findings and report writing

Project management

The research will be jointly led by Prof Hodgson (DH) and Dr Wood (EWo). DH has significant experience in leading NIHR grants focusing on workforce, having led 7 large projects as theme lead in CLAHRC Greater Manchester and acted as co-investigator on 3 HS&DR grants in workforce transformation. EWo has been leading a Health Foundation funded project into mental health service staff retention for the last three years.

EWo will take operational responsibility for delivering the study. She is an experienced research project manager, delivering a large programme of work as part of the NIHR CLAHRC Yorkshire and Humber and since then for the Health Foundation. She is now ready to co-lead a major NIHR funded study with support from senior colleagues. She will be supported by DH, and continue to be mentored by SW and TR, all of whom have successfully led large research studies for NIHR and the Royal College of Nursing.

EWo will lead the project, ensuring all applicants fulfil their commitments to complete the project on time and budget, she is committed to 50% WTE which will ensure she has time for overall project management as well as leading WP1 and WP3. EWo will supervise the part-time RAs to undertake data collection and analysis.

The staff team will meet weekly, and the wider research team, consisting of all co-applicants and the staff team, will meet every 2 months to oversee the day-to-day running of the project to oversee the running of the project and ensure it is running to time. This will include discussion of timescales, milestones, challenges, mitigations and other key operational decisions. This meeting will be attended by the PPIE co-app (EWi) and will also discuss PPIE issues and involvement as the project progresses. These meetings will be primarily run in a hybrid way to ensure ease of access.

A project specific PPIE group will be set up. This will be supported by EWi and attended by project leads. The group will meet quarterly. Initial PPIE consultation will be done with existing groups (the lead Trust has a research PPIE group and the lead University has a mental health PPIE group as part of the ARC). EWi also has a large personal network of service users who have advised on previous projects. A study PPIE group of about 8 people will be recruited from these networks and will be involved in project design, analysis and production of materials. Involve PPIE rates have been used in the costing and PPIE group members will be reimbursed for travel, childcare and personal assistance. Most meetings will be hybrid in nature, making them accessible for people who cannot travel easily but also for people who struggle to access online technologies.

Two further groups will provide oversight for the project. First, a Project Steering Group will be established and will meet quarterly (if possible, timed to coincide with the PPIE group meetings). The PSG will involve the research team (including PPI co-applicant), all site PIs, representation from the regional ICS/HEE workforce leads, plus 2 academics with specific expertise in skill-mix change. The PSG will offer oversight and advice and ensure that the sites remain informed of project progress and the research team is aware of matters affecting the partner Trusts that may affect project progress. The PSG meeting will take place online.

Secondly, an Advisory Board will meet annually (3 times in total) with representation from key national stakeholders, including Health Education England, NHSE/I, Council for Allied Health Professionals in Research and patient/service user representative bodies (e.g. Rethink, MIND) to offer guidance on policy/priorities and on engagement and dissemination.

A project administrator will support the day-to-day running of the project, including arranging meetings and assisting the team with organising interviews and reflection groups. They will also support desk research in the Set-up phase and assist in the administrative tasks relating to data management and research governance.

Ethical and Regulatory Approvals

Approval from Research Ethics Committees and Health Research Authority governance approvals will be sought during the Set-up phase (M1-6). The research team are all experienced in working with mental healthcare providers and service users and all researchers will have a protocol to follow if they have concerns, including reporting on any identified risks or disclosures of bullying or discrimination. Written consent will be taken for all interviews, verbal consent for the observational work. A data management plan will allow us to identify and manage data risks.

WP1 will require University ethics committee and HRA approval as it involves research with NHS staff. This will be sought in the set-up phase of the study and is low risk. The main data collected in WP1 will be job titles, banding of the new role and in which teams new roles have been utilised. No personal information will be collected about people occupying new roles; the only personal information collected during this phase will be the names and contact details of the Directors of HR/People Management who we will be interviewing. WP2 will require collection of the names and contact details of the stakeholders. Their data will be stored on a secure hard drive as per University policies and under password protection. Only team members who require access to this information will have it. Recordings of interviews in WP1 and stakeholder reflection groups in WP2 will be stored on a secure drive at the University and only accessible to the research team. WP2 recordings will be shared with a professional transcriber under contract with the University using secure processes, and transcription files will be anonymised and stored in a secure University drive.

WP3 will require NHS ethics committee and HRA approvals. Staff conducting the observations will require research passports. These will be sought during WP1 to ensure they are in place in good time. This will be the responsibility of EWo.

WP3 will involve the collection of multiple forms of data. Observational data in the form of field notes will be generated within teams where new roles are implemented and will focus on the interactions between staff members in new roles and the rest of the team and service users. Teams will be identified at the start of WP3 (M11-12) in collaboration with the Trust research office, the site PI,

HR, and clinical teams themselves. Team leaders will be asked to sign a consent form on behalf of the team for observations to occur. Team members will all be introduced to the researcher and the aim of the research. Data will be handwritten observations. As soon as possible the researcher will type up their field notes and paper copies will be destroyed. Digital notes will be stored in the same manner as before, on the University's secure drive, with access limited to essential personnel.

WP3 will also involve interviews with staff within the team and key managers involved in the planning and implementation of the new role. Interviews will take place either face-to-face in a private room, online or by phone. All interview participants will sign a separate consent form for the interview. Interviews will be recorded on an encrypted digital recorder or via the online meeting application (Google Meet/Zoom/MS Teams) and mp3 files moved to the University's secure server as soon as possible. Interviews will be transcribed by a professional transcriber under contract with the University.

Interviews with service users and carers will be recorded in the same way. Service users and carers will also sign a consent form. They will be recruited by clinical staff in the first instance and care will be taken to ensure that people are able to express their views but in a safe and supportive way. As much as possible, interviews will be conducted by peer interviewers. Interviews will take place by phone, online or on the team premises depending on the participant's preference. For in-person interviews, an RA will be available on site to provide any appropriate support to the peer interviewer. For online or phone interviews, the interviewer will be based at SHSC's premises to ensure appropriate support is available to them.

Audio recordings will be deleted as soon as the research is closed. Transcriptions and other data will be kept for 5 years in keeping with the University's audit processes.

Research expertise

The project team has extensive experience in mental health and workforce research. Recent and current projects that the team are involved in include the Retention of Mental Health Staff (RoMHS) study (EWo, TR, SW) funded by the Health Foundation (£568,000), the Strategic Research Alliance (with the Royal College of Nursing, £1.45m) (TR, EWo) and Investigation of Scale, Scope and Impact of Skillmix Change in Primary Care (NIHR HS&DR, £649,000) (DH). Team members also have extensive experience in the NIHR CLAHRCs (SW and DH) and ARC YH mental health theme (SW), NIHR funded SPACES (EWi), nurse staffing research funded by the Canadian Institute for Health Research (CAN$330,000) (TR), staff attitudes towards physical restraint, Hong Kong RGC Scheme (HK$777,778) (TR), the NoDem (MCI) study and COBALT study (both MK).

EWo (joint PI) is a senior research fellow with extensive experience in mental health and workforce research. She has over 10 years' experience in health services research including acting as chief investigator on a major workforce research project funded by the Health Foundation which uses organisational case studies and qualitative methods. She is also a registered mental health nurse.

DH (joint PI) is Professor of Organisational Studies with specialist expertise in the sociology of professions, healthcare workforce and boundary work. He is an experienced project and programme lead, previously theme lead in NIHR CLAHRC Greater Manchester (2014-2019) and co-director of the Institute for Health Policy and Organisation at the University of Manchester. DH is personally responsible for £1.6m research funding in health services since 2010, including NIHR-funded projects on management knowledge, patient experience data, GP federations and skill-mix in primary care. He has extensive experience in qualitative research and in co-produced research, working closely with commissioners, Trusts and other provider organisations to deliver impactful research at practice and policy levels, including service as academic advisor on several national evaluations of new approaches to care with DHSC and Health Foundation funding.

SW is Professor of Mental Health at ScHARR. He is an experienced health services researcher and an honorary NHS Consultant Psychiatrist. He has led studies of patient experience and restriction in mental health care. He is joint theme lead (mental health and multimorbidity) for NIHR ARC Yorkshire and Humber and Sheffield lead for public mental health, NIHR School of Public Health

Research. His research includes studies of ethnic inequalities in mental health care, and green space and mental wellbeing. He is a co-investigator on the RoMHS study of retention among mental health staff.

TR is Professor of Nursing. TR has for the past five years been co-PI on a large, funded programme of work for the RCN (£1.5M). This work has maintained an emphasis upon the nursing workforce, including mental health. This work has been augmented by my role in helping to lead an international study based upon realist methods and aimed at exploring those workforce related mechanisms central to nurse staffing decision making (including mental health environments). TR has a strong track record in undertaking qualitative research, having published a large number of peer reviewed papers centred on both forms of thematic analysis as well as grounded theory. TR will bring both his leadership experience and methodological insights in his advisory role within the proposed project.

MHo is Deputy Director of Research, Host trust lead and registered mental health nurse. Contribution to design, study set-up and support in SHSC. In addition to expertise in the development and delivery of complex interventional/health behaviour change studies, (collaborating on a number of large NIHR studies currently), MHo supplies expertise in service user engagement and coproduction of research in mental health services. MHo has also supported the engagement and delivery of RoHMS within SHSC.

EWi is the Patient Ambassador in Medical Education and Research at Sheffield Health and Social Care NHS FT (SHSC). Her Trust role is around supporting co-production in research, increasing service user involvement in research, advising research teams from a lived experience point of view. She is the PPI Representative and co-chair of a national group developing a competency framework for physician associates in mental health. Her role on the research project will be to support the PPIE members, advise the rest of the research team on accessibility, plain English, and dissemination. She will be on the management group and has experience in training peer interviewers.

MK is Associate Medical Director, site PI for SWYFT and consultant psychiatrist, contributing to design, study set-up and liaison/support in SWYFT. At SWYFT, he is a medical investigator and appraiser, sits on their research group and was Foundation Training Programme Director at Health Education Yorkshire and the Humber and Clinical Lead for Older People's Services in Calderdale & Kirklees. At National level MK is involved in the CRN and was the Foundation Training Programme Director at Health Education Yorkshire, so brings expertise on training and education in mental health care.

HC is Deputy Medical Director and is a Clinician and lead on workforce policy/strategy at national, regional and Trust levels. Associate registrar for Leadership and Management, Royal College of Psychiatrists She sits on national forums at RCPsych, HEE and Royal College of Physicians) and local forums (SHSC and SYB ICS) focusing on workforce and new role development. She led on development of Competency Framework for Physician Associates in Mental Health and the HEE Toolkit for Employing Physician Associates in Mental Health and also contributed to the Competency Frameworks of Advanced Clinical Practitioners, Mental Health Pharmacists and Peer Workers. HC thus brings extensive knowledge at national and policy level of new roles/new ways of working as well as specific clinical insights and networks with both policy and clinical bodies.

Success Criteria and Barriers/Risks

Measures of success

WP1: Interview OD/HR leads from at least 2/3 of the mental health Trusts across England and recruit 5-10 key informants for WP2. Generation of national map of new role implementation and accompanying discussion document.

WP2: Revised skill-mix typology is created. Typology validated by stakeholders. Online workshop to share typology and disseminate emergent findings take place as scheduled.

WP3: Each of the 4 Trusts offers 2 clinical teams that fit the typology and inclusion criteria and are happy to host the research. We recruit approximately 18 staff and 7 service users from each site for interviews. Exact numbers and staff roles will vary from team to team. Data saturation will be considered more important to final recruitment totals than numbers. Production of 4 case summaries explaining skill-mix change and boundary work in context.

WP4: Integrative analysis of the case studies completed and validated by partner Trusts and PSG/PPIE group/advisory groups. Dissemination events including final workshop take place as scheduled. Report submitted.

Risks to the research

The main risk to the research is a failure to recruit to target due to workload pressures on mental health providers. This will most directly affect WP1 and WP3.

WP1 Prevention: We will enlist the assistance of the CRNs to use their working relationship with local Trusts. Mitigation: We will also consider alternatives to Directors of HR (e.g. Directors of Nursing). If still unable to secure an interview in a Trust, we will develop an online questionnaire to capture basic information. Although all Trusts will be approached, we expect to get to interview approximately 2/3 and would consider this success.

WP3 Prevention: We have contacted 4 Trusts and received confirmation from all 4 that they are happy to host the research. Mitigation: If one of the partner Trusts has to withdraw from the project, we will look to recruit additional teams from the other 3 participating Trusts.

A second concern is the impact of pandemic and social distancing. Mitigation: In this case we would seek to conduct the observational research in WP3 online, as we presume meetings and consultations would also move to online or hybrid formats.

Another risk is ethical concerns over observational research in mental health settings.

Prevention: The research team has an extensive track record of research in mental health settings, including workforce and service user participants. We also have lived experience at the heart of our team and planning. Mitigation: Work with PPI co-applicants, NHS Ethics committee, Trusts, teams and service user representatives to ensure the protocol is acceptable. The object of the observations will be staff not service users but we understand that some service users may still be uncomfortable with the researcher's presence. In this case the researcher will leave and not observe that meeting/interaction. The 12 months allocated to WP3 should allow RAs to be flexible here.

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Data Management Plan for WP1 and WP2
Defining the data

WP1

Data collected in this work package will be of various types:
a) Names and contact details (email, telephone) for Heads of HR/Workforce in each mental health Trust in England. This information will be stored in a single Excel spreadsheet.
b) Digital recording of interview with each Head of HR/Workforce in the Trusts. Interviews will be done using either online methods (Google Meet/MS Teams) or telephone and encrypted digital recorder. Files will be saved in mp3 format - where a video recording has been made, this will be converted from mp4 to mp3 format and the mp4 file deleted. Recordings will not be transcribed. Maximum number of interviews is unlikely to exceed 55 i.e. one per Trust, but we will allow some flexibility in the event of a second person also being interviewed in some instances. Files will be named with the Trust name and date of the interview.
c) Consent from interview participants. This will be collected online through Qualtrics, either by the participant prior to the interview or by the researcher at the start of the interview, when the researcher will read out the questions for the participant to respond to.
d) Researchers' notes from the interviews. These may initially be created in paper form or Word documents. Where notes are in paper form, these documents will be scanned and the originals destroyed. There will be one set of notes per interview - see point b) for estimate of numbers. Digital files will be named to correspond with the recordings and will include the researcher's initials.
e) Digital template completed by the researchers undertaking the interviews to capture the relevant information from the interview. This is likely to be a single Excel spreadsheet. Version control will be used, and previous versions saved until all the data is collected to ensure there is a backup of the information. No personal information will be entered into the spreadsheet.
f) In the event that interviews cannot be arranged, an online questionnaire will be sent to the key contact in the relevant Trusts, and this will be returned to the research team. This will be a Word document. Number unknown as this depends on the interview response rate. These files will be named with the Trust name and date of response.

WP2

Data collected in this work package will be of various types:
a) Names, contact details (email, telephone) and role/experience of potential stakeholders to participate in reflection groups. This information will be stored in a single Excel spreadsheet.
b) Digital recording of stakeholder reflection groups. The intention is to hold 3 online, using either Google Meet or MS Teams. Files will be saved in mp4 (video) format to facilitate identification of individual contributions when the recording is transcribed. This is important, as we need to understand different stakeholders' perspectives in relation to the issues discussed. Files will be named with the date of the focus group.
c) Consent from reflection group participants. This will be completed online through Qualtrics by participants prior to the meetings.
c) Transcriptions of the reflection groups. Maximum of 3. These will be saved in Word format and will be named to correspond with the digital recordings. All names and identifying information will be removed during transcription, and participants allocated a code name/number to ensure anonymisation of contributions.
d) Researchers' notes from the reflection groups. These may initially be created in paper form or Word documents. Where notes are in paper form, these documents will be scanned and the originals destroyed. Digital files will be named to correspond with the recordings and will include the researcher's initials.
We do not expect total data storage requirements to exceed 10GB.

Looking after data during the research
All digital data collected from interviews (WP1) and reflection groups (WP2) will be stored in an access-restricted folder on the University's networked filestore, (X: drive). This is automatically backed up by the university's computer services and we will rely on their methods. The project has its own folder, which is only accessible to members of the research team.
Online consent data will be initially stored within Qualtrics on its own server, under contract with the university. Once all the data is collected for each stage of the project, it will be downloaded from Qualtrics and stored on

the X: drive, and the Qualtrics data will be deleted. Separate folders will be created within the main folder to ensure information is stored appropriately and consistently and can be easily accessed by the team. The project administrator will set up appropriate folders in discussion with the rest of the team.

Written notes from interviews and reflection groups will be destroyed immediately after scanning, so no physical documents containing data will be stored.

All researchers have completed relevant university and ScHARR information governance and data security training. The university's Information Security policies will be abided by at all times.

Files will be named as described in the previous section. A document will be created detailing the naming conventions outlined in this plan to ensure these are followed by the whole research team, and to make relevant documents readily retrievable.

Storing data after the research
Audio and video recordings will be deleted as soon as the research is closed. Anonymised transcriptions and other data relating to the analysis will be kept for 5 years in keeping with the university's audit processes. Files will be transferred to archive at the close of the project. The project administrator will be responsible for moving the data to the archive, and university computer services will be responsible for maintaining the archive. Access to archived data will be under the supervision of one of the joint PIs if needed for audit purposes. Anonymised data will be archived in ORDA for 10 years.

Sharing data after the research
Any personally identifying data will not be shared outside the project in order to preserve participant confidentiality. This will include recordings, transcriptions and researchers' notes. Trust-specific data will also not be shared outside the project. Participants in interviews and reflection groups will give consent for anonymised quotes to be used in published work.

Anonymised data will be available on request for secondary analysis. Requesting organisations will need to provide a protocol, DMP and suitable research ethics committee approval and will be subject to a data sharing agreement.

Putting the DMP into practice
The joint PIs will be responsible for data management in the project and ensuring that this data management plan is adhered to. This will include informing other members of the research team (project administrator, researchers undertaking interviews) of the requirements of the plan. They will review the plan every 6 months, or when major changes occur within the project, and will update if necessary.
…………………………………….

Data Management Plan for WP3
Defining the data
Data collected and created will be of various types.
a) Written notes of observations undertaken by the researcher, recording details of activities, conversations and interactions at specific locations which have been selected for the research. Notes will primarily focus on the interactions between staff, and may include names and/or roles to ensure understanding of what is observed. No identifiable service user details will be recorded. These notes will be either scanned or written up in Word and the original written notes destroyed. Digital files will be named with the location identifier, date and researcher's initials. Observations will be undertaken at 8 locations over a period of 3-6 months each, and the exact number of sessions of observation will be determined as the research progresses.
b) Names, job title and contact details (email, telephone) for potential and actual interview and focus group participants i.e. staff working at specific mental health sites where observations are taking place, and service users accessing services through these particular sites or their carers. Contact details of staff will be obtained by direct contact with the individuals either in person, online or by phone. Contact details of service users for interview or focus groups will be given to us by relevant staff, once their permission has been given for this information to be passed on. All this information will be kept in an Excel spreadsheet on the University server.
c) Demographic information for interview and focus group participants. Data for interview participants will be collected verbally during the interview and logged into an Excel spreadsheet afterwards in an anonymised format. Data for focus group participants
will be collected on a short paper form at the start of the focus groups, and these will be stored in a locked filing cabinet.
d) Digital recording of interviews with staff and service users. Interviews will be done using either online methods (Google Meet/MS Teams) or telephone and encrypted digital recorder. Files from online interviews will be saved in mp3 format - where a video

recording has been made, this will be converted from mp4 to mp3 format and the mp4 file deleted. Files from telephone interviews using a digital recorder will be stored in mp3 format where possible.

Exact number of interviews will be determined by the needs of the research but is expected to be approximately 100 across the sites and two groups of participants (staff and service users). Digital files will be named with the location identifier, participant code and date.

e) Digital recording of focus groups. Focus groups will be done face to face and will be recorded using an encrypted digital recorder. The files from these recordings will be stored in mp3 format where possible. Three focus groups will be held.

f) Consent forms from interview and focus group participants. For staff participants these will be collected through Qualtrics prior to the interview. Service users taking part in interviews will be offered a range of options for completing consent, including through Qualtrics, on paper or verbally with the interviewer completing the paper form. Data from paper consent forms will be transferred into Qualtrics and the originals destroyed. Service users for focus groups will complete paper consent forms at the start of the focus group, which will be stored securely in a locked filing cabinet.

g) Researchers' notes from the interviews and focus groups. These may be initially created in paper form or Word documents. Where interview notes are in paper form, these will be scanned or written up in Word and the original notes destroyed. Focus group notes will be in paper form and will be stored securely in a locked filing cabinet.

h) Transcriptions of interviews. All interviews will be transcribed by the University transcription team or an approved external supplier and saved in Word format. Focus groups will be transcribed by the student conducting them, who is part of the research team. Files will be named to correspond with the digital recordings. All names and identifying information will be removed during transcription.

We do not expect total data storage requirements to exceed 10GB.

Looking after data during the research

All digital data collected will be stored in access-restricted folders on the University's networked filestore (X:drive). This is automatically backed up by the university's computer services and we will rely on their methods. The project has its own folder which is accessible only to members of the research team.

Online consent data will initially be stored within Qualtrics on its own server, under contract with the University. Once all the data is collected, it will be downloaded from Qualtrics and stored on the X:drive, and the Qualtrics data will be be deleted.

Separate folders will be created within the main folder to ensure information is stored appropriately and consistently and can be easily accessed by the team. A separate folder will be created for each research location, with sub-folders for observations, staff interviews, service user and carer interviews, and focus groups. The project administrator will set up appropriate folders in discussion with the team.

Written notes from observations and interviews will be destroyed immediately after scanning.

The data from handwritten consent forms for interviews will be transferred into Qualtrics so that all consent data is stored together, and the paper copy of the form will then be immediately destroyed.

Focus group consent forms, demographic information and observation notes will be collected and kept in paper format, as this forms a separate student project. All paper documents will be stored securely in a locked filing cabinet.

All researchers and interviewers will complete relevant university governance and data security training.

The university's Information Security policies will be abided by at all times.

Files will be named as described in the previous section. Naming conventions for documents will be agreed by the whole team to ensure consistent naming of data to make documents readily retrievable.

Storing data after your research

Audio recordings will be deleted as soon as the research is closed.

Anonymised transcripts, observation notes and other data relating to data collection and analysis will be kept for 5 years in keeping with the university's audit processes.

Interview and focus group participant contact details will be retained until a summary of the research has been sent.

Files will be transferred to archive at the close of the project. The project administrator will be responsible for moving the data to the archive, and university computer services will be responsible for maintaining the archive.

Access to the archived data will be under the supervision of one of the joint PIs if needed for audit purposes.

Anonymised data including transcripts will be archived in ORDA, the University of Sheffield data repository) for 10 years.

Sharing data after your research
No personally identifying data will be shared outside the project in order to preserve participant confidentiality. This will include recordings, transcriptions and researchers' notes. Identifiable trust-specific data will also not be shared outside the project.
Participants in interviews and focus groups will give consent for anonymised quotes to be used in published work.
Anonymised data will be available on request for secondary analysis. Requesting organisations will need to provide a protocol, DMP and suitable research ethics committee approval and will be subject to a data sharing agreement.

Putting your plan into practice
The joint PIs will be responsible for data management in the project, and ensuring that this data management plan is adhered to. This will include informing other members of the research team (project administrator, researchers undertaking interviews and focus groups) of the requirements of the plan. They will review the plan every 6 months, or when major changes occur within the project, and will update if necessary.