

ReCITE: Building Research by Communities to Address Inequities Through Expression

Details

Summary

Culture and the arts contribute to health and wellbeing, shifting the focus away from 'disease' to people. Storytelling can be utilised as a way of collecting data, highlighting inequities to policy makers, providing health messages to communities and redirecting public agendas to better promote health equity. Liverpool has a long history of strong and active communities, and vibrant creativity but also has entrenched health inequalities that mean many local people live shorter lives with fewer years of good health than they should. Our recent community insight work with parents of unvaccinated children highlighted mistrust towards government and public health information. Routine preventive and promotive health interventions such as cancer screening and childhood immunisation have fallen well below national targets and there is an increasing burden of poor mental wellbeing.

Our overall aim is to scale-up and sustain the integration of storytelling into community and health system efforts to address these gaps and promote health equity by building a legacy of trust and collaborative action.

We will target people living in the poorest areas of Liverpool, Knowsley and South Sefton with a focus on addressing mistrust in relation to health prevention (cancer screening and childhood immunisation) and mental wellbeing promotion. We will build on existing structures to test a more integrated creative health approach. Communities, creatives and people with lived experience (PWLE) will benefit from training in community-based participatory research and in multi-media immersive storytelling to address mistrust and health inequities. We will catalyse action through the co-development of human stories on mental wellbeing, cancer screening and childhood immunisation. Creative health marketplaces will match creatives with community organisations and the health sector to galvanise new approaches.

Advocacy networks will lobby decision-makers to address structural issues beyond the reach of communities. Community Innovation Teams (CITs) are already integrated within 7 of Liverpool's Primary Care Networks and consist of health providers, volunteers, community champions and PWLEs (and we will add storytellers). We will expand to Knowsley and Sefton. Teams will benefit from training in combining routine GP practice data with behaviour insight data to identify root causes of local health inequities and can access community responsive funds to co-develop creative health solutions. Our Learning Events will be used as platforms for learning, celebration, and recognising good practice. ReCITE is a research consortium and we will work with academics from different backgrounds to evaluate what works and why. Our final evaluation toolkit will help organisations track health equity indicators and provide evidence of the effectiveness of their work.

We expect a legacy of community arts organisations who can attain funding through evidencing the impact of storytelling to commissioners. We further aim to develop a critical mass of

storytellers, PWLE, and community organisations with the knowledge and tools to collaborate and train others beyond the programme. We expect that commissioners and policymakers will see the benefits of scaling-up and sustaining a strategic creative health approach which builds community trust and increases health equity.

Start date

February 2024

Duration

36 months

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Vision

Merseyside has a vibrant ecosystem of community organisations, community activists, and community-based arts organisations, with many utilising storytelling, building on Liverpool’s rich history in the spoken and written word. Liverpool City Council’s ‘Cultural Strategy’ aims to strengthen community-led initiatives and cross-sector partnerships towards a more creative and integrated way of working [1]. Liverpool City Region is the first in the country to commit 1% of its annual £30 million devolution funding to support cultural activities. Merseyside has a culture of fighting injustice yet continues to have very high rates of health deprivation, with 43% of Merseyside’s neighbourhoods in the 10% most deprived nationally. Ongoing reductions in

funding to arts and community development organisations have coincided with the cost-of-living crisis and rising rates of poor mental and physical health.

Our community insight work highlighted heightened levels of mistrust towards government, health services and health information. This lack of trust at the interface between the community and formal health system exacerbates health inequity as it undermines confidence in public health information and uptake of effective interventions. Our community-led approach to health has broken down silos and demonstrated how the integration of storytellers, people with lived experience, community organisations and health providers can impact health equity and build trust in the short term. More evidence is needed on how such integration could catalyse a more equitable and listening healthcare system in the longer term.

Our vision is to achieve sustained integration of storytelling into community and health system efforts to promote health equity, building a legacy of trust and collaborative action between communities, storytellers and health providers in the poorest areas of Merseyside. We will achieve this by catalysing and embedding collective action and advocacy through the power of storytelling using our community-led model. We expect to demonstrate reduced inequities in the uptake of childhood immunisation, breast and cervical cancer screening, and promotion of mental wellbeing, providing much-needed evidence for funding longer-term integrated approaches.

Together we have the expertise and experience to create new knowledge, strengthen capacity and achieve our vision. Phase 2 funding allowed us to establish a unique, interdisciplinary research-ready consortium led by the Liverpool School of Tropical Medicine, ranking 2nd overall in the UK for outstanding impact; working with lead arts organisation Writing on the Wall, a National Portfolio Organisation of Arts Council England, who, for 23 years, have used storytelling as a vehicle for social change. Our health equity work with Central Liverpool Primary Care Network and Liverpool Public Health (consortium members) recently won a national award for building collaborative communities. We have expanded our consortium to include socio-cognitive science expertise from the University of Bristol to better tackle misinformation and Liverpool University, which is part of the Combined Intelligence for Population Health Action (CIPHA), giving researchers access to anonymised GP records. This will allow us to track health equity indicators and uniquely link storytelling to a large dataset, generating evidence that gives greater scope for commissioners and funders to identify what works and fund successful collaborative action.

Co-creation and Lived Experience

Many of Merseyside's neighbourhoods are characterised by health deprivation, with 43% of neighbourhoods in the most deprived 10% nationally [2]. We will work in the most deprived wards of Merseyside - Liverpool, Knowsley and South Sefton, selected in consultation with the Integrated Care Board, Director of Public Health Liverpool and based on our mapping of storytelling assets. We will jointly identify up to 15 Primary Care Networks (PCNs) in our three boroughs with large uptake gaps for preventive and promotive health. We are already aware of wide gaps in the uptake of childhood immunisations with rates of parents getting their children

vaccinated for measles, mumps and rubella dropping off in Merseyside after the COVID pandemic. Vaccine uptake in Cheshire and Merseyside is lowest in the most deprived populations (5-15% lower dependent on age and type of vaccine) and slowest to recover after negative publicity [3]. Additionally, during COVID, interventions such as mobile vaccine units, which increased overall uptake, were least effective in deprived groups. There are also avoidable and unfair differences in the uptake of cancer screening (for example, only 27% of women in Anfield and Everton PCN invited for a mammogram in 2022 attended) and an emerging mental health and wellbeing crisis in deprived areas. Community-led surveys and professional market research interviews among service non-users was commissioned by Liverpool City Council in 2023. Findings show an increase in mistrust towards government, health services and public health information in the post-COVID-era.

Co-creation and co-production with community partners and people with lived experience (PWLE) of socio-economic and health deprivation

Phase 2 funding allowed us to establish our consortium and co-develop our theory of change through a series of workshops with 71 participants from 49 organisations, including PWLE, community organisations, health providers, researchers, and storytellers. They were involved as members of the Community Innovation Teams (CITs), supporting primary care networks (PCNs) in promoting health equity. We have worked with a range of community-based organisations representing deprived communities across Liverpool, Sefton, and Knowsley. These include: White British; Roma; Polish; Irish Traveller; Somali; Arabic speakers; and refugee/asylum seekers. They expressed lack of engagement and a dearth of data relating to people in their communities. This was exacerbated by poor ethnicity coding of GP records. Community and storytelling organisations all felt increased competition for funding had resulted in short-term piecemeal projects, reducing motivation of PWLE and limiting opportunities for collective creative action to tackle 'wicked' problems such as health equity. Storytelling assets have shaped proposal priorities such as mental wellbeing and the need for an evaluation tool kit. Storytellers have pitched ideas, including a children's charity wishing to develop Horrible Histories around measles; poetic mammogram invitations using humour to engage non attendees etc. Together with community organisations they called for a fundamental shift in how health and social sectors interact with communities.

Ensuring equitable participation

PWLE are included throughout our consortium, from the core and advisory groups to the wider consortium and approach. We are taking a Community-Based Participatory Research (CBPR) approach to involve PWLE equitably in decision-making and activities throughout the research and action process. CBPR is particularly appropriate for working with marginalised communities where there is a lack of trust and power disparities [4,5]. We will include PWLE as 'co-researchers' remunerated to participate in research design, data collection, analysis, and activities across the programme. The (often justified) lack of trust towards health services and information, highlighted through our engagement activities, exacerbates, and undermines possibilities for communities and PWLE to work equitably and collaboratively. To address this, PWLE will co-create immersive multi-media stories with storytellers, which will be the basis of learning, action, and advocacy.

Our theory of change summarises our approach (see image 1). It has been developed around a range of collaborative networks and events bringing people from the community, health sector and creative storytellers together to build trust and encourage collective action (see image 2). Many root causes of health inequity are structural, requiring actions beyond the reach of communities. We will foster a collaborative movement to advocate for wider changes.

Our consortium's guiding principles developed for Phase 2, recognise power differences could be a barrier to equitable participation, and show we are committed to genuine power sharing as a pre-requisite for co-creation [6]. We will pursue principles of mutual respect, openness, and reciprocity and aim for inclusive, accessible, honest, non-hierarchical, jargon-free communication and discussions about what can be achieved.

Potential impact on the community including long-term positive change

In selected PCN areas, our work will impact on childhood immunisation, breast and cervical cancer screening, and mental wellbeing. These areas of health prevention and promotion are strategic priorities for Cheshire and Merseyside community champions and PCNs have already received NHS England funding to tackle low uptake of these services. PWLE, who are CIT members, will be involved in the design of local community-led interventions. Increased immunisation has potential long-term impact on the lives of immunised children (and through herd immunity on the lives of the unimmunised), preventing infectious diseases and their consequences (e.g., poor immunity for 18 months following measles infection). Illness during childhood contributes to lower school attendance, affecting educational and ultimately socio-economic attainment. Increased cancer screening in deprived communities has the potential for early detection, reduced cancer deaths, narrowing the gaps in life expectancy. Reducing illness from cancer has the potential to reduce mental and socio-economic stress. Finally, early intervention to promote mental wellbeing has the potential to reduce acute mental health problems. Half of all lifelong cases of mental health problems are present by the age of 14, which has long-term economic hardship consequences and is associated with later life negative outcomes [7].

Many creative storytelling organisations in Merseyside already promote wellbeing, but funding and service provision is inconsistent. Our Marketplaces for Creative Health and Advocacy Networks will focus on how to increase funding to this work. Our co-development of an evaluation toolkit aims to create a long-lasting legacy of organisations better equipped to measure the impact of their work and attain sustained funding.



Understanding

We will engage with our communities, storytellers, health practitioners and commissioners to further understand the complexities and lost potential for integration and sustainable funding of community organisations and storytelling assets.

Leading to

opportunities for building on existing structures to better integrate and fund the coming together of community organisations, storytelling assets and primary care networks

So that

context-relevant solutions using storytelling are co-developed and targeted at building trust and health equity.



Catalysing Change

We will inspire Storytelling Partnerships - combining storytelling and misinformation theories; lived experience and new technologies - and strengthen capacity to co-create multi-media stories that tackle misinformation and highlight health inequities.

Leading to

emotive and immersive stories able to catalyse diverse agents of change throughout the system

So that

stories are better targeted towards improving trust, promoting health equity and driving change in local promotive and preventive health priorities.



Collective Action

We will break down silos between the health, creative and community sectors through Creative Health Marketplaces and Community Innovation Teams.

Leading to

increased confidence, ownership and trust between sectors; stronger collaborations; renewed energy and new ideas for collective action to address local health equity gaps

So that

there are local improvements in health equity indicators and an integrated creative health model underpins a positive promotive, and preventive approach to health equity.



Advocacy

We will work with Creative Health Advocacy Networks to use the multi-media and other stories to advocate for change through digital and physical platforms.

Leading to

the spread of positive narratives and benevolent rumours; increased health provider awareness; communities empowered to push for increased accountability among decision-makers

So that

there is increased trust and pressure to challenge misinformation; a more listening, responsive health sector; and reduction in avoidable and unfair differences in health.



Evidencing Impact

We will co-develop, test and refine a mixed methods evaluation toolkit; harness our unique regional population health dataset to track jointly agreed health equity indicators; and qualitatively evaluate each of our approaches.

Leading to

A legacy of skills and tools to track and evaluate changes in health equity; the identification and spread of successful approaches; new commissioning priorities

So that

there is sufficient evidence for long-term local commitment to commissioning and funding integrated structures; and strategic, sustainable approaches to creative health are scaled-up.

BUILDING A LEGACY OF TRUST AND COLLABORATIVE ACTION: PUTTING AN END TO SILOS

STORYTELLING PARTNERSHIPS: for change

Immersive, multi-media human stories that catalyse diverse agents of change

CREATIVE HEALTH MARKETPLACES: for collaborative action

Matching storytelling and community organisations to spark new ideas with renewed energy to promote health equity

LEARNING EVENTS: for celebration, voice, evaluation and scale-up

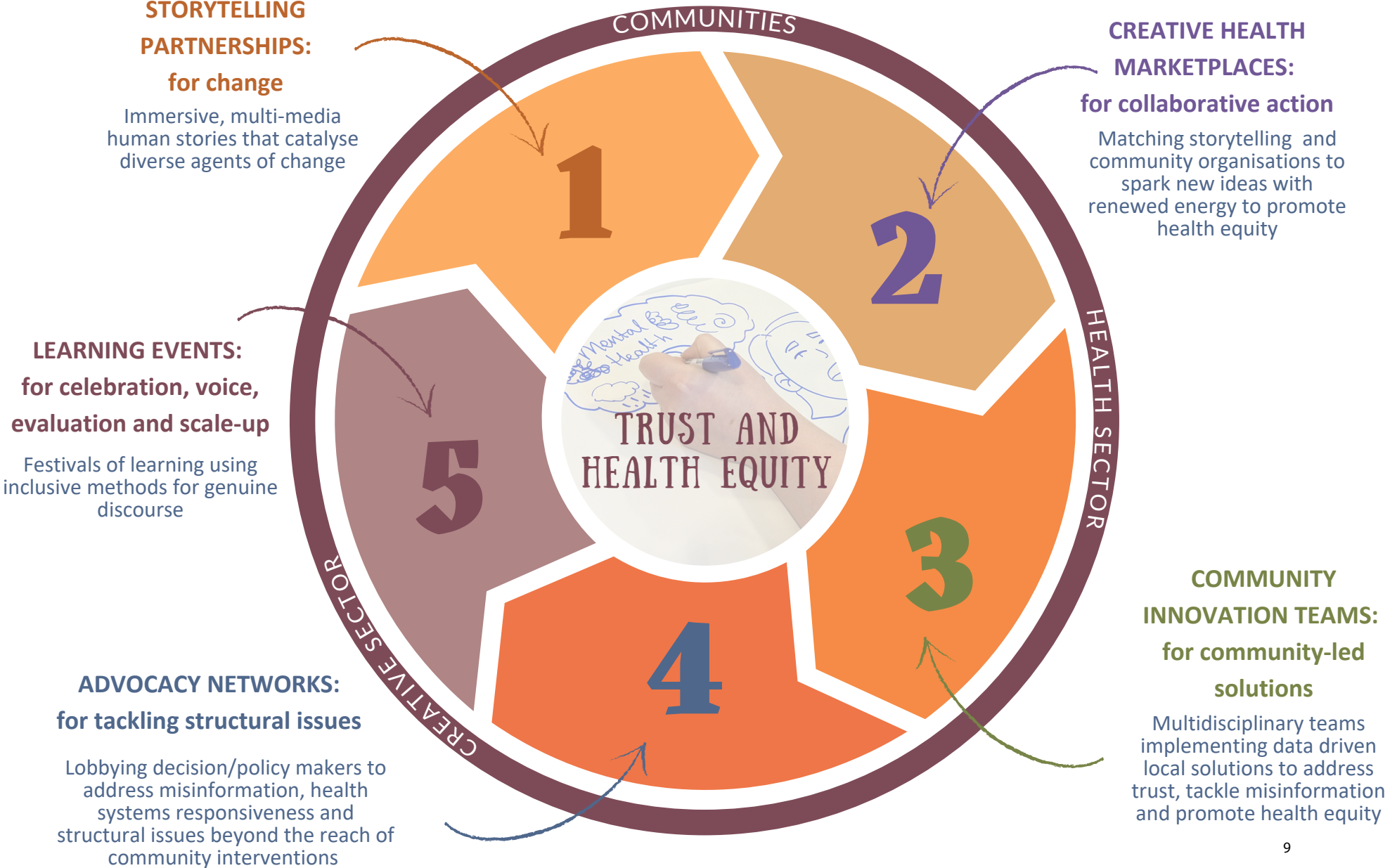
Festivals of learning using inclusive methods for genuine discourse

ADVOCACY NETWORKS: for tackling structural issues

Lobbying decision/policy makers to address misinformation, health systems responsiveness and structural issues beyond the reach of community interventions

COMMUNITY INNOVATION TEAMS: for community-led solutions

Multidisciplinary teams implementing data driven local solutions to address trust, tackle misinformation and promote health equity



Approach

Building on existing work

Storytelling resonates as a respectful, meaningful, and appropriate mechanism for challenging dominant narratives, tackling racism, combatting misinformation, and informing policy and action on health equity [7–9]. Stories have been used as empowerment tools; as educational and awareness tools; and as advocacy and lobbying tools [10]. They can help build mutual trust and contribute to greater health system responsiveness. Lack of trust at the interface between the community and the formal health system undermines confidence in public health information and affects service uptake [11-13]. Societal marginalisation and deprivation correlate with reduced trust in institutions, governments, and healthcare [14,15], fuelling a vicious cycle of inequity [16], poor mental health [17] and reduced engagement with preventive healthcare [18]. Tackling mistrust is particularly important in a polarised, unreliable, and siloed information environment casting doubt on health information [19,20]. Agents of disinformation (misinformation spread with intent) use psychologically compelling stories to exploit communities [21] and suppress activism against health disparities. Storytelling and community-led approaches are thus vital to counter harmful narratives, promote “benevolent rumours” about health and wellbeing, and tackle disparities in health outcomes.

Despite this evidence, health and social services commissioning rarely includes storytelling [22], a missed opportunity leading to short-term, project-based approaches which foster competition over collaboration, generating feelings of disappointment and exploitation amid power imbalances and vested interest [23]. Just when community champions start to unravel complexities and initiate community solutions, funding runs out [24]. Our existing work has identified the importance of advocacy to raise structural and funding issues with institutional leadership, policymakers, politicians, and other influencers.

Existing Community Innovation Teams (CITs) in Liverpool bring together Primary Care Network (PCN) staff working on health equity, community champions representing black and minority ethnic communities, volunteers and trusted members of target populations to act on local problems. CITs use routine practice data, select indicators, and develop dashboards to monitor change and gain nuanced insights into health behaviours. In 2021-22 three CITs used these dashboards to demonstrate a 12% increase in vaccine uptake from baseline among unvaccinated white men <50 years and an 11% increase among women of reproductive age in the poorest wards. Seven additional PCNs have now adopted this model to tackle avoidable and unfair differences in immunisation and cancer screening uptake. We have integrated storytellers from Merseyside to develop ‘good news stories’ to address trust and trained CITs in storytelling to counter misinformation by tailoring stories to people’s psychological motivations [25].

We will link CITs with the Combined Intelligence for Population Health Action (CIPHA) [26], a funded System-P programme between University of Liverpool (UoL) and Cheshire and Merseyside integrated care [27] providing evidence, much sought after by commissioners, on public health intervention impacts on population health equity. CIPHA provides access to

pseudoanonymised linked individual-level health records for ~2.8M people in Cheshire and Merseyside.

Theory of Change

Our co-developed theory of change (image 1; co-creation section) has two research pillars and three central pillars driving multi-sectoral integration. Capacity strengthening, Community-Based Participatory Research (CBPR) and shared learning will support co-researchers, health practitioners and evaluators to spread success and innovation. Image 2 illustrates purpose and links between events and networks.

Pillar One: Understanding: will provide evidence on the complexities of integration and impact of the lack of sustainable funding for community organisations and storytelling assets, generating potential solutions.

Pillar Two: Catalysing Change: will bring together storytellers, creative academics, People With Lived Experience (PWLE) and technology specialists in **Storytelling Partnerships** to co-create immersive multi-media stories tackling misinformation and highlighting health inequities. Partnerships and stories are designed to galvanise people and catalyse diverse agents of change throughout the system.

Pillar Three: Collective Action: will break down silos between sectors through:

1. i) **Creative Health Marketplaces:** face-to-face events matching health, community and arts sector actors from across Merseyside, focusing on trust in promotive and preventive health activities. One event will target childhood immunisation and cancer screening uptake and the second, mental
2. ii) scaling-up our **CITs** across Liverpool, South Sefton and Knowsley PCNs, specifically supporting immunisation and cancer screening. CITs will have access to responsive funds for integrating storytelling assets, health promotion/prevention activities.

Pillar Four: Advocacy: will test **Creative Health Advocacy Networks** of existing advocacy groups, storytelling assets and community representatives to address misinformation, health systems responsiveness and structural issues beyond the reach of community-led interventions.

Pillar Five: Evidencing Impact: will co-develop, test and refine a mixed methods evaluation toolkit to support funding decisions; harness our unique regional population health dataset to track jointly-agreed health equity indicators; and qualitatively evaluate each of our three central pillars.

Aims and Objectives

Our overall aim is to scale-up and sustain the integration of storytelling into community and health system efforts to promote health equity by building a legacy of trust and collaborative action between communities, storytelling assets, and health providers in the poorest areas of Merseyside.

Objective 1: Strengthen capacity with community organisations, PWLE, health practitioners and storytellers in research, storytelling, and measuring health equity changes.

Objective 2: Creatively disseminate learning and evidence on the integration of storytelling and community-led approaches, facilitating scale-up of sustainable and effective approaches.

Objective 3: Co-develop and conduct interdisciplinary research on scaling-up and sustaining the integration of storytelling assets within communities and health settings.

Methodology

We will work in the most deprived wards of Merseyside: Liverpool, Knowsley and South Sefton, selected in consultation with the Integrated Care Board (ICB), Director of Public Health Liverpool, and based on our mapping of storytelling assets. We will focus on strategic priorities for Cheshire and Merseyside community champions: 1) preventive interventions (e.g. immunisation and cancer screening) and 2) wellbeing promotion (e.g. early intervention to avoid severe mental health).

Capacity strengthening (Objective 1) is integral to our approach.

1) Co-researcher capacity for CBPR

We will use CBPR methodology for co-developing and conducting our interdisciplinary research. CBPR 'combines knowledge and action to improve community health and reduce health disparities' [28]. Key elements are: equitable involvement of PWLE as co-researchers, and other key stakeholders at all research stages; action-orientation; commitment to challenging power inequities; building on community insights; and a flexible, cyclical, iterative approach. We will work with community co-researchers to conduct CBPR through training and supported 'learning by doing'.

2) CIT capacity for understanding and using health equity data

CITs will be trained by our quality improvement expert (Doyle). The epidemiology team (Hungerford), care coordinators and public health data analysts will co-analyse routine health data in electronic GP medical records, select target populations for action, conduct root cause analyses, develop data-driven innovation plans, and create dashboards to track impact. This experience with data use will help team members to better advocate for change with public health and policymakers.

3) Storytelling capacity

PWLE will collaborate with storytellers and creative academics in Storytelling Partnerships. Storytellers will learn to use new technologies to create immersive (multi-media) experiences accessible on smartphones or in physical locations such as LSTM's immersive learning suite, and Liverpool's museums. Our socio-cognitive psychologist (Holford) will work with both CITs and Advocacy Networks using content from these stories to counter health misinformation/disinformation.

4) Creating a legacy of skills and tools to track and evaluate changes in health equity

We will build on existing frameworks and co-design an evaluation toolkit acceptable to commissioners (robust quantitative data); public health analysts (programme-orientated), and communities and storytelling assets (ease-of-use). The toolkit will include simple guidance, case studies and worked examples for storytelling assets on developing, negotiating, and tracking indicators of health equity (including on mental wellbeing, an area of significant interest to creatives). The toolkit will also include data automation scripts to analyse population health impact, providing a unique legacy for public health analysts.

Creative Health Learning Events, dissemination and scale-up (Objective 2)

Annual Creative Health Learning Events in the second and third year will bring together key stakeholders including health practitioners and commissioners from across Merseyside to learn from the full range of actors driving collective action within their communities. Learning Events are tried and tested 'festivals of learning' which develop capacity, disseminate lessons from community action, recognise best practice, and advocate for change. They level hierarchies using a range of creative, non-threatening methods amplifying community voices and promoting accountability from funders. They will provide a forum for planning next steps and scale-up. Key stakeholders from Cheshire will be invited to cross-fertilise learning across the wider region. We will showcase multimedia stories for change at learning events and also seek multiple opportunities to show them across Merseyside, with VIP launch events to create media coverage and attract senior decision-makers who are (in our experience) hard-to-reach. We will present research findings through peer-reviewed publications and at existing fora locally, regionally, and nationally, including webinars.

Research questions and methods (Objective 3)

Our research questions interweave disciplines and sectors. All questions and methods explore key concepts from our theory of change and are underpinned by CBPR methodology.

Research Question 1 (Lead: Rachel Tolhurst, Liverpool School of Tropical Medicine (LSTM); Social Scientist) What are the complexities, lost potential and opportunities of commissioning integrated collective action between communities, storytellers, health practitioners and commissioners to address mistrust and promote health equity?

We will deepen our shared understanding of opportunities and complexities of commissioning from the perspectives of key stakeholders using qualitative and participatory methods. We will conduct key informant interviews with commissioners and funders (NHS, arts, local authority and third sector e.g. National Lottery); storytelling organisations (including managers, freelancers, other creatives); members and leaders of community-based organisations working in health and wellbeing; and NHS actors working with creative and community organisations. We will review policies, rules and funding calls to map the funding landscape. We will present findings in a multi-stakeholder workshop for refinement and confirmation before creating a joint set of key principles, values and evaluation criteria.

Research Question 2 (Lead: Dawn Holford, University of Bristol (UoB); Social-cognitive Psychologist) Do the Storytelling Partnerships catalyse change in how to tackle mistrust and promote health equity?

We will assess the extent to which Storytelling Partnerships produce better targeted and useful stories for improving trust, promoting health equity, and catalysing diverse agents of change throughout the system, focusing on two local preventive health priorities (childhood immunisation and cancer screening). We will analyse observational and questionnaire data collected during training workshops and interviews with CITs and the Advocacy Network about people's confidence in and commitment to use stories for trust-building and advocacy. We will analyse behavioural insights surveys to identify impacts on knowledge, attitudes, and motivations over time.

Research Question 3 (Lead: Sarah Maclennan, Liverpool John Moores University; Creative Writing Academic). How and why do PWLE value the Storytelling Partnerships?

We will integrate participatory and qualitative evaluation methods, agreeing initial evaluation criteria with participants. We will conduct formative evaluations, participatory observation and reflective logs, holding structured conversations with and/or between participants exploring feelings and perceptions about the partnerships and impacts on them. Summative evaluations will reflect on the creative process and its impacts on their well-being as well as action around the focal issues.

Research Question 4 (Lead: Dawn Holford, UoB; Social-cognitive Psychologist) Do Creative Health Advocacy Networks lead to structural changes that improve community trust and promote health equity?

We will hold participatory workshops with Advocacy Networks to co-develop research around their use of stories to impact policy and structural change around trust and health equity. We will analyse awareness and spread of stories for advocacy, benevolent rumours, and positive narratives against misinformation using natural language processing to identify features of text (e.g., sentiments, narratives) in samples of community discourse (e.g., social media posts, discussion forums) produced by different groups. We will map discourses around health equity issues to changes in policy, rules, and funding identified in policy reviews from research question 1.

Research Question 5 (Lead: Rachel Tolhurst, LSTM; Social Scientist): To what extent do the Marketplaces and Learning Events break down silos and lead to collective action? Do they catalyse scale-up or extended funding?

We will explore perspectives and experiences on scale-up, trust, listening and power-sharing, as well as strengthened capacities and sense of agency. Individual interviews will explore service or activity adaptation, commissioning and scale-up, and how these came about. Follow-up interviews in years 2 and 3 with the same key informants will explore whether and how assumptions in the theory of change have been evidenced in practice. Findings will inform an adapted participatory Ripple Effect Mapping (REM) exercise [29,30], which uses appreciative enquiry to explore and visually map dynamic impacts of an intervention. Researchers and co-researchers will analyse the maps and recorded discussions inductively utilising mapping

software to identify impact pathways. A final thematic analysis will triangulate data from qualitative interviews, REM, document reviews and new commissions.

Research Question 6 (Leads: Dan Hungerford, UoL Epidemiology; Miriam Taegtmeyer, LSTM Clinician/Health Systems; UoL Co-investment) Do the PCN-based CITs have a measurable effect on childhood immunisation and cancer screening health equity indicators? If so, how?

Vaccine uptake and cancer screening participation will be assessed through CIPHA using patient records across 15 PCNs (Liverpool, Knowsley, South Sefton). We will:

1) use CIT intelligence on who, where and when they have targeted interventions in participating GP practices to establish the proportion in each Middle Super Output Area (MSOA) exposed to interventions and model it against the proportion taking up vaccination and screening;

2) use synthetic control methodology within an interrupted time-series framework.[31,32] Matched artificial controls (based on neighbourhood characteristics) will be MSOAs within Merseyside who did not receive targeted CIT interventions. We will embed a process evaluation to explore what worked and did not work using qualitative participatory methods described elsewhere.

Delivery Plan and Management of Research Programme

We developed an interdisciplinary research consortium in Phase 2 and expanded following local and AHRC networking events to include aligned disciplines and institutions. ReCITE now includes researchers from clinical science, epidemiology, health systems, psychology (MRC), behavioural insights, social sciences (ESRC), and the creative arts (AHRC).

Our Gantt chart shows the breakdown of activities over the three-year period. The programme will be led by Professor Taegtmeyer (LSTM), a highly experienced PI and Head of Institute of Resilient Health Systems who will have overall responsibility and oversight. Dr Holford (UoB), an emerging research leader, will be mentored as a co-PI by Professors Taegtmeyer and Lewandowsky (UoB). Each research question has a lead (or co-leads) to ensure accountability for delivery. A project manager will support the integrated **senior leadership team** of LSTM; Capacity Development International (CDI); WOW and UoB, who will meet monthly to ensure smooth management and delivery of the programme.

Storytelling Partnerships, Creative Health Marketplaces will be led by WOW, with the support of an experienced community arts project manager. CIT and Learning Events will be led by CDI (Doyle) and Advocacy Networks will be led by Collective Encounters (Jolly). Health sector and community mobilisation; research assistants; digital and multi-media experts will be based at LSTM.

Equality, diversity, and inclusion are central tenets of our consortium values, which have been co-developed within our Terms of Reference. We chose CBPR as it is particularly inclusive of marginalised communities, where there is a lack of trust and power disparities [4,5].

The **ReCITE core group** will meet 4 times a year, co-chaired by LSTM and CDI outlined in our terms of reference. Membership includes representatives from PWLE, advocacy, community and arts organisations (LifeRooms; Collective Encounters; Irish Community Care, WOW); CDI, and Liverpool Public Health, as well as the research leads.

An **Advisory Group** will meet biannually to provide oversight. It combines members from the existing CIT programme's governance structure (includes PCN leads, Director of Public Health Liverpool; HealthWatch; Merseyside Polonia; Integrated Care Board). The Core Group and Advisory Group will include PWLE and representatives of the key stakeholders. In addition, we have a wide consortium of interested organisations who we will keep updated through our mobilisers.

Risks to Delivery and how they will be managed

Key risks to delivery and their potential mitigation are:

1. There is a risk of conflict and/or dissipated efforts when integrating sectors, disciplines and methods. We have established robust governance structures and formed trusted relationships during Phase 2 funding. Members have collaborated on previous projects (e.g., CDI and WOW; LSTM and UoL; UoB and Central Liverpool PCN).
2. To minimise the risk of competing demands on time, we will link to similar initiatives, embed training into existing events where feasible and use accessible file-sharing platforms. We will combine interview tools and workshop agendas, ensuing data are collected across multiple research questions in each contact.
3. Whilst we are keen to create an impetus to commission or fund creative health approaches, local authority and NHS budgets continue to be under intense strain. The amount of funding for new initiatives may be limited.
4. Our experience has shown it is difficult to gain access to senior decision-makers in local authority and NHS. We will hold VIP launch events with media coverage mobilising support through the Director of Public Health in Liverpool and the ICB to create momentum. We have included a mobiliser with extensive understanding of local government and health service structures to help navigate systems and engage the right people. Our long-term aim is for the work to be adopted and managed as a population health management commitment by the NHS ICB.
5. We are experienced in managing the procedures and approvals needed for population health action. CIPHA and the ICB are already supporting projects and have granted approvals for influenza and COVID vaccine evaluations using CIPHA, GP, and secondary care data.

Outputs to Outcomes and Impact

We will produce an academic paper and a briefing document or toolkit for each research question. Briefing documents will contain research findings in lay language and a roadmap on how to facilitate the CITs, events and networks. These products will enable replication of successful elements of the approach.

Our theory of change describes outcomes and impacts for each of its pillars, which interact and influence each other. We envisage a legacy of increased skills, trust and collaborative working between communities, storytellers, health practitioners and commissioners; sufficient evidence for long-term local commitment to commissioning and funding integrated structures; and scaled-up, sustainable, creative health approaches.

Data Management and Sharing

Scope

This plan covers all data collected by ReCITE as funded by AHRC in Phase 3. This includes primary and secondary data collected by 1) the ReCITE group and 2) the Community Innovation Teams working within Primary Care Network structures. Primary data to be collected includes key informant interviews (with community organisation representatives, creative asset representatives, health sector institutions and people with lived experience (PWLE)), stories and creative outputs created in partnership between creative assets and PWLE, focus group discussions and participatory group analyses, workshop outputs, participant observation, survey data, and secondary data including anonymised aggregated statistics on health inequality in Merseyside.

Principles, Standards and Methodologies

All data processing and storage will be compliant with GDPR. We will also adhere to all partner Universities' data policies, which cover data protection compliance and ethical handling of research data.

Specific methodologies

Stories and creative outputs will only be used with the informed written consent of the authors.

Surveys with organisational representatives and/or community participants will be collected using secure online software licensed by the host institution to maintain anonymity and secure storage of any sensitive data. Where the use of hard copy surveys is necessary we will ensure hard copies are securely stored in locked offices, transferred, and backed up online, and then securely destroyed. Original survey data will only be accessible to researchers within ReCITE who require it. Survey data will be cleaned and analysed using standard statistical software with replicable analysis scripts maintained. Results will be presented in anonymised form. Relevant socio-demographic information will only be reported at the aggregate level to minimise risks of identification. Survey data that is completely anonymised and de-identified will be made publicly available in an open data repository along with metadata to enable data sharing and reuse.

Key informant interviews, structured conversations and focus group discussions or participatory analyses will be digitally recorded, and participant observation will be documented in logs.

These will be transferred and backed up to online storage by the observer as soon as practicable after the event. Workshop outputs will not identify any person's individual contributions. All qualitative data will be managed and analysed within NVivo. To protect anonymity of participants, original qualitative data such as transcripts, observation logs, and participatory analyses will only be available to participants and the ReCITE core team. Analysed data for all qualitative methods, such as thematic charts, will be made publicly available in an open data repository and as an annex to relevant publications.

All research data will be stored and shared within the ReCITE core group through provision of a shared cloud storage area on LSTM's secure server.

General practice data accessed through CIPHA will be used for intervention evaluation in RQ6. Data will be pseudoanonymised for the purpose of processing and Processing of data is covered by Lawful Basis for data processing under UK GDPR - Article 6 Condition 6(1)(e) and Article 9 Condition 9(2)(j). Access to data will be managed according to the existing agreed Population Health Data Protection Impact Assessment and processes, and will only be undertaken with prior approval from the CIPHA Data Access Advisory Group. Data access will be only to fulfil the project objectives and will therefore only include person records that meet the inclusion and exclusion for the study. Data items used for each person in the study will be the minimum needed to meet the study objectives. Data transfer will occur via the Internal CIPHA secure transfer and access via a trusted research environment that members of the project team already have access to and is covered by the existing Population Health (Tier Two) Data sharing agreement. Data used for analysis will be fully anonymized. Tables / text will be proofed by multiple team members trained in disclosure control procedures to protect confidentiality.

Community Innovation Teams embedded within Primary Care Networks will have access to GP data both aggregated and with personal identifiers only when the GP practice deems it necessary in order for interventions to address health equity challenges. Agreements on access to this data and its use will be under the NHS data agreement rather than this data plan. Access will not usually be given to the wider ReCITE group.

Documentation and Metadata

Secondary data dictionaries and Metadata are already available within CIPHA. But Metadata for the final clean analysed dataset will be generated.

Documentation will include survey tools, interview, structured conversation, observation and focus group topic guides.

No bespoke analysis software will be required.

Collaborative Research, Ethics and Legal Compliance, Responsibilities and Resourcing

All research will be conducted under the ethical and legal frameworks adhered to by the partner Universities, including GDPR.

This data sharing plan will form part of the contractual arrangements between partners. All research will be owned by the ReCITE core group. The institution of the lead researcher(s) for each research question will be responsible for storage and management of data and adhering to this data policy and all associated legal and ethical frameworks using institutional infrastructure. All data will be stored electronically on encrypted secure servers with automated daily backups which are held off site on secure servers.

Personal data will be collected in these areas.

1. Stories, qualitative interview data and creative outputs.
2. Identity of organisational representatives in survey data order to complete follow up interviews.
3. Type of organisational representatives
4. Socio-demographic information relating to PWLE.

Full disclosure and consent will be sought for the collection and use of personal data, which will not be shared beyond the research team unless there is specific consent to do so e.g. for stories to be used in public fora.

Data controllers and data processors will be identified for each research question.

Data Retention

All data that has not been made publicly available through repositories, publication annexes or public dissemination will be destroyed 5 years after the final publication has been produced. The research lead will also be responsible for ensuring that data is of the highest quality, fully documented, and managed in compliance with legal and ethical frameworks.

Project Partners: Letters (or emails) of Support

Healthwatch, CLPCN, ICB, LCC&KMBC, UoL

Applicant and Team Capability to Deliver

Module 1—Contributions to the generation of new ideas, tools, methodologies or knowledge

Miriam Taegtmeier (MT) leads the AHRC-funded ReCITE consortium in Liverpool. She is the joint lead of the Institute of Resilient Health Systems at LSTM. Her research at the interface of communities and health systems has led to the design and delivery of community innovation teams (CITs) in Kenya (doi:10.1136/bmjgh-2020-002452) that she adapted to the Liverpool context (<https://www.youtube.com/watch?v=QnVZj0rSZ6A>); adapted Learning Events (<https://sway.office.com/Q5UORmxdDIWoLaQd?ref=email&loc=play>) are an integral part of this process.

Rachel Tolhurst (RT) co-developed a competency framework for Community-Based Participatory Research (<https://www.ariseconsortium.org/competency-evaluation-framework/>) and processes for safeguarding in CBPR in global health (doi:10.1136/bmjgh-2019-002253). She co-leads the UKRI-funded ARISE consortium, using inter-disciplinary CBPR to develop new knowledge to strengthen accountability for health equity in eight countries.

Sarah Maclennan (SM) leads the cross-disciplinary study "We are more than one story" students with criminal records using storytelling (<http://doi.org/10.1177/0264550520914377>). This provides transferable approaches for studying underrepresented groups.

Dan Hungerford (DHU) developed a novel statistical method to address bias in observational vaccine evaluation studies using simulated control groups, proven beneficial for measuring the public health impact of vaccines ([doi:10.1186/s1296-017-0989-z](https://doi.org/10.1186/s1296-017-0989-z) and [doi:10.1016/j.vaccine.2018.09.051](https://doi.org/10.1016/j.vaccine.2018.09.051)).

Stephan Lewandowsky (SL) is an expert in countering misinformation and fake news (DOI: [10.1080/10463283.2021.1876983](https://doi.org/10.1080/10463283.2021.1876983)). Dawn Holford (DH) and SL co-created an evidence-based psychological taxonomy of anti-vaccination arguments ([doi:10.1038/s41562-023-01644-3](https://doi.org/10.1038/s41562-023-01644-3)) They also co-developed the Empathetic Refutational Interview, a procedure to correct vaccine misconceptions while respecting individual values (<https://doi.org/10.31219/osf.io/8ndz2>). This formed training packages delivered in the Horizon 2020 JITSUVAX project (<https://sks.to/jitsuvax>).

Mike Morris (MM)/Madeline Heneghan (MH) WoW's co-directors use creative writing groupwork to empower marginalized individuals and communities through creative expression and story sharing. WoW's 'Write to Work' courses (<https://writingonthewall.org.uk/projects/write-to-work-directions>) enhance participants' employability and personal development. Their "Write Minds" and "It's Not Ok" (<https://writingonthewall.org.uk/shop/its-not-ok>) projects tackle mental health and domestic abuse. In ReCITE phase 2 free-writing workshops generated poems about changes communities wanted to see in health equity, including a poem about a young mother who didn't vaccinate her child, (www.youtube.com/watch?v=8eulBojN8kl).

Victoria Ekpo (VE) brings expertise in poetic enquiry to storytelling approaches.

Vicki Doyle (VD)/Ema Kelly (EK) collaborated on developing the ESTHER EFFECT tool (<https://www.esther.ie/tools-for-health-partnerships/>), assessing lasting change in institutional health partnerships (doi.org/10.1186/s12992-015-0133-9). EK developed monitoring frameworks for global health programmes and her systematic evaluation frameworks are based on co-developed theories of change. VD created national curricula and training materials for community-led quality improvement. VD's mentoring of community-led innovation teams resulted in data-driven interventions addressing health inequities and matchmaking between creative assets and CITs resulting in the 'I did it for' touring photo exhibition (<https://www.youtube.com/watch?v=ovyO0MegYj8>).

Liz Fisher (LF)/Matt Ashton (MA) lead the development and implementation of LCC's public health strategy, community champions programme and action plans to improve population health and wellbeing including those that partner arts and health <https://www.cultureliverpool.co.uk/developing-a-cultural-strategy-for-liverpool/>).

Module 2–The development of others and maintenance of effective working relationships

MT successfully supervised 22 Master's students and 11 PhDs, with 5 current PhD students. Former students have excelled in Ministries of Health, NGOs, and academia. MT collaborates on community-based projects and mentors female leaders in Kenya, Zimbabwe, South Africa, Liverpool and Malawi. She is PI on LSTM's Liverpool Vaccine Equity Project which won the 2023 national Smarter Working Live Awards for Building Collaborative Communities.

RT successfully supervised 6 PhDs and 15 Master's students and was shortlisted for the Times Higher Education Outstanding Research Supervisor of the Year award in 2021. She strengthens capacity of community co-researchers and early career researchers through global research including ARISE, which UKRI recognises as an exemplar of equitable research partnership.

SM line manages ten permanent colleagues within the Creative Writing department and mentors staff at various career stages. She won the 2021 Liverpool John Moores University's Excellence in Academic Leadership Award and the 2023 Outstanding Contribution to the Student Experience Award.

DHU leads collaborative research through the NIHR-funded UK Health Protection Research Unit-GI and a multi-country Global Health Research Group. He supervises five PhD and master's students and hosts academic clinical fellows and foundation doctors. DHU leads the European rotavirus surveillance network. He led and managed the epidemiology and field work for the COVID-LIV community household cohort study ([10.1136/bmjopen-2020-048317](https://doi.org/10.1136/bmjopen-2020-048317)).

DH was PI on an ESRC Postdoctoral Fellowship, fostering interdisciplinary relationships. She trained NHS staff and secured funding for vaccine outreach and communication to marginalised communities, through community health organisations, including in Liverpool.

MH/MM are Co-Directors of WOW, an Arts Council England National Portfolio organisation, which partners with a wide range of stakeholders including Merseyside Universities, National Museums Liverpool, and Merseyside Domestic Violence Services. MM chairs COoL (<https://cool-collective.co.uk/>), a collective of 30+ key arts organisations that plays a pivotal role in promoting the cultural offer of the Liverpool City Region by championing inclusivity, diversity, participation and collaborative working practices.

VD/EK have developed bespoke cross-cutting skills training, including the postgraduate certificate in International Health Consultancy at LSTM. VD developed training in quality improvement, data collection and analysis for community members without formal education and uses peer-to-peer learning and advocacy events to bring together communities and policy makers.

LF/MA are experienced in managing public health teams, co-ordinating steering and strategy groups, working with multiple stakeholders, and embedding community-centred approaches, such as community champions.

Module 3—Contributions to the wider research and innovation community

MT led the REACHOUT consortium, in 6 LMIC countries, improving equity, efficiency and effectiveness of close to community healthcare providers. MT brings lessons and community quality improvement approaches from the Global South to Liverpool fostering learning and exchange ([doi:10.1186/s1293-023-09162-8](https://doi.org/10.1186/s1293-023-09162-8)).

DHU's evaluation of the UK impact of the Rotarix vaccine revealed substantial reduction in acute gastroenteritis among young children, with the greatest impact in the most deprived populations ([doi.10.1186/s12916-017-0989-z](https://doi.org/10.1186/s12916-017-0989-z)). DHU and Mark Green's (MG) work on COVID status, vaccination and deprivation shows the complexities of associations over time ([doi:10.1186/s12879-022-07878-2](https://doi.org/10.1186/s12879-022-07878-2)). MG has evaluated social and spatial inequalities at large scale ([doi:10.1016/j.lanepi.2021.100107](https://doi.org/10.1016/j.lanepi.2021.100107)). Xingna Zhang's evaluation of mobile testing units demonstrated that they may increase inequities in vaccine uptake despite overall success ([doi.10.2139/ssrn.4018689](https://doi.org/10.2139/ssrn.4018689)) and a synthetic control study of community lateral flow testing for covid-19 ([doi:10.1136/bmj-2022-071374](https://doi.org/10.1136/bmj-2022-071374)).

DHU co-led UoL Patient and Public Involvement and Engagement panel, promoting lay co-production of research.

SL has managed large, multi-disciplinary grants from the European Research Council, the EU's Horizon 2020 programme among others He has worked with policymakers at the World Health Organization around misinformation, propaganda, and conflicts between the architecture of our online information ecosystem and democracy, including helping to shape EU legislation.

DH was lead author of the widely distributed COVID-19 vaccine communication handbook, aiding policymakers and practitioners in communication strategies during the vaccine rollout in 2021.

MM collaborated on publications and research that enhance knowledge of Liverpool's radical and artistic history. MH led the Great War to Race Riots creative heritage project, co-authoring a work uncovering the lost histories of Liverpool's black community, which pioneered new approaches for community representation (<https://writingonthewall.org.uk/shop/great-war-to-race-riots-book/>).

Module 4—Contributions to broader research/innovation-users and audiences and towards wider societal benefit

MT's work in Kenya has include community member co-researchers, community advisory boards, and community research on data protection. She has facilitated cross-learning between Kenya and Liverpool, and adapted models from Kenya for COVID vaccination, childhood MMR, and cancer screening uptake in deprived wards of Liverpool.

RT has co-developed diverse multi-media research uptake materials with PWLE through ARISE (<https://www.ariseconsortium.org/learn-more/multimedia>) including webinars, conference panels, and blogs including on community-led monitoring and evaluation (<https://www.ariseconsortium.org/community-led-monitoring-and-evaluation>) and an animated film on Community-Based Participatory Research (<https://www.youtube.com/watch?v=9NNRaUqxkHo&t=13s>).

SM is a Writer in Residence at Aintree Hospital, contributing to the redevelopment of Everton Health Centre through a creative project and led a PCT-funded project that fed into the NHS's 'Five Ways to Wellbeing' evaluation process. She creates and delivers content for the Write to Work project, addressing mental health, self-esteem, and confidence amongst long-term unemployed.

DHU's matched-case control and retrospective birth cohort studies on MMR vaccine uptake inequalities and cohort studies on measles susceptibility directly impacted public health policy, leading to a targeted MMR catch-up campaign with NHS England ([doi:10.1017/S0950268815002599](https://doi.org/10.1017/S0950268815002599)). This work was recognised by the North-West Coast Innovation Awards for Delivering Research in Collaboration.

DH's contributions to tackling health misinformation includes serving on the World Health Organization's Working Group for Evidence Gap Maps in Infodemic Management and providing evidence to the Scottish Parliament's COVID-19 Recovery Committee.

MH/MM deliver innovative writing and spoken word projects including the WOW Festival, Write to Work, and What's Your Story, which bring local and national writers and artists into communities to inspire creation of original work (<https://writingonthewall.org.uk/projects/whats-your-story-2/>). WoW cultivate diversity among its audience and participants, building trust, enabling community cohesion and collaborations that influence policymakers. Notable projects include Time to Breathe, which provided a safe space for black communities to discuss and express their feelings following the murder of George Floyd, developing, publishing and showcasing creative responses.

Aidan Jolly (AJ) is a musician, songwriter/composer and performance maker leading research at Collective Encounters. He developed participatory approaches to community advocacy through stories, movement and music.

VD's promotion of public health messaging through culture and arts earned recognition at the Liverpool City Region Culture and Creativity Impact Awards, winning the International Reach Award 2021.

Ethics and Responsible Research and Innovation (RRI)

We will uphold research ethics in terms of the rights, well-being, and dignity of everyone involved in the research. We will also ensure safeguarding to promote a safe environment and respond appropriately to risks of harm.

The research will go through ethical approval at LSTM. All research will be conducted within the ethical and safeguarding policies of the academic institutions in the ReCITE core group. Creative assets and community organisations working with ReCITE will be supported to develop frameworks for ethical practice and safeguarding processes if they do not already have them.

Storytelling

There are particular ethical and safeguarding issues relating to the use of storytelling in this context.

Whilst there is considerable research showing the potential benefits to individuals of storytelling to address and give voice to inequalities, sharing such experiences can be re-traumatising, resulting in 'internalising everything again' [33]. We will work with community organisations and creative asset organisations who have relevant ethical and safeguarding practices, which include availability of counselling support and clear protocols for people to withdraw participation. Participating in research that surfaces difficult experiences can also have an emotional impact on facilitators and researchers. We will encourage reflection amongst all participants and researchers and provide opportunities for de-briefing support after storytelling workshops and group sessions where stories are being shared. Another risk is the co-option of stories to progress perspectives/narratives that are not shared by the PWLE [34,35] By facilitating genuine co-production of all materials produced by ReCITE we will ensure that narratives from PWLE are not misinterpreted or misused. Where there are different perspectives, these will be clearly identified within our research and practice outputs.

We will ensure that anyone who shares stories is fully aware of how they might be used and subsequently their planned use and are free to withdraw consent at any time. Any public screening or distribution of video, audio, written narratives, or photographic material produced

by ReCITE will be subject to consent agreements by participants including whether they wish to be anonymised.

Tackling mistrust often involves addressing deeply held convictions. This can risk conversations between participants, researchers and the public becoming confrontational, especially if they have conflicting beliefs. We will ensure that all people engaging with participants in this area are trained in an empathetic, non-confrontational way of eliciting the deeper truths underlying acceptance of misinformation and establishing common ground, using communication approaches known to help people feel validated and listened to. We will encourage reflexive practice and we will support people in managing their emotions around the conversations.

Safeguarding

LSTM's has clear safeguarding reporting structures and training and we have developed specific resources for researchers working in community contexts, including through CBPR methodologies. We will appoint a trained safeguarding focal person responsible for developing and updating our safeguarding risk matrix and for training co-researchers. We will work as a team to map potential safeguarding risks for research participants and research staff. Mitigation measures will be agreed upon for each risk and will be regularly reviewed. We will aim to create a safe space for research and collaborative activities for all participants explicitly acknowledging and exploring unequal power relations, and by using approaches that reduce power differentials in the research process. We will also work to create a safe environment for disclosure of safeguarding concerns. Safeguarding risks that emerge during implementation will be recognised, reported, and referred as appropriate in discussion with the co-PIs and LSTM's safeguarding lead.

Ethical Research Practices

Consent scripts will be submitted as part of our ethical approval process and will cover the purpose of the research, use of the data, storage of the data, anonymity, or waivers to anonymity, and who has access to the data. Consent will be sought before all forms of data collection and data use including but not only key informant interviews, sharing stories, focus group discussions, participation in workshops, surveys. All participants will be given the option of withdrawing their consent or participation in the research at any time. This will include withdrawing previously collected data.

Participants will be provided with the name and contact details of the relevant Data Protection Officer, the purposes of processing, the lawful bases for the processing, who will have access retention periods, the rights available to individuals in respect of the processing, the right to lodge a complaint with a supervisory authority.

If required, we may use Gatekeepers to provide access to participants we would not otherwise have legitimate access to, where it would be good practice/etiquette for them to make first approach to participants or to minimise and manage potential risks. Where we do use gatekeepers, we will still obtain full consent from participants.

Tool design will be done with representatives of community organisations and PWLE to ensure that questions are culturally appropriate. The work of the CITs in undertaking community-based

research will be undertaken by community researchers who appreciate the cultural sensitivities of discussing personal attitudes and experiences. Where talk is of sensitive issues such as experiences or attitudes to breast or cervical screening the option to have a same sex interviewer will be given.

Appropriate reimbursement to volunteers and organisations

Where volunteer time is not paid by other sources, we will ensure time is paid for. We will use one rate for volunteer time across all activities to ensure that payments are fair. We will make payments to community organisations rather than directly to volunteers. We will ensure that community organisations have appropriate policies regarding payment to volunteers including ensuring that payments do not adversely affect participants' benefits. Where we are directly engaging with members of the community, they will be offered vouchers (key informant interviews) or entry into prize draws (surveys). Voluntary sector creative assets organisations will be compensated for participating in workshops or capacity strengthening activities. Creative asset organisations will be paid at appropriate rates for their work within the stories for change and CIT platforms.

Data collection/use is in our data management plan.

Research Involving Human Participation

For all research involving human participation, ethical approval will be sought from the Research Ethics Committee of the Liverpool School of Tropical Medicine, UK, prior to the commencement of any studies.

Our research will require the collection of insights into knowledge, attitudes, and behaviours of people towards cancer screening and childhood immunisation. This will be collected within the participating PCNs and will focus on particular communities where the data shows that screening or immunisation rates are lower than the rest of the population. Community members will design the research tools alongside health professionals and they will be pilot tested to ensure sensitivity and cultural appropriateness. Community-led research teams (CITs) will also design interventions to improve rates of screening and immunisation within communities that are currently showing low rates of coverage and hence health inequality at neighbourhood, borough and city levels. Community-led interventions will be designed by community members, alongside creative assets and health practitioners.

Qualitative data will also be collected using interviews, structured conversations and participatory techniques with participants across all platforms and processes within the ReCITE programme. These will focus on 1) eliciting insights with regard to the lived experiences of community participants in storytelling processes with regard to their mental wellbeing challenges and access to appropriate services; 2) process and outcome evaluation of the various platforms and processes, which will include representatives of all stakeholders involved in ReCITE. Data collection will be to a large extent integrated into ReCITE meetings but will

also involve some additional interview and brief surveys. Community co-researchers will work together on tool design with social scientists and health professionals to maximise appropriateness. Use of participatory techniques will also involve all participants in analysis of issues to maximise internal validity of findings.

All members of these teams will be trained in ethical practices and cultural sensitivity. Safeguarding is covered elsewhere in this bid.

Recruitment sample sizes will be determined a priori - e.g., through power analysis for quantitative analyses – or through a combination of a priori and inductive process – e.g. through the saturation principle for qualitative analyses - to establish sufficient numbers to conduct the planned analyses for the research questions. Our research will recruit diverse groups such as PWLE, individuals from marginalised communities or areas of greater deprivation because the experience of these individuals are critical to answering questions about health inequity. We will also recruit members of other stakeholder groups involved in the research, including health service practitioners, managers and funders/commissioners, creative assets organisations and storytelling practitioners, and community-based organisations. The perspectives of all stakeholders are important to enable the development of appropriate and feasible interventions to improve health equity.

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ReCITE-Programme Plan

CODE	Milestones	PLANNED START	PLANNED END	YR1			YR2			YR3				
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Programme Overview														
Code	#N/A													
	Inception Period	YR1Q1	YR1Q2											
	Research Period	YR1Q3	YR3Q2											
	Dissemination and Write Up	YR3Q3	YR3Q5											
Inception Period														
I01	Collaboration and subcontracting agreements	YR1Q1	YR1Q1											
I02	Recruitment of staff (all partners)	YR1Q1	YR1Q2											
I03	Tool and protocol development	YR1Q1	YR1Q1											
I04	Ethics approval	YR1Q2	YR1Q2											
I05	ICB sponsorship for CIPHA	YR1Q2	YR1Q3											
I06	CIPHA data access approval	YR1Q2	YR1Q3											
I07	Inception report, detailed operational plan and finalised governance structures	YR1Q2	YR1Q2											
I08	PCN engagement and Launch Event	YR1Q2	YR1Q2											
Research Implementation (including capacity development)														
R01	Interviews with community organisations, commissioners/funders, creative assets, health practitioners (RQ 1, RQ 2 baseline, RQ 4 baseline, RQ 5 baseline)	YR1Q3	YR1Q3											
R02	Document review - commissioning practices (RQ 1)	YR1Q2	YR1Q3											
R03	Thematic qualitative analysis of data (RQ 1)	YR1Q4	YR1Q4											
R04	Participatory workshop (n=45) (RQ 1)	YR2Q1	YR2Q1											
R05	Community Based Participatory Research training (3 days x 50 people)	YR1Q3	YR1Q4											
R06	Output: Paper and Briefing Report Research Question 1	YR2Q1	YR2Q1											
R07	Formation of Storytelling Partnerships (storytellers, creative academics, PWLE, technology specialists) [Catalysing Change]	YR1Q2	YR1Q2											
R08	Baseline behavioural insight survey (RQ 2)	YR1Q2	YR1Q2											
R09	Training and co-creation of immersive multi-media stories for change (2 streams) 12 meetings [Catalysing Change]	YR1Q3	YR1Q3											
R10	Amplification events for immersive stories across Merseyside at six events [Catalysing Change]	YR1Q4	YR1Q4											
R11	Follow-up key informant interviews community organisations, commissioners/funders, creative assets, health practitioners (RQ 2, RQ 4)	YR2Q2	YR2Q2											
R12	Follow-up behavioural insight survey (RQ 2)	YR2Q2	YR2Q2											
R13	Analysis of interviews (RQ 2)	YR2Q3	YR2Q3											
R14	Update of multi-media stories for change (two streams)	YR2Q4	YR2Q4											
R15	Dissemination of updated stories for change material at six events [Catalysing Change]	YR3Q1	YR3Q1											
R16	Key informant interviews community organisations, commissioners/funders, creative assets, health practitioners (RQ 2)	YR3Q3	YR3Q3											
R17	Update analysis of interviews with additional data (RQ 2)	YR3Q4	YR3Q4											
R18	Output: Paper and Briefing Report Research Question 2	YR3Q4	YR3Q4											
R19	Participatory observation of stories for change sessions and dissemination (RQ 3)	YR1Q3	YR1Q4											
R20	Analysis of data from stories for change sessions (RQ 3)	YR2Q1	YR2Q2											
R21	Output: Paper and Briefing Report Research Question 3	YR2Q3	YR2Q4											
R22	Narrative/literature review (RQ 5)	YR1Q2	YR1Q4											
R23	Formation of Creative Health Advocacy Networks (n = 12 people x 2 teams) [Advocacy]	YR2Q1	YR2Q2											
R24	Training of Creative Health Advocacy Network [Advocacy]	YR2Q2	YR2Q2											
R25	Coordination and adaptation of multi-media stories [Advocacy]	YR2Q3	YR3Q2											
R26	Thematic content analysis and sentiment analysis (RQ 4)	YR3Q2	YR3Q3											
R27	Two Rounds of Focus Group Discussions with Creative Health Advocacy Networks (n= 2 x 10 x 2) (RQ 4)	YR2Q3	YR3Q3											
R28	Co-production workshop - advocacy toolkit (n = 20) (RQ 4)	YR3Q3	YR3Q3											
R29	Text analysis using natural language processing methods and write up (RQ 4)	YR3Q3	YR3Q4											
R30	Output: Paper and Advocacy toolkit Research Question 4	YR3Q4	YR3Q4											
R31	Creative Health Marketplace (childhood immunisation and cancer screening) (n=100) [Collective Action]	YR2Q2	YR2Q2											
R32	Creative Health Marketplace (mental wellbeing) (n=100) [Collective Action]	YR3Q1	YR3Q1											
R33	Interviews with community organisations, commissioners/funders, creative assets, health practitioners (RQ 5)	YR2Q3	YR3Q3											
R34	Participatory workshop (n=20): Ripple Effect Mapping (RQ 5)	YR3Q2	YR3Q2											
R35	Interim analysis and write up (RQ 5)	YR3Q2	YR3Q3											
R36	Output: Paper and briefing report: Research Question 5	YR3Q4	YR3Q4											
R37	PCNs application and selection for inclusion in ReCITE	YR1Q3	YR1Q3											
R38	Formation and training of 15 CITs (three phased trainings of 2 x 2 days) (n = 10 people x 15 PCNs) [Collective Action]	YR1Q4	YR2Q2											
R39	15 CITs undertake community-led interventions [Collective Action]	YR2Q3	YR3Q2											
R40	Process evaluation and KIs with CIT members and senior stakeholders (2 rounds) (RQ 6)	YR2Q3	YR3Q2											
R41	Data extraction and quality checking (RQ 6)	YR1Q4	YR3Q2											
R42	Analysis and write up (RQ 6)	YR2Q3	YR3Q4											
R43	Output: Paper and briefing report Research Question 6	YR3Q4	YR3Q4											
R44	Literature review - evaluation frameworks	YR1Q3	YR1Q4											
R45	Co-design of evaluation toolkit	YR2Q2	YR2Q3											
R46	Data automation scripts developed and integrated into toolkit	YR3Q1	YR3Q3											
R47	Refinement of evaluation toolkit	YR2Q3	YR2Q4											
R48	Output: Evaluation toolkit	YR3Q3	YR3Q3											
Dissemination														
D01	Two Creative Health Learning Events held (n = 2 x 150 people) with exit survey (RQ 5)	YR2Q3	YR3Q2											
D02	Provision of materials online and dissemination on social media	YR3Q4	YR3Q4											
D03	Webinars (n = 4)	YR3Q4	YR3Q4											
D04	Presentation at existing meetings and forums	YR3Q4	YR3Q4											