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RAPID RESPONSE EVALUATION OF THE NIHR PUBLIC HEALTH INTERVENTION RESPONSIVE STUDIES TEAMS (PHIRST) SCHEME

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ABSTRACT

The NIHR PHIRST (Public Health Intervention Responsive Studies Teams) scheme aims to enable local government (LG) across the UK to rapidly evaluate interventions aiming to improve health and tackle health inequalities in their areas. The NIHR funded academic teams and invited LG to apply for their intervention to be evaluated. The Expressions of Interest submitted by LG were assessed by NIHR, academic teams were then asked to rank them on their preference after which they were allocated to a team. From April 2020 to January 2022, NIHR had received 89 interventions from LG over three rounds, of which 35 were allocated for evaluation, ranging from a whole systems approach to diet to remote delivery in drug and alcohol services. Our project was undertaken as a PH-PRU 'Responsive' project to evaluate the initial phase of PHIRST and feed into its development.

Methods

A total of 25 semi-structured in-depth interviews were conducted with 13 academic team members, 7 LG respondents, 3 NIHR staff and 2 PPI participants. A topic guide was developed, amended throughout the interview process, covering themes such as: setting up of PHIRST teams and establishing relationships with local government; barriers and facilitators of co-production; rapid response evaluations and impacts. Transcripts were coded in NVivo using thematic framework analysis. A scoping review was conducted of documents including background papers and study protocols.

Results

The PHIRST scheme has been universally appreciated and reported as filling an important structural gap in evidence-informed LG decision-making. LG respondents highlighted that it provides, not just rapid response, but a robust evidence base, independence, and prestige, together with adding speed and cohesion beyond what a local evaluation could achieve. However, issues emerged over the call to LG for interventions to be evaluated which needed improved clarity and a wider reach; brevity of the Expressions of Interest; and transparency behind allocation. Co-production was valued and has worked well but was deemed to need some refinement. There has been a shift to pragmatic, brief evaluability assessments because of time challenges. In some instances, an evaluation was not considered appropriate or feasible, but the process of rejection was seen to be unclear. Facilitators of protocol development were reported to be the use of logic models and theory of change but agreement on the research question was found to be challenging, and some LG participants stated that the protocol appeared more useful from academic and NIHR perspectives. Additional issues emerged around timescales and scheduling, limited capacity, communication systems, consistency between teams and processes as well as PPI engagement. LG participants noted the emergence of short-term impacts on improving interventions; speed and cohesion of evaluation; improved stakeholder buy-in and raised awareness and prestige of projects but further work is needed on wider impact and long-term strategic development. 18 recommendations are provided.

Conclusion

The PHIRST scheme has an important role to play and could be developed further by refining some of its processes and developing a longer-term strategic plan.

EXECUTIVE SUMMARY

Background

The NIHR PHIRST (Public Health Intervention Responsive Studies Teams) scheme aims to enable local government (LG) across the UK to rapidly evaluate interventions aiming to improve health and tackle health inequalities in their areas.

The NIHR funds academic teams and asks LG to apply for their intervention to be evaluated. The Expressions of Interest submitted by LG are assessed by NIHR, academic teams are then asked to rank them on their preference after which they are allocated to a team. At the time of this report 35 interventions had been allocated for evaluation, ranging from a whole systems approach to diet, to remote delivery in drug and alcohol services. Our project was undertaken as a PH-PRU 'Responsive' project to evaluate the initial phase of the PHIRST scheme and make recommendations for its development.

Objectives

1. To evaluate the initial phase of the PHIRST scheme to capture learning around what worked and what did not.
2. Make recommendations on the further development of the PHIRST scheme.

Methods

This is a qualitative research study based on interviews and documentary analysis. The project received ethical approval (LSHTM Ethics ref: 26266). Interviewee selection was purposive and snowballed. We conducted 25 semi-structured in-depth interviews with 13 academic team, 7 LG, 3 NIHR staff and 2 PPI members. Interviews were carried out online, audio recorded and transcribed. A topic guide was used and amended throughout the interview process covering themes such as: setting up PHIRST teams and establishing relationships with

local government; barriers and facilitators of co-production, rapid response evaluations and impacts. Transcripts were coded in NVivo using thematic framework analysis. A scoping review was conducted of policy documents including background papers and study protocols.

Results

1. Establishing the PHIRST scheme

Concept: PHIRST has expanded over the period of the evaluation, from four to six academic teams. From April 2020 to January 2022, NIHR had received 89 interventions from LG over three rounds, of which 35 were allocated. PHIRST has been universally appreciated and reported to fill an important structural gap in evidence-informed LG decision-making. LG respondents highlighted that it provides, not just rapid response, but critically, independence and prestige to the interventions, and adds speed and cohesion beyond what a local evaluation could achieve. Both academic and LG participants would like the PHIRST scheme to continue.

Call to LG for Expressions of Interest (EOI): Respondents proposed: extending the reach of the call; additional detail on the potential benefits and resources available; a clearer idea of timescales; explanation of expectations of academics and LG, and a clear statement that an intervention could be accepted and allocated but fail an evaluability assessment.

Expressions of Interest: NIHR emphasized the need for EOIs to be brief for busy Directors of Public Health to sign-off but contain sufficient information to judge if the intervention is evaluable. Academic participants proposed the inclusion of additional questions covering: the stage of project cycle, availability of baseline data, existing evaluation elements and whether Public Patient Involvement (PPI)/citizen science is included.

Allocation: Academic teams did not understand the allocation process especially the non-geographical

allocation of projects, whilst some LG participants saw this as beneficial, providing independence and fresh perspective for regional systems. Participants preferred early allocation to enhance the management of workflows, ensure interventions are not rejected due to loss of funding or need major changes to research questions.

Recommendations:

1. Target marketing and raise awareness to broaden the reach of the call to LG.
2. Improve information on call out regarding acronym, expectation management, potential benefits, resources available, timescales and commitment for workshops; and clarify that an intervention may be rejected after allocation.
3. Encourage sure LG teams apply at an early stage of an intervention.
4. Discuss what additional questions would be acceptable to add to EOIs or whether an additional stage (triage) would assist with Evaluability Assessment.
5. NIHR to provide an explanation of allocation decisions.

2. Co-production

Relationship building: Workshops were conducted as part of the co-production process to assess the evaluability of an intervention and develop the protocol. Overall, this process was reported to have worked extremely well, but the initial meetings could be overwhelming for some in LG. There was enthusiasm for the co-production approach, bringing together different stakeholders. It was also deemed by LG teams as helping to raise the political profile of their interventions with decision-makers.

Evaluability Assessment: There has been a shift to pragmatic, brief EAs because of time challenges. In some instances, an evaluation was not deemed appropriate or feasible, although the process of rejection was seen to be unclear.

Protocol Development: Facilitators of protocol development were reported to be the use of logic models and theory of change. Agreement on the

research question was challenging, one reason being that different stakeholders may have different expectations and understanding of what is achievable. Some LG participants stated that the protocol appeared more useful from academic and NIHR perspectives than for project management purposes and would prefer clearer timescales linked to specific outputs and clarity on who does what.

Recommendations:

6. Develop a clear system for interventions that fail Evaluability Assessment.
7. Ensure that the protocol reflects LG project management requirements around timescales and roles in addition to the research question and methods.
8. Academic teams need to continually assess that the research question matches LG expectations and needs, including after submission of the protocol.

3. Cross-cutting themes

Timescales and scheduling: Timescale is a major barrier raised by participants. This covers several issues and causes multiple pinch points, specifically, around protocol development and workflows.

Capacity: Lack of capacity was reported to hinder genuine co-production. Academic teams noted not being able to buy-out time or build capacity. Dedicated knowledge broker or embedded researcher in their team were reported to assist co-production.

Consistency: The academic participants have tried to develop consistency on some processes but note that the best balance needs to be found to allow the unique approaches and skillsets of individual PHIRST teams to emerge and allow for innovation and flexibility, whilst sharing principles across the core processes.

Communication: Some LG participants proposed that contact with the NIHR be more frequent and independent from the academic teams. LG participants suggested more feedback from academic teams post-protocol, proposing brief

weekly meetings between leads plus monthly feedback with a bigger group of stakeholders to keep track of process. Lack of a website and PHIRST branding was reported as hindering awareness building and dissemination. English-centric terminology was deemed problematic for participants in the devolved nations and may result in the lack of interest outside England. Academic teams proposed monitoring systems needed to be more flexible and PHIRST-specific.

Patient & Public Involvement (PPI): PPI participants recommended that considerably more work and deliberation be applied to improve engagement, increase diversity and greater consistency across groups.

Recommendations:

9. NIHR to consider timescales: allow time for academic teams to get established; allocate projects well in advance so teams can organize work programmes and be able to work in parallel on different evaluations and reduce possibility of failing evaluability assessment due to time issues.
10. Greater understanding of LG capacity constraints and could reflect on how capacity can be built to facilitate genuine co-production. Dedicated Knowledge Broker/Embedded researchers could assist if used consistently.
11. Consider the value of consistency vs independent approaches across the academic teams. It would be advantageous to find the best balance to allow for innovation and flexibility in changing conditions, whilst sharing fundamental principles across the core processes.
12. Enhance communication with LG by both academic teams and NIHR.
13. PPI involvement needs further development, specifically improved diversity, and community involvement as well as consistency and clearer guidelines on engagement.

14. Develop the website and social media as a matter of urgency to raise awareness of PHIRST, share knowledge and dissemination.
15. NIHR monitoring systems should be PHIRST-specific and flexible.
16. Replace terminology specific to England in all materials.

4. Impact and future strategy

Local and short-term: Academic teams acknowledged that it was too soon to assess impacts other than on relationship building, but LG participants noted the emergence of short-term impacts on improving interventions; speed and cohesion of evaluation; improved stakeholder buy-in, raised awareness and prestige of projects.

Wider impact: LG participants proposed longer-term engagement beyond the evaluation rather than a rigid cut off, and would appreciate being informed about the impact of their involvement with PHIRST for wider PH.

Longer-term impact and strategic development: Future impacts raised by academic participants include developing cross-cutting themes; scaling up from the local to the regional level and developing the role of PHIRST through clearly defined medium and long-term strategies.

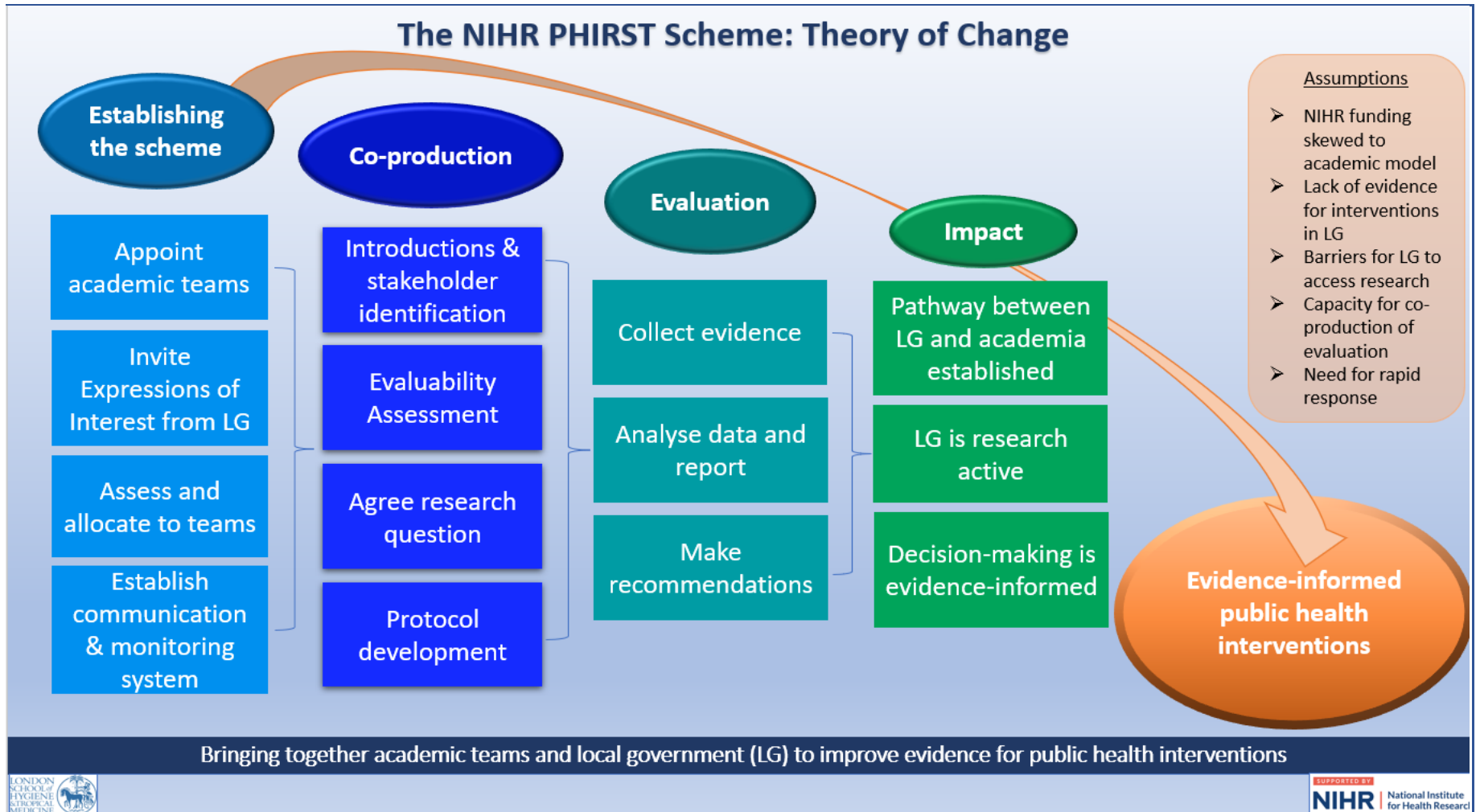
Recommendations:

17. Inform LG of the impact on wider public health of their involvement in PHIRST.
18. Establish the strategic role of PHIRST in the medium and longer term.

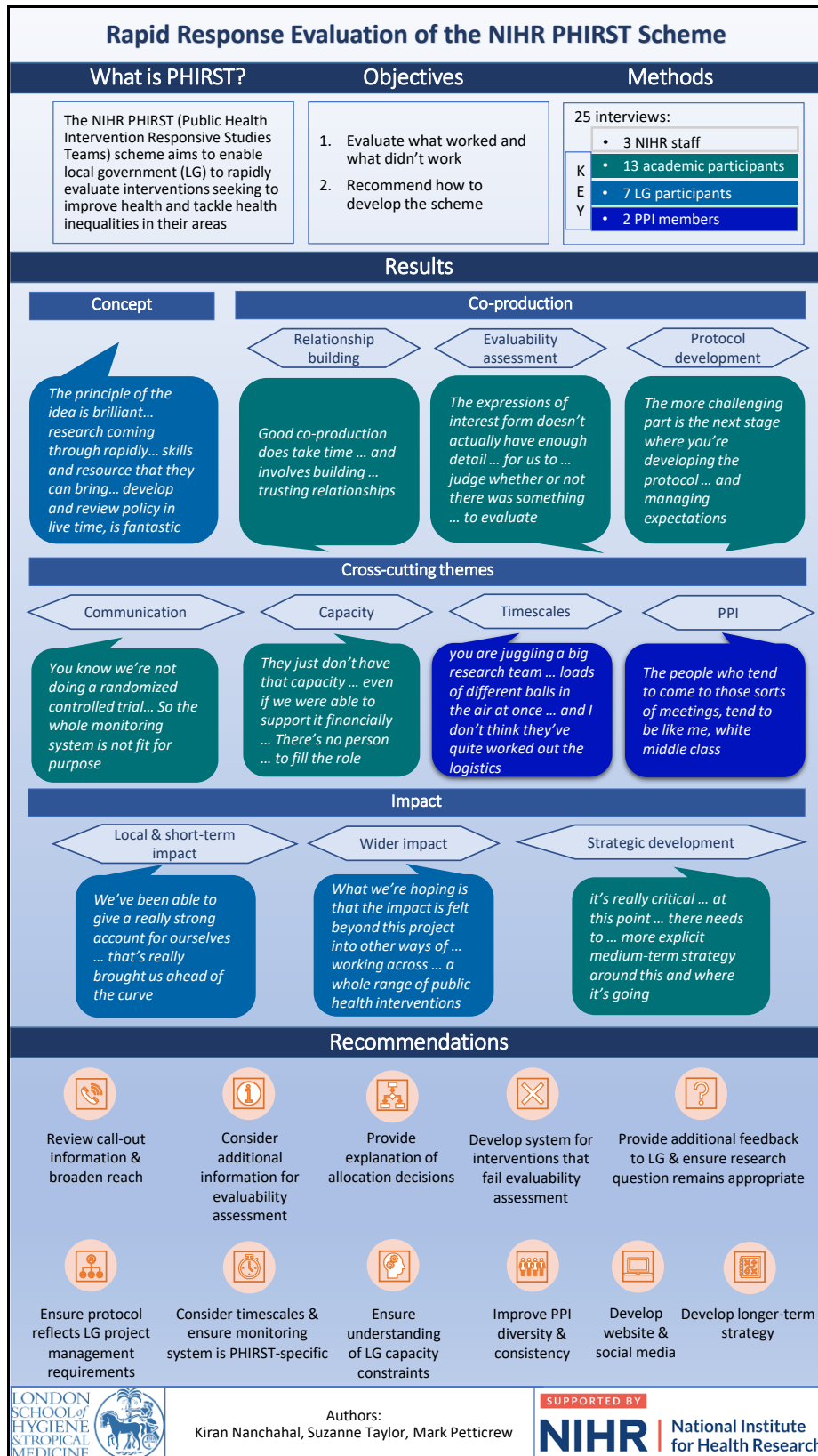
Conclusion

PHIRST has an important role to play and could be developed further by refining its processes and developing medium and long-term strategies.

THEORY OF CHANGE



INFOGRAPHIC



REPORT

Introduction

There has been a growing awareness over the past decade of the need to foster more evaluative public health research, particularly collaborations between academics and local government, as a means to developing the evidence-base for public health and health inequalities. This has involved a range of initiatives, including the NIHR Public Health Research programme, and the Public Health Practice Evaluation Scheme (PHPES) as part of the NIHR School for Public Health Research.

More recently, the NIHR Public Health Intervention Responsive Studies Teams (PHIRST) scheme has been established to enable local government (LG) to rapidly evaluate interventions seeking to improve health and tackle health inequalities in their areas. This project was undertaken at LSHTM as a PH-PRU 'Responsive' project to evaluate the initial phase of PHIRST and to make recommendations for its development.

Background

PHIRST was designed to fill a gap in the public health (PH) system, providing a bridge between academics and LG. Funding (£9-12m) was made available in the March 2020 UK Government Budget to support the prevention of ill health. The Department of Health and Social Care, with support from the Chief Medical Officer, approached the NIHR Public Health Research Programme (NIHR PHR)¹ to ascertain how the money could be utilized and what the priorities were.² There is a perceived lack of evidence for programmes and initiatives taking place in local areas (LAs) but there are barriers for them to access support for research.³ The NIHR approach to commissioning research was considered by some to be skewed towards an academic model and too cumbersome, and there was a perceived need for a better way of working between research and PH practice (similar to the Health Services and Delivery Research program model).⁴

not having an evidence base on which to base the practice was slightly unnerving... just wanting to phone a number that said 0800 research and say somebody do something! ... And so we came up with the idea ... we will find the academics ... have them on call and go to the Directors of Public Health and say surely you've got something we could evaluate. ...Then we .. stepped out in faith...we still got a response from both the academics and from local government... that's a sign ...that we weren't alone in thinking that this was possibly a need. NIHR participant (B6)

The NIHR PHR Programme was reported as having a well-functioning stakeholder group and pre-existing relationships with LA representatives across the UK, with NIHR seeing its role as helping to develop a pathway between academia and LG, building relationships between them and ensuring co-production of the evaluation by all stakeholders. This led to the development of the Public Health Intervention Responsive Studies Teams (PHIRST) scheme.⁵ The PHIRST scheme entails the commissioning of academic

¹ PHRP <https://www.nihr.ac.uk/explore-nihr/funding-programmes/public-health-research.htm>

² NIHR interview, B6

³ Walters, H. Catching golden opportunities to create public health evidence as they fly by

Blog: <https://www.nihr.ac.uk/blog/catching-golden-opportunities-to-create-public-health-evidence-as-they-fly-by/25616>

⁴ NIHR interview B6

⁵ NIHR interview, B6.

teams that practitioners working in LG could utilize to assess the effectiveness of initiatives that were already funded.

In January 2020, NIHR put out a call for two academic teams.⁶

So we put out a call that asked for teams and it was...a UK wide call and we asked for teams to ...put in applications to demonstrate to us that they would be able to, and we were quite clear in the call specification about what the purpose of the evaluation centres ...was very much around responding to local authority's needs. That was a key thing for usthat they had experience or had good links in with local authorities and knew the landscape essentially I think the main thing for us was that they would be sensitive to working with colleagues and local authorities, because it is quite a different pace...And initially the idea was that we would fund two teams, but the resource and I suppose the quality of the teams that we interviewed was ... good enough, that we were given permission to fund four teams. NIHR participant (V5)

The academic teams would be required to respond to LA needs in terms of being able to respond quickly and provide appropriate evidence for decision-making. Part of the commissioning remit stated that PHIRST teams would need to be multidisciplinary, be able to work across the UK not just in their geographic locality, be able to understand different systems in diverse environments as well as draw on expertise in various topic areas (NIHR, Y3). The NIHR received applications both from teams already working with LAs as well from those who had potential but were not currently working in this research area. Due to the quality of applications and available resources, four teams were appointed initially with two more appointed (after the scope of this study was completed).⁷

In the first half of 2020, during the early stages of the Covid pandemic, a call for expression of interest (EOI) was sent to LG for initiatives these academic teams could evaluate⁸. The initiative itself does not have to be health focused but should potentially have an impact on health. Any level of LG was eligible - regional, county, district, unitary, town or parish. The EOIs needed the support of the local Director of Public Health (DPH) or, as the scheme covered Devolved Administrations (DAs), the CEO of the relevant LG organization. Any initiative with a potential impact (positive or negative) on health was within scope including initiatives not primarily designed as PH interventions, such as road infrastructure, urban planning, clean air or low emission zones. Initiatives could be a result of partnerships with other organizations but needed to have LG involvement. Despite the pressure of the pandemic, 22 applications had been received by July 2020.

The EOIs were assessed by NIHR, academic teams were then asked to rank them on their preference after which they were allocated to a team.⁹ At the time of this report, 35 interventions had been allocated for evaluation, ranging from a whole systems approach to diet, to remote delivery in drug and alcohol services.

⁶ NIHR, Specification Document, Call for Expressions of Interest: Public Health Intervention Responsive Studies Teams (PHIRST), Closing date: 1pm on 28 January 2020

⁷ Interview, NIHR Participant B6.

⁸ NIHR, Specification Document, Call for Expressions of Interest, From local government across the UK for research ideas for the Public Health Interventions Research Studies Teams (PHIRST) initiative, 29 Jan 2020.

⁹NIHR PHR Public Health Intervention Responsive Studies Teams (PHIRST) – Proposed process for identifying interventions (June 2020, Version 2)

Aims of the PH-PRU evaluation of the PHIRST scheme

The main aim of the PH-PRU PHIRST evaluation project was to conduct a light-touch assessment of the initiative to date, similar to a formative evaluation, to identify what is working and not-working (broadly defined, as this is not an evaluation of effectiveness) and to make preliminary recommendations as to how PHIRST may be developed further.

Objectives

The specific objectives were to:

1. To evaluate the initial phase of the PHIRST scheme to capture learning around what worked and what did not.
2. Make recommendations on the further development of the PHIRST scheme.

Methods

There are specific guidelines for process and formative evaluations.¹⁰ While this project used elements of these, the main aim was to conduct a light-touch evaluation of the scheme to date (broadly defined, as this is not an evaluation of effectiveness) and make recommendations for its development. This was a qualitative research study based on stakeholder interviews and a scoping review of relevant policy documents. The project received ethical approval (LSHTM Ethics ref: 26266) and an advisory panel was established: Matt Egan (LSHTM); Dalya Marks (LSHTM and Camden & Islington Public Health Department); Martin White (MRC Epidemiology Unit, Cambridge).

Qualitative Interviews

Interviewee selection was purposive and snowballed. Between September and December 2021, we carried out 25 semi-structured in-depth interviews with 13 academic team members, 7 LG participants 3 core NIHR staff and 2 Public Patient Involvement (PPI) members. Interviews were carried out online by one research team member who took field notes and wrote interview reflection forms after each interview; interviews were audio recorded and transcribed. Interviews lasted between 30 and 80 minutes with an average of about one hour. Where participants did not want an audio recording, the interviewer took additional notes. A topic guide was developed and amended throughout the interview process, covering themes such as: the setting up of PHIRST teams and establishing relationships with local government; barriers and facilitators of co-production, rapid response evaluations and any impacts of the scheme. Transcripts were coded in NVivo using thematic framework analysis. Initial coding was performed by the interviewer and each code was validated independently by another research team member. Where coding discrepancies occurred, these were discussed to agree on refinements to the coding framework.

Document review

We conducted a scoping review of documents. Interviewees were asked to provide relevant documents including study protocols and calls outs. A thematic approach was used to analyze the documents to provide information on the interventions and processes and to cross-reference interview data.

¹⁰ <http://www.populationhealthsciences.org/MRC-PHSRN-Process-evaluation-guidance-final-2-.pdf>.

Developing Theory of Change

A theory of change was developed based on background documents and interviews.

Study limitations

Limitations include: the limited number of interviews; introduction to LG teams via academic teams could have introduced bias; evaluation was carried out early in the process and, as the intervention evaluations are ongoing, discussion focused around establishment of the scheme, relationship building and early co-production process including evaluability assessment rather than impacts.

Findings

The majority of the findings reported here are based on the analysis of the interviews. Where information comes from documentary analysis this is referenced as notes. The reporting of the findings is structured by processes involved at each stage of the scheme followed by cross-cutting themes.

1. Establishing the PHIRST scheme

1.1 Concept

PHIRST is a universally appreciated concept with all the interviewees speaking enthusiastically about the scheme, including those who had experienced problems during the process. LG participants observed that PHIRST fills an important structural gap in evidence-informed LG decision making and found the rapid response particularly useful.

the principle of the idea is brilliant...research coming through rapidly, you know all the skills and resource that they can bring to help actually develop and review policy in live time, is fantastic. LG participant (A1)

Some LG participants pointed out that PHIRST sits in a competitive market – they could take an easier route and hire consultants – emphasizing the need for the scheme to be attractive and accessible. The majority of LG respondents appreciated that PHIRST provides an opportunity to conduct robust evaluations and provide a strong evidence-base tailor-made for their specific intervention.

we wanted a proper evaluation done and that seemed like a good way to do that... we wanted a really robust project ... could also do stuff that we can't do.... You need a proper academic with that background to be able to do that. ... I'm also keen to have things like evidence base... But this is a way of getting an evaluation completely tailored to us ... so it's very kind of bespoke...I ... believe in ... research. I know that that's not always the case with people who make decisionsand it just seemed an opportunity to be able to do that. LG respondent (B2)

Some deemed PHIRST advantageous when they were unable to carry out an in-house evaluation due to funding, time, and capacity constraints.

but we didn't actually have any evaluation ... until we saw the call and then we went...that could just be what we were looking for. We didn't have any extra capacity, or funding to pay for it, so it seemed to just be a really good fit for the project that we were doing. LG respondent (P8)

All LG participants would use the scheme again and recommend it to others. They highlighted that PHIRST provides, not just a rapid response, but independence:

I valued that feeling of independence, not that anyone would have not done independent research, but for me I would have felt like oh so XX evaluating itself.if somebody from xx would have been doing this piece of work they might have missed the intricacies of the system because they would have known it. LG participant (P8)

Moreover, they appreciated the multi-disciplinary nature of the academic teams.

it was a really wide range on the team and that was really quite surprising and it demonstrated to me the importance with which other people saw our project, ... we had an evaluation team who said ... we want all of these people to be involved... because they have an interest. I think it then helped us appreciate the broad nature of what we were trying to do. they asked us questions that we weren't expecting, ..., I think having a broad range of disciplines, people come at it from a different angle. LG participant (H7)

They also noted that PHIRST involvement added prestige to LG projects, providing speed and cohesion beyond what a local evaluation could achieve and assisted with decision-making and promoting it to politicians,

being able to say that PHIRST/NIHR are interested in it, ... helped us massively to give it a bit of credibility..... that definitely helped, and especially as well selling it to like politicians or like corporate leaders or whatever, being able to give that recognised, almost like badge of reputation is really helpful for us. LG respondent (H7)

Both academic and LG participants would like the PHIRST scheme to continue. However, some problems emerged with PHIRST processes, e.g., the call to LG for interventions; timescales; monitoring systems and communication.

1.2 Call to LG for Expression of Interest (EOI)

To attract LG initiatives to evaluate, the NIHR PHR programme asked Directors of Public Health (DPH) who had already interacted with a previous unsuccessful initiative (PHINDER) if they would like their intervention evaluated, as well as putting a call to LG for EOIs approved by their DPH for interventions that they were taking forward and would like evaluated – receiving 22 responses in the first round, 45 in the second and 22 in the third.¹¹ The interventions ranged from provision of employability services to school meal provision. At the time of writing, despite 41 interventions being prioritised, 35 were selected for allocation. Whilst both call-out streams have been successful, with a total of 89 interventions received by the end of January 2022, NIHR participants raised issues around the balance of the large response to the call versus the capacity of PHIRST teams to manage the workload.

want it to be a rolling call that's open all the time, so that there's constantly an avenue for people to submit. But against that is the realisation that we only have limited capacity within the PHIRST Teams, so there's something around managing expectations and if we are going out all the time, ...

¹¹ NIHR, personal communication 22 February 2022 [PHIRST data]

there's a risk that some of them might become a bit disillusioned and think ... that's the third time I've put something in and nothing has happened. NIHR participant (V5)

LG participants stated a preference for more basic information to be included in the call out, such as the meaning of the acronym PHIRST, the potential benefits and resources available e.g., any funding to buy-out staff time, and a clearer idea of timescales.

Being a little bit clearer about what PHIRST was... just literally... a line describing the acronym, a line explaining that there is resource to support it. LG participant (A1)

Academic participants would like more detailed explanations of expectations placed upon them and LG e.g., time commitment for evaluability assessments (EA) and workshops, and a clear statement that an intervention could be accepted and allocated but still fail the EA. They also raised the issue that, since the remit covers Devolved Administrations, the call should not contain terminology specific to England as PH is not always based in Local Authorities. It should also be clear that applications can include the third sector as LG may be delivering interventions with their involvement.

LG participants indicated that extending the reach of the call out would be advantageous. In terms of reaching a wider audience, it appears that LG groups without pre-existing academic contacts could miss the call as it is deemed to be largely focused on academic rather than LG networks.

I think it went to the usual suspects... It was an academic that pointed us to it, so it had clearly come out through academic sort of circles. LG participant (P8)

To cover the wider determinates of health, some LG participants suggested an even broader advertising base including Housing Departments, Adult Social Care, Neighbourhood or Communities Departments, as well as national departments e.g., Department of Transport.

What constitutes a rapid response varied between academics, NIHR and LG. Generally, interventions selected have been longer-term projects than was expected, averaging around one year or longer.

As will be discussed in section 3.1.1, one challenge to evaluation appeared to be that some interventions were at a late stage by the time they were allocated.

I think ... some kind of recommendation that it is far preferable to do it as the project [intervention] is being established, rather than asking to evaluate something that they're already halfway through. Academic participant (C5)

1.3 Expressions of Interest (EOIs)

EOIs are an area of contention between NIHR, LG and academic teams on the level of detail required. The EOIs developed over time but, in general included the title of the project, background and aims, brief description of the intervention, geographical location, funding, timescales and anticipated impact on population health, inequalities, or wider impact. For NIHR, EOIs needed to be brief enough for busy DPH to complete but contain sufficient information to judge if the intervention is evaluable.

we've tried to make that really easy, it's like one or two sides of A4. It's nowhere near the sorts of detail that we would normally ask for in any of our funding applications. ... it's obviously been an

acceptable amount of demand; in that they've been willing to fill in that form. I don't want to ask them to fill in more, because I just don't think they've got the time. NIHR participant (B6)

Academic participants found EOIs frustrating: finding them to be too vague, compromising assessment and selection and leading to an extended evaluability assessment (EA) process. They suggested adding questions to the EOI to filter out non-evaluable projects earlier e.g., expectations from the intervention; stage in the project cycle; availability of baseline data; whether there is already an evaluation element to the intervention; involvement of PPI /citizen science.

I think an area that has been raised with NIHR from all of the PHIRST teams, which we really felt quite strongly about, was the expressions of interest form doesn't actually have enough detail ...for us to...judge whether or not there was something... to evaluate. I take on board we need to get a balance ... obviously Directors of Public Health are so busy ... that if they ... had to fill in loads of sections, that would be very off-putting, and they may decide ...it's too much work. But ...we need to get a balance between us as a team of kind of researchers that actually it is going to be worth evaluating it. ...So, kind of managing the expectations...they need to be really clear with that local authority upfront that it's a process of actually identifying whether or not there is something worth there being evaluated.

Academic participant (X1)

In contrast, LG participants found the process fast and straightforward, much easier than other NIHR funding applications. They observed that a one-page application still required considerable work and pointed out that they would be unlikely to apply if the application was too time-consuming.

really straightforward, given past experience of other NIHR applications...the whole one page that we did, albeit you know it's a lot of work to get it on one page, because you have to still...get people engaged and involved and all that, that seemed a much more streamlined simple way of doing things and...because you just don't have the time ... therefore we won't do it. ... the ..streamlined application should be used more widely. LG participant (B2)

A few LG teams were put in touch with academic groups by NIHR to comment on draft EOIs and found this assistance beneficial.

1.4 Allocation of interventions to academic teams

The NIHR PHR Programme checked the EOIs to ensure there was enough information, that the initiative had a health element and there was no overlap with work within the NIHR School of Public Health Research. The EOIs were scored and ranked by a sub-committee to identify those in high priority topic areas or considered to be most useful in practice and sent twelve to the PHIRST teams.¹² The PHIRST teams ranked them in order of their preference and NIHR subsequently allocated them to one of the teams.

However, academic teams questioned the basis for allocation, especially the case for some non-geographical allocation of projects, despite this being part of the original remit. They felt that this aspect could cause problems with LG with which they already had a relationship. Some academic participants

¹² NIHR Assessment Criteria for PHIRST Interventions; PHIRST Local Authority Intervention ranking – 1 July 2020 10:00-12:00 minutes of meeting

considered that it would be better if academic teams could act as regional hubs, building a relationship with LGs for multiple interventions over time.

On the other hand, some LG participants saw non-geographical allocation as beneficial, providing independence and a fresh perspective on regional systems, and a few academic teams also appreciated the development of new contacts.

Summary:

LG participants noted that PHIRST fills an important gap, would recommend it, and would use it again. They highlighted that PHIRST provides, not just a rapid response, but critically, independence and prestige to LG projects; adds speed and cohesion beyond what a local evaluation could achieve and assists with decision-making. NIHR branding is deemed advantageous. Both academic and LG participants would like PHIRST to continue. However, issues emerged with PHIRST's establishment: the call out needs improved expectation management and an increased reach; the balance of brevity vs information in the EOI could be improved; and allocation and rejection systems need clarification. Early allocation remains important to reduce problems for co-production.

Recommendations:

1. Target marketing and awareness building to broaden the reach of the call out.
2. Improve information on call out regarding acronym, expectation management, potential benefits, resources available, timescales and commitment for workshops; and clarify that an intervention may be rejected after allocation.
3. Encourage sure LG teams apply at an early stage of an intervention.
4. Discuss what additional questions would be acceptable to add to EOIs or whether an additional stage (triage) would assist with Evaluability Assessment.
5. NIHR to provide an explanation of allocation decisions.

2. Co-production

2.1 Workshops

Crucial elements of the co-production process are the initial introductions between the academic and LG teams by NIHR, the assessment of the evaluability of an intervention and development of the protocol.¹³ This process has generally involved workshops which often included the development of a logic model

¹³ Protocol example: NIHR131573 – PHIRST: University of Hertfordshire protocol v1 – 27/10/2020

and theory of change leading to agreed research questions. The four academic teams approached these aspects using a range of methods and types of workshops, with the system changing over time

that's why these workshops are so important, ... to do that co-production, so that you can say, ... this is what the decision makers want, how far can we get to that, this is what we're going to do, this is the protocol, do we all agree. Academic participant (2Z)

2.2 Relationship building

The initial introductions between LG and academic teams were reported as being critical to setting the tone for the whole project, although at times this proved somewhat confusing or overwhelming to LG teams.

that initial meeting was quite confusing, because there were so many people, I was not sure who was who and it was hard to keep track... ..but I mean we pretty quickly established good working relationships. LG participant (B2)

Identification of key stakeholders was also felt to be an important facilitator at this stage.

good co-production just does take time... trying to make sure that you are consulting everybody that you should be consulting and identifying and mapping out who they are, ... and involves building ... trusting relationships and ... those take time. Academic participant (W4)

To smooth out this process, some teams reported using an introductory meeting prior to the EA workshops to explain the process and to identify key stakeholders. This appeared to facilitate the process but required additional time. It was suggested that the process of introducing the PHIRST scheme needed to be flexible, depending on timescales, capacity and research experience of LG teams and this stage could be improved with clarity around: roles and responsibilities of NIHR, academic and LG personnel; the PHIRST process e.g. how workshops and the evaluation process will function; explanation of both LG and PHIRST organizational structures (at NIHR, PHIRST academic team; project team) and how LG functions (political nature of LG; constitutional; statutory requirements) and the importance of networking and discussions with the public.

LG participants appreciated being made to feel part of the team. The choice of language and pitch, and genuine involvement of LG participants was felt to be critical, especially for respondents for whom this form of research is novel.

because I've not worked like this before, I was slightly apprehensive. I was thinking gosh you know how is that relationship going to go, but ...has been more than happy ... to help in anyway ... and vice versa, ... that's really helped with the process. LG participant (R7)

In addition, evaluations are not without risk, and LG participants stressed the need for academic teams to have awareness and understanding of the political nature and culture of LG and the potential impact of carrying out evaluations.

A point that is worth considering is that the local authority has to want to have its work scrutinised and anything that requires a significant amount of effort in order to have its work scrutinised, when

they are already massively overloaded, has kind of put them off. So you've got this sort of double disincentive if you like. LG participant (A1)

Academic teams also mentioned the need to be sensitive of LG stakeholder drivers and motivations and the level of buy-in at the senior leadership level.

Another really important question ... is the drivers and the motivation of those that have put in the expression of interest, who is it that's asking for this evaluation and how on board are all of the relevant stakeholders because if we don't have that buy-in and that commitment we are going to hit problems.....evaluation can be quite a sensitive topic ... Stakeholders don't necessarily...want to be evaluated, because they fear something being unearthed...that they don't necessarily want to be known or shared. Through my many years of working...with public health departments ... you get shut down when you are trying to access data, or you're trying to approach people for interviews...because they are worried that their funding will be stopped if something a bit negative comes up, or if the evidence suggests that something is really not effective or cost effective, then they could just lose their funding....if there is...that kind of issue...we need to be conscious of it. Academic participant (D8)

2.3 Evaluability Assessments (EAs)

After allocation, academic teams assessed the evaluability of the projects. Initially, some teams used the detailed and robust approaches as published.¹⁴ However, due to the rapid response nature and tight time scales required for submission of the protocol, these proved too time-consuming and a more pragmatic assessment utilising a brief five question checklist was developed across the PHIRST academic teams.¹⁵ This pragmatic EA was reported as being beneficial, with the proviso that the robustness of the assessment is not substantially weakened.

evaluability assessment checklist that was our .. main approach when we ... first kicked off and we still use it one of the ...things that we've done together ... is come up with a briefer ... five question evaluability assessment. We ... agreed with the NIHR is that there needs to be a fairly rapid timeline to the evaluability assessment and we need to get ... a decision ... or ... an assessment of a certain level made fairly rapidly once projects are ... assigned to us. So we've agreed that within ... six weeks of our initial meeting with a new local authority, we will submit this ... five question assessment...But we still refer to the broader checklist because that has some really relevant items on it. Some things aren't so relevant, depending on the nature of the project and so on, so that longer checklist can be a bit unnecessarily laborious in terms of thinking around the key criteria. But I think some of the most important questions that we ask in that evaluability assessment are around sort of timeliness, where are things with the service set-up, delivery, instigation and so on, is it possible to do a quality evaluation given where they are now. Academic participant (D8)

Academic participants raised concerns around the tension between the academic approach to scientific rigour of an evaluation and what the LG can do and would find useful, and the need to find an approach that is acceptable to both groups (Academic participant X1).

¹⁴ Rick Davies, Friday, 23 January 2015; An Evaluability Assessment checklist

¹⁵ Assessing the Evaluability of Complex Public Health Interventions: Five Questions for Researchers, Funders, and Policymakers, DAVID OGILVIE, STEVEN CUMMINS, MARK PETTICREW, MARTIN WHITE, ANDY JONES, and KATHRYN WHEELER, The Milbank Quarterly Vol. 89, No. 2, 2011 (pp. 206–225)

the proposed methodology and the timeframe and obviously you know and I can completely understand they want to do a really good job and they want to do a high quality piece of work and that's fine, but I think our, initially some of these studies, a) took longer to get off the ground and secondly seemed to probably be, maybe more comprehensive than we were first envisaging and then hence longer in duration. So we did have some feedback from one local authority, who is involved in the PHIRST Teams, who were submitting an evaluating, who said that there was, the first meeting I think was quite interesting that their, it was, I think there was a sort of recognition from the academic teams, that a) the local authorities just, you know no disrespect to them, just weren't in that sort of space in terms of what a robust evaluation looks like and how they had far less of an understanding about what would be needed and the timeframe. But equally, potentially the academics coming in trying to do a sort of a gold standard academic evaluation, when actually what we've said all along is that you need to do what's needed by the local authority and recognising that that might be quick and dirty sometimes. So there is sometimes there's tension... Academic participant (V5)

The rejection process for interventions after allocation needs clarifying; so far two have failed the EA. To manage LG expectations, academic teams would appreciate greater clarity in the call out, or at least, very early in the process, that the intervention evaluation may be rejected by them after allocation by NIHR if it was found to be non-evaluable in its existing format or too much knowledge already existed.

because one reason for not proceeding with an evaluation would be that the question that they want addressed has actually already been answered and you know there is a great deal of evidence already available and no compelling reason why another evaluation would seem like a good idea. Academic participant (W4)

It was suggested that NIHR could provide advice to assist with future applications by providing information regarding the basis for the rejection of projects, e.g., the project is too far advanced; there is an existing evidence base; a similar intervention is undergoing evaluation by LG teams or other universities. Another participant suggested that a record should be kept on the number and types of interventions that are not evaluated to improve understanding of the types of projects likely to gain approval and reduce rejections in the longer term.

2.4 Protocol development

Participants highlighted that development of a logic model and theory of change facilitated co-production. Academic teams remarked that it allowed clearer understanding of the intervention and what the LG team hoped to achieve.

the use of logic models is a good way of bringing a collaboration together and developing shared language of what the intervention is and a shared understanding of ... mechanisms, operation ...and implementation. ... that's a really good driver ... but ...there are all the... ground rules of how we ... talk to each other and the importance of recognizing we all have our type of expertise. I suppose the other thing is ensuring that there are reciprocal benefits for everybody that is involved... exactly what the aims are for everybody ...and ensuring that we meet those. Academic participant (Q3)

This, participants thought, was especially important for projects that had not been well thought out and for more complex projects.

in the more complex ones, or those projects that have set themselves up in response to the pandemic for example, in a kind of a reactionary way, they haven't done that thinking at all.
Academic participant (C5)

LG team participants found logic models helpful in deciding the focus of the evaluation.

it was my first time using the logic model, but it was really... good way of recording the information and working out.. a good way of kind of picking out the bits that we were going to focus on. LG participant (R7)

Participants reported finding the process of protocol development to be one of the most challenging aspects of co-production.

The more challenging part is the next stage where you're developing a protocol ... and managing expectations ... in terms of what can be achieved with the budget ... and that's probably one of the key focuses here. And then the other thing is trying to establish the data, existing data sources, access to routine data, sharing agreements, all those things are ... quite complex and time consuming, but need to be ironed out before you ... can decide what's possible. And unfortunately, each project, you have to reinvent the wheel. Academic participant (Q3)

Agreement between the LG and academic teams on developing research questions was reported as being paramount. Compared to what was expected by academic teams, LG was felt to be more focused on what works or does not work in relation to process as opposed to outcomes of an intervention, and on short- rather than long-term outcomes (formative/process evaluation rather than outcome focused). On the other hand, some teams found issues around the research question in terms of the expectation of what is possible to evaluate. One participant stated that the research question being pursued by the academic team was not going to yield the information they need.

it was a lot of them telling us, rather than them listening to us. ... we need it to be much more accessible and we need pre-workshop information and we need to be ... contributing a bit more. So they moved things about a bit,but what was frustrating for me is that over the course of those workshops, I continually ...we want you to assess the.... process, not just what ends up coming out the other end. LG participant (A1)

LG teams suggested the provision of interim reports or six-monthly check-ins to assess that the work continued to match the original remit, and to allow for any shifts in focus to be agreed.

Academic participants were concerned that data sharing agreements take a long time, hindering the rapid response nature of PHIRST and suggested the development of a rapid response mechanism for data sharing. At times, there appeared to be a different expectation for the level of evidence required by LG and academics. LG participants noted that academics and LG can have different understanding of terms such as 'research' and 'evidence'. Academic participants acknowledged that systematic reviews, for example, may suit academic needs but may be less useful for LG decision-making purposes.

Academic participants highlighted the tensions around the choice of methods.

Obviously, we're there to kind of advise on like the methods of the evaluation, so our lead for one of our projects has said we suggest you do this and the local authority came back and said oh yeah,



but would prefer to do this. ... The scientific lead has said that we think you should do a population-based survey, but actually the local authority think that doing kind of...knocking on door survey within a specific population will be enough. But actually, you won't get a robust evaluation if you choose to use that method that the local authority want to use. So do NIHR want us to, almost do what the customer, the customer is always right, this is the customer's ask, so we do that, but actually we don't think it's going to give so much of a robust evaluation, or do we push to say actually we think we should do this, because it is the public's money at the end of the day and NIHR want us to do good quality research. So we brought that up recently with them and they kind of said like obviously yes we want the academic to suggest the more strongest methods for the evaluation that's what we'd want to fund, however if the policy maker, if the local authority feel like this will make the decision makers kind of fund something further, trying to meet in the middle with them, so having that open conversation and find something that kind of fits both sides of it. So that is kind of something that cropped up recently, which I think might come up again.

Academic participant (X1)

Furthermore, some LG participants asserted that the protocol seemed to be more useful from the academic and NIHR perspectives rather than for them as it is too *'academic in its information'*.¹⁶ Other feedback included that, whilst protocols are useful in setting out methods and data collection, they are too vague to be useful from a project management point of view. It was suggested that this process could be improved by setting clear timescales linked to specific outputs; explanations of who is doing what, how much, and when, would also be helpful.

Summary:

A crucial element of the co-production process is the initial introduction between the academic and LG teams by NIHR, and the process whereby they assess the evaluability of an intervention and develop the protocol. Overall, this process has worked extremely well and was deemed by LG teams as helping to raise the political profile of their interventions with decision-makers. Facilitators include stakeholder identification; use of logic models and theory of change; and the shift to pragmatic, brief EAs. Challenges include introductions can be overwhelming for LG participants. Different stakeholders within LG may have different expectations of research questions and of what is achievable. There needs to be a clear system for interventions that fail the EA. LG participants state that the protocol appears to be more useful from academic and NIHR perspectives than for LG as it is too vague for project management purposes: they prefer clearer timescales linked to specific outputs and a focus on roles as well as research questions and methods.

Recommendations:

6. Develop a clear system for interventions that fail Evaluability Assessment.
7. Ensure that the protocol reflects LG project management requirements around timescales and roles in addition to the research question and methods.
8. Academic teams need to continually assess that the research question matches LG expectations and needs, including after submission of the protocol.

¹⁶ Interview: LG participant

3. Cross cutting themes

3.1 Timescales and scheduling

One of the major challenges to co-production and rapid response evaluations raised by participants was around timescales. This covered several issues especially around research questions and protocols.

3.1.1 Delays between selection, allocation, and evaluability assessment.

Academic participants raised the issue of delays from acceptance of the EOI to allocation, which may lead to projects no longer being evaluable due to change of personnel; loss of funding; the intervention being too far advanced, or too late to influence decision-making in LG.

By the time we got them, some of them were no longer viable. Academic participant (2Z)

Academic teams also stated a preference for earlier allocation to allow them to schedule their time across projects and manage workflows, to contact LG earlier to ensure interventions are not rejected or need major changes of focus, and to ensure collection of baseline data where appropriate.

these are things that are already happening and that's the nature of public health....your best case scenario is that have prepared themselves for evaluation, have understood what baseline measures they might need ...to assess impact and have already started to collect that before they implemented their evaluation. Academic participant (D8)

that's the real challenge ... they say well we want you to evaluate this intervention we have already got happening. And we don't have any baseline data. Academic participant (2Z)

LG participants also remarked that timescale issues mean that some initial research questions designed to feed into their decision-making processes have had to be decoupled, as the evaluation could commence or complete too late and may no longer perform the function it was applied for. A PPI respondent noted that PHIRST team's idea of running rapid response projects in parallel posed logistical problems that needed refining.

That's why the PHIRSTs are so different, because normal responsive rapid research projects, they are dealing with one project, but with the PHIRSTs, you are juggling a big research team... loads of different balls in the air at once...and I don't think they've quite worked out the logistics. PPI participant (U7)

NIHR has already responded to some of these issues by allocating projects earlier than at the start of the scheme.

3.1.2 Insufficient time between allocation and submission of protocols

Evaluability Assessment (EA) and genuine co-production are seen as being time consuming processes. For most academic teams the initial timescales to produce the protocol were reported as being too short, leading the system to change over time. Whilst the PHIRST scheme is meant to be responsive, participants felt that to allow genuine co-production with LG, allowance needs to be made for the LG pace and to ensure all stakeholders, including PPI participants, are consulted. This was considered to be largely down to capacity constraints in LG and especially difficult in the ongoing pandemic.

We can only respond at the local authority's pace ... we could impose, ... this is what we understand about the project, this is how we're going to evaluate it ...that would be much more

straightforward.... To co-produce the project with the local authority and if you were answering the questions they want answered...requires time. Academic participant (2Z)

Academic participants would prefer flexibility around scheduling, and submission of EA and protocols to reflect a useful endpoint rather than an arbitrary date.

the initial ...timeline ...that we had six weeks from the point of being allocated to the intervention, to producing a protocol and then if I remember rightly that changed...that could be a draft protocol. But that timescale was just not workable ... in terms of going through the co-production process ... ensuring that there is also user, or public involvement in that process, is also very, very time consuming, to do properly. ... there was this kind of looming deadline in the MIS system ... get your report, your protocol in, it was a little bit daunting to be honest. Academic participant (c5)

PPI participants also pointed out that plans could be thrown into disarray by e.g., changes of staff or length of time it takes to establish data sharing agreements.

this long to get the Data Agreements ... that's messed up my PPI plan, because I thought by this state, we would ...doing the dissemination work. PPI participant (U7)

3.2 Consistency across academic teams

It was reported that, as NIHR did not have a template for the protocol, the four PHIRST teams developed one, with headings to be included, so that there was some consistency across their evaluations.

When it came to designing the protocols for ... the evaluations, we said to NIHR do have a template ... - no we don't have a template. So the four PHIRST teams...decided ...together what the headings for the templates are going to be, so there is some continuity and consistency. Academic participant X1

However, some academic participants have mixed views regarding the value of consistency and standardization in relation to some processes.

I probably wouldn't want something that's standardised as a protocol. But there may be core principles that we could share and reflect on ...and I think there's probably value within the PHIRST initiative to share some of that and to consider outputs. Academic participant (Q3)

The PHIRST teams have also set up a group to share templates for dissemination and identified the need for an independent PHIRST website.

3.3 Capacity

NIHR expressed a desire to build research capacity in LG.

part of that is local government realising that they can be research active and there's a legitimate role for them to do that and I think it's been useful in that, ... we've had a response from local government, yes they do want to evaluate. They've been able to be a little bit research active ... So even just having the conversations is a positive thing to do. NIHR participant (B6)

Some academic teams costed or attempted to buy-out time of LG staff, while others explored training opportunities for LG team members to strengthen co-production.

I'm quite keen to explore with those local authority leads and their partners, what capacity they might have to...put a member of staff ... on the project, so that we...work in partnership to deliver it ... alongside them rather than it just being our research staff that will arrange for meeting x to happen. ... I'd really like to try and push the boundaries ... taking on the role of co-research with us. ...we've done some training with the staff around research methods and data analysis ... with an eye to them really supporting...that process more directly. Academic participant (D8)

LG respondents who participated in training appreciated this aspect, although they reported extremely limited capacity in terms of staff or time. This lack of capacity in LG was reported as a major issue meaning that real co-production was limited in some instances, leaving some academic participants with the impression that LG teams may prefer them to do the 'heavy lifting'.

it is a real challenge for local authorities. And we have thought about different ways of building the capacity of the local authorities ... about whether or not we should look to buy out some time, or use part of the budget to buy someone from the local authority to be a researcher, ... they just don't have that capacity...even if we were able to support it financially ...There's no person .. no backfill...to fill that role. ...it's not something that seemed feasible ... So capacity is a real problem for them...at the end of those workshops we ask all of those that have been involved to complete an evaluation form and it is interesting that a couple of people have said, it's been great, but we really just want you to just tell us what to do and then do it. They just want an expert to fly in. Academic participant (c5)

Some academic teams have a dedicated knowledge broker or utilized embedded researchers or navigators. These approaches were reported to have facilitated co-production, providing assistance where there was a lack of capacity within the LG.

we've actually costed in an embedded kind of practitioner for two days a week. So, for example within xxxx we are working with a guy called xxxx he identified straightaway a member of his team two days a week who we liaise with on a regular basis. been navigating between the local authority and feeds back to us, goes and asks questions etc., and is, X is the key contact. There's no, key contact and then like an embedded, so we are giving them money for somebody's time two days a week to access that embedded practitioner and that is really key for the success of the evaluations to date, having that local authority navigator who we're funding. Academic participant (X1)

Some academic teams have used their own staff on an *ad hoc* basis to act in these roles, although this is not seen as sustainable in the long-term.

3.4 Public and patient involvement (PPI)

For academic teams, PPI brought up novel issues that they might not have considered. PPI participants who have been involved in research training have been highly appreciative of the experience. Some academic teams have found it difficult to include PPI, especially when dependent on the mechanisms that LG have for PPI:

by no means all of the local authorities have any mechanism, or processes for public involvement and engagement. So, getting our commitment manifested to that has been a little challenging in some areas... I think it's an issue that the PHIRST Centres collectively are working on, is what do we mean by PPIE in relation to public health and how we are going to evidence it. Academic participant (T6)

PPI participants echoed this concern and pointed out that their engagement remains more an intention than a reality.

I'm a big fan of co-production in principle and co-production has been identified as one of the key guiding principles. ... at the moment that's more an intention than a reality. PPI participant (Q3)

They saw the late stage of PPI involvement in co-production processes to be particularly problematic.

My experience ... is that the co-production starts at quite an advanced level when the topic for the research has already been identified, when the fundings been identified, when the research process has been identified and at that stage people are invited in as public contributors or are involved in the delivery of a project that's been very well shaped. but co-production for me is ... much more deep-rooted than that. PPI participant (Q3)

Insufficient infrastructure and experience to back up PPI plans were seen as barriers, as was limited capacity to run them effectively. There was concern that this could turn PPI into a tick box exercise and that it needed assessment at the initial application stage.

I would like them to make sure that they've got proper PPI on board on all of the PHIRSTs before they bloody start... I don't know whether the people who are doing the PPI will even end up being there for the whole five years... they are just in frustrating situations, where they haven't got that much back up from their PHIRST team... it's making sure that you've got a PPI co-app that's skilled enough in PPI to be able to...do it right within a big organization...if there isn't the infrastructure then they are never going to be able to it...it's pointless ...showing them the shining example of how it should be done, if they haven't got the capacity to do it that way. PPI participant (U7)

PPI participants highlighted that the time commitments required by PPI participants had been significantly underestimated and need more careful consideration early on to allow them to schedule their time to projects, especially if they are involved long term.

Inconsistencies between academic teams was deemed a problem with potential to drain support from one team to another when experienced PPI participants are needed to assist less experienced academic teams.

that is one of the things that I think has to be changed, so.. I don't feel like I'm having to support the other PPI co-apps PP participant (U7)

Significantly, PPI respondents suggested the need for inclusion of participants from more diverse backgrounds.

the people who tend to come to those sorts of meetings, tend to be like me, white middle class. PPI participant (T4)

PPI participants also noted that the voices and concerns of many in the community were not being heard, and raised the need to develop long-term relationships with diverse community groups.

so for me the question is...who isn't represented, whose voices aren't being heard at the moment, and what is the best way of reaching those voices. And for me it's about a long-term respectful development of a relationship with the individuals and organisations that really understand the lives of the people whose voices have been quiet so far. PPI participant (T4)

PPI participants suggested that PHIRST teams could utilize settings in which people of all backgrounds feel confident and safe to engage, e.g., researchers could go to the community groups or a neutral space, rather than participants always traveling to the researchers.

the researchers would go to somewhere where they (PPI or community representatives) would feel confident and safe and trusted ... so that it feels more equal. PPI participant (T4)

Funding of PPI was also raised as an issue: some participants may be paid, others may not; if there is payment it can cause problems if the participant is on social security benefits which in turn can impact on diversity.

how do you fund people that you are working with....some of the people doing PPI work may on the PHIRST maybe paid and some people may not be, depending on what PHIRST they are working for...and that then messes with your diversity, because if you can't pay people by vouchers for doing that many things, then it's hard to set up the consultancy groups, because you can't expect somebody to come in and have a contract if they might be on benefits. PPI participant (U7)

They also stated that there needs to be greater awareness of the abilities of the participants, e.g., be considerate of online vs paper, length of documents and language, and adapting methods and outputs using different and novel ways to engage people, e.g., through creative writing, videos, or animation to ensure that voices of diverse groups are captured and engaged.

3.5 Communication

The initial stages of PHIRST were seen as a learning process for all involved. The regular meetings between NIHR and the leads of the PHIRST teams to review progress were reported as being valuable in terms of NIHR learning about the delivery of the scheme and the PHIRST teams helping to shape its future. The robust discussions were seen as being in the '*spirit of experimentation and iterative learning and experimentation*' - NIHR participant (B6). Academic teams appreciated the adaptability, flexibility, and responsiveness at NIHR.

I think their flexibility has been really important ... the fact that they have allowed, worked with us to adapt some of those processes, it is really, really important. Academic participant (C5)

LG teams appreciated flexibility by academic teams but requested greater feedback from them post-protocol, suggesting brief weekly meetings between leads plus monthly ones with a bigger group of stakeholders to keep track of progress. Interim reports were also suggested to ensure work is on target and the remit is being met, especially, important with projects that have had to amend original research questions. Others suggested more frequent but shorter meetings to facilitate attendance.

In addition, LG participants felt that the NIHR '*disappeared*' post allocation and proposed more sustained contact with them, independent of the academic teams.

I'm a little surprised that they just disappeared off the face of the earth ... There's more of an objective independence isn't there if it comes straight from NIHR and not via your research team. LG participant (B2)

Academic teams have been forceful in noting that the lack of a website and social media presence specific to PHIRST has been a hindrance. A website has been secured under the NIHR umbrella but is not yet live.

There is a twitter account, but social media is perceived to need more attention. Participants stated that this aspect of the scheme has been late in development and that administering it takes time away from each team. Some participants have suggested that a dedicated communication member be appointed to co-ordinate PHIRST information, whilst still allowing PHIRST teams to be involved.

we haven't even got a PHIRST Comms person. So all the Comms, the website work and whatever is all being done by people in the teams taking time out, to do a bit of comms. PPI participant (U7)

NIHR uses the Management Information System (MIS) for reporting on all aspects of their research programmes, including for the PHIRST scheme. However, the academic teams highlighted that they have found it cumbersome with the timelines inappropriate for the scheme, and not designed for PH intervention evaluations (e.g., asking about number of participants you are planning to recruit.)

you know we're not doing a randomised control trial, we're doing kind of an evaluation of an intervention. So the whole monitoring system is not fit for purpose. Academic team participant (X1)

Academic respondents stated that, whilst NIHR has been flexible, they would prefer monitoring systems to be more adaptable and PHIRST-specific to help with early-stage relationship building and protocol development.

Academic participants also raised the issue that, since the remit covers Devolved Administrations, the call out and any associated literature should not contain terminology only specific to England as public health is not always based in LAs.

3.6 Covid-19

Covid-19 has proved both problematic, in that it has reduced capacity in LG, but it has also raised awareness of the role of PH and how it fits into LG.

it's ten years since it's moved into local authority and they are much, much more aligned now and as a result of covid if someone in a local authority didn't know what public health did before covid, they do now. Academic participant (M3)

Participants stated that remote working has helped non-geographical relationship building and saved time and expense. It has also facilitated conversations on sensitive topics and made it easier for service users to attend meetings.

Summary:

There are several cross-cutting themes that provided notable challenges for co-production and rapid intervention evaluation. Timescales are a major barrier raised by participants. This covers several issues and causes multiple pinch points, specifically, around research questions and protocols. Lack of capacity hinders genuine co-production, and capacity constraints at LG may have been underestimated. Academic teams noted not being able to buy-out time or build capacity if there is no-one available, and that a dedicated knowledge broker/embedded researcher can assist with capacity. Communication systems need refinement. LG participants felt the NIHR 'disappeared' post allocation and would like contact with the NIHR to be independent from the academic teams. LG participants also wanted more feedback from academic teams post-protocol, suggesting brief weekly meetings between leads plus monthly feedback with a wider group of stakeholders to keep track of process. Consistency of process needs review. For

instance, PPI varies widely across academic teams. PPI participants recommend that considerably more work and deliberation be applied to improve PPI and to provide greater consistency across groups. It has been suggested that the best balance be found to allow the unique approaches and skillsets of individual PHIRST teams to emerge to allow for innovation and flexibility, whilst sharing principles across the core processes. Lack of a website and PHIRST branding has been challenging, hindering awareness building and dissemination. A website has been secured under the NIHR umbrella but is not yet live. English-centric terminology is problematic for academic teams and LG participants in the devolved nations and may result in the lack of interest outside England. Current monitoring systems pose problems for academic teams who would like systems to be more flexible and PHIRST-specific to allow improved early-stage relationship building and protocol development.

Recommendations:

9. NIHR to consider timescales: allow time for academic teams to get established; allocate projects well in advance so teams can organize work programmes and be able to work in parallel on different evaluations and reduce possibility of failing evaluability assessment due to time issues.
10. Greater understanding of LG capacity constraints and could reflect on how capacity can be built to facilitate genuine co-production. Dedicated Knowledge Broker/ Embedded researchers could assist if used consistently.
11. Consider the value of consistency vs independent approaches across the academic teams. It would be advantageous to find the best balance to allow for innovation and flexibility in changing conditions, whilst sharing fundamental principles across the core processes.
12. Enhance communication with LG by both academic teams and NIHR.
13. PPI involvement needs further development, specifically improved diversity, and community involvement as well as consistency and clearer guidelines on engagement.
14. Develop the website and social media as a matter of urgency to raise awareness of PHIRST, share knowledge and dissemination.
15. NIHR monitoring systems should be PHIRST-specific and flexible.
16. Replace terminology specific to England in all materials.

4. Impact and strategy development

4.1 Local and short-term impact

LG participants stated that they can already see impacts of PHIRST on the ground. A number of respondents emphasized the usefulness of having projects branded as funded by NIHR and linked to universities and /or specific researchers. This appeared to increase the profile of the project and enhanced its prestige, conferring respectability and increasing the likelihood of acceptance.

being able to say that it's funded by NIHR...for any of this kind of co-production ...with a trusted organisation can only be helpful. LG participant (F4)

The PHIRST evaluation was also considered to be reassuring for decision-makers, especially when faced with new or more controversial projects.

the fact that we've gotten someone in as big as NIHR/PHIRST shows that we are serious about making this a really effective intervention. ... I think that's going to massively help...put people's fears to rest a little bit...it's helpful for us just in terms of making sure this is sustainable. LG participant (F4)

LG participants commented that they benefited from the independence of the evaluations, particularly if this came from outside their region, as this conferred additional legitimacy.

having someone from outside the region come in and take a fresh look at some of the work we're doing... will be beneficial, do it will either mean we...continue to work in that way, because it's producing some good results, or we don't continue...because it's not effective. I'm looking forward ...to sharing it with the DPH, because this is the way they want their local authorities to work together on common projects that are really too big for one local authority. LG participant (P8)

The independent assessment provided by the PHIRST scheme was viewed by some as putting them 'ahead of the curve'.

we've been able to give a really strong account for ourselves and say this isn't just our view, this is an independent view ... as to why we've done what we've done ... and that's really brought us ahead of the curve than some other local authorities. LG participant (H7)

Whilst some LGs are able to conduct their own evaluation, LG participants appreciated the speed, cohesion and resources that PHIRST added.

you know we may have reached the same conclusions, but we may have reached them slower or in a less cohesive way. LG participant (H7)

In contrast, academic participants stated that, while it was too soon to assess impacts of individual interventions, they appreciated the development of relationships with a greater number of local authorities and the raising of the profile of PHIRST and NIHR.

I think there's impact now, in as much as probably the identity and the profile of the programme and NIHR has probably grown, because ..we've basically got a foot in the door now with multiple local authorities. Academic participant (T6)

They highlighted various potential tiers of impact: the interventions themselves; for PHIRST teams, for example, capacity building at the universities through funding for research fellowships; increased buy-in by LG; and the impact of research on broader public health knowledge:

I think what's important for us is identifying the ... the different tiers of impact that we anticipate. ...the impact that comes... from the projects themselves and we will have a plan for each project to capture that,there are other impacts the impact of the patient and public involvement....So we are trying.. to capture the different types of impact that we see coming from the work that we're doing. And across the four centres ... how we can kind of capture ... the impact that comes from having the synergy .. that comes from the four centres. Academic participant (c5)

Academic participants thought that the evaluations would benefit LG decision-making by providing the evidence-base at pace compared to the normal, slower NIHR approach which can mean results are too late.

if it has to be evaluated through the normal NIHR approach, you are basically always way too late....I think for councils themselves that apply it's probably quite good impact wise, because they have the evidence that something works that they can use to ... continue a programme or expand a programme ... or cut it off...And it all goes fast enough .. for these evaluations to influence decision making. Academic participant (A5)

Furthermore, the co-production processes were seen to allow for amendments to interventions if necessary, sometimes resulting in better quality interventions.

they have actually almost changed their interventions as a result of that co-production process, because they've had that opportunity to develop that logic model, to explore the evidence and listen to what we've had to say about what works and what doesn't work. ...there's certainly been some refining around what they do and how they understand what they do.-Academic participant (c5)

4.2 Wider impacts

LG participants are interested in the evaluations having impacts beyond the individual project.

we're hoping is that the impact is felt beyond this project into other ways of ... working across.. a whole range of public health interventions. LG participant (P8)

They would also prefer sharing of evidence-driven knowledge,

one would hope ...there is some kind of overview of all these projects that have been evaluated, so that other councils can see what's been done ... and whether it worked or not. LG participant (A5)

There is a desire to scale up PHIRST beyond the individual local interventions to a larger regional/ national level or to additional projects.

But I think what we can do is use the evidence base that PHIRST are bringing to us to say as we go forward and as different funding streams start to kind of get passported ...to say these are the sorts of the things we need to be thinking about at a national level. LG participant (H7)

Academic participants agreed that the PHIRST scheme could scale up the impact of the evaluations.

there are recent MRC guidance on the adaption of interventions to new contexts and whether it can just be implemented or needs to be re-evaluated. I think that potentially could be a framework that PHIRST can draw on and I suppose what does PHIRST want to do, do they want to be doing these evaluations at a local level, but then is the pathway to a diffusion study, other NIHR, so NIHR Public Health Research Board for example, or can local authorities take sort of evidence base from PHIRST, to try out something in another area and put an expression of interest in. So could that be something that is promoted within the scheme. Academic participant (Q3)

LG participants would also like to know what wider impact co-production has had for the universities; public health research; NIHR and for the scale-up between local and national concerns.

I'd be interested to hear what benefits PHIRST felt they (university) got out of working with us and is that something that they were able to then use as a kind of national case study or you know apply thinking to different models elsewhere. LG participant (H7)

At the broader level, academic participants saw the importance of PHIRST evaluations of novel interventions for the wider PH community and knowledge mobilization.

in that there's nowhere else in the UK that's undertaking an intervention like it and the topic is, very...much in the public discourse. So, I think that will be impactful. Academic participant (W4)

They highlighted the potential to develop cross-cutting themes between projects and across PHIRST teams.

4.3 Strategy development

Looking at the wider strategic environment, the importance of the research and PH infrastructure which supports PHIRST programmes was noted as being inconsistent across the UK.

I think that's ... the challenge...with these schemes is recognising the different research ...structures, infrastructure and investments there have been. I think there might be a useful...process that the NIHR could do in collaboration with the main funders..across the UK, to..map the infrastructure around population and health. Academic participant (Q3)

LG participants would be keen on continuing involvement with PHIRST teams using the infrastructure and capacity beyond the end dates of a specific intervention evaluation.

if there is any opportunity to work with PHIRST beyond our kind of set dates. I realise that ... funds are limited and we can't have kind of exclusive use of researchers forever and a day. But it will be interesting ... to sit down with the team again and say ...we are still ...applying the learning that you've brought us so far ... what is the next logical touch point for us. LG participant (H7)

Equally, longer-term follow-up of an evaluation was seen as being useful for academic teams allowing understanding of impacts post-evaluation, perhaps feeding into the university's case impact studies.

Academic participants suggested that it was time to establish the medium- and longer-term strategy of the PHIRST scheme and consider how it intends to close the gaps in the system.

what this is trying to do for the gap in the system and it's really critical ... at this point in time... there needs tomore explicit medium-term strategy around this and where it's going. Academic participant (Q3)

It was also noted that there was an opportunity for NIHR to widen and deepen the evidence base, to formulate more sophisticated questions and answers, perhaps forming regional hubs and comparative projects similar to those found in regional clinical hubs.

you are building regional capacity to generate research questions and answer them and translate it and then there is a relationship with all the different hubs around the diffusion and sharing of knowledge.... you'd also have the opportunity .. for different regional hubs and different stakeholders to come together to present more complex comparative projects ... and offering particular research designs..... regional capacity...co-production...control and ownership ... is that the model that is the future and ...some centralised oversight. But then is that a better way of putting the control and the responsibility and the empowerment of those communities ... is that where we should be going. Academic participant (Q3)

Summary:

Academic teams acknowledged that it was too soon to assess impacts other than relationship building, but LG participants noted the emergence of short-term impacts. LG participants propose longer-term engagement beyond the evaluation rather than a rigid cut off and would like to know about the impact of their involvement with PHIRST on the bigger picture. Future impacts raised by academic participants include cross-cutting themes; scaling up from the local to the regional level and developing the role of PHIRST through clearly defined medium and long-term strategies.

Recommendations:

17. Inform LG of the impact on wider public health of their involvement in PHIRST.
18. Establish the strategic role of PHIRST in the medium and longer term.

Conclusion

The PHIRST scheme has an important role to play in improving the evidence base for health-related interventions local government and could be developed further by refining its processes and developing medium and long-term strategies.

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