

The AHSN Network

Rapid evaluation of health and care services - planning a sustainable solution for the post-COVID reset

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Foreword

In the first wave of COVID-19, health and care services innovated and adapted at unprecedented speed to provide care and protect staff and patients during a rapidly developing global pandemic.

This White Paper, led by UCLPartners and the London School of Hygiene & Tropical Medicine, explores the barriers and facilitators to performing timely, rigorous and effective evaluations of these changes. Using learning from the pandemic, it sets out recommendations for how to prioritise and resource rapid service evaluations to enable more efficient and effective scale-up of health and care innovations, both regionally and nationally. These recommendations are relevant to the future health and care system both within and beyond the current pandemic.

The findings highlight examples of outstanding regional practice in rapid evaluation, as well as revealing where changes are needed on a broader national level.

This work was carried out as part of the AHSN Network's Health and Care Reset

campaign, which seeks to shape what the health and care system should look like in the aftermath of the COVID-19 pandemic. As well as understanding what changes have taken place in response to COVID-19, through our Reset campaign we have been exploring what clinicians, academics, leaders and innovators believe should be retained, adapted, reinstated or stopped, and for which populations or settings. The insights in this White Paper – developed through interviews and a roundtable with leaders from health, research and the voluntary sector – are a key element of this work.

The recommendations presented here suggest the need for changes in how rapid service evaluations are resourced, co-ordinated and delivered. At the AHSN Network we are committed to working with the wide range of stakeholders involved to help ensure that rapid service evaluation underpins all significant future health and care service changes, providing confidence to commissioners, health care professionals and the public that changes are to the benefit of the health and care of the population.



Richard Stubbs

Lead for AHSN Network Health and Care Reset campaign and Chief Executive Yorkshire & Humber AHSN



Click 'PLAY' to hear Professor Mike Roberts set the scene for this work.

Professor Mike Roberts

Managing Director UCLPartners

Executive summary

UCLPartners on behalf of the AHSN Network commissioned the London School of Hygiene & Tropical Medicine to undertake rapid research to inform recommendations for how to prioritise and resource rapid service evaluations, drawing on learning during the pandemic.

The findings have highlighted both areas of excellence and deficiencies. A number of recommendations are made that if implemented would help ensure that all significant health and care service changes in the future would be subject routinely to relevant evaluation that should provide confidence to commissioners and the public that change is for the better – and where it is not, that it is discontinued.

Overview of recommendations:

- There should be a national policy to promote evaluation of all significant service changes
- Large-scale service change should have an appropriate funding allocation to support a relevant evaluation programme
- Clarity is required on expectations of different funded entities regarding balance of research and evaluation
- Greater parity for social care evaluation and research is needed
- There should be a system for ongoing dialogue between the NHS and care with researchers to identify priority needs for service evaluation and research
- There should be greater national and regional co-ordination of effort across research and evaluation potential partners
- There should be a national repository of available evaluations and applied research
- There is a need to increase the capacity for evaluation and applied research that can be met through increased staff training and collaborations across a wider range of providers with complementary skill sets.

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Background

In 2014, the NHS Five Year Forward View set out a clear intention to **strengthen innovation** and develop new ways of working, arguing that future gains were as likely to come from changes in process and service delivery as from technology (NHS, 2014). However, implementing untested innovations without learning and sharing lessons about their impacts or identifying the key ingredients that are required for them to succeed can be harmful and costly. For this reason, it is *generally* accepted that innovations should be evaluated before they are extended to other areas across the NHS.

During the early stages of the COVID-19 pandemic, health and social care service providers across England transformed many aspects of service delivery, rapidly implementing new interventions and models of care, sometimes in the absence of a directly applicable evidence base. Health and care leaders had to act in the absence of a system-wide mechanism to evaluate and gather real time insights, leaving them to innovate in spite of the system rather than because of it. Yet, while many performed rapid service evaluations and gathered rapid insights, not all did, and it was unclear whether the innovations that service providers deployed were always appropriate or effective.

While pandemic plans provided a framework to prioritise funding for more traditional (often clinical) research, there were no pre-prepared plans for rapid evaluations or monitoring using routine data. Research priorities were defined nationally but it was unclear how these aligned with regional or integrated care system (ICS) level service needs, including evaluation of innovations. In many parts of the country there were no obvious mechanisms that allowed local health systems to signal their immediate priorities for rapid evaluation and activate a coordinated system to undertake them in the first wave. In addition, there was little clarity about where resources for rapid research and service evaluation could be mobilized from and how they could be co-ordinated at pace to support requests for rapid evaluations from NHS England and NHS Improvement (NHSE/I) and the care sector at ICS, regional, or national level.

This challenge exists both during and outside of a health crisis. Although the National Institute for Health Research (NIHR) have a Health Services and Delivery Research Programme and commission two teams including the NIHR BRACE (The Birmingham, RAND and Cambridge Evaluation Centre) and the Rapid

Service Evaluation Team (RSET) to do rapid service evaluation nationally, these teams were reported to have had limited flexibility, as reflected in funding and priorities, in the first stages of the pandemic.

At the same time, the academic community mobilised quickly to produce additional research, but their work was not always coordinated (for example multiple simultaneous studies of COVID-19 ‘risk factors’ by different academic teams) and did not necessarily fulfil all the rapid service evaluation needs of health and care providers. This divergence between the research enterprise and the health care delivery system has been shaped by a legacy of policy decisions and investment over the past two decades (Walshe and Davies, 2013).

While there have been some good regional solutions to systems change, these vary across the country. The Beneficial Changes Network (set up by NHSE/I and built on realignment of existing capacity rather than new funding) is an example that seeks to extract learning at a national level to determine which innovations were successful, with widespread acceptance that these should be retained and scaled-up. However, there remain bigger questions about how service evaluations should be prioritised, funded, resourced, and conducted in order to better align with the needs of the system.

Approach

To understand the challenges in aligning rapid service evaluation with service needs, UCLPartners on behalf of the AHSN Network commissioned researchers at the London School of Hygiene & Tropical Medicine to perform a piece of rapid qualitative research with key stakeholders.

Eighteen independent semi-structured interviews were carried out with leaders from a range of health policy, research and service delivery organisations including NHSE/I, NIHR, AHSNs, regional medical directors, an applied research collaboration (ARC), universities, National Institute for Health and Care Excellence (NICE), the Nuffield Trust, the Strategy Unit, and individuals with experience of carrying out regional service evaluation (see [Appendix](#) for further information about methods). Interviews sought to understand stakeholders perspectives on two main questions:

- 1) How can rapid evidence reviews and rapid service evaluations be resourced and prioritised to inform meaningful service transformation in health and social care systems?

- 2) What are the facilitators, barriers and opportunities to performing rapid service evaluations, regionally and nationally, both during and outside of a rapidly developing emergency?

In December 2020, the London School of Hygiene & Tropical Medicine and UCLPartners presented the findings to an AHSN Network sponsored roundtable of eminent leaders in health (including NHSE/I and NICE), research (including NIHR), the voluntary sector and independent thinktanks, to develop recommendations about how to prioritise and mobilise resources for rapid evaluation of services in the NHS and social care (for more details about how the roundtable was structured see [Appendix](#)).

A parallel evaluation has been undertaken by the AHSN Network, led by Oxford AHSN, that specifically addresses the insights of patients and frontline workers as key influencers of coproduction in evaluation and research. We therefore did not include these stakeholders as part of our research, and its findings should be considered with those presented here.

“Health and care leaders had to act in the absence of a system-wide mechanism to evaluate and gather real time insights, leaving them to innovate in spite of the system rather than because of it. “

What we learned - Key findings from interviews and the roundtable

Can we develop a shared agreement on what a good evaluation is?

Evaluations are an important element of effective service change but there is no single framework that can be used for all purposes, to the disappointment of some. One stakeholder we spoke to reflected:

“The broader question is how do you respond to new areas of interest and is there a **standard pre-packaged methodology** that can rapidly be adopted off the shelf?”

The Bill and Melinda Gates Foundation define evaluation as ‘the systematic, objective assessment of an ongoing or completed intervention, project, policy, program, or partnership. Evaluation is best used to answer questions about what actions work best to achieve outcomes, how and why they are or are not achieved, what the unintended consequences have been, and what needs to be adjusted to improve execution.’

The Medical Research Council has published a framework for performing complex evaluations (Craig *et al.*, 2008; Moore *et al.*, 2015), which includes a portfolio of methods, but the rigour with which they can be applied may be limited by time constraints facing service managers who need immediate answers. Other frameworks also exist, including the Treasury’s Magenta and Green Books (HM Treasury, 2013, 2020) and various others that are often used in the international development sector. However, in practice, as one stakeholder we spoke to said:

“Other areas of practice and policy do this perhaps slightly more rigorously ...in health...there is a slightly sporadic approach.”

We identified an appetite among some key stakeholders to produce some kind of pre-prepared package of evaluation methods and designs that could be used in health and social care in a pandemic situation and beyond. In real life, however, this is not straightforward and evaluations exist →



| What we learned - Key findings from interviews and the roundtable

on a **continuum of scope and resource** requirements (Lamont *et al.*, 2016), ranging from:

- Those performed to **monitor the progress of a project and adapt it** – usually performed in-house
- Those that are **intended for others to learn from and test further** – which may require modest external research funding
- Those that are **designed to influence a change in practice at a national or international level** – which can require substantive research efforts that can last as long as 3-5 years.

Each requires different approaches, often involving a mix of methods, ranging from experimental designs, such as randomised trials, to complex adaptive system evaluations, and process evaluations, depending on what is being evaluated and why.

Previous work by the Nuffield Trust has revealed that many evaluations of health and care services are poorly designed, fail to define clear research questions or evaluate the processes involved, and are often unable to achieve their desired outcomes (Kumpunen

et al., 2019). This is partly attributable to dissonance between research, evaluation and practice, which can mean that the priorities and expectations of researchers and research commissioners are often misaligned, particularly with respect to what questions can reasonably be answered in short timescales and how likely the work is to be publishable. It is important also to recognise that whilst applied health researchers (who are in short supply) are required for substantive research evaluations, this level of expertise is not necessarily required for progress monitoring, which can be undertaken by those trained specifically as service evaluators.

Evaluations mean different things to different stakeholders so any evaluation must be planned in close consultation with those who will be affected by the resulting changes. This includes patient groups and carers as well as frontline health and care workers. It is also important to take account of stakeholder readiness to receive information, ensuring clarity of intent, and whether commissioners want to know if something that they have invested in does not actually work. It is crucial to ensure that commissioners and funders value the results enough to prioritise their implementation. →

We asked **what a good evaluation needed to be:**

Researchers said:

- **Independent**
- **Well designed** • **Assess:**
 - Impact - Timing
 - Value - Process
- **Generalizable**
- **Publishable** (to satisfy research funders)

Commissioners said:

- **Rapid** • **Focused**
- **Flexible** • **Easy to read**
 - Be **sufficiently well-resourced**, including specialist evaluators
- **Inform service change**

| What we learned - Key findings from interviews and the roundtable

It is important to note that every innovation does not necessarily need rigorous evaluation and a variety of approaches exist to prioritise what to evaluate and what not to (McGill *et al.*, 2015). In general, it is, however, ill-advised to scale up any *major* innovation without rigorously evaluating implementation, although this does happen, with a recent and somewhat controversial example being the national roll-out of mass repeated rapid antigen tests for COVID-19.

In times of crisis, where decisions must be taken quickly and evidence from rigorous evaluations is lacking, decisions to scale-up interventions may be taken where it seems likely, *a priori*, that benefits to patients and the workforce will exceed the harms and where the intervention is backed by theory, has plausible mechanisms and justifies the opportunity cost. During the pandemic many of the innovations that were rolled out were already in the pipeline, with some benefiting from an existing evidence base. Most were presumed to have few unforeseen harms and under the extreme circumstances, it was considered to be

better to implement them than not to. Nevertheless, an evaluation of the costs, benefits and potential harms should be undertaken at the first opportunity.

The Beneficial Changes Programme is led by NHSE/I and seeks to catalogue local innovations that have been successfully implemented during the pandemic in order to identify those that can be scaled up nationally in partnership with AHSNs and ARCs. The programme's success will ultimately depend on the ability of service providers to evaluate the innovations they have implemented and compare them in different settings, accounting for differences in context.

For many commissioners and policy-makers, relevance is more desirable than academic rigour (Petticrew, Chalabi and Jones, 2012). However, poorly designed studies could cause harm and don't help identify where quality improvement or change is needed. For these reasons, a rigid evaluation framework is challenging but a package of options may well provide credibility for the different methodological approaches adopted matched to the topic in question.

What resources are available for service evaluations and what are the roles of national bodies?

Those interviewed were unable to identify any formal mechanism whereby NHS or care organisations could articulate their needs for rapid research and evaluation, at national or regional level, during the first wave, or any organisation with a formal role in conducting such work. Some regions have created their own solutions to this, which are outlined in case studies on [page 14](#).

What happened nationally?

The pandemic plans included pre-prepared frameworks for clinical trials, including for treatments and vaccines. Research priorities were determined early in the pandemic by the Government Office for Science and SAGE, feeding into national funding calls by UKRI and NIHR. However, rapid service evaluations did not receive dedicated funding.

One participant said:

“There were some great examples of pre-specified work around pandemic response that worked quite well....having pre-specified teams was interesting. I don't know if it is a re-usable model more generally....but there was some really good practice from the pre-prepared pandemic response plans.”

The national process for prioritising rapid research and evaluation needs is based in NIHR, which funds two specialized national rapid evaluation teams, including the NIHR BRACE Rapid Evaluation Centre and the Rapid Service Evaluation Team (RSET). These teams reported having limited capacity but the ability to perform rapid, high-quality, and generalisable research to inform national policy, a recent example being remote home monitoring of COVID-19 patients (Vindrola *et al.*, 2020). Priorities are established in a horizon-scanning process that includes multiple stakeholders.

Other organisations also fund and undertake rapid evaluations, including the Health Foundation. NHSE has also supported the scale-up of the COVID-19 Oximetry @home

programme, drawing on several regional service evaluations in collaboration with the AHSN Network (West of England Academic Health Science Network, 2020).

Earlier examples of national evaluations within the NHS include the 'New Care Models Programme', commissioned by NHSE, the NIHR Policy Research Programme and undertaken by various universities and the Health Foundation (Operational Research and Evaluation Unit NHS England, 2016; Checkland *et al.*, 2019; Morciano *et al.*, 2020). This evaluation of NHS vanguards played a key role in informing the NHS Five Year Forward view and is a good example of one of the ways in which national evaluations can support innovation in the NHS, but large-scale evaluations such as this can take time to set up and need to allow time to elapse in order to make valid pre/post comparisons.

More recently, an internal evaluation hub within NHSE/I has been established to enable collaboration across different teams to share knowledge, tools and experience. A wider evaluation community supports shared learning by bringing together people working on applied evaluation across health and social care system, [About Applied Evaluation Community of Practice](#).

What happened regionally?

We were unable to identify where the responsibility or funding to perform rapid evaluations of complex interventions was intended to come from regionally. There was a particular absence of direction in relation to social care, and in the largely private care home sector.

Many commented on the Applied Research Collaborations (ARCs), which are funded by NIHR, as best positioned to lead this work as they are designed to respond to local needs. When asked what recommendations they would make to NHSE/I and NIHR to develop frameworks for health and care leaders to articulate their rapid evaluation needs, one person told us:

“Work more closely with the ARCs because they have their networks. That would be the strongest message.”

Although ARCs individually and collectively carried out local evaluations during the pandemic, they are mainly funded to carry out research. Rapid service evaluations may not result in publishable work, presenting a challenge for researchers who are normally judged and funded on their publication record both by the NIHR and their hosting higher education institutes.

The ARCs differ regionally in terms of the research themes and priorities they are funded to fulfil and how that funding is allocated in advance. All have some kind of responsive function to address service providers' needs, but the degree to which rapid service evaluations feature in this work varies. There are examples of outstanding individual leadership in supporting service evaluation at regional level amongst single and groupings of ARCs formed through shared interest but not co-ordinated by a national response.

Some interviewees also gave examples of rapid evaluations being undertaken by the Academic Health Science Networks (AHSNs). Manchester and Yorkshire and Humber AHSNs, for example, pooled funding

from multiple local partner organisations and regional budgets to fund rapid service evaluations. These examples of linkages across local geographies were seen as extremely positive, although it was noted that the AHSN boundaries do not always align with NHS regions. In terms of funding, AHSNs are commissioned mainly to support regional uptake and spread of innovations at pace and scale rather than to evaluate innovations (Ferlie *et al.*, 2017).

What was clear was that the NHS was not viewed as an entity that systematically funds rapid service evaluations or training of staff to conduct them, instead seeing the NIHR as holding that function, and as a result the response has been inconsistent. Those organisations that innovated and performed rapid service evaluations felt that they did so in spite the system and not because of it.

How can we align research infrastructure with the NHS and agree a strategic approach at national, regional and local level?

One participant told us:

“I’d like to get to a point where we are not just thinking about what we did in an emergency but about how we create adaptable, responsive and flexible systems going forward.”

Barriers to rapid evaluation

Many stakeholders identified several barriers to performing rapid evaluations, including a shortage of health services researchers and evaluators and a lack of funding for timely applied research, such as that using routine data.

It was clear that there is a range of organisations occupying the service evaluation landscape, including universities, consultancies, thinktanks, trusts, Public Health England and others, but there is often **inadequate collaboration or coordination** among them. One potential solution has been to view resources as

‘capabilities’, scanning across the system to identify what skills and contributions could be accessed in different ways, including performance of rapid reviews of evidence, which struggle to acquire resources and are frequently duplicated by different groups. For example, many third sector organisations have suffered large budget cuts but can contribute research and evaluation resources, including support for patient and user engagement and, in some cases, skilled evaluators. It was repeatedly emphasised that, when designing evaluations rapidly, the contribution of patients and staff should not be ignored.

Facilitators of rapid evaluation

Relationships, political will, existing capacity, and pre-established programmes of work were identified as levers for resourcing and facilitating innovation and rapid evaluations. We heard that it was much easier to resource and initiate rapid evaluations where there were **pre-existing relationships** between researchers and service providers. Many were based on previous personal connections and collaborations, while others involved creation of new formal and informal networks across boundaries. Areas that already had applied health researchers embedded in trusts were also more able to launch new evaluations more quickly. A particular theme was also that many programmes of work, including remote triage, social prescribing and virtual wards were also based on previously defined programmes of research, where it was easier to overcome immediate barriers (such as data access) and move to scale-up quickly.

Our discussions highlighted the importance of ensuring that this process is as inclusive as possible, drawing on as many stakeholders as possible in establishing the goals of evaluations, noting that wide engagement is essential for subsequent dissemination.

One participant commented that:

“Perhaps one way forward is to ensure we have the right network at national level including health, social care, voluntary sector and people with lived experience....I’m sure many good networks were happening before but the data-sharing and shared purpose through COVID-19 have definitely thrown people together in a way not seen before leading to new partnerships and relationships.”

Allied to this was the call for a **joined-up approach** linking those involved in evaluation and implementation across organisations to agree priorities. There were also suggestions that a **single repository** might be created where regions could signal their research needs and intentions; this could facilitate pooling of resources and avoid duplication (See Recommendations).

Initiatives that were backed by **political will** were more likely to attract resources. One controversial example was the prioritization, accompanied by direct government funding, to the University of Liverpool for the simultaneous

evaluation and scale up of ‘mass’ testing for COVID-19 using rapid tests.

Participants highlighted the importance of developing early plans to disseminate and embed evaluation findings within wider practice, co-ordinating the cycle of continuous improvement and innovation, underpinned by research and evaluation.

Reduced restrictions on accessing and sharing data played a core role in this and one participant said:

“Everything that we do in terms of research... and improvement relies on data and there is a golden opportunity to start to influence what data is collected. The Data Alliance Partnership has come about because of COVID-19...one of the biggest things that underpinned the ability to do things at pace was the data sharing across boundaries.”

The London Evaluation Cell

London Regional NHS has now convened an Evaluation Cell that incorporates the three London AHSNs and the three London ARCs, working with the regional clinical and transformation leads.

The cell has agreed a set of criteria with regional clinical and academic leaders, considering the scale of impact, generalisability, measurability etc to prioritise regional evaluation plans. The cell is working to define and prioritise specific evaluation and research questions and to develop a regional learning health system programme using research grade evidence.

The London evaluation cell is chaired by an NHS chief executive and is a good example of collaborative engagement between key partners to perform rapid learning and evaluation. It benefits from regular meetings with clear actions and outputs that are aligned with NHS service needs.

Chief Executive of Health Innovation Manchester, Professor Ben Bridgewater told us:



“Health Innovation Manchester incorporates Manchester’s AHSN, academic health science centre (AHSC), ARC and integrated care system digital office. It also represents Greater Manchester’s wider research and innovation system which creates a powerful integrated cross-system perspective for research and evaluation, as well as transformation. This enabled us to collectively define trials and diagnostics to evaluate, and respond to the national priorities on research, along with local priorities for innovation and transformation from the city region NHS command and control structures.

Together, we harnessed regional funding and partners brought their own funding too. We supported some of these programmes using local funding at risk, and utilised national funding for others.

A key reflection from our experience is that technology has been at the heart of so much and ‘digital’ has rapidly become elevated right to the top of the agenda. Secondly, organisations must work as a network of **capabilities** (clinical, digital, academic, delivery, etc), **not separate entities**. Whilst national oversight and planning is essential in a pandemic, senior NHS leadership must also trust the local areas to know what they need to do and how to sustain it.”

Evaluation Lead and Spread Fellow in the South West Academic Health Science Network, Sarah Robens, told us:



“In the South West, rapid learning from the pandemic has changed our usual approach to service evaluation. It allowed us to gather information quickly, in a way that is meaningful and useful to our stakeholders in real-time.

When COVID-19 hit, we immediately recognised the imperative of learning from the pandemic in a way that could help organisations and individuals to make decisions on a much shorter cycle than our usual evaluation work.

To ensure we harnessed the positive changes and new approaches, our focus was on **how** the response happened, rather than **what** happened. We engaged as many people as we could in a short space of time, using twitter to

share links to online questionnaires across our system, as well as maximising our existing networks and relationships. We built on information gathered through questionnaires, with in-depth interviews and distilled information down to shareable summaries.

Building on this region-wide learning, we were commissioned across our three counties to undertake rapid learning work across each.

The model we developed set out eight conditions for rapid change, outlining the importance of organizational and cultural shifts in creating the environment for positive change. We have now adopted this as an assessment tool and framework going forward.”

Recommendations

These headline recommendations, based upon stakeholder interviews and the subsequent roundtable discussion, are presented as learning from the COVID-19 pandemic relevant to the NHS and care reset period and the longer term, to ensure that resources required for rapid evaluation of changes to the NHS and care systems are prioritised, co-ordinated and appropriately applied to the benefit of patients and the wider public.

Resources and Infrastructure for rapid evaluations

NIHR should:

- Clarify expectations of different funded entities regarding balance of research and evaluation
- Consider training more clinical academics to undertake applied research and evaluations, potentially with the support of the Royal Colleges
- Ensure that funding for rapid service evaluations reaches other relevant sectors, including social care and ensure that the relevant expertise is made available to these partners
- Promote and fund work that can show demonstrable systems benefit, shifting the funding conditions and career progression of researchers to reward demonstrable systems benefit as well as academic outputs
- Provide opportunities for less established researchers to access funding for applied research, where they show the capacity to innovate to produce quality applied research (e.g. the OPENSAFELY group)
- Reduce the bureaucracy for regional service providers to access research funding for evaluating service innovations.

NHS regions should work with sustainability and transformation partnerships (STPs)/ICSs to:

- Ensure large scale service change has an

- appropriate funding allocation to support a relevant evaluation programme to understand the benefits or otherwise of those programmes*
- Align resources to create the infrastructure to engage with frontline organisations across all sectors in order to build learning systems through new ways of working
- Incentivise and build adaptable, responsible and flexible systems by building on existing expertise e.g. the ARC and AHSN networks to create an asset-based national network of regional structures for rapid service evaluations
- Build on existing partnerships, such as the Data Alliance Partnership to permanently lower barriers to accessing data quickly to enable sharing of health and social care data across boundaries
- Prevent duplication of resources by performing some rapid reviews nationally or regionally rather than locally.

Co-ordinating function

NHSE/I and NIHR should:

- Consider creating a national database of evaluations that have been completed or are underway, as done for the global [UKCDR COVID-19 research tracker](#) or [clinicaltrials.gov](#). This would have to be appropriately resourced and updated frequently →

Recommendations

- Consider developing pre-prepared pandemic response evaluations mimicking the process for drug trials such as the RECOVERY trial
- Agree roles and responsibilities and key contributions of research users and agree a memorandum of understanding (e.g. PHE, NHSE, Health Education England (HEE))
- Consider approaches to co-ordinating expertise and resources across agencies, such as the Improvement Analytics Unit, the Health Services and Delivery Research Programmes, the Rapid evaluation centres (RSET, BRACE), This Institute, Discovery, and Q community
- Promote the ARCs and AHSNs to work as collaborators in service evaluation when appropriate for example within the Beneficial Changes Network programme.

Signalling research and evaluation needs nationally and regionally

Research organisations (e.g. NIHR, MRC and Economic and Social Research Council (ESRC)) and NHSE/I should:

- Develop and co-ordinate clear demand signalling processes for health and care providers to articulate their research and

evaluation needs, incorporating local perspectives, and considering the priorities of the NHS Long Term Plan

- Promote a dialogue between the service and researchers to help frame the potential and the limitations of research and evaluation to facilitate honest conversations about questions that can and cannot be answered with available data.

Evaluation design

ARC and AHSN Networks:

- Use the existing ARC/AHSN networks to build stronger relationships between sectors, potentially using the NHS Assembly as a forum to develop these relationships and ensuring that social care is not left behind
 - o As part of this, charitable organisations could provide support in kind (e.g. data, support with patient participant involvement and potentially funding).

Evaluators should:

- Design evaluations to reflect the mixed economy of methodologies that can most appropriately address the desired outcomes, whether national, regional or

otherwise

- Ensure that patients, service users and health and social care workers are central to all evaluations, being particularly mindful to include social care, where research infrastructure is less well developed
- Ensure that any comparisons of outcomes account for differences in populations, study design, capacity of recipients to benefit and key process outcomes
- Ensure, where feasible and appropriate that evaluations have a strategic plan for disseminating the findings, with consideration of how they will contribute to any potential scale-up
- Ensure that process outcomes are monitored when evaluating any new intervention.

Implementers should:

- Ensure ongoing monitoring if an evaluation is incomplete before scaling up, including adverse effects with clear stopping rules
 - o Specific examples included the use of non-invasive ventilation in COVID-19 respiratory failure patients and also the use of lateral flow devices for COVID-19 testing
- Align evaluations with systematic and co-ordinated data collection to complete the cycle back to implementation.

Authorship



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Martin McKee CBE is Medical Director and Professor of European Public Health at the London School of Hygiene & Tropical Medicine, and a member of the board of UCLPartners. He has published extensively on health and health systems in countries undergoing major economic, social, and political change, and on European health policy and law.



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Strawberry.London managed the logistics, development and design of the report, roundtable and filming.

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Appendix

Rapid evaluation of health and care services - planning a sustainable solution for the post-COVID reset



Research methods for stakeholder analysis:

This piece of qualitative research was undertaken by a researcher at the London School of Hygiene & Tropical Medicine who conducted 18 independent semi-structured key informant interviews with leaders across a range of health policy and service delivery organisations as well as selected applied health services researchers. Interviewees were selected purposively to include perspectives from a range of different types of organisations that fund, deliver or benefit from rapid research and evaluation and snowball sampling was used to enable further investigation of evolving themes. Key organisations included NHSE/I, NIHR, AHSNs, regional medical directors, an individual ARC, universities, NICE, the Nuffield Trust, the Strategy Unit, and individuals with experience of carrying out regional service evaluation.

Results were analysed using thematic analysis, with key themes tested iteratively in subsequent interviews to produce a set of draft recommendations. Results were compiled into a set of slides outlining the key themes identified in the interviews, and these are available on request.

A roundtable on 10 December 2020 brought together 12 leaders from research, NHS and voluntary sector organisations, including national and regional NIHR organisations, NICE, NHSE/I (including leaders from the Accelerated Access Collaborative and Beneficial Changes Network programmes), Alzheimer's Society, the Health Foundation, AHSNs and the London School of Hygiene & Tropical Medicine. Participants discussed the results of the qualitative research and draft recommendations and considered three major challenges:

1) **Delivering a shared aim:**

How to overcome the many different views about the role of evaluation in healthcare and work to deliver a common goal.

2) **Funding and responsibilities:**

To establish what sources of funding already exist and to explore the roles of national bodies, including NIHR and improve transparency and understanding around how the NHS funds and resources rapid service evaluation.

3) **Capability and aligning resources:**

To establish ways of creating a system to align research infrastructure with the NHS and to mutually agree a strategic approach at national, regional and ICS level, considering what this system could look like and how it could be implemented.



Semi structured interview topic guide

'I would like to start by explaining a little background the research and to check that you are still happy to participate. This work is being carried out as part of the Academic Health Science Network Health and Care Reset campaign. It is led by UCLPartners in association with the London School of Hygiene & Tropical Medicine.

'During the first wave of COVID-19 infections, best practice guidance was not available so much was unknown about the virus and many health and social care providers innovated and adapted to provide the best possible care. In order to establish how successful these changes are, providers must rapidly collate emerging frontline clinical evidence and undertake service evaluations as quickly as possible, whilst awaiting traditional research findings, which tend to be considerably slower.

The purpose of this evaluation is to understand what went well and what didn't go so well during the first wave of COVID-19 in terms of prioritizing local research needs, conducting rapid evidence reviews and rapidly evaluating frontline services during a rapidly evolving emergency. The hope is that this learning may also be applied to a future long-term relationship between the NHS and the health and social care system and, in the broadest sense, the research and evaluation provision.

Our aim is to establish how we can mobilise resources to support closer collaboration between academic partners and the health and social care system to rapidly evaluate frontline services to improve patient care in the longer term, using COVID-19 as an exemplar for change. These findings will inform policy recommendations that will be discussed at a roundtable event with health systems leaders in December, and will eventually be presented in a White Paper.'

Consent:

'I would like to ask you some questions about your experiences of the systems and resources available for rapid service evaluations in health and social care. I will record this interview for my own records, but will only use it for the purposes of the evaluation and the analysis and nothing you say will be directly attributed to you. We are also making a short video to showcase the highlights of the research at the roundtable in December and may ask some participants if they might be able to contribute a very short video clip to this a little later. We appreciate the pressures on your time and there is of course no obligation to do this.'



Questions:

1. From your experience, do service evaluations differ from traditional research and if so could you describe these differences to me?
2. Could you explain to me how research priorities were determined during the first wave nationally and how this differs regionally?
3. Is there a similar process for service evaluations and how are they then prioritised nationally and regionally?
4. Are those national and regional prioritisations linked in any way?
5. Were you involved personally in conducting or co-ordinating any rapid reviews or service evaluations during the first wave?
 - a. Who was responsible for overseeing this and who was involved in implementing it? Who did what? What were the roles of NHSE/I and NIHR and other stakeholders e.g. third sector, Wellcome, MRC?
 - b. How was this taken forward and co-ordinated. Prompt: what links were there between academic and health and social care partners? (Process)
6. In your experience, what went well with respect to service evaluations and rapid evidence reviews during the first wave?
 - a. What didn't go so well and what do you think we can learn for the future?
 - b. Which bodies do you think should be responsible for overseeing service evaluations and rapid reviews in the NHS and who should be involved?
7. Who do you think should fund this?
8. And who do you think should actually carry out these evaluations?
9. What should a policy document recommend for a future relationship between the system and the research and evaluation community to ensure that the system's needs are met?
 - c. What resources, if any were available to facilitate these research and evaluation needs? (Financial, technical expertise, workforce)
 - d. What resources would you have liked to have had but weren't easily available?



Brief overview of evaluation approaches

	Aim: To monitor progress of project and amend (local)	Aim: For others to learn and further testing (regional)	Aim: To influence change in practice (national)
Resource	In house	Modest external research funding	Substantive research effort (3-5 year programme)
Study	Monitor a new hospice at home scheme	Assess an innovative GP led service for homeless people in hospital (Hewett N, Halligan A, Boyce T. A general practitioner and nurse led approach to improving hospital care for homeless people. <i>BMJ</i> 2012;345:e5999)	Evaluate impact of new integrated care pathway after emergency laparotomy (www.nets.nihr.ac.uk/projects/hsdr/12500510)
Problem	Specialist support for more people dying at home; to prevent avoidable emergency admissions	Homeless people experience high levels of emergency admission, long length of stay, fragmented care within hospital, poor coordination (under care of different specialist teams), and practical problems in discharge	High mortality and variations in care after emergency laparotomy. Processes associated with better outcomes, such as early admission to critical care, are not standard. Greatest gains likely from improvements to whole perioperative care pathway
Intervention	Hospice outreach team with nurses, support staff, and community link workers providing 24/7 care and crisis response	Seconded GP and hospital nurse providing specialist discharge service	Evidence based quality improvement initiative in perioperative care
Setting	Hospice and catchment of 12 general practices	One hospital site	90 hospitals in UK
Study design	Audit	Uncontrolled quasi-experimental study and qualitative research with staff and patients	Multicentre stepped wedge cluster randomised controlled trial with process evaluation
Primary outcome	% dying in preferred place of death	Emergency admissions and length of stay	All cause mortality 90 days after surgery
Use of findings	Plan further evaluation including telephone survey of staff and bereaved relatives, costs, use of health services in last weeks of life	Demonstrated change. Further testing with trial of intervention at two sites with controls to determine impact of the intervention on the changes found	Ongoing—could lead to national change in practice if demonstrates impact. Further potential application to other areas of high risk surgery

Fig 1 Continuum of evaluation activity, from local to national effort (developed from an evaluation spectrum used by North Thames CLAHRC)⁹

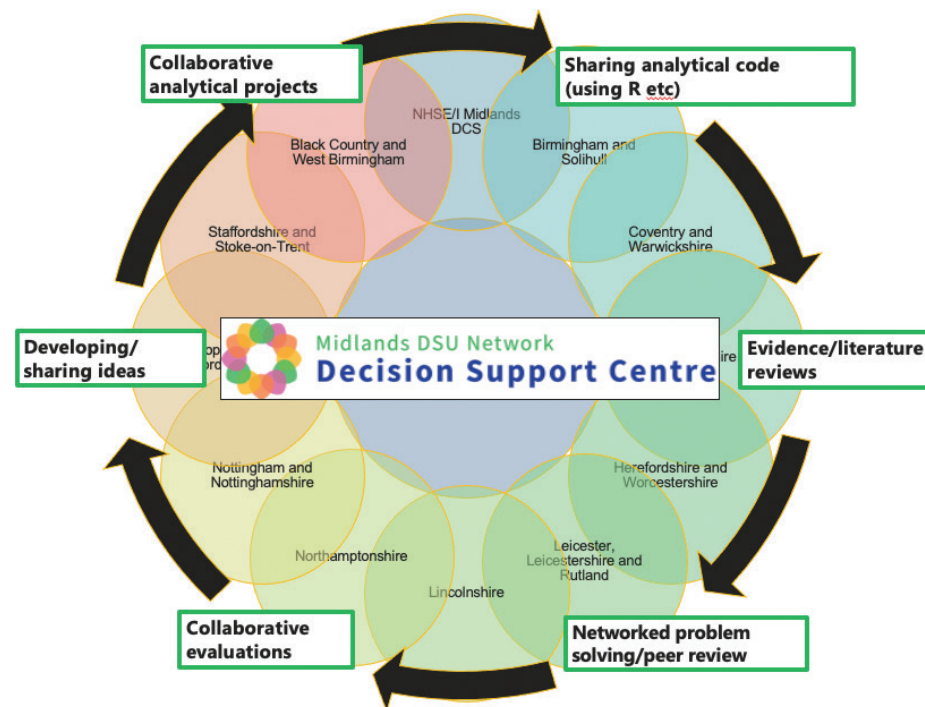
Source: Lamont, T., Barber, N., De Pury, J., Fulop, N., Garfield-Birkbeck, S., Lilford, R., Mear, L., Raine, R. and Fitzpatrick, R. (2016) ‘New approaches to evaluating complex health and care systems’, *BMJ* (Online)

However, it is also important to note that every innovation does not necessarily need rigorous evaluation, and there is a risk that the ‘perfect’ can become the enemy of the good in imposing such standards universally. The level of rigour required depends on the **decisions that the evaluation is expected to inform, the plausibility of benefit, the risk of harm, the cost of the innovation and whether the benefits are large.** If an innovation is highly likely to produce benefit, at low cost and low risk then rigorous evaluation may be superfluous, although this decision must be taken carefully to avoid potential unintended harms. This has been the case for policies on minimum unit pricing of alcohol in Scotland and smoking bans, neither of which were evaluated before being implemented nationally. It is also important to note that evaluations of relatively new innovations are more easily and quickly assessed by process or formative evaluations than those that seek to capture outcomes. (Ogilvie *et al.*, 2011).

An example of a ‘Network of Capabilities’

We spoke to the Strategy Unit in the West Midlands who also described a new collaborative system, that has been enabled by pooling local funds between numerous health, research and civic organisations.

The Midlands Decision Support Network acts as a network of capabilities across a number of local footprints and includes training on evaluation methodologies as an integral part, as shown below. (The Strategy Unit, 2020b, 2020a)



*The***AHSN***Network*

For further information about
**The AHSN Network Health and
Care Reset campaign** please see:

www.ahsnnetwork.com/reset