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## ARC West Midlands News Blog



# Reflections of an ARC Director 4: ARCs and Their Role in Service Evaluation

Richard Lilford, ARC WM Director

## Introduction

In the first article in this series [1] I showed how the co-funding principle of an ARC ensures that research is embedded in the services (health and social care). In the second, [2] I explicated the role of an ARC in the selection, development and evaluation of service delivery improvements. In the third article I described the tricky issue of meeting all the expectations of an ARC, and suggested ways to make the money go further. [3] In this article I discuss evaluations in particular.

## The MRC Framework for Complex Interventions

The MRC Framework [4, 5] provides a development pathway for a service intervention, starting with identifying the need for a service change, co-development, piloting and then larger scale roll-out, accompanied by an evaluation. Such a framework is analogous to the development of medicines: identify a promising molecule from the science base → produce the medicine → in vitro test → scale up → animal tests → pilot trials (phase I & II) → large scale trial (phase III). The MRC process was designed to reduce the problem of evaluating interventions that did not have a sound evidential and theoretical basis or that were not designed to overcome barriers or exploit facilitators to implementation.

## The Pathway in ARCs

Sometimes an ARC may follow the complete pathway. For example, we were asked to find a way to improve uptake of staff influenza vaccine, and within a year we had reviewed relevant literature, co-developed an intervention based on nudge theory, implemented the intervention, conducted a factorial randomised trial on 8,400 frontline staff, and published the results. [6] However, it is more usual to complete only part of the chain. For example, a review may show that a study is not necessary, as in the example in the second article in this series. [2] Often the service has already developed an intervention but wishes it to be evaluated in practice – we call this *opportunistic evaluations*. [7] For example, we conducted a time-series analysis of a fully-fledged intervention to reduce falls at University Coventry & Warwick. [8]

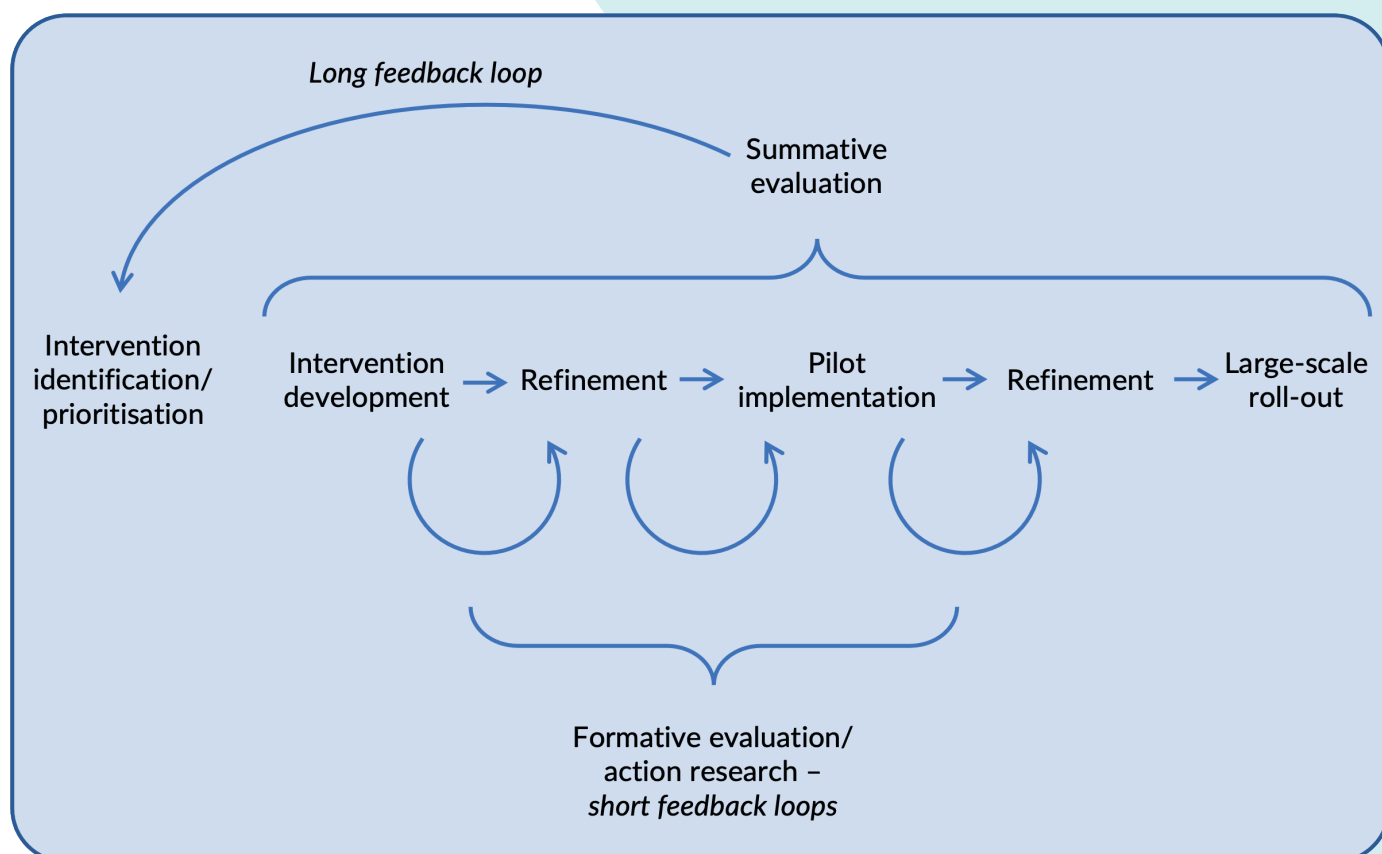
## Reality Check

ARC funding amounts to £9-10m over five years, or about £2m per year. Since large trials typically cost one to two million pounds, it is not feasible for an ARC to carry out many such trials. For example, an ARC with six themes would be limited to about one trial per theme. It follows from this limitation, that most ARC evaluations are conducted at the formative and pilot stages. These evaluations can then form the basis for a larger scale subsequent study. For example, the pilot work on computerised decision support

for prescribing in our first CLAHRC [9] led to an influential NIHR Programme grant of e-prescribing across other NHS hospitals during our second CLAHRC, and this in turn, formed the basis for a further NIHR Programme grant that is currently underway on use of Computer Decision Support to promote antibiotic stewardship. However, there are exceptions to this rule that arise when outcomes from a large-scale evaluation can be based solely on routinely collected data (as in the influenza vaccination example above). As a general rule, however, the ARC grant will be the foundation for, rather than the basis of, your next New England Journal of Medicine paper.

## Formative vs Summative Evaluations

By formative evaluations we mean evaluations that provide rapid feedback to guide the service in the development and implementation of interventions. As I have described in previous articles, feedback of findings on a rapid cycle, with the aim of influencing the intervention over its implementation phase, is a feature of action research.[10, 11] Summative evaluations are carried out by an independent research team and are fed back over longer time-scales. A summative evaluation by one research team may overlap with formative evaluation by another team. In that case, the formative evaluation is, from the perspective of the summative evaluation, a part of the intervention (Figure 1). I lay out the logic behind this point in more detail elsewhere.[12]



**Figure 1:** Diagram to represent the complementary, but distinct roles of summative and formative research. (Figure based on Lilford, et al. [Action research: A way of researching or a way of managing?](#) *J Health Serv Res Policy*. 2003;8(2):100-4).



## Mixed Methods Research

ARC-funded studies are seldom entirely quantitative; they are usually mixed methods (i.e. harness both qualitative and quantitative data), or they are purely qualitative. While I encourage mixed methods whenever possible, qualitative work may show that something is simply not working and that there is no point in pursuing it further – my CLAHRC colleague Gill Coombes abandoned a study of an alternative emergency service because early, purely qualitative, findings showed that the proposed intervention simply could not gain traction in the service. ‘*Good money should not be sent after bad*’ in the pursuit of a ‘*deliverable*’ as we shall discuss in a forthcoming article. Qualitative research can show that the necessary, if not sufficient, conditions for safety and effectiveness are satisfied. In a previous paper I showed that many high level (blunt end), inexpensive interventions, like staff development programmes, are not likely to show up in quantitative changes in outcomes at the patient level (see second article in this series [2]). This is because a worthwhile (cost-effective) signal is unlikely to be distinguishable from ‘noise’. For example, evaluation of the effect of Coventry City of Culture status is not likely to show up in an accurate and precise way in the public health statistics, and so it is being evaluated qualitatively and in a formative way. Readers who would like further discussion on these points are directed to our previous articles on action research [10, 11] and formative research.[13, 14]

## A Realist Epistemology

The call for ARCs gratifyingly made specific mention of the importance of research methodology. Much service delivery research is not suited to a ‘*hypothesis test of a primary outcome*’ paradigm. To a considerable extent this is acknowledged in the latest MRC guidance, which points out that the pattern in

the data is important (rather than a ‘primary outcome’) and that decisions should not be dichotomised on whether the confidence limits do, or do not, intersect the null. However, the MRC guidance do not say *how* the pattern in the data should be interpreted, nor *what* should replace the dichotomous statistical output. Where the MRC stops, the ARC WM gets going! So we have published studies on causal pathway analysis (to interpret the patterns in the data) and Bayesian analysis (to avoid dichotomising study outcomes).[15, 16] In our ARC interview we were asked if our methodological research could interfere with implementation. Far from interfering with implementation, developments in causal chain analysis, probabilistic reasoning and patient preference elicitation aid in the interpretation of our findings, and hence in implementation. In particular, Service Managers have been pleased, even relieved, to find that we do not insist on the hypothesis testing approach to interpretation of data.

## Opportunistic Research

Since ARC faculty work closely with the services, they are well positioned to pick up signals of impending service implementations that might be suitable for evaluation, even if they have played no part in development of the intervention. For example, we were made aware of an incentive-based intervention to improve employers’ interest in the health of their workforces. We were able to randomise 100 Small and Medium-sized Enterprises into a factorial cluster trial to evaluate this intervention.[17] It can be difficult to orchestrate such an evaluation; resources may already be fully committed at the point where an opportunity to carry out an evaluation arises. Nevertheless, ARCs should try to manage their resources so that they can take advantage of new evaluation opportunities when they occur (see previous article in this series).[3] We have been fortunate to be able to opportunistically evaluate self-help and public health interventions in Nepal and India as part of an NIHR RIGHT grant.

Many service interventions are hypothecated at the cluster level, and therefore have to be studied at this level, for example in cluster trials. The step wedge trial is a particularly flexible design and is increasingly used in experimental service delivery research. The advantages and drawbacks of the method are described elsewhere.[18] A review of cluster trial methodology showed that ARC WM faculty are the world's most highly cited group on this design.[19] However, we use other designs, including very occasionally cross-over designs and multiple block designs, while we also use instrumental variable analysis and threshold analysis. For example, we have used threshold analysis to show how financial disincentives can distort organisational behaviour.[20] Our colleague Sam Watson holds an MRC Methodology grant to explicate studies over space and time based on a focal intervention point, rather than pre-determined spatial or population clusters.

Carrying out evaluations of service interventions is part of the ARCs 'stock-in-trade'. While ARC funding can seldom support large-scale evaluations, it can both inform local implementations and form the basis for larger (often national) studies funded by competitive grants. We have not reached the end of history and ARCs are in a good position to shape how research is carried out and interpreted in the same spirit of enquiry that motivates our empirical work. The previous ARC call identified methodological research as a priority, and I hope any future call will continue this fine tradition.

*[NB. See next page for references]*

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# How Effective are Accreditation and Certification Agencies in Improving the Quality of Healthcare Institutions?

*Richard Lilford, ARC WM Director*

**A**ccreditation or certification agencies have developed all over the world. An organisation called the Joint Commission is said to be a global driver of quality improvement and patient safety. It has an international reach. In the United States alone, it accredits more than 22,000 healthcare organisations and programs. The international branch accredits organisations all over the world. There are also many country specific accreditation organisations. In England, the Healthcare Commission carries out regular inspections of facilities, in South Africa this function falls to the Council for Health Service Accreditation of Southern Africa (COHSASA) and, as we shall see, an organisation called 'Safe Care' carries out this role in many other Sub-Saharan countries.

These accreditation/certification services are highly acclaimed and widely used; most people seem to think that they are important in driving

up standards. Important for sure, but are they effective? Would you really get more effective, safer, efficient accessible, patient centred and equitable care if you were treated in a hospital with a high rating than a hospital with a low rating?

The answer is no, at least according to a paper published in the BMJ in 2018.[1] However, this was an observational study. A cluster RCT has recently been published in collaboration with the Safe Care organisation mentioned above. This study was carried out in Tanzania. The intervention consisted of support in implementing an improvement programme. All participating service providers took part in base-line and end-line Safe Care evaluations, but only the intervention group received the improvement interventions, which was tailored to the needs of the organisation. No less than 237 health facilities participated in the study. [2] All these facilities were independent,

rather than public sector, providers. This study used three types of assessment. First, measurements of the quality of care were made, based on adherence to established standards for infection control and the management of asthma, febrile illness, tuberculosis and upper respiratory tract infection. These infection control and clinical care standards were measured using standardised patients (mystery shoppers). Second, non-technical care (patient centeredness/satisfaction) was measured using exit interviews following consultations. Third, Safe Care scores were produced using the standard safe care observations set. These are upstream (organisational level) observations.

What did they find? Firstly, organisations in the intervention group, compared to the control group, improved over time with respect to the Safe Care inspection score based on observations of institutional process. However, there was no evidence of improvement between intervention and control groups, with respect to the infection control and clinical standards. The point estimates favoured the intervention group for the infection control procedures, but the control group for the clinical procedures. Nor was there any statistically significant improvements in patient reports on non-technical care quality.

What can we say about this study? First, power might have been inadequate, despite the large number of participating organisations. Given the numbers of observations, the study had 80% power to detect a nine percentage point improvement in adherence to clinical standards in the intervention group compared to the control group. This is asking quite a lot; a change of less than nine percentage points would still have been quite impressive in my opinion. Second, while the authors quote base line and end line data for adherence to Safe Care organisation level standards, they seem to use end-line data only for the front line clinical standards. Thus they seem to have simply compared clinical performance at end-line, rather than performance controlled for baseline

(or difference in difference), as implied in the Methods section. However the crucial point is this; both the intervention and control groups underwent Safe Care inspections. To be clear then, this is not really a trial of the certification process itself, but rather of the additional support that was given to the intervention group.

The study was an example of opportunistic research.[3] I am a great believer in such opportunistic research where the researchers evaluate an intervention designed and paid for by the service provider. However, there were a number of intervention features that might have mitigated against a strong signal of effectiveness. First, the support package did not appear to be co-designed, developed in an iterative way, piloted and further adapted in line with the MRC frameworks for complex interventions. [4] Second, the dose of the intervention seems rather low and the researchers observe that ‘fidelity was lower [than planned] with respect to mentoring visits and training sessions’. Third, the certification score itself improved only modestly; by about 8% in the control group and 13% in the intervention group. It seems a lot to expect such a modest change in the upstream managerial processes to impact in a measurable way on the contingent downstream effects, as I have argued previously.[5, 6]

So what is required now? I would argue that we need to embark on a process as follows: 1) develop a theory of change; 2) study current care quality across both public and private facilities; 3) co-design an affordable intervention with multiple stake-holders; and 4) conduct a pilot study. The culmination of these efforts would be a wider roll out, and evaluation, perhaps using a stepped-wedge design. Data collection and analysis would be guided by the updated theory of change and would be analysed using a multilevel model under a Bayesian framework as recommended by our group.[7, 8] One may even suggest a Solomon design to tease apart the effects of the accreditation, and the support package.[9]



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## ARC WM Quiz

Robert Koch, known as one of the *fathers of microbiology* for his work on tuberculosis, cholera and anthrax, died on 27 May 1910.

In 1881 he developed the precursor to one of the most common pieces of equipment still used in biology labs today - but what was it?

email your answer to: [ARCWM@warwick.ac.uk](mailto:ARCWM@warwick.ac.uk)

*Answer to previous quiz:* Earth Day was first celebrated on 22 April 1970. Congratulations to Alan B Cohen who was first to answer correctly.





# Solution to a Devastating Injury Related to Childbirth?



*F Cross-Sudworth; Samantha Russell; Sara Kenyon  
(ARC WM Maternity Services theme)*

**P**erineal tearing of the tissues between the vagina and rectum is common during childbirth (around 80%), however the more serious tears are much less frequent (around 6%),<sup>[1]</sup> and involve significant injury to the skin, perineal muscles, and rectum (called third- and fourth-degree tears). These tears carry significant health risks for the mother and require surgery. Even after repair, however, women can experience incontinence and pain, which can have devastating, lifelong implications for both the woman and her family.<sup>[2]</sup> Incontinence can cause social isolation due to shame and embarrassment, and impact on a woman's ability to work, leading to a loss of role within the family and financial implications. Relationships with partners may break down as due to changes to sexual relationships as a result of pain and psychological trauma, while bonding with the baby may be affected. The psychological trauma and the ongoing symptoms can lead to depression or even suicidal feelings.

Prevention of these life-changing injuries has conventionally focused on perineal care. Traditionally, midwives practice included 'guarding the perineum', warm water

compresses and holding back the baby's head, if needed, to ensure a slow 'crowning' ('hands on'). This was tested in the landmark midwifery study, the 'hands on or poised (HOOP)' trial,<sup>[3]</sup> which showed less perineal pain at ten days in the 'hands on' group, with no difference in serious perineal trauma. However, for unclear reasons, thought to be related to a desire to reduce interventions, the 'hands poised' technique has become prevalent, and is thought to be related to an increase in serious perineal trauma.<sup>[4]</sup> Current NICE guidelines state that clinicians can either use the 'hands on' or 'hands poised' technique to prevent perineal trauma.<sup>[5]</sup>

There was an attempt to address an increase in third- and fourth-degree tears with the *Obstetric Anal Sphincter Injuries Care (OASI) Bundle*,<sup>[5]</sup> led by the Royal College of Obstetricians and Gynaecologists. This has been rolled out nationally, implementing: 1) information for women; 2) episiotomies where required; 3) 'hands on' perineum; and 4) rectal examinations. The OASI programme, however, has had limited impact (0.3% difference) on severe perineal trauma rates,<sup>[7]</sup> with reasons suggested to



include use of poor-quality evidence, ignoring other evidence including use of perineal massage and warm compresses, and a lack of service user involvement.[8-10]

A recent publication from Sweden (*OnePlus*) has suggested a different approach may reduce severe perineal trauma.[11] The trial showed that two midwives being present during the active second stage of labour reduced third- and fourth-degree tears in nulliparous women (two midwives (3.9% [61 of 1546] vs one midwife 5.7% [86 of 1513]; adjusted OR 0.69 [0.49–0.97]). This randomised controlled trial was conducted

in Sweden where normal practice is for one midwife to be present at a birth unless there are complications; similar to the UK. However, implementation in the UK may be hampered by the acute shortage of midwives,[12] as highlighted by the Ockenden report.[13]

However, there remain gaps in the evidence related to perineal trauma. The recently funded CHAPTER study [14] puts women at the heart of work to improve outcomes, and results will be eagerly awaited by women as well as those that care for them.

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# A CRISPR Tomato

*Peter Chilton, Research Fellow*

Getting enough vitamin D (specifically the form  $D_3$ ) is essential for keeping our bones, teeth and muscles healthy – a deficiency can lead to problems such as rickets or osteoporosis, and can increase risk of cancer and neurocognitive issues. While vitamin D is only found in a small number of foods (such as oily fish or red meat), it can also be synthesised from provitamin  $D_3$  through our skin via exposure to UVB rays from sunlight. Even so, it is estimated that ~1 billion people globally have insufficient levels thanks to poor diet and inadequate exposure to sunlight. In fact, the UK government currently advise that everyone should take a daily supplement throughout autumn and winter.

Plants, such as tomatoes, are rich in vitamin  $D_2$ ; unfortunately, the potency of vitamin  $D_2$  is less than one-third that of vitamin  $D_3$ . [1] However, the leaves of tomato plants do synthesise provitamin  $D_3$  before it is converted to cholesterol by the enzyme SI7-DR2. Writing in *Nature Plants*, [2] scientists have used CRISPR-Cas9 gene editing

to stop the activity of the enzyme SI7-DR2, the result of which was an accumulation of provitamin  $D_3$  in both the leaves and the tomato fruit itself. The researchers estimated that one of these tomatoes would have a level of vitamin  $D_3$  as equivalent to two eggs or 28g of tuna. There was no effect on growth, development or yield of the tomatoes.

Further, the researchers suggest the possibility of using the tomato leaves in the production of vegan vitamin  $D_3$  supplements.

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# A Hug For Good Luck

Peter Chilton, Research Fellow

**F**or many people, stress is becoming an increasing part of their everyday life. There are various things people try to do in order to find some relief; one such method is massage, which has been shown to increase relaxation and reduce stress in women.[1] However, there has been little research into other forms of social touching as possible stress relief, nor potential effects on men.

Researchers from Ruhr University looked at how a short hug between romantic partners could affect acute stress. Heterosexual couples (*NB other orientations were not excluded*) were randomised to either hug for 20 seconds, or not, before individually placing an open hand into ice-cold water for up to three minutes (the Socially Evaluated Cold Pressor Test). There were no differences between groups or couples for relationship satisfaction prior to the experiment, and all experiments were conducted at roughly the same time of day.

Results showed that women who hugged their partner prior to the stress test had a lowered cortisol response compared to those in the control group (cortisol being regarded as a major stress hormone). However, there were no significant difference in men. The authors hypothesised that such difference in the response of men and women may be linked to the levels of oxytocin released – a possible avenue for future research

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# Dr Vivien Thomas - One of the Best Surgeons of His Generation

*Philip Simmons, ARC WM Project Administrator*

In 1929 a 19-year-old Mr Vivien Thomas was forced to drop out of premedical studies at Tennessee Agricultural and Industrial College after his life savings were wiped out by the stock market crash of October 1929.

## Vanderbilt University

In February of 1930 Thomas secured a low paid position at Vanderbilt University as a “janitor” (the only position available to Black people at the time) even though, in reality, he was doing the work of a Post Doc researcher on behalf of Dr Alfred Blalock. Over the next 11 years he assisted Dr Blalock in hundreds of experiments proving that the cause of haemorrhagic shock and traumatic shock were not from toxins in the blood but instead were a result of fluids leaking outside of the vascular bed (a network of tiny blood vessels spread throughout the body). This work was picked up by others who evolved it in to crush syndrome, saving the lives of an untold number of combat soldiers during WW2. This gained Dr Blalock great recognition within the medical community, though Thomas remained in obscurity. It was during these 11 years that experimental work was also conducted by Thomas and Dr Blalock on both cardiac and vascular surgery, breaking one of the great medical taboos of the time, heart operations.

## Johns Hopkins University

In 1941 Dr Blalock was made Chief of Surgery at Johns Hopkins University, with Thomas joining him. This was during the time of the

“Jim Crow” era, during which Black people were discriminated against and racially segregated from White people. As a result of this Thomas and his family had to live apart from his other colleagues, and as the only Black employees at Johns Hopkins were “janitors,” this was the level and wage that Thomas was again employed at. This discrimination continued in the workplace for Thomas who at first walked around the University in a lab coat but after becoming uncomfortable with the unfriendly stares of staff and students, resorted to wearing his city clothes instead.

## Blue Baby Syndrome

In 1943 Dr Blalock was approached by Helen Taussig who proposed that a fatal heart condition in infants known as Blue Baby Syndrome (tetralogy of Fallot) could be solved by surgery.

Dr Blalock and Thomas theorised that if the subclavian artery was joined to the pulmonary artery, then there would be an increased flow of blood to the lungs and the condition could be cured. Thomas experimented on two hundred dogs to replicate two out of the four symptoms of Blue Baby Syndrome. He then further demonstrated that the dogs could survive the corrective surgery, therefore laying out the case for human surgery.

As no cardiac surgical instruments existed at this time, Thomas adapted the instruments that had been used on the dogs for humans. Despite the Jim Crow laws banning Thomas from performing surgical procedures on humans, he literally stood on a step ladder for the entirety of the first procedure and coached Dr Blalock through



each step of the procedure. The operation on the first patient was only partially successful, in that the infant's life was prolonged only for a few months. The next two operations on an 11-year-old and 6-year-old were complete successes and an article was published in JAMA in May 1945 in which Blalock and Taussig were credited with the procedure – again Thomas received no recognition (although the operation was known as the Blalock-Thomas-Taussig shunt).

## Training & Mentoring

Not only was Thomas a skilled surgeon but he was a teacher and mentor in the 1940s to many young surgeons, some of whom would go on to have influential careers. Amongst his alumni (who all accredited Thomas with teaching them the skills that lead to their successful careers in surgery) were Denton Cooley (first surgeon to first implant a completely artificial heart), Rowena Spencer (leading authority on separating conjoined twins), and Alex Haller (established paediatric trauma as a stand-alone subspecialty in the US).

## Recognition

In 1968, prominent surgeons from across America (all of whom had been trained by Thomas) commissioned a painting of him which was hung next to Blalock's at Johns Hopkins University.

In 1976 Johns Hopkins presented Thomas with an honorary doctorate, however due to legal restrictions this was an honorary Doctor of Laws rather than a medical doctorate. He was also appointed as Instructor of Surgery at Johns Hopkins in the same year, although the irony was that due to him not having a medical degree, one of the best surgeons of his generation never operated on a human.

# Safety and Quality in Low- vs High-Income Countries: A Quantitative or Qualitative Difference?

*Richard Lilford, ARC WM Director*

Recent papers in the BMJ Quality and Safety, discuss health service improvement across low- and middle-income countries versus high-income countries. [1, 2] The point is well taken (and has been rehearsed frequently in your news blog), that frontline interventions are most effective when supported by system improvement further up the causal chain.[3] This applies at least equally in low-income countries. The same type of systems issue occur in both settings, and, in both, human resources are critical. In low-income countries, staff shortages are an enormous constraint on the delivery of safe and effective care. This problem is not easily remedied while countries remain economically poor, and the challenge, to a considerable extent, is to optimise safety within constraints. However, there is one issue that could be remedied at a lower cost and where the difference between high- and low-income countries is colossal. This problem is one of intermittent interruption in the supply of drugs and equipment. This issue is a recurring theme in the literature. The supply of medicines has been a serious problem in all of the studies included in our slum health programme for example, with the exception of Bangladesh.

While it will take time and lots of money to remedy staff shortages in LMIC, I fancy that supply chain problems are less intractable and could be remedied at much lower costs. Therefore, this short article is a plea for more research on this issue. Again and again, I read articles describing shortages of essential equipment and medicines. However, I find fewer articles actually tackling the problem. Yet, supply chain management is

a mature science in high-income countries. In our work on emergency transport in LMIC,[4] we found that ambulances frequently fall into disrepair. The risk of this happening can be mitigated by thoughtful contracting. Thus, instead of purchasing ambulances, it would be preferable to purchase ambulance services. This would be analogous to the aircraft industry, where companies manufacturing airplane engines, are reimbursed per hour of service. This puts the risk where it can be controlled.

Of course, it is easy to produce armchair solutions, which might not work in the real world, not least where corruption is rife. Nevertheless, I think that concerted efforts should be made; first to understand the problem more deeply, and then to devise tailored remedies in collaboration with relevant stakeholders.

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2. Hall BJ, et al. [Implementation challenges to patient safety in Guatemala: a mixed methods evaluation](#). *BMJ Qual Saf* 2022; **31**: 353-63.
3. Lilford RJ. [Nihilism Regarding Evaluations of Public Health Interventions](#). *NIHR ARC West Midlands News Blog*. 2020; **2**(11): 7-8.
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# Latest News and Events

## School-Based Mental Health Research

Researchers from our [Integrated Care in Youth Mental Health theme](#) have recently released guidance for researchers, practitioners and schools around school-based mental health research.

The report covers main findings under three themes:

- Challenges to school-based mental health research.
- Facilitators that ease engagement and the research process.

- Expert recommendations for improving the field of school-based mental health research.

While the challenges and facilitators reflect actual experiences, the recommendations contain insight from the Stakeholders who have been involved with school-based mental health (research) for a considerable length of time

The PDF report can be accessed at: [arc-wm.nihr.ac.uk/youth-mental-health/school-based-mental-health-research-report.pdf](https://arc-wm.nihr.ac.uk/youth-mental-health/school-based-mental-health-research-report.pdf).

## Knowledge Mobilisation Summer School

The Impact Accelerator Unit at Keele University Impact Accelerator Unit (IAU) are hosting a Knowledge Mobilisation Summer School on **June 21-23** over Microsoft Teams. The course will share practical and theoretical strategies to make knowledge mobilisation part of health and care practice.

The course aims to improve knowledge and understanding of the practical ways to design and use knowledge mobilisation strategies in

health and care practice. Combining talks and interactive breakout sessions, participants will be guided through the theories and practical strategies to support knowledge mobilisation in research design and practice.

For more information, and to book a place, please visit: [estore.keele.ac.uk/conferences-and-events/faculty-of-medicine-and-health-sciences/school-of-medicine](https://estore.keele.ac.uk/conferences-and-events/faculty-of-medicine-and-health-sciences/school-of-medicine). (NB. *Early bird discount applies until 31 May 2022*).

## National NIHR ARC Newsletters - April & May 2022



The latest issues of the national NIHR ARC newsletter are now available online: [April 2022](#), [May 2022](#). These issues feature details of a new *Focus On Research and Equity* tool; addressing barriers to ethnic minorities participation in research; self-monitoring blood pressure during pregnancy; and tackling digital exclusion for survivors of modern slavery.

To subscribe to future issues, please visit: <https://tinyurl.com/ARCsnewsletter>.



# Policy Research Programme Webinar

Are you interested in delivering research that ensures policy decisions are informed by high quality evidence?

The Policy Research Programme (PRP) is a National Institute for Health and Care Research (NIHR) programme, which funds high quality and cost-effective research to deliver relevant, timely and accessible evidence to inform policy decisions across the health, care, and public health systems. The PRP supports the Secretary of State for Health and Social Care (DHSC), Ministers, and officials in the Department and its Arm's Length Bodies.

Policy Research Units (PRUs) are an important feature of the PRP. PRUs are units or consortia, typically based in universities, that are generally contracted for around five years to deliver a blend of longer-term and responsive policy related research. Planning for the next set of PRUs to

meet policy priorities from January 2024 to December 2028 has begun. A call is expected to be launched in the summer that will initially involve completion of a focused application form by late autumn.

Policy teams are currently being consulted on the high level topics needed. The topics are likely to be broadly similar as now with the possibility of some new areas to support departmental priorities: see [Build Back Better - Our Plan for Health and Social Care\\*](#). Before a call is launched a webinar will be held on 10 June 2022 at 11am - interested applicants are invited to come along to find out more about PRUs and the PRP more generally.

For more information, including how to register, please visit: [nihr.ac.uk/funding/policy-research-programme-policy-research-units-prus-call/30558](https://nihr.ac.uk/funding/policy-research-programme-policy-research-units-prus-call/30558).

## Congratulations

Congratulations to ARC WM collaborator Patricia Apenteng who won the first prize at the *European Association of Preventive Cardiology Society Conference 2022*, which was recently held online.

Congratulations also to Sandra Remsing, ARC WM collaborator and part of the Margaret Peters Centre, on the birth of her son Aerial Felix.

## Population Health Management & Inequalities

North Central London Integrated Care System, London Borough of Islington and NIHR ARC North Thames are holding a hybrid workshop about *Population Health Management (PHM) and Inequalities* on **10 June 2022** (09:30-14:00). During the event, speakers will share the work being carried out in North Central London to stimulate discussion and explore potential for

collaboration to address important questions, such as how best to examine and understand the impacts of PHM on health inequalities.

The event will be held at UCL, 188 Tottenham Court Road, with the opportunity to join remotely. Places are very limited, so please [register here](#) if you wish to attend.

# Recent Publications

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