7. Co-producing Policy Relevant Research

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7.1. Introduction

The production of policy relevant research is a key principle in and of itself for many researchers. The importance of this aim should also be understood within the context of an increased focus on academic 'research impact'. In the UK changes to applications for major funders and the implementation of the Research Excellence Framework (REF) means that research funding is now 'strongly dependent on researchers' abilities to respond adequately to questions about the broader (non-academic) value of their work' (Smith and Stewart 2016, p. 110). This shift is reflective of international trends towards research funders placing increased emphasis on research utilisation (Tetroe, 2007) and societal impact (Phipps, 2011).

Nevertheless, the creation of impactful research is complex (see Smith et al, 2020 for full discussion) and in the transfer of knowledge from academia to policy there are some key issues that have been highlighted in the extensive literature that explore this question:

- There is a poor fit between research findings and policy context

- Research outputs do not include clear and actionable messages

- Research evidence is not created in the places that the findings will be used

In order to address some of these issues there has been increasing interest in the role of researchers who work between academia and policy in order to support the development of policy relevant research (Cheetham et al, 2018).

SIPHER is a multi-disciplinary programme of work consisting of 8 interconnected workstrands designed to support public policy design and decision-making (see Box 7.1 for more information). A key feature of the programme is the use of embedded researchers (ERs) who are co-funded by the research funding and the policy organisations. SIPHER has two full-time ERs, one each working in the Scottish Government and Greater Manchester Combined Authority (GMCA) and two ERs in Sheffield City Council who split their time 50:50 between SIPHER and their data analyst roles.

In this chapter we introduce the concept of co-produced research and the role of ERs and then illustrate the way that this approach was established within SIPHER. We finish with some reflections on the process and a series of questions for those considering the use of this approach in their own work. Box 7.1. introduces and provides content to the SIPHER project.

Box 7.1. Systems Science In Public Health and Health Economics Research – The SIPHER Consortium.

SIPHER is a large UKPRP-funded national research collaboration that is developing systems science methods to support public policy design, with a focus on improving the health and wellbeing of the population and reducing inequalities. The Consortium is a partnership between 7 academic institutions and local, regional and national government organisations. The research involves 8 intertwined strands of work drawing upon a rage of academic disciplines including social policy, public health, geography, economics and engineering. The research is methodologically diverse, combining qualitative interviews, ethnography, system dynamics modelling, participatory systems mapping and the development of decision support tools. At the time of writing, the research is 18 months into a 5 year funding period.

7.2. Co-production and the role of embedded researchers

A range of terms are used to describe the role of ERs. One such term is 'knowledge brokers', which is used to describe those working within health services research to support the 'mobilisation of research evidence into clinical practice and policy making' (Kislov, et al. 2017, p.107). This role requires information management, linkage and exchange and capacity building skills (ibid). Other studies have described a 'researcher-in-residence' model which stems from participatory approaches to research (Marshall, et al. 2016, Bussu, et al. 2020). This has an explicit focus on the creation of new knowledge alongside the mobilisation of established knowledge and, as such, can be understood as a mechanism for co-produced research (Bussu, et al. 2020). In addition, in a 'researcher-in-residence' model the role is 1) embedded within non-academic institution 2) brings new expertise to the team 3) able to negotiate and build upon different forms of knowledge (ibid). Arguably, an umbrella term for these roles is 'embedded researcher'. This term has been used more generally as 'individuals who are either university based, or employed with the purpose of implementing a collaborative jointly owned research agenda in a host organisation in a mutually beneficial relationship' (Cheetham, et al. 2018, p. 65). Even more simply, it has been described as someone doing research as a member of the team that is central to the focus of the research (Lewis and Russell 2011).

Whilst co-production is most often associated with the creation, planning and/or delivery of services through direct user involvement (Bovaird 2007, Bussu and Tullia Galanti 2018), it is used differently within the context of research and knowledge exchange. Within this context it is used to describe how research and policy can be produced in relation to one

another, and through interactions across the 'boundary' (Wehrens 2014). It is then the role of ERs to work across this boundary and, in doing so, they support the co-production of knowledge and its translation into practice (Bussu, et al. 2020) through acting as a 'facilitator, interlocutor, capacity developer and advocate' (Genat, 2009:114).

7.3. SIPHER's approach to Embedded Research and Co-production

Within SIPHER the ER model differs from the 'researcher-in-residence' approach outlined above in that the role is undertaken by people directly employed by the policy organisation, either an existing employee or a new recruit, rather than by an academic on secondment or placement. As an employee of the policy organisation ERs have access to resources, people (through networks and existing relationships) and institutional insight that it is often impossible to achieve as an outsider. Whilst there are many benefits to taking this approach, which will be outlined in subsequent sections, it is important to highlight here that one of the limitations of this approach is that there is little to no control over the recruitment process. It can also limit the extent to which the academic institutions involved can shape the role on a day-to-day basis.

Although ERs are not the only mechanism through which co-produced research can be achieved, they play a crucial role in facilitating policy-relevant research. They are able to support the translation and dissemination of knowledge through their understanding of the structures, processes and personalities within a policy organisation. This supports academic researchers to understand the routes through which to access the expertise necessary to ensure meaningful and useful knowledge creation and dissemination.

7.3.1. Motivations and rationale for this approach

The starting point for engaging in this form of co-produced research is to generate findings that are relevant and useful for policy. Working directly with the intended users of the research allows space to build shared knowledge and to explore and refine findings as they emerge. In the process of working across the policy/academic boundary ERs support colleagues in their own organisations to better understand research processes and methods. As policy organisations have played a role in the creation of the research it is hoped that there is greater confidence to share and use the findings in practice.

For academic institutions ERs offer insights into organisational culture, priorities and processes that can be difficult to access unless you are a member of that organisation. ERs – when defined as academic researchers 'in residence' – allows for an assessment and understanding of the 'worldview' of the organisation in the context of academic knowledge and literature (Lewis and Russell, 2011). When this understanding is co-produced in dialogue between embedded and academic researchers there is a mutual understanding that develops as both sets of researchers gain access, insight and understanding of the context in which they are each working. This process can start to address some of the

challenges of generating research impact and therefore is a key motivation for both academic and policy organisations. Whilst this role is not a panacea, it is one way to generate shared knowledge across the perceived boundaries between academia and policy.

A further motivation for using this approach is the potential for a reciprocal exchange of expertise. In the interactions between academia and policy the ER gains an insight into research methods, literature and research discussions which they can start to apply within their own organisations. This creates capacity within organisations, an important part of a co-produced research (Vindrola-Padros et al. 2018) and a motivating factor for policy organisations to support this approach. Policy organisations have significant ambitions but can be limited by the lack of resource. Being involved in multi-disciplinary collaborative research offers access to a wide range of academic knowledge and expertise.

7.3.2. Establishing and developing the role of Embedded Researcher

In establishing the role of an ER there are a number of practical considerations. Firstly, it is important to find institutional buy-in from the right level within the policy organisation. With senior support for partnering with academia it becomes easier to navigate the relevant processes and structures required to create and establish ERs. Secondly, the funder plays an important role in ensuring that this approach is practical and feasible. Policy organisations are often stretched to capacity and the idea of utilising limited resources solely for the purpose of an academic research project is not necessarily an attractive proposition. A co-funding approach (where the policy organisations match the research funding 50:50) can create a win-win situation. However, this remains an unusual approach and so it is advisable to negotiate on what is possible. From the perspective of the funders, this makes for a stronger bid as the policy commitment to the research is clear.

At the outset of the project, it is important to develop a clear understanding of the range of responsibilities the ER is expected to fulfil. A role description is useful, however agreement on this may be a challenge and can result in a long list of diverse responsibilities. Each ER will also bring their own expertise and experience and so retaining some flexibility in the role responsibilities is important to enable the team to make best use of these skills. The needs of policy-makers and academics may also evolve over the duration of a project, and may be affected by exogenous factors (e.g. a pandemic), further highlighting the value in flexibility to role success.

Management of the ER role requires regular conversations between the ER(s), their line manager (who, in a policy organisation, is often not involved directly engaged in the research), and the academic research team. Day to day management of the ER may be the responsibility of someone outside of or with only very limited involvement in the project. This can create multiple, potentially competing, demands on an ER's time as they seek to balance requirements of the policy organisation and requests from across the academic research teams. A practical approach to managing this is to produce a work plan in the early

stages of the project. This requires engagement across the research team to understand upcoming tasks and priorities. It is necessary for this to be a process of continual reflection and engagement with both academic and policy colleagues to ensure tasks are accurately prioritised and key opportunities or activities are not missed.

A further ongoing discussion that is required in developing the ER role is related to the forms of technical knowledge that are needed over the course of a project. On a multi-disciplinary project ERs are not expected to be expert in all of the methods. However work is required to enable ERs to understand the general concepts that underpin the approaches taken and the purpose they serve. This allows ERs to assess how they align with the goals of the policy organisation and how to support academic and policy colleagues to work together.

In some circumstances, ERs may need to develop specific technical skills and, as previously highlighted, this is part of the motivation for policy organisations to get involved. In the context of SIPHER there are ample opportunities for ERs to develop their own skills in areas such as systems mapping, evidence synthesis and approaches to policy ethnography. There is flexibility across the project so that ERs can work in ways that build on their own skills and ensure that they are relevant for their policy organisation. Specifically, SIPHER's ERs have undertaken training on policy ethnography and qualitative analysis. This has brought valuable insights to outputs and broader thinking across the research programme (see subsequent sections for more detail). As the project develops there will be increased scope for ERs to utilise their existing research skills and add to research outputs in this way.

7.3.3. Being an Embedded Researcher

Fundamental to the ER role is the building of relationships both *within* the policy organisation and *between* the academic researchers and the organisation, which contributes to ensuring that the project's research and outputs are effectively co-produced and land well within the policy organisation. In acting in this brokerage role between academic researchers and colleagues in policy organisations ERs work to bridge gaps in understanding between the two sides. In one direction this has involved making colleagues in policy organisations aware of what it is possible for academic researchers to achieve with the tools and expertise available, and in the other it has involved clearly setting out for researchers the specific questions that the policy organisations are grappling with. However, within this role there are challenges on both sides which can result in circular conversations as both academics and policy partners seek to find ways to convey their requirements and expectations within the context of co-production. For example, in working to develop a decision support tool for policy organisation, academics sought input from policy partners to outline their needs. However, without the expertise to understand the possibilities and options it was hard for policy partners to articulate this. On both sides there is a desire to understand and accommodate the other and a clear commitment to co-producing

knowledge and research outputs. Nevertheless, it requires a significant amount of discussion and reflection on the part of both academic and policy researchers to find a way to meet in the middle in order to get past the circularity of academics asking 'what do you need?' and policy partners responding 'what is possible?'.

There are a series of practical tasks that SIPHER ERs have been engaged in during the project so far. In the early stages a significant amount of time was required for background reading, orientation, and knowledge sharing between academics and policy partners. This was to ensure there is a good understanding of each other's roles from the start. There is also a bureaucratic aspect to the ER role which involved organising and facilitating meetings, workshops, or similar in order to meet the needs of particular workstrands. These tasks are also part of the process of co-production as ERs are required to provide regular updates in both directions across the boundary. Pragmatically, this requires ERs to retain a significant amount of information and also necessitates some translation and co-creation of shared language to enable effective working (see chapter 4 on Speaking the Same Language in this book for more top tips on communicating with policymakers).

Specific research tasks that SIPHER ERs have been involved in are qualitative analysis of interviews and ongoing ethnographic work. ERs were provided with initial training and take part in monthly meetings to reflect on the organisational developments related to the research topic, the wider policy landscape and organisational perceptions of the larger research project. ERs keep a personal diary which forms the basis of written and verbal summaries that are shared in monthly meetings. To allow the meeting conversations to feel unconstrained, ERs signal where the information they are sharing should be treated confidentially. This has been a useful process throughout the research as it offers space to formally reflect on the co-production process and is a key mechanism through which the academic and embedded researchers build shared knowledge.

7.3.4. Reflecting on experiences so far

The ERs have facilitated both individual and organisational buy-in to and credibility of the research. The experience in SIPHER has been that ERs often know, or are able to identify quickly, the key stakeholders to engage with the research. They are evidence of an organisational commitment to the research and there is a sense that policy colleagues have engaged with the research to a greater extent than with previous projects. This is reflected in the academic researchers' experience as they have seen greater responses to requests for participation in interviews and workshops.

Through the ERs there has been direct dialogue between researchers and users of research, vital to bringing the creation of research into the context in which it will be used. This is described as a key predictor in the application of research in policy settings (Lomas, 2000). It also addresses concerns that a challenge of bringing evidence into policy is that there is a

disconnection between evidence producers and users (Marshall et al, 2016; Walshe and Davies, 2013).

The strong relationships that have been developed across academic and policy have grown to extend beyond the original project. The consortium has been able to take advantage of further funding opportunities (sometimes at short notice), particularly where the funder requires partnership with policy organisations. The development of further projects, which include components of co-production, is also evidence of the confidence that policy partners have in the approach.

The approach of direct employment within policy organisations has been particularly beneficial in the context of the COVID19 pandemic. As secondees it would have been likely that researchers would be pulled back into research institutions; in this instance, although ERs were required to take on more tasks related to policy organisations' vital COVID responses, important lines of communication have remained open in a way that may not have been possible otherwise. Box 7.2. outlines practical ways to apply this approach.

Box 7.2. How to apply this approach

There are a number of questions to consider when developing ER roles within research projects. Addressing the following questions in the design of the project will help ensure that the expectations of both the academic and policy organisation can be met and that the collaboration is successful.

What is the role of the ER within the project?

In practice it can be any combination of facilitating research, designing and/or conducting research, brokering knowledge, and evaluating existing knowledge in the context it is being used.

Will the ER be employed by a policy organisation or will they be an academic seconded to a policy organisation?

In SIPHER ERs are employed by policy organisations which requires consideration of the following 1) how the ER will be managed day to day to best support the research project, 2) how the academic partners can play a role in recruitment to identify a good fit for the wider team, and 3) development of a plan for how the ER will engage in the research project in the case of exogenous shocks to their organisation (e.g. Covid-19).

What skills are required for the role? Do you need an analyst or a policy officer?

Identifying the key roles and responsibilities will be important here, as well as reflecting on how realistic it is that one individual will be able to fulfil the role if your expectations are diverse. Particularly in a multi-disciplinary project, it is easy to ask too much of ERs, expecting them to get involved in developing, facilitating, analysing and disseminating the

work of different academic disciplines in a way that we would not expect of an academic.

Do we need one full time or two part time ERs, with each person bringing a different skillset to the role? What skills are important at the outset of the project and how those needs might change over time?

Each of these considerations will have implications for the kind of skills and characteristics the team will look for when recruiting the ER.

What kinds of training might the ER need to fulfil their role in the project, and how will this be delivered?

For example, some training might need to be formal courses but in other situations work-based placements and the opportunity to work side-by-side with an academic researcher can be beneficial.

7.4. Conclusion

Whilst the success of the ER approach we are using has not yet been assessed, indications so far suggest that positive steps are being taken to achieve meaningful impact. As we have discussed, there are some challenges in establishing a clear role description and around the potential circularity of conversations. However, ongoing reflection and discussion has identified a number of benefits in this ER approach. ERs have supported timely and more nuanced communications between academics and policy stakeholders throughout the research process. This has been achieved, in part, through ERs acting as a bridge between academic researchers and the policy context in which their research may be used. In SIPHER, we have used this to adapt the research approach and the communication of plans and findings. Where the ER role is seen as the start of a co-production relationship this can also bring wider benefits in terms of applying for further collaborative funding opportunities. Some of the initial rationale for the approach stems from achieving research impact from an academic perspective, but it is clear that policy partners are also invested in working differently with academia to achieve change.

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