

Structural approaches to knowledge exchange: comparing practices across five Centres of Excellence in Public Health

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Figures and tables

Figures

Figure 1. A Basic Classification Scheme for Scientific Activities in Government (Saner [6], with added third dimension on knowledge exchange type)

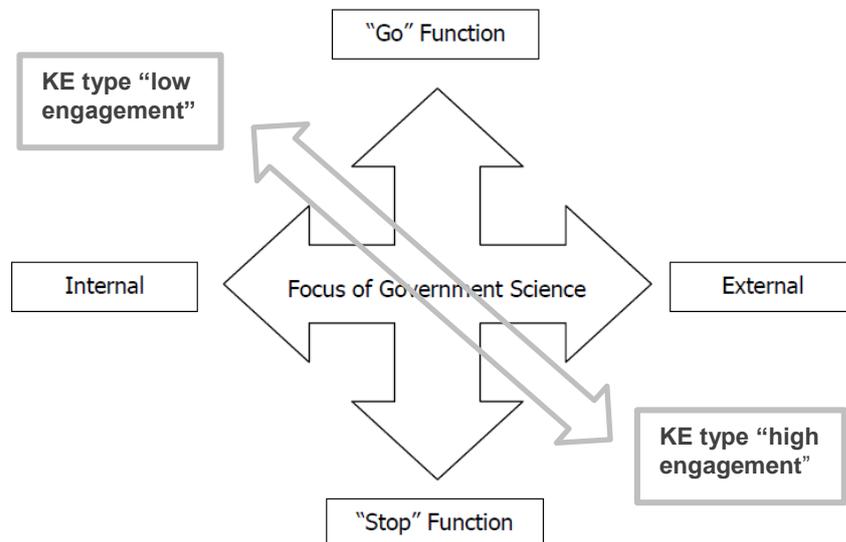


Figure 2.

Case study 1: CEDAR “Mixed modes: Knowledge Exchange in Active Travel Research”

Just as active travel can be promoted by allowing for different transport modes within a single journey (walking, cycling, driving, public transport etc.), CEDAR has been moving active travel evidence into policy realms using series of interdependent modes of delivery. The relationship between these modes, and the opportunities they create, can be as important as the individual activities.

For instance, non-academic summaries – Evidence Briefs [8], blogs, social and news media – not only allowed for easily scalable dissemination, but have also given CEDAR a wealth of plain English resources to draw on when responding at short notice to legislative bodies’ calls for evidence. Active travel submissions have been made to Parliamentary bodies, such as the House of Commons Health Committee and House of Lords committees on technology and the built environment [9]. The involvement of researchers in the production of these materials helped build skills in conveying complex research in digestible forms, and the documents acted as ‘calling cards’ to initiate relationships with policy customers.

Targeted communications, individual researcher legwork, and the brokerage of Cambridge’s Centre for Science and Policy have all contributed to forging new relationships with local and national transport policymakers. In turn these relationships have created a fertile ground for ongoing collaborations and co-productions, such as producing evidence insight for a local authority Joint Strategic Needs Assessment into transport and health, and an interactive online tool backed by the Department for Transport (DfT) to support planners in prioritising cycling investment [10].

Stakeholder events sustain these relationships and provide additional opportunities for knowledge flow back into academia. The Commuting and Health Research and Policy Forum brought together academics, policy and the third sector representatives to discuss research findings and their implications for health, planning and transport policy – and further research [11]. Closing the loop back into research, the Research and Policy Forum was used as an opportunity to conduct a research project to learn more about stakeholders’ needs and the value of this kind of knowledge exchange [12].

Figure 3.

Case study 2: DECIPHer: “An Overview of the Public Health Improvement Research Network (PHIRN) in Wales”

The Public Health Improvement Research Network (PHIRN) began in 2005 as part of the Clinical Research Infrastructure in Wales. It is an overarching infrastructure that engages academia, policy and practice to generate research questions, facilitate studies and promote evidence to practice. The strategic partnership includes various academic centres: the Welsh Government; Public Health Wales; health practitioner networks, such as the Welsh Network of Healthy School Schemes; and members of the public, in particular an advisory group of young people aged 14 to 18 (ALPHA).

PHIRN is supported by a Strategic Advisory Board, which identifies partners and negotiates partnerships, and a Partnership Board, which oversees the development of specialist methodological research capacity in pragmatic community based trials and knowledge exchange through mentoring and dedicated training courses.

Through networking activities, such as research seminars on current policy and practice issues and a twice monthly email bulletin on forthcoming collaborative and funding opportunities circulated to over 400 members, new research priorities are explored and teams are identified of academic, policy and practice representatives to take priorities forward. The teams, also known as Research Development Groups (RDGs), develop these priorities into high quality research project protocols.

PHIRN has developed a mature registration process for new projects, requiring the completion of a simple form, available online. The Partnership Board is responsible for reviewing the relevance of these applications to core PHIRN themes, and potential ways in which PHIRN can support the project's progression. In more recent years, a Research Development and Ideas Group (RDIG) has been created, which co-ordinates the resources and capacity dedicated to each RDG.

Although RDGs are time limited, several have become embedded in wider structures. For example, the Schools Health Research Network (SHRN) is now integrated within the Welsh Network of Healthy Schools Schemes, so that front line innovation is routinely developed and evaluated through strategic planning. Another example is the Well-being and Health In Schools Project (WHISP).

Figure 4.

Case study 3: Centre of Excellence for Public Health Northern Ireland: “formally partnering government-with academia”

An example of the systems approach developed by CoENI is the Physical Activity and the Rejuvenation of Connswater (PARC) study. This National Prevention Research Initiative study is an evaluation of the £40M Connswater Community Greenway (CCG) project, an urban regeneration programme which seeks to improve the built environment and the quality of life of residents in East Belfast. The research team work jointly with the Connswater Community Greenway team, which includes the East Belfast Partnership and Belfast City Council. The project is unique in that it involved five government departments in the preparation of the NPRI bid i.e. the Department for Social Development, Department for Regional Development, Department of Culture, Arts and Leisure, and Department of Health, Social Services and Public Safety NI and the Department of Agriculture and Rural Development.

The project aims to improve the quality of life of the 40,000 residents, students attending the 23 schools and colleges, visitors and tourists to East Belfast and those who choose to work and invest there. Thus, the research team were cognisant of the need to keep local politicians informed on the progress of the project. However, their busy schedule meant that it could be difficult to arrange meetings to provide project updates. Fortunately, this barrier has been overcome by the PARC team having the opportunity to present at CCG’s quarterly politician’s breakfast meetings, the timing of which allows politicians to attend before the working day begins.

The research team were also keen to keep informed policy makers who were not represented on the project team and thus have presented on multiple occasions at the Northern Ireland Assembly Knowledge Exchange Seminar Series (KESS). KESS is the first of its kind in the United Kingdom, formally partnering a legislative arm of government – the Assembly - with academia. KESS has provided a forum for PARC researchers to present academic research findings to key participants and decision-makers in the policy sector in Northern Ireland, such as MLAs and Assembly committees, as well as to the wider public. Part of the process of presenting at KESS is that academics must prepare a policy briefing on their work. This has helped PARC researchers to gain skills in writing for policy makers and aided in the dissemination process.

Figure 5.

Case study 4: Fuse “AskFuse, a responsive research and evaluation service”

Fuse, the Centre for Translational Research in Public Health, is an innovative collaboration between the five Universities in the North East of England (Durham, Newcastle, Northumbria, Sunderland and Teesside). In June 2013, after extensive consultation with local stakeholders and partners, Fuse launched AskFuse: a rapid response and evaluation service to provide decision makers and practitioners with an easy-to-access portal for public health evidence in the North East of England. The service aims to respond to a broad range of research requests from the health, well-being or social care sectors.

Examples of enquiries include requests for support with applying the existing evidence base, queries about how to make best use of current data, or requests to undertake small service evaluations.

AskFuse draws on the expertise of the Fuse colleagues most appropriate to the issue, and endeavours to work collaboratively with partners throughout the process of addressing a specific issue, from identifying the research questions to applying the evidence to improve service delivery.

The post of AskFuse Research Manager was created to provide a single point of contact for all AskFuse enquiries and to coordinate this service for each client from start to finish. In an initial conversation, the partner’s needs are explored; the nature and timescale of any further work is then agreed over a few meetings (with no obligation or fee), resulting in a research brief for researchers. The costs of any work agreed, and outputs, will be discussed at this stage. The Research Manager then liaises with Fuse senior investigators and staff at the five universities in the North East of England to identify capacity and skills to develop, commission, lead and undertake research projects.

Between June 2013 and February 2017 over 240 enquiries have been supported by the service resulting in more than 50 collaborative research projects and various co-produced knowledge exchange events.

However, the knowledge brokering process facilitated by the service has not been without its challenges. For instance, considerable time is often needed to turn enquiries into a format which is ‘researchable’, in part because of unreal expectations. Secondly, local funding for agreed research projects was generally limited, while academic enthusiasm for supporting these projects was sometimes dampened by a lack of institutional incentives to engage in knowledge exchange. Finally, developing AskFuse proved particularly challenging in a time of significant system upheaval in the NHS. This also changed the types of evidence that were valued by enquirers, with more emphasis being put on implementation advice from qualitative or realist designs.

Figure 6.

Case study 5: UKCTAS “Building collaborative relationships with policy partners and charitable bodies”

The UK Centre for Tobacco Control and Alcohol Studies (UKCTAS), is a network of 13 universities (12 in the UK, 1 in New Zealand) that conduct research teaching and policy work into the use of tobacco and alcohol. The core of the Centre’s knowledge exchange activity is its collaborative relationships with policy and charitable bodies, including Cancer Research UK, British Heart Foundation, Public Health England (PHE) and Action on Smoking and Health. Outreach activities include a smokers’ panel, an alcohol discussion group and a dedicated teaching programme, which all assist in building capacity and guiding the Centre to produce scientific and policy relevant research findings.

Many of these activities were ‘unintentional consequences of research instigated by the centre. For instance, University of Nottingham PhD student Leah Jayes measured levels of indoor particulate (PM_{2.5}) pollution in a sample of English prisons, and found extremely high levels of PM_{2.5} in the prison indoor environments where smoking is allowed. The study also showed that prison staff had high levels of exposure during their working day and efforts to separate smokers and non-smokers did little to protect staff from passive smoke exposure. The subsequent research report [13] has directly influenced the government’s decision to implement a smoke-free policy across the prison sector in Wales and four prisons in England from December 2015, and it is highly likely this policy will be applied to all English prisons in 2016/17.

Organic development of knowledge exchange activities can be hampered by internal constraints. For example, the lack of a dedicated centre press office (non-UKCTAS funded university staff are used), limits the volume and quality of internal and external communication, and the wide geographical spacing of the network with separate university research groups also presents challenges in bringing staff together for engagement activities.

Tables

Table I. Comparing case studies on three dimensions of knowledge exchange

Case study	Function (Go – Stop)	Focus (Internal – External)	Type/ Scale (Low – High)
<i>CEDAR</i>	Go (developing new research)	Internal (academic staff) and External (national policymakers)	Range of interdependent activities (info management, linkage, capacity development)
<i>DECIPHer</i>	Go (developing new research)	Internalising external audiences (national policymakers) with academic staff	Early linkage and capacity development to build strategic partnerships for focused engagement (Research Development Groups)
<i>CoENI</i>	Go (developing new research)	Internal (academic staff) and External (national policymakers)	Focused engagement (Research Development Groups) and wider linkage that supports capacity building
<i>Fuse</i>	Go (developing new research)	External (local policymakers and practitioners)	Range of activities, either separate or organic development (info management, linkage, capacity development and decision and implementation support)
<i>UKCTAS</i>	Stop (controlling pollution problem in prisons)	External (national policymakers)	Range of organic developed activities (info management, linkage, capacity development and decision and implementation support)