National Institute for Health Research

Policy Research Unit Final Report 2011/18

Name of the NIHR PRU:	Policy Innovation Research Unit (PIRU)
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Progress against strategic aims

Progress is summarised below (*in italics*) against the original Department of Health (DH) specification for the Unit, and the vision, aim and objectives of the Unit taken from the initial work programme of December 2010.

The original DH specification stated that PIRU was:

> '…to strengthen the use of evidence in the initial stages of policymaking …. It will do this in particular by supporting, or undertaking, the evaluation of policy pilots or demonstration initiatives. The Unit's core expertise will thus be methodological, rather than topic specific, of relevance to all aspects of the Department's policy activity. Unit staff will however also provide a source of individual subject expertise for specific areas of DH policy.
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> The Unit will provide an effective responsive capacity, enabling the speedy 'drawdown' of scientific expertise against selected, high profile and high priority, areas. … This will require expertise in evaluative designs that are effective in real world contexts and within the time and/or resource constraints that typically surround policy making. It will also require good knowledge of, and a strong profile within, the relevant scientific communities.
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> The main activity of the Unit will be the evaluation of high priority policy pilots or demonstrator projects, utilising formative and/or summative approaches.'

This is exactly what PIRU has done since its inception.

Vision for the new Unit

- To 'co-produce' rigorous research evidence to inform the early stages of policy innovation working with a wide range of policy decision makers in the Department of Health (DH), other national agencies and at local level in the NHS and local government
- To focus on evaluation methods and evaluative studies (primarily but not necessarily exclusively in relation to pilots and other forms of structured innovation), an

- To provide a generic, responsive resource capable of contributing directly to the initiation, development and implementation of policy innovations and pilots, potentially across the entire portfolio of the DH.

The Unit has largely fulfilled the above vision in that it has been highly responsive and has undertaken a wide range of 'early' evaluations of innovative policy pilots in health services, social care and wider public health. It has undertaken some methodological work related to the design of quasi-experiments, mostly related to novel approaches to matching.

The Unit engaged closely and frequently with makers relating to pilots and other innovations. The Unit also responded fully to the needs of policy makers for research and advice. Indeed, responsiveness was a key feature of the way that the Unit operated. The Unit was described as follows in the official record of its positive external review in September 2014: 'The Unit is productive and has developed a strong programme of work since its inception, providing much needed external capacity/expertise in policy evaluation. DH particularly values the support and advice provided by PIRU.'

A good example of the Unit's ability to respond at short notice to unexpected requests was the evaluation of the Screen and Treat Programme set up in March 2016 to support UK citizens affected by the terrorist attacks in Tunisia (March and June 2015), Paris (November 2015) and Brussels (March 2016). The Unit engaged with officials within days of receiving the request for research in December 2015. The research was undertaken alongside the implementation of the Programme. The interim report in March 2017 provided a number of important actionable recommendations to improve the response of mental health services in the event of future incidents.

Aims

- To develop a way of working with the DH based on close relationships so that Unit staff are fully integrated at an early stage into the processes leading to important policy innovations and that DH staff are fully involved in the design of evaluations so that innovations are both 'evaluable' and generate learning for policy development;

Unit staff have worked closely with policy and analytical staff in DH and other central agencies while advising on, scoping, and undertaking evaluations.

- To increase and strengthen the ability of the Department to use evidence from previous research and future policy innovations.

This has not been a major part of the Unit's work since DH has not asked the Unit to contribute to the development of its ability to become more 'evidence-informed' in the way it does its business. The Unit has done some work such as preparing a guide for DH and other agencies' staff on how to plan pilot programmes to be 'evaluable' and how to commission their evaluations. The guide was made available to DH for use on its intranet and published on the PIRU website.

Objectives

- To develop early awareness of emerging and new challenges facing the health and social care system in England with a view to providing advice on where pilots and innovation are most likely to be needed

The Unit undertook two 'horizon scanning' exercises for DH and its arm's length bodies, one in 2012-13 (on health care scenarios for 2030) and the other in 2011-12 (on future research priorities related to the forthcoming NHS reforms of 2013). It also identified the research that would be needed to support implementation of the 2012 'Caring for our future: reforming care and support' White Paper and how different DH/NIHR units could best contribute, given their skills.

- To participate in the development of policy innovations (primarily pilots and demonstration programmes) so that the requirements of evaluation for policy learning are integral to the process, innovations are based on the best evidence available and innovations are 'evaluable'

The Unit did not have opportunities to become involved in the design and development of innovations and pilots. On two occasions, having undertaken preparatory work, it was decided by DH not to involve the Unit in this way (e.g. in relation to the Integrated Care and Support Pioneers).

- To advise on the design and methods of evaluation of policy innovations so that evaluations are robust and capture impacts on different population groups, across different parts of government, but are tailored to the realities of practical policy making

The Unit's senior staff were very frequently called upon to provide advice on the feasibility, necessity, value and approach to evaluation of a wide range of policy innovations, bearing in mind the constraints of the policy process. In addition to rapid, informal advice (e.g. attending meetings with policy teams), the Unit undertook 11 more substantial projects involving preparing a scoping report on the contours of a potential policy/pilot evaluation.

- To undertake evaluation of high priority policy pilots or demonstration programmes using formative and/or summative approaches and ensure that the findings are used for future policy development

The Unit undertook seven evaluations of high priority policy pilots and demonstration programmes, four evaluations of Government strategies, detailed advice on the evaluation of 11 other innovative policies and programmes based on rapid scoping work and a range of other research studies (n=20), including six policy evaluations (e.g. a large programme of research on the impact of the Public Health Responsibility Deal and a study of the implementation and use of the Friends and Family Test in general practice).

Progress against research themes

Given the responsive nature of the remit of the Unit and the fact that it was not subject area-focused, it was stated from the outset that it would not be easy to predict how its activities would unfold. As a result, the initial research themes were described in broad terms since they needed to be implemented flexibly.

The initial plan of December 2010 set out the following themes:

- horizon scanning and intelligence gathering for the early identification of new and emerging issues likely to call for policy innovation and piloting

See remarks above relating to horizon scanning. The Unit also undertook work to identify research and evaluation needs for future policy development in a number of areas such as related to the 2012 Social Care White Paper.

- assessing the need for evaluation and its feasibility in relation to early stage policy innovations

The Unit undertook extensive advisory work on the need for, and feasibility of, evaluations in relation to a wide range of policy innovations. This ranged from attending meetings at short notice, through commenting on draft specifications, to undertaking work to prepare reports on the nature and feasibility of potential evaluations or drafting invitations to tender. For example, the Unit prepared an advisory report on how the Department might evaluate the Payment by Results (PbR) Drug & Alcohol Recovery Pilot Programme in 2012, prepared a similar report on the evaluation of the Drug Recovery Wing Pilot Programme in 2011 and helped develop the specification for the evaluation to assess the impact of the Children and Young People's Access to Psychological Therapies Programme in 2014.

- rigorous syntheses of existing evidence ahead of the initiation of pilots, including evidence and experience from other countries and exploitation of high quality individual-level clinical databases and other routine information sources, to inform pilot development (e.g. to help identify which problem the innovation aims to address, to clarify the theory about how the intervention is expected to work, to clarify the nature and extent of uncertainty surrounding the intervention (e.g. to help determine whether evaluation is worthwhile), and to estimate the scale of potential intended and unintended effects from previous studies of the same or conceptually similar interventions (e.g. to help with evaluation design);

The Unit undertook a number of rigorous evidence syntheses, including of experience in other countries, as part of the preparatory work for evaluations (e.g. for the choice of GP practice pilot). However, as discussed above, these activities were not undertaken to inform pilot development since Unit staff were not invited to take part in such work. The Unit also undertook a number of stand-alone systematic reviews (e.g. on the effectiveness of alternatives to anti-psychotics in management of people living with dementia).

- advice on the design of policy initiatives so that evaluation is designed in from the outset, helping policy makers clarify the objectives and logic models underlying initiatives, and identify the resources required for evaluation, building the needs of evaluation into policy development

Again, Unit staff frequently advised on approaches to policy and pilot evaluation but were not asked to advise on the design of initiatives. The Unit was typically asked for advice only after planning a pilot programme was well advanced and usually when it had already been announced and sites recruited. Also, the request was for advice about evaluation rather than about the pilot or innovation itself. Thus it was not possible to provide advice designed to increase the 'evaluability' of pilots and innovations.

- advice on the overall design of evaluations and on specific methods to be used (e.g. specification of datasets to be collected by pilots)

As mentioned above, Unit staff were very active in this respect.

- supporting the subsequent process of pilot development and implementation (e.g. to encourage consistency in key aspects of the delivery of an intervention if required for evaluation to yield policy learning)

Apart from providing early and interim findings from evaluations and their policy implications, both as planned and as required by changing policy decision requirements, the Unit was not asked to be involved directly in supporting the development and implementation of pilots.

- advising on the interpretation of findings (e.g. assessing the extent to which the effects seen have been caused by the pilot and are likely to be replicable more widely, and relating the findings of a single DH study to the wider evidence from the UK and overseas

Policy and analytical staff typically commented on the findings of Unit studies but the Unit was rarely asked to discuss how the findings should be interpreted in order to inform specific decisions.

- supporting learning from pilot evaluations (e.g. presentation of findings in an accessible and relevant manner to guide the roll out of pilots, but also deriving lessons for future policy development processes from the experience of mounting and evaluating pilots)

The Unit prepared and disseminated advice both in writing and orally to a range of audiences on the commissioning of evaluations of policy pilots and how pilots could be made more 'evaluable'. This was based on detailed research outlined in the initial work plan to review how recent DH-led pilots and demonstration programmes had been evaluated and how the findings had been used in the policy process.

- modelling and simulations to estimate the likely effectiveness and cost-effectiveness of pilots ex ante and to estimate their potential effects if 'rolled out' more generally ex post, including equity consequences

Modelling and simulations were used in a minority of PIRU projects (e.g. the cost-effectiveness component of the evaluation of the Cold Weather Plan for England) but were probably less prominent than initially expected.

- data linkage and warehousing of 'routine' data to provide a flexible resource for relatively low marginal cost ex ante assessment and long-term monitoring and evaluation of policies and pilots (e.g. including studies of 'universal' policies as well as post-evaluation monitoring of demonstration programmes)

Due to information governance restrictions and the requirements of the NHS Information Centre (now NHS Digital) for data releases to be related to specific projects and analyses rather than to enable research capacity ex ante, it was not possible for the Unit to develop a resource of datasets that could be used at low marginal cost to expedite evaluations. In addition, the huge range of different topics covered by the Unit militated against the utility of the Unit investing in this sort of facility rather than accessing facilities developed by others. The collaboration with the Nuffield Trust enabled a number of evaluations to be undertaken using routine data without needing to develop infrastructure at LSHTM (e.g. Effect of a telephonic alert system (Healthy outlook) for patients with chronic obstructive pulmonary disease). The Unit undertook work to identify the potential of high quality clinical databases for policy evaluation, publishing a report on the ways in which the over 40 National Clinical Audits in England might be used for this purpose.

- becoming the Unit of choice for the Department in undertaking major evaluations of policy innovations

The Unit was always much in demand for advice on design of evaluations and to undertake evaluations. This suggests that the Unit made significant progress towards this bold objective.

- capacity building through providing DH and NHS staff with opportunities to participate in policy evaluation (e.g. hosting NIHR SDO management fellows) and offering more formal training for DH staff and others (e.g. PhD students) in evidence-informed policy initiation and development processes as well as methods of policy evaluation

The Unit set out an ambitious agenda for developing novel forms of researcher-policy maker interaction in its first work plan. Despite putting considerable early effort into this potential theme, it proved impossible to implement any of the new ideas. For example, the initial plan included a programme of regular secondments and/or exchanges in both directions between DH and the Unit but these could not be implemented, principally because of the two major reorganisations and 'downsizing' of the Department in the early years of the Unit. A number of offers of training for DH staff were also made at intervals but none came to fruition. It also became clear that training of researchers was not regarded by the Policy Research Programme as a priority for Policy Research Units since the PhD funding included in the original Unit budget had to be removed before the Department would approve the budget.

The initial work programme envisaged the Unit working across health services, social care and wider public health.

This was undoubtedly achieved. The Unit worked across large parts of the remit of the DH, as shown by projects such as the evaluation of the choice of GP pilot (for NHS England), evaluation of

the direct payments in residential care Trailblazers (a social care project) and the evaluation of the Public Health Responsibility Deal (a public health project outside the NHS and social care system).

The initial plan also included a range of methodological work related to 'real world' evaluations where the researchers had limited or no influence over how and where a complex innovation was being implemented.

The main methodological focus, in practice, was a series of studies to improve the robustness of observational (non-experimental) research designs by developing more sophisticated methods for ensuring comparability between intervention and 'control' groups such as synthetic controls and genetic matching. Because of the high level of demand for responsive work, it was not possible to undertake the other methodological work outlined in the initial plan (e.g. on the characteristics of policies that risk increasing inequalities in access, use and outcomes of health and care services, better methods to assess the value of new evaluations, refinement of methods for 'rapid reviews').

Key research outputs

Given the highly responsive remit of the Unit, those leading projects tried to make them useful for policy (sometimes without quite knowing the direction of policy thinking in the Department – see below). The general feedback received via the Unit's liaison officers in the eight years was positive in this regard.

In terms of the contribution to wider knowledge, the series of papers from the evaluation of the Public Health Responsibility Deal was probably the most significant. It was described by an expert in the field as a major contribution to knowledge of the limits of corporate sector involvement in public health policy. Specifically, the results of the evaluation were published in 11 (to date) peer-reviewed publications. The findings have not only contributed to the growing evidence on public-private partnerships for health, but have also influenced policy and practice. For example, in the UK, this work was the subject of a 2015 report by the Institute of Alcohol Studies, and a 2016 briefing to Ministers of Parliament on sugar and health. Further afield, the World Cancer Research Fund International's policy database disseminated two of the articles as part of its work to share research on the effectiveness of food and nutrition policy actions globally. Moreover, this research contributed to a debate held in the European Parliament on 18 October 2016 on the merits of self-regulation for public health. Finally, this work contributed methodological innovation in relation to approaches to evaluations of complex policy interventions.

In terms of contribution to a new area of enquiry, the Unit used its evaluation of the social impact bond (SIB) Trailblazers in health and social care as a platform to develop an international community of interest in SIBs and other novel forms of social finance for public service innovation, involving both researchers and policy makers. Unit staff were instrumental in organising the first international conference on SIBs in September 2016. A number of the papers were published in a subsequent special issue of the *Journal of Economic Policy Reform*. The conference is now an established annual event, having taken place in 2017 and 2018, followed by a special issue of *Public Money & Management*. Plans are well advanced for 2019 when the conference will be staged in collaboration with the Government Outcomes Lab at Oxford University and Newcastle University Business School.

In terms of methodology for evaluation, the series of analyses on new methods of matching for use in quasi-experimental evaluations (e.g. on use of synthetic controls versus more conventional difference-in-difference methods) represented a major addition to the literature.

Contribution to research capacity, particularly related to policy

This topic did not appear in the Unit's original specification and was not discussed with the Unit during the eight-year period. If this heading is interpreted as 'engagement with policy makers' (the guidance on the final report was not easy to interpret in this respect), the Unit strove to take any opportunity to interact with policy officials in a range of agencies (not just in DH). For example, PIRU appeared frequently on the programme of DH analysts' seminars with a range of staff presenting their work to a diverse audience of officials from DH, PHE, NHSE, etc.. The Unit's contribution to research infrastructure and attempts to develop novel forms of engagement with policy, including offers of training, are discussed above.

Impact in broad terms on policy, public health, health care and social care

It is notoriously difficult to identify the impacts of specific pieces of research-related advice and individual research projects without undertaking detailed investigation. Even where research insights are visibly taken notice of, it is difficult to determine how decisions and their consequences would have been different in the absence of the research. For example, findings could have simply confirmed an already chosen policy path which, though valuable, is challenging to demonstrate. In some cases, PIRU attempted to find out whether a piece of work had proved useful, but, apart from general, informal feed back to the effect that the Unit's work was highly valued, it was not possible to obtain much insight into this. As part of the feedback after the Unit's first very positive external review in September 2014, PIRU was asked to consider whether exploring research impact could be part of its future programme. After consideration, it was decided that, since there were already a number of groups in the UK well established in this field such as at RAND Europe (Jonathan Grant et al) and at HERG, Brunel University (Steve Hannay), it would not make sense for PIRU to duplicate this work.

PIRU's remit was specifically to contribute to 'the initial stages of policymaking' when innovative policies were being tested through 'pilots'. In the absence of a formal post-project debriefing process, it was difficult for the researchers to judge the impact of 'early' evaluations on policy, though they clearly had an impact on any subsequent longer term evaluations, if these were commissioned, since PIRU's 'early' evaluations included providing advice on the best approach to longer-term evaluations. However, it was possible in each annual report to identify a small sub-set of specific impacts that were visible to policy 'outsiders' (e.g. references in policy documents to the findings and implications of PIRU evaluations). The three 'Added Value Examples' that accompany this report give an indication of the range of PIRU's impacts across health services (evaluation of the implementation of the UK Antimicrobial Resistance (AMR) Strategy), social care (evaluation of the direct payments in residential care Trailblazers) and wider public health (evaluation of the Cold Weather Plan for England).

Given that most of the Unit's work, particularly its larger-scale studies, began as responses to requests from policy teams, it is highly likely that the findings had some policy impact even if this was not necessarily quite as expected. For example, the evaluation of the social impact bond (SIB) Trailblazers in health and social care engaged the attention of policy makers in the Cabinet Office and Department of Culture, Media and Sport rather than DH. It also led to production of practical guidance for those embarking on local SIB projects prepared in collaboration with other researchers in the field.

Other studies had more direct and obvious policy impacts. For example, the evaluation of the choice of GP practice pilot, 2012/13 showed that the option of visiting an 'out of area' practice as a day patient was not only less popular with patients than the alternative of 'out-of-area' registration but it overlapped substantially and unhelpfully with existing ways of seeing 'out-of-area' patients such as 'temporary resident' status and the ability for patients requiring 'immediate and necessary' treatment to receive it. The roll-out of the pilot nationally in 2015 did not include the day patient option, in line with the findings of the PIRU pilot evaluation. It is likely that PIRU's work contributed substantially to this decision since the evaluation findings and data were used in drafting the guidance from NHS England on the roll out of the scheme, including the estimates of the likely scale and nature of demand for out-of-area registration with general practices.

Patient and public involvement and engagement

Unsurprisingly for a Unit funded by the Policy Research Programme to provide evidence for national policy making, the principal focus of the Unit's work was to satisfy the needs of DH and its arm's length agencies. Typical projects also needed to start rapidly. Sometimes too, the innovation being piloted was not especially 'public or patient-facing' (e.g. SIBs or the Public Health Responsibility Deal). For these reasons, the PIRU approach to patient and public involvement (PPI) was determined on a project by project basis. PPI varied between projects from little or none (e.g. Public Health Responsibility Deal) to extensive (e.g. evaluation of the implementation of the UK Anti-microbial Resistance Strategy). Sometimes, a rapid desk-based project required no PPI or no PPI was possible in the time available.

Since PIRU's work did not focus on a specific patient/client group, it was decided that it would not be feasible to institute the Unit's own PPI group. Instead, the Unit recruited patient and lay advisers ad hoc for some projects but principally via the Quality and Outcomes of Patient-Centred Care Research Unit (QORU) Public Involvement Implementation Group (PIIG). Latterly, the Unit has gone beyond advisory roles to including lay researchers in some project teams (e.g. UK AMR Strategy implementation evaluation).

Generally, in projects involving primary research, PPI took place from start (detailed proposal/protocol) to finish (interpretation of findings and drawing out their implications) with the composition of any steering and/or advisory groups determined by the topic and/or patient/user group(s) affected by the policy or pilot.

Some projects required a more substantive PPI component than others. For example, two lay researchers were recruited to be full members of the research team for the evaluation of the implementation of the UK Anti-microbial Resistance Strategy. The lay researchers joined during the very early stages of the scoping study in order to contribute to the design of the main project, and subsequently contributed to development of materials for research governance (e.g. research ethics requirements), and the detailed design of local case studies. As the project progressed, the lay researchers led focus groups with members of the public as part of the local case studies; and contributed to analysis of data, outputs and dissemination of findings.

Strategic partnerships and collaborations

Building further strategic partnerships was not a feature of the original DH specification for PIRU. Since the Unit was itself a collaboration between LSHTM, the PSSRU at LSE, Imperial Business School and RAND Europe, plus having call-off sub-contracts with a range of other groups (e.g.

Nuffield Trust, Centre for Reviews and Dissemination, York), it was not judged that the Unit needed (or could manage) further 'strategic' partnerships.

Individual projects could require specialist skills and knowledge that the core partners did not possess. In these cases, the Unit developed ad hoc collaborations. For example, the Unit collaborated with ESCHRU, another DH-funded PRU (on the scoping of the evaluation of the Integrated Personal Commissioning Pilots), as well as with the Health Experiences Research Group, University of Oxford (on the 100,000 Genomes Project participant experiences project). PIRU also collaborated for the evaluation of the implementation of the UK Antimicrobial Resistance Strategy with the Royal Veterinary College. The Unit collaborated with Newcastle University Business School to organise the first international research conference on Social Impact Bonds in September 2016. The second and third international conferences in autumn 2017 and 2018 were staged in collaboration with Newcastle, RAND Europe and the Government Outcomes Lab (based at the Blavatnik School of Government, Oxford University).

The Unit also undertook a number of projects in association with the NIHR School for Social Care Research (e.g. independent assessment of improvements in dementia care and support to inform the final year of the *Prime Minister's Challenge on Dementia*) to make better use its own research resources than would have been possible by working alone.

Reflection on governance and management arrangement and relationships with stakeholders

Unlike most PRUs, PIRU did not have a standing 'customer group', principally because it was not topic-focused. The Department judged that it would have been too difficult to maintain an effective governance group that could represent needs and priorities across the entire Department. Instead, relationships were established de novo for each project. This process worked fairly well though it meant some work at the start of each project on the part of the liaison officers responsible for different topic areas and the research team to identify and bring together the main interests. Seemingly inevitably, policy teams typically changed frequently, making it difficult to keep track of who the principal 'customers' for projects were. Sometimes, it was apparent that the hand-over between post-holders had not included any mention of a PIRU evaluation. On at least one occasion, new policy team members were very unenthusiastic about the presence of an independent evaluation team.

The wide range of different policy areas touched on by PIRU projects meant that the Unit worked with most of the Department's liaison officers and a large number of different policy officials. This required some flexibility in that there was some variation in expectations between liaison officers (e.g. in willingness to permit informal discussions between Unit staff and policy officials where they were not present to manage the demands of policy officials on the capacity of the Unit) and policy teams (e.g. some officials knew little about how DH commissioned 'independent' research).

On occasions, because of political sensitivities and uncertainties, it was difficult to know how best to focus projects to make them relevant because policy officials were reluctant to share information about policy developments (e.g. the policy options under consideration). This was a particular problem when the Unit was proposing projects to DH.

One aspect of governance and management that could have been improved related to post-project debriefing both in terms of process (e.g. relationships and communication) and the use made of the research by the 'customers'. The PRP does not have any system for this. Comments

from policy ‘customers’ and discussions on draft research reports, plus external peer review focus on the findings and their interpretation by the researchers which fulfils a different function.