

How government can work with academia



About this report

Policy making is a core task for government. But to make policy well government needs to be open to external ideas, including from academics. This report sets out how government can improve the way it uses academic evidence and expertise in forming policy. It forms part of a project on how to build a better relationship between government and academia.

For more information visit: www.instituteforgovernment.org.uk/academia-and-policymaking

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List of abbreviations

ACMD Advisory Committee on the Misuse of Drugs

ARIs Areas of Research Interest

BEIS Department for Business, Energy and Industrial Strategy

CO Cabinet Office

CSA Chief scientific adviser

CSaP Centre for Science and Policy

DCMS Department for Digital, Culture, Media and Sport
Defra Department for Environment, Food and Rural Affairs

DfE Department for Education

DfID Department for International Development

DfT Department for Transport
DH Department of Health

DHSC Department of Health and Social Care
DWP Department for Work and Pensions

EEA European Economic Area

ESA Employment and Support Allowance
ESRC Economic and Social Research Council
GCSA Government chief scientific adviser

GESAC Group Evidence Science and Analysis Committee

GO-Science Government Office for Science

GSE Government Science and Engineering

HEFCE Higher Education Funding Council for England

HO Home Office

HoPP Head of the Policy Profession

HoSEP Head of the Science and Engineering Profession

ITT Invitation to tender LPC Low Pay Commission

MAC Migration Advisory Committee

MHCLG Ministry of Housing, Communities and Local Government

MoJ Ministry of Justice

NDPB Non-departmental public body

NICE National Institute for Health and Care Excellence

NIHR National Institute for Health Research

OIT Open Innovation Team RBS Royal Bank of Scotland

REF Research Excellence Framework UKRI UK Research and Innovation

Summary

The UK Government currently spends £9 billion a year funding academic research.*1 The UK has 30 of the top 200 universities in the world and is home to leading academics in virtually all disciplines. Many of those academics work on areas directly relevant to public policy. But this report, based on interviews in 10 government departments, finds that government often struggles to draw on academia effectively in forming policy. This reduces officials' ability to advise ministers on the basis of the best available evidence and expertise – one of the principles at the core of how UK government works.² Ultimately, it can harm the outcomes of policy for citizens.

Universities do much else besides contributing to government policy. They are independent centres of teaching and the pursuit of knowledge. And they are far from the only source of evidence and expertise available to policy makers. But they are a very important one. Academics offer deep knowledge, expertise and research that can help to inform, design, improve, test and scrutinise government policy. Policy is poorer for overlooking academic contributions.

We found many examples of teams and initiatives that use evidence and expertise very well. To take just three: the Department for Education (DfE) has created a pool of academic researchers that officials use to commission rapid evidence reviews; the Cabinet Office has set up a unit, sponsored by universities, that helps senior academics to work part time with departments to develop policy; and the Department for Environment, Food and Rural Affairs (Defra) has a large system of advisory committees, which give officials fast access to academics to support policy work.

But these are exceptions rather than the rule. Too often, the use of academic evidence and expertise in forming policy is inconsistent and ad hoc.

Good engagement currently relies on individuals. Most policy officials feel they do not have time to engage with academics. When they do, they often struggle to find relevant research. They are not equipped with the tools to make it easy to access useful academic research and advice. This leads to frustration, and ultimately means that valuable knowledge remains untapped.

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^{* 2015} spending across departments, research councils and funding councils (excluding European Union contributions and defence spending).

^{**} This was the consensus at a private roundtable held at the Institute for Government in December 2017 and was the consistent view we heard throughout our interviews.

This report sets out how government can be more systematic in how it accesses and uses academic evidence and expertise. Our recommendations focus on two areas. First, in most departments, no one has clear responsibility for how officials engage with academics or for how they use evidence and expertise. This inhibits co-ordination, and undermines incentives to improve. While these responsibilities should fall under specific senior leadership roles – chief scientific advisers, chief analysts and departmental heads of the Policy Profession* – in practice we found that this rarely happens. Our first key recommendation is:

 Permanent secretaries must establish clear responsibility within departments for how officials engage with academics and for the quality of the evidence and expertise used in policy.

As the heads of Whitehall departments, permanent secretaries need to ensure that their departments address two further obstacles to using evidence and expertise well in forming policy. There is often a divide between departmental analysts (economists, social and operational researchers and statisticians) and policy officials, which means that the knowledge and information that analysts have access to do not make it into policy. And high staff turnover and weak institutional memory mean that many departments suffer from 'collective amnesia', with officials unable to develop understanding of a policy area or access the evidence that informed past policy.³ These are big challenges that occur across departments. Responsibility for tackling them must be clarified.

Second, while there are many promising initiatives that connect academics with policy making, departments are not learning from and replicating these. There is little co-ordination across government.

In this report we describe key areas in which Whitehall needs to improve its relationships with academia to enable officials to make better use of academic expertise. These areas cover a broad range of activities: from the networks that officials use to access informal advice, to the advisory committees and secondments they use to work with academics, to how departments commission or influence external academic research. We offer case studies of best practice in each area.

The crucial next step is for permanent secretaries to ensure that their departments replicate what other departments do well. We make recommendations on how departments should do this:

- Every department should create an 'expert network' to help officials find relevant academics.
- Departments should work with universities and research funders to develop 'induction schemes' for policy officials new to a policy area to enable them to get up to speed quickly.

^{*} The Policy Profession is the cross-government group of officials involved in forming policy.

- Working with ministers and senior officials, permanent secretaries should assess
 where their departments face gaps in expert advice, which could be tackled
 through new advisory committees, the sponsorship of external bodies such as
 'what works centres' or other methods we highlight.
- Every department should set up a secondment programme for bringing in academics, of a scale and nature that best fits the department's needs.
- Departments should enable officials to use standing contracts with approved researchers to commission research and evidence reviews quickly.
- Chief scientific advisers, chief analysts and departmental heads of the Policy Profession should have joint responsibility for drafting 'Areas of Research Interest' and ensuring that these are the starting point for discussions with academia.
- The Policy Profession Board, the Analytical Functions Board and the new government chief scientific adviser should review government's use of tools for bringing insights from diverse academic disciplines into policy making.

Most of our recommendations focus on officials. But improving the use of evidence and expertise relies on the support of ministers. Many ministers already take the use of evidence by their departments very seriously. It is vital that all ministers do this – demanding high-quality evidence in every policy submission – to create the right incentives for civil servants. Specific tools for bringing expert advice into policy, such as advisory committees, also need the support of ministers.

Transparency is also important to government using evidence well:

- senior officials need transparency to understand how well departments are doing and where they need to improve
- academics (and others) need transparency to see where they can contribute to policy making
- the public needs transparency to understand and scrutinise what government is doing and why.

In the 2012 *Civil Service Reform Plan*, the Government committed to publishing more of the evidence base that supports policy; and senior officials have since continued to call for more 'open policymaking'.⁶ But progress has been patchy.^{*} The most recent annual review of evidence transparency in Whitehall found that, despite improvements in some departments, many still fail to set out the evidence behind

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^{*} The latest update from the Government, in 2014, said that strong demonstration of the use of evidence by departments was 'the exception rather than the rule'. See Cabinet Office (2014) *Civil Service Reform Plan: Progress report*, Cabinet Office, p. 20, retrieved 5 November 2017, www.gov.uk/government/publications/civil-service-reform-plan-progress-report

policy.⁷ Transparency is needed so that officials in government – and academics and others outside of government – can scrutinise the strength of evidence.

Government should build on previous progress

Government has made significant efforts to improve its own use of evidence and expertise over many years. The civil service has launched numerous initiatives, from the drive towards 'evidence-based policy' in the 1990s and 2000s,8 to efforts to make policy making more open to external thinking in the 2010s.9 In the past five years:

- the Policy Profession has tried to increase policy officials' understanding of how to use evidence¹⁰
- several departments have sponsored what works centres to help make evidence available to policy makers and practitioners
- the Government Office for Science (GO-Science) has led an initiative to get departments to communicate their research needs more skilfully to academia.¹¹

Government and academia have also made major changes to how core university funding is distributed to encourage academics to apply their research beyond academia to areas including public policy.* Between 2007 and 2009, the Higher Education Funding Council for England (HEFCE) ran two formal consultations on the Research Excellence Framework (REF), a new assessment of the quality of research and its 'impact' beyond academia, which informs funding allocations. The first exercise, covering all UK universities, was conducted in 2014.* The introduction of the Research Excellence Framework has led to significant cultural change (and remains controversial among academics). Crucially for government, though, academics are more willing to engage with policy making as a result.

Research funding is also undergoing a major transition. In April 2018, the Government launched UK Research and Innovation (UKRI) – a new funding body which brings together all seven research councils, HEFCE and Innovate UK. While building on the strengths of these bodies, Greg Clark, the Business Secretary, has said UKRI will be a "single voice and strategic brain" for research and innovation. Its aims include increasing links between academia and business, supporting more interdisciplinary research and funding research that addresses the challenges set out in the Government's Industrial Strategy. UKRI will also fund research into other government priorities. It has created a new funding pot to 'ensure that UKRI's investment links up effectively with Government departments' research priorities'. It has created a new funding pot to 'ensure that UKRI's investment links up

There are, of course, clear limits to strengthening the relationship between government and academia. Academic independence is crucial. The Haldane principle established in 1918 – that academics, not politicians, should make decisions about

^{*} Government funding of universities is split between 'core' funding, provided annually by funding councils, and funding for specific research or projects, allocated by research councils.

^{**} The proportion of the Research Excellence Framework allocated to 'impact' will increase from 20% to 25% for the next assessment in 2021.

individual research proposals – remains as important today as it did then. Senior officials, academics and research funders agree on this.

Yet there is still a persistent sense in both Whitehall and academia that the relationship between them is not good enough and policy making does not draw on academic evidence and expertise as well as it should. Sir Jeremy Heywood, the Cabinet Secretary, recently said:

"I am sometimes a little frustrated that we don't make better use of academics... We clearly have an immense pool of academic talent on our doorstep and, while there are many excellent examples of collaboration, it often feels like we could be doing more." 15

This report shows how.

This report focuses on Whitehall, which is only one part of the picture in the UK. The devolved governments, local government, arm's-length bodies and other organisations also draw on evidence and expertise in making policy – and we were told about examples of best practice in each. It is clear that different parts of the system have much to learn from one another about how to work with academia. This report contributes to that.

In late 2017, we held two private roundtables exploring the challenges that officials and academics face in improving engagement. We then conducted 28 interviews with officials from 10 departments, academics and research funders – in addition to numerous informal conversations.

The recommendations we set out in this report are intended to help Whitehall recognise good practice where it exists and learn from it. We hope this will help government to build better relationships with academia and therefore make better use of academic evidence and expertise in forming policy.

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1. The importance of improving links between government and academia

Academics can contribute to policy making in many ways

Academics can contribute in many ways to improve government policy. They can offer expertise (advice based on knowledge of a field) and evidence (facts and information that support a proposal). They typically spend their entire career in a specialist area, which gives them very deep knowledge. But they can also offer understanding of a whole field. For instance, Defra's Science Advisory Council is made up of scientists who offer Defra expertise and advice based on substantial knowledge and experience of a wide academic area.

Sometimes academics offer evidence for policy decisions through their original research. For example, Dame Sarah Cowley's 2008 research on the benefits of early interventions by health visitors – trained nurses who visit people at home – was crucial to the 2010 Coalition Government's decision to invest in 4,200 new positions.¹

Academic approaches also help policy officials to reflect on continuity and change in policy. Sir Nick Macpherson, Permanent Secretary at the Treasury from 2005 to 2016, has said that learning from historians provided a hugely important new dimension to his officials' expertise, saying that "it's extraordinary how often officials tend to develop policy from first principles rather than going back and getting a deeper understanding of why we are where we are now, and what has informed the development of policy". The Treasury launched a programme with the Policy Institute at King's College London, which allowed officials to attend lectures on the history of the Treasury and PhD students at King's to study Treasury archives.

Academics also offer expertise in new methodologies. The Cross-Government Trial Advice Panel is a good example. It brings together government officials with experience of running experimental trials with 25 academics who have expertise in experimental methods. So far it has advised officials in 18 departments on how to design trials. The director of analysis in the Ministry for Housing, Communities and Local Government (MHCLG) has said that the technical support from experienced academics on the panel is an invaluable resource for his department.

Officials also use academics as independent critics to 'kick the tyres' of policy. This happens both formally – for instance, civil servants appoint academic panels for projects to assess the quality of internal research – and informally, when officials call up academics to test their thinking. Academics also review the impact of policy, offering a source of evaluation and institutional memory of past policy.

Many policy officials have weak connections to academia

Despite the positive examples that can be found, the links between policy making and academia in the UK are still far weaker than they could be. Policy officials told us that connections were often "very ad hoc", inconsistent and fragile and that this led to

academic evidence and expertise not being used effectively in policy.⁶ This was the consensus at a roundtable held at the Institute for Government in November 2017 and the view held by senior policy officials we spoke to across Whitehall.⁷

Some interviewees thought that policy officials saw engaging with academic evidence as the job of government analysts (the economists, statisticians, and social and operational researchers in the civil service who develop the evidence base for policy). One said: "I'm not sure policy officials do much engagement with academics... I think most of it is done through the analysts... unless you have a very high-profile academic who's in the media." This view was shared in several departments, but senior policy

officials said that it should not remain the status quo. There was consensus that policy officials needed to build their own relationships with academics to have a good grip on what they were saying, while relying on analysts for more in-depth understanding of academic fields.

Policy officials told us that connections [with academia] were often "very ad hoc", inconsistent and fragile

Our interviewees identified that policy officials face three main barriers to engaging with academia.* First and foremost is a lack of time

and other constraints on officials' capacity. Policy officials do not feel they are given the time and resources to build academic networks and engage with academics as well as coping with other pressures. Second, policy officials have trouble finding relevant experts or relevant research when they need them. Third, some policy officials feel that there is little incentive to seek out academic evidence and expertise because of the culture within departments. Officials recognise these barriers. Our case studies show that some departments are developing approaches to overcome them. But departments need to build on these efforts.

Previous research has also recognised weak connections between Whitehall and academia.** In 2012, Institute for Government research found that government officials felt that the policy process did not effectively gather or use outside thinking, including from academia.** Of 340 senior government policy officials surveyed in 2014, a significant minority said that they did not engage at all with academics and many said that they engaged only in limited ways.** Meanwhile, a study of the Department of Health (DH) found that policy officials had quite weak connections to external expertise.**

Weak connections reduce officials' ability to draw on the best available evidence and expertise

Weak connections with academia are bad for government policy making and can contribute to policy failures. They reduce policy officials' ability to base policy on the

^{*} A systematic review conducted in 2014 found similar barriers. See Oliver K, Innvar S, Lorenc T, Woodman J and Thomas J (2014) 'A systematic review of the barriers to and facilitators of the use of evidence by policy makers', BMC Health Services Research, vol. 14, no. 2, https://bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-14-2

^{**} It is notable that there has only been one survey and three ethnographic studies conducted in Whitehall of policy making, connections with academia and the use of evidence and expertise. More work of this kind is needed.

best available evidence and expertise. Without trusted relationships with academics, policy officials are less likely to be able to listen to useful advice in designing policy or receive feedback during implementation. For example, the Department for Work and Pensions' (DWP) failure to listen to clear advice from academics to pause the rollout of Employment and Support Allowance (ESA) in 2012 led to significant implementation problems, with high levels of outstanding assessments.*

The way in which departments use evidence is inconsistent. In 2016, Sense about Science, the Institute for Government and the Alliance for Useful Evidence began using a framework to review how transparently departments present evidence in policy documents. The annual review does not assess the quality of evidence but it shows whether policies are clearly based on evidence or not. While some departments (such as the Department for Transport) scored highly in the latest review in 2017, several others (such as the Cabinet Office, the Treasury and Department for Education (DfE)) scored lowly because, in a sample of policy documents, they did not clearly set out evidence for what they were doing and why.

Government is better at drawing on some academic disciplines than others

The structure of government influences its receptiveness to academic contributions. Government is more receptive to input from the natural sciences and economics than from history and other social sciences, arts and humanities:

- **Science**. Scientists have well-established routes into government. The first government chief scientific adviser (GCSA), who provides scientific advice to the Prime Minister, was appointed more than 50 years ago. There is a network of 15 departmental chief scientific advisers (CSAs), who provide advice to permanent secretaries and senior officials; and there are over 70 scientific advisory committees and councils, which provide advice on a range of issues, from the misuse of drugs to emergencies. There are also almost 13,000 Government Science and Engineering professionals concentrated in departments such as GO-Science and Defra.¹⁴
- Social sciences. Some social sciences map directly onto government departments and professions, but others have weaker connections. Economics has a strong voice in government in the Treasury and via the network of 1,400 government economists officials trained in economics who inform policy discussions on the basis of economic evidence and expertise. (Many government economists go on to work in policy roles, including the current Cabinet Secretary, Sir Jeremy Heywood, and his predecessor.) Government social and operational researchers draw heavily on research and methods across social-scientific disciplines to inform policy making. Public health academics have an obvious audience in DH and an advocate in the chief medical officer. In some cases, government has set up units or independent

^{*} This was highlighted at a roundtable held under the Chatham House rule at the Institute for Government. Professor Malcolm Harrington, an academic who reviewed the Employment and Support Allowance, has argued that the rollout should be paused. See BBC News (2012) 'Reviewer of fitness-to-work benefit tests to stand down', BBC News, 30 July, retrieved 22 May 2018, www.bbc.co.uk/news/uk-politics-19046447. The National Audit Office meanwhile highlighted the costs of poor implementation in 2015. See National Audit Office (2015) Welfare Reform – Lessons Learned, National Audit Office, retrieved 22 May 2018, www.nao.org.uk/report/welfare-reform-lessons-learned

organisations to help policy officials make better use of insights from a specific discipline, such as the Behavioural Insights Team* for behavioural economics, and the what works centres, a network of organisations that aim to improve how evidence is used in a range of social policy areas (see Table 2 on page 53). But other social sciences, such as psychology and sociology, have less obvious audiences.

• Arts and humanities. While many policy officials are arts and humanities graduates, a previous Institute for Government report found that government does not engage with arts and humanities in a formal way. For instance, it said 'there has not been any systematic commitment to engage professional historians in the enterprise of policymaking. It argued that this lack of a historical perspective contributed to poor institutional memory and the tendency to repeat policy mistakes. Other humanities – such as philosophy, languages and anthropology – similarly do not have professional or institutional 'entry points' in government. At a roundtable on social security policy at the Institute for Government, ex-officials and politicians agreed that DWP was very good at economic analysis but often missed more qualitative understanding of how claimants experienced changes to benefits. There have been numerous ad hoc efforts to develop seminar series or secondments to access arts and humanities scholars, but these remain small scale and their impact on policy is not easily quantifiable.

Government is more likely to miss valuable input where the paths between academia and policy making are less well trodden. However, it is not always obvious how to fit academics from different disciplines into the policy making process.

Policy making is 'messy'

As Institute for Government research has shown, policy making does not follow the linear rational model set out in the Treasury's *Green Book* guidance, with distinct stages from identifying the rationale and objectives and appraising the evidence, to monitoring, evaluation and feedback. ¹⁹ Instead, policy is created through a complex interaction of ministerial priorities, public attitudes, media, civil service capacity and other factors – in addition to evidence and expertise. Policy officials act as 'ringmasters', pulling together input from these multiple sources.

Academic evidence and expertise will not be part of every policy discussion. One deputy director explained how evidence is not always the priority:

"It's quite possible to be discussing a policy and not discuss the evidence base. And you might be surprised at that, but if you think about it, first you might be discussing the money – what does this cost? Then you will be discussing the legal questions, so are we legally obliged to do this because it's European or [do] we put in an Act ourselves? Then someone will discuss the press and public interest, for example there have been 80 parliamentary questions on this. It's surprising, you can actually fill quite a long brief about a topic – should cups be white? – without discussing why you

^{*} The Behavioural Insights Team was set up in the Cabinet Office but is now an independent organisation that continues to provide services to government.

thought cups should be white and what the evidence was about how many cups and why."²⁰

In some areas, relevant high-quality evidence does not exist (and departments then need to work with academics, research funders and others to develop evidence). In others, factors including politics and values can override an evidence base. But whatever the quality of the evidence, stronger relationships with academics will mean that policy officials are more able to draw on the best evidence and expertise that is available – and engagement with academia is less likely to be pushed out by other pressures.

Politics shapes how research and policy interact

How government uses external expertise in policy is also complicated by the politics of different policy areas. The spectrum, from technocratic to political, has been described as the difference between 'tornado and abortion politics'.²¹ In less-contested areas, it is often easier for officials to engage with expert advice. Ministers and officials are less likely to have prescriptive government manifesto commitments to stick to, and there are fewer other interest groups to consider. In more political areas, evidence and expertise are more likely to be viewed through the lens of a policy maker's values and what they think will be politically acceptable.²² It can be easier for government departments to shut out academic (or other expert) input. For instance, this seems to be why successive governments consistently ignored academic studies demonstrating that badger culling did not prevent bovine tuberculosis, in part because they were unwilling to take on the farming lobby.²³ Ministers vary in how much evidence and expertise they demand in policy submissions.

Political debates – and sometimes individual ministers – also shape the relationships that whole departments have with academic communities. DWP has a strong internal research staff but it has often had a poor relationship with some parts of the academic community researching social security. According to a roundtable held at the Institute for Government, this has at times made DWP relatively closed to research it has not either conducted itself or directly commissioned. Defends similarly at times had a fractious relationship with the education research community. By contrast, some departments have very strong connections with research communities, such as the Department for International Development (DfID) and international relations scholars; or DH and public health researchers.

Evidence enters policy via complex routes

Academic evidence often reaches policy through organisations such as think tanks, non-governmental organisations and consultancies. To take our earlier example, Cowley submitted her research on health visitors to the Health Select Committee and it was picked up in policy papers written by the Centre for Social Justice (a think tank) and the Conservative Party Research Department.²⁵ The Conservative Party then included a commitment to increase the number of health visitors in its 2010 manifesto, which the 2010 Coalition Government carried through.²⁶

Surveys show that policy officials in Whitehall use 'brokers' such as media organisations and think tanks more often than going directly to academics.²⁷ The same is true of Parliament and local government. Parliamentary committees cite academic

research much less frequently than government, private sector and not-for-profit organisations.²⁸ And local government officials rely more often on evidence from government, third sector organisations and think tanks than from universities.²⁹

'Brokers' are an important part of how academic evidence and expertise enter policy. Media organisations, think tanks, businesses and other organisations package evidence – from academia or from their own research – in ways that are relevant for policy officials. Academics often work with these organisations to find ways of influencing policy. Many organisations – such as the British Academy, the Institute for Government and the Royal Society – act as conveners, bringing together academics and officials.

However, brokers should not be a replacement for direct connections between government and academia. Deep knowledge of the research base can be lost in translation. While some brokers are neutral, many exist to advocate particular causes, which means they are likely to present evidence and expertise to make their own points.

'brokers' should not be a replacement for direct connections between government and academia

Senior officials in Whitehall care about improving their connections with academia and government's use of academic evidence and expertise in forming policy. In order to do this, they first need to tackle the obstacles that hamper success, including clarifying who has responsibility for improving these connections.

2. Obstacles to better use of evidence and expertise in policy

Our research found that, beyond the reasons why individual officials have difficulty accessing academia, there are also some underlying obstacles in departments that prevent officials from using academic evidence and expertise as well as they should. To date, initiatives driven by the centre of government have not fully managed to address these problems.

Responsibility

The most important obstacle is the absence of clear responsibility in departments for how officials engage with academics and the quality of evidence and expertise used in policy making. This is such a widespread and fundamental problem that the need to overcome it runs through all of our recommendations. The lack of a clear 'owner' for how departments work with universities is a key reason why more departments do not adopt the successful approaches we describe in case studies in the next chapter.

Responsibility for evidence and expertise in policy falls between different senior roles

Responsibility for how officials engage with academics and the quality of evidence and expertise in policy typically falls between four senior roles within departments:

- **Permanent secretaries**. The 2012 *Civil Service Reform Plan* said that permanent secretaries were 'accountable for the quality of the policy advice in their department and [must] be prepared to challenge policies which do not have a sound base in evidence or practice'. While permanent secretaries used to always be the minister's principal policy adviser, some have now taken on more of a chief executive role overseeing departmental operations. In practice, they have to delegate this responsibility.
- Chief scientific advisers (CSAs). CSAs should provide advice and challenge to ministers and policy officials and work with other senior leaders 'to ensure a robust and integrated evidence base underpins policy formulation, delivery and evaluation'. They also have responsibility for strategic connections with academia.
- **Departmental heads of the Policy Profession (HoPPs)**. Policy Profession reforms in 2012 stated that '[e]ach HoPP will be accountable for raising the standard of policy making and driving improvement activity within departments'.⁴
- **Chief analysts**. Chief analysts or directors of analysis oversee the groups of analysts in their department. They focus on how analysts are used as a resource in policy discussions and how to improve analysts' skills and capability, which includes their knowledge of academic research.

The scope of these roles varies between departments. In some departments – such as DWP and MHCLG – the chief analyst is also the CSA. In others, such as Defra and the Department for Business, Energy and Industrial Strategy (BEIS), the CSA is the head of the Science and Engineering Profession.

In theory, permanent secretaries should be responsible for working with the CSA, HoPP and chief analyst to ensure that policy is based on the best external evidence and expertise. One former permanent secretary explained how this should work: "I would say: 'I want those three in a room and we're going to talk about quality of evidence and they're going to work together to make it happen'."

While some departments are doing this, we found too many cases where this co-ordination does not happen – and there was confusion at more junior levels about who was responsible for what. For instance, some CSAs felt that they were responsible for the quality of evidence across whole departments, while policy officials thought that CSAs were confined to more technical scientific advice. In several departments, CSAs and HoPPs lack the resources to effectively take on responsibility for how officials access and use academic evidence and expertise.

The influence of chief scientific advisers varies significantly between departments

CSAs' power in departments varies significantly. Some are very well integrated into senior executive teams and wield significant internal and external influence. For example, the CSA in Defra is part of the senior team, chairs Defra's Group Evidence, Science and Analysis Committee (we describe Defra's committee system in more detail in Chapter 3) and sits on the board of two research councils. When the What Works Team reviewed DfID they found that the CSA's presence on committees provided an important incentive for policy officials to use evidence.⁷

Interviewees told us, however, that in other departments, CSAs are "much less integrated" or "marginal". While they might be consulted on specific questions, they can be excluded from strategic decisions and the day-to-day business of policy making. Some civil servants we spoke to told us that their CSAs were not visible and had very little influence over the work of their department. A report by the Campaign for Science and Engineering in 2017 found that only five out of 15 CSAs sit on departmental boards.

The resources that CSAs can command vary greatly. A review by the House of Lords found considerable differences in the hours that CSAs are contracted to work. While some are full time, many work two or three days a week while continuing a role in academia; others, as we have seen, combine the CSA role with a sizeable management role in the civil service (often as chief analyst). Interviewees across Whitehall and outside consistently highlighted Defra as a department where the CSA model works effectively. It has a CSA, who works four days a week, supported by a deputy CSA* and a staff of approximately 30 in the CSA office. Elsewhere, part-time CSAs are supported by one member of staff.

Departments should learn from others where the role is widely considered to be working well, such as Defra. Permanent secretaries should work with the new GCSA to

^{*} The review by the House of Lords noted that deputy CSAs, who are usually career civil servants, are often crucial to CSAs appointed from outside government gaining traction. See House of Lords Science and Technology Committee (2012) *The Role and Functions of Departmental Chief Scientific Advisers*, parliament.uk, retrieved 22 May 2018, https://publications.parliament.uk/pa/ld201012/ldselect/ldsctech/264/26402.htm



Departments should learn from others where the [CSA] role is widely considered to be working well, such as Defra

identify how the model can best be adapted to their department's needs.

We also found confusion about the extent of the CSA's responsibility for disciplines beyond core science, such as social sciences and arts and humanities. CSAs formally oversee science and engineering but successive GCSAs have stressed

that they should not be limited to this. Sir John Beddington, GCSA from 2007 to 2013, said that the absence of a high-level champion of social sciences was one of his few regrets at the end of his term.14 Sir Mark Walport, his successor, emphasised the role of social sciences and arts and humanities, but whether CSAs have any responsibility for brokering connections for these disciplines remains unclear.15

Interviewees told us that the CSA network is dominated by science. Someone familiar with the network described social science as an 'orphan science', even though several chief analysts who are nominally CSAs come from a social science background.16 It is notable that there has not been a single externally appointed CSA drawn from social sciences or humanities since Paul Wiles stepped down from the Home Office role in 2010.

Departments should bring CSAs in from more diverse backgrounds to address this imbalance. Permanent secretaries should also work with senior officials within the department to clarify responsibility for connections with different academic disciplines. And to support this, GO-Science should play a much wider role, championing knowledge, evidence and expertise from all disciplines, rather than focusing mainly on science and engineering.

Departmental heads of the Policy Profession lack resources

Twelve Actions to Professionalise Policy Making, a key civil service reform document published in 2013, set out two central actions – strengthening the roles and responsibilities of HoPPs and creating a Policy Profession Support Unit – which were viewed as 'critical enablers' of the other 10 actions, which included implementing policy standards and adopting 'open policymaking'. 17

It is difficult to get an exact sense of progress on all 12 actions because the independent annual assessments that were promised have not, to date, been published. Our interviewees suggested that there has been clear progress in some areas, but less in others.

HoPPs and the Policy Profession Support Unit have made significant progress with supporting professional development activities within departments. For example, a wide range of e-learning modules is now available to policy makers, and interviewees in several departments told us that HoPPs had played a strong role in encouraging policy officials to develop their skills. 18

In 2017, the profession published a good set of standards – organised around evidence, politics and delivery – which now form the basis of professional development. The 'evidence' section identifies useful competencies such as the ability to 'use networks to shortcut to the most relevant evidence' and 'make full use of your expert networks'.¹⁹

It should be noted that the Policy Profession has achieved this from a low base. In 2013, it was little developed as a profession. Only 52% of policy professionals knew who their HoPP was; in one department, only 26% $\rm did.^{20}$

However, there is still some way to go to make progress on 'raising the standard of policy making' through the profession. Officials told us that in many departments, the HoPP role is still quite marginal and restricted to Policy Profession skills rather than the quality of evidence used in policy making.²¹ As with some CSAs, we heard that HoPPs typically do not have the resources to tackle these larger challenges. Their roles have not been sufficiently strengthened to allow them to meaningfully take on responsibility for the quality of policy. HoPPs typically do Policy Profession activities on the side of a challenging day job, often as a director. The Ministry of Justice (MoJ) has appointed a deputy HoPP, but few other departments appear to have done this.

It is also difficult for HoPPs to have visibility of evidence use across their department. It is worth noting that DfID has started using the evidence transparency framework, cited above, internally to support policy development.²² The New Zealand Government has also adapted the framework for officials to use.²³ Using the framework makes it easier for senior officials to see how the department uses evidence and expertise in forming policy.

HoPPs need further support if they are to be accountable for policy standards and the quality of evidence and expertise used in policy making. Previous Institute for Government research noted that the Policy Profession Support Unit is small and underresourced, with just a handful of staff members, compared with other professions, which have teams of 25 to 30 people supporting professional reforms.²⁴ It also found that the unit lacks guaranteed long-term funding, which undermines long-term planning.²⁵

Other professions have developed approaches to tackling resourcing challenges. The Government Science and Engineering (GSE) Profession ran a consultation of its professional community when it was developing its profession strategy in 2016.²⁶ Many interviewees said they felt that departmental heads of the Science and Engineering Profession (HoSEPs) were not visible enough or able to provide strong enough leadership. In response, the profession has developed a network of 'champions' in departments that support HoSEPs.²⁷ Each HoSEP now has a specific job objective to deliver the GSE strategy within their department.

The Policy Profession and departments should assess how best to support HoPPs, learning from other professions. One possible model of ensuring that there is clear ownership would be for HoPPs to report annually to permanent secretaries on the quality of evidence used in policy across departments, drawing on the evidence transparency framework.

Senior teams set the culture for how departments use academia

It comes down to: 'Do your directors and your Grade 5s [deputy directors] think [engaging with academics] is important?'

When no one is clearly responsible for the use of external expertise in policy, it has an effect on the culture of the department. In many departments, policy officials do not feel it is their role to engage with academia. One interviewee, with experience in several departments, explained that the crucial difference was the behaviour of senior civil servants in setting the tone: "It comes down to:

'Do your directors and your Grade 5s [deputy directors] think [engaging with academics] is important?'."²⁸ When ministers and senior officials do not create this culture, there is little consequence if policy officials do not actively seek out external evidence and expertise. The 2012 *Civil Service Reform Plan*²⁹ mooted 'policy audits' to help combat this – and to learn lessons from policy implementations – but the recommendations relating to building an evidence-seeking culture have not been widely implemented.³⁰

Unclear lines of responsibility also prevent good links with universities and research funders. Departments are not benefiting as much as they should from partnerships to support secondments or communicate research priorities, as we set out below. This kind of engagement is often left up to individual policy teams or small units – rather than co-ordinated across the department – which often means that it does not happen.

It is difficult for individual academics and university officials to know who to approach in departments – whether to offer new research or set up a secondment – when there are no people or teams with this responsibility. A university official responsible for linking academics with departments across Whitehall told us that engaging with Defra and DH was much easier than engaging with other departments because they had teams responsible for co-ordinating the departments' collaboration with academics (the CSA office and the Strategy Unit respectively).³¹ In most of the departments we looked at, there was no single team responsible.

Finally, lack of ownership makes it difficult for senior officials to monitor progress and drive improvements. Most departments do not have a clear idea of how well they are drawing on evidence and expertise in forming policy. Departments also have little sense of what approaches work when trying to improve evidence use. For instance, very few collect data centrally on the number of secondments that they use. We did not find any departments that collected feedback, from officials and participants, on how well advisory committees are working. Responsibility for such monitoring needs to be clear.

 Recommendation 1: Permanent secretaries must work with their chief scientific advisers, chief analysts and departmental heads of the Policy Profession to establish clear responsibility within departments for how officials engage with academics and for the quality of the evidence and expertise used in policy.

The divide between policy and analysis

Another common problem we found was in how departments were getting their analytical and policy professions to work together. Analysts usually have strong connections to academia and a good understanding of academic methods; they consider being on top of academic evidence and expertise as central to their role. Analysts act as intermediaries, informing policy making on the basis of evidence and linking policy officials to relevant experts. But we heard that in many departments, analysts are not as well integrated into policy making as they need to be. This means that they are not able to contribute to policy development as much as they should.

Interviewees did provide examples of analysts and policy teams working well together. For instance they highlighted DfE's Children and Young People's Mental Health policy programme as an example of evidence- and analysis-led policy development. But when we asked about what was usual across departments, interviewees described problems. One senior analyst told us there was "quite a disconnect" between analysis and policy making in their department, adding that many policy officials still have not "got to grips with what analysts do". The workshop held at the Institute for Government in 2017, participants agreed that there was a lot of work to be done across Whitehall to make the relationship between policy and analysis more seamless.

This view is supported by ethnographic research previously conducted in DH. Interviewees for that research said that there was a "historical split between analysts and policy within the Department... it's been kind of viewed as a 'them and us'". ³⁴ Senior DH analysts said that they were often not 'in the loop' and did not have 'a seat at the top table'. ³⁵ At more junior levels, DH analysts were frequently excluded from discussions about policy development. ³⁶

In our research, a senior analyst with experience in several departments told us that far too often analysts are not "in the room" when high-level decisions are made.³⁷ When this happens, they are not able to use their understanding of the evidence base to influence policy development. Instead, they are asked to find evidence for, or assess the impact of, decisions that have already been made. One analyst summed this up by saying that it was very difficult to contribute to policy making proactively.³⁸

The House of Commons Select Committees on Education, on Science and Technology, on Health and on Women and Equalities have conducted 'evidence check' exercises, which highlight this pattern.³⁹ The model is simple: a department provides a short statement setting out the evidence behind a policy and committees then invite submissions from academia, expert organisations and citizens to test the strength of the department's evidence. Several evidence checks have revealed a disjuncture between policies and the departmental analysis cited as supporting them. These exercises have brought improvements. For instance, DfE has changed its policy so that parents of summer-born children have the option of delaying when their children join school reception class, after an evidence check revealed that the previous policy,

^{* &#}x27;Confirmation bias' – searching for evidence that confirms pre-existing beliefs – is a wider challenge for policy making that we have discussed in Hallsworth M, with Parker S and Rutter J (2011) *Policy Making in the Real World*, Institute for Government, retrieved 3 December 2017, www.instituteforgovernment.org.uk/publications/policy-making-real-world

mandating that summer-born children start school in September, was based on weak evidence.⁴⁰

Different models affect how analysts and policy officials work together

There are different models of how analysts work with policy teams across Whitehall, which affect how academic research is brought into the policy process:

- **separate units** analysts and policy officials work in separate teams (Home Office)
- **embedded** analysts work in policy teams (DWP)
- **mixed** some analysts work in policy teams but a central pool works separately, focusing on strategic analytic work (DfE).

There is no 'one size fits all' model. There are trade-offs with each approach:

- Separate units can lead to analysts being shut out of policy discussions unless specific features are in place. Senior analysts need to be involved on policy discussions with ministers, special advisers and senior officials if they are to advise them about where evidence can inform policy making and make sure that evidence is available in a timely fashion.
- Embedding analysts in policy teams helps to ensure that policy officials include analysts' evidence, but analysts in these teams need good management. One director of analysis told us that analysts managed by policy officials are often asked to do normal policy work and not given tasks that utilise their skills.⁴¹
- In some departments, all analysts are embedded. But there is a good case for retaining at least a small central analytical capacity for strategic projects. As with the case of children and young people's mental health policy in the DfE, this can allow analysts to identify priority areas where developing evidence can help lead the policy agenda.

Making the model work is one part of ensuring that policy officials use the expertise that analysts have access to in forming policy. But analysts and policy officials also need skills and reciprocal understanding to work well together.

Analysts need to be good at communicating evidence to policy officials

Analysts need to have a good understanding of policy making and how to communicate with policy makers to be able to contribute evidence and expertise effectively. Analysts sometimes work in silos, away from the policy teams who are preparing material for ministers. Chief analysts and the heads of their profession recognise that analysts need to be able to 'sell' their work to policy officials and communicate their ideas in ways that policy officials understand.⁴² Yet on both sides we heard the view that "we speak two languages".⁴³ A senior economist told us that the heads of profession in the Government Economic Service are constantly thinking about how to get economists to be more policy savvy.⁴⁴ The Government Social Research Profession has also stressed the importance of understanding policy making better.⁴⁵

Strategies for reform published by both professions also identify improving analysts' communication skills as a key priority.⁴⁶

Policy officials need to be good at using analysis

Policy officials need to have a good understanding of what analysts do and how it relates to policy making in order for departments to use evidence well. Our interviews across departments suggest that this remains a challenge.⁴⁷

There are some existing schemes to help policy officials understand analytic work better. For instance, the Government Economic Service has run 'economics for non-economists', a two-day training course for policy officials covering the basics, which is extremely popular. The Policy Profession and the London School of Economics (LSE) have developed an Executive Master's programme for senior civil servants, which includes a week on using evidence.

These initiatives are excellent, but interviewees said that they need to be bigger. Policy officials at all levels – not just the senior civil service – need to be good consumers of analysis. One deputy director said: "I think every policy official should be forced to go either on [economics for non-economists] or the LSE week-long session... I think that level of investment would repay itself to the country a million times over."⁴⁸

In addition, they need to cover a wider range of disciplinary approaches. Most of the schemes we were told about focus on economics. Social researchers in DfE have set up a programme to educate policy officials about social research methods, but this remains very small.⁴⁹ Compared with major efforts to improve policy officials' understanding of other professional 'functions' across the civil service, such as the recently developed Commercial, Finance and Human Resources Professions, efforts to improve links with analysis are low-level.

Senior officials are aware of these challenges. For the permanent secretary in one department we looked at, bridging the gap between policy and analysis is a key priority. Another department, the Ministry of Justice, has created a new role, 'Head of Analytical Skills in the Policy Profession', to co-ordinate efforts to develop the skills of policy officials and improve the connection between analysis and policy in the department. Across Whitehall, permanent secretaries, HoPPs and chief analysts need to invest attention and resources to ensure that analysis is effectively integrated into policy making.

Staff turnover and institutional memory

A final challenge in terms of the use of evidence and expertise in policy that we found across departments was a limited ability to maintain connections with academia and retain knowledge because of high staff turnover and weak institutional memory. These are major issues that need long-term solutions. But they are having a significant impact on departments' ability to use external evidence and expertise effectively. And Brexit is increasing turnover in departments, adding extra pressure. Again, senior teams in departments need to be clearly responsible for tackling these issues.

High staff churn makes it hard for officials to maintain connections with academics

Staff turnover is a persistent problem in Whitehall.* On average, 9% of staff leave each department every year; in the Department for Exiting the European Union and the Cabinet Office, more than a third do.⁵² This calculation does not include considerable internal turnover between roles within departments, often with officials moving to completely new policy areas, for which data is not published. According to the 2017 Civil Service People Survey, more than 20% of staff across the civil service expect to leave their organisation within the next year.⁵³

High staff turnover creates challenges for the way in which departments use evidence and expertise. Senior policy officials and analysts told us that their teams are usually staffed by people relatively new to their policy area because officials move on so quickly. For officials therefore need to get up to speed very quickly. They have to be able to understand the key issues in their area, identify the main stakeholders, and have some grasp of what the evidence says, who the relevant experts are and what previous policy has been.

But in most departments, it is hard for policy officials to do this. Inductions for new arrivals are often limited; institutional memory of past policy or evidence is poor; and junior policy officials have limited access to experts previously used by other department officials.

High staff turnover also creates problems for academics trying to engage with departments. They frequently tell us that it is very difficult to find relevant policy officials – and when they manage to do so, these officials move on quickly. In addition, officials often do not pass on the relationships they have built up with academics to colleagues when they leave their role. Departments should therefore establish a procedure to ensure that this happens, for instance a template for handing over contacts.

Weak institutional memory prevents officials from accessing evidence used in past policy

Weak institutional memory means that policy officials have limited ability to draw on the evidence and expertise used in past policy. A 2015 review of government records concluded that the transition from paper to email and electronic documents had 'undermined the rigour of information management across much of government'.⁵⁵ Responding to the review, the Cabinet Office published *Better Information for Better Government* in 2017, which said that most of the information accumulated in the past 15 to 20 years is 'poorly organised, scattered across different systems and almost impossible to search effectively'.⁵⁶

This is true of academic work that government commissions. Much of the research that government pays for is not stored properly, which makes it impossible for officials to access.⁵⁷ Many policy reviews commissioned by ministers are similarly lost.⁵⁸

^{*} In the summer of 2018, the Institute for Government will begin a project looking at policy churn and staff turnover in the civil service.

Recent Institute for Government research has found that weak institutional memory makes Whitehall prone to the constant reinvention of policy.⁵⁹ Policy Profession standards say that policy officials should be able to 'identify and explain parallels between previous unsuccessful attempts to solve [a] policy problem, and why they failed'.⁶⁰ In practice, civil servants often cannot access previous work to find out whether policy proposals had been investigated or rejected and why. Geoff Mulgan, Chief Executive of Nesta, a charitable foundation, recently compared current efforts to

tackle homelessness with extensive work done by officials 10 years ago, arguing that "there is very little sign that either government or opposition is even dimly aware of what was done".61 In 2017, the Government estimated that "wasted effort recreating old work" costs £500 million a year.62

... 'wasted effort recreating old work' costs £500 million a year

The civil service is trying to address these problems. Following the review, a team was set up in the Cabinet Office to take forward its recommendations, which included renewing efforts to improve compliance.⁶³ It is looking at:

- · how to make existing information searchable
- how to develop new standards, guidance and naming conventions for future information
- the platforms and funding needed for future systems.

There are also other central initiatives, organised through the Government Knowledge and Information Management Profession and the Policy Profession, to improve knowledge sharing.⁶⁴

But these initiatives have not led to major changes in several of the departments we spoke to. One deputy director summed up the view we heard in many departments: "There's always something going on about knowledge and information management but they don't have the most effect. Because we're just all very busy, and the amount of my time that I can spend thinking about the file structure on a shared drive is quite minimal."⁶⁵

The civil service needs to make a renewed effort to break out of this cycle. Permanent secretaries and senior officials need to find ways to give their staff an incentive to change their behaviour, rather than trying to enforce compliance with any new 'file structure'. This is a big challenge that will require long-term thinking.

Senior officials also need to reduce the impact of high turnover and poor institutional memory on the use of evidence and expertise in current policy making. Clear lines of responsibility should help with this. For instance, there should be someone who is responsible for ensuring that new arrivals are provided with an induction and have access to relevant experts (we describe how departments can do this in the next chapter).

There should also be a clear 'owner', responsible for ensuring that, as much as possible, officials can access evidence used in previous policy. Improving knowledge management in the digital era is a long-term challenge. But the Treasury's approach to improving institutional memory – by investing in historical training for officials and giving academics access to the department's archives – shows that there are steps that senior leaders can take.

Broadly, senior leaders should ensure that officials have strong connections with academics with long expertise in departmental policy areas. The seven ways of improving engagement that we set out in the next chapter will help with this.

3. Ways to improve engagement between government and academia

There are opportunities for government to learn much more from what it is already doing. Departments are trying out many ways of improving engagement – and having some success. Unfortunately, while there are, as one interviewee put it, "a thousand flowers blooming", there is little co-ordinated understanding of what works. The essential next step is for departments to learn from and replicate successful initiatives.

In our interviews across 10 departments, we looked for different ways in which officials access and use academic evidence and expertise in forming policy, for which ministers and officials responsible. Many exist, but we focused on those that:

- · make engaging with academics easier for civil servants
- help civil servants to find relevant academic experts and academic work quickly
- provide valuable evidence and expertise that have an impact on policy
- help build connections with academia into departmental processes
- help tackle contentious policy issues or fill evidence gaps.

This led us to focus on seven areas:

- **expert networks** the web of contacts that officials have access to for advice, evidence or further contacts, including institutional networks (that departments or universities create and are accessible to officials) and personal networks
- **advisory committees** ad hoc or formal forums of academics and other experts that provide advice to officials and ministers
- policy reviews reviews of policy conducted by experts, including academics, appointed by ministers outside the official appointments process, and reviews conducted internally
- secondments permanent or part-time positions in government departments for PhD students or more senior academics
- commissioned research portals or contracts that departments use to commission research

^{*} This is not an exhaustive list but covers the most important ways in which government can improve how it engages with academia. Other examples of approaches developed outside of Whitehall include conferences and academic blogs.

- **statements of research needs** statements that departments use to communicate to academics and funders the priority questions they want answered through new or existing research
- **research and evidence centres** independent institutions, outside of government and academia, where academics and other experts work on policy problems, synthesise existing evidence and carry out new research to help fill evidence gaps.

These ways of improving engagement have direct benefits if they influence how a specific policy is developed. But they also create wider benefits for departments by allowing individual policy officials to build stronger relationships with academics and enabling departments to build stronger relationships with universities and research funders. In this chapter, we offer examples of best practice for each of the seven areas, which are summarised in Table 1. Departments should learn from and replicate these.

Table 1: Departments' engagement with academia

Area	Use across government	Example of best practice
Expert networks	Most departments send some staff to external networking organisations, mainly the Centre for Science and Policy (CSaP) at the University of Cambridge. Only one department we looked at has developed its own expert network. Analysts are typically well supported to build networks but policy officials less so.	Cambridge – Centre for Science and Policy (external)
		Defra – expert network
Advisory committees	The use of advisory committees is mixed and they have variable influence across departments. Some departments have more than 20 committees and draw on them extensively in making policy; others have very few. Committees are concentrated in science and economic policy areas.	Defra – committee network
		Home Office – Migration Advisory Committee
Policy reviews	Policy reviews have been used increasingly over the past two decades. They are concentrated in some departments and have limited transparency.	Foresight programme
		The Pensions Commission
Secondments	The number of secondments across government is growing but remains small and concentrated in pockets. Most departments still do not have their own secondment scheme. Six departments have accepted placements brokered by the Cabinet Office.	Cabinet Office – Open Innovation Team
		Defra – PhD placement scheme
Commissioned research	Some departments have developed their own models or use standing contracts, but most still procure research through public procurement routes.	DfE – Analytic Associate Pool
Statements of research needs	Thirteen departments have published their 'areas of research interest'. Some have used these as the basis for wider engagement with the research system.	Department for Transport
Research and evidence centres	Research and evidence centres cover a very wide range of bodies. Some departments have close relationships with independent evidence institutions. Eight departments have sponsored a what works centre.	Policy research units
evidence centres		What works centres

Expert networks

"One of the frequent challenges for the policy official is: 'Who do I ring up? Who is the world expert?' If you are lucky enough to have a great chief scientist, you can ask them, but if you are an average policy official, knowing who to talk to is the single most important thing."

Sir Chris Wormald, head of the Policy Profession¹

Officials rely on the networks they have access to – institutional and personal – to find academics to talk to for advice, to find evidence or to commission research. The strength of these networks is essential to how officials engage with academia. High staff turnover in the civil service makes access to networks even more important

because officials need to be able to get up to speed with relevant expertise in new areas very quickly.

Building institutional networks

Departments need to think about how they build institutional networks that enable officials at all levels, from those who have just joined up to senior civil servants, to access academic expertise.

Many of the policy and analysis teams we spoke to keep a 'stakeholder spreadsheet' – a list of useful contacts from academia, business, civil society, think tanks and other institutions that are relevant to a project or policy area. But these are typically maintained at a project level and are not shared more widely, and we were told that the process for maintaining them was typically "unsystematic" or "ad hoc".²

Very few departments we spoke to have networks that are accessible to a wider group of civil servants within the department. Defra's is the most developed. It has created an expert network of 150 academics with expertise across Defra policy areas.³ The list of experts is accessible to all core Defra staff and the network was set up explicitly to provide staff with people to call up for advice, or to provide further routes into academia. Between the vote to leave the European Union in June 2016 and March 2018, Defra's headcount increased by 65%.⁴ Officials told us this meant it had "lots of new people coming in to work on Brexit without an established academic network", which was a key reason for setting up the open-access network.⁵

Another model available to departments is funding externally managed networks. Defra previously funded the Sustainable Development Research Network, which was set up in 2001 to strengthen links between policy officials and academics interested in sustainable development. The network is co-ordinated by the Policy Studies Institute, a think tank now based at the University of Westminster, and continues to act as a hub for events, commissioning calls, resources and case studies.

The Cabinet Office is also developing proposals for more institutional networks, such as an Economic Policy Network to broker connections between academics and officials in the Treasury and other departments.⁸ These networks would aim to have academic experts security-cleared and ready to provide input when policy officials need it, helping to tackle the timing issue that is often a barrier.

But most departments have not set up networks. Setting up and managing a network takes up time and departmental resources. When a network is managed by a department, staff need to keep information about academics (such as their contact details, roles, areas of expertise and previous interactions with the department) updated, and establish rules for using the network.

Several interviewees said that this initial set-up cost had prevented them from establishing networks. But departments should invest to save. The potential benefits of establishing networks – allowing more officials to find relevant experts more quickly and reducing some of the impact of high turnover – far outweigh the cost.

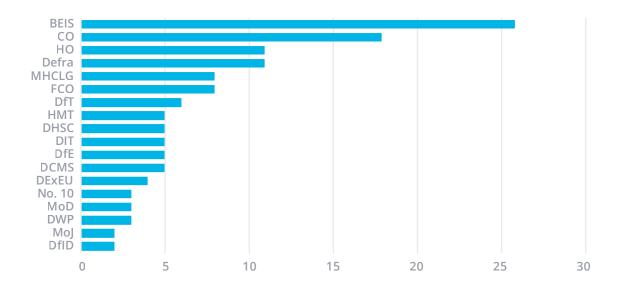
• Recommendation 2: Every department should create an 'expert network' to enable officials to tap into academic expertise. Responsibility for establishing such a network should lie with the chief scientific adviser and the head of the analytic professions, but with the active involvement of the departmental head of the Policy Profession to make sure that the network is used by policy professionals as well.

Personal networks

Beyond institutional networks, civil servants rely on their personal networks. Senior civil servants identify 'previous connections' as one of the principal channels for finding academics⁹ and this was borne out in our interviews. Personal networks give policy officials fast access to academics they trust to provide useful expertise, which is extremely valuable given capacity constraints. But if officials rely too much on them and are not encouraged to broaden their connections, it can lead to dominance by the 'usual suspects'.

Policy officials at all levels need to be supported to develop effective personal networks in academia. Several initiatives exist to help officials do this, but they are mostly available to more senior civil servants. The 'Policy Fellowship' at the Centre for Science and Policy (CSaP) at the University of Cambridge is by far the most advanced. It provides senior civil servants with intensive programmes of meetings with academics, from Cambridge as well as other universities, to discuss relevant questions. Since it was set up in 2011, almost 150 senior officials from departments and agencies have completed the fellowship, with some departments using the programme heavily (see Figure 1). Following the programme's success, CSaP has also set up a 'Junior Policy Fellow' programme.

Figure 1: Number of Centre for Science and Policy Policy Fellowships by government department, 2011 to April 2018



Source: Centre for Science and Policy (CSaP) admissions data provided to the Institute for Government.

The Policy Profession has worked with the London School of Economics to develop an Executive Master's Programme for senior civil servants, which includes a focus on

networking.¹⁰ And the Blavatnik School of Government at the University of Oxford has just set up a fellowship to strengthen links between permanent secretaries and public policy researchers.¹¹

Departments should establish further partnerships like these with universities and research institutions and make them available to policy officials at more junior levels. Analytical teams we spoke to typically provide networking opportunities for junior officials. For instance, an analyst in BEIS told us that every year they take their whole team for an away-day at a research centre, where they can meet and interact with academics.¹² Most policy teams we spoke to did not.

Policy teams could use partnerships with universities to establish 'induction' programmes for policy officials fresh to a policy area. An induction in the evidence and expertise around a policy would mitigate some of the impacts of high staff turnover by helping officials to get up to speed quickly and begin to develop their own networks.

Departments should look to establish partnerships with universities beyond London, Oxford and Cambridge. This would help Whitehall to increase the diversity of academic advice it receives. There are now more than 30 university policy institutes – hubs for interdisciplinary work focused on public policy – around the UK.¹³ These would be a good place for many departments to start.

A further way for departments to strengthen links with a wider range of universities would be to instigate regular networking events with universities around the country. DWP has been doing this by staging 'roadshows' – events for discussing policy and research – at different universities, to enable officials to build networks with universities. Parliament has also developed a strong outreach programme of lectures, workshops and events, which universities (and other organisations) can request. Departments should learn from these examples.

Beyond opportunities such as these, senior officials should encourage more junior staff to build networks. Senior analysts told us that knowing the key academics in a policy area was an important part of understanding the evidence base for more junior analysts. ¹⁴ In one department the analytic community had developed a 'Practical Guide for External Engagement', which gave analysts tips on how to find and work with academics. ¹⁵ In the Scottish Government, the analytical community has similarly developed guidance. The Treasury even awards a cup to the team that has best developed its stakeholder network, including with academics. ¹⁶

But not all officials we spoke to were given support for external engagement. Some departments had more closed cultures. While the importance of building networks is recognised in the Policy Profession standards, many policy teams said that building networks was sidelined due to other pressures.¹⁷ Encouraging team members to build

up networks is not always recognised as part of senior policy officials' roles. The Policy Profession should ensure that having academic networks is considered part of policy officials' stewardship of a policy area. While facilitating networks should also be part of the CSA's role, in some departments we saw, CSAs were marginal and so were not able to do this effectively.

 Recommendation 3: Departments should support policy officials to build academic networks by creating partnerships with universities and developing induction programmes for staff new to a policy area. This should be overseen by the chief scientific adviser but with support from the departmental head of the Policy Profession.

Advisory committees

The next area we looked at was advisory committees, councils and panels. Government appoints experts – from academia, business, industry, the third sector or other backgrounds – to be on standing or ad hoc committees that provide advice to officials. Committees' functions vary: they scrutinise departmental research, policy and processes; they provide strategic input or challenge; and they give expert advice on specific areas. We focused on those with a set membership that meet reasonably often because they have a greater influence on departmental policy making. We found that the use of committees varies between departments: in some they are integrated into policy making; in others they remain quite peripheral.

There are many types of advisory committee

The key types of committee are as follows:

• Advisory non-departmental public bodies (NDPBs) are committees that are sponsored by a department and provide it with expert advice. Most scientific advisory committees and councils – of which there are over 70 – are advisory NDPBs, but some are classified as expert advisory committees. Scientific advisory committees advise on specific topics, such as drug misuse – the Advisory Committee on the Misuse of Drugs (ACMD). Scientific advisory councils give more strategic advice across a range of issues, such as Defra's Science Advisory Council. Most advisory NDPBs are set up without legislation and with no significant budget. But some, such as the ACMD, have a statutory footing; and some have a permanent secretariat and a research budget, such as the Migration Advisory Committee (MAC).

^{*} In Twelve Actions to Professionalise Policy Making, Action 9 called on departmental HoPPs and human resources directors to transform the development of policy Grades 7 to senior civil service Grade 1 to include a greater focus on developing deeper subject expertise and wider experience. Action 11 focused on the need to capture and share this knowledge as staff moved around. Although implied, neither spoke directly to developing and maintaining networks, let alone academic networks. See Policy Profession (2013) Twelve Actions to Professionalise Policy Making, Policy Profession, https://civilservicelearning.civilservice.gov.uk/sites/default/files/twelve_actions_report_web_accessible.pdf

- Expert advisory committees are permanent committees that often perform a similar role to advisory NDPBs but do not have a legal existence, such as the Air Quality Advisory Group and the Expert Advisory Group on AIDS.*
- **Cross-cutting committees** are committees that work across government departments, such as the Trial Advice Panel, or provide advice across departmental areas, such as the Council for Science and Technology.
- Ad hoc committees and academic panels are committees that do not have a formal
 or permanent role but advise on or quality-assure internal research. For example,
 MHCLG is setting up an academic advisory panel to advise officials on
 homelessness and rough sleeping.

Some departments use committees much more than others – and the influence of committees varies

Some departments use advisory committees to inform a large amount of their policy work. Defra has a network of 28 committees managed by officials across the department. These feed into the work of its Science Advisory Council, which is chaired by an independent academic and provides overarching advice on science policy and strategy across the department. The Home Office has seven advisory NDPBs, providing advice on issues such as the misuse of drugs, migration and policing.²¹ BEIS uses committees to look at industrial development, energy spending and fuel poverty; and it also houses the Low Pay Commission.²²

In these three departments, and others that use committees well, committees often have a direct line into senior management and can be highly influential. Defra is a good example. Defra's CSA chairs the Group Evidence Science and Analysis Committee (GESAC), a sub-committee of the Defra Executive Committee, which integrates all of the internal science, evidence and analysis (including statistics, economics and social science) across the Defra Group, including its arm's-length bodies such as the Environment Agency and Natural England. When combined with the advisory committee structure, this means that the CSA sits at the centre of a large committee system and uses it to draw on an extensive academic network and feed into decision making on Defra's Executive Committee. This system, including the Science Advisory Council, provided significant input into the 25 Year Environment Plan, which government sees as a key plank in its future policy.²³ It also gives Defra significant convening power. In 2015, Defra needed expert policy advice to deal with high levels of cryptosporidium – a microbial parasite – in water supplies in Lancashire, which affected more than 300,000 households.²⁴ Through its network, the department was able to bring experts together quickly to help inform its policy response.²⁵

Some departments have identified gaps in expertise or co-ordination where committees are needed. For instance, BEIS set up the Energy Innovation Board, a new

^{*} The Institute for Government previously recommended that advisory NDPBs should be treated as expert advisory committees, without a legal footing, as part of a simpler taxonomy for arm's-length bodies. This would better reflect their role and prevent them from being included in targets to reduce the number of quangos. See Gash T, with Magee I Sir, Rutter J and Smith N (2010) Read Before Burning: Arm's length government for a new administration, Institute for Government, www.instituteforgovernment.org.uk/publications/read-burning

committee bringing together budget holders responsible for energy research across departments and research councils, because it recognised that its predecessor, the Low Carbon Coordination Group, was ineffective because it lacked senior buy-in. Central departments have also started to identify cross-government gaps. The Cabinet Office created the Trial Advice Panel because government lacked expertise in conducting experimental trials.²⁶

However, other departments use standing committees much less effectively. Some have very few formal advisory committees and interviewees told us that committees are not integrated into departmental work, or have become talking shops due to lack of senior buy-in, and therefore do not have much impact on policy.*27

Committees are also much more established in some disciplines than in others. There is a very strong network of scientific policy committees and increasingly there are committees providing technical advice in economic policy areas, such as the Low Pay Commission and the Migration Advisory Committee. However, we found fewer committees drawing on other disciplines, for instance providing historical expertise on past policy.

Giving committees greater powers can help to tackle difficult policy areas

In a few cases, departments use committees that have a secretariat, a degree of independence from government and extra powers, such as a statutory role and the ability to make direct recommendations to ministers.**

Giving committees greater powers in this way can be very effective. The idea is that they help to depoliticise evidence by analysing it at a stage removed from the policy process. Committees can use these powers to contribute to how policy evolves in areas that require continuous attention – as the Migration Advisory Committee shows.

^{*} Poor management is not confined to academic groups. A review of the effectiveness of non-executive directors on Whitehall boards found that many non-executive directors are similarly frustrated and feel that boards do not work effectively because departments do not manage them well. See Hazell R, Cogbill A, Owen D, Webber H and Chebib L (2018) Critical Friends? The role of non executives on Whitehall boards, University College London, retrieved 2 March 2018, www.ucl.ac.uk/constitution-unit/publications/tabs/unit-publications/178_-_Critical_Friends__The_Role_of_Non_Executives_on_Whitehall_Boards

^{**} Policy reviews and inquiries can serve similar functions but are not permanent. We describe policy reviews in the next section. For inquiries, see Norris E and Shepheard M (2017) How Public Inquiries Can Lead to Change, Institute for Government, www.instituteforgovernment.org.uk/publications/how-public-inquiries-can-lead-change

Case study: The Migration Advisory Committee

The Migration Advisory Committee (MAC) was set up in 2007. It is an NDPB sponsored by the Home Office that provides independent advice to government on immigration policy. The committee is composed of six leading academics and its programme of work is set by the Home Secretary. In its first nine years it was chaired by Sir David Metcalf, an eminent academic who was previously a founding member of the Low Pay Commission, and it is now chaired by Professor Alan Manning. The committee directs the MAC Secretariat – a permanent staff of around 15 civil servants, mostly economists, in the Home Office – and has a budget to commission its own research. It has taken steps to ensure its independence, for instance it retains full publishing rights.

The MAC has been highly influential on government policy – almost all of the recommendations it has made have been taken forward by government. For example, the committee has carried out numerous reviews of the Shortage Occupation List (which records occupations for which there are not enough resident workers to fill vacancies), which have led to changes of status for various occupations including nurses and actuaries. In 2011, the Government commissioned the MAC to look at the income requirement for the family migration route for non-European Economic Area (EEA) family members. The MAC said that the threshold was too low and recommended a higher threshold, which the Government implemented in 2012. In 2015, the-then Prime Minister David Cameron commissioned the MAC to carry out two reviews of Tier 2 – the main route for non-EEA nationals to apply to work in the UK. In response, the Government made changes to salary thresholds for experienced professionals, visas for students and immigration skills charges.

Having won trust and credibility within the department for handling difficult issues well, the MAC has been able to contribute to wider questions that are contentious for government, such as the impact of international students on migration.

The Low Pay Commission similarly demonstrates how rigorous academic evidence and expertise can be used to shape the evolution of a crucial policy area. But its recent history also shows how difficult it is to retain political support for powerful expert bodies over the long term.

Case study: The Low Pay Commission

The Low Pay Commission (LPC) was set up after the 1997 General Election to advise government on the level of the National Minimum Wage. The idea of a National Minimum Wage was highly contentious at the time. While there was growing academic evidence in support of it, in both the UK and the United States, the proposal was strongly opposed by the Conservatives and much of the business community.

The LPC was initially chaired by Professor George Bain, President and Vice-chancellor of Queen's University Belfast. Its members were three representatives each of employers and employees respectively and two 'independents', both also academics. It presented its first report in June 1998, which drew on 580 evidence submissions and made recommendations about how the National Minimum Wage should be introduced. Margaret Beckett, then president of the Board of Trade, said that the strength of the report was "crucial to how easy it was or was not to convince everybody in government... that this was a policy that we could pursue as well as should pursue". 29

The National Minimum Wage was established in the National Minimum Wage Act 1998, which also gave the LPC a statutory role: to continue to advise government on the minimum wage in future. Since then the LPC has issued annual reports, influencing adjustments to rates and the introduction of a separate rate for 16- to 17-year-olds and apprentices.

The LPC continues to advise on the National Minimum Wage two decades later. However, Chancellor George Osborne introduced a National Living Wage in the 2015 Budget without consulting LPC research or advice, which has arguably reduced its power considerably.³⁰

The MAC and the LPC both demonstrate how committees that are given powers – such as staff, resources and a legal remit – can be effective in shaping long-term policy. They have had notable successes in depoliticising evidence and building consensus (although not fully – for instance there is a healthy critique of MAC methodology and the policy it informs in both academia and Parliament*). Nonetheless, by becoming trusted institutions they established the role of external expertise in policy making and proved sustainable through the change of government in 2010.

^{*} Portes' analysis of a 2012 MAC study highlights the different ways in which the underlying data was used to end up with very different headline figures. See Portes J (2012) 'British jobs and foreign workers: today's reports on immigration and unemployment', blog, National Institute for Economic and Social Research, 10 January, retrieved 12 April 2018, www.niesr.ac.uk/blog/british-jobs-and-foreign-workers-todays-reports-immigration-and-unemployment#.UxZRKIViJbF. In January 2018, the Home Affairs Select Committee called for the MAC to be strengthened further to increase confidence and consensus about immigration evidence. See Home Affairs Select Committee, 'Reform and public involvement needed to restore confidence in immigration system', Parliament.UK, 15 January, retrieved 15 April 2018, www.parliament.uk/business/committees/committees-a-z/commons-select/home-affairs-committee/news-parliament-2017/immigration-policy-consensus-report-published-17-19

However, as the LPC's recent experience shows, it is hard to maintain political support for expert bodies over long periods, even when they are effective. Chairs need to have a good relationship with the minister responsible. The story of the Advisory Council on the Misuse of Drugs further shows how expert advice can clash with government's political priorities.

Case study: The Advisory Council on the Misuse of Drugs

The Advisory Council on the Misuse of Drugs (ACMD) – which is made up of around 20 academics, medical practitioners and drugs policy experts – assesses the harms and risks of drugs and advises the Home Office on drugs classification. In 2008, the ACMD published a report that reviewed the harms of ecstasy and recommended that the Government should downgrade it from a Class A to a Class B drug.³¹ Jacqui Smith, Home Secretary at the time, ignored the advice (which went against government policy). Shortly before the publication of the report, Professor David Nutt, chair of the ACMD, published a separate research paper, which said that ecstasy was 'no more dangerous than horse riding', which was widely reported in the media.³² Nutt went on to publish a paper in late 2009, which said that ecstasy was less harmful than tobacco, according to scientific research. He was sacked the following day by Alan Johnson,³³ Smith's successor, who said: "he cannot be both a government adviser and a campaigner against government policy", arguing that Nutt had crossed the line from science into policy and was damaging government efforts to give clear messages about the harms of drugs.³⁴ Nutt responded that he did not know where the line between science and policy was.³⁵

The case of the ACMD has lessons about how government and academia interact. It shows that good engagement is usually built on shared understanding about the role of evidence and expertise in policy. It also shows that academics on committees need to be able to manage the politics as well as the evidence. As one interviewee put it, chairs must "walk a tightrope": protecting their committee's independence and ability to inform and critique government policy, while also building strong relationships with ministers and officials to make it likely that recommendations are taken forward. This is also a challenge for officials and ministers – to choose to establish a forum that might question their approach.

Currently this empowered model is used relatively infrequently in Whitehall in comparison to systems abroad. In Germany, a powerful system of permanent expert commissions – funded by ministries and covering areas such as foreign affairs, family matters and migration – has been a key part of the policy making process for decades.³⁷

Departments should share lessons about how to use committees effectively

While expert advisory bodies are used well in some departments, others should use them more often and more effectively. Whitehall has taken some steps to share lessons. In 2010, GO-Science produced a report on sharing best practice across scientific advisory committees, including induction processes and guidance about the relationship between committees and departments.³⁸

But departments should do much more to identify where committees could be used more widely. MHCLG set up an independent expert advisory group on fire and building safety in late 2017 after recognising a gap in expert advice following the Grenfell Tower tragedy.³⁹ Departments should be doing this proactively.

 Recommendation 4: Permanent secretaries should work with ministers and senior officials, including the chief scientific adviser, to assess whether their department faces gaps in the provision of expert advice, where advisory bodies should be established.

Beyond this, departments should do more to learn from others that use committees well. While GO-Science's report contains useful lessons about how committees should be managed, senior departmental leaders need to share lessons about how to integrate them into departmental policy making. Defra emerged from our interviews as a widely recognised example of best practice for how committees are integrated into policy making. Other departments should seek to learn from it.

Policy reviews

As well as officials gaining advice through committees, ministers appoint academics to lead or contribute to policy reviews – studies of government policy led by an external expert. As our case study of the Pensions Commission (see below) shows, policy reviews can help government to achieve major one-off policy changes, drawing on academic evidence, and are a particularly effective tool when political support and consensus need to be established. However, their use is concentrated in a small number of departments, there is a lack of transparency about how they work and there is poor institutional memory in re-using the findings of previously commissioned reviews. As well as exploring these matters in this section, we also briefly discuss the role of the Foresight programme, an internal mechanism for looking at future policy problems.

The use of policy reviews is growing but is concentrated in some departments

The use of policy reviews chaired by experts from outside government – which range from a brief study of a problem to lengthy programmes of work – has grown significantly in the past two decades. Between 1997 and 2012, ministers appointed more than 260 outsiders – from academia, business and elsewhere – to advise on policy development or implementation. ⁴⁰ Not all of these completed a full policy review: some held a standing advisory position, some headed up units, and not all led to a published report. But even with these caveats, there has been a notable rise in the commissioning of reviews by an outside expert. Such appointments are selected by ministers and do not go through a formal appointment process. ⁴¹ Recent examples include high-profile reviews of artificial intelligence and buildings regulation, ⁴³ while post-18 education policy is currently being reviewed.*

^{*} The review into post-18 education policy is being led by former DfE non-executive director Phillip Auger and a panel of experts, including academics. See Department for Education (2018) 'Prime Minister launches major review of post-18 education', news release 19 February, www.gov.uk/government/news/prime-minister-launches-major-review-of-post-18-education

Many policy reviews are led by people with expertise outside academia. Between 1997 and 2012, 40% of appointments were from business, with less than a quarter from academic research.⁴⁴ But most reviews draw on academics as co-chairs (such as for the Pensions Commission, described below) or advisers, and gather evidence through submissions.

As with committees, some departments use policy reviews much more than others. Between 1997 and 2012, ministers from six departments made two-thirds of the appointments to conduct such reviews.* The Treasury made more than 50 and DfE made more than 30.45 Other departments – such as Defra, the Department for Culture, Media and Sport (DCMS) and DfID – used the model sparingly.46 The authors of a 2012 King's College London study have suggested that departments with less capability to conduct research (such as the Cabinet Office) or more difficult relationships with interest groups and researchers (such as DfE) rely more on policy reviews.⁴⁷

Some policy reviews have had a significant impact on policy

Some reviews have led to major policy changes. The Pensions Commission, led by the businessman and former academic Adair Turner, is a good example.

Case study: The Pensions Commission

The Pensions Commission, which ran from 2003 to 2006, is often considered a high-water mark of evidence-based policy making. (The Institute for Government has written a full case study of the Pensions Commission and an assessment of the implementation of auto-enrolment.⁴⁸) The commission was made up of three members: Adair Turner, a vice president at Merrill Lynch and former economics professor at the London School of Economics and the University of Cambridge; Jeannie Drake, the deputy general secretary of the Communication Workers Union; and John Hills, a professor of social policy at the London School of Economics. It was supported by a small independent secretariat of six analysts drawn from DWP, led by DWP's director of analysis. The department established its own parallel internal team.

Through rigorous analysis, effective communication and political management, the commission paved the way for highly significant changes to pensions policy that were politically unthinkable when it was set up. These included the Government restoring the earnings link, raising the pension age, reducing contributions requirements and ending the opportunity to opt out of the additional state pension.

The commission went significantly beyond its original brief, using its first report to build consensus around the analysis of the problem and the options that government faced; and its second report to push for specific policy changes.⁴⁹

^{*} The Department for Business, Innovation and Skills, Cabinet Office, DfE, DH, HM Treasury and No. 10.

The Pensions Commission is one of many examples that demonstrate that reviews can lead to major policy change, build consensus or change the terms of the debate. Other high-profile examples include the Independent Commission on Banking, led by Professor Sir John Vickers, which laid the groundwork for reforms to the banking sector after the LIBOR scandal, and Professor Lord Nicholas Stern's review of the economics of climate change. But installing a prominent expert is not guaranteed to solve difficult policy challenges. Sir Andrew Dilnot's review of social care funding an example of a high-profile review that, while significantly influencing the debate, has so far failed to achieve cross-party consensus and to lead to policy change.

There is a striking lack of transparency about how government uses policy reviews

In 2012, a King's College London study concluded that there was a major lack of transparency around how external experts are appointed, the work they produce and the impact that their work has.⁵² There still is. Appointments are not overseen by any of the usual bodies such as the Commissioner for Public Appointments or the Cabinet Office. There are no central lists of policy reviews undertaken or collated findings. And there is no consistency in government responses to reviews.

This lack of transparency has an effect on the value that policy reviews can have for getting external evidence and expertise into policy making. It makes it difficult to

identify and promote good practice. While some reviews are very effective, the impact of a significant number is unclear.⁵³ And as with commissioned research (see below), the lack of consistent publication of reviews in one place undermines their value. Policy reviews may be useful to future policy work, but not if civil servants cannot access them. Departments should therefore maintain a full list of all policy reviews conducted, their publications and any government responses to them.

Departments should maintain a full list of all policy reviews conducted, their publications and any government responses

More transparent appointments might also help to increase diversity. Between 1997 and 2012, 85% of independent policy advisers appointed were male and only 2% were not white.⁵⁴ More diversity is needed to tackle the wide range of issues for which government uses policy reviews.

These issues deserve further study. It is worth noting that policy reviews are different from the other tools for engaging with academia that we assessed. They specifically allow ministers to ask experts for solutions. This directness makes them a potentially powerful tool for bringing about changes in policy, as the example of the Pensions Commission shows. But often their value is not realised. More transparency is needed to improve how they work, but with the caveat that ministers still need to be able to handpick experts they trust.

^{*} The Institute for Government will publish a report shortly on health and social care funding. This includes an assessment of how inquiries have been used in the past to help resolve 'knotty' policy issues.

Government also uses internal policy reviews to support policy

Alongside policy reviews conducted by external experts, government also has internal programmes for bringing academic expertise in to review specific policy areas. The Foresight programme run by GO-Science is a good example.

Foresight projects aim to develop evidence for policy officials about future challenges. Projects run for 12 months and GO-Science collaborates with government departments, academics and other experts. Recent projects have looked at the future of an ageing population, cities, graduate mobility, food and farming.

Foresight projects were established in the UK in 1993, but the original model was developed in universities and used by other governments and businesses across Europe.⁵⁵ An evaluation of the programme in 2005 found that it had been successful in bringing together diverse groups of experts from different disciplines and concluded that 'it is doubtful whether such mobilisation could have been achieved by conventional ministerial or Research Council programmes'.⁵⁶

While Foresight studies have a longer timeframe than most policy projects, they provide lessons for departments:

- Foresight projects bring interdisciplinary teams together to work on policy questions. For instance, studies of the future of psychoactive substances and the future of infectious diseases drew on historians, as well as scientists, to provide comprehensive interdisciplinary advice.⁵⁷ Most of the tools we have reviewed focus on specific disciplines.
- Foresight programmes highlight the importance of consistent ministerial support
 for experts to be used well. Each project needs a ministerial champion. This support
 adds to their value and helps them to be influential. But due to the high turnover of
 ministers and the long duration of projects, Foresight programmes often report to
 ministers who did not commission them, which can reduce their impact.

Secondments

While being on a committee or leading a policy review can be much higher profile, the practice of bringing academics into government on secondment allows them to play a closer role inside policy making and, potentially, can bring in a far wider range of academics.

When secondments go well they create significant benefits in both directions: academics have knowledge, expertise, skills and modes of thinking that can be invaluable to a department; and secondees can use the knowledge they develop to inform future research and educate other academics and students about the realities of government. Secondment schemes help policy officials to build networks in academia, and vice versa.*

^{*} Several interviewees said that more academic secondments for government officials could mirror the benefits of government secondments: equipping officials with academic skills and an understanding of academia. We came across no specific schemes for full-time secondments for government officials (as opposed to networking schemes, such as the scheme at the Centre for Science and Policy at the University of Cambridge).

Secondments or fellowships are usually funded by research councils or academic institutions and bring in students at undergraduate, Master's and PhD levels and career academics at post-doctoral and more senior levels.

While there are challenges in setting up secondments – such as finding suitable people and managing human resources across institutions – these are not insurmountable.

Secondment programmes should be established by more departments

The number of secondments across Whitehall is still quite small and concentrated in a few places (it is not possible to form a complete picture because few departments collect relevant data). A 2014 GO-Science report based on internal discussions with departments found that placement schemes were 'heavily concentrated' in small pockets of government such as the Department for Business, Innovation and Skills (now BEIS) and GO-Science. In other departments, it found 'lack of awareness as to what was available' and 'concern that placements would not prove to be cost or time effective'. 59

Since then, schemes for PhD and post-doctoral students have been set up in Defra and the Cabinet Office⁶⁰ and the Foreign and Commonwealth Office is piloting a two-year Fellowship scheme for more senior academics.⁶¹ We were told that the DWP operates a scheme, but found no information available publicly. There are also long-running schemes for students administered by professions, such as the Government Social Research 'sandwich placement'. Research councils fund some placements in departments that do not have their own programmes.

But secondment schemes are still not widely used. In some departments, interviewees told us they were not aware of any secondments.⁶² Several secondees told us they were the first academic secondments to come into their team.⁶³ A university official responsible for organising

secondment schemes are still not widely used

secondments said that beyond the five departments with schemes, many seem to take in very few or no academics at all.⁶⁴ One official working across several departments said that they were shocked at how few academics were brought into government in this way.⁶⁵

Successful secondment schemes create benefits at low direct cost to government departments

Secondment schemes can provide a useful influx of academics with limited direct cost to government. A new cross-government scheme for brokering secondments – the Open Innovation Team – supports this, and has identified demand for secondments in government departments.

^{*} It is important to note that this is dependent on the current structuring of public spending, which has put significant funding into research councils to encourage secondments of academics into government departments. Secondees' salaries are still ultimately paid by taxpayers.

Case study: The Cabinet Office Open Innovation Team

The Open Innovation Team (OIT) was set up in the Cabinet Office in 2016 to increase the use of academic expertise in government policy making. It organises secondments and facilitates networks between government departments and academia. Four universities – Bath, Lancaster, Southampton and Warwick – sponsor the team, which has no funding from central government.

The team works with departments to identify priority areas where they need academic expertise. It created the 'Digital Government Partnership' – which has brought academics working on digital transformation, artificial intelligence and social media analytics into government – following conversations with the Government Digital Service and DCMS. It plans to follow this with projects to support other departments, such as an Economic Policy Network working with the Treasury and others.

In total, the team has worked on 48 'academic collaborations' – arrangements between academics with deep subject expertise and government departments. One academic has advised high-profile work on childcare reform; another has developed a proof of concept for the use of distributed ledger technology, which has wide potential application in many departments. For these full-time academics, the OIT has found flexible arrangements – with academics working part time, sometimes remotely – work best for both sides. This is partly because it is very difficult for academics to get out of teaching and research commitments, but also because departments prefer flexible consultation to full-time support.

In addition to brokering academics, the team has organised 30 placements for PhD students, mostly working full time for three to six months. These students have supported the work of academic collaborations and provided the team with extra capacity. Many have been recruited from doctoral training partnerships (regional bodies that fund PhD students and include support for a placement).

Although it is too early to assess the impact of the OIT, there is clearly significant demand for the function it provides at the centre of government; brokering connections between policy officials and academia. The Cabinet Secretary, Sir Jeremy Heywood, recently praised its work, and the team has plans to scale up.⁶⁶

As well as this Cabinet Office initiative, some departments have set up their own schemes. Defra has set up a 'studentship' programme, which it has found successful. The programme is funded by the Natural Environment Research Council's (NERC) London Doctoral Training Partnership and managed by the CSA's office.⁶⁷ It embeds PhD students in policy teams for three months. Interviewees told us that policy teams benefit from hosting students who apply deep knowledge of specific areas – whether it is nitrogen and air quality or upland farming practices – to policy discussions.⁶⁸ Defra only provides office space and equipment.

Individual teams do not have time to organise secondments

The core reason why departments do not benefit more from secondments is that they have not set up central schemes (managed by the department, through one of the professions within the department or through the CSA office). Setting up and running placements is resource-intensive. Arranging the pay, terms and conditions and security clearance is a barrier. Managing secondees also takes time. For instance, it takes careful consideration to find suitable work for secondees. Ensuring that the move from academic to civil service working practices is successful requires guidance, particularly for more junior placements. Policy teams, left up to their own devices, do not normally have the resources to do this – departments that had set up successful schemes agreed that it needs "central drive". The OIT is going some way to fill this gap, but it is not designed to organise all secondments across departments, nor should it be.

Departments should set up secondment programmes

Instead, departments should set up permanent secondments to overcome these barriers. Permanent programmes also have another major benefit: departments decide what they want from secondments and design programmes to meet their needs – rather than being pulled in different directions by individual placements from different externally organised research council schemes.⁷² Permanent departmental schemes would work alongside a continuing role for the Cabinet Office as a broker.

 Recommendation 5: Every department should set up a secondment programme for bringing in academics, of a scale and nature that best fits the department's needs.

Departments should work with UK Research and Innovation, research councils and universities to secure funding for programmes. Permanent secretaries should appoint someone to be responsible for overseeing this, for example the CSA or the departmental HoPP. The Cabinet Office should support the OIT to continue to act as a broker of secondments and academic expertise.

New secondment schemes should build on what works

There is a pressing need for departments to learn simple lessons about how to make a secondment successful. While there is strong qualitative and anecdotal evidence from host organisations, secondees and universities about the benefits of secondments, there is a surprising lack of studies to properly evaluate their impact.* This should be a priority for departments. They should work with UKRI, Research Councils and universities to support external evaluations. These will help government and the research community to better understand what works.

The Institute for Government has developed a simple survey questionnaire to ask academics going on fellowships about their experiences. The questionnaire covers a range of areas, including aims and objectives, induction, training, management, work carried out and outcomes. We found no schemes in government that used a similar

^{*} The Alliance for Useful Evidence has shown that approaches to increasing evidence use, such as collaboration and co-production, are under-evaluated. See Alliance for Useful Evidence (2017) *Using Evidence*, Alliance for Useful Evidence, www.alliance4usefulevidence.org/assets/Alliance-Policy-Using-evidence-v4.pdf

survey. Some of those running secondments built in a small amount of feedback, usually ad hoc, maybe consisting of a conversation. Very few new schemes looked back at past ones to see how to organise them. Most departments do not even collect basic data about secondments.

There is an important need to gather this kind of feedback – particularly to manage expectations about what the secondment will be like. As well as successful experiences, we heard about secondments that did not go well. In these, academics often had very different expectations from the teams they joined, such as whether they would be working on research close to their specialism or as part of a team. Mismatched expectations led to frustration for both sides: academics not finding the experience something that helped further their career; or civil servants not getting the resources they needed, or worse, the secondment becoming a problem they ended up having to manage. When secondments schemes go badly like this, it alienates both sides and puts people off further collaboration.

We conducted the survey with a small number of secondees. Their responses, and the interviews we conducted with secondees or officials who had been involved in secondment schemes, offer lessons for how to set up, design and manage secondments to make them more effective:

- **Set-up**. Departments should build connections with academic institutions to fund and recruit for secondment programmes. Research councils are the most common source of funding, but the OIT shows that partnering directly with universities is also possible. For officials who want to recruit PhD students, doctoral training partnerships are fertile ground because they have placement periods built into them. Early career researchers usually need approval from departmental supervisors to undertake secondments, while more senior academics will often need to negotiate arrangements and work more flexibly. To help organise these, officials should build connections with university departments relevant to their policy areas.
- **Design**. Programmes should, as much as possible, integrate secondees into departmental work and policy teams. A university official who has organised over 50 secondments told us that schemes were least successful when secondees were isolated, with little opportunity to collaborate. Programmes should, though, be flexible to individual needs. Often secondees want to come away from secondments with a concrete output (this is a particular pressure for PhD students and early career researchers). Defra managed this trade-off by putting those on placement into policy teams but also enabling them to draft an 'evidence statement'. Interviewees did not agree on the ideal length of secondments but they saw three months as the minimum to be worthwhile. Departments should be flexible, allowing students or researchers to continue to study part time.
- Management. Most secondees we spoke to told us they had little or no induction. To be effective, they needed some idea of how departments work, who the key figures were in the policy area they were working on and how their work fitted into other processes within the department. Similarly, management processes were

often not established: several secondees said that they did not have a line manager and so were unable to identify goals or aims for their placement period. Officials organising secondments should establish clear induction and management processes for secondees, and develop guidance for teams that host secondments explaining how to design a suitable programme of work. Secondees would also benefit hugely from something as simple as a buddying scheme, putting them in touch with other secondees. This could help lessons to be shared across different schemes. A simple portal on the government intranet could provide this, although someone would need to be responsible for maintaining it.

Overall, managers of secondment programmes should include an induction checklist for both the secondee and the person who will oversee their secondment. They should also collect basic data and set up a feedback mechanism, such as a survey.

Commissioned research

Officials also commission research directly. Over the past decade, there have been significant cuts to research budgets in most departments. Commissioning research well – and making the most of research that has been commissioned – is therefore increasingly important if departments are to meet their research needs.

Research spending has fallen sharply in recent years in most departments

Although overall research and development spending across departments has grown since 2008, this rise has been concentrated almost entirely in three big spending departments: BEIS, DH and DfID.⁷⁵ The overall trend masks deep cuts to research budgets in other departments (see Figure 2). Between 2007 and 2015, research spending more than halved in five departments. In the Department for Communities and Local Government it fell by three-quarters. In some departments, part of this change is down to spending being reclassified or moved between departments and agencies, but interviews confirmed that these departments had still experienced major reductions.

These falls in research spending were described as part of a "massive structural change", with funding now being centrally channelled through BEIS (formerly the Department for Business, Innovation and Skills) to fund research and innovation. Over the same period, research spending at BEIS increased from £448 million to £1.2 billion. 77

250
200
150
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Defra DCMS DfT HO DfE DWP DCLG MoJ

Figure 2: Departmental spending on research and development, 2007 and 2015 (£ millions)

Source: Office for National Statistics, UK Government expenditure on science, technology and engineering, 2015.

This is a significant shift for departments. As one CSA explained: "The responsibility for delivering the research and development that is needed by the policy departments that are trying to deliver national-based outcomes is no longer embedded with the policy departments – it's now in a centralised pot." Whether this centralisation of research funds has been successful is itself an area that requires further attention. Interviewees' opinions were mixed but we did not find evidence either way. In any case, reduced budgets mean that departments need to become more intelligent customers.

Departments can use a range of research suppliers and commissioning routes

Departments use a wide range of suppliers, including consultancies, arm's-length bodies and charities, as well as academics. The poor quality of government data makes it difficult for officials – or external researchers – to know how departments are spending money. Textual analysis of government spending data in 2012/13 suggested that 'private sector research consultancy and technical advice' was the dominant provider of commissioned research for most departments, with academics making up a relatively small proportion of spending in most departments, except for DH.⁷⁹ While this is an interesting finding, better data is needed for departments, and others, to gain a more robust sense of the suppliers that government is using.

Officials also have many ways to commission research, from open competition – where anyone can respond to an invitation to tender (ITT) – to selective procurements, where a group of pre-approved suppliers can bid for work. Each route has strengths and weaknesses. Open tenders ensure fairness and price competition. Selective tenders

^{*} There are also two-stage models, where potential suppliers complete a short expression of interest.

are usually faster and can be less onerous for smaller suppliers – such as small groups of academics – to respond to.* Officials need a mix.

European Union directives set out detailed procedures for the award of certain contracts. Research whose value equals or exceeds a certain threshold (currently £118,000 for central government) must be subject to open competition. Market research must also be openly tendered, but 'research and development services' are exempt. Departments therefore have greater flexibility in how they commission pieces of research falling under the threshold or the research and development exemptions.

However, uncertainty about the rules and risk aversion mean that departments are not making the most of this flexibility. A review by the Social Research Association in 2011 found that confusion led to some departmental frameworks defining all research as market research, and therefore subject to open procurement. It recommended that government departments should use a greater range of methods for procuring research.⁸¹ Our research suggests that this remains the case, despite significant changes to public procurement regulations in 2015. Interviewees told us that confusion about which procurement routes departments were allowed to use was preventing them from using more selective approaches.⁸²

Bespoke commissioning routes can help departments access academic expertise

For academics, government commissioning can be a challenge. Academics find it hard to submit responses to complicated government tenders alongside immediate pressures, such as teaching. And they typically require long lead times; one busy senior academic told us that his research projects were booked out two to three years in advance.⁸³ But officials may want answers in three to six months. We were told that this often results in officials using consultancies to deliver the work instead.

DfE's Analytic Associate Pool, a network of approved researchers who can bid for research, is an example of an innovation that tries to overcome these challenges – and give officials easier access to academics to conduct smaller pieces of research. DfE still uses open competitive tenders to procure larger pieces of research, but the pool has proven extremely useful for quickly procuring smaller pieces of research. While it has yet to be formally evaluated, our interviews suggest that it is a model from which other departments should learn.

^{*} It is important to note that there has been a clear push to simplify these contracts with the creation of a new slimline public sector contract, and a new research marketplace, but these have not been implemented yet.

Case study: The Department for Education's Analytic Associate Pool

DfE set up the Analytic Associate Pool in 2014. It provides analysts with flexible research capacity by enabling them to tender research to a group of approved academics ('research associates'). At There are currently 170 associates who range in experience from PhD students to senior professors. Being a member is no guarantee of work; it simply allows associates to bid for contracts. So far, the Associate Pool has been used to commission several hundred pieces of research (summaries of which are published on GOV.UK).

The Associate Pool minimises bureaucracy. Previously, it was onerous for officials to bring in academics. The Associate Pool was designed to create a simple, fast tendering process. Analysts draft brief terms of reference and can set short deadlines; academics in the Associate Pool are invited to submit brief applications. This makes it a rapid tool for getting literature or evidence reviews when there is not the capacity within the department.⁸⁵

The Associate Pool also aims to create a more flexible and diverse research supply for analysts by giving them access to a range of academic experts. The Associate Pool is mostly used for small projects worth up to £15,000 (although projects can exceed this). Analysts can commission large amounts of research at peak times and none at other times.

DfE officials told us that the Associate Pool has provided wider strategic benefits to the department. It has helped to improve officials' relationships with suppliers, and their connections with academia more broadly. Analysts learned that academics needed warning of upcoming research projects, particularly at busy periods in the academic year, so they started issuing advance notices and updates on future priorities. This allowed academics to form into consortia to bid for projects. 'Growing the supplier market' in this way improves DfE's ability to draw on academic expertise in forming policy. Officials have also been invited to sit on advisory groups for funding bids as a result of closer collaboration. Some projects involve close working between departmental analysts and associates, which has proved a fast way to upskill analysts in academic research skills.⁸⁶

So far, the Associate Pool model has not been extended to other departments. Some other departments, such as DH, use 'standing contracts' with academics to achieve similar benefits, but this is relatively rare. Interviewees at DfE told us that other departments are interested in the model but are tied into tendering research through other public procurement routes.⁸⁷

 Recommendation 6: Departments should, where appropriate, enable officials to commission research and evidence reviews quickly using standing contracts with approved researchers, drawing on the model successfully developed by the Department for Education, rather than using more resource-intensive public procurement routes. Chief scientific analysts, directors of analysis and heads of the Policy Profession should assess the feasibility of this for their department.

Previously commissioned research is often not accessible to policy makers or the public

In addition to improving how research is commissioned, government also needs to address the way it manages and stores commissioned research. *Missing Evidence*, a report by the Rt Hon Sir Stephen Sedley and published by Sense about Science in 2016, found that significant confusion about the rules governing the publication of commissioned research was leading to "millions of pounds of research being lost from government records". The report found that "11 government departments were unable to provide a list of the research they have commissioned; of those, seven said that they did not hold that information centrally". The report found that "11 government departments were unable to provide a list of the research they have commissioned; of those, seven said that they did not hold that information centrally".

There is no overarching analysis that allows officials or the public to know what research is commissioned. If commissioned evidence is published, it is spread across different parts of GOV.UK. While good-quality research might be used by the team that commissions it, over time these connections can be too easily forgotten, particularly with high staff turnover. As with policy reviews, failing to publish research is a major institutional memory problem for departments, and a waste of constrained departmental resources.⁹⁰

Sedley made one key recommendation in 2016:

"All government departments should register externally commissioned research in a standardised public register and report its publication so that this information is available, and continues to be available, to the rest of government, parliament, the research community and the public."91

This recommendation has still not been implemented. We feel that it remains hugely important and so we repeat it here.

Statements of research needs

As well as improving departments' ability to directly commission research, the Government has also recognised that it needs to better communicate research priorities to funding councils and academics. The new 'Areas of Research Interest' (ARIs) aim to do this. They are a response to the 2015 review of the UK research councils, led by Sir Paul Nurse, which said that government needed to take a more strategic approach to research and development – and specifically recommended that departments set out priority questions they want answered through new or existing research.⁹² The arguments behind the ARIs were reinforced in our research: many officials were frustrated that academic work misses the key issues and fails to help them answer the questions they face in forming policy.⁹³

ARIs are not a means for government to direct what research academia conducts. The Nurse Review emphasised the Haldane principle – that academics, not politicians, should make funding decisions about individual research proposals – as have statements by ministers and Sir Mark Walport, chief executive of UKRI. Hastead, they are intended to help academics working in policy-relevant areas to anticipate future government priorities. UKRI has created the Strategic Priorities Fund specifically to support research in policy areas that do not fit into existing funding streams but are

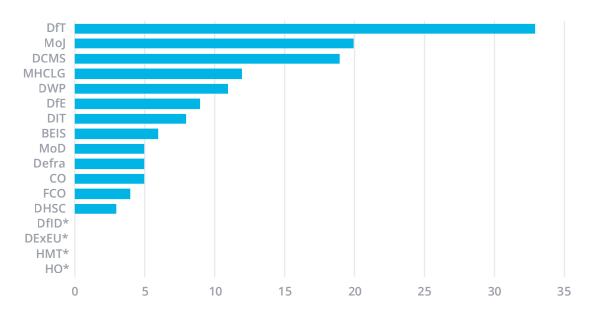
important priorities across government – for instance, housing, welfare, social cohesion and skills.⁹⁵ It is important that the balance – between government communicating strategic priorities and academia retaining independence over what research gets funded – is maintained.

To maximise the benefits ARIs have for how government works with academia, departments need to produce high-quality ARIs that give researchers and funders substance to work with, and make sure that they discuss ARIs with academia.

The first ARIs are a positive step, but they are of mixed quality

Thirteen departments have now published ARIs, which is a very good step. Others are expected to follow. ARIs are not intended to be simply 'shopping lists' of research ideas but the basis for collaboration. But the depth of the first batch varies (see Figure 3). The Department for Transport's statement is detailed and thoughtful; we were told that it led to a range of funding being made available. Others, such as the Foreign and Commonwealth Office's statement, are much briefer and give vague priorities such as 'the future of work and trends in the global economy', which are unlikely to provide the basis for future research. It will likely take several attempts to achieve consistently high standards. It is notable that those clearly authored or overseen by CSAs or directors of analysis appear to be stronger. Senior officials should work with academics to help prioritise and refine research questions.

Figure 3: Departments that have published Areas of Research Interest and length of document (number of pages)



Note: *ARI not yet published.

Source: Government Office for Science and Cabinet Office, 'Areas of Research Interest', GOV.UK, retrieved 14 May 2018, www.gov.uk/government/collections/areas-of-research-interest.

ARIs should be the start of the conversation between officials and academics

Publishing ARIs should be just the start of the conversation. Departments also need to discuss their research interests with research councils and academics. Defra, for example, held a two-day conference at the Royal Society to discuss its ARI with research partners and work out what to fund and how. This enabled officials to provide input into the focus, timelines and terms of policy-oriented research. Such forums also help departments to better understand the pressures and requirements on academics in undertaking research.

Departments should use ARIs to benefit from more interdisciplinary approaches to policy questions, following the example of the Foresight programme. This will require officials engaging with academics and funders outside of core departmental areas. There will also be common themes across the ARIs. GO-Science should work with UKRI to ensure these are communicated effectively to funders.

Departments need open lines of communication with research funders. Officials should offer their insights to research projects that aim to contribute to government policy, for instance by participating as much as possible as practitioner reviewers on research funding bids, overseen by research councils. This should follow clear processes with academic peer review retaining control of decisions to ensure academic independence. But using officials in this way can make policy-relevant research more useful to policy. Analysts we spoke to in several departments, such as DfE, already do this. Officials should also contribute more to panels for the Research Excellence Framework, overseen by the HEFCE, where the impact of academic research on public policy is judged. The Policy Profession recently floated this idea. It would help academics to understand how officials view academic engagement.

 Recommendation 7: Departmental chief scientific advisers, directors of analysis and departmental heads of the Policy Profession should have joint responsibility for drafting Areas of Research Interest and ensuring that they are communicated to research funders and academics.

Research and evidence centres

We have reviewed six ways of improving engagement for which ministers and officials have direct responsibility. But there are also a range of independent institutions between government and academia that have the potential to make a strategic, long-term contribution to government policy making, including think tanks, businesses and charities.

We are interested here in institutions that government directly funds or sponsors and we look at two models: research centres, which departments fund to help fill evidence gaps (such as the policy research units funded by DH); and evidence centres, which government sponsors to bring evidence to the attention of policy makers and practitioners (such as the what works centres funded by various departments). Both examples show clear opportunities for government to work with external bodies more to improve its own use of evidence and expertise. Indeed, David Willetts, former Universities Minister, has noted that the UK is unusual compared with other countries

in that an 'unusually high proportion' of research is conducted in universities, with a very small amount of funding available for public research institutes.⁹⁹

However, there is more work to be done to evaluate the effectiveness of the research and evidence centres that government supports and to share good practice between them. In turn, government should develop a more strategic approach to funding them and identifying where more are needed.

Policy research units show how departments can fill evidence gaps

DH, through the National Institute for Health Research (NIHR), has supported various research centres for several decades to develop the evidence for policy making in the department and in its arm's-length bodies. It funds policy research units – groups of academics, often from multiple universities, working on a single policy area – for five years to carry out programmes of research. The department currently invests in 13 policy research units, working on a range of issues, including cancer awareness, screening and early diagnosis, obesity and mental health.¹⁰⁰ These aim to provide both a 'stable long-term resource' – enabling the department to develop more sophisticated approaches to long-term challenges – and a capacity for rapid responses and expert advice. NIHR is currently re-tendering for 14 new policy research units. DH has long recognised these units to be an important part of how it meets its research needs. Several interviewees – in Whitehall and academia – identified policy research units as an example of best practice for a department working with academic research centres to fill evidence gaps in key policy areas.¹⁰¹

The what works centres vary in design and resources

The expansion of the network of what works centres has been one of the most significant developments in the landscape of evidence and policy in the UK in recent decades. The National Institute for Care Excellence (NICE) was set up in 1999 and became a what works centre in 2013; the other eight centres have been established since 2011. They were envisaged as doing 'NICE for social policy' – applying the methods of evidence-based medicine that NICE used (evidence synthesis, experimental trials) to areas such as educational attainment, early intervention and crime. There are plans to establish further centres, including for children's social care.

The centres vary significantly in form and resources (see Table 2). NICE is a non-departmental public body, sponsored by DH; several centres are charitable foundations; and others are consortia of universities and other bodies, including businesses. While the Education Endowment Fund was set up with a £125 million 15-year endowment from DfE, most others compete for funding year to year. Six of the centres receive funding from the Economic and Social Research Council (ESRC).¹⁰⁴ The centres are mostly relatively small – ranging between five and twenty staff – apart from NICE (which has around 600 staff).¹⁰⁵ The centres are staffed by people from a range of backgrounds, typically academics, practitioners and government officials.

^{*} NICE now stands for the National Institute for Health and Care Excellence.

Table 2: What works centres

Organisation	Year founded	Status	Annual budget*	Government sponsor(s)	Funding partner(s)
National Institute for Health and Care Excellence	1999	NDPB	£62.5 million	DHSC	_
Education Endowment Fund	2011	Charitable foundation	£14 million	DfE	-
Early Intervention Foundation	2013	Charitable foundation	N/A	CO, DfE, DH, DWP, HO, MHCLG	ESRC, RBS
What Works Centre for Local Economic Growth	2013	Consortium	£1 million	BEIS, DfT, DWP, MHCLG	ESRC
What Works Centre for Crime Reduction	2013	Public body	N/A	College of Policing, HO	ESRC
Wales Centre for Public Policy	2014	Consortium	£450,000	Welsh Government	ESRC
What Works Centre for Scotland	2014	Consortium	£1 million	Scottish Government	ESRC
What Works Centre for Wellbeing	2014	Social enterprise	£1.3 million	-	ESRC, Public Health, HMG, Big Lottery Fund and others
What Works Centre for Ageing Better	2015	Charitable foundation	£5 million	-	Big Lottery Fund

^{*} Agence nouvelle des solidarités actives (2017) British What Works Centres: What lessons for evidence-based policy in France?, www.alliance4usefulevidence.org/assets/Ansa_A4UE_whatworks_final_Full-report-standard.pdf.

What works centres have generated a lot of evidence

What works centres have undoubtedly made progress in generating evidence. As of January 2018, they had produced over 288 evidence reviews and supported over 160 trials. 106 The Education Endowment Fund – which has the largest budget apart from NICE – has been particularly active, conducting 10% of all known trials in education internationally. 107

Some centres have had major successes in getting the evidence they have generated used, particularly by practitioners. For example, the Education Endowment Fund's trials and resources have led to changes in how teaching assistants work with groups of children in over 900 schools. The What Works Centre for Crime Reduction's trials showed that body-worn cameras reduced allegations against the police by 33%, which led to cameras for the police being rolled out across London. On the police being rolled out across London.

But getting evidence used by policy makers is difficult

Some centres have also had notable successes in influencing government policy. For example, an evidence review by the Wales Centre for Public Policy, commissioned by the Welsh Government, found that providing free childcare in fact had negative consequences on maternal employment, which informed the Welsh Government's decision to offer subsidised childcare. Meanwhile, DWP is drawing on work by the Early Intervention Foundation on the impact on children of unresolved conflict between parents in order to inform a new programme of interventions. 111

But most centres have found influencing policy difficult. A survey showed that staff still feel they have work to do to identify effective dissemination methods. A strategic review by the ESRC found that while centres have made some progress on engaging with government – for instance some had briefed ministers – improvement was required. In January 2018, the What Works Network said that it will devote more resources to encouraging the adoption of evidence.

There is clearly room for government to work more closely with the centres. Some centres have strong routes into departmental policy making. Officials in DfE told us that they regularly consult the Education Endowment Fund during projects for its frontline experience.¹¹⁵ In Scotland and Wales, the centres have a very close





relationship with government: for instance, the Wales Centre for Public Policy decides its work programme in co-ordination with the First Minister – enabling it to act as an independent body for tackling priority questions. ¹¹⁶ But others, such as the Centre for Wellbeing, have less obvious connections with government. ¹¹⁷

More broadly, the centres have not, to date, been rigorously evaluated, which makes assessing how they improve policy makers' and practitioners' use of evidence difficult. The What Works Centre for Crime Reduction is the only centre that has been subject to independent review. The ESRC has noted this and launched a review to find out 'what works with what works centres', which is yet to report. Evaluation should be a priority for funding councils and departments that sponsor what works centres.

Government should develop a more strategic approach to supporting research and evidence centres

In addition to improving connections between research and evidence centres and policy making, government should also look at the long-term funding of these centres – and their coverage of key policy areas and disciplines.

Policy research units help DH and its arm's-length bodies to tackle policy areas where academic evidence is limited. The model could be applied to many other areas where there is not sufficient research to support important policy decisions. But most other departments have experienced significant cuts to their research budgets and cannot directly fund new multi-year research centres. Government should look at how to fund research centres in other priority areas, for instance though UKRI's new Strategic Priorities Fund.

Many of the current what works centres also face uncertainty over long-term funding and have to compete for resources year to year. This reduces their ability to appoint staff and develop long-term plans. The ESRC provides some funding to most centres, but this is not enough to sustain them. Ruth Gibson, Deputy Director of the ESRC, speaking at an event at the Institute for Government, said that while the centres are strategically important "there is not necessarily a blank cheque". 120 If centres provide major returns on departmental investments – as the Education Endowment Fund has for DfE – more departments should consider providing long-term support.

The current evidence centres that government supports are quite patchwork and focused on a narrow disciplinary approach. For instance, David Halpern, the what works national adviser and chief executive of the Behavioural Insights Team, has noted that there are major gaps in the what works network, most notably in welfare policy, probation and the judiciary.¹²¹ Most of the centres are also quite narrowly focused on particular social science methods.

Government should review gaps, looking at both priority policy areas that would benefit from independent bodies, and opportunities for supporting research and evidence centres to develop more interdisciplinary approaches. This should form part of an effort by key senior groups across government to develop a more coherent approach to engaging with academic evidence and expertise.

 Recommendation 8: The Policy Profession Board, the new Analytical Functions Board and the new government chief scientific adviser should review government's use of tools for bringing insights from diverse academic disciplines into policy making.

4. Conclusion

Improving the use of evidence and expertise in government policy making is a vital challenge. Progress has not been as fast as many have hoped. But using evidence and expertise well in making policy is not easy. It needs clear responsibility. And it relies on strong connections with academia across a range of areas: from how individual officials find academics in day-to-day policy making, to how departments draw on academic advice, to how they commission research, work with research funders and support independent bodies. Improving how departments do each of these things needs consistent commitment from senior leaders – political and official. The key – as Defra, which we cite repeatedly, shows – is for these leaders to establish a culture that values evidence highly.

The breadth of examples in this report shows that there is real enthusiasm for improving how government collaborates with academia. We found such enthusiasm in every department we looked at. The Cabinet Secretary, Sir Jeremy Heywood, has set a clear goal by publicly calling for greater collaboration. This report highlights how teams and departments should go about it, drawing on what others already do well.

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4. Conclusion

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