



UK What Works Centres

Aims, methods and contexts

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EXECUTIVE SUMMARY

A network of What Works Centres have been developed in the UK over the last five years to “improve the way government and other organisations create, share and use (or ‘generate, transmit and adopt’) high quality evidence for decision-making”¹. This What Works Network represents one of the first attempts to take a national approach to prioritising the use of evidence in public policy decision-making.

What Works Centres are different from standard research centres. They are ‘intermediary’ organisations designed to encourage and enable the use of research evidence in policy and practice decision-making. The Centres have similar overall aims but different organisational structures and funding arrangements. They work in different areas of social policy and focus to varying extents on different parts of the evidence production-to-use process.

Unsurprisingly, as this is an emerging field, there is not an accepted overarching model to describe and understand the work of such intermediary organisations. This project examines the range of approaches being undertaken by the nine Centres², to provide a means of comparing and contrasting their work and the contexts within which they sit. This report looks at the activities and products of the Centres and how they operate within their sectors.

The purpose is to provide an overall analysis and description of the Network that can support the development of existing Centres and assist in the planning of future Centres and their equivalents. Although we are able to comment on the nature of the Centres, this study is not an independent evaluation of their effectiveness. The aims are to:

1. Develop an analytical framework to understand and compare the nature and work of the What Works Centres, and other evidence intermediary centres and activities.
2. Describe and characterise each of the current Centres as of 2017.
3. Analyse the similarities and differences between the plans, methods, contents and outputs of the Centres and to interpret the key themes emerging from this comparison.
4. Create supplementary resources to assist in the planning of current and potential Centres (subsequent to this report).

The project has been conducted by Prof. David Gough, Dr Chris Maidment and Prof. Jonathan Sharples at the EPPI-Centre at UCL. It should be noted that although the Centres have been given opportunities to check and comment on the accuracy of the data collected, the report is the work of the authors and does not necessarily represent the views of the Centres.

The structure of the report is as follows:

Chapter 1: Introduction

A description the history, aims and purposes of the Network, and the framework used to collect and compare data on the Centres. This framework categorises their work by five types of activity – Contexts, User engagement and supporting uptake, Communicating and interpreting evidence, Research production, and User perspectives – and includes a structured approach for comparing the evidence standards that are applied for different activities.

¹ <https://www.gov.uk/guidance/what-works-network>

² At the time of writing, a tenth What Works Centre (for Children’s Social Care) was still in development.

Chapter 2: The UK What Works Centres

A short summary of each of the Centres with information on their history, status, governance, resources, business model, aims and strategies.

Chapter 3: Dimensions of difference between and within the Centres

Description of the activities of the Centres, showing how they are similar and different, organised according to the five categories from the study framework. More detailed examples of specific work by each of the Centre is included in the appendix.

Chapter 4: Evidence standards

An analysis of the different evidence standards that are applied to, and underpin, the production and communication of evidence by Centres.

Chapter 5: Cross cutting issues and interpretations

A discussion and interpretation of some of the commonalities and differences identified in Chapters 3 and 4, including implications for What Works Centres, other research organisations and funders.

Key findings

The What Works Centres conduct a wide array of work: building a more robust and comprehensive evidence base; raising awareness and understanding regarding the need for using evidence, and; influencing local and national policy to consider evidence more effectively. This work has resulted in numerous achievements, some of which were captured in a recent publication by the Cabinet Office (2018) of the first five years of the What Works Network. We have provided an account of the rich range of activities taking place across the Network in Chapter 3.

In describing the nature and activities of the nine UK What Works Centres, this report identifies a number of ways that Centres are similar and different from one another, in terms of: how they perform their key functions; the extent and manner of their work outside of these key functions; and their wider strategies to engage and influence their audiences. Some key themes that emerge from these commonalities and differences are discussed under the following six headings:

- Activities within evidence ecosystems
- User engagement and supporting uptake
- Evidence standards
- Monitoring and evaluation
- Wider systems and contexts
- Collaboration across Centres

Activities within evidence ecosystems

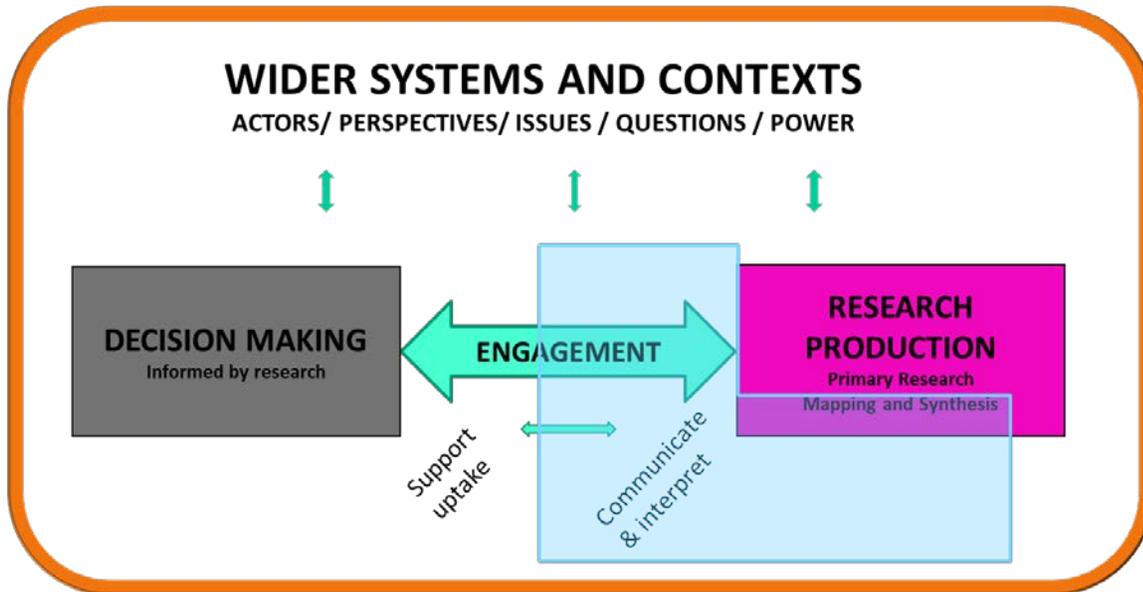
If we consider the work of What Works Centres in the context of the overall evidence ecosystem, then a key question is, what are they doing in relation to that system?

In general, the greatest emphasis of work for the Centres is across three areas: communication; the synthesis of research findings; and providing access to what is known about the evidence base. For example, each of the What Works Centres produces syntheses of research, translates findings into briefings, summaries or toolkits, and interacts with its audience to promote an engagement with this evidence. Relatively less work is undertaken to actively support the uptake and application of evidence

in policy and practice decisions³. Hence, the majority of the effort is located in the right-hand side of the ecosystem framework (as shown in the shaded area of the figure below).

If we relate that to the three main objectives set out for the Network – generate, translate, adopt – we see less activity in the ‘adopt’ category than for ‘generate’ and ‘translate’. This is also predominantly a research production (push) approach to the use of research, rather than problem-solving, demand-led (pull) approach.

What Works Network activities across the research use ecosystem



Adapted from Gough et al 2011, Gough 2012

We also observed that the balance of activity for Centres tends to broaden over time. Although the initial emphasis for Centres is often on aggregating, synthesising and providing access to evidence, over time most Centres are placing an increasing proportion of their effort in interpreting research (e.g. producing actionable guidance) and on supporting uptake and application of evidence i.e. broadening of scope towards the left-hand side of the framework.

Another issue is the extent to which Centres are involved in primary research. The nature of primary research is an important issue for all Centres, but most do not have the necessary resources to run extensive research programmes or have decided that these resources are better allocated differently. Undertaking primary research has a number of potential benefits, such as: filling gaps in the current underlying evidence base; increasing the likelihood that primary research is fit for purpose (e.g. for synthesis); and, engaging intended end-users and instilling a culture of enquiry in frontline practice. The varied degree of involvement in – or influence on – primary research may also have implications for the

³ This is the general trend across the Network although some individual Centres such as the College of Policing are undertaking substantial work in this area.

What Works Network, such as a lack of consistency in evidence standards within, and between, some Centres.

The focus of activity, described above, raises fundamental questions around the appropriate scope for a What Works Centre and how broadly they operate across the different functions of an evidence ecosystem. The two Centres with the largest budgets have adopted two very different approaches. The *EEF* is, arguably, moving to a position where it operates as an integrated and self-contained evidence system in itself. *NICE*, on the other hand, has a much more specific role in the healthcare ecosystem, centered around the creation of evidence-based guidance. Both approaches have advantages and disadvantages, which are discussed in more detail.

We have also noted that *within* domains there can be significant variation in the strategies and activities that are used to face similar challenges. A good example is the variation in evidence standards used across the Network, where there is variation both within, and between, Centres.

The variation between Centres may be very appropriate. Centres are working in different systems with different audiences, legal status, relationship with government, degrees of funding, aims and roles, and different stages of development. It is therefore not surprising if they require different strategies. It is also possible that some of the variation may just be serendipitous; however, without more explicit Theories of Change it is difficult to ascertain the extent to which the choices Centres make are strategic considerations of all the choices available. Centres do, of course, explain their strategies and their activities, but they do not tend to provide much detail on the specifics of:

- The nature of the evidence ecosystem that they are intervening in.
- The ways in which evidence is not being used, engaged with, or produced that is limiting the functioning of that evidence system (i.e. the extent of evidence-informed policy and practice in their sector).
- How their work will change that evidence ecosystem.
- The Theories of Change that explain how the methods that they apply will achieve the desired aims and objectives (though a number of Centres are planning or undertaking work to develop theories of change).
- How their work will help the evidence ecosystem work within the wider systems (see Wider Systems and contexts below).

User engagement and supporting uptake

Users of research are not simply the recipients of research findings, they can be involved in all aspects of the evidence ecosystem. They can be informed, consulted or given decision-making power in:

- The uptake of research through the implementation of evidence-informed decisions.
- Access to, and consideration of, recommendations and guidance.
- Engagement activities that support knowledge mobilisation mechanisms (such as access to evidence, skills to enable use) and address behavioural needs (such as creating opportunities and motivation to consider research) (Langer et al. 2016).
- The production and generation of syntheses of research and/or primary research.

As already discussed, the Centres have undertaken less work on research uptake and implementation than on research production and engagement. Despite this, the Centres all aim to increase the use of research findings in decision-making. In doing this, the Centres vary in how they define their main 'users', on such dimensions as:

- Which potential users are prioritised (and which are not).
- How tightly these users are specified.
- The relative emphasis on individuals, groups or organisations.
- The emphasis on engaging early adopters/champions or a broader audience of users.
- The distinction between the users of Centres outputs and services, and the ultimate beneficiaries of the Centres' work.
- Equity issues of differential engagement with both the use of, and production, of research.

In general, it would be helpful if there was greater specification on how and why particular users and beneficiaries are selected and prioritised, and the nature of engagement with evidence that the Centres are hoping to achieve.

Evidence standards

What Works Centres need to be clear about the quality and relevance of the research findings that they are using to inform decision-making. Most Centres have some formal processes and/or criteria for standards of evidence, although there is considerable variation in how these standards are defined and applied. Some of the evidence standards have been created by the Centres themselves, while others are externally developed systems.

Some evidence standards are specified (i.e. codified) in methods manuals. These may describe the process of determining the standard of evidence and also rate evidence as meeting a particular criteria or quality rating. Clarity about both methods and criteria can help to achieve consistency and quality of evidence standards.

Where there are not codified processes or criteria then individual research reports often specify the methods used for that particular study, meaning standards can vary from report to report within Centres.

Unsurprisingly, Centres have been predominantly concerned with evidence about research on the impact of interventions, or 'what works', however Centres use different cut off points regarding the required level of robustness for such primary studies, and/or different criteria to determine whether the studies meet these requirements. More consistent standards across the Network would help audiences to expect a certain quality of output and, therefore, generate confidence in the findings presented.

At the same time, Centres are developing standards relating to qualitative methods, for example, the *EEF's* guidance for evaluators on conducting implementation and process evaluation. The co-production model of *Scotland*, where the Collaborative Action Research consists of qualitative and mixed methods case studies, is another interesting example.

In summary, Centres vary on many aspects of evidence standards including:

- Processes for undertaking a study or other research product.
- Methodological approaches and standards.
- Report specific or manualised systems for applying standards.
- Specific criteria for grading the quality of a product.
- Quality assurance from: internal processes; external criteria; or external reporting standards.
- The parts of the evidence ecosystem to which the most explicit evidence standards are applied.
- The types of research questions to which the standards are applied.
- The level of detail provided for each of such processes and criteria.

Individual Centres also do not always apply standards of evidence consistently in different parts of their evidence ecosystem. For example, we found differences in:

- *The degree of specification of standards* – Centres tend to have the most developed and codified standards for the part of the evidence ecosystem in which their work is mostly focused.
- *The purposes for which the research is being undertaken* – for example, different standards for a systematic review undertaken to inform planning a piece of primary research rather than to inform a toolkit.
- *Decisions to provide evidence quickly* – for example, recommending certain actions as evidence-informed on the basis of individual studies, even though the Centre normally uses syntheses as the foundation for decision-making.

In addition to the more technical aspects of variation between and within Centres, there are some more fundamental differences between Centres in their approach to evidence. Most Centres use synthesis of the whole relevant evidence base in order to inform decision-making. Mostly this is through formal explicit methods. The two exceptions are *Wales* and *Scotland* whose remits are, unlike other Centres, territorial rather than topic-based. Consequently, they work across a range of policy areas with a wide variety of evidence. *Wales* uses experts to synthesise evidence while *Scotland* uses a more interpretative realist approach and takes an overtly co-production model to how evidence is produced. *EIF* is also an exception in focusing on the evidence from at least two quality studies rather than a whole evidence base to state that there is a causal relationship between an intervention and outcomes.

Individual Centres and the What Works Network as whole might benefit from greater clarification of the choice of type and method of evidence standards both within and across different Centres.

Monitoring and evaluation

What Works Centres advocate the use of research to inform decision-making, so to what extent are Centres themselves evidence-informed?

An important aspect is monitoring and evaluating their own work and impact. Impact can be assessed on the basis of:

- The ultimate beneficiaries (such as crime reduction or pupil attainment).
- The behaviours of intended users in increasing the use of evidence to inform decisions, and in adopting evidence-informed approaches.
- Intermediate outcomes such as users' knowledge of research findings.

Most Centres are at an early stage in their development and undertake relatively little evaluation of the impact of their work on ultimate beneficiaries. More common are measures of intermediaries (users of research) accessing the Centres' products and some follow up measures tracking their use (such as feedback from users on product usefulness or changes in thinking, and citations of these products in government policy documents). Nevertheless, do such intermediary outcomes lead to positive effects on intended beneficiaries? This is difficult to assess without clarity about both the theory of change and the empirical evidence for this theory, leading from: (i) Centre activities to (ii) various intermediate outcomes (e.g. access of resources), to (iii) evidence-informed policies or practices, and then to (iv) positive outcomes for beneficiaries.

An additional challenge is the limitation of research methods being used to assess impact of the Centres work. Rarely does this involve testing the counterfactual – what would happen to both intermediary and

ultimate outcome goals if the Centres' activities did not take place? Also, many outcome measures in this field are subjective reporting of perceived impact, rather than objective measures of change.

A second aspect of being evidence-informed is the extent that Centres make use of the wider research base on knowledge brokering organisations. Currently, Centres make relatively little reference to this in statements about planning their own work.

Wider systems and contexts

A key consideration for What Works Centres, as intermediary organisations, is how they sit and work within external structures and systems. This includes not just the systems of evidence production and use they form part of, but also the wider political and societal systems in which it is hoped the benefits of evidence use will be realised e.g. policy, improvement, funding, accountability systems (Best, 2010). An implication of such a 'systems' model is that the effectiveness of Centres is a function of how well they integrate with external organisations and the systems in which they operate.

A finding from this review is that all Centres face challenges, to some degree, in impacting on these wider systems. This is not surprising for a number of reasons:

- The wider systems that the Centres are trying to engage with are often predominant influences in the sector (e.g. accountability).
- These wider systems are not always structured in a way that is receptive to research evidence, and so may not form an infrastructure that can naturally accommodate the work of the Centres.
- Centres are typically operating in sectors with historically weak track records and cultures of engaging with research.

These are not isolated to the What Works Network, and are typical of most research organisations, universities and funding bodies that are trying to influence wider decision-making. Indeed, there are potential advantages to having a single organisation, such as a What Works Centre, acting as a focal point for evidence-informed decision-making. By operating in the synthesis, communication and engagement domains of the evidence ecosystem, Centres are well-placed to process a large, and potentially overwhelming, body of evidence, and so provide a degree of coordination to that part of the evidence system.

That coordination only applies to one bit of the evidence ecosystem though. If Centres are going to retain a relatively tight focus then where does the responsibility lie for coordination across the rest of the evidence ecosystem? Moreover, if the Centres are only one element of the evidence ecosystem, how do they best go about influencing the wider, non-evidence systems? In this context, the natural progression we observed in this study for Centres to take on a broader remit – e.g. supporting more active uptake of evidence – is a logical response i.e. providing more coordination to the system by doing more functions. An alternative strategy could be for Centres to retain a tighter remit and operate in a system where there is more overarching coordination (e.g. *NICE* in the healthcare system). In this scenario, Centres may attempt to manage some of overarching coordination, influence it, or stay largely removed.

Whatever the approach, Centres will need to be adept at identifying levers of influence, nimble in capitalising on opportunities as they arise, and persuasive in their approach. Ultimately, there will be limits to what Centres can achieve within their context, which emphasises the importance of making precise, strategic decisions on how and where they place their effort and resources.

Create new systems that disturb existing systems.

Bring the existing systems to the work of the WWC

Embed WWC activities in existing external systems



One area where Centres face a strategic choice is the degree to which they embed their work within existing systems and processes. At one end of the spectrum, Centres can adopt strategies that create new systems that compete with, and disturb, existing systems. Overall, activities such as these, that compete with, and disturb, existing systems occurs least across the What Works Network. The next approach to interacting with the wider context involves attempting to attract, and align, organisations in those external systems to the work of the Centres. At the embedded end of the spectrum are activities that frame and integrate the work of the Centres in existing external activities, policies and structures.

An overall reflection from this study is that activities that frame and embed the work of the Centres in external processes and structures are perhaps underutilised at present, given the promise that these approaches show in influencing decision-making. We saw few examples across the Network of attempts to explicitly analyse the evidence ecosystem and its relationship with the wider systems, to inform Centres' Theories of Change and intervention strategies.

Organisational factors can have a significant impact on the means and degree by which Centres shape both the evidence ecosystem and wider systems in which they operate. There is a general view that independence from government is an advantage for Centres – whilst that can be true in some aspects, there are also potential trade-offs. For example, being close to government can create natural opportunities to integrate a Centre's work into policy systems, although at the same time create unhelpful perceptions of non-independence and top-down compliance with users.

Unsurprisingly, the overall budget a Centre has at its disposal influences the scope and nature of its engagement activities. Centres can also be constrained by the timescales of the funding cycles they work to, as well as the degree of freedom they have on budget allocation. A lack of budget flexibility may also limit the strategic capacity of the Centres. As they seem to have relatively limited scope for their own income generation, it is unclear how funding can be sustained without government or philanthropic support.

Finally, an important variable in relation to the Centres' role and impact is its point of development. The What Works Network is a relatively new initiative, with all but two of the Centres being five years old or less (*NICE* was established in 1999, the *EEF* in 2011). Inevitably, the relative infancy of many Centres creates limitations on their impact and reach as they develop their brand and credibility, build networks and relationships, and establish products, services and expertise. Centres are not static of course, and we captured examples of rapid and significant shifts in Centre's strategy, activities and impact.

Collaboration across Centres

The Centres were formally set up as the What Works Network in 2013 and regularly meet as part of the Network. The collaborative work to date has predominantly been through more informal bilateral arrangements between Centres. There is potential for broader collaboration across the whole or part of the Network and hopefully this report is a contribution to that process.

The wide range of approaches employed, and challenges experienced, suggests that there is much that the Centres could learn from each other. There are many potential incentives for the Centres to work together, such as:

- *Strategic development* – Discussing strategies with others may help a Centre to clarify the reasons behind the strategic choices they have made, and better understand the alternative approaches that are available.
- *Shared learning* – Sharing experiences and observed impacts may help highlight the value of certain work or of undertaking it in a certain way; for instance, the benefits of influencing the primary research agenda and the different strategies available for this.
- *Coherence at Network level* – Greater collaboration could lead to consistency and clarity in areas where more consistency might be expected and useful, such as evidence standards.
- *Brand image and funding* – Such consistency could help build confidence in What Works outputs and so raise the profile the Network.
- *Collaboration on overlapping topic areas* – Some issues and policies may be of interest to more than one Centre.
- *Infrastructure efficiencies* – Where areas of interest overlap, pooled resources can achieve impacts that align with the agendas of two or more Centres. An example could be the joint development of methods and processes.

There may be disincentives too though such as actual or perceived lack of flexibility, financial costs, and the possibility of competing interests. Finally, the Network has criteria for membership and these could be expanded to cover things such as joint standards (including evidence standards) and reporting processes.

In conclusion

This report provides a description and comparison of the UK What Works Centres to improve our understanding of the work their aims and methods.

The What Works Network is unique in its aim to ensure that public services across a wide range of policy areas are informed and improved by the best available evidence. The variety of approaches identified by this study demonstrate the scale of the What Works Network initiative.

This report identifies potential points of development for the Centres though we recognise that they operate with varying remits and funding and in different contexts that may constrain the extent that they are able to engage with some of these issues.

The findings of the study may also have relevance for the funders and audiences of the Centres, other intermediary organisations and individuals working between research use and research production, including any future What Works Centres.

Additionally, for researchers and others interested in evidence use, the report provides a case study of a unique network of knowledge creation and mobilisation.

CHAPTER 1: INTRODUCTION

1.1 What Works Network history, aims and purposes

The What Works Network⁴ was launched in 2013, with the aim of ensuring that spending and practice in public services is informed by the best available evidence. Two Centres – the National Institute for Health and Clinical Excellence (*NICE*) and the Educational Endowment Foundation (*EEF*) – existed prior to the formation of the Network. Seven new institutions have been created over the last five years, all part-funded by government, including two affiliated Centres, What Works Scotland and Public Policy Institute for Wales (now the Wales Centre for Public Policy), covering public policy in Scotland and Wales, respectively. The nine Centres cover a broad range of policy areas, which account for approximately £200 billion of annual public spending. The establishment of the What Works Centre for Children’s Social Care was announced in October 2017 and it will be in development until 2020 so is not included in this review.

Table 1.1: The nine What Works Centres included in this study

What Works Centre ⁵	Policy area
National Institute for Health and Care Excellence (<i>NICE</i>)	Health and social care
Educational Endowment Foundation/Sutton Trust	Education outcomes for 3-18 year-olds
College of Policing What Works Centre for Crime Reduction	Crime reduction
Early Intervention Foundation	Early intervention
What Works Centre for Local Economic Growth	Local economic growth
Centre for Ageing Better	Improved quality of life for older people
What Works Centre for Wellbeing	Wellbeing
Affiliate: Wales Centre for Public Policy (replacing PPIW)	Potentially any policy area
Affiliate: What Works Scotland	Potentially any policy area

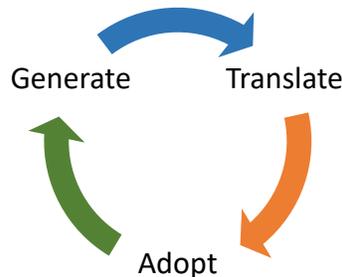
The What Works Network is supported and promoted by the What Works Team in the Cabinet Office, led by the What Works National Adviser, Dr David Halpern. This central team have defined three core

⁴ In this report, the term ‘What Works Network’ or WWN refers to this group of What Works Centres. When referring to the Cabinet Office team that supports this Network, we use the term ‘What Works Team’ or WWT.

⁵ Shown in order of establishment, plus the two affiliate members. Any recent changes of name and shortened versions of the names used in this report are shown in Chapter 2 Table 2.1

functions for the Centres – generate, translate, adopt – which form the basis of the membership criteria for the Network, (see Figure 1.1).

Figure 1.1: The three core functions of the What Works Network (Cabinet Office 2013)



These three core functions have remained the same since the Network was launched, and have gradually become more specific and detailed (though Centres are not limited to these functions):

1. **Generate** evidence on what works in a defined policy area:
 - Produce high-quality, accessible evidence syntheses (drawing on systematic reviews and meta-analyses) which meet the needs of decision-makers and service-users.
 - Make direct comparisons between different practices in their policy area by producing toolkits which summarise the evidence base according to:
 - Effectiveness of the intervention – using consistent evidence standards;
 - Strength of the evidence – using a common currency for rating quality;
 - Cost-effectiveness – using cost information and cost-benefit analysis where possible.
 - Interrogate the evidence to draw out accessible and practical information about the applicability and implementation of each intervention.
 - Identify research gaps and work with partners to fill them using rigorous experimental and quasi-experimental techniques.
2. **Translate** evidence to specific user groups in a user-friendly format:
 - Publicise and share evidence generated with users, providing guidance on how to interpret and use the information and adapting style where needed.
 - Maintain independence and methodological rigour when communicating the evidence, making sure that advice to users does not reach beyond what the evidence suggests and primacy is given to findings from high quality impact evaluations.
 - Commit to a high level of transparency around all evidence and recommendations to decision-makers.
 - Use plain English explanations of the limitations of any advice to ensure that users do not misuse the evidence published by the centre.

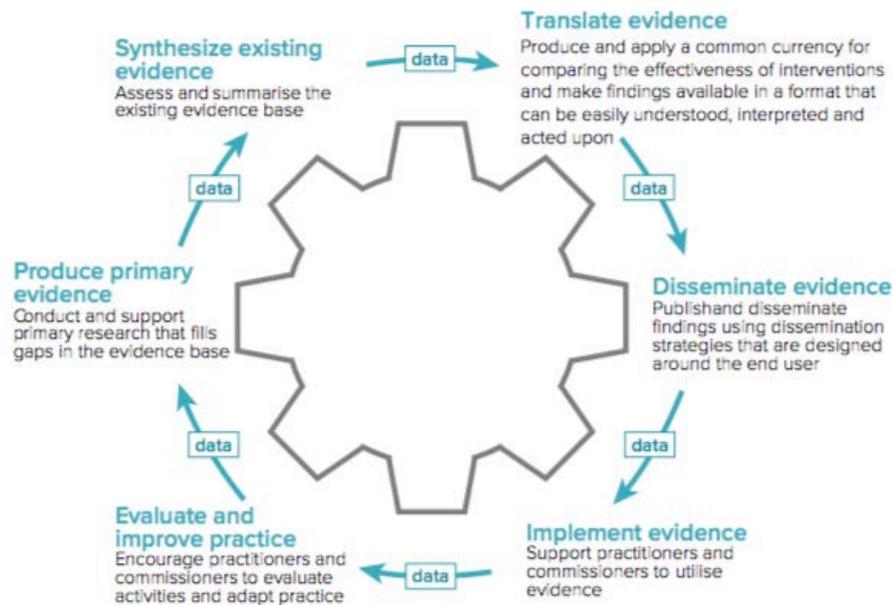
3. Encourage the **adoption** and intelligent use of evidence, and contributions to the evidence base:
 - Build capacity within user groups to understand, use and build evidence through workshops, conferences, targeted communication and other innovative approaches.
 - Work in collaboration with other What Works Centres, professional bodies, inspectorates and other groups and networks to reach user groups where possible.
 - Engage with the broader academic and policy community to improve the relevance, credibility and use of the evidence and advice produced by the Centre.
 - Provide advice and encouragement to those commissioning and delivering innovative interventions and research projects in order that their work is evaluated effectively and contributes to a growing evidence base.
 - Put the needs and interests of stakeholders designing and delivering public services at the heart of their work plan.
 - Make practical steps towards evaluating their own impact.

In 2017, the membership criteria for Centres were redrafted to include a set of six principles, designed to underpin the academic legitimacy of the Network and enhance outcomes (abridged):

- **Independent** – providing independent and unbiased advice to users, and retaining editorial control over all research and products.
- **Methodologically Rigorous** – using a clear and consistent process for evidence generation and synthesis; engaging with the wider academic and policy community to assure the quality of evidence products; and giving primacy to findings from high quality impact evaluations through a robust system for ranking evidence.
- **Practical** – playing a leading role in driving the use and generation of evidence in a specific, pre-defined policy area; and making practical steps towards evaluating and improving the Centre’s own impact.
- **Accessible** – putting the Centre’s target user group at the heart of all activities; sharing evidence with users at no cost in formats that are easy to understand and that enable them to make practical decisions on the basis of “what works”.
- **Capacity-building** – mobilising evidence and working to ensure that it is put into practice by decision-makers who will have the greatest impact; building user groups’ understanding of how and when to use and generate evidence.
- **Transparent** – providing comprehensive, easy-to-understand information about the methods and limitations behind the Centre’s output, and publishing both the research generated and the evidence around the impact of the Centre’s work.

To date, there is not an agreed overarching Theory of Change for the Network. In a recent report summarising the work of the Network over its first five years (Cabinet Office, 2018), a model was put forward (see Figure 1.2, adapted from The Digital and Trustworthy Evidence Ecosystem produced by MAGIC in 2016) describing the work of the Centres with more fine-grained categories of activities.

Figure 1.2: What Works Centres areas of activity (Cabinet Office 2018)



This model sets out a wide range of activities that the Centres may undertake and each of the Centres carries out some work in each of the three areas of Generate, Translate, Adopt. Whilst this model has value in describing how various activities work together as an overall evidence system, like all models, it also has its limitations. Firstly, the process of moving from evidence to action is represented as a linear unidirectional process, which is not always correct or desired and so would not adequately represent user driven functions undertaken by the Centres. Second, the model does not capture how the evidence ecosystem sits in relation to other systems such as funding, policy, accountability and improvement. For these reasons, the current report uses a broader framework— see Section 1.4 for details.

Finally, it is worth noting that the What Works Network sits within a broader range of activities, led by the Cabinet Office, to increase the use and quality of evidence in policy making. This includes:

- Running a Cross-Government Trial Advice Panel with experts from across academia and government, providing a free service for all civil servants to help test whether policies and programmes are working.
- Sharing findings from the What Works Centres across government and promoting discussion on 'what works'.
- Offering training to equip civil servants with the skills, capability and commitment to use evidence effectively.
- Undertaking a programme of work with HM Treasury to help civil servants make informed judgements on investment in services that lead to impact and value for money for citizens.

1.2 What Works Centres as intermediary organisations in evidence ecosystems

In many countries including the UK, most of the resources for academic research are invested in primary research with much lesser amounts being invested in systematically mapping and synthesising the resultant research findings, or in brokering or other ways enabling their use⁶. The realisation that investing predominantly in just one part of an evidence ecosystem may not lead to the efficient use of that research has led to an increase in funding and support to facilitate and enable social and economic impact (i.e. non-research impact) within the sector. The drivers for research centres are, however, still mainly academic and so continue to focus on research production and dissemination.

The development of intermediary organisations such as What Works Centres (that sit between or across different parts of the evidence ecosystem) is a further attempt to enable improved engagement between research use and research production. Research intermediaries vary significantly in their form, roles, activities, context and impact. This variation applies both between intermediary organisations and within intermediary organisations, where the roles and activities of individual intermediaries are often fluid and context-dependent (Sin, 2008). Research intermediaries cover a diverse range of organisations, from policy-facing organisations such as think tanks and lobby groups, through to practice-facing brokers such as professional organisations, government agencies, private companies and frontline practitioners.

Amanda Cooper studied 44 research intermediaries in Canada and identified a broad range of brokerage activities, occurring in different combinations and through different approaches: linkages and partnerships; awareness; accessibility; engagement; organisational development; implementation support; capacity building; and policy influence (Cooper, 2014). In addition to varying in their role and function, intermediaries can also differ in terms of whose knowledge is being mobilised (e.g. researcher knowledge, practitioner knowledge) and the form of that knowledge (e.g. scientific, technical, practical wisdom) (Ward, 2017).

A number of authors have discussed the work of What Works Network. Bristow and colleagues (2015) have described the origins, roles and activities of the Centres and provided an initial assessment of the potential strengths and limitations of this approach. Lenihan reviewed over twenty evidence-informed policy organisations internationally and provided a number of lessons for the emerging What Works Network (Lenihan 2013⁷, 2015⁸). Others have focused on the key skills and attributes of knowledge brokers more generally (Lomas, 2007⁹). There has also been a formal evaluation of the College of

⁶ If, for example, you examine research funding websites, the majority of the funding opportunities available concern new primary research as opposed to reviewing or communicating existing evidence.

⁷ Lenihan (2013) advised Centres: To be open to multiple methods & all forms of rigorous evidence; To safeguard independence – of structure, budget, & findings; To diversify funding where possible; Leadership is key, but institutionalisation of good evidence based practices is equally important; Budget size is not as important as using resources wisely; Effective communication is paramount; To stay transparent, avoid data ‘silos,’ & promote co-operation among evidence based policy institutions; and To self-evaluate.

⁸ Lenihan stated the importance of: An institution’s credibility, based on independence, neutrality, reputation, trust, transparency, and the quality of its methods and evidence; The utility of the research it produces, based on transferability, timing, stakeholder involvement and resonance with policy-makers; The communication of that research in terms of effectiveness, dissemination, presentation and translation for policy-makers.

⁹ Lomas (2007) identified the following key characteristics: Entrepreneurial (networking, problem solving, innovating); Trusted and credible; Clear communicator; Understanding the cultures of both researcher and

Policing's What Works Centre for Crime Reduction (Hunter et al. 2017) conducted as part of the academic consortium supporting that Centre, in which the authors report on the large amounts of activity of the Centre¹⁰.

An interesting feature of these reports is that they can emphasise features and activities that some Centres, or the Network itself, consider to be less important or outside of the What Works Centre remit altogether. For example, a recent review exploring the potential to develop an equivalent network in Canada suggested that conducting experimental primary research was a core function of such centres (Cave et al. 2017) when this is not specified as a core function by the Network (see Box 1 earlier).

In 2016, the Economic and Social Research Council (ESRC) conducted a strategic review of the What Works Network, and their role in supporting it, including a consultation survey with stakeholders, and analysis of key documentation. The survey captured perspectives on the Network to date, perceived benefits and challenges, as well as views on long-term sustainability. A key question raised in the report was 'What Works in What Works?', with the suggestion that the ESRC should support learning in this area, including the 'development of an emerging impact narrative'. This narrative would consider 'how different models are working in different contexts, share learning and promote flexibility of approach according to circumstances' as well as evaluate effective practice across the Network.

A further consideration for intermediary organisations is how they sit and work within external structures and systems. Allan Best's work on 'knowledge to action' systems captures this principle well, in highlighting that knowledge mobilisation activities and processes don't work in isolation, but sit within complex systems outside of research, with multiple actors and influences, each with their own priorities, motivations, processes, time-scales and world views (e.g. policy, improvement, funding, accountability systems) (Best, 2010). An implication of such a 'systems' model is that the effectiveness of intermediary organisations is a function of how well they integrate with external organisations and the systems in which they operate.

In conclusion, there is a growing recognition of the diverse roles that research intermediaries play and the contexts they operate in. Nevertheless, despite this increased interest, there are surprisingly few empirical studies examining the effectiveness and impact of intermediary organisations, nor an agreed overarching model to describe their work. In this review of What Works Centres, we have focused on the basic logical components that make up a 'knowledge to action' system, as a way of framing the work of the centres. This conceptual framework is discussed in Section 1.4 below.

1.3 Approach of this study

The purpose of this report is to provide an overview of the current What Works Network and the range of activities it undertakes, resulting in a comparison of the Centres that is of interest to a broad range of audiences. The findings can inform:

- Current and potential users and funders of the What Works Centres, through a better understanding of the differences and commonalities across Centres.

decision-making environments; Able to find and assess relevant research in a variety of formats; Facilitates, mediates and negotiates; and Understands the principles of adult learning.

¹⁰ Activity reported by Hunter et al. (2017) included building the knowledge base for crime reduction, making it accessible and comprehensible to practitioners, increasing awareness of research and embedding in police practices, enabling shifts in attitudes towards research and increasing police and academic collaboration.

- Current What Works Centres to reflect on how they operate in relation to other Centres and how they might draw on processes and strategies used across the Network, stimulating the exchange of ideas, sharing of mistakes and successes, and collaboration on common goals.
- A broad range of similar intermediaries (including prospective What Works Centres) to understand how ‘knowledge to action’ systems can operate in practice and how organisations can play a range of different functions in bridging between research, policy and practice, as part of these systems.
- Academic audiences to gain insight into how conceptual models and theories of knowledge mobilisation manifest themselves in practical initiatives such as the What Works Network.

This study provides a description and analysis of the work of the What Works Centres but is not intended as an evaluation of the effectiveness of the Centres. It should also be noted that the array of all the work undertaken across the Network is vast and rapidly expanding so providing a comprehensive and detailed account of all Centre activities is not practical. Instead the study describes each of the Centres and where their focus lies: the approaches they have chosen and the key functions that they perform, in order that these varying approaches and the reasons for them can be compared.

1.3.1 Methods

This study used a structured framework (see Section 1.4) to collect and analyse data on the work of the Centres. The procedures for the study are outlined in Table 1.2.

Table 1.2: The procedure for this study

Research plan	Developed by the research team at UCL. Ethical approval granted by the university.
Preparation	Initial and update meetings were held with the Advisory Board for input and oversight of the data collection process. Consent to participate was obtained from the Director or Chief Executive of each of the What Works Centres.
Information sources for data collection	<ul style="list-style-type: none"> • Interviews conducted with the Director and/or a delegated member of staff for each Centre in the summer and autumn of 2017. • The Centres’ websites and other public sources of data, such as annual reports. • Further information and internal documentation provided by relevant Centre staff members.
Data collected for each What Works Centre	<ul style="list-style-type: none"> • Their status, history, governance, resources, business model and sustainability. • Their aims and the methods or strategies used to achieve these aims. • The activities and products that make up these methods, the resources these activities involve, their uptake by users and their perceived impacts. • How these aims, methods, activities and products fit into to the wider policy and practice context (ecosystem) in which the Centres operate. • The ways in which the methods, activities and products, uptake and achieved impact are being monitored and evaluated, and the outcomes of such monitoring and evaluation.
Input and checking	The above information was collected and analysed using a structured framework (discussed further in Section 1.4). These were fed back to the respective Centres to enable them to check for accuracy and completeness. Following any necessary revisions, the frameworks were used to develop two documents for each Centre: a two page overview of its role, structure and

	resources and a summary of its main activities. Again these documents were issued to the respective Centres, and to the Cabinet Office What Works team and ESRC, for correction and comment.
Analysis	These documents were used to compare the Centres and their work, and a meeting was held in February 2018 with the What Works Network (Centre representatives and the What Works Team), the Alliance for Useful Evidence, and ESRC to discuss issues arising from this analysis.
Writing the report	Following further feedback and analysis, a preliminary draft report and then a revised draft report were produced in April and May 2018, both of which were circulated to the What Works Network (the Centres and What Works Team), the Alliance for Useful Evidence and to ESRC, for further comment before publication.
Intended future work	To use the analysis and findings in this report to create a user friendly resource for current and potential What Works Centres to help them consider the dimensions on which they differ and the implications of these differences for their planning and development.

The Centres were continuing to develop and change throughout the review process. A ‘census date’ of 1st July 2017 was therefore used where possible when collecting data to create a ‘snapshot’ of each Centre, enabling a consistent comparison of the Network at a certain moment in time. The varying evolution of the Centres is, however, a key interest of the study so data was also collected on how the Centres and their work have changed over time, including since July 2017, and any plans for changes in the future.

The data collection and checking process described above incorporated input from the Centres, the Cabinet Office’s What Works Team and the ESRC to ensure that the information contained in this report is as accurate as possible. The Centres have been given opportunities to check and comment on the accuracy of the data collected and drafts of the report. The report is still the work of the authors and does not necessarily represent the views of the Centres.

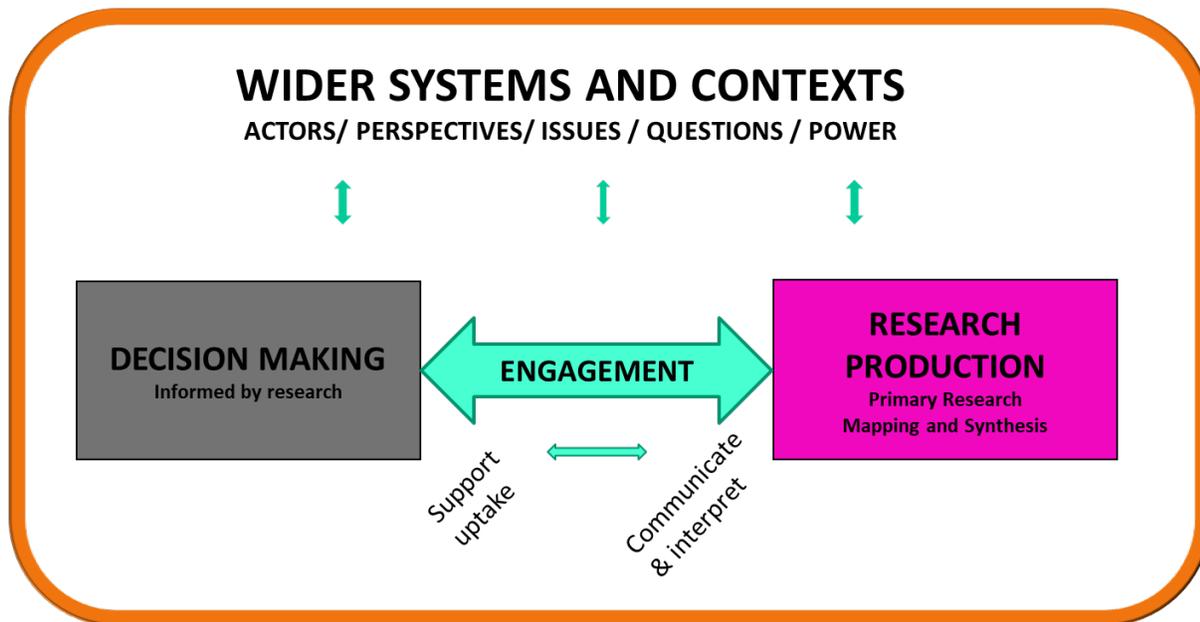
1.4 Analytic frameworks of this study

1.4.1 Main domains and sub-domains

As explained in Section 1.1 there is not a universally agreed model of the nature of evidence-informed policy and practice. The What Works Network’s own original and more detailed models (Figures 1.1 and 1.2) describe the Centres’ main remit and work but a broader perspective was required for this study to examine any work they undertake that falls outside of this remit and how the Centres interact with the wider system in which they sit. We have used a simpler but broader model as a framework for data collection to capture the main domains of evidence use and the two-way interactive relationship between the use of research and research production. In other words, our model views the work of the Centres as part of an evidence ecosystem within a broader public policy context.

A version of this model shown in Figure 1.3 differentiates the main components of work that can be undertaken by the Centres and similar intermediary organisations into four main domains (Wider systems and contexts, Decision-making, Engagement and Research Production). This is obviously a very simple classification of many functions involved in evidence-informed policy and practice but serves a useful structure for locating the range of activities undertaken by the Centres.

Figure 1.3: The main components of an evidence ecosystem within its broader system/context



Adapted from Gough et al 2011, Gough 2012

The model has some similarities with the What Works Centres model (Figure 1.1) and the adapted Magic model (Figure 1.2) but additionally shows the context in which the Centres are working. Also, as the Centres have developed, they have begun to take a more bi-directional view that goes beyond the traditional ‘push’ (production) model of research where evidence is generated then disseminated, interpreted and used. The Centres have increasingly recognised the additional ‘pull’ (demand) processes where users inform research production to ensure that the outputs meet their needs (in terms of perspectives, topic content and format). This distinction between pull and push is similar to Weiss’s (1979) distinction between problem solving and research production led approaches to evidence use.

Both push and pull are necessary but there can be a tendency in discussions of evidence use to default to a push view of the system that places research production first and the use of research last. By placing research use in decision-making first and linking it to research production by a two-way process of engagement that makes no assumptions about the direction of these processes, the above four domains model is well placed to capture any work the Centres are undertaking. The four domains are now briefly described.

Context

This is the context of the wider system within which each Centre is working. Each What Works Centre is trying to make the evidence use system in their topic area work more effectively by helping to “ensure that spending and practice in public services is informed by the best available evidence”, the principal aim of the What Works Network (Cabinet Office, 2018). They are attempting to do this within a wider context for their public policy area. There are therefore two levels: (i) the narrower evidence ecosystem with engagement between the use of research and its production; and (ii) the broader system and context within the evidence ecosystem exists.

These wider contexts affect what types of policy and practice decisions are made, whether they are likely to be informed by evidence, the nature and extent of research being produced and what is happening in the intermediary space between research use and research production. In some areas of public policy there will be powerful organisations and interests or just historical ways of doing business that may or may not be open to increased use of research evidence in decision-making. The contexts do not only influence the general nature of evidence use within their topic area. They may also affect whether or not a Centre is established and, if one is, how it is structured, governed, and financed and the work that it does. It might be that a Centre is more likely to be created in a context where there is sympathy for evidence use or may be more likely in a context where there is a particular need for increased evidence use. There is unlikely to be a consistency of view within a public policy context. There may be many different perspectives with varying values and priorities not just about the use of evidence but about what problems need to be solved and which research questions should be asked.

Decision-making

The aim of the What Works Network is for research evidence to be used in decision-making but the Centres, as intermediary organisations, are expected to support and enable this through engagement with external individuals and organisations rather than directly make and implement decisions themselves. The Centres may work closely with policymakers and practitioners to encourage the uptake and use of evidence but ultimately an external user will make and implement the decision. We have made this distinction clear in the model by separating Decision-making (done by the user) from Supporting uptake (done by another party, such as a What Works Centre, to support the user). The term 'research use' can be applied to both types of activity so we have only used this where we refer more broadly to activities conducted in this area (i.e. any activity that takes place towards the left-hand side of our model).

In some cases though, Centres may be involved more directly in the decision-making process. Guidance production, for instance, involves the Centre using evidence to recommend policy or practice. Centres that have sufficient freedom of movement and power may take this a step further by stipulating standards of practice and requiring practitioners to meet these. However, in each of these cases it is still the user that makes or implements the decision and so any recommendations, standards and even penalties for failure to apply them can be seen as a very active form of engagement. As this is a matter of degree, these activities are described together in the report with other engagement activities under the heading 'User engagement and supporting uptake' (see the next section on engagement).

Engagement

This is the interaction between the process of using research and its production. Using evidence involves engagement of some kind, the extent of which can range from simply providing access to a piece of research (e.g. via a website) to working closely with the user to develop research skills and a better understanding of the evidence itself. The direction of this engagement can be both 'push' and 'pull' with users informing the research alongside the activities to promote and embed the research produced.

The approach to examining engagement in this study is informed by the framework from the Science of Using Science (SOUS) review (Langer et al. 2016) which sets out various mechanisms and behavioural components that enable engagement and the levels they can be applied at. The wide array of engagement mechanisms available to What Works Centres has been divided in this report into the following three sub-domains:

User engagement and supporting uptake: Interaction and verbal or face-to-face engagement to encourage, support or enable research users to apply evidence. This primarily involves interaction with

the research user and covers a spectrum of activities. It may involve one or more of the following SOUS mechanisms¹¹:

- INTERACT – Interaction between decision-makers and researchers.
- SKILLS – Supporting decision-makers to develop skills in accessing and making sense of evidence.
- STRUCTURE & PROCESS – Developing, maintaining or advising on structures and processes to support evidence use.

Communicating and interpreting evidence: Translating evidence and making it accessible, for instance via toolkits and guides. This covers a wide spectrum of activity from publishing a piece of research on a website to guidance production processes that interpret research findings (and sometimes other forms of evidence) to produce recommendations. It may involve one or more of the following SOUS mechanisms:

- AWARENESS – Building awareness for, and positive attitudes toward, evidence-informed decision-making (EIDM).
- COMMUNICATION & ACCESS – Providing communication of, and access to, evidence.

User perspectives: All parts of the evidence ecosystem and wider context (see Figure 1.3) are influenced by the values, priorities and assumptions of different actors. User perspectives can therefore be used to help determine what issues could be informed by research and what types of research evidence would be helpful, as per the SOUS mechanism:

- AGREE – Building mutual understanding and agreement on policy relevant questions and the kind of evidence needed to answer them.

Co-production is a distinct form of engagement in that it involves evidence users and researchers working closely together to create research findings: the research users for example are also the research producers. The space that intermediaries work in is collapsed as a consequence. The Centre may still undertake a range of engagement and production activities alongside its external co-production partners or it may focus on setting up the initial partnerships and facilitating their work.

Research production

This is the creation of research evidence through undertaking research. The main form of research production identified in the What Works Centre model (see Section 1.2) is synthesis of evidence which is a meta level of study (Gough et al. 2017). This may involve reviewing or conducting systematic reviews¹² and meta-analyses, or less formal literature reviews and rapid evidence assessments. The Centre may also conduct their own primary research, for instance to evaluate interventions, or conduct secondary data analysis to address existing evidence gaps. Finally, a Centre may conduct research on research use, engagement and production. This can take the form of evaluating the impacts of its own processes and outputs or researching the methods and impacts of external organisations in the theory and practice of ‘research use’.

¹¹ Langer et al. (2016) identified six mechanisms of engagement: Awareness (M1), Agree (M2), Communication & Access (M3), Interact (M4), Skills (M5) and Structure & Process (M6).

¹² A systematic review can be defined as: ‘reviews of existing research using explicit, accountable rigorous research methods’ (Gough et al. 2017, p5)

1.4.2 Evidence standards

Evidence standards are not an activity carried out by Centres but a set of principles, processes or criteria that can underpin many of a Centre's activities across the four domains. When research is undertaken, certain standards are expected of the methods of research and the evidence produced by that process in order to make justifiable evidence claims (for instance, that the evidence produced shows that an intervention is effective). In other words, evidence standards are the processes or criteria applied for making evidence claims that may then be justifiably used to inform policy or practice or individual decision-making. These standards vary in their content, their detail, and the rigour and strictness and manner in which they are applied. They also vary in what they are applied to. Evidence standards can be used to justify evidence claims from primary research, from research syntheses, from summaries of an evidence base, on guidance to inform policy or practice and on evidence to justify actual decisions informed by research.

Data was collected on the evidence standards used by the Centres. As evidence standards is a complex issue fundamental to effective use of evidence, it is examined separately in this report (see Chapter 4). The implications of the approaches taken by the Network are then discussed in Chapter 5 alongside the implications of any other variation between the Centres and their activities.

In this report we consider 'evidence' to be any academic research, including research undertaken by non-academic individuals using similar research methods. It should also be noted that policymakers and other organisations (including What Works Centres) may also consider other forms of research such as public/expert opinion or financial data when making decisions, and their evidence standards may make specific allowances for this.

CHAPTER 2: THE UK WHAT WORKS CENTRES

This Chapter presents further detail on the individual What Work Centres that make up the Network, using a 'census date' of 1st July 2017 to provide a snapshot of the Centres at the same moment in time¹³. Table 2.1 provides information on the establishment and ongoing status each Centre¹⁴.

The rest of this chapter describes each What Works Centre in turn (in alphabetical order). A common structure is used to provide a brief overview of each Centre in terms of its:

- History, setting, and the research topics covered
- Legal status and governance
- Business model and resources
- Mission, aims and the strategies employed to achieve these aims
- Degree of involvement in the different domains and sub-domains of work set out in the model of the research use system (see Section 1.4.1)
- Plans for the future

The intention is to give some context to the subsequent analysis of the activities undertaken by each Centre and how they vary across the Network, described in Chapter 3. Each overview is therefore limited to two pages and therefore, for the larger Centres in particular, provides a broad description rather than a comprehensive account of the Centre in its entirety. For a more detailed discussion of the various activities of the Centres, please see Chapter 3 and Appendix 1.

¹³ The What Works Centre for Children's Social Care is not included in the analysis for this report as the formation of this Centre was announced after this date.

¹⁴ For more detailed information, please see the overviews of each Centre that follow.

Table 2.1: What Works Centres' status, governance and funding

What Works Centre	Legal Status	Year formed	Annual budget ¹⁵	Main funding Sources
Centre for Ageing Better	Charity and Limited Company	2015	£5.3m	The Big Lottery Fund endowment
What Works Centre for Crime Reduction	Part of the College of Policing (Limited Company owned by government)	2013	£1.5m	The College of Policing (through its grant in aid funding from the Home Office) and ESRC
Early Intervention Foundation (<i>EIF</i>)	Charity	2013	£1.5m	Departments for Education (DfE) and Work & Pensions, Ministry of Housing, Communities & Local Government ¹⁶ , and Public Health England
Education Endowment Foundation (<i>EEF</i>)	Charity	2011	£16.5m	Department for Education endowment
What Works for Local Economic Growth	Joint project led by LSE with ARUP and CfC (Charities and Limited Companies)	2013	£1.25m	ESRC, Ministry of Housing, Communities & Local Government and Department for Business, Energy & Industrial Strategy ¹⁷
National Institute for Health and Care Excellence (<i>NICE</i>)	Non-Departmental Public Body	1999	£71.3m	Department of Health and Social Care ¹⁸
What Works Scotland	A joint project led by University of Glasgow (Charity)	2014	£1m	ESRC, Scottish Government and the Universities of Glasgow and Edinburgh
Wales Centre for Public Policy (WCPP, replacing PPIW) ¹⁹	Project led by Cardiff University (Charity)	2013 (PPIW)	£530k	Welsh Government and ESRC
What Works Wellbeing	Community Interest Company	2014	£1.3m	ESRC, AHRC, 12 Government Departments/Agencies, 4 businesses and the Big Lottery Fund

¹⁵ Approximate annual budget based on figures of income or expenditure for the 2017 calendar year or 2016/17 financial year where available, or the average annual budget where figures were provided for a longer timescale.

¹⁶ Prior to January 2018 known as the Department for Communities & Local Government.

¹⁷ Also, since 2017, the Department for Work and Pensions and the Department for Transport.

¹⁸ Prior to January 2018 known as the Department of Health.

¹⁹ In October 2017 the Public Policy Institute for Wales (PPIW) was renamed the WCPP (see 2.8).

2.1 Centre for Ageing Better²⁰

2.1.1 Description (history, setting, topics)

Topics: Quality of life in later life (as measured by financial security, physical and mental health, social connections and personal wellbeing).

History and setting: Dual parentage: set up as a What Works Centre in response to the 2013. Government Report 'Ready for Ageing' and supported by the Big Lottery Fund to form an independent charitable foundation.

Location boundaries: England, though keen to learn from international evidence.

2.1.2 Legal status and governance

Formal legal status: Charity (Centre for Ageing Better Trust) and also a Company Limited by Guarantee (Centre For Ageing Better Ltd).

Governance: The non-executive supervisory Board of Trustees has overall legal responsibility for the direction, management and control of the organisation. *Ageing Better* has four Committees: Governance; Remuneration; Finance, Investment & Audit and Programme & Partnerships.

2.1.3 Business model

The 10-year funding period has enabled *Ageing Better* to embark on ambitious, long term projects.

2.1.4 Resources

Staffing: Total of 26.8 FTEs in post, most of whom have joined in the first 6 months of 2017. This approximately matched the level set out in the original business model.

Annual budget: £5.3m for 2017. Secured an endowment of £50m for the 10-year period 2015-2025 from the England Committee of the Big Lottery Fund in January 2015, with further development funding of £200k from the Department of Health (now DHSC) and £600k from the Department of Communities and Local Government (now MHCLG)²¹.

2.1.5 Mission and aims.

Mission

- *Ageing Better* want a society in which everyone enjoys a good later life.
- They believe that more people living longer represents a huge opportunity for society. But changes are needed so more people enjoy good health, are financially secure, are socially connected and have a purpose in later life.

Aims

- To bring about changes in society that enable more people to enjoy a good later life (for people in later life today and for future generations).
- To bring fresh thinking to the challenges and opportunities that society faces as more people live longer.
- To develop, share and apply evidence to help people age better.

²⁰ Referred to in this report as *Ageing Better*. For more information, see centreforageingbetter.com.

²¹ Since January 2018, respectively known as the Department of Health and Social Care and the Ministry of Housing, Communities and Local Government.

The problem, need for change: Increasing numbers of older people presents challenges to how government, society and individuals plan for future years. A good later life is not universal as too many people still experience health, wellbeing, financial or social problems. Ageing is seen as a problem rather than as an opportunity for society and for individuals.

2.1.6 Strategy

A place-based, life course approach – intervening now for better outcomes later – and examines not just at what works but how (implementation). *Ageing Better* works to ensure that the evidence for what works to improve later life is better understood and more widely applied, and to support others to adopt and sustain effective or promising ways of working. However, it does not use a simple, traditional, linear model of synthesise > package > disseminate. Where there is no primary evidence to synthesise and no existing good practice to evaluate, *Ageing Better* will develop, pilot and evaluate ideas based on the knowledge and expertise people with professional and lived experience. And where there is good evidence of what actions will bring about change for people, *Ageing Better* will work directly with partners to influence and support them to achieve that change.

Key activities

Ageing Better has developed programme logics or Theories of Change for a range of topics dependent on the question and current state of evidence. Mechanisms for change include:

- Commissioning others to bring together the evidence on a topic, evaluate current practice and develop and test new approaches.
- Influencing national and local decision makers by communicating the changes that are needed to the system in order to improve later life.
- Sharing knowledge on the best evidence and ways of implementing it, including bringing people together to learn from each other.
- Working with and in localities to implement what works, learn from implementation and share lessons and programme narratives with other areas.

2.1.7 Degree of involvement in the 4 work domains (see Section 1.4.1)

Most of the work for the first two years of operation has been laying groundwork: identifying needs and building status, though a larger research programme is now coming into effect, and several strategic partnerships are up and running. Effort and staffing is approximately equal between 3 teams: Evidence 5.4 FTEs, Communications 7.8 FTEs, and Innovation/and Change 7 FTEs. The focus of work is, therefore, spread across contexts, engagement and supporting uptake, and increasingly research production.

2.1.8 Future plans

Ageing Better is developing a new Strategy to be published in summer 2018, which will set out how the Centre can be more ambitious in its mission to have greater impact, and what it could do more of or differently in achieving this.

2.2 What Works Centre for Crime Reduction²² (at the College of Policing)

2.2.1 Description (history, setting, topics)

Topics: Crime reduction (and policing more generally by the College)

History and setting: In 2013 ESRC and the College of Policing²³ (CoP) joint-funded an academic consortium (the Commissioned Partnership) to support the establishment of a What Works Centre for Crime Reduction to identify, assess and share the evidence base on reducing crime with policing and crime prevention practitioners. The consortium undertook primary research and systematic reviews in priority areas and identified, mapped and coded the existing crime reduction evidence to inform a toolkit hosted by the CoP. A team within the CoP then reviewed, translated and communicated the research findings. The CoP has been engaged in wider activities to translate and communicate evidence and as of early 2017, the whole CoP is seen as a What Works Centre²⁴.

Location boundaries: England and Wales, though outputs are made available and links are developed internationally.

2.2.2 Legal status and governance

Legal status: No separate legal status: Part of (and increasingly co-terminus with) the CoP (a company limited by guarantee, owned by the Home Secretary and an Arm's Length Body of the Home Office).

Governance: The Board of Directors comprises an independent chair, the College Chief Executive, four independent directors from various sectors, and five members from specified policing staff or ranks. It is supported by: (i) the executive leadership team, who oversee the operations and management of the organisation, and ensure everybody in the College meets the standards of the Code of Ethics for Policing; and (ii) the Audit & Risk committee; Nominations & Remuneration committee; Professional Committee (capability needs, national standards & practice); Regulatory Consultative Group, and Equality, Diversity & Inclusion Advisory Panel. Projects and programmes each currently have an academic advisory group where appropriate. The work of the academic consortium was coordinated by UCL and overseen by a joint funders group chaired by ESRC and attended by the Chair of the CoP.

2.2.3 Business model

Funded by the CoP, from its grant in aid delegation from the Home Office. The academic consortium was funded by the CoP and the ESRC from 2013 to 2018. The CoP were heavily involved with the commissioning of, and engagement with, the university/police partnerships established through the £10m Police Knowledge Fund (administered by the Higher Education Funding Council for England (HEFCE) and funded by HEFCE and the Home Office).

2.2.4 Resources

Staffing: Approximately 20 FTEs (at July 2017), mainly social research staff with some knowledge management and engagement roles. The Commissioned Partnership Programme was staffed predominantly by academics.

Annual budget: £1.5m (approximately) for 2017/18.

²² Referred to in this report as *Crime Reduction*. For more information, see whatworks.college.police.uk/Pages/default.aspx.

²³ COP is the professional body for everybody in policing and is operationally independent of the Home Office.

²⁴ Where a distinction remains between the What Works Centre and the College, this report focuses on the activities of the What Works Centre specifically.

2.2.5 Mission and aims

The mission of the College of Policing is to provide those working in policing and crime reduction with the skills and knowledge necessary to prevent crime, protect the public, and secure public trust. Through its What Works activity, the College aims to develop the research and infrastructure for improving evidence of ‘what works’ and getting it used in practice by:

- Building policing capability to use and build the evidence base for policing and crime reduction.
- Embedding evidence and evidence-based approaches in policing systems owned by the College e.g. the learning curriculum, College guidelines and standards; recruitment and promotion processes.
- Producing, quality assuring, translating and making accessible the crime reduction evidence.

The aims of the initial joint ESRC/CoP investment aligned more closely with the What Works Network aims and were less oriented to changing policing culture.

2.2.6 Strategy

The College uses and promotes an evidence-based approach where police officers and staff create, review and use the best available evidence to inform and challenge policies, practices and decisions. This can be supported by collaboration with academics and other partners. The College also owns some levers for professional development such as the policing curriculum and guidance, enabling it to make evidence use integral to all police roles and progression routes. This allows evidence to be explicitly embedded in these levers and stimulates others to act on similar agendas. Officers and staff are being encouraged to reflect on their practice, consider evidence, learn from successes and failures, challenge accepted practices and innovate in the public interest. Due to the paucity of quality impact evidence in some areas, the College is actively encouraging robust impact evaluations to fill the gap.

2.2.7 Degree of involvement in the 4 work domains (see Section 1.4.1)

Much of the early work of the Centre was focused on identifying and making accessible, through the Crime Reduction Toolkit, the existing evidence on what works for crime reduction (research production and engagement). In more recent years, the focus has shifted to embedding evidence-based approaches in the systems that will incentivise the use of research including: the development of evidence-based guidelines and standards; ensuring the national policing learning curriculum is based on evidence of what works; and ensuring the recruitment, assessment and promotion processes for policing reflect evidence-based approaches as a core skill requirement. In addition, the Police Knowledge Fund has stimulated co-production between policing and academia to develop the evidence in priority areas.

2.2.8 Future plans

Plans for further ‘what works’ investment by ESRC are currently in discussion. The CoP’s plans include:

- Updating the toolkit and developing alternative ways of making evidence more accessible to different audiences.
- Accelerating the delivery of high quality evaluations in priority areas, for example, vulnerability.
- Building capability by embedding research and evidence-based approaches in police qualifications and learning.
- Supporting policing and academic partnerships, expanding the Centre’s audiences and increasing links with other What Works Centres.

The College will continue to develop its approach to creating evidence-based guidelines and is working with the *EEF* to develop a tool to assess the quality of qualitative and quantitative social research studies and develop a way of rating a body of mixed-method evidence.

2.3 Early Intervention Foundation²⁵

2.3.1 Description (history, setting, topics)

Topics: Early intervention regarding the risks (such as neglect) and protective factors (such as familial relationships) that can affect children's development and life chances.

History and setting: Following the 2011 reports from the Independent Review of Early Intervention by Graham Allen MP (requested by the Prime Minister in 2010), *EIF* was commissioned in 2013 by Government with cross-party political support and set up as a dedicated charity: independent from, though predominantly funded by, government. The What Works Centre was purposed with assessing evidence and maintains strong relationships with Whitehall.

Location boundaries: England (due to government funding) with some reach beyond. This includes outputs that are available to all and developing links with the devolved nations and outside of the UK.

2.3.2 Legal status and governance

Formal legal status: Charity

Governance: *EIF* is governed by a board of 10 trustees, and where appropriate takes advice from a 12-person Evidence Panel of experts in early intervention, developmental science, social research and related topics. *EIF* is accountable to its funder departments (led by the Department for Education as the sponsor department, with the Ministry of Housing, Communities and Local Government, the Department for Work and Pensions and Public Health England) via grants for work that include KPIs for delivery of *EIF* projects, outputs and activities, and to other government and non-government funders (trusts and foundations) for contracted work.

2.3.3 Business model

EIF is predominantly funded through the above four government departments and although the strategy is for this to continue, the Centre aims to diversify funding from private and commercial sources, such as trusts and foundations or local authorities. There is increasing international interest in the Guidebook and other outputs, and *EIF*'s work with local authorities is expected to increase, e.g. via the Early Years Transformation Academy project currently being scoped. The Centre is considering new academic funding/partnership opportunities, how to use the intellectual capital it has built up, and which skills/assets others might purchase (while still producing work for public good).

2.3.4 Resources

Staffing: FTEs: 20 (effectively²⁶), mainly from research, policy, communications or voluntary backgrounds.

Annual budget: Planned £1.5m expenditure this year, £1m of which is from a central government grant, the rest from individual government contracts (for ad hoc pieces of work) and external work.

2.3.5 Mission and aims

EIF's mission is to ensure that effective early intervention is available and is used to improve the lives of children and young people at risk of poor outcomes. *EIF* defines early intervention as identifying and providing effective early support to children and young people who are at risk of poor outcomes. *EIF* is founded on the belief that early intervention is socially, morally and economically preferable to waiting

²⁵ Referred to in this report as *EIF*. For more information, see www.EIF.org.uk.

²⁶ Staff numbers are averaged at quarterly points throughout the year to give an equivalent figure to FTEs: 20 as at July 2017, 18 on average for the financial year ending March 17.

for problems to become more severe and entrenched, and that evidence-based interventions can benefit a large proportion of the population.

The problem, need for change: There are growing numbers of children and young people who are living with complex problems which inhibit their short-term and long-term life chances, new risks, and reductions in public spending are all leading to increased pressure on relevant services and substantial expenditure on late intervention. Personal, social and developmental problems can be identified at an early age, and their occurrence and severity often shows a widening gap based on socio-economic factors. The right early intervention could prepare young people better and put them on a different path.

2.3.6 Strategy

In 2018, EIF set out their strategy for the next five years. This strategy reflects the need to refresh and re-energise the positive case for early intervention among policymakers and those with the power to invest and support early intervention at a macro level, and reinforces the need to ensure that evidence about the effectiveness of different early intervention approaches is available, relevant and used to influence real-world decisions about policy and practice. Key activities include:

- **Making the case:** producing a refreshed set of evidence-based arguments that make a new and more nuanced case for early intervention, which reflects how this agenda has changed over the past decade and seeks to address some of the barriers that prevent early intervention from being a higher priority.
- **Generating evidence:** evidence on the economic and social case for early intervention; evidence to change policy and practice (on identifying risk, assessing need, the effectiveness of programmes, workforce practice and building local systems); and support and tools to help others continue to build the UK evidence base.
- **Using evidence to change policy and practice:** communicating evidence to influence behaviour and supporting change by working through policymakers, sector and workforce bodies, large charities, the Centre's networks, and directly with local places.

This builds on the strategy set out in 2015 which focused on producing, communicating and driving the adoption of evidence – reviews, systematic mapping but not primary research – on potentially effective intervention approaches, plus the developmental goal of building a sustainable and resilient Centre.

2.3.7 Degree of involvement in the 4 work domains (see Section 1.4.1)

During the last full financial year (up to March 2017), approximately 70% of resources were spent on evidence generation (research production), with 20% on dissemination and 5% on supporting adoption (engagement and supporting uptake), and the remainder on other costs such as administration. This has since changed with the new strategy.

2.3.8 Future plans

The 2018–2023 strategy reflects a series of lessons learned during EIF's first five years in operation, including the need to ensure that evidence is directly relevant to the questions being asked within the relevant sectors; to expand and improve the UK evidence base, to complement international studies and trials; and to reflect the increasing pressures and complexity within public services and the voluntary sector, which create both additional challenges and new opportunities for early intervention.

2.4 Education Endowment Foundation²⁷

2.4.1 Description (history, setting, topics)

Topics: Education outcomes for 3-18 year olds, particularly those from disadvantaged backgrounds.

History and setting: Established in 2011 by the Sutton Trust, as lead charity in partnership with Impetus Trust (now part of Impetus–Private Equity Foundation), with a founding endowment of £125m from the Department for Education (DfE). The *EEF* and Sutton Trust are, together, the government-designated What Works Centre for Education.

Location boundaries: The *EEF* only funds projects that will work for the benefit of pupils and settings in England, although supports innovative ideas from overseas that are applicable to the English education system. The *EEF*'s evidence system and resources (e.g. *Teaching and Learning Toolkit*) are being applied internationally e.g. Australia, Latin and South America, Scotland.

2.4.2 Legal status and governance

Formal legal status: Charity.

Governance: The Board of Trustees has discretion as to how the *EEF* meets its charitable objects, supported by an Advisory Board of 16 leading figures from education, public policy and business. The Grants Committee assess applications for funding projects and interventions, based on recommendations from the *EEF*'s team of Programme Managers. They later assess the specific, costed plans for these projects (and evaluations) in order to make recommendations to the Board of Trustees.

2.4.3 Business model

The *EEF* executive team and board manage and invest the initial endowment funds, plus fundraise against them. The endowment is used to secure further funding through partnerships with trusts and foundations, companies, funding bodies and others. Schools contribute teachers' time and resources to projects, and may also contribute financially. International partnerships operate under licensed contract with the *EEF*, as a further source of revenue.

2.4.4 Resources

Staffing: 25 members of staff work for the *EEF* (as at 1st July 2017). Mainly with backgrounds in teaching, charity or research; some from communications or finance.

Annual budget: Founding grant of £125 million from the DfE which, along with further contributions that bring the total expected investment to around £225m, is to be expended within the 15 year period from 2011-2026. In 2012 the DfE also awarded £10m for further evaluations on literacy at the primary / secondary transition, £1m towards evaluations of Research Use in Schools in 2013, £1m towards evaluations of 'Character and Education' projects in 2016, and an estimated £1m towards evaluations of Early Years: professional development and leadership in 2018. In addition, a further £28m has been contributed since 2011 by a range of organisations to extend the range and reach of the *EEF*'s work.

2.4.5 Mission and aims

The *EEF* is dedicated to breaking the link between family income and educational achievement, ensuring that children and young people from all backgrounds can make the most of their talents. It aims to raise the attainment of 3-18 year-olds, particularly those facing disadvantage; develop their essential life skills; and prepare them for the world of work and further study.

²⁷ Referred to in this report as *EEF*. For more information, see educationendowmentfoundation.org.uk.

The problem, need for change: Education and life prospects are worse for pupils from low-income families. There are significant different outcomes not just around the world or between north and south, but between schools in similar locations and with similar circumstances. The *EEF* believes the main reason for these differences are the decisions schools make on a day-to-day basis. The *EEF* aims to improve this decision-making by providing reliable evidence of ‘what works’ in raising outcomes for disadvantaged pupils, and supporting schools – and the wider system – to apply this knowledge.

2.4.6 Strategy

There are three broad areas of activity:

- *Synthesising evidence* from around the world of ‘what works’ in teaching and learning and sharing this with teachers and senior leaders through practical and actionable resources such as its Teaching and Learning Toolkit and its Guidance Reports.
- *Generating evidence* of what works to improve teaching and learning, by funding robust, independent evaluations of high-potential programmes and approaches.
- *Scaling up evidence* to make sure teachers and other practitioners are able to act on evidence (e.g. through its Research Schools Network) and that the most promising programmes particularly benefit the most disadvantaged children and young people.

The *EEF* uses an evidence ‘ecosystem’ model, through which activities relating to innovation, evaluation, synthesis, translation and use of research are explicitly linked. The Centre operates across all stages of that evidence system. The *EEF* looks at *all* research on improving education outcomes but prioritises its grant making on projects that target children and young people from low-income backgrounds. The scale-up and knowledge mobilisation activities work are available to all schools, although are also directed to areas with high levels of poverty and low levels of social mobility e.g. DfE Opportunity Areas.

2.4.7 Degree of involvement in the 4 work domains (see Section 1.4.1)

93% of funding is spent on delivery and evaluation of programmes in schools/settings, 7% is spent on management/administration. The *EEF* dedicates approximately 20% of its grant-making to independent evaluations to achieve not only secure impact results, but also good implementation and process evaluation to gain good understanding of why programmes have worked (or not). As such, the vast majority of funding is allocated to research production although significant staff time is spent on engagement and supporting uptake.

2.4.8 Future plans

A strategic decision at the outset was to focus a significant proportion of its initial efforts on generating new evidence, by funding rigorous evaluations of a wide range of educational interventions. The decision to focus initially on evaluation was founded on the belief that a limiting factor in improving outcomes for disadvantaged pupils – and of evidence-based practice more generally – has been the availability of robust evidence of ‘what works’ in real-world school settings. With a greater throughput of evidence now occurring, the *EEF* is now beginning to apply increasing funding and resources to scale-up and KM activities (approx. 50%).

2.5 What Works Centre for Local Economic Growth²⁸

2.5.1 Description (history, setting, topics)

Topics: Local economic growth, with employment, productivity & wages as the key outcomes.

History and setting: Set up in October 2013 with initial funding from the ESRC, the Department of Communities and Local Government and the Department of Business, Innovation and Skills²⁹. The Centre consists of the following partners: London School of Economics (LSE) who are lead partner and assess evidence, produce rough drafts and manage demonstration projects; Arup who conduct the searches of existing evidence and deliver workshops; and Centre for Cities (CfC) who handle communications, producing finished outputs.

Location boundaries: Provides advice in the UK, primarily England, using evidence from OECD countries.

2.5.2 Legal status and governance

Formal legal status: No separate legal status. The centre is a joint collaborative project of three organisations: LSE (Charity and Company Limited by Guarantee), ARUP (Company Limited by Guarantee) and CfC (Charity and Company Limited by Guarantee).

Governance: The three delivery partners value their status as non-partisan organisations and maintaining the impartiality and independence of the Centre is essential to the credibility of the work produced. Further, the work is tested with and shaped by an independent board of experts.

Professor Overman at LSE is the Director of the Centre. Governance is by the Management Team with representatives of the three partnership organisations. During the first phase academic robustness of evidence review work was overseen by the Academic Panel, with academics from universities across the UK. The second phase relies on ad-hoc peer review of outputs from relevant academic specialists. A panel of users advises on the relevance and accessibility of the Centre's findings, and helps publicise the work through their networks. A funders committee with representatives from all funders agrees the workplan, receives the annual report, and undertakes other governance functions as required.

2.5.3 Business model

The Centre operates independently and sets its research agenda based upon feedback from users and experts. In the second phase (2017-2019), funding comes from ESRC, the Ministry of Housing, Communities & Local Government, the Department for Business, Energy & Industrial Strategy, the Department for Transport and the Department for Work and Pensions. The business model accommodates the independence to direct research but also maintains influence on government policy as a result of their investment in the work.

2.5.4 Resources

Staffing: 9 FTEs as of July 2017. This includes 7 FTEs from LSE (director, deputy director, academics / research economists, and an administrator), 1 FTE from Arup (senior analyst, analyst, additional graduate staff when needed), and 6 part time CFC staff (mainly social media plus an economist).

Annual budget: Annual core funding is £1.25m.

²⁸ Referred to in this report as *Growth*. For more information, see www.whatworksgrowth.org.

²⁹ Now respectively the Ministry of Housing, Communities and Local Government and Department for Business, Energy and Industrial Strategy.

2.5.5 Mission and aims

To encourage the use of evidence in local economic growth policymaking: making the evidence accessible, improving understanding of what works best, and working directly with partners to grow the evidence base through better evaluation. Objectives by 2019 include improving the quality of the UK evidence base (to address the lack of evidence-based approaches and robust evaluation), demystifying and supporting evaluation and access to a portfolio of evidence

2.5.6 Strategy

The Centre works with decision makers in central and local government to give them a deeper understanding of ‘what works’, and to improve their ability to design, implement and evaluate effective programmes. The first three years focused on establishing the state of the evidence and on building networks and relationships with user communities. Key activities include:

- Systematically reviewing the evidence base on policies for local economic growth, identifying high quality evidence and highlighting key findings on policy effectiveness and design.
- Working with, and convening events and workshops for, local authorities, Local Enterprise Partnerships, central government and business to help them understand and make better use of evidence in designing and delivering policy.
- Improving the quality of the UK evidence base by helping to develop ‘demonstrator’ projects – local policy experiments that develop and test innovative approaches.

2.5.7 Degree of involvement in the 4 work domains (see Section 1.4.1)

The bulk of the work going forward is in building capacity for research production (through advising on demonstration projects) and in engagement, predominantly with policymakers directly, to support decision-making.

2.5.8 Future plans

The Centre is a long-term endeavour and over the next two years will:

- Extend core capacity-building activities, drawing on its experience and user feedback.
- Shift the main emphasis from evidence reviewing towards:
 - Helping policy makers develop and evaluate local policy pilots.
 - Workshops and events on using evidence to improve outcomes for local economies.
 - Providing resources and guidance on evaluation on the website.
 - Engaging local and national policymakers in collaborations with academics and policy experts.
 - Providing a wide-ranging portfolio of evidence, case studies & guidance for better local economic growth policy evaluation.
- In addition to the core work the Centre has taken on two special projects:
 - Local impacts and responses to Brexit.
 - Supporting places in the development of their Local Industrial Strategies.

2.6 National Institute for Health and Care Excellence³⁰

2.6.1 Description (history, setting, topics)

Topics: Health and social care, including public health.

History and setting: NICE was established in April 1999 to reduce variation in the availability and quality of NHS treatments and care across the country. In April 2013 NICE was established in primary legislation. The Health and Social Care Act 2012 requires NICE to perform the primary functions of providing quality standards, advice and guidance. Various forms of guidance are developed by the NICE's Centre for Guidelines and Centre for Health Technology Evaluation, while the Health and Social Care Directorate produces a range of products to improve quality within the NHS and the Evidence Resources Directorate provides access to evidence and information to support guidance development.

Location boundaries: Guidance for England only, though NICE consults with and provides certain products/services to the rest of the UK.

2.6.2 Legal status and governance

Formal status: Non Departmental Public Body (NDPB), accountable to sponsor Department of Health and Social Care³¹ but operationally independent of government.

Governance: The NICE Board (which sets strategic priorities and policies) consists of 9 non-executive directors, plus the 4 executive directors and 3 directors who make up the Senior Management Team. The Senior Management Team, who are responsible for day to day decision-making and operation of the Centre, are accountable to NICE's Board and are advised by various Independent Advisory Committees. Within the Board various subcommittees operate on matters such as the Audit, Risk management and Remuneration, while NICE guidance and other standards and performance metrics are made by independent committees. The Guidance Executive – a committee made up of NICE executive directors, guidance centre directors, the communications director and implementation programme director – consider and sign off guidance for publication, on behalf of NICE's Board.

2.6.3 Business model

The majority of the funding comes through grant-in-aid from the Department of Health and Social Care (78%). The remaining funding comes from other NDPBs (NHS England and Health Education England) and income generating activities (Scientific Advice, the Office for Market Access and research grants).

2.6.4 Resources

Staffing: Total FTEs: 617, including 595 permanently employed staff.

Annual budget: £71.3m gross expenditure for 2016/17. Total revenue funding from the Department of Health and Social Care for 2016/17 was £58.5 million.

2.6.5 Mission and aims

To drive and enable excellence across the health and social care system, using evidence and engagement to inform, influence and support national and local policy.

2.6.6 Strategy

To help improve the quality, sustainability and productivity of health and social care, NICE produces guidance and information on effective practice, programmes and technologies (for instance medicines, treatments and public health interventions) to aid decision-making. The Centre takes account of value for money, recognising the need to demonstrate the benefits of new practices against what they displace, and by recommending effective targeting or discontinuation of interventions as appropriate.

³⁰ Referred to in this report as NICE. For more information, see www.NICE.org.uk.

³¹ Prior to 2018 known as the Department of Health.

The Centre's objectives also support the delivery of NHS England's Five Year Forward View and the Department of Health and Social Care's priorities.

NICE promotes its guidance and information using its own and various third party channels, and help people to use it by providing practical support tools. It has a unique role in the health and care system transformation given its remit across health care, public health and social care and is therefore well placed to adopt this system-wide perspective.

Three strategic objectives bring together the Centre's priorities:

- Delivering guidance, standards, indicators and evidence, helping to achieve high quality, sustainable services, supporting the health and care system to use its resources efficiently, and contributing to a thriving life sciences industry.
- Supporting adoption and impact by working with others to provide practical tools and support to help people make the most of the work and to measure its use.
- Operating efficiently, by using resources productively and sustainably, and by supporting *NICE* staff to deliver on their full potential.

2.6.7 Degree of involvement in the 4 work domains (see Section 1.4.1)

As *NICE* is well established in terms of its remit and influence, it uses a relatively small proportion of its resources on managing its position in the wider system it operates within. The majority of its work on wider contexts is instead focused on engaging with its stakeholder communities, linking to the core principle of "Input from the public, patients, social care users and professionals" with the aim of having *NICE* outputs implemented and thereby supporting the use of evidence. This work therefore overlaps significantly with its work on engagement and supporting uptake. Engagement with these key audiences forms the majority of *NICE*'s work, supported by some research production in the form of secondary analysis and synthesis of evidence as part of the guidance production process.

2.6.8 Future plans

NICE has a detailed programme of strategic objectives for 2017/18, based around the ambition to both *drive* the design and effective delivery of services provided by the health and care system:

- Using evidence to inform the ambition for people using health and social care services.
- Engaging and influencing central and local government and the NHS.
- Visible impact on national and local strategies and policies.

It also *enables* the design and effective delivery of these services:

- Products designed to support individual decisions and system-level quality improvement.
- Topics aligned with health and care system ambition and capacity.
- Presentation and delivery integrated with quality improvement and performance management systems.

NB: Some restructuring has taken place since July 2017.

2.7 What Works Scotland³²

2.7.1 Description (history, setting, topics)

Topics: Public policy, with four key areas: Policy development, Improvement of PSR planning and delivery, Community, and University.

History and setting: An initiative established in 2014 bringing together staff from the Universities of Edinburgh and Glasgow. The aim was to work with Community Planning Partnerships³³ (CPPs), statutory and third sector organisations, and other bodies to explore how public services could start to work towards the recommendations of the Christie Commission on the Future Delivery of Public Services and the Scottish Government's priorities for reform. Although *Scotland* works closely with Government, work is rarely produced in response to Government requests. Instead the workstreams are responsive to CPPs. WWS works within and developed the four pillars of the Christie Commission report – prevention, performance, participation, partnership – and supplements that approach with a focus on place, an element that has become central to PSR in Scotland today.

Location boundaries: Throughout Scotland, initially with 4 CPPs (Aberdeenshire, Fife, Glasgow and West Dunbartonshire).

2.7.2 Legal status and governance

Formal legal status: No separate status. The Centre is a 'co-funded research based initiative' with the core funding grant from ESRC and the Scottish Government awarded to the University of Glasgow (Charity).

Governance: The Centre reports to a Funders' Group formed of representatives from ESRC and Scottish Government and with an independent chair from the civil society sector. It also consults and receives guidance from a Research Advisory Group which includes representatives from a range of academic, public and third sector organisations with expertise in the areas of public service delivery and reform.

2.7.3 Business model

Time-limited externally grant funded project (2014-2018) with a focus on setting up systems and legacy. The initial focus was on building a team and recruiting CPPs to participate in the project and the final 12 months is focused on communicating findings and creating legacy from the Centre's work.

2.7.4 Resources

Annual budget: Approximately £1m, 80% from ESRC & Scottish Government grant (50/50 split), with 20% institutional contribution by the Universities of Glasgow and Edinburgh. Approximately 90% of annual budget across both institutions is spent on internal staff and activities (85% of Glasgow's budget and 94% of Edinburgh's budget), as opposed to commissioning work from external partners.

Staffing: 10.6 FTE staff. (27 employees & PhD students listed on website, mostly academics).

2.7.5 Mission and aims

To improve understanding in how best to mobilise evidence, implement collaborative reform, and promote community empowerment in order to develop public services that improve outcomes and life chances for the people of Scotland. Priorities include translating project findings into system-wide

³² Referred to in this report as *Scotland*. For more information, see whatworksscotland.ac.uk.

³³ A Community Planning Partnership (or CPP) is the name given to all those services that come together to take part in community planning. There are 32 CPPs across Scotland, one for each council area. Each CPP is responsible for developing and delivering a plan for its council area.

change, identifying what does/does not work and what can be done to improve impact at different levels, reviewing and interpreting evidence of large-scale reform programmes and their impacts, and investigating local variations in the results of interventions and how to address them.

2.7.6 Strategy

The Centre has been pioneering Collaborative Action Research (CAR) in multi-agency, multi-practitioner public service environments as this is central to the overall aim to understand and improve the way local areas in Scotland use evidence to make decisions about public service development and reform. WWS works with CPPs to put evidence into their services, i.e. determine how best to use evidence and how to reform public services. Particular emphasis is placed on developing evidence-informed learning to challenge existing inequalities with a focus on outcomes. Different Theories of Change have been developed for each project, although partnership and collaborative working is a common focus.

CAR involves two elements: *Collaboration* and *Action research*. *Collaboration* forms links between the Centre's academic researchers and groups of practitioners working for a variety of public services and the third sector. *Action research* involves these researchers supporting the groups of practitioners to:

- Reflect on working practices in relation to an issue of common concern to them.
- Explore evidence on that topic, learn from it and enact evidence-informed change.
- Share the experience and findings, so spreading the learning.

2.7.7 Degree of involvement in the 4 work domains (see Section 1.4.1)

A greater proportion of time was committed to research production in the earlier periods with increasing focus on supporting uptake later in the programme; while engagement and interaction activities have been consistently undertaken throughout the programme period. Research is also co-produced with users through CAR and so includes engagement.

2.7.8 Future plans

During 2015-16, the Centre mainly used a collaborative action research (CAR) approach to work with 4 specific community planning partnerships to explore the design and delivery of public services. For 2017-18, it will focus on sharing this knowledge, synthesising the above findings to focus on specific conceptual and practical issues that the work has identified as being important to public service reform. The findings will be translated into practical and useful resources, including evidence-based solutions, training, programmes, toolkits and frameworks. The Centre will continue to work with representatives from the Scottish Government, CPPs and third sector organisations, community groups and other agencies, drawing on existing links and fostering new partnerships.

2.8 Wales Centre for Public Policy (WCPP, a new Centre replacing the PPIW)³⁴

2.8.1 Description (history, setting, topics)

Topics: Public policy in Wales: the full range of issues that concern the Welsh Government (including health, education and skills, housing, the environment, food, fisheries and agriculture, sport, culture and tourism, the impacts of Brexit).

History and setting: The Public Policy Institute for Wales (PPIW) was established in 2013 to support Welsh Government Ministers to identify their evidence needs and access authoritative evidence and advice from across the UK and internationally. The contract to establish and run the Institute was won by Cardiff University through a process of open competitive tendering. Following discussions with the ESRC and Cabinet Office in 2014, the role as an affiliate of What Works Network was agreed. This gave the PPIW the additional remit and funding from the ESRC to collaborate with other What Works Centres to raise awareness in Wales of the evidence they produced. In 2017 the Wales Centre for Public Policy (WCPP) was established with increased funding to combine the ex-PPIW work with a What Works Centre role (see 2.8.8).

Location boundaries: Wales (though the Centre aims to contribute to the international evidence base).

2.8.2 Legal status and governance

Formal legal status: No separate status: an externally funded institute within Cardiff University (Charity).

Governance: Run by a small team whose role was to liaise with Welsh ministers and officials, design studies and work with experts to produce reports, briefings, workshops and other outputs. The PPIW's work programme was co-produced with ministers, agreed with the First Minister of Wales and overseen by an independent Board of Governors to guarantee the integrity of the work by ensuring that the evidence produced was not subject to political influence and that its outputs were published promptly. An Executive Group, comprising representatives from a group of universities and think tanks that collaborated in the development of the PPIW³⁵, advised on sources of expertise that could be drawn on.

2.8.3 Business model

The PPIW was core funded by the Welsh Government. Project-based funding for additional research was secured from the ESRC through its Urgency Grant scheme and ring-fenced funding allocated via Cardiff's Impact Acceleration Account.

2.8.4 Resources

Staffing: 7 FTEs in total (as at July 2017): a small team that included a Director, five researchers and a Communications and Administration Officer, working in partnership with academics and other experts.

Staff were recruited from academia, civil service, local government, third sector and private sector.

Annual budget: £450,000 per annum of which £200,000 was set aside for commissioning external expertise. Additional ESRC funding amounted to approximately £80,000 per annum.

³⁴ The Public Policy Institute for Wales (PPIW) was the What Works Centre in Wales in July 2017 (the census date of this report, see 1.3.1). The work of the PPIW has since been continued by the WCPP. The term *Wales* is used throughout the rest of this report to refer to the What Works Centre, except in cases where we refer specifically to either PPIW or WCPP. For more information, see www.wcpp.org.uk and ppiw.org.uk.

³⁵ Cardiff University, Swansea University, Aberystwyth University, University of South Wales, Bangor University, Liverpool University, and the Bevan Foundation.

2.8.5 Mission and aims

To increase evidence-informed policy-making by generating analysis and advice on key challenges facing public policy makers in Wales, focusing on demand and supply. More specifically, the remit was to:

- Support ministers to identify their evidence needs.
- Help them access sources of independent, authoritative evidence & advice to meet those needs.
- Help them become a more intelligent consumer of/for other research.
- Raise awareness within academia of the Welsh Government's priorities and enable researchers to communicate evidence in forms useful to and used by ministers and their officials.

The problem, need for change: The PPIW was a Programme for Government commitment that reflected a view among ministers that policy decisions would benefit from authoritative evidence and fresh thinking from outside the civil service.

2.8.6 Strategy

The PPIW provided evidence and expert advice upon demand for Welsh Government Ministers via a rolling work programme developed in consultation with Ministers, Special Advisers and senior officials. This involved drawing out policy implications but not advocating or campaigning for specific policies or interventions. Between 2013 and 2017, the PPIW completed around 70 separate pieces of work to rapid turnarounds (typically around six months, but some as little as two months), which helped to prove the concept and worth of the PPIW method to policymakers. The PPIW was not asked or funded to undertake systematic reviews, trials or toolkits. Instead it worked collaboratively with What Works Centres and other researchers to increase the impact of their work with policy makers and facilitate learning between countries in order that Wales benefitted from and contributed to international evidence about 'what works'. Further key activities included:

- One-to-one discussions between ministers and experts; workshops with experts and officials.
- Modelling and organisational analyses.
- One-page summaries and short ministerial briefings for all written outputs press releases and blogs about studies and their implications plus, in some cases, launch events.

2.8.7 Degree of involvement in the 4 work domains (see Section 1.4.1)

The PPIW's work primarily involved the engagement of users of evidence (approximately 30% of staff time) and the synthesising and mobilisation of evidence (research production and engagement) in forms that were relevant to Ministers' needs and readily accessible to them (70%). Some studies also produced new data and evidence.

2.8.8 Future plans

In October 2017, in light of the PPIW's success it was renamed the Wales Centre for Public Policy and its funding was increased significantly; core funded by the ESRC and Welsh Government with additional funding from Cardiff University and a joint funded post with the Alliance for Useful Evidence. The open, competitive call by ESRC and the Welsh Government to run the Centre was won by Cardiff University, taking on a wider remit that continues the PPIW's work with Welsh Ministers but also works with public services and practitioners to identify and address their evidence needs and to help them access and apply evidence produced by the What Works Network. The Centre examines what works in policy delivery and formulation and may have a role in commissioning trials.

2.9 What Works Centre for Wellbeing³⁶

2.9.1 Description (history, setting, topics)

Topics: Wellbeing: a measure of social progress concerning quality of life and prosperity, positive physical and mental health, and sustainable thriving communities. Four specific work programme areas: work & adult learning, culture & sport, community wellbeing and wellbeing across the life course.

History and setting: Established in 2014 by a development group (chaired by Lord Gus O’Donnell) of the founding partners that included ESRC, Public Health England (PHE), the Office for National Statistics (ONS), the Local Government Association and Big Lottery Fund, plus various government departments.

Location boundaries: UK-wide. What Works Wellbeing does engage internationally where there is substantial interest and activity but its focus is to improve outcomes throughout the UK.

2.9.2 Legal status and governance

Formal legal status: A Community Interest Company in partnership with four academic-led consortia of 16 universities (Charities), OECD and 7 non-government organisations.

Governance: The Centre consists of a small core team (independent of academia) plus 4 consortia of academics and NGO staff who carry out research production – primarily systematic reviews and data analysis, conceptual and methodological development – and stakeholder engagement, each on one of the 4 specific work programme areas listed above. These consortia are led by academics from the University of East Anglia, Brunel University London, the University of Liverpool and the London Schools of Economics. Other members include the Universities of Sheffield, Reading, Essex, Winchester, Durham, Oxford, and Warwick, plus University College London, Goldsmiths College, Happy City, Centre for Local Economies, Social Life Ltd, OECD, Action for Happiness and How to Thrive.

The Centre worked closely with the ESRC and PHE to establish governance, partner and evidence commissioning arrangements that were agreed at the development group. PHE, as a key delivery partner, continued to host the Centre until it was established as a standalone entity with a Chair, board and staff. The Board, which includes representatives from ESRC and PHE and decides their roles on the Board, monitors progress and sets the strategic direction. It was supported by the Commissioning panel (academics and ‘expert users’ who recommended which proposals to fund), and is now by the Partners Forum (continued engagement with the 18 founding partners), Advisory Panel (to ensure the robustness and accessibility of the Centre’s products), and Management Group (the Director, Heads of Evidence and Principal Investigators or deputies who ensure the quality and appropriateness of outputs).

2.9.3 Business model

The work programme is approved by the Board and managed by the core team but the consortia that produce the research are the ESRC grant holders and receive some of the funding directly.

2.9.4 Resources

Staffing: 5.6 FTEs at the What Works Centre core team and brings in external expertise when needed. Including the 4 above consortia there are 57 people from 16 universities and 7 NGOs.

Annual budget: Around £3.9m over the first three years (2014-2017), approximately £3m of which is to the consortia (£1.6m from ESRC, the rest from Government). PHE are the main funder of the core team.

³⁶ Referred to in this report as *Wellbeing*. For more information, see whatworkswellbeing.org.

2.9.5 Mission and aims

To improve wellbeing in the UK, reducing wellbeing inequality and misery; this should be the ultimate objective of government policy and community action. The Centre's vision is of "a future where the wellbeing of people and communities improves year on year and wellbeing inequalities are reduced". It aims to improve decision-making by bringing together and developing relevant, useful, high quality, robust evidence and communicating this well, particularly to those with funds to spend on work towards wellbeing outcomes such as governments (national/devolved/local), businesses, charities and trusts across the UK.

The problem, need for change: UK is 19th in the world for wellbeing and there are sharp contrasts in levels of wellbeing within the UK. Action to improve wellbeing is dispersed and confused because the science is relatively new, not easy to find, understand or compare in part because it comes from a range of disciplines and sectors. There is also a need to agree the evidence standards, definitions and methodologies that are used across different sectors and to improve the evidence quality in a way that is comparable.

2.9.6 Strategy

What Works Wellbeing brings a narrative across the 4 initial areas – each with a dedicated academic and practitioner consortium conducting research and engagement – using research from elsewhere to fill any gaps. This work is co-ordinated by the core team and carried out by the academic-led consortia with civil society partners or, in some cases, by the core team. The Centre has three main roles:

- Thought leadership and collaboration.
- Supporting academic research/evidence into practice.
- Supporting practice into evidence; improving evaluations, collaborating to fill evidence gaps.

Key activities of the Centre and consortia include undertaking systematic and scoping reviews, work on methodology, producing evidence summaries and, recently, starting to consider the development of toolkits, indicators and guidance. The Centre looks at the whole life course but most of the work relates to adulthood between the ages of 16 and 60. This is in part because this is the time of life when wellbeing dips and also because there is already substantial activity for other age groups elsewhere, e.g. the Education Endowment Foundation, the Early Intervention Foundation and the Centre for Ageing Better. What Works Wellbeing collaborates with What Works Centres such as these for mutual benefits for these groups and to help ensure that all wellbeing outcomes are addressed.

2.9.7 Degree of involvement in the 4 work domains (see Section 1.4.1)

The majority of the funding from all sources goes towards research production by the consortia.

2.9.8 Future plans

Instead of winding down after the initial work programme in June 2018, the Centre is continuing to develop methodology and disseminate evidence and is working at setting up new research programmes to grow the evidence base, collaborating with various organisations such as police to conduct trials. The second evidence programme is in development.

CHAPTER 3: DIMENSIONS OF DIFFERENCE BETWEEN AND WITHIN THE CENTRES

This chapter provides a more detailed account of the wide range of work taking place across the Network, highlighting both the similarities and differences between the Centres. Examples of the main activities undertaken by the Centres are discussed according to the five categories used in our analytical framework (described in Section 1.4) plus a section on collaborative work across the Centres. Each section includes a box listing some of the main issues and questions discussed in the text. Many of the main activities of work of each Centre are summarised in Appendix 1.

3.1 Wider Systems and Contexts

Each of the Centres is part of an existing evidence ecosystem (e.g. relevant research funders, producers and users) that sits within a broader system or context (those that direct relevant public policy or are affected by it, such as government, industry and society). Table 3.1 summarises the main audiences of each Centre and where the Centres tend to focus their attention and resources. It is not a comprehensive list and work in areas or with audiences not mentioned in the table may be extensive and involve substantial resources.

The nature of the Centres' work is very varied. The range of these activities in relation to the Centres' broader roles and contexts is described under the following subheadings:

- 3.1.1 Theory of Change: overall aims, roles and strategies for making a difference
- 3.1.2 Centres as organisations: Legal status, size and income, flexibility in spending, stage of development, profile and sustainability
- 3.1.3 Politics, values and relationship to government
- 3.1.4 Specified vs developmental roles and topic advocacy
- 3.1.5 Collaboration beyond the What Works Network: partnership with the profession, local authorities and others

More details of the activities discussed can be found in Appendix 1.1. Some of the work of the Centres in relation to their context is overt and easy to record. Some on the other hand may be quite political and not so openly discussed or recorded for this study.

3.1.1 Theory of Change: overall aims, roles, and strategies for making a difference

The Centres are relatively new organisations. They are interventions to make a change, to increase the development and use of research within their evidence ecosystem. As intermediaries between research and use, they define what their ecosystem is and are involved to different degrees and in different ways in any part of that system. It is therefore to be expected that Centres vary in the balance of investment in difference parts of their ecosystem.

At its start, the *EEF* made the assessment that there was a lack of primary evidence in some important areas and invested predominantly in producing primary research to fix this gap. The new studies also highlighted the profile and relevance of the Centre. As the gap is filled, the *EEF* has invested more resources in guidance and use of research. *Growth* also assessed that there was not sufficient primary research but without a primary research budget the Centre instead supports the development of primary research skills in others.

Table 3.1: The main audiences and focus of resources for each What Works Centre

Centre	Main audiences	Main focus of resources
Centre for Ageing Better	Central & local government, research funders, other system level actors such as housing providers and employers	Broad initial investment across communications, engagement and support, plus planning for evidence production ³⁷
What Works Centre for Crime Reduction	Police and Crime Commissioners, police leaders & practitioners	Initial focus on synthesis and engagement, moving towards supporting the use of research by practitioners through guidance, standards and capability building
Early Intervention Foundation	Central and local government, relevant charities, sector and workforce bodies and commissioners	Initial focus on evidence generation, moving towards more even balance with policy and practice
Education Endowment Foundation	Teachers & school leaders	Majority of investment in primary research with substantial work to engage with & support schools and early years / post-16 settings
What Works for Local Economic Growth	Local authorities, Local Enterprise Partnerships ³⁸ , government departments	Synthesising evidence, building capacity and skills to develop and understand the evidence base
National Institute for Health and Care Excellence	Health & care providers and commissioners (including but not limited to the NHS)	Producing guidance for healthcare practitioners, with extensive professional & public engagement
What Works Scotland	Local government / Community planning partnerships ³⁹ , public service agencies	Co-production of research with CPPs, The focus dependent on local needs and decisions
Public Policy Institute for Wales (now WCPP)	Welsh government ministers & officials ⁴⁰	Generating evidence reviews, engaging to plan then disseminate & discuss the research
What Works Wellbeing	Governments (Central / devolved / local), Civil society, business and the public ⁴¹	Primarily evidence synthesis ⁴² , supported by large system of organic knowledge mobilisation

³⁷ As of July 2017, the majority of the research production was still in the initial stages.

³⁸ Local Enterprise Partnerships: elected authorities and businesses who provide the strategic leadership and economic vision for their local area.

³⁹ Community planning partnerships (CPPs): local services that come together to take part in community planning. There are 32 CPPs across Scotland, one for each council area.

⁴⁰ Since October 2017, the new named WCPP has additionally focused on engagement with public services.

⁴¹ What Works Wellbeing works mainly with and through sector bodies e.g. Directors of Public Health, Government Analysts, Charity evaluation leads, Society of Occupational Medicine.

⁴² Majority of funding allocated directly to academic consortia to produce research. Small core team manages the work programme and engagement strategies.

NICE has a clear service delivery role in providing products such as practice guidance and quality standards on a national level. This is more efficient than individual local services and practitioners duplicating the evaluation of research and other evidence and making recommendations on practice. *NICE* also has an accreditation and quality assurance role. It assesses the health guidance production processes other organisations and also produces and endorses a range of quality assured resources and examples of good practice. Although *NICE* is the largest Centre, its work is focused predominantly in guidance. The *EEF* in contrast, is very involved in everything from primary research to toolkits to guidance to scale up.

Ageing Better develops and brings together and shares research evidence and the best ways to implement this evidence with decision makers. As it is more recently commissioned and at an earlier stage of development it is building brand and credibility and invests a third of its resources in communications. It also has developed logics for its individual programmes instead of an overriding Theory of Change. Even where a Centre does not have an explicit Theory of change, it is usually implicit in that a Centre is providing resources or attempting to change something.

In working within the evidence system, Centres may also have a role in developing research methods. *NICE* for example, has been very involved in the development of cost effectiveness and quality of life in health interventions and the Quality of Life Adjusted Life Year. *Wellbeing* has been putting effort into the ways that wellbeing can be measured.

In addition to how Centres work in different parts of the evidence ecosystem, Centres vary in their balance between different audience groups. The *EEF* and *Crime Reduction*⁴³ are particularly focused on professional practitioners and the local organisations that they work within. *Growth, EIF, Scotland* (and in the future *Wales*) have a particular interest in working with local government. *Ageing Better* and *Wellbeing* have a very broad topic focus and thus wide audiences too. Narrower audiences may in some respects be easier for Centres to achieve but may also provide a more acute measure of success or failure.

Centres also vary in the breadth of their topic. *Scotland* and *Wales*⁴⁴ are defined by country rather than topic so potentially can work cross many topic areas. Centres such as *Ageing Better* and *Wellbeing* have a very wide remit in society due to their topics cutting across most of other social policy areas whereas the *EEF* and *Crime Reduction* are directed at particular services and professional groups. Even where remits are relatively narrow, though, there can be enormous breadth of topic as in, for example, education. Also, user groups in education are of course not only the teachers and their employers that the *EEF* has chosen to target. There are also school students and parents and other sections of society concerned with the education that a country provides.

Each of the Centres is busy developing work within its own particular evidence ecosystem and field of public policy but collaborative work is also taking place across multiple Centres, which is discussed in Section 3.6.

The Centres all of course have explicit aims and have undertaken some form of needs analysis to inform the strategies and methods used to meet them. These aims, however, tend to be rather general in specification without detailed Theories of Change or monitoring and evaluation to assess their success (See Section 3.4.3).

⁴³ Part of, and increasingly co-terminus with, the College of Policing

⁴⁴ The Public Policy Institute for Wales, replaced in October 2017 by the Wales Centre for Public Policy

There are many issues relevant to the strategic approaches and Theories of Change for the Centres, some of which are listed in Box 3.1.1. Similar boxed lists of issues are also provided for the other sections of this chapter.

Box 3.1.1 Theory of change – key issues

1. **Evidence ecosystem definition, needs analysis and aims:** the variation in and basis for Centres' aims, and their resultant strategies and activities in different parts of their evidence ecosystem
2. **Theory of change (ToC):** the strategy of each Centre to achieve their aims
3. **Breadth of ToC:** whether applied Centre-wide or only to specific areas of work
4. **Focus of work:** the area and breadth of work across the different domains of an evidence ecosystem
5. **Impacts:** who or what the Centres are aiming to change
6. **Audiences:** who the users of Centres' services are
7. **Strategies and methods:** the approaches employed to achieve change
8. **Direct and indirect work and embedding in systems:** the nature of influencing the ecosystem
9. **Developing research and research use methods:** the methods necessary to achieve the ToC
10. **Geographical boundaries:** the geographical reach of Centres' roles (for both input into and impacts from the Centre's work)
11. **Extent of specification:** the degree to which these dimensions (such as needs analysis and ToC) are explicitly stated

3.1.2 Centres as organisations: Legal status, size and income, flexibility in spending, stage of development, profile and sustainability

The legal status of the Centres and their constituent parts or hosts varies from charities to private companies to non-departmental bodies. Some Centres have no separate legal status and are parts of larger organisations such as universities (*Growth, Scotland, Wales, the four consortia of Wellbeing*) or government owned companies (*Crime Reduction*). The legal status does not always provide a clear view of the ownership or independence as both charities and companies can be government run and most universities are charities.

The Centres vary considerably in size as measured by their annual budgets which may affect the range of activities they can undertake though *NICE*, the largest Centre with an annual budget over one hundred times larger than the smallest Centre, has very specific areas of work.

Most of the income of the Centres is received on the basis of grants to undertake specific work or to support the general development of the Centre. Other Centres, particularly those that are essentially within government such as the College of Policing and *NICE* (see Section 3.1.3), have recurrent grants and thus security of funding is subject to strategic oversight. There can also be other income streams. *NICE* has some revenue from selling services and *Crime Reduction* were provided with a grant from ESRC to help fund a Collaborative Research programme provided by a group of universities.

Ageing Better and the *EEF* are unusual in being allocated endowments to finance them over several years which provides them with more security than Centres receiving funds over shorter time frames and subject to more frequent external review. In contrast, much of *Wellbeing's* income is allocated

directly by funders to academic consortia that produce evidence products with only a small proportion of income provided to the central team.

Endowments can also provide financial flexibility as funds may be less dependent on specific budget headings. The *EEF*, for example, is able to propose joint funding with other organisations which can be an attractive proposition as it multiplies the effect of the investment for both organisations. At the time of writing, the *EEF* has secured additional funding of £28m to expand the reach and scope of its work.

Several of the Centres were allocated medium terms grants over several years, but without clear plans as to longer term financing. *Scotland* sees their funding as a one-off grant with no current plans for long term funding and the ongoing existence of the Centre. In contrast, *EIF* and some other Centres that have longer term plans and do not have foundation level investments may need to be self-sustaining organisations that approach relevant trusts/foundations, bid with partners who provide different skills, and tap into commercial demand for outputs.

High profile and credibility is an important and ongoing issue for all the Centres. For Centres such as *NICE* and the *EEF* that have been in existence for some years and pre-date the formation of the What Works Network, there is much experience in developing brand and profile. *Crime Reduction* has had an established role and status from inception as it was originally formed as one team within the College of Policing. Newer Centres have to build a brand. *Ageing Better* has invested much of its early energy in building credibility and status including partnership work with strategic organisations. Similarly, *Wellbeing* has been establishing credibility and status as a major known voice in its field through producing relevant research.

Box 3.1.2 Centres as organisations – key issues

1. **Legal status:** to whom and how are Centres legally responsible
2. **Annual budget:** the size of the Centres as measured by their annual budget
3. **Financial time horizons:** whether income is recurrent or highly time specific, and the length of budget commitments
4. **Flexibility in budget use:** the extent to which a Centre can determine expenditure and areas of work
5. **Sale of services/products:** income streams from providing services and products
6. **Financial efficiency:** what can be achieved within budget limitations
7. **Stage of development:** the different focus of Centres as they develop
8. **Profile and credibility:** and the ability of a Centre to influence the ecosystem it sits within
9. **Sustainability:** financial sustainability of Centres over time
10. **Relationship with Theory of Change (ToC):** how these factors of budgets, credibility and changes over time have influenced or are addressed by the ToC (explicit or implicit).

3.1.3 Politics, values and relationship to government

Research evidence and intervening in an evidence ecosystem is a political act with social values. In promoting research evidence they are endorsing social values of transparent formal systems for the use of one type of information in decision-making. In some cases they are promoting particular further values. *NICE*, for example, uses the values of utility and efficiency to inform the resource allocation of government resources in health and social care. *NICE* then, rather than central government, takes on responsibility for some sensitive funding decisions.

There are also values choices in the topics considered. *NICE*, for example, provides guidance on health and social care practice but not on health and social care policy. The *EEF* is concerned with the attainment of school students from economically disadvantaged backgrounds but addresses this through the lens of educational provision rather than structural societal issues. Recent work on school breakfasts is interesting as although within a school setting it more directly addresses economic disadvantage.

Other examples of social values being contained within the Centre's remit are *Ageing Better* and *EIF's* focus on the importance of certain stages of life; such as, for example, *Ageing Better's* concerns for safe high streets for older people. *Scotland* also expresses social values in its advocacy of collaborative research between users and producers of research (see also advocacy in Section 3.14). *NICE* is unusual in having an explicit social values policy (NICE 2008; Gough et al. 2014), soon to be updated, that drives its process of developing stakeholder-based evidence-informed guidance (See Section 3.3.1). *NICE* also has a Citizen's Council to discuss values issues in its work.

All Centres are independent of government in terms of day to day spending but not in terms of their legal status or overall strategy and funding. *NICE* and the College of Policing (of which *Crime Reduction* is part) are arm's length government agencies funded by government with particular policy remits but with a degree of independence of how these remits are applied in practice. These agencies work very closely with government as they are highly linked in with other aspects of government work. *NICE* provides a service for the National Health Service and its staff. The College of Policing has responsibilities for setting practice and learning standards, plus some aspects of training and accreditation, of police officers. Both agencies also work closely with government in promoting the benefits of evidence use to government and securing funds for extra areas of work. For instance, the College was an advisor and key stakeholder of the Police Knowledge Fund provided by the Home Office and the Higher Education Funding Council for England (HEFCE). However, in being part of the systems and processes, having a high profile, and being widely accepted in policing, it has less need to seek political support or seek infrastructure funding.

In other cases, government may provide funding to develop particular areas of work. *Wales*, for example, was funded by the Welsh government (as the Public Policy Institute for Wales) to provide evidence on demand for Ministers via a rolling work programme of short turn-around assignments and by ESRC to undertake research on some of the key strategic challenges facing government such as poverty and the use of government policy levers. This involves working closely with politicians and officials in both identifying research needs and considering how research evidence can be useful to government.

Some Centres work with several government departments. *EIF*, for example, works with the Departments of Education (DfE), and Works and Pensions (DWP), the Ministry of Housing, Communities and Local Government (MHCLG) and Public Health England (PHE), which involves negotiating funding. Engagement with government is also important for credibility and achieving *EIF's* advocacy role. Similarly, *Growth* works with several Government departments including the Departments for Transport (DfT) and Business, Energy & Industrial Strategy (BEIS) in addition to DWP and MHCLG. The Centre aims to position itself centrally in the policy system and to build reputation by widening the reach to more decision-makers; working with a wider set of supporting partners, and developing a cross-cutting programme of support for areas with devolved powers. The Director has a frequent audience in Whitehall, is increasingly involved in collaboration (for instance on oversight panels), and speaks at international conferences to improve global status.

In other cases, Centres can be largely independent of government yet may have close relationships with government and may receive funds from them. The *EEF*, for example, is an independent charity with foundation level funding (from the government) and works with schools and the teaching profession. It also works closely with government providing advice, assisting with processes such as sitting on the panel to produce professional standards, being partners in planning and delivering large scale government initiatives, and being a champion for the use of research evidence in decision-making. Formal independence can however be important for maintaining status and image with both professional practitioners and with the government itself.

Another example is the work of *Ageing Better* in building a reputation with government through producing a manifesto, meetings with ministers, providing formal responses to Green papers, and supporting departments in collaboration with other stakeholders to explore policy priorities and evidence needs and new approaches to problems. Similarly, *Wellbeing* has regular contact with its funding departments, feeds into policy consultations, and maintains links with political parties and think tanks.

Box 3.1.3 Politics, values and relationship to government – key issues

1. **Specification of political and social values:** the perspectives that drive Centre’s topics, aims, methods and investment in different areas of work
2. **Specification of policy on social values:** the extent of overt explanation of the above perspectives
3. **Relationship to government:** the nature of that relationship including independence from government and its influence on the Centre’s work and profile. Examples of variation in relationship with government:
 - a. Direct management by government (none of the 9 Centres)
 - b. Arms’ length management by government
 - c. Separate but with grant funding from government
 - d. Collaborative work with government
 - e. Active relationships

3.1.4 Specified vs developmental roles and topic advocacy

NICE was set up by government to undertake specific functions. These roles have developed since the Centre was set up in 1998 through negotiation with their sponsoring ministry in government. Many of the other centres may have specific roles and functions but they also have a more developmental approach where the Centre itself determines and develops how it achieves its broad remit. *Crime Reduction* is more of a hybrid between these extremes. It is part of a government agency, the College of Policing, and is taking on some government agency functions, such as the development of standards for police officers, but the College also takes a developmental role as it builds the What Works Centre to become an increasing part of its work. *Scotland*, in seeing their Centre as a time limited grant and not an ongoing Centre, have a developmental role in the sustainability of the outcomes they achieve.

All centres advocate for their area of work and for the use of research evidence. Most of these are based on traditional approaches to academic primary research and synthesis, but *Scotland* puts an emphasis on collaborative approaches between researchers and users of research in the process of research production.

Some Centres have particular focus on advocating for their topic area in order to change current thinking. *Wellbeing*, for example, provides ‘thought leadership’ in this new area, promoting the added value of using wellbeing as a goal and relevant metric for the policies of government and charities. *EIF* and *Ageing Better* similarly aim to advocate for the importance of prioritising early intervention and ageing respectively with ageing seen as an opportunity not a problem. The advocacy role is also a part of the importance for these Centres in engaging with government.

Box 3.1.4 Specified and developmental role – key issues

1. **Stage of development of brand:** developing brand and credibility
2. **Stage of development of role:** the changing focus as a Centre develops
3. **Specific versus developmental focus:** the extent that Centres have defined or changing and growing roles
4. **Advocacy role for approach to research evidence:** the extent that Centres are advocating for particular methods
5. **Advocacy role in terms of topic focus (as well as for evidence use):** extent that Centres are advocating for increased attention to particular social policy issues.

3.1.5 Collaboration beyond the What Works Network: partnership with the profession, local authorities and others

Collaborative work takes place between the What Works Centres and examples of these joint projects are provided in Section 3.6. The Centres also form close collaborative partnerships and undertake joint work with a range of other organisations.

For several centres, professional practitioners are major partners as well as users of their work. The *EEF*'s large programme of primary research evaluations involve support from many teachers and schools. The *EEF*'s major area of activity in their toolkit, guidance and scale up projects, and Research Schools Network are all directed at working with teachers and schools.

NICE's guidance products are developed with practice staff and are aimed at a wide range of health and welfare professional practitioners, provider organisations, and the commissioners of services. *NICE* also aims to influence the effective use of evidence more widely through accreditation and quality assurance by other guidance producers. They also publish quality standards though these, like much of *NICE*'s outputs, are guidance rather than required practice. The exception is the Technology Appraisal programme where service users have the right to receive medicines and treatments approved by *NICE*. *Crime Reduction* has a very particular role through the College of Policing in working with police on professional development. This includes incentivising the use of evidence through evidence-based guidelines and standards, which like *NICE* are developed with practitioners, inclusion in the National Police Curriculum and reflecting these skills in the criteria for recruitment and promotion.

Most Centres work with local government. *EIF* works with local authorities and local delivery bodies to integrate evidence into their planning and decision-making processes in relation to the implementation of early intervention services. Local authorities are also a key audience for their guide book (see Section 3.3). *Growth* works with Local Enterprise Partnerships (LEPs) and local authorities to provide advice both on research evidence and how to undertake local evaluations. The *EEF*'s primary audience is teachers and schools but it also works closely with local authorities that, for example, provide staff time for undertaking the implementation of interventions for the *EEF*'s primary evaluation studies and

collaborate on scale up projects on proven effective interventions. As the governance of schools has changed, the *EEF* engages with a more complex middle layer of organisation between central government and school management.

NICE has also increased its work with local authorities since they took over responsibility for public health within their areas. *Scotland* works with local authorities in its Collaborative Action Research. Wales worked predominantly with central Welsh government but is broadening to work with local authorities too.

Centres work with a large range of other organisations to develop evidence use and to achieve the Centres' and the partners' goals. *Crime Reduction's* collaborators include, for example, Police Now (who recruit and develop policing staff), a large network of evidence champions across police forces, the Government Commissioning Academy for commissioners across all sectors, the Society of Evidence Based Policing and 14 police academic collaborations set up through the PKF. *Scotland's* collaborations have including informing and influencing new collaborative research programmes for Housing (CACHÉ) and Children's Neighbourhoods (CNS), in the west of Scotland. *Ageing Better* partner organisations beyond local authorities include the International Longevity Centre (ILC-UK), Design Council, Business in the Community, Calouste Gulbenkian Foundation, Housing LIN, and Leeds Older People's Forum.

The Centres focus their work within the relevant four countries of the United Kingdom and are open to broader international collaboration. Many discuss and promote their work at international meetings. *NICE* is highly involved in international health guidance organisations and has provided consultancy advice to many countries. *EIF* is also building on established links with the other UK nations and is in the early stages of establishing international networks.

The *EEF* has actively sought out other countries keen to integrate evidence into their educational systems. If more countries use evidence to improve teaching and learning then this could lead to more and better evidence of high-potential approaches and programmes, which will feed directly into the global evidence synthesis on which the *EEF's* Toolkits are based. The *EEF* has worked with school systems in Australia to develop a local version of the Toolkit, contextualising global evidence recent, local examples and collaborating to conduct of large scale trials in Australian schools. A Scottish Toolkit has been developed with Education Scotland. The Centre is now supporting the adoption and contextualisation of the Toolkit in Latin America, Europe and South-East Asia, which is accelerating the generation of new knowledge to help teachers in England and across the globe to make more evidence-informed decisions.

Box 3.1.5 Collaboration beyond the What Works Network – key issues

1. **Focus of collaboration:** such as professional practice, management, policy, research, communications
2. **Level of work:** individual, organisational, or national levels
3. **Level of impact:** individual, organisational, or national levels
4. **Professional standards:** evidence-informed expectations or rules about practice
5. **Accreditation:** evidence-informed qualification and certification of skills and practices
6. **Decision-making:** basis for collaborative decisions
7. **International work:** collaborative relationships and work beyond their main geographical remit.

3.2 User engagement and supporting uptake

This section of the chapter considers the engagement of Centres with their users including the support of the uptake and use of research in their decision-making. As discussed in Chapter 1, the Centres are intermediary organisations and so are not expected to make and implement policy and practice decisions. Instead they are expected to engage with and support other organisations or individual policymakers and practitioners, helping to ensure that evidence is used effectively in these decisions and their implementation.

Both production led ('push') approaches to evidence use and more demand or user led ('pull') approaches are important. There can be research advances that change the way that phenomena are considered that was not previously imagined by research users. On the other hand, a 'push' led approach on its own may not reflect the needs of users and so may not always produce user relevant research. Despite the need for both approaches there is the danger that the default position is a 'push' perspective: the traditional order of starting with research and moving to its use. Instead the chapter sections and figures in this report start with the use of research in decision-making. For this reason, this chapter discusses user engagement and supporting uptake before progressing to research production.

Table 3.2 lists examples of the activities in relation to user engagement. More details of these activities can be found in Appendix 1.2. In this Chapter the dimensions of difference are considered under the more detailed sub-headings of:

- 3.2.1 Interaction and relationships
- 3.2.2 Skills
- 3.2.3 Structures and processes
- 3.2.4 Supporting evidence and guidance use

3.2.1 Interactions and relationships

A wide range of strategies are used to engage with potential users of Centre services and activities. *NICE*, for example, has a Public Involvement Programme with 110 lay members and 122 patient experts working with *NICE* on guidance production, a public affairs strategy to build strong relationships with those who plan and deliver health and care services, an external engagement strategy that organises conferences and contributes to the conferences of others, and local support for organisations to learn about and contribute to *NICE's* activities.

All the other Centres have similar if more modest strategies and organise workshops, masterclasses, conferences and other events. *Wellbeing* have made a strategic decision to mostly contribute to the events of others rather than investing energy in their own events when research (on research use) shows that relatively passive forms of engagement are not that effective in increasing the use of research (Langer et al. 2016).

Several Centres appoint champions to further their work. *NICE* has Student Champions and more senior Fellows. *Growth* has a network of early career researchers who can assist with local partners on project evaluations. *Wellbeing* works with champions within local authorities and other organisations to develop their data skills and to achieve wellbeing goals. *Wellbeing* also encourages people to be seconded to the Centre from their normal work where they can both learn about and contribute to the Centre's work. *Crime Reduction* has over 60 champions based in nearly all of the police forces across England as well as 'advocates' and 'practitioners'.

Table 3.2: What Works Centre activities relating to user engagement and supporting uptake

Centre	Work in this sub-domain	Examples of specific activities
Centre for Ageing Better	Formal & informal engagement with key stakeholders	<ul style="list-style-type: none"> • Public events • Roundtables • Speaking engagements • Public affairs • Parliamentary activity
What Works Centre for Crime Reduction	Providing opportunities to share learning, collaborate & participate in research, & embedding evidence-based policing into all professional practice	<ul style="list-style-type: none"> • Evidence Champions • Bursary scheme • Police Knowledge Fund • Police OnLine Knowledge Area • Recruitment & progression routes • Learning in research use, generation & application / critical appraisal skill • Research surgeries • Guidance for evidence use • Evidence-based guidance (in development)
Early Intervention Foundation	Engaging directly with local authorities & police forces across England	<ul style="list-style-type: none"> • Events (e.g. Academy for Police Leaders masterclasses) • Local engagement • Guidance & support for evidence use & implementation
Education Endowment Foundation	Engaging directly with schools, as well as early years & post-16 settings, & providing resources to encourage evidence use	<ul style="list-style-type: none"> • Campaigns to promote effective use of evidence • Research Schools Network • Monitoring & evaluation tools • Implementation resources • Excellence Fund • Promising Projects
What Works for Local Economic Growth	Engaging & informing local authorities	<ul style="list-style-type: none"> • Workshops • Linking local partners & academics • Guidance to support effective evaluations of interventions
National Institute for Health and Care Excellence	Engaging with the profession, the public & academia	<ul style="list-style-type: none"> • <i>NICE</i> Fellows • External engagement • Public affairs • Public involvement programme • Local support • Student champion scheme • Fee-for-service consultations: Office for market access (OMA), Scientific advice • Support for implementation • Embedding guidance in practice
What Works Scotland	Collaborative action research with the evidence users	<ul style="list-style-type: none"> • Collaborative action research • Community profiling • Facilitative Leadership training • Participatory Budgeting evaluation toolkit
Wales Centre for Public Policy (formerly PPIW)	Engaging with government to plan & disseminate research	<ul style="list-style-type: none"> • Agreeing research priorities & discussing outputs • Workshops (for local context)
What Works Wellbeing	Building relationships with central & local government, charities & business	<ul style="list-style-type: none"> • Working with local champions • Dissemination • Secondment

Another approach is to develop professional networks within the user group. *Crime Reduction* has a Police OnLine Knowledge Area which is an on-line collaboration tool that facilitates networking and sharing of research and practice, and supports an extensive network of evidence champions across forces. There is also the Policing and Crime Research Map, an interactive resource with details of ongoing post graduate police research to enable networking between police forces and researchers. The *EEF* has developed Research Schools which provide a network and a focus for school led awareness and engagement with research.

There are also collaborations with professional practice driven organisations such as ResearchEd, the Coalition for Evidence Based Education and the Society for Evidence Based Policing.

Another related strategy is the development of joint work between Centres and partners (see also Section 3.15 on partnership). This is intrinsic to the work of *Scotland* and *Wales* as they are both assisting with specific user research evidence needs. Joint work is also a component of many other Centres. *Growth* advises commissioners of services about their research needs. *Ageing Better* partners with organisations who wish to be more age friendly in their work. *Wellbeing* employs people with experience of relevant sectors as implementation leads to understand their sectors, feed that understanding into research and to bridge the gap between research and practice. The College of Policing helped to commission and engaged with 14 collaborations between academic institutions and police that were funded through the Police Knowledge Fund⁴⁵ in order to: (i) build sustained capability amongst officers and staff to understand, critique and use research; (ii) embed or accelerate understanding of crime and policing issues, and evidence-based problem-solving approaches; and (iii) demonstrate innovation in building the research evidence base and applying it through knowledge exchange and translation.

Engagement can also be increased through integrated campaigns. The *EEF* combines providing guidance with local advocacy and direct grants to help support scale up of programmes.

3.2.1 Interaction and relationship – key issues

1. **Engagement and evidence use mechanism:** the balance between raising awareness, reaching agreement, providing access, and developing relationships (see Chapter 1, section 1.4.1)
2. **Behavioural components of engagement:** enhancing the capability, opportunity and motivation for the use of research
3. **Interaction participants:** the subjects of user engagement (for example, the general public; political context; advocacy groups; specific policy, practice or societal users)
4. **Engagement role and power:** the balance between knowledge brokers, strategic partnerships and professional communities, and their power to influence the evidence ecosystem (see also Section 3.5)
5. **Degrees of co-construction:** in use, engagement, guidance, research, innovation
6. **Audience selection:** the balance between audiences and within specific audiences
7. **Fit with Theory of Change:** the aims and methods of interaction

⁴⁵ Since replaced by the Police Transformation Fund which operates on a different model.

3.2.2 Skills

A range of approaches are used to develop skills related to evidence use. *Growth*, for example, has produced How to Guides for undertaking evaluations. The *EEF* has developed its DIY Evaluation Guide as an interactive tool to introduce key principles of educational evaluation and guidance on how to conduct small-scale evaluations of new approaches and interventions. *Wellbeing* has published a range of resources on research including approaches to measuring wellbeing.

Many Centres provide resources that can assist with research such as *Scotland's* costing data, *Crime Reduction's* cost effectiveness toolkit and how to guides, and the *EEF's* Families of Schools database which provides access to attainment data that enables benchmarking against similar schools that may identify areas with scope for improvement. The *EEF* also provides resources to assist with self-assessment and audit and guidance and support for implementation.

Centres also provide direct advice and training. *Growth* provides workshops in local areas, *Crime Reduction* has research surgeries and their Evidence base camp. *NICE* has specialised paid for services for those developing health technologies to advice about the likely evidence needs and to learn about *NICE's* appraisal procedures. *Scotland* has a Facilitative Leadership training programme of small group training sessions and larger workshops within their Community Planning Partnerships. In addition, the co-production model of research development by *Scotland* means that research awareness and skills is built into the production process with partners.

For *Crime Reduction*, the College of Policing is responsible for the national curriculum for police learning and recruitment and promotion standards. Modules on evidence-based approaches and research methods have been included in the new degree-level curriculum for police entrants and learning will be implemented through an assessed project. Evidence-based policing is also covered in the development programme for officers and staff preparing for chief officer ranks. In addition, the College Bursary Scheme offers contribution towards tuition fees for those undertaking degree or post graduate study alongside their normal work.

3.2.2 Skills – key issues

1. **Stage of research use:** skills in use; application; interpretation; synthesis, primary research or general research literacy
2. **Specificity:** whether skills are generic or linked to a specific theory of change stage or to specific projects
3. **Embedded skills in theory:** the extent that skill development is within needs analysis and theory of change
4. **Embedded skills in practice:** the extent that skill development is embedded in structures and processes, for instance built into appraisal or career development
5. **Level of intervention:** Individual or organisational level of investment in skills
6. **Skills development methods:** how the skills are achieved
7. **Selection of recipients and their needs:** identifying who needs what in terms of skill development, representativeness
8. **Resources:** that assist in developing skills to undertake or use research

3.2.3 Structures and processes

Many approaches to evidence use are at the individual level and so may not be sustained over time with staff changes and lack of institutional memories. Centres therefore undertake work at an organisational level and create institutional structures to maintain a focus on research evidence as part of decision-making processes.

This approach is clear in Centres working as part of current institutional structures. The College of Policing is responsible for police standards and learning curriculum, recruitment and promotion processes and the competency and behaviours framework. By building evidence issues into these systems, *Crime Reduction* institutionalises them within policy and practice. The College is now developing evidence-based standards and guidance so that research evidence will inform what accepted standards of practice are. These standards can then be inspected against by Her Majesty's Inspectorate of Constabulary and Fire and Rescue Service (HMICFRS).

NICE does not govern or proscribe the use of the evidence-informed guidance that it produces but it still can have a powerful influence. As part of the Government's health systems, the Centre informs the National Health Service which healthcare interventions meet a level of cost effectiveness measured by quality of life and articulated as an Incremental Cost Effectiveness Ratio⁴⁶. It also provides Quality Standards which services can compare their work against. Patients can also have the right to have treatments recommended by guidance funded by the NHS. *NICE* also work very closely with the medical colleges that provide training and professional accreditation within health specialties.

Centres outside government can also have an influence on the structures within government. For example, *Wellbeing* works with the government Social Impacts Task Force. The *EEF* provides support for the government's Strategic Investment Fund for school improvement, to help ensure that the process and criteria for awarding funds is evidence-informed. The *EEF*'s Research Schools Network, where member schools act as focal points to support evidence use, initially disrupted the status quo but has now become part of the ongoing system for spreading best practice. Also, all Centres through their credibility and profile and services impact on what is considered accepted practice and so can have an indirect influence on systems and structures.

Scotland's Collaborative Action Research includes the responsibility for the participants to support ongoing work on the topic.

Box 3.2.3 Structures and processes (in evidence use) – key issues

1. **Existing versus new structures and processes:** the extent that work is embedded within existing systems or creating new systems to enable evidence use
2. **Types of structures and systems:** for example, networks of professional collaboration; accepted professional practice; professional recruitment and progression; user rights to evidence-informed services; policy funding decisions
3. **Freedom of choice:** the extent that the use of evidence or guidance is optional or required
4. **Level of use:** how systems can apply at policy or practice levels of organisation
5. **Sustainability:** whether structures and processes (i.e. the use of evidence) would continue if the Centre came to an end

⁴⁶ These assessments do not apply to social care interventions at present.

3.2.4 Supporting evidence and guidance use

The uptake of evidence-informed guidance by users is an issue for the Centres that provide guidance, interpretations and recommendations.

NICE has a unit for dissemination of guidance and implementation support, endorses good quality resources to aid implementation and provides examples of innovative implementation practice. They also provide information and resources on change management, costs and savings, and evaluation, and develops targeted support where needed. It also works with local authorities and NHS services to facilitate implementation and gathers examples of good practice for shared learning.

The *EEF* is experimenting with different implementation strategies. It works with local authorities to align implementation strategies with local needs. It has an Excellence Fund to financially reward the uptake of promising projects that involve the fidelity of core not negotiable components (practice or function) and ‘faithful adoption and intelligent adaptation’ to local circumstances. It works to fit evidence into school improvement by infusing the processes with evidence. They have campaigns that combine guidance with advocacy and support. The Research Schools Network also enables use of guidance through awareness raising and focus on evidence in decision-making.

Mention has already been made of the special situation of *Crime Reduction* in terms of being involved in developing competency and learning frameworks which provide an institutional process for evidence-informed work. The Centre is piloting a process for developing evidence-based guidance which will involve specialist and frontline practitioners, as well as academics. The introduction of research evidence into an existing organisational system may in some ways be easier to achieve than setting up a brand-new system but it may still create challenges in introducing a new basis to how decisions are made within the organisation.

Evidence use may also be different where the user has been very involved in specifying the research need and the way in which the evidence and recommendations have been created. *NICE* guidance committees, for example, specify the topic focus, commission systematic reviews and interpret and evidence. *Scotland’s* work is based on co-production and *Wales* has very user defined evidence reviews.

Box 3.2.4 Supporting evidence and guidance use – key issues

1. **Resources:** to support the use of guidance
2. **Incentivisation, alignment and user roles:** that encourage or require the use of evidence (see also Sections 3.2.1 and 3.2.3)
3. **Structural approaches:** helping to develop structures and processes that embed and sustain evidence use (as in Section 3.2.3)
4. **Level of evidence uptake:** national, regional, organisational and individual level
5. **Breadth and depth of evidence and guidance:** the scope and detail of the guidance

3.3 Communicating and interpreting research evidence

This section of the chapter considers the Centres' role in the communication and interpretation of evidence. The dimensions of difference are considered under the more detailed sub-headings of:

- 3.3.1 Guidance: interpretation of evidence to form recommendations
- 3.3.2 Access to evidence: presentation of evidence through toolkits and summaries
- 3.3.3 General communication methods: broader communication strategies for raising awareness about Centre aims, services and products

Table 3.3 lists examples of the activities of the Centres in these roles and more details of these activities can be found in Appendix 1.3.

3.3.1 *Guidance: interpretation of evidence to form recommendations*

The Centres provide interpretations, recommendations and guidance informed by research evidence. Research findings have little meaning on their own. They need to be interpreted in the context of other information such as academic and practice knowledge and the context in which they may be applied. All of the Centres provide some form of 'guidance' in the form of interpretation of research evidence but vary in the extent and type of formalised procedures for doing this.

NICE has the largest and most developed and most resource intensive systems for creating guidance. Its work includes the evaluation of innovative practices, diagnostic tests, medicines, and professional practices. It sets up guidance committees representing key user, practice, and academic stakeholders that seek relevant research evidence, use practice and academic experience to fill in any gaps in the research evidence base and to interpret the and apply evidence using the Centre's Social Values policy (See Section 3.1.3). Pathways are also produced which are interactive flow diagrams showing how the numerous guidelines relate. *NICE* also produces Quality Standards informed by the guidelines on priority areas for improving the quality of health and social care. Other Centres have developed less intensive processes for developing guidance or recommendations, informed by the *NICE* stakeholder driven approach of interpreting systematic review-based evidence.

The *EEF*'s guidance involves a scoping exercise involving teachers, policy makers, academics and other stakeholders to identify the issues most salient to teachers. A panel of teachers and academics then helps to interpret the available research evidence in order to make practical, accessible, understandable recommendations.

Crime Reduction has been piloting a guidance process using a mix of police specialists, frontline practitioners, and academics to consider the best available research evidence, alongside practitioner expertise to make practical and accessible recommendations. As already mentioned, the aim is for the guidance to set out clear standards for practice which can be inspected against and used to inform the police learning curriculum.

EIF has produced guides on Preventing Gang Involvement and Youth Violence, Commissioning Mentoring Programmes, and Social Impact Bonds and Early Intervention. *Ageing Better* has developed leaflets on getting active in later life and a short guide on how to implement a campaign that aims to create more age-friendly high streets.

Table 3.3: What Works Centre activities to communicate and interpret research evidence

Centre	Work in this sub-domain	Examples of specific activities
Centre for Ageing Better	Recommendations and summaries from the findings of evidence reviews and deliberative workshops	<ul style="list-style-type: none"> • Research and policy briefings, infographics • Recommendations based on research findings • Implementation guidance • Website & social/electronic media • Media work
What Works Centre for Crime Reduction	Online resources to make evidence accessible to police and crime reduction practitioners and decision-makers. Piloting a process for developing evidence-based guidelines in priority areas.	<ul style="list-style-type: none"> • Evidence-based guidelines (in development) • Crime Reduction Toolkit • Information resources for practitioners: the National Police Library, the Knowledge Bank, the Global Policing database • Policing & Crime Research Map • What Works Centre for Crime Reduction Microsite and electronic media • Briefings and infographics
Early Intervention Foundation	Presentation of evidence on effective programmes and approaches to encourage evidence-based policy making and commissioning	<ul style="list-style-type: none"> • The <i>EIF</i> Guidebook • Evidence reviews • Resources • Evidence-based recommendations • Website & electronic media
Education Endowment Foundation	Online resources to present evidence and guidance to teachers and senior leaders and on a range of high-priority issues	<ul style="list-style-type: none"> • Guidance reports • Teaching & Learning Toolkit & the Early Years Toolkit • ‘Big Picture’ themes • Families of Schools database • Website & any electronic media
What Works for Local Economic Growth	Online summaries of evidence reviews with guidance embedded in the communication of findings	<ul style="list-style-type: none"> • Topic specific toolkits • Website & Social media • Evaluation case studies
National Institute for Health and Care Excellence	Providing access to information and guidance on medicines, practices and care	<ul style="list-style-type: none"> • Interventional procedure guidance • Health Technology Evaluations • Medicines & technologies programme • Centre for guidelines • <i>NICE</i> Pathways • Quality standards • Social Value Judgements • Online resources • <i>NICE</i> in the news • Other engagement activities: Enquiries, Publishing, Internal communications
What Works Scotland	Co-producing and interpreting findings from research	<ul style="list-style-type: none"> • Reflecting on collaborative action research • Community profiling • Website & electronic media
Wales Centre for Public Policy (formerly PPIW)	Producing briefings and summaries of evidence and discussing these with the research user	<ul style="list-style-type: none"> • Briefings & summaries • Website, social media • Newsletter
What Works Wellbeing	Translation of academic papers into briefings, summaries and, increasingly, recommendations	<ul style="list-style-type: none"> • Briefings & summaries • Evidence Comparison Tool • Policy recommendations • Dissemination

3.3.1 Guidance – key issues

1. **User roles:** power and level of involvement of different stakeholders in different stages of the process
2. **Use of practice and academic expertise:** to interpret and fill gaps in the research evidence and to contextualise its relevance
3. **Breadth, depth, and interaction and overlap between guidance:** the variation in the scope of the issues addressed by guidance
4. **Values and priorities:** at the level of the Centre and at the level of individual guidance
5. **Explicitness of values and methods in guidance production:** how explicit are the reports about the detail of how guidance is produced
6. **Formality of process:** for creating guidance

3.3.2 Access to evidence: presentation of evidence through toolkits and summaries

Many of the Centres have guidebooks or toolkits that act like consumer guides to provide users of evidence with a quick and user-friendly method of accessing the findings of research. These guidebooks and toolkits typically provide evidence on the extent of impact, the trustworthiness of the results, and the costs of the intervention or service. The findings are usually based on reviewing the findings of pre-existing systematic reviews, so they are based on reviews of reviews. Guidebooks and toolkits can include some interpretation such as issues for users to consider or actions that could be taken but this is not to the same extent of interpretation as in guidance and recommendations (as in Section 3.3.1). In other words, there are degrees of interpretation between toolkits giving access to evidence and guidance providing recommendations on action.

The *Crime Reduction* Toolkit, the *EIF* Guidebook, the *EEF's* Teaching and Learning Toolkit and the Early Years Toolkit, the *Growth* Toolkits, and the *Wellbeing* Evidence Comparison Tool all provide the summaries of findings across a range of topic of concern to the Centre. All of these provide information on impact, cost and strength of evidence. The *Crime Reduction* Toolkit in addition provides evidence on the process by which the intervention has its effect and how best to implement it, which can assist with interpreting the evidence in relation to different use contexts.

Centres produce a range of other products such as the briefings and summaries of evidence findings produced by *Wellbeing*, *Wales* and *Ageing Better*. Some of the briefings are about individual studies but they also provide overviews of evidence. These may be from a systematic review of evidence related to a research question or, in well studied areas, a review of reviews (see Chapter 4, Section 5 on Access to Research evidence standards).

Other products include the *EEF's* 'Big Picture' Themes which draws together evidence on high priority issues for schools. Promising Projects provides quick access to estimates of effects of interventions on educational attainment on populations with different background characteristics.

Other approaches include events and workshops as discussed in Section 3.2.1. *Growth*, for example, have used workshops to discuss evidence findings on particular issues with local authorities. *Ageing Better* uses key facts to help raise awareness about the importance of a topic.

The toolkits, briefings and related products have involved a range of different products that vary in the levels of evidence, details of evidence, format, and the amount of explanation provided about how

these were produced. Little is known about the effect of this variation on the nature of the evidence produced and its uptake and use. Data that are available are mostly concerned with frequency of website or social media ‘hits’ or attendance at meetings, which may indicate awareness and interest in the research evidence. As part of the evaluation of the What Works Centre for Crime Reduction (Hunter et al. 2017), self-reported data was collected on changes in the use of research with regard to strategic decision-making and resource allocation. The *EEF* also have survey data on reported use of toolkit information but not objective data on use and impact (see Section 3.4.3 that includes Centres’ monitoring and evaluation).

Scotland and *Wales* are a bit different to other Centres in terms of their relationship to their users and thus also of their engagement with research findings. *Wales* provides expert evidence syntheses in response to specific Welsh government needs. The briefings for the Welsh Government and the meeting with ministers is therefore very focused on feeding into policy needs and decision-making. *Scotland* used a co-production model of Collaborative Action Research so the users are intimately involved in the evidence that is produced.

NICE is also different in that its energies are mostly focused on providing guidance where research has been interpreted alongside other forms of information by guidance committees. The research evidence informing the guidance is available though is not the main form of engagement with users.

Box 3.3.2 Access to evidence – key issues

1. **Topic scope:** the breadth, depth and overlap between topics
2. **Topics and populations selected:** for inclusion in toolkits and briefings
3. **Evidence included:** type of research questions, evidence, methods, and consideration of equity
4. **Format of products:** user friendliness and explicitness about methods of production
5. **Fitness for purpose:** extent that the evidence provided fits the users’ needs
6. **Monitoring access and usage:** how the use of evidence is defined; for example, seen, downloaded, read, interpreted, subjective reports of use, objective data on use
7. **Co-production and engagement:** and how this may increase access
8. **Local versus generic evidence:** user specific products and engagement

3.3.3 General communication methods: broader communication strategies

All of the Centres have websites and use a range of communication methods such as blogs, e-newsletters and social media. The communications may be aimed at the general public, members of the particular sector that a Centre operates in or other likely users of research evidence and research informed guidance.

Many communicate directly with members or subscribers or particular types of organisations. *Crime Reduction* send emails to members, *NICE* has a newsletter with nearly 45,000 subscribers, and the *EEF* write regularly to all schools and all local authorities with reports and other updates. Centres are predominantly communicating about their own work though *Wales* also reports on the activities and news of other Centres in the What Works Network. The Centres vary in the extent that the content of the communications is about research evidence that might inform their decision-making or broader engagement with the issues of concern to their audiences that might relate to research evidence.

The resources invested in general communications reflects the size of the Centre and the relative importance to its work. For both these reasons *Ageing Better* and *NICE* have large communications teams: each year *NICE* manages an annual conference, engagement in many other meetings, contact with 500 journalists and a response service with thousands of enquiries. Conversely, *Wales* and *Wellbeing* each have a single communications officer so have to be innovative in publicising their work.

As with access to evidence (Section 3.3.2) most data on communications effectiveness is based on frequency of use such as web and social media ‘hits’.

Box 3.3.3 General communications – key issues

1. **Audience selection:** targeting groups/individuals or providing open access and fit with Theory of Change
2. **Form of communication:** method and whether this was selected to meet audience needs
3. **Purpose:** whether providing evidence to be used (‘push’) or engaging with users’ broader needs that may drive their interest in using research (‘pull’)
4. **Resources:** the funding and staff needed and allocated for this central function as a proportion of budget

3.4 Research production

This section of the chapter considers the involvement of the Centres in the production of research. The dimensions of difference are considered under the more detailed sub-headings of:

- 3.4.1 Research synthesis
- 3.4.2 Primary research
- 3.4.3 ‘Research on research use’ and Centre planning and evaluation

Table 3.4 lists examples of the activities in relation to research production. More details of these activities can be found in Appendix 1.4. More details on the Centres’ approaches to research are included in Chapter 4 on evidence standards.

3.4.1 Research synthesis

The synthesis of research to clarify ‘what is known and how is it known’ and ‘what more do we need to know and how is it known’ is a core aspect of use of research. Synthesis of relevant studies (primary research) can provide a more comprehensive statement of research evidence than a single study. Even if a study is excellent in quality and relevance, studies undertaken at different times in different circumstances can lead to different results. It is therefore not surprising that synthesis of research is one of the main activities of the Centres.

The Centres often use systematic review methods which use explicit rigorous methods to undertake the synthesis (just as rigorous explicit methods are expected of primary research) (Gough et al. 2017). Systematic reviews can be used to address both empirical and conceptual questions. The Centres predominantly review questions of impact but they are sometimes also concerned with issues of process.

In some cases there are already a number of existing systematic reviews. Centres therefore also undertake reviews of these existing reviews (reviews of reviews) to provide a broad assessment of an

Table 3.4: What Works Centre activities relating to research production

Centre	Work in this domain	Examples of specific activities*
Centre for Ageing Better	Research production to build the evidence base	<ul style="list-style-type: none"> • Evidence reviews • Primary & secondary research • Developing practices to support the use of research
What Works Centre for Crime Reduction	Synthesising the existing evidence base to support decision-making and practice	<ul style="list-style-type: none"> • Systematic reviews • Synthesis for the Crime Reduction Toolkit • Primary research published by the College • Primary research published by the Academic Consortium • EMMIE Framework
Early Intervention Foundation	Assessing existing evidence that evaluates programmes and their costs	<ul style="list-style-type: none"> • Synthesis • Programmes, Practice & Systems • Evidence standards
Education Endowment Foundation	Reviewing evidence to improve understanding of ‘what works’	<ul style="list-style-type: none"> • Synthesis for the Toolkits • Literature reviews • Early Years Measures database • SPECTRUM database: measuring essential skills and non-academic outcomes • Primary Research Framework • Data archive & analysis • Research on Knowledge Mobilisation
What Works for Local Economic Growth	Reviewing evidence of relevant policy areas	<ul style="list-style-type: none"> • Evidence reviews • Demonstrator projects
National Institute for Health and Care Excellence	Focused primarily on interpreting and presenting evidence	<ul style="list-style-type: none"> • Guidance production • Indicators
What Works Scotland	Collaborative Action Research co-produced by the Centre and Community Planning Partnerships (CPPs), including representatives from central and local government and the third sector	<ul style="list-style-type: none"> • Primary research from collaborative action research • Synthesis • Research on production & use of evidence: Learning about partnership working and collaborative learning, Evidence to Action in public service delivery, Community profiling
Wales Centre for Public Policy (formerly PPIW)	Commissioning experts to apply their existing knowledge and expertise to key issues	<ul style="list-style-type: none"> • Expert synthesis • Primary research
What Works Wellbeing	Synthesising the existing evidence base and assessing cost effectiveness (through the academic-led consortia)	<ul style="list-style-type: none"> • Commissioning research • Secondary research • Methodology workstream • Research on research use

*Excluding monitoring and evaluation of the Centres’ own work – See Section 3.4.3 (iii) and Appendix 2

evidence base. This is the approach used by the *EEF* to populate its evidence toolkits described in Section 3.3.3

Not all reviews by the Centres are systematic. *Wales* often uses an academic expert model of research synthesis, commissioning academics to apply their expertise to a government research priority. These

syntheses do not have a standard methodological approach and use the skill and experience of the reviewer to examine and review the evidence base. This approach is affordable for the Centre's resources and produces outputs within the timescales needed to directly influence policy decisions. *EIF* produces a range of syntheses – rapid evidence reviews for example – alongside their systematic reviews.

Most of the reviews and 'reviews of reviews' are undertaken by internal or external partners rather than the core organisation of the Centres. For the *Crime Reduction Toolkit*, for example, the academic consortia identified and coded reviews to include, although more recently College of Policing researchers have also been involved in this process. Similarly for *Wellbeing*, synthesis is undertaken by its four academic consortia. The *EEF* commissions Durham University to produce the data for their evidence toolkits. There is variation in how the reviews and reviews of reviews are undertaken by the Centres and this is discussed in Chapter 4 on evidence standards.

The questions addressed by research synthesis are, as with their primary research (see Section 3.4.2), mostly about 'what works'. Crime Reduction goes beyond this, including moderators, mediators and implementation considerations. Generally, however, there is little use of process research data (or other forms of research evidence) in research synthesis across the Centres.

Box 3.4.1 Research synthesis – key issues

1. **Research questions:** addressed in terms of topic and type of question, and breadth, depth and complexity
2. **Use of mapping of research and of administrative and cohort data in planning:** for instance research gap maps, administrative or cohort data
3. **The existing evidence base:** how the evidence base is assessed and how this assessment informs the Centre's strategy
4. **Methods and standards of research:** see Chapter 4

3.4.2 Primary research

Primary research is necessary for producing research findings. With a focus on what works, it is not surprising that the most common research question addressed by the Centres through primary research is one of the impact of services and programmes evaluated through controlled experiments to test for the effect of extraneous variables (testing the counterfactual). Several of the Centres are however concerned with other questions. These may be a study of process to understand causal effects which help in the refinement of interventions or in their modification to apply in different settings. There may also be other questions such as studying prevalence of phenomena in society or user perspectives on issues.

The *EEF* is the Centre which invests the most in primary research through the commissioning of mixed methods valuations of funded projects. Research needs proposed by gaps in the evidence base and by the potential of innovative programmes are piloted, then evaluated experimentally at a school level and if successful, evaluated experimentally at a very large scale. The *EEF's* investment is supported in many cases by funding partners such as charitable trusts and corporate foundations. Schools also contribute in terms of assisting with the implementation of the intervention and by working with the evaluators who are independent from the intervention team. Programme development also includes codification of intervention components, iterative adaptations, and clarification of the Theory of Change as to why an intervention should work.

Several other Centres have some primary research work. *Crime Reduction*, for example, had several studies undertaken by the academic consortium and the College of Policing invests in a few primary studies, and engages with primary research projects undertaken through the Police Knowledge Fund. Several Centres encourage and enable research such as the evaluation demonstration projects and resources by *Growth*, the DIY Evaluation Guide provided by the *EEF*, and a range of methods guides from *Wellbeing*.

A significant proportion of *Scotland's* outputs are primary research. A main focus of its work is Collaborative Action Research where various forms of research at the primary and secondary levels are brought together (in a co-production process with users) to provide user relevant research evidence.

NICE does not usually undertake primary impact studies but does collect quality of care data that can inform research providers and funders. Guidance products can also identify gaps in research which is communicated to primary research funders such as the Medical Research Council and National Institute for Health Research.

The majority of the research outputs produced by *EIF* are reviews or overviews, though they do conduct some primary research such as small qualitative studies. *Growth* and *Wellbeing* also focus on research synthesis and do not undertake primary research, though *Wellbeing* regularly conducts secondary data analysis, whilst *Ageing Better's* first primary research is still in process.

There are several advantages for a Centre in shaping and informing the primary research agenda in their field. First, a Centre's analysis of the needs of the evidence ecosystem may have concluded that there is a general lack of relevant primary research. Second, their work with users and the mapping and synthesis of research may have identified specific gaps in the field. Third, there is the opportunity to influence research methods and evidence standards. Fourth, Centres can be a disruptive force in changing expectations about research in a field. Education research, for example, has a very strong tradition in asking questions about the nature of the education but less of a history in the UK of experimental research to assess the impact of interventions. The investment by the *EEF* in such experimental work has changed the balance of educational research.

Some Centres have the budget to invest directly in primary research whilst others such as *Growth* have an influence through developing awareness, motivation and support. *Growth* also influences its field and has a cross What Works Network role in leading on the use of administrative data in Centres' work.

Other examples of the development of research methods include:

- *Crime Reduction's* EMMIE process for incorporating information about the processes (moderators, mediators and implementation considerations) by which interventions have their effect.
- *NICE's* Quality Adjusted Life Year system for assessing cost effectiveness against quality of life.
- *Scotland's* Participatory Budgetary Evaluation Toolkit to allow users of research to more easily incorporate cost issues. It can also include the provision of data that enables further research and better use of research such as *Scotland's* Local Data Profiles.

Box 3.4.2 Primary research production – key issues

1. **Need for primary research of different types:** relative need in a Centre's evidence ecosystem for answers to different questions (impact, process, prevalence, complexity)
2. **Focus of primary research:** relevance of topic focus and methods to inform users' needs
3. **Methods selection:** fit for purpose of the methods used for different questions (including nudge strategies and administrative data) and for informing user's needs
4. **Methods development:** Centres' roles in developing methods to enable evidence use
5. **Level of involvement:** whether research is produced, commissioned or enabled through support and advice
6. **Influence over the primary research agenda:** the extent to which a Centre has control over the above factors, i.e. the ability to shape the primary evidence base to meet its needs
7. **Co-production:** how this approach compares and relates to standard research strategies

3.4.3 'Research on research use' and Centre planning and evaluation

All of the Centres aim to increase the use of research evidence in policy and practice and, possibly, more broadly in society. This raises the question of the extent that Centres have engaged with the research literature providing evidence about effective strategies for increasing the use of research in decision-making. Centres may have engaged with this 'research on research use' evidence in:

- (i) The initial planning of their work
- (ii) Evaluating potential new strategies and methods
- (iii) Evaluating components of ongoing work
- (iv) Assessing whether What Works Centres 'work'

These are discussed in turn.

(i) Initial planning of the Centres' work

Although the Centres have the aim to increase evidence-informed decision-making, they do not tend to refer explicitly in the descriptions of their planning to the evidence base on what is known to be effective in achieving that aim. In other words, they do not tend to refer to research on intermediary organisations and other research on evidence use in their planning.

Instead of research on research use, the usual justification of approaches is framed in terms of gaps that need to be filled within their evidence ecosystem such as the availability of primary research, access to synthesis of research findings, access to evidence-informed guidance and the involvement of users to ensure that the evidence produced is relevant to them.

There is however acknowledgement of the importance of 'research on research use' in the existence of Centre projects developing that evidence base (see ii below) and in evaluating Centre work (see iii below).

(ii) Evaluating potential new strategies and methods

There are several examples of Centres directly contributing to the evidence base on 'research on research use'.

One example is *Wellbeing's* involvement in the Wellcome Trust funded 'Science of Using Science' review of the evidence base (Langer et al. 2016). This provided the evidence used by *Wellbeing* that passive

dissemination of access to research is a necessary but not sufficient component of effective strategies to increase research use in decision-making.

Another example is a programme of work funded by the Department for Education and undertaken by the *EEF* on the efficacy of different strategies for increasing the use of research by teachers in schools. This includes a multi arm randomised cluster trial of different forms of research dissemination to schools and by a number of other more demand (pull) type strategies to increase research use strategies such as Evidence for the Frontline and the RISE Evidence-informed school improvement project.

A further example is the programme of work of *NICE's* Research Support Unit examining the evidence base for aspects of *NICE's* work including the most effective form of committees (Oliver 2015), uptake of guidance (Kneale 2016) and social values in guidance (Gough et al. 2014).

(iii) Evaluating components of ongoing work

The evidence base is also increased by the Centres undertaking evaluations of their ongoing work. This fits into three types:

(a) Stand-alone studies of impact and process

One example is *EIF* commissioning Warwick University to evaluate the impact of a series of early years events (one national conference and five regional evidence seminars) where attendees reported greater understanding of the evidence presented and subsequent use of this evidence. Another is *Crime Reduction's* study of users' experience of working with the *Crime Reduction* Toolkit to inform its continued development. *Crime Reduction* has also piloted and evaluates some work around improving knowledge, skills and behaviour through the delivery of evidence-based learning programmes. As part of Cardiff University, *Wales* is producing impact studies for the Research Excellence Framework 2021 and was the subject of an external review by an independent panel appointed by the Welsh Government in 2016/17.

The *EEF* is very involved in ensuring that all of its work is piloted and formally evaluated; for example, formal evaluations of its Best Use of Teaching Assistants Campaign. It can also be argued that as the *EEF's* primary research evaluations of practice regarding effectiveness (studies in real-world conditions, rather than efficacy studies in ideal conditions) assess whether research informed approaches can be implemented, they are therefore a form of study of research use. Their experimental trial of how to apply formative assessment at scale, for example, is a study of the efficacy of formative assessment but also a study of how to implement it in practice.

(b) Case studies of influence

Centres may attempt to influence policy in terms of advocacy for a topic area as in *Ageing Better* working towards the issue of ageing being included in the White Paper on Housing. They may also work to have influence in terms of evidence as in *Ageing Better* contributing to the Government's Fuller Working Lives strategy on the issue of life-long learning. Another example is the Department of Work and Pensions referencing *EIF's* work in a major funding decision.

(c) Administrative data and surveys of resource use

Most Centres have statistics showing differential levels of people accessing various products on their web pages, social media 'hits' and 'mentions' and attendance at events some of which may be benchmarked for comparison against other organisations. For example, 64% of schools in England have

used the *EEF*'s toolkits according to a YouGov poll published by the National Audit Office in 2015. *NICE* reports that its guidance and quality standard pages are accessed 20 million times per year.

Some Centres also undertake surveys. One example is *Ageing Better*'s surveys of unprompted awareness of those from 'inner' (where ageing is high priority) and 'outer' stakeholder organisations. Another example is the *EEF*'s surveys of teacher awareness and use of their toolkits. A further example is *Crime Reduction*'s surveys of conference attendees and their reports of increased understanding and confidence in using evidence to inform decisions. The Centre also surveys all police officers and staff regarding both toolkit awareness and attitudes towards evidence-based approaches.

NICE monitors the uptake of its guidance using data routinely collected from national audits, reports, surveys and indicators. It also routinely surveys all those contributing to their guidance to complete an exit questionnaire to report on satisfaction of working with *NICE*.

Awareness and reported use are, of course, important measures but are not the same as objective measures of evidence use in decision-making. Also, even objective measures do not necessarily mean that there was a causal effect as, without a counterfactual, it may be that the outcome would have occurred anyway.

(d) Non-formal evaluations

In addition to formal evaluations, there is of course much reflection by Centres about the effectiveness of their work. *Scotland* provides good example of reflexive practice in organising 'what we have learnt' events, exploring evidence to action activity with its Community Planning Partnerships. In addition, Centres of course receive feedback by funders and customers about their work and these may include key performance indicators.

Monitoring of the Centres main areas of work and their outputs is of course recorded in general terms in annual reports and other documents.

(iv) Evaluating whether What Works Centres 'work'

The 2016 ESRC review of the Centres asked the question of whether the What Works Centres work. In terms of formal evaluation of the impact of the Centres, the academic consortium supporting *Crime Reduction* evaluated the success of the Centre in terms of its production of useful resources, its engagement with key stakeholders, and their improved understanding and application of research evidence (Hunter et al. 2017) (see Chapter 1 Section 1.2).

The study described in this current report is a description of the nature of the Centres and how they vary, not an evaluation of their effectiveness. Any such evaluation in the future could, however, be informed by the issues and dimensions of difference identified by this study.

Box 3.4.3 'Research on research use' and Centre planning and evaluation – key issues

1. **The use of 'research on research use':** the nature and extent of engagement with such research in Centres' planning and theories of change
2. **Contributing to 'research on research use':** Centres contributing to both fundamental research and research on particular research use strategies
3. **Evaluating components of ongoing work:** the nature and extent of evaluations
4. **Monitoring of Centre work:** under each of the research use, engagement, and production headings
5. **Impact of the What Works Centres:** the extent that this could, should or is evaluated
6. **Outcome measures:** the choice of measures including the use of subjective Vs objective measures
7. **Testing counterfactuals:** assessing which outcomes might have occurred without the Centres' work
8. **Proportion of work:** the extent that Centres invest effort in research on research use

3.5 User perspectives: Scoping and engaging with users' perspectives and needs

This section of the chapter considers the role of user perspectives in the work of the Centres. Table 3.5 lists examples of the activities in relation to context and more details of these activities can be found in Appendix 1.5.

Centres have developed a number of strategies for identifying user perspectives on research. *Ageing Better* have both commissioned research (a stakeholder survey, statistical analysis segmenting the population and further qualitative investigation) and conducted their own direct work (a public consultation, an evidence review, a series of high level, expert roundtables and 3 deliberative workshops). Similarly, the *EEF* works with teachers and other stakeholder to identify the issues on which teachers most need information and recommendations.

Wellbeing contacted over 4,000 people during the first 12-18 months of operation to consult on needs and scope of the new Centre through conversations, surveys, roundtables and events across the UK with over 700 policy officials, practitioners and academics. Public Dialogues were commissioned to engage with the public across the UK (108 participants) to inform the Centre design and policy priorities. The four academic consortia also undertook Voice of the User consultations with their audiences to inform detailed work plans. Users also continue to participate in the Centre's governance processes with, for example, representation on the Advisory Panel, the partners forum, the Strategic Council for Wellbeing in Work, the Social Impacts Task Force, the Board, and the staff teams and consortia.

All of the Centres engage in different way with their various audiences which provides a means by which user perspectives can be understood. Where there is very close working on developing user-driven evidence then user perspectives are integral to the process as with *Scotland's* co-production model and *Wales's* evidence service for the Welsh government.

Table 3.5: What Works Centre activities relating to user perspectives

Centre	Work in this sub-domain	Examples of specific activities
Centre for Ageing Better	Commissioned scoping work and primary research for lived and professional experience, to help determine priorities and identify knowledge gaps	<ul style="list-style-type: none"> • Scoping & exploratory research
What Works Centre for Crime Reduction	Input into guidance development and consultation, and research to assess user needs	<ul style="list-style-type: none"> • User research to inform the development of the Toolkit • User research on knowledge sharing • Survey/interviews with officers and staff to identify priorities • Guideline committees
Early Intervention Foundation	Input for the redevelopment of the Guidebook	<ul style="list-style-type: none"> • Online survey and phone interviews with representative users
Education Endowment Foundation	Input into guidance development	<ul style="list-style-type: none"> • Guidance Reports advisory panels
What Works for Local Economic Growth	Expert advice on research priorities and communication	<ul style="list-style-type: none"> • User Panel
National Institute for Health and Care Excellence	Produce guidance and standards that are fit for the audience needs and take account of relevant overarching moral and ethical issues	<ul style="list-style-type: none"> • Guidance committees • Stakeholder consultation • Citizens Council
What Works Scotland	Participation in co-production and collaborative action research (CAR)	<ul style="list-style-type: none"> • Participant engagement (to discuss and decide topics, then plan and deliver research)
Wales Centre for Public Policy (formerly PPIW)	Discussions with ministers / First Minister to suggest and agree priorities, to set the research agenda	<ul style="list-style-type: none"> • Scoping & priority setting
What Works Wellbeing	Consultation, research and user participation to assess and address user needs	<ul style="list-style-type: none"> • Setting priorities & direction: Consultation on needs and scope; user involvement in governance processes

A further approach is shown by *NICE*'s Citizen Council which is a panel of 30 members of the public that reflect the demographic characteristics of the UK. The aim here is less to identify user perspectives on research priorities and more to do with developing user perspectives about how *NICE* undertakes its work including the social values that underlie *NICE* processes and guidance production. A somewhat similar approach, though with a broader focus, is taken by the College of Policing's Regulatory Consultative Group (CRCG) that discusses working practices and policies from users and other stakeholders.

Research evidence does not in itself determine what decisions should be made. Evidence use requires interpretation and then application and both of these depend upon perspectives (values and priorities) and other forms of evidence such as local context. Several Centres produce recommendations and guidance and involve users in that process. In addition to providing perspectives and contextual

information they can also include other forms of knowledge to supplement whatever research evidence is available.

There are also more specific user perspective strategies. *EIF*, for example, undertook an online survey and phone interviews with representative users from Whitehall, local government and frontline practice to redevelop their Guidebook. For *NICE*, guidance is a core role and this produced by stakeholder representative guidance committees. The government decides on the issues requiring guidance but the specific focus is developed, after a broader consultation exercise, by the guidance committees that also develop systematic review questions and deliberate on their findings and other forms of evidence and perspectives available to the committee. The *EEF* and *Crime Reduction* have learned from *NICE*'s work to develop their own guideline development groups on similar principles though somewhat smaller in scale in terms of number of guidelines and the extent of work to develop each one. Guidance processes are largely used to inform practice rather than policy recommendations.

Box 3.5 Scoping and engaging with users' perspectives and needs – key issues

1. **Clarifying the main users:** who the users are and how they fit with the Centre's aims and theory of change
2. **Identifying user perspectives:** their values and priorities
3. **User roles and user power:** how they provide input in each stage of the research use and research production
4. **Alignment of perspectives:** the extent and methods to align user and Centre perspectives
5. **Balancing research demand and research production:** 'push' and 'pull' approaches
6. **Advocacy of research and of topic perspectives:** differential Centre roles

3.6 Cross Centre work⁴⁷

The Centres are all part of the What Works Network and that is managed by the What Works Council organised by the What Works Team at the Cabinet Office and the What Works National Adviser. The Centres are all independently managed but the Network acts as a coordinating body that enables shared learning beyond other formal and informal meetings and joint work. The size of the Network has grown since its inception and it is not known how this will develop further over time with potential new Centres as members.

One example of shared learning across Centres is *EIF* interviewing all of the other Centres to better understand their aims and strategies. *Crime Reduction* and the *EEF* have also met with *NICE* to learn from and develop their own process of evidence-informed guidance.

Centres can also join forces to develop work as in *Crime Reduction* and the *EEF* working together to create a rating system for the quality of research studies. There are also examples of Centres working together on topics of joint interest such as *EIF* and the *EEF* on social mobility or organising joint events with the school sector and the *EEF* and *Wales* in increasing teachers' engagement with research evidence. Another example is *EIF* and *Wales* undertaking commissioned joint work on methodology for the assessment of fiscal costs/benefits to Wales of early intervention.

⁴⁷ More details of work undertaken jointly by two or more Centres can be found in Appendix 1.6.

They may also join forces to provide advice to third parties such as *EIF* and the *EEF* working together to provide informal advice for the Department of Education.

In other cases, two Centres may have overlapping user groups. For example, *EIF* and *Crime Reduction*, supported by the College of Policing, jointly set up an Early Intervention Police Academy that provides training for police leaders.

There are also examples of Centres taking responsibility for leading on an issue for the Centres as in *Growth's* lead role on the use of administrative data in evidence-informed decision-making.

Wales has also taken on the role of helping to involve other Centres in work within Wales, for instance through *EIF* and *Wellbeing* events in Wales, and by assisting the *EEF* in making links with the Welsh government and education community. *Wales* used their regular newsletter to inform their Welsh audience about the work of the other Centres. The Director of *Wales* is also on the advisory board for *Scotland*.

The ESRC has recently (January 2018) provided resources to fund and encourage further cross-Centre projects.

Box 3.6 Collaboration within the What Works Network – key issues

1. **Nature of bilateral collaboration:** such as joint learning, joint methods work, joint topic work, overlapping user groups, providing a service to other Centres
2. **Nature of Network wide collaboration:** such as joint systems and standards
3. Strategic nature of collaboration: culture of joint work versus more serendipitous joint interest
4. **Incentives for joint processes and work:** efficiency, avoiding duplication, pooling of resources and expertise, widening reach and impact
5. **Disincentives for joint processes and work:** such as different priorities, competitive pressures or lack of resources
6. **Strictness of eligibility criteria and of shared reporting data:** advantages and disadvantages
7. **Growth in What Works Network:** impact on all membership and collaboration issues

CHAPTER 4: EVIDENCE STANDARDS

The work of the What Works Centres is driven by the notion that decisions are more effective when informed by evidence. However, this assumes that the evidence used is both trustworthy and appropriate: it is unlikely that basing a decision on vague, misleading or irrelevant evidence will lead to better outcomes. A key question then concerns the quality and relevance of research evidence that is necessary for informing policy and practice.

When knowledge is mobilised it is important that the recipient clearly understands the level of confidence in this knowledge, for instance whether a particular outcome is likely or merely a possibility, and whether this is always true or varies according to other factors and circumstances. Evidence standards are the processes and criteria used to assess evidence and determine what claims can be made from it. The nature of such evidence standards is thus a basic issue for any form of knowledge broker including the What Works Centres.

A Centre may require that the research they undertake or use in some way is conducted using a specific method (e.g. experimental study or systematic review), uses existing standards or criteria to assess evidence robustness, quality or bias (e.g. how data was collected or which studies are included in a review) or is audited through certain processes (e.g. peer review). In other words, the evidence claim (and the certainty with which it is made) is based on standards that the Centre has employed to assess the research evidence.

The first section of this chapter introduces some of the different ways that evidence standards are used in research. The rest of the chapter considers how different evidence standards can be applied in different parts the research use and research production ecosystem. Standards may differ between, and even within, each of the five main categories of activity (discussed in Chapters 1 and 3) as Centres may use different processes or criteria when producing guidance as they do for developing toolkits, or for conducting syntheses as opposed to primary studies.

4.1 Types of standards used

4.1.1 Types of research

Research questions, methods and findings vary enormously. Research findings can be empirical or conceptual statements. The methods of research can be quantitative or qualitative. The nature of evidence claims therefore also varies considerably. For the What Works Centres, research questions predominantly concern the efficacy of different strategies and interventions in order to generate evidence on the impact of different policies or practices. Other research questions may also be considered to assess interventions – how they produce their effect, in what situations they apply, how cost effective or acceptable to users they are – or to improve understanding of people’s views and priorities and the prevalence of different phenomena such as how often a particular problem arises.

In this report we consider ‘evidence’ to be any academic research, including research undertaken by non-academic individuals using similar methods. It should also be noted that policymakers and other organisations (including What Works Centres) may consider other forms of evidence such as public/expert opinion or financial data when making decisions, and their evidence standards may make specific allowances for this.

4.1.2 Processes and criteria for evidence standards

Most Centres have methods manuals and systems to describe how research should be undertaken to ensure that the findings are trustworthy and can be relied upon. The use of an explicit system helps to ensure consistency in statements regarding the strength of an evidence claim so that, for instance, evidence of an effect described as weak in one product would not be considered strong in another.

Some Centres have their own manualised systems, such as *NICE's* guidelines manual. Others use or adapt existing scales produced by other organisations, such as the Maryland Scientific Methods Scale used by *Growth* and *EIF* to test for the control of bias in primary experimental studies of impact. Some Centres use a mixture of the two. Standards may include specific criteria that need to be met for the research to be considered acceptable for inclusion (in some category of quality and/or relevance).

Where a manual is not present the standards are usually 'report specific', reported in the methods section for that product. The standards applied may therefore, but not necessarily, vary between individual reports. *Wales*, for example, agrees the appropriate methods with the experts it commissions to produce research on a case by case basis. Both report specific and manual based standards can differ in how much detail is provided to allow a reader to assess or replicate what standards had been applied.

4.1.3 Quality control of research methods used to produce evidence

As well as specifying the methods used to conduct research, evidence standards may include suggested or required steps to be taken to ensure the quality of the outputs. These steps may be internal processes such as independent double screening; *Wellbeing*, for example, double assesses a sample of the studies included in each of its evidence reviews. External quality control may also be used to assess quality of process; for instance, the peer review process used by *Wales*, *Crime Reduction* and *Scotland*. Evidence standards may also include reporting standards; requirements focused on what is included in the study report.

4.2 Evidence standards according to the position within an evidence ecosystem

Evidence claims can be made at many parts of the research use and research production ecosystem. Consequently, evidence standards can be applied to evidence claims in:

- Supporting uptake
For instance, what is the standard used when claiming that the evidence shows that an intervention should be applied in a particular way or to a particular group of people?
- Interpreting evidence (Guidance)
For instance, what is the standard used when claiming that the evidence shows that a particular intervention should be part of an organisation's policy or standard practice?
- Communicating evidence (Access)
For instance, what is the standard used in the selection of evidence to include or highlight in summaries or toolkits?
- Synthesis of research
For instance, what is the standard used when determining which studies to include in a review and how to assess them?
- Primary research
For instance, what is the standard used when determining how studies should be conducted, assessed or reported?

It might be assumed that the same levels of evidence claims are applied to different points in the ecosystem but this is not necessarily so. The outputs from these different parts of the system may have different purposes and so result in different standards being applied. A Centre may have different standards for conducting primary research and for synthesising existing studies. For example, if it produces primary research using very specific methods but chooses to include a wider range of research in syntheses in order to give a more inclusive assessment of the existing evidence base. Similarly, Centres may provide access to research findings based on syntheses that use different evidence criteria to their own. They might also create guidance and recommendations based on a broader evidence base. For supporting uptake and guidance there is the further complication that other (non-research) evidence may be included to interpret and apply evidence. This might include user and other stakeholder perspectives to identify priorities, professional expertise to fill research gaps and contextual information in relation to application of findings.

Table 4.1 shows the main categories of work which the Centres undertake and have evidence standards for. Whilst most Centres have methods manuals, these do not usually cover all of their evidence products. Where they do use their own or other organisations' manualised standards is indicated in red. This demonstrates that nearly all of the Centres have some areas of work where the standards applied are 'report specific' (indicated in black in the table). This can lead to inconsistency in the application of evidence standards in a Centre's products of the same type, either through active choice or the lack of a codified approach. There can also of course be inconsistency if explicit standards are not always followed in practice.

Table 4.1: Evidence standards by stage in an evidence ecosystem

Centres	Support uptake	Guidance	Access	Synthesis	Primary
<i>Ageing Better</i>	Report specific	-	-	Report specific	Report specific
<i>Crime Reduction</i>	-	Piloting new process	Own manual (& criteria)	Report specific	Report specific
<i>EEF</i>	Report specific	Report specific	Own manual (& criteria)	Report specific	Own manual
<i>EIF</i>	-	-	Own manual (& criteria)	Report specific	Report specific
<i>Growth</i>	-	--	Based on synthesis	Own + External manual (& criteria)	-
<i>NICE</i>	-	Own manual + External manual	Based on synthesis standards	Own manual + External manual	-
<i>Scotland</i>	-	-	Based on synthesis standards	Report specific	Own manual
<i>Wales</i>	Report specific	-	-	Report specific	Report specific
<i>Wellbeing</i>	-	Own manual+ External manual	Based on synthesis standards	Own manual+ External manual	Report specific

4.3 ‘Supporting uptake’ evidence standards

When a What Works Centre acts to support the uptake of decisions informed by research, it is likely to base its advice and support on assessments of the evidence base from research syntheses or guidance and recommendations derived from those syntheses (see Section 3.2). *Wales* often arranges direct discussions between the minister who requested the research and the researcher who produced it, ensuring that the user needs are met and that the findings and implications are understood. The *EEF* has developed campaigns based on specific reviews and has experimented with various methods for implementation, based on current ‘research on research use’ evidence, while *Ageing Better* is developing appropriate implementation strategies for its upcoming research outputs.

However, support may also be influenced by other forms of information – anecdotal evidence or a Centre’s own experience of what has worked previously, for instance – and the ways in which such information is incorporated into strategies are rarely specified. Alternatively, a Centre may choose to base elements of their advice and support on a single study, which raises two questions. First, what evidence standards have been applied to ensure the quality and relevance of that individual study⁴⁸? Second, regardless of the quality of the study, is it a robust approach to base advice and support on a single study rather than an assessment of the total relevant available evidence?

4.4 ‘Guidance’ evidence standards

Guidance and recommendations are based on interpreting the meaning and relevance of research evidence, going beyond making the evidence accessible (see Section 3.3).

NICE’s guidance production process is the longest established, most formalised and largest in terms of both the resources used and outputs produced. Evidence standards are applied through the *NICE* methods manual, which sets out the methods for producing and assessing research evidence of what works and what it costs, and also through the use of the GRADE system where appropriate. The guidance production process is managed by independent and unbiased Committees of stakeholders including academic, practitioner and user experts, with at least 2 lay members. Non-scientific evidence such as expert testimony can complement research evidence or provide information on context⁴⁹. The guidance committee uses judgement when incorporating non-scientific evidence, interpreting the evidence, and making recommendations to practitioners and commissioners. Judgements are also made within the parameters of *NICE*’s social values policy (Gough et al. 2014, *NICE* 2008).

Some Centres have an agreed methods process for creating guidance even if this is not in a manualised form. *Ageing Better*, for example, develops messages and recommendations through working with their Research Advisory Groups, the teams that synthesised evidence, and other stakeholders to compare and integrate the synthesis findings with other evidence gathered by *Ageing Better* from practice and lived experience. The *EEF* also has a formal guidance development process developed with a panel of teachers and academics, and underpinned by the principles of being Applicable, Accurate, Accessible, and Actionable. The guidance is based on reviews conducted by independent teams of the best available research evidence, and for which the methods are report specific. Both *Ageing Better* and the

⁴⁸ Some Centres have undertaken research (primary and synthesis) on the process of research uptake and use and these are discussed under the relevant headings below.

⁴⁹ <https://www.NICE.org.uk/process/pmg20/chapter/introduction-and-overview>

EEF therefore have guidance production processes and report specific methods for the evidence used to inform such guidance. *Crime Reduction* are also piloting such guidance production processes.

Wellbeing uses a similar approach to guidance when assessing the extent to which study participants are representative of the source population, whether study results would be similar (or interventions feasible) in different settings. *Wellbeing's* own manual specifies the synthesis methods to be used, such as the external manualised processes of quality appraisal of GRADE and CERQual. These include a process for determining whether evidence is strong enough to be used to support decisions and categorising the evidence accordingly (as Confident, Moderate Confidence and Low Confidence, though *Wellbeing* calls these Strong, Promising, and Initial). The evidence reviews and draft recommendations are considered by the Centre's Advisory Panel and/ or round tables of experts who provide comments and suggest possible refinements prior to publication.

4.5 'Access to research' evidence standards

The main approach to providing access to the evidence base relevant to different questions is through toolkits and guides that bring together disparate research findings and present them in a consistent, accessible format (see Section 3.3). This work implicitly or explicitly uses standards for combining research evidence and making statements about what the evidence does or does not say.

4.5.1 Criteria for overall judgements on the evidence base

Centres take four different approaches in how they judge the evidence base. They: (i) undertake reviews of reviews; (ii) select the best quality reviews; (iii) conduct an informal review of primary studies meeting a quality threshold, or; (iv) consider there to be evidence to inform policy or practice if there is at least one study meeting particular quality thresholds.

(i) Reviews of reviews

The *EEF* approach is to undertake a synthesis the findings from of all the reviews that meet their quality threshold criteria, which are mostly concerned with avoiding bias. They rate the extent of an impact by the effect size, which is then translated into months of additional progress at school due to the intervention. The quality of the evidence is given a score from one to five padlocks to represent security as follows:

 **Very Extensive:** Consistent high quality evidence from at least five robust and recent meta-analyses where the majority of the included studies have good ecological validity and where the outcome measures include curriculum measures or standardised tests in school subject areas.

 **Extensive:** Three or more meta-analyses from well-controlled experiments mainly undertaken in schools using pupil attainment data with some exploration of causes of any identified heterogeneity.

 **Moderate:** Two or more rigorous meta-analyses of experimental studies of school age students with cognitive or curriculum outcome measures.

 **Limited:** At least one meta-analysis or systematic review with quantitative evidence of impact on attainment or cognitive or curriculum outcome measures.

 **Very limited:** Quantitative evidence of impact from single studies, but with effect size data reported or calculable. No systematic reviews with quantitative data or meta-analyses located.

(ii) The best quality existing systematic review

Crime Reduction presents the results from all reviews meeting its criteria and included in its Toolkit but does not systematically synthesise the findings across the reviews. Instead it produces a narrative of the impact and evidence for each intervention reported, which may reflect the findings from multiple reviews. Where more than one systematic review exists for an intervention, the highest quality study is used for coding through a formal process (Bowers et al. 2014) and the evidence standards are applied to this individual review, coded as:

Very strong quality: The review was sufficiently systematic that *most* forms of bias that could influence the study conclusions can be ruled out

Strong quality: The review was sufficiently systematic that *many* forms of bias that could influence the study conclusions can be ruled out

Moderate quality: Although the review was systematic, *some* forms of bias that could influence the study conclusions remain

Limited quality: Although the review was systematic, *many* forms of bias that could influence the study conclusions remain

The coding process uses the EMMIE system developed by its academic consortium, which assesses the five factors of Effect, Mechanism, Moderators, Implementation and Economic Cost. Regular inter-rater reliability exercises monitor levels of agreement in determining which studies do and do not meet pre-defined inclusion criteria.

(iii) Review of evidence base of primary studies meeting quality criteria

Growth uses a similar approach for both their toolkit and their systematic reviews (see Section 4.5.2), providing an overview of studies that score Level 2 and above on the Maryland Scientific Method Scale:

Level 5: Research designs that involve explicit randomisation into treatment and control groups, with Randomised Control Trials (RCTs) providing the definitive example.

Level 4: Quasi-randomness in treatment is exploited, so that it can be credibly held that treatment and control groups differ only in their exposure to the random allocation of treatment.

Level 3: Comparison of outcomes in treated group after an intervention, with outcomes in the treated group before the intervention, and a comparison group used to provide a counterfactual (e.g. difference in difference).

Level 2: Use of adequate control variables and either (a) a cross-sectional comparison of treated groups with untreated groups, or (b) a before-and-after comparison of treated group, without an untreated comparison group.

Level 1: Either (a) a cross-sectional comparison of treated groups with untreated groups, or (b) a before-and-after comparison of treated group, without an untreated comparison group.

Wellbeing have an Evidence Comparison Tool which describes the evidence in terms of the number of studies, impact, strength of evidence and costs per person. These are derived from Centre reviews.

(iv) At least one study meeting quality criteria

EIF's assessments of interventions hinge on primary research that demonstrates impact. It uses its own standards of evidence developed in-house and building on external systems (from the Dartington Social Research Unit and NESTA) to rate the evidence base on the number of high quality studies that exist, ranging from:

Level 4: Evidence of effectiveness

Level 3: Evidence of efficacy

Level 2: Preliminary evidence

NL2: The most robust evaluation evidence does not meet the Level 2 threshold

NE: Robust evidence that the programme did not provide significant benefits for children

The highest evidence rating (Level 4) is given for programmes where there are at least two high quality intervention studies showing a positive impact and where one of them has evidence of a child outcome lasting longer than a year. *EIF* states that both Level 3 (efficacy) and Level 4 (effectiveness) are at ‘the point at which there is sufficient confidence that a causal relationship can be assumed’. A summary of these top levels of the grading structure are listed below.

Level 4+: The criteria for level 4 plus:

- At least one of the effectiveness evaluations will have been conducted independently of the programme developer.
- The intervention has evidence of improving *EIF* child outcomes from three or more rigorously conducted evaluations (RCT/QED) conducted within real world settings.

Level 4: The programme has evidence from at least two rigorously conducted evaluations (RCT/QED) meeting Level 3 criteria and:

- At least one evaluation uses a form of measurement that is independent of the study participants (and also independent of those who deliver the programme).
- At least one evaluation has evidence of a long-term outcome of 12 months

Level 3+: Meets Level 3 criteria and:

- Additional consistent positive evidence from other evaluations (occurring under ideal circumstances or real world settings) that do not meet this criteria, thus keeping it from receiving an assessment of 4 or higher.

Level 3: Evidence from at least one evidence or higher is the point at which there is sufficient confidence that a causal relationship can be assumed and:

- Participants are randomly assigned to the treatment and control groups through the use of methods appropriate for the circumstances and target population, OR sufficiently rigorous quasi-experimental methods (e.g. regression discontinuity, propensity score matching) are used to generate an appropriately comparable sample through non-random methods.

EIF also have a formal process within which such evidence standards judgements are made:

1. **Initial assessment:** Using this material, *EIF* conducts an initial assessment against 33 separate criteria relating to the quality and rigour of the evaluations that provide a programme’s best evidence. For more detail on the standards of evidence, see: *EIF* evidence standards.
2. **Expert review:** *EIF*’s initial assessment is reviewed by a panel of academics and experts with knowledge of the specific subject area and of evaluation and statistical analysis.
3. **Sub-panel reviews:** Small groups of subject-matter experts and *EIF* staff meet to review the detail of each assessment in fine detail and agree a provisional evidence rating. The makeup of the panel changes with each panel, to ensure the right mix of expertise, are included
4. **Confirming the rating:** Provisional evidence and cost ratings are shared with providers, who may request a reassessment if they consider that the criteria have not been properly applied. Following this stage, a final moderation meeting is held with all members of the sub-panel meetings to ensure consistency of rating and ratify provisional ratings as final.

EIF make it very clear that the evidence ratings of programmes in their Guidebook are not a ‘kite mark’ or guarantee of effectiveness or relevance to in local contexts. They are not recommendations for programmes to be selected ‘off the shelf’. They are instead a starting point for finding out more about effective early interventions that might be relevant in specific contexts.

Scotland provide an Evidence Bank which lists all of their literature reviews. Their approach to reviews is described in Section 4.6 below.

Table 4.2: Evidence standards for access to evidence (e.g. via toolkits)

Examples from Centres	Variables described	Included data	Method for summarising evidence base	Judgement method / criteria
<i>Ageing Better: Implications from reviews</i>	Report specific	Report specific		Report specific
<i>Crime Reduction: Toolkit</i>	Impact, mechanism, moderator, implementation, Cost, Evidence	Syntheses (& funds the Global Policing Database providing access to primary studies)	Narrative review of reviews	Best quality/fit synthesis
<i>EEF: Toolkit</i>	Impact, Cost, Evidence	Syntheses and Primary studies	Synthesis of syntheses	<i>EEF</i> Padlock grading system
<i>EIF: Guidebook</i>	Impact Cost, Evidence	Primary studies	Appraisal of individual primary studies	<i>EIF</i> Evidence Standards: Level 3 and above
<i>Growth: (topic specific) toolkits</i>	Impact, Cost, Evidence	Primary studies	Review of primary studies	Adapted Maryland Scale: Level 2 and above
<i>NICE: Guidance (& pathways)</i>	Impact, Cost and Evidence reported in guidance	Syntheses and Primary studies (and other evidence)	Guidance Committee review of reviews and other evidence	<i>NICE</i> guidance manual including GRADE
<i>Scotland: Evidence Bank</i>	Report specific	Report specific	Report specific	Report specific
<i>Wales: reviews and implications</i>	Report specific	Report specific	Report specific	Report specific
<i>Wellbeing: Evidence Comparison Tool</i>	Impact, Cost, Evidence (Initial, Promising, Strong)	Wellbeing’s Briefings on reviews of the evidence	Comparison of data from Wellbeing’s Briefings	<i>Wellbeing</i> methods manual

A summary of the different approaches of the Centres towards evidence standards for access to the evidence base is provided in Table 4.2. This shows which variables are presented and what types of data

or study are included in each of the Centres' toolkits and guides, plus how they assess and categorise the evidence. The entries in red indicate that more than half of the Centres use standardised processes throughout the development of these toolkits and guides.

4.6 'Research synthesis' evidence standards

Finding the evidence for 'what works' principally involves understanding the comparative effectiveness of different interventions. For a richer 'what works' evidence base, research may also seek to identify for whom interventions work, at what cost, and in what context (so as to judge wider applicability / feasibility), and to improve understanding of Theories of Change (based on an understanding of why and how interventions may work), and what the enablers and barriers are to wider adoption.

While some Centres such as *NICE* undertake syntheses mainly as part of the process of producing guidance or toolkits, others have separate synthesis products which do not necessarily share the same methods or evidence standards as guidance and toolkits. For example, both the *EEF* and *Crime Reduction* have conducted reviews using their specific methods that are detailed in the research reports but were not necessarily undertaken according to the Centre standards manual or common criteria used in their toolkits.

Many but not all of the reviews conducted by the academic consortium for *Crime Reduction* have used the EMMIE process and fed into the *Crime Reduction* Toolkit. The reviews used a range of methods such as systematic mapping (to present the available evidence on a range of related interventions) and combinations of meta-analyses and realist syntheses (to quantify the effect of a particular intervention and gain insight into how and when such effects occur). All research publications were independently peer-reviewed to help ensure that standards are met. The *EEF* also undertakes a number of separate syntheses of the evidence base to inform its toolkit and primary research programme.

Wellbeing has a methods manual to inform the process of systematic review which, like *NICE*, uses GRADE & CERQUAL and includes internal quality assurance processes such as double codings of a number of studies by different reviewers. *Growth* also undertakes systematic reviews of evidence of impact and has a short guide explaining the main stages.

Ageing Better review methods are report specific but share a standard formal process that includes:

1. Creating draft scope;
2. Publishing the full Invitation to Tender.
3. Following a procurement process.
4. Bids assessed and scored by *Ageing Better* and independent expert reviewers.
5. A Review Advisory Group (RAG) (with academic and policy and practice experts, people with lived experience, AB) appointed to advise on the ITT; assess bids; and provide advice at key stages of the synthesis process.
6. Review team appointed and the review undertaken with a full protocol for the review to be approved by the RAG and *Ageing Better* team.

Ageing Better states that as different audiences have different areas of interest, a single evidence rating system for the broad range of questions it addresses is not appropriate. Instead the Centre assesses the strength of evidence in a way that is fit for purpose for the evidence it is reviewing. The range of evidence that *Ageing Better* uses includes:

- Published research evidence.
- Practitioner evidence and knowledge.
- Evidence and knowledge from people with lived experience.
- Secondary data sources such as routine administrative data.

EIF undertake a number of different reviews including scoping reviews. A different approach is taken by *Scotland* which has conducted reviews using the Evidence Bank review process (building on methods developed by the Centre for Research on Families and Relationships). The Centre does not describe these as systematic reviews, instead taking an interpretative approach informed by rapid realist reviews and qualitative synthesis. Data is extracted using a three-stage process of:

- Reading all included papers to identify key features.
- Producing narrative reviews of the findings/issues from groups of papers addressing specific questions.
- Re-reading key papers to ensure review findings and arguments are supported by research.

The search strategy and inclusion criteria are published with the final review and a critical appraisal process is applied. Literature published in peer-reviewed journals is judged to meet the quality threshold as long as they specified their data collection methods. To quality review other forms of data, critical appraisal criteria for qualitative research is drawn on. Any limitations in the methodology and robustness of findings are highlighted and the final report is peer reviewed by academics and users.

A less formal approach is used by *Wales* which commissions expert reviews of the research evidence to provide timely responses to ministers' evidence needs. These reviews have no set standards. The experts conduct a quick skilled overview of the evidence to provide flexible, expert knowledge and relevant evidence to inform government ministers in Wales about what is and what is not known on different issues.

The different approaches of the Centres towards evidence standards for research synthesis is summarised in Table 4.3. In addition to showing the types of review conducted and whether the method to be used is specified in a manual, the table also shows whether there can be variation in certain evidence standards regarding inclusion criteria (where studies were conducted and what language they are reported in) and the quality control process used to check consistent coding of the studies. The last two columns show how the included studies are assessed and the synthesis findings are reported. We can see that most Centres allow some flexibility in the methods used to conduct reviews (though the method used is reported in each review for transparency).

Table 4.3: Evidence standards for research synthesis

Centres	Synthesis method				Included studies quality criteria	Synthesis findings
	Type	Specification of methods	Geography / language	Coding checks		
<i>Ageing Better</i>	Systematic review	Review Advisory Group	Report specific	Report specific	Report specific	Report specific
<i>Crime Reduction</i>	Systematic review	Report specific or for use in EMMIE	Report specific	Report specific	Report specific ⁵⁰	Report specific
<i>EEF</i>	Systematic review	Report specific	Report specific	Report specific	Report specific	Report specific
<i>EIF</i>	Systematic review	Report specific	Report specific	Report specific	'Evidence Standards'	'Evidence Standards'
<i>Growth</i>	Systematic review	Report specific	Report specific	Report specific	At least Maryland 3	Report specific
<i>NICE</i>	Systematic review	Manual	Report specific	Manual	Includes GRADE	Includes GRADE
<i>Scotland</i>	Evidence Bank review	Report specific	Report specific	Report specific	Report specific	Report specific
<i>Wales</i>	Academic expert review	Report specific	N/S	N/S	N/S	N/S
<i>Wellbeing</i>	Systematic review	Manual	GDP like UK / all languages	Manual	Includes GRADE	Includes GRADE

4.7 'Primary research' evidence standards

Several approaches to appraising primary studies have already been described as part of standards for providing statements about the overall evidence base (Section 4.5) or of systematic review (Section 4.6).

The *EEF* has also a separate primary research programme that feeds into other areas of its work. These are rigorous controlled experimental trials of educational interventions which use formal techniques to avoid bias, including commissioning separate teams to provide and evaluate the interventions. The studies also include process evaluations to understand the components of successful implementation and to inform scale-up if successful. The studies are undertaken in the following stages:

1. *Pilot studies*: early or exploratory stage of development, evaluated in a small number of settings through qualitative research to develop and refine the approach and test its feasibility.

⁵⁰ Standardised criteria in development.

2. *Efficacy trials*: quantitative impact & implementation and process evaluation to test whether an intervention can work under developer-led conditions, together with an indicative cost (usually 50+ settings).
3. *Effectiveness trials*: quantitative impact & implementation and process evaluation to test a scalable model of an intervention under everyday conditions where the developer cannot be closely involved in delivery because of the scale (usually 100+ settings across at least three geographical regions).
4. *Scale-up*: Lighter touch evaluation to monitor fidelity of implementation of programmes that have been expanded to deliver to a large number of settings, particularly in disadvantaged areas (having been shown to work when rigorously trialled, and with the capacity to deliver at scale).

Student performance in national tests such as Key Stage 2 assessments and GCSEs is tracked using the National Pupil Database. This provides an easy, cost effective way of obtaining attainment outcomes without costly data collection exercises. In addition, the *EEF* may commission additional robust tests of attainment. The Centre is not prescriptive about which tests or minimum standards are used but those that are must be reliable, valid and free from bias: see criteria in Section 4.4.1.

Ageing Better also undertakes primary studies including pre/post studies of the effects of pilot projects and prevalence studies of phenomena such as the living circumstances of older people. *EIF* states that the variety of their work means that different levels of quality assurance are required and so they use bespoke designs that are rigorous though not well codified. They categorise evidence on impact into the same four levels used in their guidebook (see Section 4.5.1).

Scotland undertakes mixed methods case studies. The Centre works with the four Community Planning Partnerships to undertake Collaborative Action Research that involves the stages of: reflect; explore; learn; enact and share. These can be repeated cyclically if desired. While many of the outputs are qualitative case studies, the collaborative nature of developing the research plan means that the methods used can vary significantly. These might include surveys, interviews, meetings and events, informal discussions, observations, desk research, and some quantitative research. The case studies examine not just whether a project was successful but also how and why, describing the challenges, solutions and outcomes. In some cases, further research was recommended to help predict project impacts in different contexts.

Growth does not undertake any primary studies itself but provides support and encouragement to others to do so. This advice includes methodological standards and of course the manual the Centre developed for appraising evidence for its reviews and toolkits discussed earlier (see Section 4.5.1).

The Centres' evaluation of their own work (See Chapter 3) is a form of primary research but this is predominantly survey type data with little information provided on evidence standards. More formal evaluation on the use of research is undertaken by the *EEF* who use the same or similar processes as in their primary research experimental work.

4.8 Evidence standards issues

The discussion of the use of evidence standards by the Centres raises a number of issues. The first is that evidence standards do not apply within only one part of the evidence ecosystem but across: evidence uptake; guidance; access to the evidence base; research synthesis and primary research.

Centres varied not only between themselves on each of the Stages but also within their own work at different stages. Variation was found at each stage on:

- (i) Processes for undertaking the study or other product
- (ii) Methodological approaches and standards
- (iii) Specific criteria for grading the quality of the product
- (iv) Quality assurance from: internal processes; external criteria; or external reporting standards
- (v) Manual (internal or external) versus report specific explanation of methods and standards
- (vi) The level of detail provided for each of such processes and criteria

Different systems are also used for making judgements about whether evidence is good enough evidence to inform policy and practice, based on:

- (i) Synthesis of primary and other syntheses (e.g. *EEF* Toolkits)
- (ii) The best quality synthesis available meeting a quality threshold (e.g. *Crime Reduction* Toolkit)
- (iii) Review of primary studies (e.g. *Growth* Toolkits)
- (iv) At least one good quality relevant study (e.g. *EIF* Guidebook)

The next chapter compares the Centres and their work in more detail, including in the evidence standards they apply, and discusses the implications of the variation between them.

CHAPTER 5: CROSS CUTTING ISSUES AND INTERPRETATIONS

The UK is unique in having an established network of What Works Centres that act as a link between academic research and various areas of public policy, tasked with improving the use of evidence in decision-making. The Centres within this What Works Network conduct a wide array of work: building a more robust and comprehensive evidence base; raising awareness and understanding of the need for using evidence, and; influencing local and national policy to consider evidence more effectively. A recent review by the Cabinet Office (2018) of the first five years of the What Works Network highlighted a raft of achievements including:

- 288 evidence reviews produced or commissioned, including 48 systematic reviews.
- 61 sets of guidelines produced by *NICE* over the past two years.
- 5 Centres have evidence comparison toolkits or guidebooks that provide easily digestible summaries of the existing evidence base.
- 64% of school leaders use the *EEF* Teaching and Learning Toolkit.
- 141 local authority Troubled Families teams have received *EIF* guidance.
- Both *Ageing Better* and *Scotland* have developed strategic partnerships with individual local authorities to improve evidence use in decision-making.
- 20 bespoke evaluation workshops delivered to local authorities and LEPs by *Growth*.
- *Wellbeing* runs an annual course for approximately 150 civil servants on incorporating wellbeing into policy analysis and a micro-site to help charities evaluate their wellbeing impacts.
- 20,000 members of the police community receive What Works updates via the College of Policing Members' Hub.
- 74% of top-tier local authorities participated in the *EIF*'s Foundations for Life road show.
- The What Works Network has a combined Twitter following of over 226,000.
- Over 10% of all robust education trials in the world funded by the *EEF* and 1 in 3 English schools have participated in *EEF* trials.
- A *Wales* evidence review informed the development of the Welsh Government's subsidised child care offer and pilots to test accessible and sustainable models in six Welsh local authority areas.
- The *EEF* are scaling up 12 promising projects to reach over 100,000 pupils in nearly 1,900 schools.

The context under which the What Works Network was created is largely outside of the scope of this report though credit should go to government for the intent and strategic vision shown to build a What Works Network. The development of national policies that support evidence-informed policy and practice is significant in itself, and spreads wider than the creation of the Network (e.g. Department for Education's policy to support 'evidence-based teaching' (Caldwell et al. 2017)).

The Centres have a common overall strategy – 'create, share and use high-quality evidence for decision-making' – and use many similar approaches to achieve their goals. There are also a number of ways that Centres are different from one another:

- How they perform their key functions – how they synthesise evidence, translate the findings into accessible outputs and support its uptake.

- The extent and manner of their work outside of these key functions – helping to build the primary evidence base or increased user driven strategies.
- Their wider strategy – such as who they engage with at individual, local, organisational and national levels and how.

This final chapter discusses some key themes that emerge from these ‘commonalities and differences’, under the following six headings:

- 5.1 Activities within evidence ecosystems
- 5.2 User engagement and supporting uptake
- 5.3 Evidence standards
- 5.4 Monitoring and evaluation
- 5.5 Wider systems and contexts
- 5.6 Collaboration across Centres

These interpretations suggest possibilities for learning and cross-fertilisation of ideas and activities across the Network. Comparison and reflection may help What Works Centres and other intermediary research organisations (including prospective What Works Centres) consider the range of strategic approaches available to them. Such consideration may also help Government, funders, researchers, and wider audiences, better understand the potential impacts of What Works Centres, and the means by which these are, or could be, achieved.

5.1 Activities within evidence ecosystems⁵¹

This section discusses how the Centres interact with the evidence ecosystem around them; where and how they fit into it and how they are trying to change it. The way in which these evidence systems influences wider systems and contexts is discussed in more detail in Section 5.5.

5.1.1 Activities across the evidence ecosystem

If we consider the work of What Works Centres in the context of the overall evidence ecosystem, then a key question is what are they doing in relation to that system?

In general, the greatest emphasis of work for the Centres is across three areas: communication; the synthesis of research findings; and providing access to what is known about the evidence base. For example, each of the What Works Centres produces syntheses of research, translates findings into briefings, summaries or toolkits, and interacts with its audience to promote an engagement with this evidence. Relatively less work is undertaken to actively support the uptake and application of evidence in policy and practice decisions⁵², such as: interpreting findings to produce dedicated guidance products; developing the skills of users to find, interpret and apply evidence; developing structures and cultures

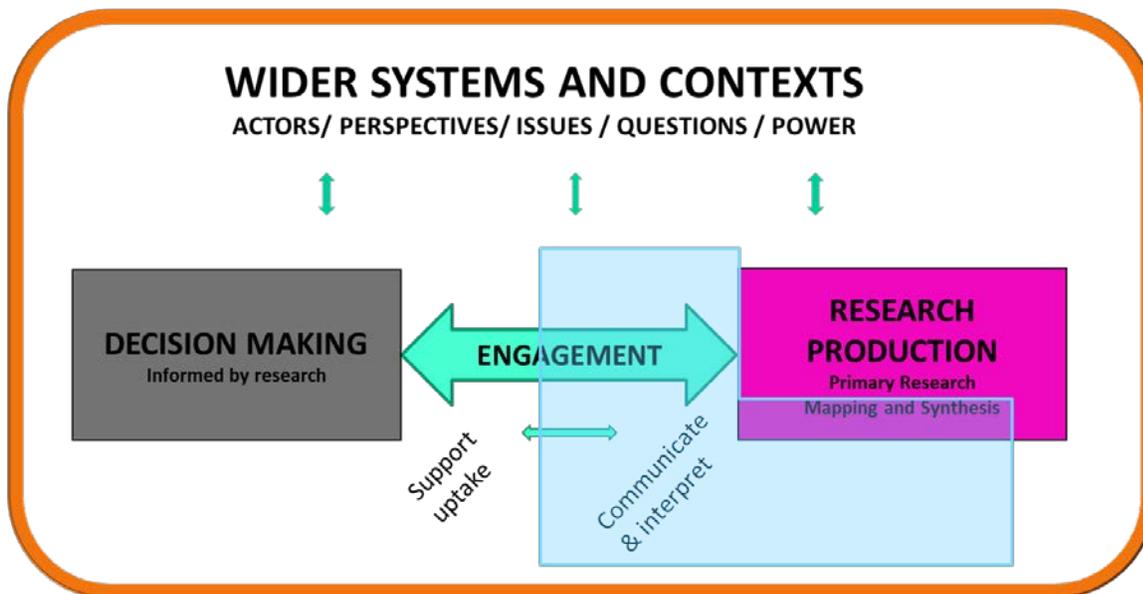
⁵¹ This is illustrated by the overviews of Centres in Chapter 2 and the approaches used by the Centres, described in Chapter 3. See, for example, sections: 3.1.1 Theory of change: overall aims, roles and strategies for making a difference; 3.1.3 Politics, values and relationship to government; 3.1.4 Specified vs developmental roles and topic advocacy, and; 3.3.1 Guidance. Also Chapter 4 describes the various approaches taken to evidence standards across the various stages between research use and research production.

⁵² This is the general trend across the Network although some individual Centres such as the College of Policing are undertaking substantial work in this area.

that embed the use of evidence into decision-making processes; supporting implementation of evidence and sustaining the use of research in decision-making beyond the involvement of the Centre.

Hence, the majority of the effort is located in the right-hand side of the ecosystem framework (as shown in the shaded area of Figure 5.1). If we relate that to the three main objectives set out for the Network – generate, translate, adopt – we see less activity in the ‘adopt’ category than for ‘generate’ and ‘translate’. This is also predominantly a research production (push) approach to research use, rather than problem-solving demand-led (pull) approach.

Figure 5.1: What Works Network activities across the research use ecosystem



Adapted from Gough et al 2011, Gough 2012

We also observed that the balance of activity for Centres tends to broaden over time. Although the initial emphasis for Centres is often on aggregating, synthesising and providing access to evidence – *Crime Reduction*, *EIF*, the *EEF*, *Growth*, and *Wellbeing* are all examples of this – over time, Centres are placing an increasing proportion of their effort in actively interpreting research (e.g. producing actionable guidance) and on supporting uptake and application of evidence, i.e. broadening of scope towards the left-hand side of the framework. For example, despite focusing a lot of its initial effort and funding on generating evidence, the *EEF* has become much more active in supporting the uptake and implementation of evidence-based interventions over the last three years, through initiatives such as their Research Schools Network. Likewise, *EIF* has become more focused on providing advice and tools that support the application of its evidence. It tailors its engagement work with local authorities and police forces to help them implement early intervention effectively, for instance by helping to assess local need and readiness for change, or to develop strategy and/or investment plans.

Whilst there seems to be natural developmental trajectory for What Works Centres in this respect, there are notable exceptions. *NICE* is an example of a Centre which had the creation of practitioner guidance and guidelines built in to their remit from the outset. *Wales* provides an evidence service in response to

requests from the Welsh government. *Scotland's* emphasis on co-production with local users also puts the Centre close to the use of research in decision-making.

Another issue is the extent to which Centres are involved in primary research. In a recent Canadian report on What Works Centres, Cave et al. (2017) state that primary research is a core function; however, this activity occurs relatively little across the Network, with only the *EEF* and *Scotland* running major primary research programmes. *Crime Reduction* has secured funds from the Home Office to invest in accelerating the primary research evidence on vulnerability, while other Centres such as *Ageing Better* and *Wales* do undertake some primary research, but this is a small absolute and relative investment of resources.

There are advantages to a Centre undertaking primary research. The first advantage is that it provides an ability to directly shape the underlying evidence base and fill gaps in the current research. For example, the *EEF's* initial focus on large-scale evaluation was founded on the belief that a limiting factor in improving outcomes for disadvantaged pupils has been the availability of robust evidence of 'what works' in real-world school settings. Being able to fund primary research and evaluation enables the Centre to address this issue and fill gaps in the evidence base. For *Scotland*, co-production of primary and secondary research was perceived to be a key weakness in the system, so has become a central aspect of their work.

The second advantage is increasing the likelihood of research evidence that is fit for the purpose for the work of Centres. This can include, for example, creating a throughput of research on topics that matter to Centres and their users, with appropriate designs and methods that can focus on longitudinal impact and adapt over time. It can also provide consistency if so required in: methods; measures; reporting; evidence standards; and quality assurance. All of these factors help ensure that there is appropriate and relevant evidence to synthesise and interpret, and ultimately provides more useful evidence to inform decision-making.

Another key advantage of primary research is that it encourages intended end users to become involved in research, instilling a culture of enquiry in frontline practice. Developing such cultures can therefore help facilitate the ongoing engagement between a Centre and its audience, potentially generating greater impact from its outputs.

The nature of primary research is an important issue for all Centres, but most of them either do not have the necessary resources to run extensive research programmes or have decided that these resources are better allocated differently. Instead, they try and influence primary research production, rather than undertaking it directly. *Growth* and *Wellbeing*, for example, invest considerable effort in encouraging others to undertake relevant primary research. They provide resources such as research methods guides and specialist workshops to support the practice of undertaking research. Likewise, *NICE* has become more explicit over time in its recommendations regarding primary research gaps that emerge when producing guidance.

The varied degree of involvement in primary research may have implications for the What Works Network. Indeed, one possible reason for the lack of consistency in evidence standards within, and between, some Centre's could be due to the lack of influence on what primary research is available (see Chapter 4 and 5.3). Further investigation on the nature and impact of strategies to shape the primary research agenda would be helpful, with a view to creating a clearer picture of the range of options available to Centres and to inform the overall strategy of the Network.

In summary, most What Works Centres are involved in the synthesis, translation and communication of evidence, and in doing so, are generally fulfilling the expected requirements of a What Work Centre.

However, they tend to be less involved in primary research and research uptake. Whilst the Centre's current activities are certainly worth pursuing, research indicates that they are likely to have limited impact unless there are also complementary efforts across other areas of the evidence system, and on activities that attend to the behavioural needs of research users (such as the capabilities, opportunities and motivation to engage and act) (Langer et al. 2016). Perhaps recognising these limitations, Centres are gradually becoming more involved in interpreting research and supporting its uptake, and in addressing these behavioural and contextual factors.

The focus of activity, described above, raises a fundamental question around the appropriate scope for a What Works Centre, and how broadly they operate across the different functions of an evidence ecosystem. If we compare the two Centres with the largest budgets, the *EEF* and *NICE*, we see two quite different responses to this question. The *EEF* is, arguably, moving to a position where it operates as an integrated and self-contained evidence system in itself, involved in everything from funding innovation and primary research through to producing guidance and supporting its implementation. *NICE*, on the other hand, has a much more specific role in the healthcare ecosystem, centered around the creation of evidence-based guidance. The *EEF*'s approach may create advantages in terms of being strategically coherent at the system level (e.g. linking primary research and synthesis) and places less reliance on factors outside of their control. At the same time, there are potential risks in terms of being separated from the rest of the education research system, in being isolated from challenge and new ideas, and in having limited capacity to play such a broad range of roles. Identifying a more focused role in a smaller part of an evidence system may be a more valid and feasible approach for Centres. Nevertheless, this arrangement relies more heavily on the interdependence with other elements of the system and creates the need for strategic coordination at the overall system level. These issues around scope, coordination and integration are revisited in Section 5.5 on Wider systems and contexts.

Whatever approach is used, Centres will benefit from well-specified Theories of Change that clearly articulate their role in the evidence ecosystem.

5.1.2 Evidence ecosystems and Theories of Change

Despite the broadly similar approaches undertaken by most Centres across the evidence system, we have noted that *within* domains there can be significant variation in the strategies and activities used to face similar challenges. A good example is the variation in evidence standards used across the Network, where there is variation both within and between Centres in the evidence standards they use, and the manner and detail in which they are described. For instance, some Centres use different standards for different processes (e.g. when synthesising evidence as opposed to producing primary studies), while others use expert opinion to determine the appropriate standards to apply to individual pieces of work (see 5.3).

The variation between Centres may be very appropriate. As Bristow and colleagues commented, there is no reason to believe that one model fits all needs (Bristow, 2015). Centres are working in different systems with different audiences, legal status, relationship with government, degrees of funding, aims and roles, and different stages of development. It is therefore not surprising if they require different strategies.

It is also possible that some of the variation may just be serendipitous, depending on what solutions were known about and available at the time. Being opportunistic, of course, should not be discouraged, although without more explicit Theories of Change it is difficult to ascertain the extent to which the choices Centres make are strategic considerations of all the choices available. It also makes it difficult for Centres to compare and contrast the approaches that they have taken.

As Chapter 1 explains, What Works Centres can be viewed as additions to (interventions into) the pre-existing evidence ecosystems. If this is the case, what is the additionality that the Centres aim to offer (i.e. what is the problem that the Centre aims to solve), and how is their analysis of the current system driving their strategic choices? The Centres do of course explain their strategies and their activities, but they do not tend to provide much detail on the specifics of:

- the nature of the evidence ecosystem that they are intervening in;
- the ways in which evidence is not being used, engaged with, or produced that is limiting the functioning of that evidence system (i.e. the extent of evidence-informed policy and practice in their sector);
- how their work will change that evidence ecosystem;
- the Theories of Change (ToCs) that explain how the methods that they apply will achieve the desired aims and objectives (though a number of Centres are planning or undertaking work to develop ToCs);
- how their work will help the evidence ecosystem work within the wider systems (how improving the use of evidence will benefit society or the individuals they aim to help – see Section 5.5).

5.1.3 Variation: Questions and possibilities

To what extent is variation in Centres' strategies due to:

- **Strategic choices and the analysis of their evidence ecosystem and its potential to change?**
- **The context and remit of their role?**
- **Opportunities that happen to present themselves?**

It could be helpful to clarify the needs analyses, Theories of Change and opportunity costs of different strategic choices open to Centres in planning their work. This would include an analysis of where the current evidence ecosystems are, and aren't, working effectively and where a Centre could contribute.

To what extent are current Centre strategies and activities the most effective strategies?

This question could be addressed by an analysis of: Centres' wider contexts; the challenges of evidence being used in decision-making; and the research evidence on what is effective to enable that change.

Will the potential contribution of the Centres change over time?

The Centres developmental plans could be informed by an analysis of how the evidence ecosystems are likely to change over time and the consequences for the future roles of the Centres in that developing environment.

Is variation between Centres beneficial or harmful?

The variety of approaches used across the Network provides an opportunity for the Centres to analyse the varying choices available for achieving their aims and to explicitly define their remits and contexts.

5.2 User engagement and supporting uptake⁵³

5.2.1 Using research, users of research, and beneficiaries of evidence-informed decision-making

The use of research and supporting uptake of research are core issues for the Centres. As intermediary organisations, the Centres are expected to engage and support decision makers rather than make and implement decisions themselves. But what is ‘use’ of research, who are the users, and are these the same as the beneficiaries of evidence-informed decision-making? This study has shown that ‘use’ of research can mean different things to different people. Although there is no right or wrong answer, we have considered ‘use’ in decision-making to mean more than simply being aware of research, but to at least involve applying the insights from research findings to decision-making. As such, research use extends beyond engagement with evidence (Morton 2015). At the same time, even where research is used to inform decisions it may not always be clearly seen in the outcome. For example, research may suggest a particular approach is not effective and result in a decision not to adopt it. Additionally, even if the research has had a direct seemingly positive effect on a decision, it may be difficult to ascertain that the research was the decisive factor. Obtaining a sharper, shared understanding of the nature and definition of terms such as ‘research use’ across the Network could be helpful.

The variation in use also raises the question of who the target users should be. The target users may seem obvious in education, where teachers are the natural group of potential users of research evidence, but, how do you decide which teachers these should be? The *EEF* have made a decision to particularly target teachers in leadership positions, given their decision-making responsibilities.

There is also the issue of whether potential users of research are not considered. Teachers and teachers’ leaders may be an important focus for What Works Centres, but what about school students and their parents? In health over the last few years, there has been increasing focus on the involvement of users of services, so that their perspectives influence research priorities and the use of research. Even within a particular user group, there may be differential engagement with sub-groups. It may be that it is the more affluent and higher educated parents, teachers and schools that engage most with research evidence.

Similarly, should the focus be on individuals or groups or organisations? This may depend on the nature of the ecosystem. In a very centralised educational system it may be more effective to focus on central government organisations. In more decentralised systems, like the English education system, there may be greater impact by focusing efforts at regional and school level.

The individuals and groups that Centres define as their main target users of research can be defined broadly or narrowly. There may be general strategy for broad groups, with more targeted messages or strategies for specific sub-groups. A toolkit providing access to an evidence base may, for example, be structured in way that is particularly user friendly for professional practitioners but can also be a resource for others, such as policy makers or academics.

User engagement may also be facilitated through early adopters or champions. *Wellbeing*, for example, engages with individuals in local authorities through a ‘bottom up’ approach while the *EEF* has developed a network of 23 Research Schools that acts as regional centres of excellence and provide a

⁵³ The variation in user engagement and supporting uptake was considered in Chapter 3, for example in sections: 3.2.1 Interaction and relationships; 3.2.2 Skills; 3.2.4 Supporting evidence and guidance use; 3.3.2 Access to evidence; 3.3.3 General communication methods, and; 3.5 Scoping and engaging with users’ perspectives and needs.

focus for developing evidence-based practice. There can also be other types of intermediaries. What Works Centres act as knowledge broker organisations, but they also develop and employ individual knowledge brokers as a specialist professional group.

Users may not always be the ultimate beneficiaries of Centres' work. Enabling the police to make use of research is principally to reduce crime in society. Working with local authorities on economic growth is with the intention of helping the local community. Again, this all depends on the analysis of the wider context, specification of aims, and Theories of Change about how users of research relate to the ultimate beneficiaries of such research use.

There may be equity issues of differential engagement with research, but also in the production of research. In health research there is increasing concern to ensure that research production considers differential effects of services on potentially disadvantaged groups, rather than assuming that findings of average research effects are sufficient (Welch et al. 2016). To what extent, for example, does the evidence produced or used by a particular Centre assist the disadvantaged people in society as opposed to the average person?

In sum, What Works Centres do discuss the users of their services and how they work together. It might still be helpful for greater specification on how users and beneficiaries are selected and the nature of engagement with evidence that the Centres are hoping to achieve.

5.2.2 User engagement across the evidence ecosystem

Users of research are not simply recipients of research findings. They can be involved in all aspects of the evidence ecosystem. They can be informed, consulted or being given decision-making power in:

- The uptake of research through the implementation of evidence-informed decisions.
- Access to, and consideration of, recommendations and guidance.
- Engagement activities that support knowledge mobilisation mechanisms (such as access to evidence, skills to enable use) and address behavioural needs (such as creating opportunities and motivation to consider research) (Langer et al. 2016).
- The production and generation of syntheses of research and/or primary research.

As already indicated in Section 5.1, the majority of effort across the What Works Network involves the synthesis and interpretation of research and creating access to research findings, and so there has been more user engagement of that type. Examples of more active work undertaken to support uptake include local campaigns managed by *EEF* and the changes to recruitment and promotion structures implemented by *Crime Reduction*. Users may be consulted about their perspectives, such as *EIF*'s survey of user priorities for research evidence, *Growth*'s meetings and workshops with local authorities, *Crime Reduction*'s user testing of research translation tools to ensure they meet need, and the co-production of priority setting by *Wales* and *Scotland*. Given the stage of development that the Centres are at and the resources they are working with, though, their engagement with users tends to be limited either in breadth – for instance, focusing on one or more specific groups from a range of potential users – or in depth – taking a relatively lighter touch approach to engage with a wider audience.

Being provided with information, or being consulted on priorities, is not the same as having power in deciding what will be researched or how findings will be interpreted. An example of users having power and control in the outputs of What Works Centres is the co-production model of research, which is used by both *Scotland* and the police/academic partnerships set up with the aid of the College of Policing through the Police Knowledge Fund. *NICE*'s processes for stakeholder driven production of guidance and

guidelines are another example, while *Wales* co-produces the majority of its work programme directly with government ministers, building in the needs of the user when designing research.

Again, all the Centres discuss the way that they engage with their users but vary in how they define their main ‘users’, on such dimensions as:

- Which potential users are prioritised (and which are not).
- How tightly these users are specified.
- The relative emphasis on individuals, groups or organisations
- The emphasis on engaging early adopters/champions or a broader audience
- The distinction between the users of Centres outputs and services and the ultimate beneficiaries of the Centres’ work.
- Equity issues of differential engagement with both the use and production of research.

What is often less explicit are the choices made about how this varies for different places of the evidence ecosystem between research use in decision-making, engagement with research, and research production. It might be helpful if there was greater specification on how and why particular users and beneficiaries are selected and prioritised and the nature of engagement with evidence that the Centres are hoping to achieve.

5.2.3 User engagement and supporting uptake: Questions and possibilities

What types of research use in decision-making are being sought?

This can include consideration of research, direct effects of research, and implementation of evidence-informed recommendations. The visibility of such use may vary too.

Who are the desired end users of the research? And how was that decided?

How broad and how differentiated and segmented in terms of activities are the user groups? How do different Centre activities fit to different degrees with different user groups? Who are the desired beneficiaries of the research use? And how will they benefit?

What power do different users and beneficiaries have in each part of the ecosystem?

It is useful to consider what processes are involved to ensure that different user stakeholder perspectives can influence to different degrees different stages.

What parts of the evidence ecosystem is user engagement focused and why?

As Centres become more involved in guidance and research uptake, they can consider both user’ central roles and needs (and behavioural components) in those roles.

Are users in a position to make good use of the engagement that Centres offer?

A Theory of Change for evidence use can consider the users’ capability, opportunity and motivation to engage with research evidence (and other aspects of Centres’ engagement strategies)

5.3 Evidence standards⁵⁴

What Works Centres need to be clear about the quality and relevance of the research findings that they are using to inform decision-making. Most Centres have some formal processes and/or criteria for standards of evidence (developed externally or by the Centres themselves) but there is considerable variation in how these standards are defined and applied. Some of the variance seen, both in the evidence standards applied and in the quality control practices used to ensure their application, can be explained by factors such as the different functions and funding arrangements of the Centres.

Most Centres codify some evidence standards in manuals that may describe the *process* of determining the standard of evidence and may also rate evidence as meeting some specific *criteria* or rating of evidence. *NICE*, for example, have a very detailed manual for creating evidence, but the cut off points for particular judgements is less clearly defined. Other Centres may specify criteria but provide less information on the research methods by which such criteria are to be achieved. Clarity about both methods and criteria can help to achieve consistency and quality of evidence standards. Where processes or criteria are not codified then individual research reports often specify the methods used for that particular study, meaning standards can vary from report to report. This results in considerable variation in the detail and comprehensiveness with which methods, quality assurance and evidence standards are reported.

Not surprisingly, across the Network the evidence standards have been predominantly concerned with evidence about research on the impact of interventions, or ‘what works’. Whether Centres are undertaking or examining primary research, the concerns about the standard of evidence are typically the same for all Centres, with a concern about ‘testing the counterfactual’; that any reported changes after receiving an intervention are due to the intervention rather than simply time or selection bias or other extraneous variables. However, the Centres each use different cut off points regarding the required level of robustness for such primary studies or different criteria to determine whether the studies meet these requirements. Consistent standards across the Network would help audiences to expect a certain quality of output and, therefore, generate confidence in the findings presented but this may not be feasible or appropriate.

At the same time, Centres are developing standards relating to qualitative methods, for example, the *EEF*’s guidance for evaluators on conducting implementation and process evaluation. The co-production model of *Scotland*, where the Collaborative Action Research consists of qualitative and mixed methods case studies, is another interesting example.

In summary, Centres vary on many aspects of evidence standards including:

- Processes for undertaking a study or other research product.
- Methodological approaches and standards.
- Report specific or manualised systems for applying standards.
- Specific criteria for grading the quality of a product.
- Quality assurance from: internal processes; external criteria; or external reporting standards.
- The parts of the evidence ecosystem to which the most explicit evidence standards are applied.
- The types of research questions to which the standards are applied.
- The level of detail provided for each of such processes and criteria.

⁵⁴ The variation in approaches to evidence standards were considered in Chapter 4. The following sections of Chapter 3 are also particularly relevant: 3.3.1 Guidance; 3.4.1 Research synthesis, and; 3.4.2 Primary research.

There is also variation within (as well as between) Centres in their use of evidence standards. Some of this variation is simply due to different parts of the evidence ecosystem having different or additional requirements in terms of evidence standards. Systematic reviews, for example, have additional evidence standards to those for primary research. There are also some inconsistencies in how Centres develop or use evidence standards, including:

- Degree of specification of standards. Centres tend to have the most developed and codified standards for the part of the evidence ecosystem that their work is mostly focused. The *EEF*, for example, invests considerably in primary research and has a highly developed process and standards for producing and reporting mixed-methods evaluations. *NICE*'s work is on the production of guidance for professional practice, which has led to a sophisticated, manualised processes for the synthesis of relevant evidence and the management of guidance committees.
- Different purposes to which the research is being undertaken - for example, a systematic review may be undertaken to inform planning a piece of primary research rather than to inform a toolkit
- A wish to provide evidence quickly - for example, recommending certain actions as evidence-informed on the basis of individual studies even though the Centre normally examines a whole evidence base rather than relying on individual studies

In addition to the more technical aspects of variation between and within Centres, there are some more fundamental differences between Centres in their approach to evidence. Most Centres use synthesis of the whole relevant evidence base to inform decision-making. Mostly, this is through formal explicit methods. The two exceptions are *Wales* that uses experts to synthesise evidence and *Scotland* that uses a more interpretative realist approach. *Scotland* also differs from other Centres in taking an overtly co-production model to how evidence is produced. *EIF* is also an exception in focusing on the evidence from at least two quality studies rather than a whole evidence base to state that there is a causal relationship between an intervention and outcomes.

Individual Centres and the What Works Network as whole might benefit from greater clarification of the choice of type and method of evidence standards both within and across different Centres.

5.3.1 Evidence Standards: Questions and possibilities

Is consistency in the use of evidence standards across Centres necessary or advised, in terms of:

- a) How the Centres choose to produce and evaluate evidence and make statements based on this evidence (such as: evaluating the evidence base through expert or formal explicit methods of synthesis; making evidence statements on the basis of synthesis or single studies; and the role of co-production of evidence)?
- b) Technical aspects of how evidence standards are specified and applied?

It could be argued that in advocating evidence use the Centres should have shared definitions of necessary standards of evidence to inform decision-making. Alternatively, it could be argued that they have different remits and so different conceptions of relevant evidence.

Is consistency in the use of evidence standards within Centres necessary or advised, in terms of:

- a) The specific evidence requirements of a particular part of an evidence ecosystem?
- b) Pragmatic pressures that limit consistency in approach?

It would help for there to be justification for the application of different standards at different stages of evidence-informed policy and practice.

To what extent would it be helpful to use more explicit, detailed and codified (rather than report specific) evidence standards?

Codified standards would allow greater transparency and consistency and comparison of approaches within and between Centres.

Should codified standards include specific criteria as well as process?

Specific criteria are more specific but also require detailed processes.

To what extent is it helpful to use less formalised or quicker approaches with lower evidence standards to provide evidence statements to inform decision-making of different kinds?

The danger is that the status of the evidence is less clear.

5.4 Monitoring and evaluation⁵⁵

What Works Centres advocate the use of research to inform decision-making, so are they themselves evidence-informed? Do they have information systems or other checks to assess whether their planned activities are being achieved in practice? To what extent are their strategies and activities achieving their goals and is this outcome due to the Centres' activities? In other words, do the What Works Centres work?

One aspect of being evidence-informed is monitoring and evaluating their own work and assessing their impact. Impact can be assessed at on the basis of:

- The ultimate beneficiaries (such as crime reduction or pupil attainment).
- The intended users in increasing the use of evidence to inform decisions.
- Intermediate outcomes such as users' knowledge of research findings.

The Centres are undertaking relatively little evaluation of the impact of their work on ultimate beneficiaries. This is an issue not just for the What Works Network but across the field of knowledge mobilisation. The *EEF* is the only Centre to have a single, defined and quantifiable outcome measure of the Centre's beneficiaries: the attainment of disadvantaged pupils. The *EEF* tests the efficacy of strategies to achieve this outcome using experimental trials. Since the census date of the study, *NICE* has produced an impact report on cancer that charts changes in key statistics (such as survival and referral rates) before and after the publication of relevant guidance. They also have a tool that estimates the resource impact of implementing guidance. Their indicators provide relative data, for instance the percentage of patients with a certain condition who have received a particular treatment. Some Centres also refer to government policy changes that appear to be due, at least in part, to their actions. This may be indicated by clear stages of Centre involvement in the process of policy making or mentions of the Centre's work in policy documents. There is always the possibility that other factors were more important in the policy change and that evidence of other Centre activity is used to support decisions made for other reasons (Weiss 1979).

More common are measures of intermediaries (users of research) accessing the Centres' products. Often this involves measures such as rates that websites or social media outputs are accessed, indicating awareness of the Centres and the evidence they produce. Surveys are used to assess whether people are aware of research evidence and find out how it influences their work. Although this form of data can show the necessary conditions of being aware of, and positively motivated about research, it does not provide a high level of certainty that it is changing behavior. It does not show that evidence-informed decision-making is being achieved.

But do such intermediary outcomes lead to positive effects on intended beneficiaries? This is difficult to assess without clarity about both the Theory of Change and the empirical evidence for this theory, leading from: (i) Centre activities to (ii) various intermediate outcomes (e.g. access of resources), to (iii) evidence-informed policies or practices, and then to (iv) positive outcomes for beneficiaries. It is easy to see how the use of resources such as toolkits would be an intermediate outcome, but it becomes more challenging to state the detail of causal processes in moving from access to evidence to the use of evidence in decision-making, which then leads to impact for beneficiaries. The lack of detailed, explicit

⁵⁵ The variation in monitoring and evaluation was considered in Chapter 3, for example, sections: 3.1.1 Theory of change: overall aims, roles and strategies for making a difference, and; 3.4.3 'Research on research use' and Centre planning and evaluation.

Theories of Change by the Centres at present makes it difficult to assess whether they are evaluating the most relevant intermediary outcomes.

An additional challenge is the limitation of research methods being used to assess impact of the Centres work. This rarely involves testing of the counterfactual – what would happen to both intermediary and ultimate outcome goals if the Centres' activities did not take place? This is somewhat understandable as such testing can be expensive and difficult in complex systems. Similarly, many outcome measures in this field are subjective reporting of perceived impact, rather than objective measures of change. The *EEF* is an exception in that it undertakes controlled experimental studies, not only of its own current practices, but also tests other approaches, such as the 'Literacy Octopus' trials, which found that different forms of communicating evidence to teachers did not have much impact on teacher behavior or pupil outcomes. *Crime Reduction* has also evaluated the delivery of some evidence-based learning programmes to improve knowledge, skills and behaviour.

Studying the impact of the work of the Centres has the potential to contribute to the wider knowledge base on enabling the use of research in decision-making (research on research use). This raises the question of how much the Centres use the available evidence base on 'research use' to inform their Theories of Change, strategies of action, and work activities? Until recently there has been little mention of the use of such research by the Centres, apart from *Wellbeing* and the *EEF*, suggesting that this evidence base is not yet a main component of strategic planning.

5.4.1 Monitoring and evaluation: Questions and possibilities

**To what extent are the centres being evaluated to ensure their work is evidence-informed?
Are the Centres' approaches to evaluating the impact of their work appropriate?**

There is much potential for evaluations that are tied into the Centres' theories of change as how their work will result in the planned intermediate and final outcomes.

To the extent that Centres are evaluated, what are the appropriate methods and evidence standards for evaluating impact?

Currently many methods either do not test the counterfactual or do not use objective outcome measures.

How can intermediary organisations themselves be evidence-informed?

Centres could make use of the increasing evidence base on enabling evidence use.

5.5 Wider systems and contexts⁵⁶

5.5.1 Integrating in the wider context

A key consideration for What Works Centres, as intermediary organisations, is how they sit and work within external structures and systems. This includes not just the systems of evidence production and use they form part of (discussed in Section 5.1) but also the wider political and societal systems in which it is hoped the benefits of evidence use will be realised. Evidence activities do not work in isolation but sit within complex systems outside of research, with multiple actors and influences, each with their own priorities, processes, time-scales and motivations e.g. policy, improvement, funding, accountability systems (Best & Holmes 2010). Also, the evidence on research use indicates that system level changes are some of the most effective strategies. An implication of such a ‘systems’ model is that the effectiveness of Centres is a function of how well they integrate with external organisations and the systems in which they operate.

Put another way, you could, in theory, create an elegant evidence ecosystem with excellent, well-connected processes, yet have little impact on decision-making if those activities fail to achieve traction on the wider systems.

A finding from this review is that all Centres face challenges, to some degree, in impacting on these wider systems. Even *NICE*, with its formalised role in creating guidance and guidelines, encounters variable levels of engagement with its outputs. A recent report for the Institute for Government (Sasse & Haddon 2018) highlighted the need for What Works Centres to disseminate their outputs and engage with government more effectively, and for government departments to work more closely with the Centres to develop stronger routes into policy making.

This general challenge across the What Works Network is not at all surprising. Firstly, the systems that the Centres are trying to engage with – such as accountability, funding, and policy systems – are often predominant influences in the sector. For example, *Growth* works not just with local authorities and enterprise partnerships but also with employers and businesses that are influenced heavily by market forces. The health and policing systems in the UK are complex, with multiple components and well-established practices, while the high-stakes accountability system in English education⁵⁷ has a huge influence on the decisions schools make. This means that many Centres have to find ways of complementing, rather than competing with, these systems. Even other organisations within the evidence ecosystems, such as the funders and co-funders of the Centres themselves, operate under their own remits and constraints which the Centres may need to adapt to⁵⁸.

Secondly, these wider systems are not always structured in a way that is receptive to research evidence, and so may not form an infrastructure that can naturally accommodate the work of the Centres. For example, the relatively short timeframes for government policy making are not necessarily commensurate with the longer timeframes of designing, conducting, synthesising and interpreting

⁵⁶ The broader Contexts within which Centres work was considered in Chapter 3, for example in sections: 3.1.1 Theory of change: overall aims, roles and strategies for making a difference; 3.1.2 Centres as organisations: Legal status, size and income, flexibility in spending, stage of development, profile and sustainability; 3.1.3 Politics, values and relationship to government; 3.1.4 Specified vs developmental roles and topic advocacy, and; 3.1.5 Collaboration beyond the What Works Network: partnership with the profession, local authorities and others.

⁵⁷ Led by the school inspectorate, Office for Standards in Education, Children's Services and Skills (OfSTED).

⁵⁸ This study focuses on the work and experiences of the What Works Centres and did not approach their funders/co-funders or any other external organisations or audiences.

research. The lack of a receptive infrastructure is exacerbated in sectors where there aren't established systems, such as *Wellbeing* and *Ageing Better*, where the respective Centres need to make their audience aware of their role and purpose. For instance, while a doctor or teacher is naturally incentivised to inform themselves of best practice, as they are assessed on their ability to improve outcomes for patients/children respectively, few practitioners or policymakers were directly accountable for improving wellbeing until recently⁵⁹.

A third, related, challenge for Centres is that they typically operate in sectors with historically weak track records and cultures of engaging with research. Indeed, many Centres see an important aspect of their work as encouraging a long-term culture shift towards research engagement and use, as part of evidence-informed policy and practice. This challenge is even greater when, in addition advocating for the use of evidence, the remit of Centres also includes changing perspectives and understandings on the focal issue itself, such as is the case for *Wellbeing* and *Ageing Better*.

The challenges Centres face in influencing wider systems are not isolated to the What Works Network, and are typical of most research organisations, universities and funding bodies that are trying to influence wider decision-making. In this respect, there are potential advantages to having a single organisation, such as a What Works Centre, acting as a focal point for evidence-informed decision-making. By operating in the synthesis, communication and engagement domains of the evidence ecosystem (see 5.1), Centres are well-placed to process a large, and potentially overwhelming, body of evidence, and so provide a degree of coordination to that part of the evidence system. Consistent standards, processes and styles can help develop a brand where audiences expect a certain type of output, leading to increased confidence in the results. However, if the Centres are working predominantly in only one element of the evidence ecosystem, how do they best go about influencing the other elements of the evidence ecosystem and the wider, non-evidence systems? Where and how does that wider coordination take place?

In this context, the natural progression we observed in this study for Centres to take on a broader remit – such as supporting more active uptake of evidence – is a logical response in providing more coordination to the system by doing more functions. An alternative strategy could be for Centres to retain a tighter remit and operate in a system where there is more overarching coordination (e.g. *NICE* in the healthcare system). In this scenario, Centres may attempt to manage some overarching coordination, influence it, or stay largely removed.

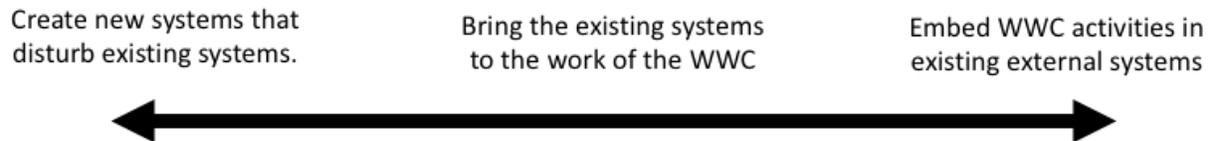
Whatever the approach, What Works Centres will need to be adept at identifying levers of influence, nimble in capitalising on opportunities as they arise, and persuasive in their approach. Ultimately, there will be limits to what Centres can achieve within their context, which emphasises the importance of making precise, strategic decisions on how, and where, they place their effort and resources.

⁵⁹ Legislation has now come into force requiring that wellbeing is addressed, especially in the devolved governments and through the Health and Wellbeing Boards in England.

5.5.2 Strategies for integrating in the wider context

One area where Centres face a strategic choice is the degree to which they embed their work within existing systems and processes (see Figure 5.2).

Figure 5.2: The spectrum of options for embedding work in existing systems and processes



At one end of the spectrum, Centres can adopt strategies that create new systems that compete with, and disturb, existing systems. One example is the *EEF's* grant making activity, which is having a wider influence on expectations and activities around innovation in education. By July 2017, the *EEF* had funded 145 high potential projects, selected through a process that includes a detailed consideration of the existing evidence for the intervention. The *EEF* refers to this process as 'disciplined innovation'. This approach to grant making, in turn, is impacting on other innovation funds. For example, in 2017, the Department for Education committed £140m to support school improvement through the Strategic School Improvement Fund (SSIF). The *EEF's* approach is influencing how this money is allocated, with the selection of SSIF being based on an evidence-informed approach to planning, implementing and monitoring a programme of work. Overall, such activities that compete with and disturb existing systems occur least across the What Works Network.

The next approach to interacting with the wider context involves working with the existing external systems, by attempting to align those systems to the work of the Centres. For example, all Centres create summaries and interpretations of research in their field, whether that be through Toolkits, guidance, evidence briefings, or some other format. These outputs are disseminated through a variety of channels, including websites, newsletters, press releases, events and workshops, with the aim of attracting users and supporting engagement. In doing so, they aim to draw people - and the systems in which they operate - toward the work of the Centres. This is the most prevalent approach of engaging with the wider context across the Network, although, as previously discussed (see Section 5.2), these activities are likely to have limited impact unless there are also complementary efforts to attend to the behavioural needs of the intended users.

At the embedded end of the spectrum are activities that frame and integrate the work of the Centres in existing external activities, policies and structures i.e. 'take the Centres to the mountain'. This type of approach also occurs across the Network, although to a lesser extent than activities that bring the systems to the work of the Centre, and with significant variation between Centres. Here are two examples:

- The Centre for Ageing Better have made a strategic choice in their early stages to actively engage with national policy making as a way of gaining credibility, status and traction. They produced a manifesto for the 2017 election, met with ministers, and submitted formal responses to Green Papers. For example, they are in discussions with the Cabinet Office, Department for Health and Social Care and Ministry of Housing, Communities and Local Government regarding the Centre's involvement in a 2018 Green Paper on care and support for older people.

- When it was set up, the College of Policing inherited the existing body of policing guidance known as Authorised Professional Practice (APP) - guidelines that set minimum standards and expected practice in policing. Previously, the guidance was developed predominately by speaking to force subject matter experts, with some occasional evidence from non-systematic reviews. Since 2015, the guidance production process has been in development using an evidence-informed approach, working under the instruction of a guidance committee (including practitioners, academics and specialists). New systematic reviews are commissioned where the existing evidence base is weak, and integrated with practitioner expertise using processes that draw on *NICE*'s approach to guidance production.

The range of strategic approaches available to Centres in engaging with external systems presents decisions about where the balance of effort should lie. An overall reflection from this study is that activities that frame and embed the work of the Centres in external processes and structures are perhaps underutilised at present, given the promise that these approaches show in influencing decision-making. The College of Policing is an exception, mainly due to the positioning of the What Works function within the professional body for policing, which allows greater leverage over these external processes and structures.

Whatever the choice, the ability of Centres to align with, embed in, or disturb external systems and processes relies on being able to understand and influence those wider systems. Some of this knowledge can be sophisticated without being explicit. Indeed, we noted that having an implicit awareness of, and influence on, wider systems at leadership level was key strategic advantage for Centres.

At the same time, we saw few examples across the Network of attempts to explicitly analyse the evidence ecosystem and its relationship with the wider systems, to inform Centres' Theories of Change and intervention strategies. Indeed, it is notable that a recent model to describe the work of the Network did not include a representation of the non-evidence systems (see Chapter 1, Section 1.1, Figure 1.2).

5.5.2 Constraints of contexts and remit

As discussed, the Centres vary significantly in terms of their organisational context, for example their funding arrangements, size, remit (see Section 5.1). These organisational factors can have a significant impact on the means and degree by which Centres shape both the evidence ecosystem, and wider systems in which they operate. Some of these factors are discussed below:

(i) Relationship with government

Centres vary significantly in terms of their organisational and legal status in relation to government. There is a general view that independence from government is an advantage for Centres – whilst that can be true in some aspects, there are also potential trade-offs.

Some Centres, such as *NICE* and *Crime Reduction*, are arms-length government bodies: their day-to-day decisions are independent from government, but their overall remit, strategy and funding is accountable to their sponsor department in government (e.g. Department of Health and Social Care in the case of *NICE*). This arrangement can create advantages in terms of being closer to the systems they are trying to influence (e.g. leverage on professional standards), although can create unhelpful perceptions of non-independence and top-down compliance with users.

Wales is an interesting outlier in that it has an explicit remit to feed into government policy making, based on a work programme that is co-produced with government. As such, it is naturally well-placed to integrate its work into policy systems.

A number of Centres such as the *EEF* and *EIF* also receive government funding, although they operate as independent bodies from government. This independence is perceived to help build trust and credibility, particularly with practice-based stakeholders. At the same time, these Centres perhaps have fewer obvious pathways to impact, and so have to be creative in findings ways to influence potential users. Receiving government funding isn't a guarantee of an enhanced role and remit in relation to the sector.

Greater independence from government can also necessitate wider engagement. *Ageing Better*, for instance, is funded through an endowment and therefore operates as a fully independent body. This potentially enables the Centre to be nimble in adapting to opportunities and, despite the lack of government funding, to create and maintain access to government through building their profile and gaining traction on the wider system.

(ii) Nature and extent of funding

There are three ways in which funding appears to affect the work of a What Works Centre and how it relates to its wider systems: the overall size of the budget; the timescale of the funding cycle; and the flexibility in the way the budget can be used.

Unsurprisingly, the overall budget a Centre has at its disposal influences the scope and nature of its engagement activities. The *EEF*, with its large up-front endowment, is in the fortunate position of being able to both fund significant initiatives to mobilise their outputs and in being able to attract additional funding to support those initiatives. The Research Schools Network, a network of 23 schools that act as regional outposts for the *EEF*, is an example of such an initiative, jointly funded with the Institute for Effective Education at the University of York.

In addition to the amount of funding, Centres can be also be constrained by the timescales of the funding cycles they work to, as well as the degree of freedom they have on budget allocation. There have recently been changes, for example, to the frequency with which *EIF* is required to negotiate funding with government departments. This may limit their capacity to be strategic in the medium and longer-term, while the negotiations themselves require a substantial share of resources.

A lack of budget flexibility may also limit the strategic capacity of the Centres, as recognised by the Institute for Government (Sasse & Haddon 2018). Although *Wellbeing's* initial work programme was funded for the first three years of operation, a significant proportion of the budget is automatically allocated to academic partners, meaning there is relatively little budget with which to be strategically flexible. Having funding in the form of upfront endowments, such as is the case for *Ageing Better* and the *EEF*, aids strategically flexibility. Evaluation of What Works activities and outputs (which is currently relatively rare – see Section 5.4) could help demonstrate the value of the Centres and so encourage increased and ongoing investment, enabling longer-term strategies to be developed.

(iii) Point of development

An important variable in relation to the Centres' role and impact is its point of development. The What Works Network is a relatively new initiative, with all but two of the Centres being five years old or less (*NICE* was established in 1999, the *EEF* in 2011). Inevitably, the relative infancy of many Centres creates

limitations on their impact and reach, as they develop their brand and credibility, build networks and relationships, and establish products, services and expertise.

Centres are not static of course, and we captured examples of rapid and significant shifts in Centre's role and impact. *Ageing Better*, for example, began with scoping work to determine research priorities and build credibility, and are now embarking on a significant programme of commissioned research production. *Crime Reduction* began as a small team hosted by the College of Policing (and supported by an academic consortium work programme) but made the strategic decision to 'infiltrate' the rest of the College to embed evidence-based policing, so in many respects the What Works Centre and College are now treated as a single entity. The *EEF* and *EIF* initially focused the majority of their efforts on generating new evidence, the *EEF* through grant making and evaluation and the *EIF* through synthesis. Both are now, to greater or lesser degrees, becoming more active in producing guidance, mobilising evidence and supporting application. This strategic development is different to that of *NICE*, where its role has remained relatively consistent (producing guidance and guidelines), although its remit has been extended over the years e.g. to social care.

5.5.3 Wider systems and contexts: Questions and Possibilities

Is there a receptive infrastructure for the work of Centres? What is the relationship between Centres and that infrastructure? What strategic choices are Centres making to engage with the wider systems?

Undertake a more explicit analysis of the wider systems in which Centres sit, to inform their Theories of Change and engagement strategies.

Whose responsibility is it to create a receptive infrastructure for the work of the Centres?

Who shapes the overall evidence ecosystem? Who integrates that evidence system in wider systems?

How much effort should Centres spend on disturbing external systems, shaping external systems around their work, or embedding in external systems?

Activities to embed the work of Centres in existing external activities do occur across the Network, although they are perhaps underutilised at present.

There are opportunities to share lessons, ideas and practical strategies (both successful and unsuccessful) on linking the work of Centres to wider systems.

How nimble are Centres to develop and evolve? How is this agility influenced by the constraints and parameters a Centre is operating within?

There are opportunities to create examples of clearer developmental trajectories for Centres operating in different contexts.

What is the relationship between the Centre and government? How is that relationship affecting the integration with wider systems?

There are opportunities to explore how government can facilitate the integration of What Works Centre's work in wider systems that extend beyond funding.

To what extent does the lack of core long-term funding limit the strategic capacity and flexibility of the Centres?

It would be helpful to investigate the advantages and disadvantages of different funding models for Centres in more detail.

5.6 Collaboration across Centres: Issues, questions and possibilities⁶⁰

The Centres were formally set up as the What Works Network in 2013 and regularly meet as part of the Network. The collaborative work to date has predominantly been through informal bilateral arrangements (although this will be increasing with recent ESRC grants to support collaboration). There is potential for broader collaboration across the whole or part of the Network and hopefully this report is a contribution to that process.

The Centres are very different organisations; as described in Chapter 2 they vary on many dimensions including legal structure, size, and stage of development, specific aims and remit, Theories of Change, user engagement, activities, evidence standards, and self-evaluation. It could be argued therefore that there is limited purpose in collaboration. They do, however, share a common goal – of improving evidence use in social policy and practice – and the very fact that a wide range of approaches has been employed (and challenges experienced) may instead indicate that there is much that the Centres could learn from each other. They may each have developed strategies and activities that perfectly fit their needs at present but as the Centres continue to move forward and develop, there will increasingly be opportunities to collaborate.

There are many potential incentives for the Centres to work together, such as:

- **Strategic development.** Discussing strategies with others may help a Centre to clarify the reasons behind the strategic choices it has made and to better understand the alternative approaches that are available, so maximise the impact of their future work.
- **Shared learning.** Sharing experiences and observed impacts may help to highlight the value of certain work or of undertaking it in a certain way; for instance, the benefits of influencing the primary research agenda and the different strategies available for this.
- **Coherence at Network level.** Greater collaboration could lead to consistency and clarity in areas where consistency might be expected such as evidence standards, agreeing the most appropriate (and evidence-based) approach. Such coherence could also help address evidence gaps in the Network which is currently somewhat “patchwork and focused on a narrow disciplinary approach” (Sasse & Haddon 2018).
- **Brand image and funding.** Such consistency could help build confidence in What Works outputs and so raise the profile the Network, putting Centres in an advantageous position, for example, to attract funding.
- **Collaboration on overlapping topic areas.** Some issues and policies may be of interest to more than one Centre – for example, *EIF* and *Crime Reduction* or *Ageing Better* and *Wellbeing*. There may be other issues with wide reaching effects on society may be of interest to most, if not all, of the Centres. One such example could be substance abuse by children which could potentially be investigated by *Crime Reduction*, *EIF*, the *EEF*, *NICE*, *Wellbeing*, as well as *Wales* and *Scotland*.
- **Infrastructure efficiencies.** Where areas of interest overlap, pooled resources can achieve impacts that align with the agendas of two or more Centres. An example could be the joint development of methods and processes.

There may of course be disadvantages and disincentives for standardisation across the Network such as actual or perceived lack of flexibility, financial costs, and the possibility of competing interests. Flexibility

⁶⁰ The collaboration across Centres was considered in Chapter 3, for example in sections: 3.1.5: Collaboration beyond Network issues; 3.3.2: Structures and processes issues (in evidence use); 3.6: Collaboration within What Works Network issues.

and plurality can also enable innovation: the differing experiences, perspectives and contexts of What Works Centres can lead them to develop different strategies for addressing common issues.

The Network has criteria for membership and these could be expanded to cover things such as joint standards (including evidence standards) and reporting data on their work.

The issue of ongoing financial sustainability of the Centres is beyond the scope of this report although is worth touching on briefly. The Centres are a form of evidence infrastructure that provides a service to maximise societal investment in research production and public policy and practice. As they seem to have relatively limited scope for their own income generation, it is unclear how funding can be sustained without government or philanthropic support.

5.6.1 Collaboration across Centres: Questions and possibilities

What opportunities are available for collaboration between Centres, both currently and going forward, and how will these be acted upon?

It would be useful to understand:

- *Where Centres' interests and agendas overlap,*
- *Functions performed by more than one Centre that may have potential for combining or collaboration, and*
- *The skills and experiences of Centre staff that could be of value to other Centres.*

What are the incentives and disincentives for increased collaboration across Centres?

A discussion of some of the issues raised in this report could focus on the work of the Centres and any potential advantages of increased collaboration.

5.7 Conclusion

This report provides a description and comparison of the UK What Works Centres to improve our understanding of their work, aims and methods. Short overviews of each Centre are provided in Chapter 2 and Chapter 3 provides an account of the rich range of activities taking place across the Network. We then discuss the evidence standards that underpin all What Works Centre research activities in Chapter 4. Chapter 5 discusses differences in the approaches taken by the Centres and possible reasons for, and implications of, this variation.

The What Works Network is unique in its aim to ensure that public services across a wide range of policy areas are informed and improved by the best available evidence. The variety of approaches identified by this study demonstrate the scale of the What Works Network initiative.

This report identifies potential points of development for the Centres though we recognise that they operate with varying remits and funding and in different contexts that may constrain the extent that they are able to engage with some of these issues.

The findings of the study may also have relevance for the funders and audiences of the Centres, other intermediary organisations and individuals working between research use and research production, including any future What Works Centres.

Additionally, for researchers and others interested in evidence use, the report provides a case study of a unique network of knowledge creation and mobilisation.

Further work could be undertaken to build on the findings from this study, including:

- Discussions with the individual Centres and other intermediary organisations to consider the relevance of the report to their work.
- A 'What to consider' resource for new and potential What Works Centres that sets out some key questions and issues.
- More detailed research on the impacts of the individual What Works Centres and the Network as a whole.

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APPENDIX A1: EXAMPLES OF CENTRE ACTIVITIES

A1.1 WIDER SYSTEMS AND CONTEXTS

Examples of interaction between the What Works Centres and key audiences (e.g. Government) to increase standing, raise funding or collaborate to encourage and support wider use of evidence

Centre for Ageing Better

Relationships with Government & other main players to build profile and reputation

Much of the first two years has been spent building credibility and status and establishing a series of strategic partnerships with localities and others: the key output so far. In addition to the communications and brand development already mentioned, this work has included meetings with ministers, formal responses to Green papers, and producing a manifesto for the 2017 election. This engagement is continuing, for instance through discussions with the Cabinet Office, Department of Health & Social Care, Ministry of Housing, Communities & Local Government and Department for Business, Energy & Industrial Strategy regarding for example the forthcoming green paper on care and support for older people, and in the Industrial Strategy Grand Challenge on Ageing. Engagement with relevant Government departments is monitored through the Centre's customer relationship management service as well as informally. Other than building up evidence of demand for the Centre's outputs, the main visible impacts so far has been the inclusion of Ageing into the Housing White Paper and contributing to the Government's Fuller Working Lives strategy (the issue of life-long learning). The Government recognising ageing issues in policy due to *Ageing Better's* input shows that they are becoming a known, reputable voice as planned.

Strategic partnerships: Formal arrangements to jointly deliver a programme of activities to which both partners contribute resources and in pursuit of a common goal: to bring about change for people in later life. Partner organisations have a broad base of knowledge and evidence on ageing, the ability to apply evidence for change across several domains and want to become more age-friendly. They currently include the International Longevity Centre (ILC-UK), Design Council, Business in the Community, Calouste Gulbenkian Foundation, Housing LIN, Greater Manchester Combined Authority (GCMA), and Leeds City Council and Leeds Older People's Forum. Programme staff across the Centre work with and support these partners to bring together evidence and commission evaluations to identify and test what works, and to spread this learning to key decision-makers across a range of sectors in order to ensure that the needs of an ageing population are met.

College of Policing / What Works Centre for Crime Reduction

Influencing policy to adopt evidence-based approaches

The Centre has a high profile and widely accepted role in policing, so comparatively little resource is spent garnering political support or funding. The Centre does try to influence the agenda though and provide evidence to inform the development of strategies. It also promotes the benefits of EB approaches to the Home Office and Others to try to generate funding for forces and academic partnerships e.g. securing money for the Police Knowledge Fund from the Home Office and the Higher

education Funding Council for England. The Centre is also encouraging the Police Transformation and Reform Board to build an evaluation strategy around the Police Transformation Fund. Key collaborations include Police Now (who recruit and develop policing staff), the *EIF* on the Early Intervention Academy for Police Leaders, the Government Commissioning Academy for commissioners across all sectors, and the Society of Evidence Based Policing.

Early Intervention Foundation

Relationships with Government and other key partners

The Centre maintains relationships with central government – including the Departments for Education and Work & Pensions, the Ministry of Housing, Communities & Local Government, and Public Health England – which underpin the relevance and status of the Centre. Substantial energy is spent negotiating funding with these departments. The value of *EIF*'s outputs to Government are demonstrated by securing further funding, and grants for work with government departments include KPIs for delivery of projects, activities and outputs.

To ensure the Centre is a self-sustaining organisation, it has also secured funding from other government departments (such as the Home Office) and trusts and foundations (such as the Joseph Rowntree Foundation and Battersea Power Station Foundation), and taps into commercial demand, for example, from local authorities seeking direct advice and support. *EIF* is also building on established links with the other UK nations, and is in the early stages of establishing international links with national and regional governments.

EIF works with local authorities and local delivery bodies to integrate evidence into their planning and decision-making processes; and with early intervention providers to help them understand the relevance and value of evidence-based assessment, and how they can improve their own evidence base (for example, through commissioning high-quality evaluations).

Education Endowment Foundation

Engagement with UK Government and international partners

Various forms of engagement with Central government are undertaken by the Centre, including the CEO, Sir Kevan Collins, being assigned the role of 'Evidence champion' by the Department of Education. The *EEF* has also taken opportunities to become influential partners in helping to plan and deliver large-scale government policy initiatives (e.g. SSIF, TLIF, Opportunity Areas). For example, in early 2017, government expanded the Research School Network across 12 regions of low social mobility in England, called Opportunity Areas.

The Centre has also developed this influence internationally, actively seeking opportunities to work with other countries looking to integrate evidence into their educational systems. The rationale being that if more countries use evidence to improve teaching and learning it will lead to better evidence of high-potential approaches and programmes, which will feed directly into the global evidence synthesis on which the *EEF*'s Toolkits are based (and so help teachers and schools in England). The *EEF* has formed global partnerships with schools, education organisations and governments. It worked with school systems in Australia to develop an Australian version of the Toolkit, contextualising global evidence recent, local examples and collaborating to conduct of large scale trials in Australian schools. A Scottish Toolkit was then developed with Education Scotland. The Centre is now supporting the adoption and contextualisation of the Toolkit in Latin America, Europe and South-east Asia, which is accelerating the

generation of new knowledge to help teachers in England and across the globe to make more evidence-informed decisions.

What Works for Local Economic Growth

Ongoing relationships with local and central government

The Centre works closely with Local Enterprise Partnerships (LEPs) and local authorities (LAs), and is linked to multiple Government departments: Housing, Communities and Local Government (MHCLG), Transport (DfT), Work & Pensions (DWP) and Business, Energy & Industrial Strategy (BEIS). The intention is to position What Works Growth centrally in the policy system and to build reputation by widening the reach to more decision-makers; working with a wider set of supporting partners, and; developing a cross-cutting programme of support for areas with devolved powers. The Director has a frequent audience in Whitehall, is increasingly involved in collaboration (for instance on oversight panels), and speaks at international conferences to improve global status. The Centre for Cities uses existing relationships with local authorities to publicise activities and findings.

Working with commissioners: The Centre works with programme commissioners in central government, funding councils and other agencies to help inform monitoring and evaluation frameworks, research programme specifications and similar. For example, it currently works with (or has recently worked with) the Arts and Humanities Research Council, Future Cities Catapult and a team from the MHCLG covering European Regional Development Fund and European Social Fund programmes. The Centre's involvement focuses on advice and guidance, rather than drafting documents, and is provided for free where they closely match with the Centre's core aims.

NICE

Improving the use of evidence throughout the system

NICE is an agency of government and has four very specific roles specified by government:

- **A societal role** in providing open and accessible engagement with decisions about the equitable allocation of societal resources. In addition to the open transparent technical aspects of its work, it has a Citizens Council to discuss social issues related to *NICE*, a social values policy that informs these decisions, and stakeholder driven guidance committees that develop guidance for professional practice.
- **A political role** as the health and social care context in which *NICE* sits is inherently political. Some of this political responsibility is delegated to the open transparent processes of *NICE* which have a credible brand that is separate from state provision by, for example, Public Health England.
- **A service delivery role** which provides a net benefit to the system by providing products (such as guidance on evidence-informed services and quality standards of expectations of good practice) that as well as being open and transparent save time from reducing the repetition of much of decision-making by different agencies and individual practitioners (though services have much discretion on whether and how these products are used).
- **A scientific role** in providing science informed products but also developing methods for creating guidance including advances in health economics. *NICE* has a manual for the processes of developing guidance that includes expectations of certain processes and criteria such as the GRADE system.

Accreditation and quality assurance: *NICE* is firmly established within the health and care sector as the key source for guidance on health technology and practices, and increasingly on broader issues such as public health and social care. In addition to working to maintain and develop this role, the Centre aims to influence the effective use of evidence more widely in the sector, for instance through Accreditation and quality assurance. This programme assesses the guidance production processes of external organisations to ensure consistent high standards, and that recommendations are based on robust evidence. The majority of external guidance producers have now been awarded accreditation (and so recognition and credibility). The Centre also plans to launch a light-touch renewal programme to uphold relationships with accredited guidance producers.

NICE also produces a range of quality assured resources including:

- Cochrane case studies and Do not do recommendations – both of which identify practices that could or should be discontinued or reduced.
- Endorsement – of good quality resources that support the implementation of *NICE* guidance (24 in 2016/17).
- Shared learning – examples of *NICE* guidance implemented in an innovative and effective way (66 in 2016/17).
- Quality and productivity – case studies assessing initiatives for saving money and improving quality (7 in 2016/17).

What Works Scotland

Planned for the following year

Throughout 2017 the focus of the Centre has been on carrying out its remaining remit. The Centre has historically engaged with Government and the wider system in order to establish its status and the value of its outputs, and this will be part of the upcoming strategy in 2018. Over the past 2 years, What Works Scotland has regularly liaised with academic and government representatives in both Northern Ireland and Wales that are involved in the development of their respective emerging What Works models. This collaboration has involved sharing research findings and ideas, on-going advice and delivering several presentations to advisory groups for both countries. What Works Scotland has also directly informed and influenced the model for the new collaborative research programmes for Housing (CACHÉ) and Children's Neighbourhoods (CNS), based in the west of Scotland.

Wales Centre for Public Policy (formerly the Public Policy Institute for Wales)

Engagement with policymakers and key Government staff

The Centre has built its reputation within Welsh Government by delivering useful work quickly. It has now established a key role in the process setting research priorities, helping the First Minister and other ministers to identify key questions before arranging and disseminating research that addresses these needs. Further engagement work has included:

- Policy seminars for officials.
- Joint activities with the Head of Policy Profession and Policy leads in departments.
- Liaison with Government in-house Knowledge and Analytical Services researchers and analysts.
- Liaison with Government's statistical service.
- Liaison with Welsh Government chief economist.

What Works Wellbeing

Relationships with central government & funders

What Works Wellbeing has been establishing credibility through research production in order to develop its status into that of a major player and become a known voice in the field. Their work has involved regular contact with funding departments, identifying potential sources of funding, finding commonalities between the funding available and showing added value of policies with wellbeing outcomes. The Centre promotes wellbeing as an ultimate goal and common metric for charitable and government activity, and addresses mental health issues on occasion through research or comment. It feeds into consultations and talks to think tanks and all political parties. Political influence is developed and used by the Centre, for instance through the former senior Government officials present on its Board. Much of its success though has been through ‘bottom up’ approaches such as working with champions within local authorities to promote the Centre’s agenda and embed evidence-based policy and practice throughout the organisation.

A1.2 USER ENGAGEMENT AND SUPPORTING UPTAKE

Examples of activities undertaken by the What Works Centres to:

- *engage with practitioners/policymakers and facilitate relationships with researchers*
- *enhance the research and evidence skills of users*
- *influence decision-making structures and processes*
- *provide resources, tools and guidance to aid processes and practices*
- *support evidence use and the implementation of guidance*

Centre for Ageing Better

Formal and informal engagement with key stakeholders

Events and face-to-face engagement: Identifying the right audiences and reaching stakeholders through speaking engagements and face-to-face engagement. The Centre has started to organise and livestream events, mainly to gather information or raise awareness during the first two years of operation. Events planned for the future are likely to involve more dissemination of research findings as well as developing sessions to discuss and debate the topic of ageing. The Centre is also involved in various stakeholder engagement work for scoping (see Section 5, *User perspectives*).

College of Policing / What Works Centre for Crime Reduction

Providing opportunities to share learning, collaborate and participate in research, and embedding evidence-based policing into all professional practice

Evidence Champions: A network, launched in 2013, of officers recruited to promote and embed evidence-based practice in policing and to share ideas and knowledge across forces through face-to-face meetings, POLKA (see below), seeking funding opportunities, expanding the policing evidence base and raising awareness. At September 2017 there were 61 champions across 38 out of 43 forces, with further ‘advocates’ and ‘practitioners’.

Police Knowledge Fund (PKF): A £10m fund provided by the Higher Education Funding Council for England and the Home Office to support development of sustainable education and research collaborations between police forces and academic institutions in England and Wales. Its objectives are to build capability regarding evidence use, embed/accelerate understanding of crime/policing issues, and demonstrate innovation in building and disseminating the evidence base. 14 bids were awarded funding in 2015, involving 39 forces, 30 universities, the British Transport Police, Police Service Northern Ireland and the National Crime Agency.

Police OnLine Knowledge Area (POLKA): A secure online collaboration tool introduced in 2009 and hosted by the College, for the policing community to network, ask questions, share insights and suggest new ways of working. There are now 300 communities on POLKA including an academic network to support police officers and staff undertaking further study.

Recruitment and progression routes: Amending procedures such as competency frameworks and professional development reviews to ensure that they are informed by evidence and include evidence use as part of the role, promoting the importance of evidence within the organisation. Some of these changes have been completed and the Police Education Qualifications Framework is being revised following public consultation. By 2020, entry to policing roles will involve a 3-year programme, either securing a degree in policing prior to entry or serving a degree level apprenticeship at entry. Serving officers with other degrees may complete a conversion course.

Training in research use, generation & application/critical appraisal skill: The revised Police Education Qualifications Framework (above) will necessitate degree level qualification. The core values framework also provides motivation to adopt evidence-based policing: a module on this is included in the two-year Initial Police Learning and Development Programme (IPLDP) for police constables, and in the National Policing Curriculum. The Centre also offers one off regional 'Master-classes' for officers in developing skills in research appraisal, 'How to' guides and an annual workshop to share evidence and experience at the International Crime Science Conference. The College Bursary Scheme offers contribution towards tuition fees of up to £6,000 for those undertaking degree or post graduate study alongside work: 25 awarded in 2016/17 and 79 announced for 2017/18.

Research surgeries: Scheduled events (nearly 100 to date) at College sites around the country that offer 'drop-in' practical help and guidance to help increase knowledge of research methods and build analytical capacity. The Centre works closely with forces to support and encourage research projects and the evaluation of new initiatives.

Guidance for implementation: A costings guidance resource (spreadsheet tool + guide) aims to help practitioners make more accurate cost-benefit assessments of specific interventions (what data to collect, how to calculate and present all costs associated with implementation), and estimate of the costs of implementing in different contexts (e.g. upscaling). It was developed by the University of Australia and UCL and tested at a workshop by practitioners including police officers and staff, and PCC and charity representatives. The Centre also links with the National Policing Lead, who is responsible for implementation of College standards, and provides a peer support function which, though not routine, can support implementation in particular areas where requested.

Early Intervention Foundation

Engaging directly with local authorities and police forces across England

Events: National conferences and regional events, plus a series of masterclasses (the Early Intervention Academy for Police Leaders and the new Early Years Academy), with the aim of providing evidence of

what works and practical knowledge to drive the adoption of effective early intervention and galvanise change. Over 40 events held since November 2013 including 4 Police Masterclasses, 3 National conferences, 5 Regional Early Years Evidence Seminars, 6 Regional Masterclasses and 5 Workshops for representatives from the pioneering 20 places. Demand is high and the majority of local authorities are receptive and eager. One series of early years events (one national conference and five regional evidence seminars) was evaluated by a team from the University of Warwick (see appendix 2).

Local engagement (*through the Places Network: 99 individual members from 37 local authority / PCC areas and 20 police forces*): Visiting / providing advice to local authorities and police on ‘what works’ and how to use evidence in decisions. Projects include developing tools to advise local authorities and workforces on how to implement early intervention effectively. This may include helping assess the local need and readiness for change, or the evidence on effective interventions and their success factors; developing strategy and/or investment plans; and advising on monitoring and/or evaluation. Tailored communication materials are produced to target particular sector leaders and bodies. Positive feedback received from attendees of the Places Network meetings.

Guidance and support for evidence use and implementation: The Centre has identified ‘increasing evidence literacy’ throughout the sector as an important precondition to achieving impact through its work, and as a need among the sector itself. It seeks to achieve this through the content of its research outputs and through key dissemination activities, such as subject-specific workshops, Places Network meetings and larger conference-style events.

Education Endowment Foundation

Engaging directly with schools and providing resources to encourage evidence use

Scale-up campaigns: Providing guidance (evidence-based recommendations and practical resources), local advocacy (working with local partners to support schools), and targeted use of evidence-based programmes (mainly grants to test and scale up programmes). The five year, £10m *North East Primary Literacy* campaign (co-funded with Northern Rock Foundation) was launched in 2016 to help tackle the significant literacy gap in the region by providing information to all 880 primary schools and, ultimately, catalysing long-term system change. The £5m *Making Best Use of Teaching Assistants* campaign aimed to help schools realise potential benefits of better deployment of the £5bnational resource of teaching assistants. Sheffield Hallam University and the Institute for Fiscal Studies (IFS) are evaluating this latter campaign, as well as an ‘embedded’ model of the *Making Best Use of Teaching Assistants* campaign, where support to apply the guidance is built into existing structures and processes.

Research Schools Network: A network of 23 schools appointed following a competitive application process and funded to support the use of evidence to improve teaching practice, with £7.2m provided by the *EEF*, the Institute for Effective Education and Department for Education. The schools will become focal-points for evidence-based practice in their region, supporting 2,000+ schools to use and develop evidence-based practice through engagement, communication and innovation, plus training and professional development for staff at affiliated schools.

Monitoring and evaluation tools: The DIY Evaluation Guide is an interactive, online tool that introduces the key principles of educational evaluation and provides guidance on how to conduct small-scale evaluations of new approaches and interventions in schools, nurseries and colleges. The aim is to help indicate whether or not an intervention is effective, save teachers time and guide future action. The Families of Schools database described in Section 3 provides access to attainment data that enables

benchmarking against similar schools in order to identify areas with scope for improvement. A set of online resources on ‘Assessing and Monitoring Pupil Progress’ are also available.

Implementation resources: In 2018, the *EEF* published a guidance report, ‘Putting Evidence to Use: A School’s Guide to Implementation’, to support schools to give their innovations the very best chance by working carefully through the who, why, where, when and how of managing change. In addition to producing guidance on key school improvement issues, a range of implementation tools and resources (e.g. online courses) are created to help schools apply evidence-based recommendations: reviewing existing practice, understanding school weaknesses and intervention success factors, preparing staff and systems for change, and evaluating and embedding change. For example, the *Making Best Use of Teaching Assistants* guidance was accompanied by self-assessment audit tools, case study videos, staff observation tools, and draft school policies on TA deployment. The Centre works with partners to design and deliver programmes of training and support for implementation (e.g. North East Primary Literacy Campaign) and produces guidance for schools applying to the Department for Education’s Strategic School Improvement Fund (SSIF).

Excellence Fund: Aims to support more disciplined innovation by financially incentivising 124 schools to adopt the most promising projects to create a lasting legacy of evidence-based practice. For instance, the £600,000 partnership with Suffolk County Council’s Raising the Bar programme aims to boost attainment by bringing promising evidence-based programmes, selected from a menu of options, to more than a third of Suffolk’s publicly funded schools. More than 120 schools offering funding to train a total of more than 600 school staff, and their feedback described how funds enabled the launch of programmes that will benefit children.

Promising projects: Projects and interventions (13 as of July 2017, now 16) that have shown promise through *EEF*-funded evaluations and to which the Centre has re-granted in order to test their impact at a larger scale, or which have already demonstrated positive impact in a large-scale *EEF* trial. The first project to successfully conclude an at-scale trial, Magic Breakfast, secured £26m funding (together with Family Action) to run morning clubs in over 1,770 schools across the country, focusing on the most disadvantaged areas. Section 4 describes the process by which the Centre tests projects through pilots, efficacy and effectiveness trials.

What Works for Local Economic Growth

Engaging and informing local authorities

Workshops: These events (11 as of July 2017) promote the Centre’s policy review findings and advice on evaluation, and examine the opportunities and challenges faced by local authorities in using and developing evidence to inform local economic policy, though some have addressed specific issues (e.g. Brexit impacts). The aim is to demystify and provide access to evidence. The Centre also offers to present findings and advice on evaluation to local partners involved in demonstrator projects (see Section 4), tailored to local needs if requested.

Linking local partners and academics: What Works Growth is developing a network of early career researchers (who have completed their PhDs within the last five years), alongside its existing academic panel and academic / expert networks. The Centre is happy to suggest members of this group who may be able to assist local partners on project evaluations, where this also matches with researchers’ interests, and in some cases can make funds available to cover the researcher’s time.

Guidance to support effective evaluations of interventions: Ten subject specific ‘How-to-evaluate’ guides and two general guides have been produced to support production and are promoted via the website and social media. This includes the series of blogs published by the Centre in 2015 that introduced ways of improving the evaluation of local growth policy. It was intended to demystify the process of undertaking robust and useful evaluation of local growth programmes, and to encourage more policymakers to undertake such evaluations. Further work is undertaken directly with local authorities to support the implementation and evaluation of trial projects through the Demonstration Projects programme (see Section A1.4).

NICE

Engaging with the profession, the public and academia

NICE Medicines and prescribing associates: A community of health professionals employed or contracted by the NHS or non-departmental government bodies, who work with their own organisation and their local health economy to:

- Support the adoption of *NICE* and other high-quality guidance into practice.
- Improve safety through highlighting issues of medicines safety, risk and ‘never events’.
- Support the local introduction of new medicines.
- Develop leadership, facilitation, decision-making and management skills.

NICE associates develop and support local networks, identifying local affiliates to share and exchange information, and link with the *NICE* field team and *NICE* fellows and scholars. The associates form a community of practice, supporting each other as an expert group. They share ideas and examples of good practice, as well as receiving information and support from the medicines and prescribing team at *NICE*.

NICE Fellows (part of the Fellows and scholars scheme): Senior influential leaders who act as ambassadors for three years, using their strong networks to promote the work of *NICE* at a regional and national level and presenting at various conferences and meetings. They are supported through workshops, access to experts, and the chance to network with like-minded advocates of evidence-based practice. Nine fellowships were awarded in 2017, bringing the total to 27.

External engagement: Attending conferences and events worldwide, planning and delivering the annual conference, and disseminating products to key external audiences. In 2016/17 *NICE* hosted 19 exhibition stands and delivered 141 workshops and speeches, hosted the *NICE* Forum and successfully bid to co-host the 2018 guidelines international network conference. Almost 1,700 members of the insight community help shape products and services while *NICE* newsletters now reach just under 45,000 subscribers. *NICE* is co-hosting the Guidelines International Network conference in September 2018.

Public affairs: Managing strategic engagement to build strong working relationships with stakeholders and ensure guidance and resources reach those who plan, deliver and use health and care services. Participated in high profile general practice speaking engagements and met many clinical/social care/patient organisations to discuss priorities.

Public involvement programme (PIP): Opportunities for patients, carers and the public to participate in, for instance *NICE*’s work with lay people, supporting the development and implementation of guidance or evaluating patient, carer and public involvement in *NICE* activities. This year the PIP team has 110 lay members and 122 patient experts, and has taken part in 21 international speaking engagements. Any lay

member who leaves a committee, and all patient experts who give testimony to our committees, are invited to complete an exit questionnaire about their experience of working with *NICE*. Proposals for improving how patients and the public can contribute to guidance and standards were drafted following a literature review and public survey, and 117 responses to the subsequent public consultation were received.

Local support: Helping professionals put our guidance into practice, raising awareness of *NICE* and its outputs and giving local organisations a chance to provide feedback. For example, meeting with social care commissioners from local authorities across the UK advising NHS England on their Sustainability and Transformation plans and helping to develop evaluation tools.

Student champion scheme: A national programme training and supporting students to share information about the *NICE* Evidence Search online service with fellow undergraduates to improve the routine use of evidence-based information by future health and social care staff. This reaches more than 2250 students per year, with 21 training workshops last year.

Fee-for-service consultations:

Office for market access (OMA): Tailored, confidential discussions that allow developers of healthcare technologies and pharmaceuticals to learn about *NICE* appraisal procedures and their own market access plans to help them bring their products to market. Clients are referred to other bodies when relevant, e.g. the Medicines and Healthcare products Regulatory Agency, the National Institute for Health Research or Public Health England.

Scientific advice: Consultation on development plans for medicinal products, advising developers of healthcare technologies (80+ so far) how to generate the evidence needed for future submissions to *NICE* or other market access evaluations. *NICE* has participated in the US Food and Drug Administration payer programme for the medtech industry, worked with the London School of Economics' health division on cost effectiveness evaluations, educational courses on UK health technology appraisal evidence and methods, and supporting MSc students working in related fields.

Support for implementation: Helping organisations to put guidance into practice, alongside promoting *NICE* outputs and services. *NICE* provides access to information and resources on change management, costs and savings, and evaluation, and develops targeted support where needed. It uses implementation consultants to work with stakeholders such as local authorities and NHS to inform and facilitate implementation, and to gather feedback and examples of good practice for shared learning. The Centre also develops relationships with other organisations to promote products.

Embedding guidance in practice: *NICE* guidance and health technology guidelines, described in Section 3, have become a recognised part of the decision-making process for health and social care services. While they do not govern or prescribe the practice of healthcare organisations, they do support service users' demands for recommended services and products. The Centre also aims to encourage evidence-based practice through national strategies and initiatives (e.g. the Five Year Forward View), embedding relevant *NICE* recommendations and standards into new priority areas of national activity, and working with organisations (in areas relating to educational and training requirements, financial benefits and rewards, regulation, data collection and monitoring systems, and patient and third sector organisations) to motivate individuals to adopt *NICE* guidance and standards.

What Works Scotland

Collaborative action research with the evidence users

Collaborative action research (CAR): Engagement and co-production is integral to the whole CAR process described in Section 4. Interaction between the Community Planning Partnership (CPP) participants and the Centre ensures a mix of local/subject knowledge and research expertise. More than 40 events (including 25 workshops and presentations) have been used to communicate research and to engage with CPPs, using ‘carousel approaches’ and various other facilitative models. For example, the Centre facilitated a Development Day on community-led action planning action research interviews and other approaches with local community engagement practitioners and community planning partners (using a developmental participative approach). The outcomes of some collaborative action research projects have included setting up systems and structures to ensure that the process of research and reform is sustained. In these cases, the participants identified the need for such structures and were expected to take leadership roles in creating and developing them.

Community profiling: Work to co-produce and publish data profiles for 17 neighbourhoods (see Section 4) aimed not just to generate these outputs but to develop the capacity of local officers to produce and update them.

Facilitative Leadership training: training a pool of facilitative leaders at various levels in their Community Planning Partnership through 1 or 2 day training sessions (for small groups) and monthly workshops/seminars (for around 60 people). Attendees gave positive feedback and committed to delivering further training themselves to cascade knowledge.

Participatory Budgeting (PB) evaluation toolkit: Establishing a Participatory Budgeting Evaluation Group with Glasgow CPP to devise a bespoke evaluation toolkit for local PB activities. This involved meeting approximately once a month over 18 months to hear and review evidence from local sources and national/international literature, analyse local pilots, consider similar frameworks emerging in Scotland and learn about the technical and political dimensions of leading international processes. The Centre helped to finalise the design of the PB toolkit pilot while the CPP took ownership for updating the pilot toolkit in future, based on ongoing learning.

Wales Centre for Public Policy (*formerly the Public Policy Institute for Wales*)

Engaging with government to plan and disseminate research

Agreeing research priorities and discussing outputs: The Centre became a key resource for the Government in helping to identify research needs, commissioning syntheses from relevant experts (often rapid reviews based on their existing knowledge) that address these priorities and helping to communicate the findings through a recognised process of interactions with the First Minister and other ministers. The priority setting process, described in more detail in Section 5 involved regular meetings with Welsh ministers, providing the opportunity to raise awareness of the Centre’s existing work and outputs. By responding to an evidence need identified by a policy maker at the appropriate moment in the policy development process, the PPIW (and now the WCPP) was able introduce evidence into a decision-making process at the key moment. The user engagement, specifically the co-production of the work programme, was designed to ‘meet the user of evidence where they are’ and therefore avoid the need to interpret the user’s needs, or to bend an evidence generation programme to respond to the question that decision makers were facing.

PPIW’s role in conveying the findings from the commissioned research, other than producing the summaries and briefings described in Section 3, was to establish the relationship between the minister who requested the research and the academic who conducted it, as these parties then discuss the

research findings and implications without the input of the Centre. By discussing the research directly with ministers when both planning what is required and communicating the findings, the Centre was to produce data in a format suitable for the user and to provide further explanation where necessary to ensure that the findings and their implications were fully understood.

Workshops: A series of workshops in 2015 brought together experts to analyse Ministers' future evidence needs, gaps in the evidence base, and recommendations for filling these. The Centre also uses workshops for most of their reviews of the international evidence base to translate the findings to the local context. This helps both disseminate knowledge and inform the production of the final review product.

What Works Wellbeing

Building relationships with local authorities and organisations

Knowledge mobilisation: What Works Wellbeing has established links with organisations in a wide spread of locations in order to develop a good understanding of the situation across the country. It works with champions within local authorities to promote the Centre's agenda and so help ensure that wellbeing goals are included in organisational strategies. These links have enabled the development a large system of organic knowledge mobilisation alongside standard online communications and events. The Centre has connections across the UK through the universities it works with to produce research and engage with users, such as the taskforce in Norwich which tests the Centre's outputs. It has also developed links with local and national government, charities and businesses, for instance through its Strategic Council for Wellbeing in Work. The core team is made up of people who have worked in relevant sectors. Its role, alongside the advisory panel and partner/stakeholder engagement (plus an implementation team currently in development), includes sense-checking the products, speaking to users, determining what other products, formats and information are needed, bridging the gap between research and practice. What Works Wellbeing also runs the secretariat for social impacts task force (a cross government network) and public health & wellbeing expert group, which helps ensure the Centre is embedded in the knowledge mobilisation system.

Dissemination: Alongside the publication of research outputs, the Centre's core staff, academic teams and board members present on the evidence produced and shares findings from stakeholder consultations and public dialogues at a range of events. The events and engagement budget is very limited, with just one communications person is responsible for the website, social media and all events. As hosting events is not cost effective and has been shown to have limited impact, the Centre has made the strategic decision to go to the audience and so attends and presents at events run by others including sector bodies such as Chief Culture & Leisure Officers Association, Society of Local Government Chief Executives, Housing Association conferences. The Centre presented and ran two workshops per day to 300-400 people at Civil Service Live, the National conference of civil servants (delivered jointly with ONS).

Secondment: This approach is used to help with translation and knowledge mobilisation into relevant sectors and organisations. The aim is for at least 1 or 2 staff to be in a secondment arrangement at any one time: the Centre may be approached directly by people looking to do this or may advertise a job as 'Secondment preferred'. The secondees' organisation is normally asked to contribute the VAT to ensure that they are invested in the arrangement though certain roles in the limited implementation team have only been possible when fulfilled by secondees paid for on a programme or by their organisation.

A1.3 COMMUNICATING AND INTERPRETING EVIDENCE

Examples of activities undertaken by the What Works Centres to:

- *interpret evidence into guidance, recommendations or standards*
- *provide communication of, and access to, evidence (e.g. via toolkits and other resources)*
- *communicate information about the What Works Centres and their outputs via electronic media*

Centre for Ageing Better

Recommendations and summaries from the findings of evidence reviews and deliberative workshops

Briefings and infographics: Summaries and visual aids, free for anyone to use, which present the best evidenced statistics from primary sources to make the Centre's findings more accessible. The outputs produced as of July 2017 are based on *Ageing Better's* scoping work to raise awareness of issues and set research priorities: 10 briefings/summaries and 7 infographics depicting key facts and statistics in different topic areas, which were downloaded around 13,000 times in total in 2017. Similar materials will be produced for all upcoming commissioned research, including evidence on 'what works'.

Recommendations based on research findings: All of the Centre's research and evidence work are published with insights and recommendations, and sometimes with separate insight reports. As at July 2017 though, the majority of the research on what works was still in progress, so relatively little interpretation of findings had been undertaken.

Implementation guidance: The Centre shares knowledge on the evidence for what works to help create change. In the past year, it has published a leaflet on getting active in later life and a short guide on how to implement a campaign that aims to create more age-friendly high streets. The Centre will work further in this area with partners and other organisations to develop charters, new guidelines and practical recommendations to inform the work of government and the voluntary, public and private sectors. This will include investigating whether and how evidence-based recommendations are used in decision-making and their impacts if so. While this forms a small element of the research conducted so far, further research on research use is in progress.

Website and social media: Social media programme and revamping website to go beyond providing pdfs: using infographics, publishing additional materials – approximately 2-4 blogs and 1-2 Opinion articles per month, regular tweets (daily or more), working through LinkedIn and producing e-newsletters. New website launched Winter 2017/2018. Communications as a whole accounts for around a third of the budget and staff. Communications such as social media hits and mentions in the press are benchmarked against ILC-UK, Age UK, the *EEF* & the Resolution Foundation.

College of Policing / What Works Centre for Crime Reduction

Updating and replacing codes of practice with evidence-based guidelines, providing information resources for police and crime reduction practitioners

Authorised Professional Practice (APP): The official source of professional practice and standards for policing, authorised, developed and owned by the College prior to the establishment of the What Works Centre. These goes beyond guidance to set minimum standards or expected practice and were developed by speaking to professionals with some non-systematic evidence review.

Pilots have taken place of evidence-based guidelines that are intended to replace the above APP standards and eventually form a code of practice. These guidelines have been development since 2015 using guideline committees that include a mix of specialists, police officers, frontline practitioners,

academics. Systematic reviews are used where the existing evidence base is sufficient, alongside practitioner expertise. The intention of the Centre is to feed these guidelines into the curriculum and create tools to support implementation where appropriate.

Crime Reduction Toolkit: An online resource launched March 2015 that presents evidence via succinct summaries of the conclusions of systematic reviews. This was the main output of the commissioned partnership programme conducted by a consortium of universities and jointly funded by the College and ESRC. The toolkit summaries rate the impact, cost and implementation of a range of over 50 crime reduction interventions, and the quality of the evidence/approach on which those conclusions are based. The College will continue in-house development from 2017 following recent user testing. The toolkit has been widely used (averaging 2,100 views per month, used by 54% of respondents to a recent evaluation survey of sector professionals and by 15% to inform day-to-day decision-making), garnered international interest and won the European Public Sector Award.

Information resources for practitioners:

The National Police Library: Provides book loans via the College of Policing site in Ryton and an online library catalogue to College members, plus access to online journals through provision of an Athens account. It also promotes evidence and services via a twitter account.

The Knowledge Bank: The community within POLKA (the online forum for practitioners to share knowledge described in Section 2), where research findings are uploaded.

The Global Policing database: A web-based and searchable database designed to capture all published and unpublished experimental and quasi-experimental evaluations of policing interventions conducted since 1950 (currently from 2008 to 2014, which represents one third of the policing research captured). This was jointly funded by the College of Policing and the Australian Research Council, and developed by the Mayor's Office for Policing And Crime (MOPAC) in London and experts from the University of Queensland.

Policing & Crime Research Map: Interactive resource hosted by the College that provides details of ongoing (& completed) research at Master's level and above across the UK including (as of July 2017) around 250 research projects listed including 24 RCTs. It is intended to increase collaboration across forces and between police and researchers.

What Works Centre for Crime Reduction Microsite: Ancillary to main College of Policing website, it showcases the Centre's work, hosts the Centre's products, provides access to key evidence mechanisms and links to national/international resources, detailing research on policing and criminal justice interventions. The Centre also has an emailing list and membership hub.

Early Intervention Foundation

Presentation of evidence on effective programmes and approaches to encourage evidence-based policy making and commissioning

EIF Guidebook: Information on rigorously assessed programmes shown to improve outcomes for children and young people, including: the strength of evidence of impact and costs, specific outcomes, how the programme works and is delivered, and success factors. 26,000 users between launch in October 2014 and December 2016⁶¹, from at least 131 of the 152 English upper-tier or unitary local authority areas (including local authorities, NHS trusts, police and schools).

⁶¹ 45,000 users as of March 2018.

Evidence reviews: Generating and publishing evidence and knowledge through evidence-based reviews and systematic mapping of potentially effective approaches. Published products include (as at July 2017) 2 Overviews covering 7 new reports, 4 studies, 11 reviews and 5 tool/guidance publications. Feedback suggests the publications were well received and, as of December 2016⁶², at least 9 have 1,000+ views, including the flagship Foundations for Life report with around 3,000 downloads and 9,000 views. They have had impact on policy (e.g. DWP commissioning £15 million of support, drawing directly on one review) and supporting application (e.g. local police using *EIF* evidence in work with primary schools).

Resources: The Centre also produces a range of resources and guidance content designed to support decision-making and delivery by identifying lessons from research evidence that are relevant to practice or by highlighting gaps in the evidence on practice, such as where widespread approaches have not been formally tested or evaluated. These resources may be published via the *EIF* website for public access, or produced on a bespoke basis for a specific local area, sub-sector or organisation. Products developed so far include a set of maturity matrices, which help to assess progress and readiness for change in a local area, a guide for commissioners on tackling harmful conflict between parents, and a '6 common pitfalls' guide for those seeking to plan or commission evaluations of early intervention.

Evidence-based recommendations: Increasingly, the Centre's projects have generated recommendations for policymakers; for example, to highlight priorities for investment and further research, gaps in the evidence on current practice, and opportunities for policies and programmes to work and create benefits across multiple Whitehall departments or delivery agencies. Guidance produced so far includes Preventing Gang Involvement and Youth Violence – Advice for Commissioning Mentoring Programmes, and Social Impact Bonds and Early Intervention.

Website & electronic media: Updating and maintaining the site/EI portal and other online activity, including social media, to disseminate knowledge about early intervention in order to change practice and policy. This includes monthly email newsletters, blog posts and regular tweets.

Education Endowment Foundation

Online resources to present evidence and guidance to school leaders and teachers on a range of high-priority issues

Guidance reports: Practical recommendations that are Applicable, Accurate, Accessible, and Actionable are developed by reviewing the best available international research in order to support an evidence-informed teaching system. Each report starts with a scoping exercise, involving teachers, policy makers, academics and other stakeholders, to identify the issues most salient to teachers (not researchers). Typically, a systematic review will then be commissioned to gather evidence on those issues. A panel of teachers and academics helps to interpret the findings to make practical, accessible, understandable recommendations. Guidance is becoming a core part of the approach to communicating evidence, with 6 reports planned in the coming months to add to the 3 published as of July 2017.

Teaching and Learning Toolkit and the Early Years Toolkit (EYT): An accessible online summary of the international evidence on the most effective approaches to improving the attainment of children and young people aged 5 to 16 (and 3 to 5). The toolkit was developed from the Pupil Premium Toolkit (a 20 page report originally launched in 2011) by Durham University. It synthesises meta-analyses of an estimated 12,000 studies and presents the findings via 34 'strands' (and 12 EYT strands) which

⁶² As at March 2018, at least 17 publications have received 1,000+ pageviews, including the flagship Foundations for Life report with around 4,500 downloads and 19,000 pageviews.

summarise the evidence relating to teaching and learning practices, indicating costs, impact and evidence strength. In 2017, an NFER survey of senior leaders found that 57% of secondary schools and 48% of primary schools used the toolkit to help decide which approaches and programmes to adopt (up from 11% in 2012).

‘Big Picture’ themes: These are designed to be a constantly updated ‘one-stop shop’ for *EEF* resources on 14 key themes chosen in collaboration with teachers, drawing together the most relevant findings from the Toolkits and *EEF* evaluations to provide a rich picture of the developing evidence base.

Families of Schools database: An interactive tool based on national attainment data that enables you to compare the performance of pupils in your school to those of other schools with similar characteristics. It aims to help schools share their successes, learn from their colleagues, and build capacity in the system. Of the 17,675 schools in the current database, over 80% have been looked up online. Of these schools, 95% have been looked up more than 3 times.

Website & any electronic media: Primarily a collection of the above accessible resources (school themes, all evaluations, guidance and resources), plus various electronic media via the website or promoting materials on the website (social media, blogs, newsletters). The *EEF*’s regular email newsletter has over 14,000 subscribers. Its Twitter account has over 28,000 followers and its Facebook page is followed by almost 10,000 people.

What Works for Local Economic Growth

Online summaries of evidence reviews with guidance embedded in the communication of findings

Toolkits: A description of a particular programme or intervention and its aims, plus discussion and graphical indicators of its effectiveness, its cost-effectiveness and the strength of the evidence. Around 20 toolkits and overviews produced as of July 2017. A link is also provided to a pdf discussing these factors and presenting the evidence in more detail. The Centre’s toolkits and evidence summaries discuss issues for policymakers to consider in order to support decision-making and the design of effective interventions. Evidence strengths and gaps are also highlighted both to inform policymakers and help direct future research.

Website & Social media: Advice on policy, practice and evaluation: promoting evidence through online resources such as toolkits and advising on evidence production and use through the same guides used for the workshops described in Section 2. The Centre typically issues up to 3 blog posts per month and daily tweets. The aim is to demystify and provide access to a wide range of relevant, robust evidence.

NICE

Providing access to information and guidance on medicines, practices and care

Guidance and guideline production is the key function of *NICE* and various resources are generated:

PRODUCT GUIDANCE

Interventional procedure guidance: Reviews the efficacy and safety of a wide range of (mainly) novel or innovative medical procedures to make sure that they are safe and effective enough for wider NHS use, and produces guidance on best practice for their use.

Health Technology Evaluations: summarising evidence of clinical and cost effectiveness and giving recommendations on the use of new and emerging technologies to support adoption. Includes:

- *Diagnostics*: technologies used to diagnose or monitor a disease.
- *Medical technologies evaluation programme*: Facilitates research where needed. Provides guidance through Medtech innovation briefings (evidence summaries commissioned to support the NHS Five Year Forward View) and Medical technologies guidance (recommendations to improve quality of care).
- *Technology appraisals*: Gives recommendations on the use of new and existing medicines and treatments within the NHS, based on a clinical review of the evidence (trials and, where possible, real life), including economic evidence.

Medicines and technologies programme:

Medicines and prescribing: Comprehensive guidance, advice and support for prescribing and the best use of medicines across the NHS. The advice can also appear in *NICE* guidelines.

Adoption and impact: Provides resources to support the appropriate uptake and use of medicines and tracks the implementation of *NICE* guidance. The Resource impact assessment team also develops implementation tools (e.g. templates, resource planners) and informs key NHS stakeholders of upcoming guidance recommendations.

***NICE* advice**: programmes consisting of a range of products that are either based on *NICE* guidance or involve a critical assessment of relevant evidence. However, these products do not have the status of formal *NICE* guidance, and do not contain new *NICE* recommendations.

- *Evidence summaries*: Summaries of the best available evidence to inform local NHS planning and decision-making, for selected new medicines, off-label use of licensed medicines and unlicensed medicines.
- *Key therapeutic topics (KTTs)*: Key therapeutic topics summarise the evidence-base on topics identified to support medicines optimisation.
- *Local government briefings (LGBs)*: Advice for local government on the public health actions that are most effective and provide best value for money.
- *Medtech innovation briefings (MIBs)*: Objective information on device and diagnostic technologies to aid local decision-making by clinicians, managers and procurement professionals.
- *IAPT assessment briefings*: Improving Access to Psychological Therapies (IAPT) services provide evidence-based therapies to people with anxiety, depression and medically unexplained symptoms. We assess digitally enabled therapies which offer the potential to expand these services further.

SERVICE/ISSUE GUIDANCE

Centre for guidelines: A clinical guidelines programme with new topics developed by external guideline centres (at the Royal Colleges of Physicians and Obstetrics and Gynaecology) and updates developed internally; a social care programme now developed by these colleges, and; a public health programme managed internally. Both the clinical and public health programmes are now switching mostly to updating previous published guidelines, as their portfolios are completed, and the opportunity is being taken to reshape the portfolios to better reflect current service priorities.

PATHWAYS, STANDARDS AND DEVELOPMENT

***NICE* Pathways**: A large-scale programme of interactive flowcharts of all *NICE* guidance on a wide range of topics (with 40 entries listed under A alone).

Quality standards: Priority areas for improving the quality of health and social care in England, based principally on *NICE* guidance. Each set of around half a dozen statements per topic helps providers to assess their performance and identify any areas which might need improvement.

Social Value Judgements: To inform guidance production, a set of principles were developed by the *NICE* board using published literature, reports by *NICE*'s Citizens Council, and the results of a survey conducted on behalf of *NICE*. A second edition used similar evidence plus a wider array of sources including publications commenting on the first edition, legislation on human rights, discrimination and equality, and results from a roundtable discussion and a consultative workshop.

Online resources: The primary outputs of *NICE* – guidelines on health technologies and guidance on practices – are published in the 'Guidance and advice list' on the website. This also provides health professionals with access to *the British National Formulary* (up-to-date information on the use of medicines); *Evidence services* (the Evidence search service, Journals and databases, Clinical knowledge summaries, Evidence awareness email alerts, and medicines in development via partner website, UK PharmaScan), and; *Indicators* (national and local information on the quality of care provided and the impacts on health to help GPs and CCGs identify priorities for improvement, benchmark performance and demonstrate progress).

***NICE* in the news:** Raising awareness of *NICE*'s publications and remit through press briefings and press releases, publishing news stories, blog posts and videos, overseeing interviews and managing corporate social media accounts. In 2016/17 *NICE* spoke to, on average, 500 journalists each week and published 162 news stories/blog posts on the *NICE* website. **Public affairs:** Circulated more than ten articles via the Royal College of GPs monthly e-newsletter to 50,000+ GPs (who help develop, promote and implement the guidance).

Other engagement activities: The scale at which *NICE* operates necessitates the following functions:

Enquiries: Each year *NICE* receives thousands of enquiries from our stakeholders including general enquiries, Freedom of Information requests and letters from parliamentarians.

Publishing: Supporting the guidance development process and publishing the guidance and related products, including Pathways. These published materials set out the general benefits of adopting *NICE* recommendations, including how to access available support in written materials, via conference contributions and through tailored local engagement.

Internal communications: Sharing updates amongst staff using a variety of channels.

What Works Scotland

Co-producing and interpreting findings from research

Reflecting on collaborative action research (CAR): The findings from the Centre's CAR work with community planning partnerships (see Section 4) are often used to make policy or practice recommendations. While the Centre does not produce separate, dedicated guidance products, the CAR process often produces reflections on the process with more than ten research reports based on the collaborations published as of July 2017 along with various working papers.

Community profiling: Co-producing and publishing data profiles for the 17 'Your Community' neighbourhoods on the council website. The aim is to make statistical data at the micro-level more accessible, relevant and meaningful; and to contribute to a more localised approach to policy-making through the development of local action plans and improvements in partnership working. WWS is also capturing and sharing this learning at a national level.

Website & electronic media: Creation and maintenance of the website plus the use of social or electronic media: communications in 2017 have included 9 blog posts, 5 newsletters and tweets most days, plus various workshops and other events to promote the Centre's outputs and findings.

Wales Centre for Public Policy (*formerly the Public Policy Institute for Wales*)

Producing briefings and summaries of policy reports and discussing these with the research user

Briefings and summaries: As described earlier in Section 2, the Centre discussed research needs with ministers, commissioned research to address these needs and supported the researcher in disseminating the findings. This support included writing ministerial briefings – edited summaries of the syntheses and reports commissioned from experts – and produced reports of expert workshops in order to tailor and interpret the research for the needs of the audience. In addition to the written briefings, the Centre established links between academia and government for the researcher to discuss the output directly with the minister who requested it. This opportunity to discuss the outputs face-to-face with the Centre or the academic who produced it aimed to help understand the implications of the findings. The focus was on presenting and explaining the evidence rather than shaping policy and no separate, dedicated guidance products were produced.

Website, social media: In addition to publishing reports, the PPIW also routinely issued press releases and blogs about studies and their implications, publishing evidence on the website and promoting via social media: blog posts every 1-2 weeks, regular tweets (typically daily or more). This required approximately half of the time of the Communications Officer with support from other PPIW staff. In some cases, it convened events to launch reports.

Newsletter: The PPIW communications officer gathered information about reports and activities from each of the What Works Network counterparts to compile and then circulate a newsletter every 2 months to around 1,500 people to raise awareness and promote Network outcomes.

The Wales Centre for Public Policy will continue these activities.

What Works Wellbeing

Interpretation of academic papers into briefings, summaries and, increasingly, recommendations

Briefings and summaries: Summarising academic reports – systematic and scoping reviews, secondary data analysis – to produce more accessible materials, such as 2 page summaries with infographics. Different products have been produced depending on the audience and their awareness and engagement with the Centre and the research area. These include (as of July 2017) 4 basic packages (e.g. branding the report and promoting via blog posts, the website, social media and partner networks), 4 standard packages (adding designed and translated briefings, press releases and further engagement) and 1 booster factsheet (other additional materials can include videos, webinars, events, slide sets). Over 40 further packages are scheduled in the coming months. An evidence comparison tool for wellbeing interventions in the workplace has also been developed recently to present data on cost effectiveness, evidence strength and wellbeing impact. The intention is to expand this approach to all wellbeing evidence in the future.

Policy recommendations: The initial work conducted by the Centre to interpret the findings of research focused primarily on presenting evidence and making it accessible. The briefings produced each contain a short section interpreting what the evidence means for different audiences. Policy recommendations have also been produced summarising the Commission on Wellbeing and Policy, which makes the case

for using wellbeing as the ‘yardstick’ for public policy. Further guidance on considering wellbeing in decision-making is included in the ‘Introduction to wellbeing in policy’ course slides available on their website.

Dissemination: The communications strategy is based on the well-used ‘Awareness, Interest, Action’ model and evaluation framework. Activities include publishing and promoting reports and summaries via the website, social media, blog posts and stakeholder engagement at different levels. The Centre generates blog posts on a weekly basis (no more than two per week) along with multiple tweets most days. To assess reach, the Centre uploads all research on to Researchfish (for Impact Assessment), uses web analytics, and monitors attendees, newsletter membership, social media hits, and numbers of follow ups (e.g. “Can I have a copy of the presentation?” “Can you speak at our event?”).

A1.4 RESEARCH PRODUCTION

Examples of activities undertaken by the What Works Centres to review existing evidence and produce, commission or fund new primary research and analysis, including research to inform the improvement of processes, methods and the use of evidence

Centre for Ageing Better

Research production to build the evidence base

Evidence reviews: Synthesising primary research, where sufficient evidence exists, investigating not just what works but how and under what circumstances. Four main reviews had been completed as of July 2017 (Aids and Adaptations review, Inequalities review, Experience of Retirement transitions and Age friendly employer practises). Funding has been secured to build this area of work and further resources have been allocated for reviews due for completion in the next year.

Primary and secondary research: Where there is insufficient existing primary research to synthesise, *Ageing Better* plans to find and evaluate examples of relevant practice taking place or, if these cannot be found, to research personal/professional experience in order to develop ideas that can be piloted and evaluated. While some primary research has been completed alongside secondary analysis and the scoping activities described in Section 5, the majority of this work is in progress or planned. Again, significant resources have been allocated for evaluations and gathering data on current practice due for completion in the next two years. This will include investigating the use and impact of evidence-based recommendations.

Developing practices for research use: A key element of the Centre’s work has included funding structures (for example working with parent organisation the Big Lottery Fund to look at means and evaluation of fund distribution for ageing work across England), research development, and cross-pollinating with other What Works Centres to learn from each other in terms of ways of working and making decisions.

College of Policing / What Works Centre for Crime Reduction

Synthesising the existing evidence base to support decision-making and practice

Systematic reviews: The identification, systematic mapping & synthesis of new priority areas to highlight evidence, or lack of evidence, on a particular research question. At a minimum, a qualitative synthesis will be expected for every topic, complemented by a quantitative synthesis if sufficient evidence exists. Academic consortia were commissioned to address 12 new priority areas (7 of which are in the toolkit described in Section 3). The College has produced further systematic reviews and rapid evidence assessments on 10 National Policing Curriculum categories relevant to practitioners, academic partners and agencies across the law enforcement sector.

Synthesis for the Crime Reduction Toolkit: 325 systematic reviews or meta-analyses of various interventions were identified using a protocol reviewed by staff at the College of Policing and a panel of external experts then coded using the EMMIE system – see Chapter 4, Evidence Standards. The development of this toolkit by academic partners and the presentation of this evidence is described in Section 3. An extension has been granted to the original commissioned programme to enable the academic consortia to re-run the search for systematic reviews and therefore ensure that the toolkit comprehensively reflects the up-to-date evidence base.

Primary research published by the College: Focused on supporting work underway across the rest of the College or evaluating the impact of change programmes implemented by the College (including work on ethics & values, leadership & strategic command, community engagement & crime prevention and intelligence & counter-terrorism). The findings are disseminated via peer-reviewed research publications.

Primary research published by the Academic Consortium: Chosen to address gaps in knowledge, e.g. in areas such as domestic abuse, crime prevention messaging and tackling violent extremism. Primary research is also conducted through the Police Knowledge Fund described in Section 2.

EMMIE Framework (*Effect, Mechanism, Moderator, Implementation and Economic Cost*): Methodology developed by academic consortia as part of the work of the Commissioned partnership programme (CPP) to frame and filter evidence for practitioner use and the online toolkit. It combines findings of recognised control trials with consideration of intervention context and was completed and introduced in 2015. See Evidence Standards in Chapter 4.

Early Intervention Foundation

Assessing existing evidence that evaluates programmes and their costs

Synthesis: Evidence analysts assess and develop the evidence of what works using an internally-developed rigorous framework – see Chapter 4, Evidence Standards – following a call for Expressions of Interest for programmes that fit the scope of an intended review. Published outputs include the flagship *EIF* Guidebook product, which contains evaluations of 50 programmes (over 80 as of March 2018) with at least preliminary evidence of impact, and reviews including landmark *Foundations for Life* report which looked at 75 early years programmes. Approximately two-thirds of the Centre's resources in 2016/17 were allocated to evidence generation. The Centre's budget currently does not provide for conducting or commissioning evaluations.

Programmes, Practice and Systems: Research on the use of research, aiming to generate knowledge and evidence about key questions on how to implement early intervention. This involves driving the adoption of the evidence by working actively with commissioners, workforces and sector representative

organisations to change practice and testing the impact of this. As described above, Warwick University was commissioned to evaluate the impact of a particular series of *EIF* events relating to evidence in early years provision, which reported positive results in terms of participant feedback, changes in understanding and behavior change.

Evidence standards: Developed new organisational assets such as a methodology to assess programmes and decisions on evidence standards. Evidence standards draw on work done by the What Works Network and similar international bodies such as Blueprint, Washington State University, Dartington Social Research Unit, A4UE. The What Works Network Operational group organised an active discussion about evidence standards between the Centres' Directors of Evidence. *EIF* then refined their standards after looking at the early years literature to focus on high level (quality & volume) evidence and to work with organisations to build evidence in low quality areas (i.e. where it is lacking or where they need help).

Education Endowment Foundation

Reviewing evidence to improve understanding of 'what works'

Teaching & Learning Toolkit and Early Years Toolkit (yet): These syntheses of meta-analyses (comprising an estimated 12,000 studies) provide teachers with an accessible summary of the international evidence on different approaches to improving attainment. The Centre has developed methods to assess the strength of evidence (e.g. through the padlock system), as well as the average impacts and costs of these approaches. The presentation of this evidence via the toolkits is described in Section 3.

Literature reviews: Commissioned evidence-sifting exercises that highlight the most promising approaches and programmes and provide a solid basis on which to begin identifying, testing, and then scaling these approaches. Research tenders are made for reviews that aim to identify interventions which demonstrate impact on young people's outcomes, plus the quality of this evidence and the key features of effective practice. Twelve⁶³ separate literature reviews on a range of topics are available on the *EEF* website, some of which led to Themed Rounds of primary research funding (independent evaluations).

Primary Research Framework: This includes various levels of evaluation (pilot, efficacy and effectiveness) and funding (grant making/funding innovation, general rounds, co-funded themed rounds, follow-on scale-up grants). Mixed methods evaluations of interventions (usually involving a randomised controlled trial) are funded both through regular general funding rounds and special themed funding rounds (often co-funded with partners, such as the Wellcome Trust, the DfE, the Bell Foundation and Unbound Philanthropy, Money Advice Service and J.P. Morgan). Grantees often contribute towards project costs, though non-profit organisations such as schools and local authorities may only be expected to contribute to appropriate implementation costs (e.g., teachers' time).

The *EEF* has a well-established project pipeline. Where pilots of interventions are successful, an efficacy trial is then conducted to assess impact and cost-effectiveness; these test whether an intervention can work under developer-led conditions in a number of schools, or early years/post-16 settings, usually 50+. If this is successful, larger scale effectiveness trials are then carried out; these test a scalable model of an intervention under everyday conditions (where the developer cannot be closely involved in delivery because of the scale) in a large number of schools, or early years/post-16 settings, usually 100+

⁶³ With a further two reviews published on the website since July 2017.

across at least three different geographical regions. Promising projects are scaled up through further funding – see Section 2. The *EEF* is committed to supporting projects at all stages of this pipeline, investing (with co-funding partners) more than £200m by 2026.

Data archive and analysis: Access to national pupil database provides the administrative data for robust secondary analysis (e.g. matched studies) to assess programme impacts.

Research on Knowledge Mobilisation: The Centre has commissioned primary research into various methods or projects regarding the communication and/or use of evidence in education settings. Examples include the Statistical Analysis Plan for multi-arm research dissemination trial (Literacy Octopus), the RISE Project, and Evidence for the Frontline. Appropriate evaluation methods are agreed as part of the commissioning process.

What Works for Local Economic Growth

Reviewing evidence of relevant policy areas

Evidence reviews: Reviewing all available evidence on 11 policy areas affecting local economic growth to support local decision-making on how to allocate limited resources, and to provide the bases for the online toolkits – see Section 3. The reviews consider impact evaluations of policy interventions (causal effect and cost-effectiveness), outlining what tends to work but not where or for whom – they are a complement, not a substitute, for local practitioner knowledge. An aspiration for the Centre is to be able to fund and produce primary research and evaluations, in order to address knowledge gaps identified by these reviews.

Demonstrator projects: Supporting evaluation by providing free advice to local authorities, LEPs, Combined Authorities for implementing and evaluating trial local economic development programmes. The work, led by the academic element of the Centre (LSE), aims to build the evidence base as current evidence is often sparse or flawed. As the budget does not allow for conducting or commissioning primary research, the Centre has focused on its advisory role to get more demonstrators up and running, building networks and evaluation capacity. The learning is a two-way process: in addition to helping local authorities and other intervention providers evaluate, the Centre gains a better understanding of how local authorities approach such projects and the obstacles they face.

Where the evaluation involves comparison to a control group (not necessarily a randomised controlled trial), the Centre is able to provide ongoing support including:

- Advice on monitoring, appraisal and evaluation frameworks.
- Advice on evaluation design: different approaches, specific issues with chosen research designs, how to trial and data gathering.
- Help with the evaluation itself through specification of invitation to tender for evaluation. membership of advisory/steering groups and peer review of interim/final reports
- On occasion, peer support or undertaking analysis.

The Centre may also be able to help deliver the evaluation if it is:

- Generalisable
- Important
- Applying robust methods (most likely, but not necessarily an RCT)
- A complement to, not a substitute for, private sector / in-house analysis.

As of July 2017, 20 approaches have been pursued but only 3 or 4 have gone ahead. Variety of reasons for not proceeding (resources, 'politics').

NICE

Focused primarily on interpreting and presenting evidence

Guidance production: The bulk of the research synthesis conducted is to inform the various guidance on health practices and guidelines on health technologies that *NICE* produces. This guidance production process is described in more detail in Section 3, along with the evidence reviews and summaries produced by the Centre's Health Technology Evaluation teams.

Indicators: The Centre collects information on the quality of care provided (and the impacts on health) at national and local levels, to help GPs and CCGs:

- Identify where improvements are needed.
- Set priorities for quality improvement and support.
- Create local performance dashboards.
- Benchmark their performance against national data.
- Support local quality improvement schemes.
- Demonstrate progress that local health systems are making on outcomes.

The Centre does not allocate significant resources to creating or commissioning new primary research, though research recommendations for funders are produced from the guideline process.

What Works Scotland

Collaborative Action Research co-produced by the Centre and Community Planning Partnerships (CPPs), including representatives from central and local government and the third sector

Primary research produced through the Collaborative Action Research (CAR) approach:

Aberdeenshire: Work on 'Community capacity-building for health and wellbeing' included reporting on pilot programmes and current policies/practices following interviews, study visits, desk research, local consultation and reflections. Work on 'Community planning: partnership working and evidence use' involved early scoping discussions with central and local CPP staff, mapping developing collaborative practices, development workshops/collaborative discussions and several national events to support implementation and foster effective learning and sharing.

Fife: Three Partnership Innovation Teams (Welfare, Family Fun and Schools) identified research problems, collected and analysed data (e.g. via surveys, focus groups and existing databases), before interpreting and acting. An overarching strategy group and a range of events, meetings, resources, and tools helped to strengthen the capacity to understand, produce and use evidence and create a community of practice around issues of knowledge generation and use. Positive feedback has included reports of improved links between different parts and levels of the respective systems, and a greater awareness of frontline perspectives and issues.

Glasgow: Contributing evidence and developing the research skills of the participants/CPP partners through case studies, evaluations, an evaluability assessment (to develop and clarify the underpinning 'theory of change' of Thriving Places), co-produced seminars bringing together CPP partners and Masters students interested in related fieldwork, and support for conducting and analysing community consultation.

Synthesis: Some has taken place as part of the CAR approaches described above. This has resulted in around ten evidence reviews and briefings, as of July 2017.

Research on the production and use of evidence:

Learning about partnership working and collaborative learning: The Centre interviewed a range of staff from the Aberdeenshire community planning partnership and held ‘*What have we learnt by using CAR’ national events* to capture learnings and evidence emerging from across case study partners to inform the development of findings and recommendations about what works in public service reform.

Evidence to Action in public service delivery: The Centre also explored and built an overview of the evidence to action activity of WWS’s knowledge partners in the context of public service delivery, identifying mechanisms used and gaps in evidence provision.

Community profiling (see Section 3): The Centre is capturing experiences and lessons from the co-production of neighbourhood data profiles and sharing this at a national level.

Wales Centre for Public Policy (formerly the Public Policy Institute for Wales)

Commissioning experts to apply their existing knowledge and expertise to key issues

Expert synthesis: PPIW provided independent, authoritative analysis and advice on the issues which matter most to Welsh policymakers (identified through the process described in Section 5). The Centre examined literature and consulted experts in Wales, the UK and further afield to develop the research requirements before commissioning this from a relevant expert. Research included rapid reviews of the evidence; policy reports commissioned from an expert or group of experts; one-to-one discussions between ministers and experts; workshops with experts and officials; modelling and organisational analyses. The PPIW then produced a brief policy report and with the expert, discussed this with ministers – see Section 3. The Centre has undertaken more than 70 such studies in four years and plus additional work on significant priorities for the Welsh Government, enabled by ESRC funding. Positive feedback has been provided by ministers, special advisers and officials, who attribute a range of new policies/changes in policies directly to these outputs. Funding has now been secured for a further five years as the Wales Centre for Public Policy.

Primary research: Commissioned very occasionally but the main outputs of the Centre are the reviews of existing evidence and experience commissioned from experts described above.

What Works Wellbeing

Commissioning research from the four academic-led consortia and other partners

Commissioning research: The Centre partners with the ESRC to commission academic institutions through grants – primarily systematic reviews, to provide an independent assessment of evidence findings and quality, and scoping reviews, to provide a narrative of the existing evidence base and identify gaps. The workplans were agreed by the Board in December 2015 (and published in early 2016) after a consultation phase with stakeholders and users of the Centres work alongside public dialogues. Secondary analysis is often used to address evidence gaps using a range of large, sometimes longitudinal, datasets where possible to help show causality. The vast majority of the Centre’s resources are focused on this research production as 90% of total grant funding is paid directly to the research producer.

The review process involves initial scoping and various forms of stakeholder engagement (such as DELPHI panels, as used in the published review by Langer et al., 2016) to determine questions before the academic team conducts the review according to the Methods Guide. The review is then assessed for quality assurance by the Centre Advisory panel of academics and end users – including wellbeing experts, review methodology experts, knowledge use experts including some people who were on the original commissioning panel – with comments referred back to the authors. At this point the draft also

goes to the core team, board and relevant partners (in some cases advisory panels for specific work areas or sectors located within the relevant academic teams). Comments are referred back to the authors. The Centre then translates the review, adding evidence ratings, turning it into a brief and simplifying it as much as possible, before drawing up a communications plan.

Secondary research: The Centre does not currently commission or conduct primary research such as evaluation studies, though it does commission secondary data analysis to investigate questions that have not been addressed in existing literature. It is, however, increasingly working with commissioners of primary research and evaluations to advise on evidence gaps and how to best fill them, and to advise those doing projects and policies on how they can be evaluated effectively. This is because a lot of projects and policies are already happening to improve wellbeing but the learning from them is not regularly and systematically being collected and shared. Dependent on securing funding, future plans may also include expanding the research programme to include trials in order to build the evidence base.

Methodology workstream: The Centre has developed methodology and begun work towards a common currency for comparing the wellbeing impact of different policies and approaches. The methods group, led by the Head of Evidence in the core team in collaboration with the 4 teams working on the key topic areas, produced an Evidence Review Methods Guide (see Chapter 4, Evidence Standards). This is reviewed by the methods group every six months and includes internationally recognised qualitative evidence standards (the first What Works Centre to do so). This and the guides produced on cost effectiveness are primarily internal resources and for use by other research teams looking to do similar work. As wellbeing is a new field of research, the Centre also produces methodology resource for external use which includes discussion papers, how-to guides and, more recently, an online website on evaluation guidance.

Research on research use: Collaboration with A4UE & EPPI to produce the discussion paper 'Using Evidence; What Works?' and on the Science of Using Science knowledge project with the Wellcome Trust, Nesta/Alliance for Useful Evidence and the Evidence for Policy and Practice Information Centre. To underpin the Centre's work it used an evidence base on knowledge use that includes the above research. The evidence use mechanisms identified in the review are built into the Centre's workplan.

A1.5 USER PERSPECTIVES

Examples of activities undertaken by the What Works Centres to involve users in setting priorities, principles or ways of working

Centre for Ageing Better

Commissioned scoping work and primary research for lived and professional experience, to help determine priorities and identify knowledge gaps

Scoping and exploratory research: To identify what matters to people regarding ageing and what can affect these outcomes, the Centre commissioned a stakeholder survey (plus statistical analysis segmenting the population and further qualitative investigation) and conducted public consultation, an evidence review, a series of high level, expert roundtables and 3 deliberative workshops with people aged 50 and over. This scoping work is complete and the long-term research priorities and topics

decided. Further research on ‘what works’ now seeks to identify good practice or new ideas where evidence is insufficient to review.

College of Policing / What Works Centre for Crime Reduction

Input to ensure the development of high quality regulations, determinations, Codes of Practice and guidance

The College's Regulatory Consultative Group (CRCG): Collecting input and agreement regarding working practices and policies from users and other stakeholders: members of staff associations, unions, the Home Office and other interested parties. The CRCG supports the Board and the College Executive in discharging their responsibility for preparing Police Regulations, determinations, Codes of Practice and guidance.

Guideline development: The process currently being piloted to develop guidance (described in Section 3) uses committees made up of academics, frontline practitioners and SMEs to ensure the needs of the user are met.

Early Intervention Foundation

Input for the redevelopment of the Guidebook

User research was undertaken at the start of the project to redevelop the *EIF* Guidebook (re-launched in March 2017), including online survey and phone interviews with representative users from Whitehall, local government and frontline practice.

Education Endowment Foundation

Input into guidance development

The guidance development process described in Section 3 involves working with teachers and other stakeholders to agree the issues on which teachers most need information and recommendations.

What Works for Local Economic Growth

Expert advice on research priorities and communication

User Panel: Advises the Centre on priorities for research and ways to make findings as helpful as possible to those who can make the best use of them. As at July 2017, the Panel was chaired by the Chief Economic Development Officer at Leeds City Council and is composed of a group of experts with a strong interest in using evaluation to improve policy-making.

NICE

Produce guidance and standards that are fit for the audience needs and take account of relevant overarching moral and ethical issues

Guidance committees: Independent, diverse, multidisciplinary committees that draw on their expertise to develop recommendations in the areas defined by the guideline scope. They include practitioners and lay members selected for their knowledge and experience, each with equal status (with the exact composition tailored to the guideline topic and agreed by the Developer and *NICE* quality assurance staff). A committee may refine and agree the review questions to be addressed by the evidence reviews, and advise on developing the review protocol and alternative analyses. Each then considers the

evidence, develops the recommendations, considers factors that may help or hinder implementation and advises on implementation support that may be needed. Each piece of guidance includes a prominent statement to emphasise why it was developed and the case for its implementation.

Stakeholder consultation: Once the committee has made its recommendations, a draft version of the guideline is sent to stakeholders for consultation. Equality issues are identified and considered before the guideline is sent out, and the guideline is assessed for its impact on equality. The guideline developer considers comments from stakeholders and agrees any changes.

Citizens Council: A panel of 30 members of the public that largely reflect the demographic characteristics of the UK. The Council's recommendations and conclusions are incorporated into a document called Social value judgements and, where appropriate, into *NICE's* methodology. Councillors are recruited by an independent organisation and serve for up to three years, meeting once a year for 2 days at a time for discussions arranged and run by independent facilitators.

The Public Involvement Programme described in Section 2 also encourages wider input into the Centre's practices.

What Works Scotland

Participation in co-production and collaborative action research (CAR)

This is integral to the whole CAR process described in the Primary research production: local community planning partnership staff are engaged from the start to discuss and decide the relevant topics, then to plan and deliver the research.

Wales Centre for Public Policy (*formerly the Public Policy Institute for Wales*)

Discussions with ministers / First Minister to suggest and agree priorities, to set the research agenda

Scoping & priority setting: PPIW held regular meetings with each minister across the Welsh Government and scoping workshops to identify key research questions. This process was facilitated by the close relationship with ministers and the profile of the Centre among them. The Centre suggested potential evidence needs via a briefing and the Government confirmed priorities (typically around 40 topics). The Centre then assessed the issues on which it could add most value and agreed a programme of around 12-16 issues with the First Minister, with capacity for additional issues to be tackling part way through a programme on a call off basis (typically around 6). This process generally took between 6 to 9 months, resulting in a programme of research that the Centre would then commission from experts though the process described in Section A1.4. The benefits of engaging the research user in this way are described in more detail in Section A1.2.

What Works Wellbeing

Consultation and research to assess user needs

Setting priorities and direction: Extensive user engagement is built in to the Centre's governance and processes, including board and advisory panel membership, recruitment and partnerships. The first six months of the Centre from June 2015 was a consultation phase that included:

- 'Voice of the User' consultations between the four evidence teams and their respective stakeholders to inform detailed workplans (methods varying according to audience needs)

- *Public Dialogues* commissioned to engage with the public across the UK (108 participants) to inform the Centre design and policy priorities. Results of consultations were published along with summary documents, reports and technical appendices for each public dialogue area. The dialogues were very well received (referred to as exemplary in an independent evaluation) and downloaded nearly 1,000 times by March 2016 when the consultation ended.

Additionally, to help ensure that outputs meet user needs, users are included alongside experts as members of the commissioning panel that reviews research applications and interviews applicants before making recommendations to the funders, ESRC. Users are also represented in governance processes and throughout the Centre: for instance, the Advisory Panel, the partners' forum, the Strategic Council for Wellbeing in Work, the Social Impacts Task Force, the Board, and the staff teams and consortia.

APPENDIX A2: MONITORING AND EVALUATION

Ageing Better

The Centre tracks engagement with relevant Government departments, monitoring engagement both through its Customer Relations Management service and informally. Other than building up evidence of demand for *Ageing Better* outputs, the main visible impacts so far were getting *Ageing* into the Housing White Paper, and contributing to the Government's Fuller Working Lives strategy (the issue of life-long learning), both of which were published in Feb 2017. The Government recognising ageing issues in policy due to *Ageing Better's* input shows that they are becoming a known, reputable voice as planned.

Communications (social media hits/mentions) are benchmarked against ILC, Age UK, the *EEF* & the Resolution Foundation, the results of which demonstrate a good profile built in short time. A stakeholder survey showed high level of unprompted awareness: around half (47%) of the 'outer' stakeholders identified (as opposed to core stakeholders who had established relationships with *Ageing Better*) were aware of the Centre, with much higher recognition from organisations where ageing is a high priority.

Website usage and access to evidence statistics (18 Dec 2016 to 18 Dec 2017):

- Total website downloads 12,876
- Total sessions 167,503
- Total page views 307,358

Top 5 downloads: Strength and balance infographics, 995; Later life in 2015, 591; The benefits of contributing to your community in later life, 509; Fulfilling work: What do older workers value about work and why? 395; Retirement transitions ITT (archived), 386.

Crime Reduction

User testing of the Crime Reduction Toolkit took place initially and again recently at a workshop by practitioners including police officers and staff, and PCC and charity representatives. This identified general approval but with some usability issues: the amount of data included means the Toolkit is seen as sophisticated but complicated. Developing the Toolkit presented a challenge to balance providing evidence for policymakers on the likely average effects of interventions (the original designed purpose) against informing practitioners what works and how. Further work is now taking place to package the toolkit in order to make it more relevant to current challenges for police officers and staff.

Usage of the What Works Centre for Crime Reduction (WWCCR) Microsite rose to 4,000-6,000 monthly users during the last quarter of 2016 (having been between around 2,500 and 4,500 throughout 2015 and 2016, except when it peaked at 7,316 in March 2015 after the launch of the Toolkit and the Police Knowledge Fund). 46% of the evaluation survey respondents had used the website. Homepage views peaked at around 20,000 in Oct 2016, never having dropped below 10,000 since introduction in Feb 2015.

The Toolkit has averaged 2,100 views per month to date with 54% of respondents to an evaluation survey reporting having used the Toolkit. 15% of respondents reported that they now use the Crime Reduction Toolkit to inform day-to-day decision-making, with 8% still using the What Works Briefings, 11% using the WWCCR microsite and 29% using POLKA.

EIF

The Government values *EIF*'s quality and outputs, which is demonstrated by feedback from government and renewed funding. Contracts for work with government departments include KPIs for delivery of projects, activities and outputs.

In 2017/18, *EIF* undertook a survey of stakeholders (both known and unknown to *EIF*) at national and local levels, across the various sectors it interacts with; this survey received over 500 responses. Among those who had heard of *EIF* previously, 91% said they agreed or strongly agreed that they trust information provided by *EIF*, 90% respect the work of *EIF*, and 86% value its outputs. Around 80% of respondents had previously come into contact with *EIF* content (such as reports, resources, events, or direct advice), and the vast majority considered this content to be "very useful" or "quite useful" (88–100%, depending on the specific form of engagement).

There are generally insufficient resources for evaluation but demand for the Centre's outputs is high and event attendee numbers are reported quarterly to the board. 216 attended FFL dissemination events and a further 200 booked on the remaining regional seminars, reaching 94 (62%) of top tier local authorities. The Centre for Educational Development, Appraisal and Research (CEDAR) at the University of Warwick was commissioned to conduct some evaluation work on the *EIF* conference, with initial findings that, of the attendees surveyed:

- 87% reported that information from the conference will influence on their practice.
- 80% reported changes in their understanding of the evidence.
- 60% reported greater confidence in using evidence in their decision-making at work.

One series of early years events (one national conference and five regional evidence seminars) was evaluated by a team from the University of Warwick. Their findings include:

- Both the conference and seminars were successful in increasing participants' understanding of the evidence around parenting and inter-parental relationships: over 80% of participants across events felt they understood a lot better the scientific evidence around these two areas.
- Both events were successful in increasing understanding about the evidence generation process.
- Importantly, attendance and learning that took place at these events led to a change in the way people worked: over a period of 4 to 5 months after these events, *EIF* evidence was used to influence commissioning decisions (10% to 31%); and to develop programmes further (31% to 47%; e.g., to develop evidence for existing interventions, to test new interventions).
- Participants at the Evidence Conference and Evidence Seminars had very similar positive views on the events themselves; over 90% would recommend them to colleagues.
- Between 58% and 85% of participants across events had sought out further evidence, information or research on parenting programmes or inter-parental relationships, suggesting that that event attendance and learning stimulated further enquiry into available evidence.

The Places Network includes 37 members from 29 geographical areas and positive feedback was received from attendees of the first Places Network meeting in October 2016. Members valued updates on emerging issues, and meeting/learning from similar individuals and organisations.

Access to evidence and communications statistics, as of December 2016*:

- Guidebook – 26,000 users since launch in 2014, from at least 131 of the 152 English upper-tier or unitary local authority areas including local authorities, NHS trusts, police and schools.
- Foundations for Life report – 2,736 downloads and 8,913 unique pageviews of the since publication in 2016. This is *EIF*'s most viewed report, though at least 8 others have 1,000+ views.
- 175,086 website users since March 2014.
- 3,397 newsletter subscribers.
- 7,876 Twitter followers.
- 72,734 visits to Twitter profile since May 2015.

The Centre has also received feedback demonstrating that its outputs are well received, have had a direct impact on policy (for example, the DWP commissioned £15 million of support, drawing directly on one review) and have supported application (local police using *EIF* evidence in work with primary schools).

** As at March 2018, the guidebook has had over 45,000 users and at least 17 publications have received 1,000+ pageviews, including the flagship Foundations for Life report with around 4,500 downloads and 19,000 pageviews.*

EEF

Appropriate evaluation methods are agreed as part of the commissioning process for all external research. The *EEF* works with partners to design and deliver programmes of training and support for implementation, such as the North East Primary Literacy Campaign or the guidance on applying for the Strategic School Improvement Fund (SSIF). It also produces various implementation resources such as the Self-assessment audit tools, Staff observation tools, and Draft school policies that accompanied the Making Best Use of Teaching Assistants guidance. The impacts of this work is evaluated, for instance by Sheffield Hallam University and the Institute for Fiscal Studies (IFS) are for the Making Best Use of Teaching Assistants Campaign. A report integrating the findings from the process and impact evaluation, as well as the findings from the campaign in Lincolnshire, is due in autumn 2018. The Centre has also received positive feedback from some of its work on knowledge mobilisation, for example from schools involved in the Excellence Fund in Suffolk stating that the funds had enabled the launch of programmes that will benefit children (more than 120 schools offered funding to train a total of more than 600 school staff).

Access to evidence and communications headline data:

- In 2017, 57% of secondary schools and 48% of primary schools used the *EEF*'s Toolkit to help decide which approaches and programmes to adopt (up from 11% in 2012), according to an NFER survey.
- Of the 17,675 schools in the *EEF*'s online Families of Schools database, over 80% have been looked up by end users. Of these schools, 95% have been looked up more than 3 times.

Growth

A series of blogs was published by the Centre to introduce ways of improving the evaluation of local growth policy. It was intended to demystify the process of undertaking robust and useful evaluation of local growth programmes, and encourage more policymakers to undertake such evaluations. This series of blogs and resources has had over 7,000 views since it was published in 2015.

Toolkits and overviews were produced, each providing a description of a particular programme or intervention, its aims, effectiveness, cost-effectiveness, the strength of the evidence, plus a link to a pdf presenting the evidence in more detail. As of July 2017, around 20 toolkits and overviews have been produced and the toolkit pages have had over 5,600 views.

The number of demonstrator projects completed is monitored but there are currently insufficient funds to undertake further evaluation of these or other research production activities.

NICE

Since February 2017, the Centre for Guidelines has been responsible for publishing clinical and public health guidance (mostly updating existing guidelines as their portfolios are completed) and social care guidance. 2016/17, the Centre published guidance on tailored care for complex needs, arming the public to fight antimicrobial resistance and treating low back pain. *NICE* also published 5 pieces of diagnostics guidance (25 in total), 25 interventional procedures guidance covering a range of treatments or diagnostic tests, 38 MIBs, 5 new MTGs (33 in total), 53 final technology appraisals (over 400 in total), 20 evidence summaries, 15 key therapeutic topic summaries, 6 briefings providing tips on health technology guidance adoption, 81 tools or other resources, 33 new quality standards and 4 updated standards (148 in total). *NICE* also added all 200+ advice products to the Pathways programme, assessed the potential environmental impact of *NICE* guidance and hosted two stakeholder learning events. It disseminated key information across the NHS through regular contact with a network of 70 prescribing associates and through the weekly medicines and prescribing alerts service that more than 12,000 people are signed up for. In addition to the collaboration with The Royal Colleges, *NICE* worked with NHS organisations/chief medical officers across the four UK nations and various companies, academics and clinical experts to address evidence gaps.

NICE provides resource impact assessment of the guidance and the assessment team advises guideline committees on issues such as patient demand and training. The impact team measures the uptake of *NICE* guidance, quality standards and advice recommendations by using data from national or local audits, reports and journal publications. The uptake data included in all published audits is available online and a March 2017 report reviews the uptake and impact of *NICE* guidance, standards and advice. A monthly digest and planner is also currently shared with approximately 1000 subscribers each month, ranging from academics and commissioners to independent subscribers.

- Medtech innovation briefings webpages receive 700 views per day, more than double compared to when first published three years ago.
- Two-thirds of the 112 recommendations or quality statement measures included in the March 2017 impact report show increased uptake since the previous audit (September 2016), 19 of which were statistically significant.
- Various technologies, guidance and standards have been adopted by the NHS, e.g. HeartFlow technology which estimates suggest could save the NHS £214 per patient.

Scotland

None specified for the workshops and development days, but the Facilitative Leadership training attendees provided positive feedback and committed to delivering further training themselves to cascade the knowledge.

Wales (PPIW, replaced by WCPP)

The impact of the Centre's work is assessed through an external evaluation report, internal self-evaluation, formal and informal feedback from Ministers, an impact log and impact case studies. Positive feedback has been received from ministers, special advisers and officials, and they have attributed a range of new policies or changes in policies directly to work undertaken by the PPIW, for example: (1) Creation of the Invest to Save programme; (2) Changes in the Government's plans for free child care; (3) A new framework of provision for young care leavers; (4) Development of the Government's international strategy; (5) Creation of national well-being indicators.

Access to evidence and communications headline data:

- Total number of views of PPIW reports (Jan 2014 – Sept 2017): 16,249.
- Report with most single views: Promoting Emotional Health, Well-being and Resilience in Primary Schools (2738 views)

Wellbeing

The impacts are not expected to be immediate as the Centre is focusing much of its efforts into long term plans to shift people's thinking and organisations' agendas. There have been some early indications of the Centre's effectiveness at changing thinking and behaviour, such as the setup of a joint project between a secondee's organisation and What Works Wellbeing following the end of their secondment.

Access to evidence and communications headline data:

- Website: 6,000 views and 2,300 visitors in October 2016. (These figures had broadly doubled by September 2017 and again by February 2018.)
- As of February 2018: 6,500 Twitter followers, more than 2,500 people on the evidence alert mailing list, and more than 18,000 product downloads, 225 contributions to calls for evidence. Over 4000 people from policy, practice and academia have attended What Works Wellbeing events, courses and roundtables.
- The results of public/stakeholder consultations were published and had been downloaded nearly 1,000 times by 31 March 2016. The dialogues were very well received (referred to as exemplary in an independent evaluation).
- The Centre's work has been featured in the Stevenson-Farmer Review; Culture White Paper; ITT for Sport England; MHCLG response on parks; plus DWP and BEIS are using the existing reviews in writing their 10 year plans for Work, Health & Disability, and government responses on mental health and good quality jobs. Various feedback has been received reporting better understanding of evidence and the use of this evidence in decision-making.

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Founded in 1990, the Social Science Research Unit (SSRU) is based at the UCL Institute of Education, University College London. Our mission is to engage in and otherwise promote rigorous, ethical and participative social research as well as to support evidence-informed public policy and practice across a range of domains including education, health and welfare, guided by a concern for human rights, social justice and the development of human potential.

The views expressed in this work are those of the authors and do not necessarily reflect the views of the EPPI-Centre or the funder. All errors and omissions remain those of the authors.

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