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**Discussion Paper 2**

**Evidence-based policy and practice:  
moving from rhetoric to reality**

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## **Introduction**

The UK Labour Government, first elected by a landslide in 1997, and returned with a substantial majority in 2001, has placed great store on being a ‘modernising’ government. In setting out its modernising agenda, the government pledged: *‘we will be forward-looking in developing policies to deliver outcomes that matter, not simply reacting to short-term pressures’* (White Paper 1999). In support of such a focus, official documents set out the key characteristics of ‘modernised’ policy (Box 1). Of the seven characteristics listed, one states that policy should be *‘based on all available best evidence’* (Strategic Policy Making Team 1999). This both asserts the importance of evidence in effective policy making whilst simultaneously placing it in a broader context as only one amongst several imperatives.

Furthermore, in linking policies to outcomes, the government emphasises the need for policy implementation to deliver real change. Indeed, if *‘education, education, education’* was the mantra of Labour’s first term, then *‘delivery, delivery, delivery’* is set to be the rallying cry of the second. Thus evidence needs to impact not just on policy development, but on policy implementation and, through this, practitioner behaviour change as well. Only if radical changes are seen in front-line services will the government be seen to have made good its election promises on ‘delivery’. Thus evidence about what to do, how to do it, and how to ensure it happens has become a focus for much activity in many parts of the public sector: education, health care, criminal justice services and social care most especially.

This paper develops one particular conceptualisation of the ‘evidence into policy and practice’ agenda, and explores how the UK public sector is grappling with this issue. Along the way we make a number of observations about how things are, as well as suggestions as to how things might be improved. In doing so we engage with a wide literature, but more specifically draw on a series of sector specific reviews published in the book *What works: evidence-based policy and practice in public services* (Davies, Nutley et al. 2000), and two special issues of the journal *Public Money & Management* devoted to the same topic (Jan 1999; Oct 2000).

Because the use of evidence is just one imperative in effective policy making, and in acknowledgement that policy making itself is always inherently political, a *caveat* seems appropriate at this point. Further, as professional practice is also most usually heavily contingent on both client needs and local context, warnings are similarly needed in this area also. The term ‘evidence-based’ when attached as a modifier to policy or practice has become part of the lexicon of academics, policy people, practitioners and even client groups. Yet such glib terms can obscure the sometimes only-limited role that evidence can, does, or even should, play. In recognition of this, we would prefer ‘evidence influenced’, or even just ‘evidence-aware’ to reflect a more realistic view of what can be achieved. Nonetheless, we will continue the current practice of referring to ‘evidence-based policy and practice’ (EBPP) as a convenient shorthand for the collection of ideas around this theme which have risen to prominence over the past two decades. On encountering this term, we trust the reader will recall our *caveat* and moderate their expectations accordingly.

#### ***Four requirements for improving evidence use in policy and practice***

If evidence is to have a greater impact on policy and practice then four key requirements would seem to be necessary before such an agenda can be developed. We present these in sequence for convenience rather than because of strong prior beliefs that the sequencing reflects either necessary temporal positioning or relative importance. These key requirements are:

1. Agreement as to the *nature* of evidence.
2. A strategic approach to the *creation* of evidence, together with the development of a *cumulative knowledge base*.
3. Effective *dissemination* of knowledge; together with development of effective means of *access* to knowledge.
4. Initiatives to *increase the uptake* of evidence in both policy *and* practice.

We will now take each of these areas in turn to explore both diversity across the public sector and to make some tentative suggestions about how the distinctive EBPP agenda may be advanced.

### ***The nature of evidence***

In addressing the EBPP agenda in 1999, the UK Government Cabinet Office described evidence as:

*“Expert knowledge; published research; existing statistics; stakeholder consultations; previous policy evaluations; the Internet; outcomes from consultations; costings of policy options; output from economic and statistical modelling.”* (Strategic Policy Making Team 1999)

This extraordinarily broad and eclectic definition clearly positions *research*-based evidence as just one source amongst many, and explicitly includes informal knowledge gained from work experience or service use: *“There is a great deal of critical evidence held in the minds of both front-line staff ... and those to whom policy is directed.”* (Strategic Policy Making Team 1999).

Such eclecticism, whilst inclusive and serving to bring to the fore hitherto neglected voices such as those of service users, also introduces the problems of selection, assessment and prioritising of evidence. It is instructive that such egalitarianism in sources of evidence is not present equally in all parts of the public sector. Health care, for example, which has of all the service areas engaged in the most sustained manner with EBPP, has within it an established ‘hierarchy of evidence’ for assessing what works. This places randomised experimentation (or, even better, systematic reviews of these) at the apex; observational studies and professional consensus are accorded much lower credibility (Hadorn, Baker et al. 1996; Davies and Nutley 1999). This explicit ranking has arisen for two reasons. First, in health care there is a clear focus on providing evidence of efficacy or effectiveness: which technologies or other interventions are able to bring about desired outcomes for different patient groups. The fact that what counts as ‘desired

outcomes' is readily understood (reductions in mortality and morbidity; improvements in quality of life) greatly simplifies the methodological choices. The second reason for such an explicit methodological hierarchy lies in bitter experience: much empirical research suggests that biased conclusions may be drawn about treatment effectiveness from the less methodologically rigorous approaches (Schulz, Chalmers et al. 1995; Kunz and Oxman 1998; Moher, Pham et al. 1998).

In contrast to the explicit hierarchical approach in health care, other sector areas such as education, criminal justice and social care are more properly characterised by methodological 'paradigm wars' (Davies, Nutley et al. 1999). In these areas the research and practice communities are riven with disputes as to what constitutes appropriate evidence, there is relatively little experimentation (especially compared with health care), and divisions between qualitative and quantitative paradigms run deep (Davies, Nutley et al. 2000). This happens in part because of the more diverse and eclectic social science underpinnings in these sectors (in comparison to the natural sciences underpinning in much of health care), and in part because of the multiple and contested nature of the outcomes sought. Thus knowledge of 'what works' tends to be influenced greatly by the kinds of questions asked, and is in any case largely provisional and highly context dependent.

These observations suggest that if we are indeed interested in developing an agenda where evidence is more influential then first of all we need to develop some agreement as to what constitutes evidence, in what context, for addressing different types of policy/practice questions. This will involve being more explicit about the role of research *vis-à-vis* other sources of information, as well as a greater clarity about the relative strengths and weaknesses of different methodological stances. Such methodological development needs to emphasise a 'horses for courses' approach, identifying which policy and practice questions are amenable to analysis through what kinds of specific research techniques. Further, it needs to emphasise methodological pluralism, rather than continuing paradigmatic antagonisms; seeking complementary contributions from different research designs rather than epistemological competition. The many

stakeholders within given service areas (e.g. policy makers, research commissioners, research contractors, and service practitioners) will need to come together and seek broad agreement over these issues if research findings are to have wider impact beyond devoted camps.

### ***A strategic approach to knowledge creation***

Whichever part of the public sector one is concerned with, one observation is clear: the current state of research-based knowledge is insufficient to inform many areas of policy and practice. There remain large gaps and ambiguities in the knowledge base, and the research literature is dominated by small, *ad hoc* studies, often diverse in approach, and of dubious methodological quality. In consequence, there is little accumulation from this research of a robust knowledge base on which policy makers and practitioners can draw. Furthermore, additions to the research literature are more usually research-producer driven rather than led by research-users' needs.

Recognition of these problems has led to many attempts to develop research and development (R&D) strategies to address these problems (see Box 2 for an example in education). Developing such strategies necessarily requires addressing a number of key issues:

- What research designs are appropriate for specific research questions, and what are the methodological characteristics of robust research?
- What is an appropriate balance between new primary research and the exploitation of existing research through secondary analysis?
- How can the need for rigour be balanced with the need for timely findings of practical relevance?
- What approaches can be used to identify gaps in current knowledge provision, and how should such gaps be prioritised?
- How should research be commissioned (and subsequently managed) to fill identified gaps in knowledge?

- How can research capacity be developed to allow a rapid increase in the availability of research-based information?
- How are the tensions managed between the desirability of ‘independent’ researchers free from the more overt political contamination, and the need for close co-operation (bordering on dependence) between researcher users and research providers?
- How should research findings be communicated, and, more importantly, how can research-users be engaged with the research production process to ensure more ready application of its findings.

Tackling these issues is the role of effective R&D strategies, but gaining consensus or even widespread agreement will not be easy. The need to secure some common ground between diverse stakeholders does however point the way to more positive approaches. The traditional separation between the policy arena and the research community has largely proven unhelpful. Much of the more recent thinking in this area now emphasises the need for partnerships if common ground is to be found (Laycock 2000; Nutley, Davies et al. 2000). Researchers will need to become much savvier about the policy process, and far more closely engaged with their policy customers. Policy people in turn need to gain a greater and more sophisticated understanding about the research process and what it can and cannot accomplish in reasonable time. Closer and more integrated working over prolonged periods can most effectively foster these cross-boundary understandings. Doing so however is not cheap or organisationally straightforward, and it raises some serious concerns about independence and impartiality. Nonetheless, examples of successful development of policy from suggestive evidence, policy that is then seen through to practice change and beneficial outcomes, often display an unusual degree of partnership working (see Box 3).

### ***Effective dissemination; effective access***

Much of the activity built around supporting the EBPP agenda has focused on searching for, synthesising, and then disseminating current best knowledge from research. Thus the

production of systematic reviews has been a core activity of such organisations as The Cochrane Collaboration (health care), The Campbell Collaboration (broader social policy, most notably criminal justice), the NHS Centre for Reviews & Dissemination (health care again), and the DfEE Centre for Evidence-Informed Policy (education). The strategies used to get these products to where they can be utilised involve both dissemination (pushing information from the centre outwards) and provision of access (web-based and other repositories of information that research-users can tap into).

Two main lessons have emerged from all of this activity. The first is that pushing information from the centre out is insufficient and often ineffective: we also need to develop strategies that encourage a ‘pull’ for information from potential end users. Following on from this is the need to address issues of diffusion much more than dissemination.

Diffusion – defined by Rogers as *‘the process by which an innovation is communicated within a social system, and adopted or rejected by its members’* (Rogers 1995) – implies a much more proactive stance towards the communities within which the evidence is intended to be used. In terms of encouraging EBPP we can think of three different levels of diffusion that are required (Nutley and Davies 2000):

- *Diffusion of best practice*: i.e. increasing the uptake of ‘evidence-based technologies or practices’ – and encouraging the abandonment of those technologies or practices which evidence shows are ineffective.
- *Diffusion of the ideology of evidence*: i.e. developing amongst policy makers and – most especially – service delivery professionals a culture where evidence is valued and sought as part of routine decision making.
- *Diffusion of organisational innovations*: i.e. the promulgation of those organisational structures, processes and strategies which encourage the generation, searching, appraisal and use of best evidence.

Understanding these different levels of diffusion suggests that different messages may be required for different audiences at different times. For example, it clarifies that promulgation of individual research findings may be less appropriate than distilling and sharing pre-digested research summaries; it also suggests that multiple channels of communication – horizontal as well as vertical; networks as well as hierarchies – may need to be developed in parallel. By moving our conceptualisations of this stage of the EBPP agenda away from ideas of passive dissemination and towards much more active and holistic change strategies, we may do much to overcome the often disappointing impact of evidence seen so far (Nutley, Davies et al. 2000).

### ***Initiatives to increase the uptake of evidence***

Increasing the uptake of evidence in both policy and practice has become a preoccupation for both policy people and service delivery organisations. While not wishing to deny that evidence is just one ingredient in the policy mix, accumulated experience and some empirical research has identified a number of circumstances when research evidence is more likely to be incorporated into policy (Box 4). Paying attention to these, and restructuring policy processes to ensure that some of these stipulations are met, provides one set of guidance for increasing the impact of research on policy.

Moving from a consideration of policy formulation, to a perspective of policy implementation brings into focus the need to encourage practitioner behaviour change – so that services delivered are more closely in-line with best evidence. Here, many strategies have been tried ranging from personal incentives to wholesale organisational change (Box 5). From a considerable review effort in health care (Bero, Grilli et al. 1998; Effective Health Care Bulletin 1999; Halladay and Bero 2000) some consistent lessons are beginning to emerge:

- Most interventions are sometimes effective.
- None are always effective.

- Interventions based on diagnosis of the barriers to evidence-based practice are more likely to be effective.
- Multifaceted approaches show best chances of success.

Notwithstanding the generality of these observations, more specific conclusions were drawn about the likely success of different change strategies:

- Strategies found to be generally *effective* included: financial incentives; educational outreach; reminder systems.
- Strategies found to be generally *ineffective* included: passive dissemination; traditional post-qualification education
- Strategies found to be of *variable effectiveness* included: audit & feedback; opinion leaders; interactive educational initiatives; local consensus models; patient-mediated interventions.

Thus, in health care at least, we are beginning to develop an evidence base for the implementation of evidence based practice. It is not hard to see that many of these lessons will transfer readily to other parts of the public sector, especially those service areas that are concerned with the delivery of services by professionals to individual clients from within dedicated service organisations: social care, education and the criminal justice services.\*

Two key strategic choices have now emerged when considering how to influence practitioner behaviour change so that it is more congruent with best evidence. The first of these choices reflects the relative emphasis placed on the production of prescriptive

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\* Indeed, a new research centre – the *Research Unit for Research Utilisation* (RURU) – has been established at the University of St Andrews to explore just these issues in a broad array of service organisations (health care, social care, education and the criminal justice system). This Centre – part of the national ESRC-funded ‘Evidence Network’ – will also be concerned with synthesising lessons for the implementation of EBPP from diverse literatures such as those on individual and organisational learning, management of change and knowledge utilisation.

guidelines compared to the development of reflective practitioners. Evidence to date on guidelines implementation has been disappointing, unless such guidelines are accompanied by other structural and procedural change, such as performance indicators and incentives (Effective Health Care Bulletin 1999). In particular, when evidence is contested and highly context dependent, improving the capacity of practitioners to access, assess and incorporate evidence in a dynamic and flexible manner may have greater potential.

The second key choice, related to the first, is whether attention is focused on *individual* practitioners, their attitudes, beliefs and behaviours, or whether more holistic efforts are made at changing the *organisational context* within which such practitioners are situated. The overall rather disappointing impacts of interventions based on influencing individuals suggests that broader change strategies may offer more optimistic avenues (Halladay and Bero 2000). This means paying attention to structures, processes and cultures, as well as developing congruent changes at each layer within an organisation (see Figure 1). Developing and assessing such broader-based shifts to evidence-led practice remains one of the most formidable challenges for the reform of public services over the next decade.

### ***Concluding remarks***

This broad overview has identified some of the progress and many of the outstanding challenges facing EBPP in public services. At each stage we have sought to identify some of the more promising directions for future work, recognising that – given the relative paucity of evidence on effective knowledge utilisation – that these suggestions are tentative at best. The key theme that emerges is that simple and unproblematic models of EBPP – where evidence is created by research experts and drawn on as necessary by policy makers and practitioners – fail as either accurate descriptions or effective prescriptions. The relationships between research, knowledge, policy and practice are always likely to remain loose, shifting and contingent. Nonetheless, for those interested in getting research-based knowledge more firmly embedded in policy making, policy

implementation and professional practice, much can be learned from diverse cross-sectoral experience. One crucial lesson is the need to move to more holistic models that bring research producers, research funders and commissioners, policy makers, and practitioners into much closer and more sustained collaborations. It is through open partnerships that span the creation, validation and incorporation of research evidence that we are likely to see more effective use of such evidence for the betterment of public services.

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**Box 1: Characteristics of 'modernised' policy**

- Strategic: looks ahead, contributes to long-term goals.
- Outcome focused: aims to deliver real change.
- Joined up: works across organisational boundaries.
- Evidence-based: based on all available best evidence.
- Inclusive: is fair; takes account of the interests of all.
- Flexible and innovative: tackles causes, not symptoms; not afraid of experimentation
- Robust: stands the test of time; works in practice

Source: abstracted from (Strategic Policy Making Team 1999).

**Box 2: National Educational Research Forum R&D Strategy**

A forum of researchers, funders and users of research evidence with responsibility for developing a strategic framework for research in education. The focus of its work includes:

- Identifying research priorities
- Building research capacity
- Co-ordinating research funding
- Establishing criteria for the quality of research
- Considering how to improve the impact of research on policy and practice

Source: (Sebba 2000).

### ***Box 3: Getting evidence into practice: the repeat victimisation story***

In 1983 the Home Office gave crime prevention a higher profile and established a new policy unit – the Crime Prevention Unit (CPU). Unusually for that time, a small team of research staff was located within the unit – a group that eventually evolved into the Police Research Group (PRG) in 1992. It quickly became clear that there was very little information available to the police on what works in crime prevention. In order to fill this lacuna a series of research projects were commissioned.

An early research project proved to be particularly influential. The remit given to the researchers was to ‘find an area with a high burglary rate, make it go down, and tell us how you did it’. An inter-agency project team was brought together of academics, police, probation staff and others. Their analysis showed that there was a great deal of ‘repeat victimisation’: if a house had been burgled there was a significantly higher risk that it would be burgled again. This led the team to focus on victims as a way of reducing crime. By a variety of means they protected victims in a demonstration project, and reduced repeat victimisation to zero in seven months. The burglary rate in this demonstration area also fell overall by 75% over the following three years.

The challenge then became to get the findings of this research to impact more generally on crime prevention policy and practice. Contrary to the normal pattern of handing such a task over to a policy unit, it was agreed that ongoing responsibility for the programme of work should remain in the PRG.

In rolling out the research findings a great deal of effort was put into engaging practitioners (particularly police forces) in the repeat victimisation story. A specially constituted task force used a variety of means to reach practitioners:

- A repeat victimisation liaison officer was designated in each police force, whose task it was to ensure that the research was properly disseminated – in effect a local champion.
- A series of liaison officer meetings were arranged to share good practice and iron out any emerging practical difficulties in implementing strategies to tackle repeat victimisation.
- A publication designed specifically for practitioners at middle manager level was produced (‘Preventing repeat victimisation: the police officers’ guide’).
- A computerised database of good practice was established within the PRG for use by UK police forces.

Probably the most significant action in forcing repeat victimisation onto the police agenda, however, was its adoption as one of the Home Secretary’s police performance indicators for the prevention of crime. By 1998 all forces claimed to be able to identify repeat victims to some degree; all but one force was able to identify repeat victims of domestic burglary, and all forces had developed a strategy to tackle such crimes.

Source: adapted from (Laycock 2000).

#### ***Box 4: Evidence into policy***

Attention is more likely to be paid to research findings when:

- The research is timely, the evidence is clear and relevant, and the methodology is relatively uncontested.
- The results support existing ideologies, are convenient and uncontentious to the powerful.
- Policy makers believe in evidence as an important counterbalance to expert opinion: and act accordingly.
- The research findings have strong advocates.
- Research users are partners in the generation of evidence.
- The results are robust in implementation.
- Implementation is reversible if need be.

Source: adapted and extended from (Finch 1986; Rogers 1995; Weiss 1998).

***Box 5: Strategies used for changing professional practice***

- Financial incentives
- Continuing Professional Development
- Guidelines or other ‘prescriptions for practice’
- Educational outreach/academic detailing
- Reminder systems & client-mediated methods
- Audit, accreditation and other inspections
- Linkage to performance indicators/targets
- Identification of exemplars - “beacons”
- Organisational change e.g. team working

Source: adapted from (Bero, Grilli et al. 1998; Effective Health Care Bulletin 1999).

[See Figure 1 in separate file](#)

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