Implementing Evidence-Based Practice: A Synthesis of the Evidence

Flora Fitzalan Howard is a researcher and registered forensic psychologist based in HMPPS' Evidence-Based Practice Team, and co-editor of the Prison Service Journal.

Evidence-based practice (EBP) involves the conscientious, explicit, and judicious use of the best available evidence when making decisions.¹² This involves integrating multiple sources of evidence in a structured approach, combining research evidence, clinical expertise, and operational insights in the context of user characteristics, culture, and preferences.³ The three main benefits of, or reasons for doing, EBP are:

- To give us the best chance of improving outcomes; all interventions, treatments, activities, policy decisions and so on can a) achieve the intended (improved) outcome, b) make no difference/have no impact, or c) backfire and make things worse. Using the best available evidence gives us the best chance that what we put in motion will 'work' as hoped, bring better outcomes, and not cause unintended harm.
- 2. To help us to use money and resources wisely; for example, helping an organisation to choose from a range of potential activities the one that has the greatest impact, or the one that works equally well as others but for less cost.
- 3. To ensure that practitioners, decisionmakers, and organisations continue to learn and grow; integrating new, more credible, and trustworthy evidence into decisions routinely, so that new learning can be mobilised, and existing practices adapted in light of this.

EBP is eminently sensible; after all, why would a person or organisation do something that the evidence says is ineffective, or could even backfire and make

things worse? Why would a person make decisions about investment without first looking to the evidence to see if this is likely to work? And yet this is not uncommon. In correctional services around the world, 'common sense' is still often used as a powerful rationale for implementing programmes that have no basis in scientific evidence and virtually no hope of being effective.⁴ It can be very tempting to 'go with our gut' and trust our personal beliefs about what works or what is best when making decisions. We will all have heard people say they 'just know' that an activity will work or not, or that the solution is 'obvious' or a 'no brainer', and yet sometimes they struggle to back up this judgement with much, if any, evidence.

This happens in other areas of society too, of course, but this intuitive practice appears especially prevalent in corrections, and was described quite eloquently by an eminent scholar in this field: "*if I studied quantum physics, few people would offer their opinions about how I should go about my business, but because I study criminal behaviour and corrections, everyone offers me advice*".⁵

In the field of corrections around the world, there are several examples of interventions or projects where policy makers and practitioners believed strongly that they would work, but research went on to show that they were ineffective or actually increased reoffending.⁶ These sorts of unsuccessful initiatives teach us to be cautious about assuming our intuition or 'common sense' is correct, and instead we are encouraged to look to the conscientious, explicit, and judicious use of the best available evidence when making decisions.

This article synthesises available evidence on how to implement EBP and draws together suggestions on how organisations can develop in this area.

Being conscientious means making a concerted effort to gather and use evidence, committing effort and resources to do this, rather than relying on what is to hand or what we can easily access. Being explicit means spelling out and describing the evidence on which we base claims or decisions, so that it is open to scrutiny. Being judicious means focusing on the most reliable and trustworthy evidence, identified through critical appraisal.

^{2.} Sackett, D. L. (2000). Evidence-based medicine. New York: John Wiley.

^{3.} American Psychological Association. (2006). Evidence-based practice in psychology. American Psychologist, 61(4), 271-285.

Cullen, F. T., Blevins, K. R. Trager, J. S., & Gendreau, P. (2005). The rise and fall of boot camps: a case study in common sense corrections. *Journal of Offender Rehabilitation*, 40, 53-70.

^{5.} Latessa, E. J. (2004). The challenge of change: correctional programs and evidence-based practice. Criminology & Public Policy, 3, 547-560.

^{6.} Barnett, G., & Fitzalan Howard, F. (2018). What Doesn't Work to Reduce Reoffending? A Review of Reviews of Ineffective Interventions for Adults Convicted of Crimes. *European Psychologist*, *23*(2), 111–129.

What is 'Evidence' and What Counts as 'Good' Evidence?

There are four main types of evidence that contribute to EBP. Determining the best available evidence for EBP requires a careful assessment of the relevance and reliability of each source to determine how confident we can be in the findings, their relevance to the particular context or problem, and what weight they should be given when informing decision-making and practice.

1. Scientific research evidence:

When available, scientific research evidence is a critical contributor to EBP. This is prized because

compared with other types of evidence it tends to have greater rigour, relevance, and independence. There are many types of research designs and methodologies, each of which is suited to answering different types of questions, and each has strengths and limitations. The 'right' or 'best' methodology therefore depends on the nature of the research question. Not all research is conducted with equal rigour and not all reports (such as in newspapers) referring to research can always be trusted as giving the whole picture. There exist well-established approaches and universally agreed standards and hierarchies for critiguing the

quality and rigour of much scientific evidence which are valuable in enabling us to assign the appropriate level of confidence in the evidence reported.⁷

2. Clinical/professional expertise:

A further source of evidence comes from professional practice and the knowledge of staff working in the area of interest. This feedback is

There are many types of research designs and methodologies, each of which is suited to answering different types of questions, and each has strengths and limitations.

essential for identifying and integrating research evidence with other forms of data relating to everyday practice and the service context. The voice of experience can be very persuasive for practitioners. However, even experienced staff (including people with scientific training) are not infallible. Levels of experience and sources of knowledge can vary, and our thinking often suffers from unconscious biases and errors; we are rarely as dispassionately rational when we consider evidence and data as we would like to think.⁸ For example, it is well established that human beings tend to pay more attention and give more weight to information that fits with our preconceived views, and typically ignore or play down evidence that might conflict (known as confirmation bias); this can

make it difficult to recognise when our actions and beliefs are contrary to good evidence.⁹

When using practitioner experience and knowledge it is very important that this is subjected to analysis and critique before informing decisions.¹⁰ Ideally data relating to staff expertise and experience will be subject to critical reflection and carefully articulated to allow for debate, cross-checking, and verification, validation perhaps using other data too.^{11 12} This helps to increase the validity, reliability, and credibility of this type of evidence, and its value in EBP. The interaction between research insights and practical

know-how is not straightforward or linear, and there is much still to learn about how to do this effectively.

3. Knowledge from stakeholders:

This includes the experiences and views of service users, such as clients, patients, people living in prison or under supervision in the community, their families and partner agencies in the sector. Involvement of

Breckon, J. (ND). Using research evidence: a practice guide. Alliance for Useful Evidence; Puttick, R. (2018). Mapping the Standards of Evidence Used in UK Social Policy. Alliance for Useful Evidence; HM Treasury. (2020). Magenta Book. Central Government guidance on evaluation. London; HM Treasury. (2012). Quality in gualitative evaluation: A framework for assessing research. London; Nutley, S., Powell, A., & Davies, H. (2013). What counts as good evidence. Alliance for Useful Evidence.

^{8.} See footnote 7: Breckon, J. (ND); Levant, R. F. (2005). *Report on the 2005 Presidential Task Force on Evidence-Based Practice*. American Psychological Association.

Ross, L., & Anderson, C. A. (1982). Shortcomings in the attribution process: on the origins and maintenance of erroneous social assessments. In Kahneman, D., Slovic, P., & Tversky, A. (Eds.), Judgment under Uncertainty: Heuristics and Biases. New York: Cambridge University Press.

Rycroft-Malone, J., et al. (2004). What counts as evidence in evidence-based practice? *Journal of Advanced Nursing*, *47*(1), 81-90.
 Stetler, C. B., et al. (1998). Evidence based practice and the role of nursing leadership. *Journal of Nursing Administration*, *8*, 45-53; Eraut,

Stetler, C. B., et al. (1998). Evidence based practice and the role of nursing leadership. *Journal of Nursing Administration*, 8, 45-53; Eraut, M. (2000). Non-formal learning and tacit knowledge in professional work. *British Journal of Educational Psychology*, 70, 113-136.

^{12.} Reflecting on one's own experience, knowledge, hypotheses, inferences, emotional reactions, and behaviours, and using this to modify one's practices accordingly. This includes an awareness of the limits of one's knowledge and skills, and recognising biases that can affect judgement, and taking explicit action to limit the effect of these.

stakeholders in EBP could include groups or communities being involved in planning service delivery or sharing their previous experiences or encounters with different services.¹³

This kind of knowledge can shed light on individual, social, and cultural differences that may impact on the effectiveness of approaches or interventions, or prompt consideration of additional objectives of a project or task.¹⁴ However, while asking people about their feelings, attitudes, opinions, and knowledge can be really valuable, the same is not the case for asking about outcomes (e.g., asking users to assess whether they benefitted from a programme has limited value while asking them whether the service content met their immediate needs or circumstances,

and felt tailored to their situation, will be critical in designing a responsive service). A robust body of evidence has suggested that asking service recipients about the impact on outcomes does not produce particularly reliable evidence.¹⁵

Gathering and incorporating individuals' values, experiences, and preferences into EBP is complex and requires expertise. Mixing scientific evidence with personal accounts is particularly challenging when these do not appear to fit well together, and not enough is yet known about how to combine these to best effect.

4. Organisational and local data:

The local setting or organisation itself provides information that can be incorporated into EBP, such as audit and performance data, knowledge about the culture, social and professional networks, local and national policy, and situational constraints (such as resources and time). A key concern when considering use of these for EBP is how to ensure that it is systematically collected and critically appraised. More needs to be understood about how to do this: little consensus currently exists on the quality criteria to apply to local, operational evidence, in contrast to the quality standards and appraisal process for scientific research.¹⁶ That said, such data can also be used by researchers in a different way - to determine outcomes to study and as ways to possibly measure impact - so good partnership between groups can be useful.

Evidence-Based Practice Steps

There are several models of EBP, but in summary the following are the commonly identified stages that appear critical in bringing better outcomes; 1) identifying the problem, 2) knowledge acquisition, evaluation, and distillation, 3) knowledge dissemination and diffusion, 4) application, and 5) assessment and evaluation.¹⁷

Identifying the problem

A robust body of

evidence has

suggested that

asking service

recipients about the

impact on

outcomes does not

produce particularly

reliable evidence.

This entails translating a practice issue or problem and turning it into an answerable question. For example, 'what effectively reduces violence in custody?' or 'what is the impact of education on employment

> rates?' or 'is this service better provided by peer workers or staff in professional roles?'. The process of asking these types of questions helps us to recognise if we have enough evidence already, or if a search for more is needed.

Knowledge acquisition, evaluation, and distillation

This involves systematically and comprehensively searching for and retrieving evidence, critically appraising this for quality, trustworthiness, and relevance, and then aggregating this by weighing each piece and synthesising it into a

comprehensible and useable narrative.

Knowledge dissemination and diffusion

This involves sharing the evidence in different ways with the right people which can then prompt action. This might involve mass communication or more targeted dissemination, and the use of multiple methods and channels to make this accessible and practically useable.

Application

This means incorporating the evidence into realworld decision-making and practice. People need to know what the evidence says, but more importantly, how to use it (e.g., what behaviours or activities should they be doing more or less of, with who, when, and how).

^{13.} Farrell, C. & Gilbert, H. (1996). Health care Partnerships. London: Kings Fund.

^{14.} Heath, D., & Heath, D. (2012). Decisive: how to make better decisions in life and work. New York: Crown.

^{15.} Nickerson, R. S. (1998). Confirmation bias: A ubiquitous phenomenon in many guises. Review of General Psychology, 2(2), 175-220.

^{16.} Rousseau, D. M. & Gunia, B. C. (2015). Evidence-based practice: the psychology of EBP implementation. Annual review of Psychology.

^{17.} Briner, R. (2019). The basics of evidence-based practice. Society for Human Resource Management.

Assessment and evaluation

These allow us to understand the impact of the EBP decisions or actions taken and learn from these to further inform future practice and decision-making. Good evaluation needs to be prepared in advance, with careful thought given to the design, the outcomes of interest, and how to measure them reliably. With new evidence available, decisions about practices or policies can be revised. New initiatives can fail and learning from those can be as helpful as from those that appear to be more immediately successful; but if we don't monitor and review then we won't ever know.

What Works to Implement EBP Effectively?

EBP is simple in theory and yet despite many efforts, for many decades, and across many areas of society, there is a troubling lack of hard evidence about

how to actually implement this effectively, i.e., what specific activities or tasks get good evidence to decision-makers and frontline staff and help them to use it effectively.¹⁸ There are plenty of 'good practice guides' and advice, but most of it seems to be based on expert opinion, rather than scientific evidence. The challenge of bridging the 'evidence-practice gap' is considerable; in healthcare it has been estimated to take 17 years on average to incorporate evidence-based practices into routine practice (and many never actually reach widespread clinical use).¹⁹ Work in that same field has investigated behavioural barriers and facilitators of the uptake of evidence-based practice in routine practice; a recent systematic review has suggested that interventions should focus on physical and social opportunities, and psychological capability, as outlined in Table 1.20

Behavioural construct	Barriers	Facilitators
Psychological capability: knowledge or psychological skills, strength, or stamina to engage in the necessary mental processes	Knowledge gaps.	Adequate knowledge and education.
Physical opportunity: opportunity afforded by the environment involving time, resources, locations, cues, physical affordance	Time constraints and inadequate staffing.	Well-designed strategies, protocols, and resources.
	Cost and lack of resources.	Adequate services, resources, and time.
	Resident complexity.	
	Compromised communication and information flow.	Innovative environmental modifications.
	Staff turnover.	
	Competing priorities.	
	Guideline complexity and associated workload. Impractical guidelines.	
Social opportunity: opportunity afforded by the interpersonal influences, social cues and cultural norms that influence the way that we think about things	Lack of teamwork.	Leadership and champions.
	Lack of organisational support.	Support and coordination among staff.
	Inconsistent practices.	
	Reactive approach.	Involving residents and families.
		Good communication and information flow.

Table 1. Barriers and facilitators to the implementation of EBP

18. A field called 'implementation science' studies methods to promote the adoption and integration of evidence-based practices, interventions, and policies.

19. Morris, Z., Wooding, S., & Grant, J. (2011) The answer is 17 years, what is the question: Understanding time lags in translational research. *Journal of the Royal Society of Medicine, 104*, 510-20.

20. McArthur, C., Bai, Y., Hewston, P., Giangregorio, L., Straus, S., & Papaioannou, A. (2021). Barriers and facilitators to implementing evidence-based guidelines in long-term care: A qualitative evidence synthesis. *Implementation Science*, *16*, 70-95.

The Alliance for Useful Evidence, alongside other organisations committed to EBP, have comprehensively reviewed the evidence on what works to enable the ready use of research evidence.²¹ They looked at more than 150 different types of interventions, but despite this, they were clear that we do not currently have a concrete evidence-base for what works for each stage of achieving EBP, and more research is needed to build our confidence in the right ways of working in this area. Overall, the following activities, based on the review's findings, should be considered 'promising'.

Building awareness and positive attitudes towards evidence use:

No firm conclusions could be drawn on the effectiveness of 'awareness building' because it hasn't been researched enough and usually happens alongside other activities so it's hard to separate out the impact of just this activity. The following might be promising though:

- 'Marketing for good', where the value of evidence for a specific context or group is communicated/tailored to be meaningful for them.
- Making evidence the norm, where thinking about research becomes part of day-to-day work, and is seen as intrinsic to being a member of that profession.
- Prizes and professional recognition, which can include awards, celebration, and peer recognition, for research use and EBP.
- □ Focussing on what people care about, and how evidence can help with this, and doing this in an interesting and emotive way that people can connect with and remember.

Achieving consensus on the right questions to ask and the evidence needed to answer them:

It is suggested that mutual dialogue between researchers and professionals works better than a 'we know what research is best for you' type of approach. Unfortunately, even though there is lots of discussion in the literature on this, the review identified no evidence for the impact of this on its own. The following consensus-building activities might have some promise though:

Using journal clubs to facilitate regular conversation with peers about research. This could help professionals define what kind of evidence they need, how to use evidence in practice, developing knowledge and reinforcing the use of evidence.

□ Using Delphi panels to create an agreed view on appropriate evidence,²² which is more robust and transparent because of the structured approach taken.

Communicating about, and providing access to, evidence:

The evidence suggests that we need to think more like 'marketeers'. We need to look at audience segmentation, personalised and tailored messages, and user-friendly design. There is also a wealth of existing evidence on how to change people's behaviour through communication and persuasion.²³ The following activities were suggested by the review (the first eight are more strongly supported by evidence than the last three):

- Giving people what they need through tailored and targeted messages, making this concrete, topical, and locally specific.
- Hotlines and helpdesks to answer specific questions, provide information and support on subjects.
- □ Framing evidence so the format has impact, such as how much people gain or lose. Psychologically, losses loom larger than gains, so sometimes it might be more powerful to frame the evidence in terms of how it prevents or helps avoid bad things from happening.
- Communicating uncertainty in way that doesn't put people off the evidence by being too vague.²⁴
- Telling stories to communicate research, and forging emotional connections to the evidence through narratives and metaphors can help with people's understanding and engagement.
- Social and online media can be used to reach large and widespread audiences and make evidence findings more convenient to access.
- □ Creating a recognisable and respected brand as positive images can be powerful and foster faith in your evidence.
- Reminders (such as by email, posters, or Tweets) are a simple but effective marketing strategy and can alert people to new evidence available or to refresh knowledge on something. It is also very cheap to do – but

^{21.} Breckon, J. & Dodson, J. (2016). Using evidence: what works? A discussion paper. London: Alliance for Useful Evidence.

^{22.} Delphi panels are a tried-and-tested way to reach a consensus. They use a series of questionnaires to collect data from the panel. These go through a number of rounds, and are analysed and refined, so that the group starts to converge on an agreed decision.

^{23.} For example: Behavioural Insights Team (2014). EAST: Four Simple Ways to Apply Behavioural Insights.

^{24.} Rarely is research black and white. Uncertainty can put people off research evidence. It is vital to report on uncertainty and not distort the evidence though, but how this is done is important.

we need to be mindful of equal access to different technologies.

- Getting the timing right by seizing opportunities for when audiences might be more open to the message.
- User-friendly design and layout of evidence and data visualisation.
- □ Mixing a cocktail of communication strategies rather than using only one.

Facilitating interactions between decision-makers and researchers:

Included here are activities labelled 'collaboration', 'co-production', or 'cooperative inquiry', which feel intuitively to be a good idea. Unfortunately, the review could find no evidence to support this, partly because 'interaction' is such a vague term, and it almost always occurs alongside other activities, so it is not possible to detect the impact of this alone. The research is generally mixed, unclear, or non-existent. But one thing stood out: social influence evidence shows how important leaders are to making a difference.

We need evidence champions, role models, 'change agents', and evidence messengers. These leaders don't always have to be senior people in the organisation, as peer influence is powerful too.

Supporting decision-makers in developing the skills to access and make sense of evidence:

The studies reviewed suggest that skills and training initiatives are effective, with research particularly supporting the value of training in critical appraisal, university level courses, and continuing professional development. Training is more effective when delivered by people who motivate and inspire learners. The best approaches seem to be:

- Accelerated learning, coaching, guided design, and just-in-time training. Training in the office/on-site can be effective as learning can be immediately applied.
- Mentoring and supervision in the workplace can be effective, allowing more adult peer-topeer support, enabling self-direction, and fostering motivation.
- Online learning can deliver results and means a vast amount of information can be accessed at a convenient time. Digital learning allows for the tracking of results, so learning can be tailored, and further support offered.

Influencing decision-making structures and processes:

Evidence needs to be hardwired into everyday decisions or EBP will always be a struggle for organisations and individuals. The evidence on systems to embed EBP in this way is difficult to interpret however, as such systems are usually combined with other activities meaning effects are hard to disentangle, and the research in this area is in its infancy. Providing practical resources to help people incorporate research seem promising, the strongest evidence supports:

- Providing practical assistance such as tools, protocols, and committees charged with thinking about evidence. Decision-aid tools can be effective in helping people to consider all available options and the right evidence to use.
- Rewarding staff for their efforts to apply evidence, and auditing and feedback can also be effective.
- Making evidence an institution by having standalone organisations or teams who fight the corner of evidence and can influence policy.

Implications for Organisational EBP Development

EBP is an important goal for HMPPS, as it is for many other organisations, to ensure that what we do is effective, involves wise decisions about our use of resources, and enables us to learn and flex our practices and policies as new evidence becomes available. At both individual and organisational levels, it is good practice for us all to question why we do or think the things that we do, on what basis we make our decisions, how open we are to reconsider decisions or views, and whether we have looked to the evidence to inform them or if these are based on intuition, personal preference, tradition, or because we believe it is 'common sense'. Drawing together the evidence around promising approaches for EBP, and the wider literature about human behaviour change, we can start to identify that as an organisation wanting to develop EBP we will want to focus on the following:

Improving research creation.^{25 26}

Developing a culture where science is valued and seen to be at the heart of what the organisation does, could help to speed the growth of scientific knowledge that can be used for EBP. Prison- and probation-based research currently falls well behind some other fields in terms of investment and speed of

^{25.} Rynes, S. L., Colbert, A. E., & O'Boyle, E. H. (2018). When the "Best Available Evidence" Doesn't Win: How Doubts About Science and Scientists Threaten the Future of Evidence-Based Management. *Journal of Management, 44*(8), 2995-3010.

^{26.} Bierie, D. M. & Mann, R. E. (2017). The history and future of prison psychology. Psychology, Public Policy & Law, 23(4), 478-489.

progress.²⁷ We need to make sure that the research that is undertaken focuses on the most important or pressing problems and involves more stakeholders in determining areas of study. Fostering relationships between researchers and practitioners, as well as collaboration on research projects, may also help to bridge that gap, develop trust and perceptions of credibility, as well as produce research findings that are relevant and translatable for real-world practice. This may also make it easier to plan good evaluation, from project conception stage, rather than come to this too late and hindering the guality of study. Finally, increasing the quality, replicability, and transparency of research can help to avoid later criticism and negative publicity, and build trust in research.

Improving research dissemination.^{28 29 30}

Communicating research in ways that are interesting, and easy for audiences with varying degrees of prior knowledge to access, interpret, and apply is important. This includes using a range of writing styles, and channels methods or of presentation and dissemination (such as written summaries, infographics, videos, podcasts, and alternative media). Persuasive arguments and presentation of research is especially important when the message might provoke strong views, and we need to anticipate and aim to address potential

resistance or reactance to scientific findings.³¹ Research findings need to be framed according to the end-user's interests and needs. We need to spell out what this evidence means for them, with specific recommendations for practice, and what benefits there might be for them in adopting these. Practical resources, such as toolkits, protocols, and decision-aids that help people to think about and integrate evidence in decisions are also recommended.

Communicating research in ways that are interesting, and easy for audiences with varying degrees of prior knowledge to access, interpret, and apply is important.

Leadership is important so that EBP is promoted and supported from the top of the organisation and by managers throughout. Organisations can set and promote professional standards which include EBP,³² and when guidance, standards, and policies are based on evidence, the practices shaped by these are more likely to be evidence-based and thus effective. This includes assurance and audit activities that are focussed on those practice features that the evidence supports. When time is built into the early stages of projects and policy creation for reviewing and considering the available evidence, then initiatives are likely to be easier to implement and ultimately more successful.

Developing training, learning, and networks.33

Helping all staff to critically engage with and use evidence requires investment in training and skill development. For example, the College of Policing provides a bursary scheme for staff to develop skills, knowledge, and expertise in the use of evidence. Organisations can also use courses, distance learning, symposia, and conferences to share and spread evidence and to help people to use this in their practice. Getting people involved in conducting research can be a way of helping them develop in this area, as would providing them with tools that can help them critically reflect on the evidence they come across.

Networks can provide a platform for learning and sharing evidence throughout an organisation, and onthe-job coaching, supervision, and mentoring in the use of evidence is also recommended. Further, supporting teams or individuals in the early stages of project or policy development to consider the underlying rationale for their proposals and expected impact, by developing a good theory of change and

^{27.} Bierie and Mann (2017), see footnote 26, provide this useful comparison: Prison Services to Marriott hotels. Both are multi-billiondollar agencies, with hundreds of residents and staff at each location. They both operate 24 hours a day, 7 days a week. Both are responsible for offering safe housing, preventing disease from spreading, finding ways to feed and protect and communicate with a diverse range of demanding residents. Both must maintain control and policy adherence across multiple sites and broad geography, and both must comply with countless regulations. In contrast with many Prison Services, however, Marriott employs over 1,000 data scientists who churn out scientific discoveries, programme evaluations, innovations, and statistical tests.

^{28.} See footnote 25: Rynes, S. L., et al. (2018).

^{29.} Medical Research Council (2013). Developing and evaluating complex interventions: new guidance.

^{30.} Breckon, J., Mthiyane, H., & Shephard, J. (2019). Bodies of evidence: how professional organisations in health, education and policing champion the use of research. Alliance for Useful Evidence.

^{31.} See footnote 25: Rynes, S. L., et al. (2018).

^{32.} See footnote 30: Breckon, et al. (2019).

^{33.} See footnote 30: Breckon, et al. (2019).

using this to shape decisions early on, is recommended.³⁴

Incentivising and reinforcing EBP.35

People need to feel motivated to use research, and so professional recognition and rewards for EBP, or contributions to this could be considered. The wider evidence base on reinforcement shows this to be a powerful way to shape human behaviour. Behavioural research also shows that human beings are heavily influenced by what people around us do and say, and we follow like-minded individuals and social norms.³⁶ As such, networks, promotion of evidence from senior leaders, and engaging staff at all levels in EBP may help people to feel properly involved, and promote a culture where EBP is seen as the norm and something we all promote and sustain.

Evaluating and learning from strategies to promote and embed EBP.

Given the limited evidence base for how to effectively implement EBP, strategies used to promote and facilitate EBP need to be trialled and tested across functions and staffing groups. Learning from such testing can then be used to develop an organisational model to support EBP.

Conclusion

Despite the concept of EBP existing since the 1980s, and concerted efforts across the world and in different domains of society to adopt this, there are real challenges with the evidence on how to do this well. There is good agreement about what EBP is and its value. There are well-established standards for how to produce and rigorously assess robust scientific evidence. However, we cannot say the same for other forms of evidence that can contribute to EBP, or how to best integrate different types of evidence to inform decisions. Activities and approaches purporting to help people apply evidence in shaping practice and policy are plentiful, however, many of these have not been rigorously evaluated to confidently determine their impact. Currently, we mainly have ideas about promising approaches rather than a concrete, rigorous evidence-base for doing EBP.

^{34.} Theory of Change is essentially a comprehensive description and illustration of how and why a desired change is expected to happen in a particular context. It is focused in particular on mapping out or "filling in" what has been described as the "missing middle" between what a program or change initiative does (its activities or interventions) and how these lead to desired goals being achieved. It does this by first identifying the desired long-term goals and then works back from these to identify all the conditions (outcomes) that must be in place (and how these related to one another causally) for the goals to occur.

^{35.} See footnote 30: Breckon, et al. (2019).

^{36.} See footnote 23: Behavioural Insights Team. (2014).