Implementing Evidence-Based Practice in Health and Social Care

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This report outlines the enablers of implementing evidence-based practice (EBP) in a health and social care context, and outlines some frameworks that support the implementation of EBP.

This is based on our review[1] of health and social care contexts in the UK, the USA and Australia, which explored the implementation of new innovations based on research, as well as the incorporation of research in day-to-day practice, for example, social workers learning new techniques to engage children.

Please get in touch with our Head of Research, Dr Stephen Boxford, for more detail or to continue the conversation.

1   Context

1.1   What is evidence-based practice?

Evidence-based practice (EBP) is the use of practice and interventions that are empirically shown to lead to improvements in desired outcomes. This report explores evidence-based practices broadly, i.e. evidence-based interventions, and frontline day-to-day practice and strategies in health and social care services that are based on evidence.

Figure 1 outlines key terminology regarding evidence-based practice and defines how the terms are used in this report.

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[1] If you would like details on the methodology used for the literature review, or a full bibliography, please feel free to get in touch with the Cordis Bright research team: info@cordisbright.co.uk.

Figure 7: Project Oracle's Top Ten Tips for implementation

Figure 1: Key terminology

Term	Definition	Source
Evidence-based practice	Empirically supported interventions that improve outcomes. During this report, the term evidence-based practice is used to include both longstanding proven practice as well as new innovations or interventions where there is a strong evidence-base for positive impact and are being scaled up.	Chamberlain et al. (2012)
Spread	Activity that results in an intervention being replicated across multiple sites.	The Health Foundation (2018)
Scaling-up	Scaling, which is a subset of spread, refers to an initiative to replicate an intervention specifically through a higher-level organisation or geographical entity (such as a professional body or government agency); but spread can also happen through horizontal connections between adopters, without the involvement of a higher-level entity.	The Health Foundation (2018)
Innovation	New approaches, practices, treatments, technologies and services. A sub-set of this is evidence-based innovation.	The Health Foundation (2018)
Innovator	The individual, team or organisation that developed the idea for the intervention or that first implemented it within the UK.	The Health Foundation (2018)
Adopter	An individual, team or organisation other than the innovator that implements the intervention in a different site or setting to the one in which it was originally developed.	The Health Foundation (2018)
Context	A set of factors or attributes specific to a new adoption site that can affect improvement and implementation efforts. It has a dynamic nature, in terms of the relationship between context and implementation, and between the various factors that might influence context.	The Health Foundation (2014)

1.2 Understanding barriers and enablers to implementing evidence-based practice

The current health and social care climate demands many public services to be delivering a high level of change aimed at raising standards and improving practice, all whilst

demonstrating value for money (Brown, 2015; Godar, 2017). It could therefore be assumed that implementing effective and financially viable evidence-based practice would be a high priority for organisations commissioning and providing services.

However, numerous barriers make it difficult for organisations to implement change in practice, and therefore the process by which this change is introduced needs careful consideration:

> *'Improving…public sector services is influenced as much by the process of implementing innovative practices as by the practices selected for implementation'.*
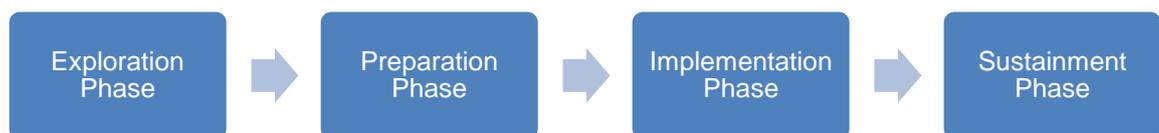
> Aarons, Hulbert & Horwitz (2011, p.4)

Although some research has been conducted into how to overcome these barriers in a health context, much less has been documented in relation to the public health and social care sector. The literature that does exist in this area focuses mostly on theories of implementation, rather than the practical enablers of scaling (see The Health Foundation, 2014). This document aims to provide a useful outline of the key enabling factors that support successful implementation of EBP.

2 Four phases of implementation

Aarons, Hurlbert & Horwitz (2011) have developed a model for the process of implementing evidence-based practice in public sector services. This model, shown in Figure 2, can be used as a framework for considering challenges and opportunities, and supporting the implementation of EBP (Aarons, Hurlbert & Horwitz, 2011; Walsh, Rolls Reutz & Williams, 2015).

Figure 2: Four phases of implementation of EBP in public services

Exploration Phase		Preparation Phase		Implementation Phase		Sustainment Phase

Source: Aarons, Hurlbert & Horwitz (2011)

Within the Exploration phase, potential implementers consider what EBPs might best solve a specific problem. They will also consider the opportunities and challenges within their particular context. In the Preparation phase, implementers plan how they will integrate the new practice into the existing system through a thorough review of the challenges. In the Implementation phase, the adopted practice is implemented. This is where implementers will find out if their work during the Preparation phase addressed the major issues. Finally, there is the Sustainment phase, during which stable funding and ongoing quality assurance and monitoring processes ensure that the intervention is ingrained into the adopting organisation (Walsh, Rolls Reutz & Williams, 2015).

Through our review of the literature we have identified six key enablers that are important to consider within each of these phases: context, collaboration, leadership, skills, capacity, and funding. These are the key enablers for implementing EBP successfully.

3 Six key enablers of successful EBP implementation

3.1 Summary

A review of the literature suggests that there are six key enablers for successfully implementing EBP. These are outlined in Figure 3.

Figure 3: Cordis Bright's key enablers for the implementation of evidence-based practice

Enabler	Key considerations
Context	• Modification of evidence-based practice according to context • Careful consideration of the balance between flexibility and fidelity i.e. preserving the core aspects of the innovation which will have the desired effect, and adapting other aspects to suit the new context (Albury et al., 2018; Aarons, Hurlburt & Horwitz, 2011; McDonald et al., 2005; Brown, 2015) • Building in flexibility to an EBP through codifying so it can be adapted when rolled out • Consider the needs of the community • Context is a common theme across all other enabling factors
Collaboration	• Collaboration between innovators, leaders, and staff when adapting an intervention and integrating EBP • Knowledge-sharing with other organisations/sites • Collaboration is a common theme across all other enabling factors.
Leadership	• Incorporate rewards for scaling-up into policy • Ensure it is easy to set up organisations to drive scaling • Support managers with implementation • Consultation between leaders and staff • Communicate clear aims and objectives • Draw upon an overarching set of governing principles • Leader should make themselves available for support • Effective managerial-professional relations • Supportive organisational context • Aligned leadership priorities • Integrate messages from research into system design, workforce development and front-line practice
Skills	• Creativity and co-operation • Skills-assessments and dissemination plans • Motivate learners to use new skills • Ongoing training and supervision

Enabler	Key considerations
	• Provide access to online research • Ongoing monitoring • Development of supportive networks • Accessible and engaging knowledge sharing
Capacity	• Consider capacity of users • Consider capacity of staff • Pay for more staff • Reduce caseloads • Work with voluntary sector • Develop multiple sites simultaneously
Funding	• Social innovation mentors • Automatic sorting mechanism for promising innovations • Fund time for adopters and innovators to collaborate • Develop sustainable funding structures • Develop internal facilitation

More detailed information about each step is provided below.

3.2 Context

When implementing EBP it is vital that adopters have a thorough understanding of the local context:

> *"Local authorities need support to develop their understanding of how to apply research evidence in practice to their own local systems and context, and how to go beyond the commissioning of an individual evidence-based programme to integrating the messages from research into system design, workforce development and social work practice."*

Godar, 2017, p.10

> *"Successful implementation may require adaptation of the intervention or a long journey to build new relationships, shift the prevailing team, culture, or develop new skills"*

Horton, Illingworth and Warburton, 2018, p.9

Understanding the context that underpins each of the other five enabling factors is key to successful implementation. For example, leadership and organisation at a local level will affect the scaling and spread of evidence-based practice in a particular setting (Albury et al., 2018; Godar, 2017). Collaboration between leaders and staff is often key to resolving context-specific challenges (see section 0). Taking into account a local setting's capacity, skill-set of the workforce and funding structure will heavily inform the way in

which EBP is implemented, and will be particularly important in ensuring it has sustainability long-term (see sections 3.6, 3.5, and 3.7).

There is, however, a tension between **flexibility and fidelity** which needs to be balanced to ensure successful introduction of EBP. The Health Foundation (2018) found that 47% of innovators whose innovations were adopted saw instances of an adopter making changes in a way that gave them concerns about fidelity and the potential impact that deviating too far from the original model may have on effectiveness and outcomes. This may be overcome by innovators collaborating with leaders of adoption sites in the codification of an innovation, i.e. describing it in a way that supports replication. The authors describe two contrasting approaches to codification – 'tightening' and 'loosening'. 'Tight' descriptors might attempt to describe the innovation in a more comprehensive way, or set out relevant specific social dynamics. 'Loose' descriptors focus less on the specific details and more on the ability of adopters to formulate their own version of these components in the new context. This might involve focusing on the underlying principles/ goals and allowing adopters to work towards these in their own way. A finely balanced relationship between both tight and loose descriptors can support the consideration of context and reconcile the need for flexibility and fidelity.

Codifying EBP in this way may help overcome one of the key barriers to implementation – a view that it is irrelevant to practice on the ground (Pravikoff et al, 2005; Solomons & Spross, 2011; McKenna, Ashton & Keeney, 2004). Describing the EBP in a way that means it can be flexibly adapted when rolled out may increase the extent to which it is perceived as a useful and worthwhile change (Routledge & Porter, 2008; The Health Foundation, 2014). Moreover, having an understanding of the context in order to develop a culture of respect for research, strengthen staff relationships and clearly articulate the need for change can also help increase the profile of EBP and encourage a more positive perception from staff (see section 0).

A lack of understanding of context in relation to the needs of citizens in different localities can also present challenges to implementing EBP. Godar (2017) analysed the use of research evidence in five local authorities' child protection services, and found that off-the-shelf interventions often result in problems with referral criteria, whereby users who would benefit from the programme in a certain locality are not eligible to participate. Once again, building in flexibility to EBP in a way that can take account of context, in particular local need and demand, is important to ensure that it is reaching the targeted population.

3.3 Collaboration

Collaboration is key to striking this correct balance between flexibility and fidelity. This collaboration can take the form of **innovators consulting with leaders** in the design phase to support the initial design of methods that are suitable to the local context (Mosson, Hasson, Wallin & Schwarz, 2017). It can also take the form of collaboration between **leaders and staff**, which is often key to creating a culture that is receptive to EBP (see 0).

Collaboration within **supportive networks** can help different localities share knowledge about successful strategies for implementation (Albury et al., 2018; Godar, 2017; Shiell-Davis et al., 2015 ; Mullen, Bledsoe & Bellamy, 2008). Godar (2017) argues this can be a particularly effective enabling factor where socio-economic circumstances are similar

between sites. The Department for Education has attempted to build up such a network of knowledge-sharing within its Innovation Programme.

> **Case Study:** The Department for Education Innovation Programme
>
> The DfE's Innovation Programme aims to build understanding about what works and what doesn't work in supporting vulnerable children and young people, and share that learning across contexts. They have set up Innovation Insight Boards to share helpful approaches and conditions required for successful scale and spread. They also distribute Learning Summaries, which aim to provide thought provoking ideas and insights from the Innovation Programme.
>
> Building up supportive networks in this way to share best practice and project-specific approaches may be an effective way of overcoming skills and knowledge barriers that can hinder the implementation of evidence-based practice.
>
> Cordis Bright are evaluators for several of the Innovation Programme projects, contributing first-hand to the monitoring of innovations in order to identify effective interventions and strategies that might be useful across contexts.

Strong inter-organisational networks can also support the sharing of the skills and knowledge necessary for an EBP to be a success, and can help alleviate some of the barriers faced in terms of capacity and funding. This will be discussed in more detail in sections 3.5, 3.6 and 3.7.

3.4 Leadership

Leadership plays an important role in shaping each of the other five enablers identified in section 3.11.1. Leaders have influence in determining the extent to which context over-rides fidelity (see 3.2), in supporting the development of new skills (3.5), and in ensuring there is the capacity (3.1) and funding (3.7) for EBP to be introduced successfully.

Leadership is particularly important in ensuring the building of successful relationships that will underpin effective collaboration (see 3.3). Andrews et al. (2015) conducted a collaborative action-research project to identify and address the key elements that support and inhibit the use of evidence in health and social care for the elderly population. They found that management relations with practitioners was an important enabling factor, particularly making front-line staff feel valued, appreciated, respected, trusted and celebrated. They also found that leaders collaborating with professionals they manage, supporting them to make sense of the evidence and using collaborative approaches to decision-making was a key element in supporting the use of evidence in workforce development.

Pettigrew, Ferlie & McKee (1992), who studied the reasons for variability in rate and pace of service change in the NHS agree, arguing that a '**supportive organisational culture'**, '**effective managerial-professional relations'**, and '**the availability of key people leading change'** are also key factors in creating a receptive context.

In addition to the role of leadership in enabling these factors, the literature identifies a number of other key areas where leaders have an important role to play. These include:

- Creating a culture which is receptive and ready for change.

- Managing risk.

- Incentivising and prioritising evidence-based practice.

These are explored in more detail below.

Culture change

Leaders are vital in shifting the culture of an organisation to ensure colleagues are ready and receptive to changes in ways of working. In some cases, a shift in culture towards a bottom-up way of working encourages the adoption of changes in practice. Albury et al. (2018) argue that it is therefore important that leaders decide together with their staff whether a new practice or intervention should be implemented. **Consultation with staff** in this bottom-up way will enable leaders to have a better understanding of any adaptations that may need to be made, and ensure a culture among front-line workers that is ready and receptive to change. Many researchers have found that drawing upon **an overarching set of principles** that govern an organisation's decision-making will also ensure more chance of acceptance from frontline staff (Godar, 2017; Routledge and Porter, 2008; Mosson, Hasson, Wallin & Schwarz, 2017).

Gray, Joy, Plath & Webb (2015) suggest that supportive management structures and procedures, practitioner supervision, and guidelines and protocols to help embed EBP and IT support systems are important in overcoming the barrier of a culture which may be averse to changes. Mosson, Hasson, Wallin & Schwarz (2014) also highlighted the importance of a leaders creating a **supportive culture for managers** in preparing them for a new role with a greater focus on managing implementation.

Managing risk

Managing risk is also important in achieving buy-in from frontline staff. Brown's (2015) study explored case study examples of innovation in practice in social work in the UK, and found that in some cases a major barrier to implementing EBP was a risk-averse environment. Routledge & Porter (2008) suggest such an environment can be the result of apprehension towards changing roles and structures, while Gray, Joy, Plath & Webb (2015) in their national survey of social workers found that sometimes staff were averse to EBP because they found it too demanding.

Another key way that leaders can tackle this apprehension around challenges to established cultures and profession roles is to clearly articulate the need for change with their staff, the impact that is expected from EBP and what it is trying to achieve (Albury et al. 2018). A framework that outlines roles, tasks, goals and the potential benefits of change with **'simplicity and clarity'** can help achieve this (Routledge & Porter, 2008; Pettigrew, Ferlie & McKee, 1992).

Incentivising and prioritising EBP

Another distinct way in which leaders can support the effective implementation of EBP is through incentivising and prioritising it within their organisation. For example, Breckon & Dodson (2016) summarised a literature review conducted by the project 'The Science of

Using Science' on effective strategies to increase the use of research evidence. They found that **public recognition and rewards** could help make evidence-use the norm. Mosson, Hasson, Wallin & Schwarz (2014) also suggest that policymakers could develop a more incentivised climate by **incorporating rewards for scaling into policy**, and by **ensuring it is easier for people to set up organisations to drive scaling.**

Chamberlain et al.'s (2012) analysis of scale-up models found that a programme is also likely to last longer if it has been **integrated by the leaders into mainstream services** and if scaling is adopted on a wider organisational level, rather than relying on lone champions. The positive effect of such integration can be seen in the case study of the 'Altogether Better' innovation, which was embedded into GP practices. By prioritising EBP in this way by integrating it fully into mainstream services, leaders can help support its effective implementation on the ground.

Leadership from a 'political context' as well as from within an organisation is also important to consider when scaling-up EBP (Bate, 2014). Godar's (2017) research suggests that the expectations of policy makers will affect the final decision by local managers and leaders on whether to implement an evidence-based change in practice. Thus it is necessary that policy decision makers, providers and consumers/users have **aligned priorities** for successful scale-up (Chamberlain et al., 2012).

Finally, leaders at the top of health and social care services can contribute to prioritising EBP by going beyond simply commissioning it, to **integrating messages from research into system design, workforce development and general practice** (Godar's (2017).

3.5   Skills

There are a number of key considerations around the development of skills that are necessary for successful implementation (Gray, Joy, Plath & Webb, 2015). These include:

- Skills in adapting existing interventions to a new context.

- Specific skills relevant to the EBP.

- Format of knowledge sharing.

The way in which appropriate skills are developed and how this knowledge is transmitted will depend heavily on the context of the setting.

Skills in adapting EBP to new contexts

Mullen, Bledsoe & Bellamy (2008) examine existing literature related to the implementation of evidence-based practices in social work, arguing that adopters need to be **creative and co-operative** to successfully adapt an evidence-based innovation for a new setting. They suggest that the research shows that a creative combination of multiple strategies are needed for successful implementation of EBP, rather than relying on a single approach. Such strategies are outlined in Figure 4. Which strategies, how they are used and the combination of strategies will depend heavily on the context of the adopter site. Godar (2017) also suggests that creatively adapting off-the-shelf EBP is important to ensure that it is responsive to local needs. It is therefore necessary that those adopting EBP have the skills to find and draw upon a range of sources of inspiration for designing

innovative responses, including examples from other areas as well as academic research. This would involve the ability to build positive working relationships within professional networks and a creative eye for adaption.

Specific skills and staff training relevant to the EBP

Once the skills required for an EBP have been identified, it is important that staff are trained in these and that this knowledge is shared across the workforce. What Works Scotland's evidence review (Shiell-Davis et al., 2015) of scaling up in public services found that before implementation is underway, it is helpful if managers prepare by **conducting skills assessments**, as having a thorough understanding of existing skills can help identify those that need to be developed.

Skills training is important not only for the development of new skills specific to an intervention, but also when attempting to encourage the incorporation of EBP more generally into the workforce, e.g. social workers keeping abreast of new research. Solomon et al (2011) examined a range of literature relating to the barriers and facilitators to adopting EBP in nursing practice using Shortell's framework for continuous quality improvement. They found that a majority of studies reported barriers in accessing resource materials and staff's lack of confidence in their ability to evaluate the quality of the research. A smaller number of studies also found that understanding the research and finding the research overwhelming was another barrier to using EBP. To overcome such barriers, Godar (2017) recommends **providing access to online research** and staff training to support this. Breckon & Dodson (2016) suggest that such training should be combined with a push and motivation to use EBP, which can be achieved through **online supervision.** In addition, **local case discussion and reviews** will also increase workers' confidence in using evidence in every-day practice, as well as supporting them to use new skills of a specific intervention in relation to some practical examples.

Disseminating the knowledge gained from training and skills development is also important in ensuring that the EBP is sustained. Shiell-Davis et al. (2015) suggest creating a **rigorous dissemination and knowledge plan,** including using sharing platforms. Breckon & Dodson's (2016) review suggests that such plans are even more effective if combined with a push to **motivate learners** to use their new skills, such as though online learning mentoring.

There are a number of different strategies to disseminate knowledge and skills that might be used in such a plan. Mullen, Bledsoe & Bellamy's (2008) suggestions are outlined in Figure 4. As previously mentioned, the authors argue that a combination of these strategies is needed for EBP to be implemented successfully.

Figure 4: Strategies for the dissemination of knowledge and skills

Strategy	Details
Teaching Model	Teaching individual practitioners the evidence based-process in the context of formal education.
Direct Implementation	A top-down strategy. Findings are disseminated through agency directives, manualised interventions, accreditation requirements, algorithms, toolkits etc.

Strategy	Details
Combining evidence and stakeholder consensus	Modifies the above top-down approach by combining evidence with stakeholder consensus to take context into account when seeking local applications.
Combining staff training and organisational development	Training individuals and addressing the organisation context, including developing the culture, systems and structures.
Professional infrastructure as agent	Focuses more broadly on the social work profession itself, and includes the research community, schools of social work and practice organisations.

Mullen, Bledsoe, & Bellamy (2008)

Building up a collaborative network of organisations can also support this exchange of knowledge. Newton et al. (as reviewed by Greenhalgh et al., 2004) studied change within the UK primary health care sector, and noted that the importance of co-operative inter-organisational networks (a key factor to create a receptive context for change, as suggested by Pettigrew, Ferlie & McKee, 1992) increased in cases where the policy environment was less supportive (see 0).

Format of knowledge sharing

As well as the sharing of knowledge and skills, the format in which this knowledge is transmitted is important. Andrews et al. (2015) found that capturing and presenting relevant evidence in **accessible and engaging formats** was an enabling factor for encouraging social workers to use research-identified approaches in front-line practices. They found that social workers were more likely to adopt EBP if the evidence was presented in plain language, stories, poetry, pictures and music (see the 'Better Life' website for examples).

However, many authors, such as Mosson, Hasson, Wallin & Schwarz (2017), stress the difficulty of such training and knowledge-sharing in terms of restricted resources. Indeed, staff capacity and funding have a knock-on effect at almost every stage of successful implementation.

3.6 Capacity

Creating capacity and time has been identified by many studies as the most important and direct factor in enabling successful implementation of EBP, as outlined in **Error! Reference source not found.** (Solomons & Spross, 2011). If the enablers relating to context, collaboration, leadership and skills are all in place, and yet there is an instability, lack of continuity or low numbers of staff, EBP simply may not be implemented. This lack of capacity could limit the extent to which an effective service in health and social care is delivered at all, let alone the implementation of EBP (Godar, 2017; Brown, 2015; Shiell-Davis et al., 2015). **Considering the specific context of the adopter site** through collaboration between innovators and adopters can shed light on an EBP's potential effectiveness given the capacity available locally, and any adaptations needed to ensure its success using the available resources.

That said, there are many things organisations and local authorities can do to overcome capacity issues when implementing EBP. Other than **paying for more staff** (Chamberlain et al, 2012), authorities could **reduce caseloads**; this would free up their time not only to use EBP, but to access training and discuss current research (Godar, 2017).This is especially important as staff capacity and having dedicated time to devote to developing the skills required (see section 3.5) has been identified as a key enabler to implementing EBP (Godar, 2017; Shiell-Davis et al., 2015; Brown, 2015; Gray, Joy, Plath & Webb, 2015).

Collaboration with **voluntary sector organisations** may help create more time and more capacity. Such organisations can provide expert knowledge that might support existing staff to implement EBP, or could even provide additional staff to implement the EBP themselves, especially as demand for a service may increase (Godar, 2017).

Another way that capacity can be increased is through **developing and implementing the EBP across several sites at once** to facilitate group training and an increased exchange of information and networking (Godar, 2017; Chamberlain et al., 2012). Sharing of information can make implementation more efficient, reducing the strain on capacity. Lessons from other sites can be particularly relevant and useful where socio-economic circumstances are similar between sites (Godar, 2017). When organisations network with other organisations that are employing EBP, it has the potential to make it more likely they too will explore or adopt it (Aarons, Hurlbert & Horwitz, 2011). This is because it can serve to familiarise the organisation with the EBP, and set the example that it is achieving change. However, such collaboration may be resource draining in itself, as visiting other sites and making time for knowledge sharing requires time and capacity. Again, context needs to be considered in terms of how much time the change in practice or intervention will take and how much time existing staff have to implement it.

3.7   Funding

The literature suggests that there are two main factors to consider related to funding when looking to implement EBP: ensuring there are sufficient funds to encourage effective implementation, and taking into account how changes in practice may present cost-saving opportunities.

Funding for implementation

Research suggests that inadequate funding continues to be a huge barrier in implementing sustainable evidence-based practice (Brown, 2015; Mulgan & Kohli, 2010; Routledge & Porter, 2008; Gray, Joy, Plath & Webb, 2015).

As described throughout the sections above, to effectively adapt and implement EBP to a particular local context requires time, commitment from leaders and collaboration. Innovation Unit's study of innovations in the NHS suggests that **time for these meaningful discussions to take place needs to be funded**, as does time to look at the areas where extra investment would make the biggest impact in any given locality (Albury et al., 2018).

Ensuring that there is sufficient funding for EBP to be sustained into the future is also an important consideration. Developing and utilising a **sustainable funding structure**, such

as the Rolling Cohort Model (see case study below) could help ensure the long-term success of evidence-based practice.

> **Case Study:** Chamberlain et al (2012) – analysing the success of the Rolling Cohort Model
>
> In 2002, the government introduced the Multidimensional Treatment Foster Care (MTFC) programs in a Rolling Cohort design. Funding was set up for costs only and was allocated to support the initial time required to recruit, assess, approve and train foster parents, clinical team staff, and to set up the required systems for multi-agency collaboration.
>
> All local authorities were offered the opportunity to bid for grants in yearly cohorts over four years. This was to allow time to build capacity and for learning across sites. Participants in earlier cohorts would lead the process for those who followed. Developing several sites at once would allow for group training and an increased exchange of information.
>
> Chamberlain et al. reviewed the use of the Rolling Cohort design and argue that it helped create system-level changes and opened the door for establishing other evidence-based interventions. They suggest it would be more successful if combined with a tapered funding approach, where year-to-year funding for adopter sites is gradually reduced over a three- or four-year period. The authors suggest that this would provide a feeling of financial security from which sites could build sustainably from a much earlier stage, knowing that funding will be available over a longer period of time.

Our review highlights some ways that the costs of implementing EBP can be reduced. Mulgan & Kohli's (2010) report recommends that to tackle additional costs, leaders should invest in **social innovation mentors** to advise adopters in all areas, including how to adopt an innovation in a financially viable way. They also suggest creating and introducing an **automatic sorting mechanism** for the most promising innovations, as seen in the private sector (i.e. when investors are incentivised by big returns to seek out new ideas that might succeed, thus sorting promising products from those that are less so). This would enable authorities to scale up EBPs that were the most financially viable for their particular context, i.e. those that meet the needs of the local population and would have enough referrals to prove economically sustainable. Considering the context of an adopter site (see 3.2) and collaborating with experts (see 3.3) may be useful in informing the creation of such a mechanism, through providing an understanding of local needs and funding issues.

Andrew et al. (2015) also suggest that costs can be reduced through **developing internal facilitation** led by research-aware practitioners rather than having to fund external agencies to support implementation. Choosing innovations and EBP that **match the needs of the community** can also save costs, as less money needs to be spent on implementation, i.e. modifying the new or existing services to enable easier integration (Shiell Davis et al., 2015).

Cost-savings

A main driver in taking up evidence-based practice is the opportunity that a new way of working could present to make savings while offering effective services (Godar, 2017). Brown (2015) highlights the importance of considering **the wider context of needs** to maximise this cost saving opportunity. For example, new cost-saving innovations might be particularly appealing in the adult health and social care sector, which is experiencing immense financial pressure as older people are living longer. The promise of cost-savings can secure buy-in from commissioners and senior managers, which, as previously mentioned, is a key enabler for successful implementation (Albury et al., 2018).

However, adopters should make sure that the number of beneficiaries will justify the initial costs of scaling-up EBP; smaller local authorities for example, may not see the same kind of cost-savings as a larger authority with more eligible beneficiaries (Chamberlain et al., 2012). Conversely, too tight a focus on cost-savings may undermine the wider aspirations of EBP, and dissuade organisations from adopting something that will effectively improve health and social care practice (Andrew et al., 2015). It should also be noted that in some cases funding for 'double running' costs, where a new way of delivering service has to be trialled alongside the existing one, may be necessary, and therefore even where EBP can save money, it may take time for these savings to materialise (Horton, Illingworth & Warburton, 2018).

4   Key barriers

The literature suggests that a variety of these enablers in combination are likely to enable EBP to be successfully implemented. The majority of existing research suggests that the key success factor is considering the context of the adopting organisation when addressing issues that may arise in leadership, skills, capacity and funding.

However, the two enablers which are most often cited in the literature as reasons for why EBP is not implemented are (a lack of) capacity and funding; mainly time, space (in the form of space within the service for EBP to fit in, and in the form of networks for sharing of good practice) and money (Solomons & Spross, 2011; Godar, 2017; Albury et al., 2018; The Health Foundation, 2014; Chamberlain et al. (2012); Breckon & Dodson (2016); Brown (2015) Mulgan & Kohli 2010; Routledge & Porter, 2008; Andrews et al. 2015; Gray, Joy, Plath & Webb, 2015). Therefore a greater focus on building these, through the mechanisms outlined in sections 3.6 and 3.7, should be a key consideration for anyone looking to introduce and scale up EBP (Horton, Illingworth & Warburton, 2018).

5   Frameworks for Implementation

Our review also identified frameworks to support the implementation of EBP and to ensure its sustainability. These frameworks have been developed in relation to health care, but may be applied across social care too. However, it should be noted that research investigating the effectiveness and suitability of these frameworks in the social care sector is lacking.

Our review identified two main types of frameworks: tools for considering contextual factors to address when implementing EBP, and frameworks for the evaluation of the extent to which an EBP is being adopted.

5.1 Frameworks supporting adaptation to different contexts

The frameworks that are beginning to be developed specifically for the use in the health and social care sector tend to focus on encouraging the consideration of contextual factors to identify and overcome potential barriers to implementing EBP. Below we outline three frameworks in this category.

5.1.1 Promoting Action on Research Implementation in Health Services (PARIHS) Framework

Perhaps the most comprehensive framework that has been developed, encompassing many of the enabling factors discussed in this report, is Rycroft-Malone's (2004) Promoting Action on Research Implementation in Health Services (PARIHS) Framework. The purpose of the framework is to outline the elements that need to be considered for successful implementation of research in practice. It was originally developed from collective experience and since its first publication has undergone research and development work, including a concept analysis of each of the dimensions: **evidence, context and facilitation**. Each of these elements has sub-elements (see Figure 5) and each of these sub-elements can be categorised on a continuum of 'low' to 'high'. It is argued that if each sub-element can be judged to be 'high', the implementation is more likely to be successful.

Figure 5: PARIHS Framework

Element	Sub-element
Evidence	• Research • Clinical Experience • Patient Experience
Context	• Culture • Leadership • Skills
Facilitation	• Purpose • Role • Skills and Attributes

Source: Rycroft-Malone (2004)

The framework proposes that the most successful implementation occurs when the context of the new site 'is *receptive to change with sympathetic cultures, strong leadership, and appropriate monitoring and feedback systems*' (Rycroft-Malone, 2004, p. 299). Clarity of roles, decentralised decision-making, valuing of staff, transformational leaders, and a reliance on multiple sources of information on performance, are argued to make the chances of successful implementation more likely (Rycroft-Malone, 2004).

5.1.2 Brown's framework to assist with the replication of innovations

Brown (2015) poses a set of questions that can be used to analyse the context within which a change in practice or an innovation is going to be trailed (see Figure 6). Section 1 of the framework supports managers to think in advance about the complexity of the process and barriers they might face. Section 2 considers the governance structures and the readiness of the organisations, including staff training and any adaptions that may have to be made. Section 3 examines the costs and resources, and Section 4 supports the development of plans for sustainability.

Figure 6: Brown's framework for analysis of context before implementing a new innovation

Section 1: Defining the innovation

- Is it a single or multiple site trial?
- What type of innovation is it?
- How many organisations will deliver the implementation?
- What is the innovation (i.e. what aspect makes it innovative?)
- What is currently known from previous studies about it? e.g. is there evidence of effectiveness?
- What is the 'theory of change' on which it is premised?
- What outcomes are you hoping to achieve?
- Is there a shared vision for the project?
- What is the relevant advantage of this project over your existing services?
- What is the size of your oragnisation?
- To what extent do you consider your organisation to be ready to implement this?

Section 2: Implementation in your environment

- What (if any) adaptations have been made to the model in advance for your context?
- Is the enviornment simple or complex in relation to inter-dependent relationships, shared goals and taregts?
- Has your organisation needed to make any changes to adopt/test this? (structural or procedural)
- Will its use require any staff to have change in role or change of identity? If yes, who and in what ways?
- What new skills or training will staff require to deliver it?
- Have any risks been identified in relation to implementing it? If yes, please detail and state how they have been managed
- What barriers or difficulties, if any, do you anticipate with implementation

Section 3 : Resources

- Please detail what costs are incurred in setting up and implementing this pilot. Please include staff, resources, equipment and other costs

Section 4 : Next steps

- Is there a plan to test the model and then to roll it out to other sites? If yes, have you considered how this will be funded?
- Please describe any evaluation plans that you have in place.
- Which of the following will you be measuring: Inputs/Outputs/Outcomes?
- Have you had any 'additional' resources to test this model or implement it?
- If yes, what, if any, plans have been made to cover these additional costs should you wish to scale up the model in the future? i.e. is there a plan for sustainability?
- What period of time have you allowed for implementation?

Source: Brown (2015)

5.1.3 Project Oracle's Top Ten Tips

Project Oracle (an organisation that supports youth organisations to produce, use and share evidence to improve interventions) developed 'The Top Ten Tips to reflect on when considering adopting an existing intervention' for schools (2015). These simple questions are presented in Figure 7.

Figure 7: Project Oracle's Top Ten Tips for implementation

Project Oracle's Top Ten Tips to reflect on when considering adopting an existing intervention
1. How similar is the problem to the one I am trying to resolve (pupil characteristics, age group, nature of subject)?
2. What kind of impact do they appear to have achieved and over what period of time? From what I know of other kinds of interventions, how long does it take to see results? Am I able to invest for that amount of time?
3. How robust is the evidence for the impact being claimed (e.g. additional months progress on some nationally standardized scale, scale of pupils/groups involved, comparator groups, externally validated or verified, trialled by a network of schools, wider research base)?
4. What are the quoted costs of the intervention and does it look from my experience as if there might be any hidden costs or requirements? How does this intervention compare with others that are looking to achieve similar aims? Is it more or less costly? More or less time consuming?
5. How does this evaluation compare with my own experience of these kinds of interventions and those of people I know?
6. Does this evidence come from a school context that is meaningfully similar to mine? Are there some aspects of my context that might mean that it is more/less effective or easier/harder to implement?
7. Were there any non-negotiables or specific circumstances that they identified would have to be in place for this to work e.g. in terms of data collection, cover time or arrangements with other staff?
8. What would it take to implement this intervention well in my context? Do we have adequate systems, resources, and time to make this work? Are there any potential barriers to achievement? Would it be supported by leadership?
9. If I were to implement this, would it replace something else? What would the impact of stopping that other kind of work be?
10. What if it doesn't work? Will I be able to justify having tried?

Source: Project Oracle (2015)

5.1.4 May's model for the analysis of conditions necessary to support introduction of complex interventions

May's (2006) model may be useful for organisations to decide whether an EBP intervention has the potential to be adapted into every-day practice. May conducted a number of qualitative studies around how new clinical interventions became normalised in everyday practice in health care. The data from these studies were analysed to create a model to assist organisations in understanding the practical challenges when adapting an intervention to a new context. The model aims to identify and evaluate the factors that enable or inhibit integration of complex interventions into a mainstream service. Although the model does not relate specifically to evidence-based interventions, it may nonetheless apply to the processes necessary for integrating EBP on a large-scale.

The model specifies that four constructs within an intervention or EBP should be evaluated to assess whether they may be an enabling or inhibiting factor to successful implementation. These constructs are:

- **Interactional workability.** This refers to the work that professionals and patients do. Enabling components for normalising new interventions include evidence of co-operation (see 3.3), shared beliefs about roles, the meaning of the work, goals and outcomes, and a set of rules that govern these interactions (see 2.2.4).

- **Relational integration.** This refers to the level of trust that is embedded in professional knowledge and practice. Enabling components within this domain that will support the normalisation of interventions include agreement about the skills and knowledge related to the work, shared beliefs about the expertise necessary for the intervention, and a set of rules for distributing this knowledge (see 3.5).

- **Skill-set workability**. This refers to the division of labour in health care settings and the mechanisms by which knowledge about complex interventions is shared. Enabling components include policies about allocations of tasks and the competencies required for working within an intervention, agreements about skills appraisals and the level of autonomy of staff, and mechanisms for training and monitoring (see 3.5).

- **Contextual integration.** This refers to the capacity of an organisation to understand and agree the allocation of control and resources needed to implement an intervention and decide how it fits into an existing service. Enabling components include formal or informal policies about how resources are distributed, how existing systems and practices need to be modified to make new ones possible, and how to minimise disruption and risk that may be associated with EB. Other enablers include clarity around the responsibilities of stakeholders (see 2.2.4) and mechanisms to evaluate the work being done.

An intervention can be given a score against each of these constructs to assess the potential it has for being integrated into every-day practice.

5.2 Evaluation frameworks and tools

This second group of frameworks are those used for evaluating the extent to which an EBP is being adopted. These related to nursing in the UK, but may be useful in evaluating the use of EBP across the health and social care sector more widely.

5.2.1 The Developing Evidence-Based Practice questionnaire

Gerrish et al. (2006) developed a validated questionnaire to be used by the nursing profession to determine the extent of EBP. (N.B. it has been validated for nursing in both hospital and community settings in England.) They suggest that the questionnaire could be used as an outcome measure in 'before and after' intervention studies that aim to assess the impact of service development, training or other innovations on the extent of evidence-based practice. More information about the questionnaire can be found here.

5.2.2 Upton & Upton's evidence-based practice questionnaire (EBPQ) for nursing

Upton & Upton (2005) developed the evidence-based practice questionnaire (EBPQ) which is a validated self-report measure of EBP across three key dimensions: evidence-based practice, knowledge of EBP and attitudes towards EBP in nursing. The tool was intended to be used to measure the implementation of EBP. However, Upton & Upton found that the questionnaire may also be useful for developing and evaluating educational programmes, policy developments and management initiatives. More information about the questionnaire can be found here.

6   Conclusions

Overall, there are relatively few studies that have evaluated the success of implementing evidence-based practice in the health and social care sector. There are even fewer that research the effectiveness of the specific frameworks outlined in Section 5. However, a broad review of the literature highlights some potential enablers that may support the implementation of EBP in relation to context, collaboration, leadership, skills, capacity and funding.

The over-riding feature that permeates through each phase and aspect of implementation is the significance of context and collaboration. Planning for and adapting EBP for a new setting is influential on the long- and short-term success and sustainability of a new intervention or way of working, and collaboration between stakeholders is instrumental to achieving this. In the health and social care sector, where context is such an influential factor on the type and scale of services provided, it may be argued this collaboration and consideration is particularly vital.