

Bridging the gap

An introduction to implementation science



Introduction

The youth mental health field is undergoing a period of rapid and significant change. The evidence base for effective practices and programs is growing and the expectation that youth mental health care be informed by research evidence has never been greater.

However, bridging the gap between research and practice is a considerable challenge.

Organisations that adopt new interventions or programs often fail to implement them with sufficient quality to achieve the desired outcomes.

Fortunately, the field of implementation science is developing our understanding of what it takes to successfully implement evidence-based practices and programs (EBPs) in the 'real world'.

The application of this knowledge could help to increase the uptake of EBPs across the youth mental health sector, enabling more young people to benefit from effective care.

About this guide

To stimulate the thinking of those involved in developing, planning, commissioning, and providing youth mental health programs, this brief guide provides an overview of the implementation science field.

What's covered:

- What is implementation and why does it matter?
- What real world factors affect implementation?
- How can quality implementation be achieved?
- How can success be measured?
- Where has implementation science been applied in the field?
- Examples of implementation science being applied in youth mental health

The fundamentals of implementation

What are evidence-based practices?

In implementation science, evidence-based practices (EBPs) refer to interventions, practices, programs, policies, or guidelines that have some evidence of their efficacy and effectiveness for a given population or clinical problem.^{1,2}

Implementing programs and practices that have already been shown to be effective offers the best chance of achieving health and social outcomes, and provides best value for money.

When an EBP is implemented with quality, the likelihood that a program will achieve positive outcomes for young people increases

What is implementation?

The process of trying to integrate research findings and EBPs into real-world settings is known as implementation.

When an EBP is implemented with quality, the likelihood that the program will achieve the desired outcomes for young people increases.^{3,4}

Unfortunately, the benefits of EBPs are often unrealised, and their effectiveness reduced by issues (often unseen) with implementation that are not adequately addressed.⁵

Implementation failure has a substantial cost. Not only does it waste public money, but worse it can negatively impact on the quality of care by causing unnecessary disruption to health professionals and the wider health system.⁶

What is implementation science?

Emerging in the early 2000s to address the research to practice gap, implementation science is a multidisciplinary field that has been defined as: '*the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice, and, hence, to improve the quality and effectiveness of health services.*'⁷

As the field has grown over the past two decades, attitudes to what implementation involves have changed. They have shifted from 'let it happen' (where evidence is published for whoever wants to use it) to 'help it happen' (where guidance and one-off trainings are provided) to 'make it happen' (where implementation is planned and multiple strategies are used to integrate EBP).⁸

Factors impacting on implementation

A key aim of implementation science has been to identify the factors that inhibit or facilitate quality implementation. Thanks to multiple studies, these factors, often referred to as implementation determinants, are now well known.

There are numerous determinants which span multiple levels of a healthcare system, from the level of healthcare practitioners and consumers up to the broader economic and policy context.

Identifying the potential barriers and facilitators when planning for implementation provides crucial information that helps to determine what the most appropriate implementation methods will be for the particular setting.

Characteristics of the practice or program	Characteristics of healthcare practitioners	Characteristics of healthcare consumers	Characteristics of the context	Characteristics of the implementation process
<ul style="list-style-type: none">▪ Appropriateness to address the identified problem▪ Fit with local setting▪ Utility and accessibility of guidelines▪ Internally or externally developed▪ Quality and validity▪ Adaptability▪ Relative advantage over alternatives▪ Complexity▪ Cost	<ul style="list-style-type: none">▪ Knowledge and beliefs about the practice of program▪ Self-efficacy▪ Competency▪ Cognitive and behavioural barriers to change▪ Motivation▪ Commitment to the organisation	<ul style="list-style-type: none">▪ Young people's needs▪ Young people's preferences▪ Young people's resources▪ Young people's access to services	<ul style="list-style-type: none">▪ Organisational readiness▪ Structural characteristics▪ Organisational culture▪ Leadership▪ Incentives and rewards▪ Tension for change▪ Resources▪ Scientific theory and research▪ Political pressures and influences▪ Availability of funding▪ Local, state or federal policies	<ul style="list-style-type: none">▪ Level of planning▪ Formalised implementation plan▪ Level of internal or external support▪ Presence of implementation leaders, champions or team▪ Engagement with stakeholders

Table 1: Implementation determinants, based on Nilsen et al.⁹, Damschroder et al.¹⁰, Durlak and Dupre¹¹

Achieving quality implementation

Quality implementation

Defined as '*putting an innovation [EBP] into practice in such a way that it meets the necessary standards to achieve the innovation's desired outcomes.*'¹²

The field has identified common characteristics associated with achieving quality implementation:

- It is a process that occurs in stages, progressing from planning to full implementation and sustainability
- It requires multiple implementation strategies targeted at several levels of the healthcare system
- It involves collaboration between service providers, policymakers, researchers, and 'intermediary' organisations that can help develop implementation capacity.^{3,13}
- It can take, on average, two to four years to achieve the desired program outcomes.⁵

An increasing emphasis on synthesising implementation research has developed understanding of the methods or techniques (known as implementation strategies) which can be used to achieve quality implementation.

For instance, an extensive review of the field has led to the compilation of 73 implementation strategies, rated by their feasibility and importance, and organised into six categories:^{14,15}

- Planning strategies
- Education strategies
- Financial strategies
- Strategies to restructure
- Quality management strategies
- Strategies to address the policy context

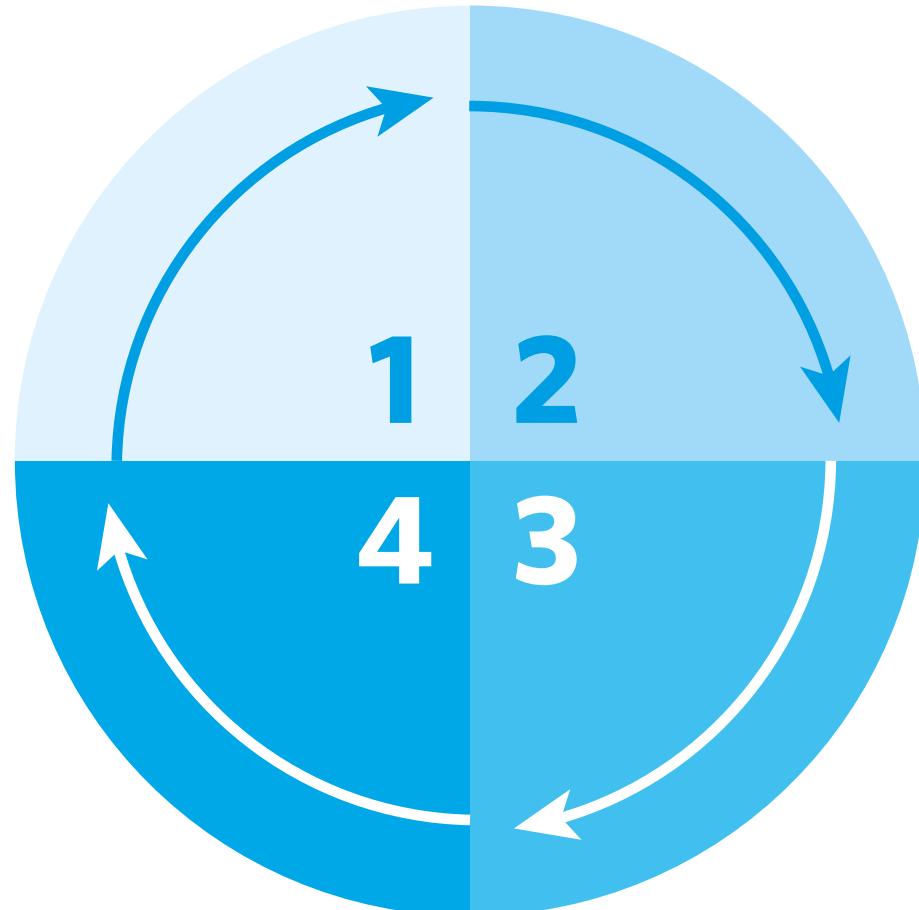
Education strategies i.e. staff training, are the most commonly used strategies, however the evidence is clear that they are not sufficient to facilitate successful implementation by themselves. They need to be part of a larger suite of strategies.

Whilst it is useful to use theory and frameworks to guide implementation, making sense of them can be a time consuming process. Therefore, on the next pages we outline an example of a staged approach to implementation, which draws on common components of implementation identified in the research.^{12,14-17}

A staged approach to implementation

1. Explore

- Identify the problem or need
- Assess evidence for programs or interventions that could address the problem
- Assess fit and feasibility of the program or intervention for the setting



2. Prepare

- Assess the organisation's readiness
- Develop an implementation plan
- Foster a supportive climate
- Create an implementation team
- Build staff capability and develop infrastructure to support implementation

4. Sustain

- Plan for sustainability early
- Support and encourage good implementation practices
- Secure ongoing resources and implementation supports

3. Implement

- Support staff and problem solve as issues arise
- Reinforce training with follow-up support and supervision
- Use data to improve the implementation process
- Conduct a process evaluation

Figure 1: An example of a staged approach to implementation, informed by Aarons et al¹⁶, Meyers et al¹², Powell et al^{14,15}, and Sharples et al¹⁷. Although it is presented as a linear process, stages will often overlap and need to be revisited.

Stage 1: Explore

The exploration stage is primarily concerned with identifying and defining the problem to be solved, and then turning to the evidence to find an appropriate intervention or program.

Identifying the problem requires examining any available information that can help to refine the area of focus, including any relevant data concerning the organisation, the client group, the community or the workforce. Stakeholder perceptions should also be gathered and considered. Consideration should be given not only to the problem or gap that exists, but also to what change might look like.

Once the problem has been identified and defined, the question of how to best solve the problem must be addressed. This requires looking to the existing evidence to find interventions, programs or approaches that have been shown to be effective previously. This might involve looking to what has worked in the past in the setting itself, or looking for

interventions that have been shown to work in similar settings where the same problem has been faced.

Finding trusted evidence can be a significant challenge, not only because of the varying quality of evidence available but also because of the limitations of evidence, i.e.:

- Evidence does not always exist
- Evidence from one setting doesn't always translate to another
- An effective intervention may not have been tested in a way which has established it as an evidence-based practice
- An evidence-based intervention may not be appropriate for a particular client or cultural group

Trusted sources of evidence include systematic reviews, findings from randomised control trials, clinical guidelines and other forms of evidence synthesis. However, where a clear evidence base for an intervention does not exist or where adaptation of an intervention is required, a pragmatic approach can be to implement evidence-informed practice.

Evidence informed practice combines the best available research with the experience and judgment of practitioners, and the preferences of young people and families to deliver measurable benefits.

Finally, the fit and feasibility of the intervention or program for the implementation setting needs to be established. This involves assessment of whether the intervention's objectives – the purpose, the target group, activities, and outcomes align with the organisation's needs, values and resources.

Questions to explore in order to assess the fit and feasibility include how likely the program is to be accepted by staff and clients, how much additional capacity building will be required, whether there are funds available to carry out the intervention, and whether there is likely to be support from organisational leaders.

Stage 2: Prepare

The preparation stage involves assessing the readiness of the organisation to implement the chosen program, putting together an implementation plan, and preparing the people and resources required for delivery of the program.

Assessing the organisation's readiness involves establishing the degree to which the organisation is ready to adopt the change, and identifying potential barriers and enablers to quality implementation. This information can then be used to help inform the implementation plan and the strategies selected. The types of questions to consider in a readiness assessment include:

- Who are the key stakeholders and how engaged are they?
- How motivated are staff to adopt the program?

- Is there support for the change amongst management/leaders?
- Do staff have the skills or confidence to carry out the program?
- What resources are required to implement the program?
- How will data be collected and analysed? Frameworks like R=MC² model and the Consolidated Framework of Implementation Research framework (CFIR) can be used to guide readiness assessment (see further resources).

The implementation plan should follow a clear logic, and be based on a detailed understanding of the components of the intervention and the changes it will bring about if implemented effectively. It should include tasks, responsibilities and timelines in order to improve accountability as the implementation progresses.

Developing a logic model can be helpful in creating the implementation plan, as it provides a framework for linking each step of the process

from problem identification to activities, through to short and longer-term outcomes. The plan should describe:

- The identified problem
- The program or intervention
- The implementation strategies which will support the program to be carried out
- The changes to occur as a result of the implementation activities
- The expected outcomes for the target group

The implementation activities identified in the plan should address the needs and barriers identified through the readiness assessment, and be based where possible on evidence for strategies to support and sustain behavioural and organisational change.

Implementation outcomes should be clearly defined as part of the plan and measures identified to allow for monitoring once the delivery of the program begins.

Stage 2: Prepare (continued)

Once the implementation plan has been developed and strategies identified, the people and infrastructure must be prepared. This involves setting up the practical requirements for implementation and getting those who will be involved in the change process ready for action. This will again be informed by the readiness assessment, which will have identified the key people to be involved, as well as their capacity and capability to adopt the change.

Fostering a supportive environment is key to preparing for implementation, and involves creating a shared understanding of and rationale for the program or intervention to be adopted. It also requires clarification of what the implementation process will involve and what it will require from staff. Strategies for the most effective form of communication for the audience will need to be considered, using existing communication lines where possible and allowing opportunities for discussion and questions from staff.

Recruiting opinion leaders to be advocates or 'champions' for the program can also be helpful in creating a supportive environment for change.

Champions can be used not only to communicate the advantages of a new way of working and the rationale for the chosen program, but can lead by example through their direct participation in the implementation process.

Champions may also form part of an implementation team, alongside other program staff and external staff from intermediary organisations who have particular knowledge of the intervention or of implementation.

Implementation teams are one strategy that can support the building of staff capacity to deliver the program by providing on the ground expertise, advice and monitoring, alongside other integral strategies such as training and supervision.

Finally, building the organisation's general capacity for implementation is also an important consideration, and will involve ensuring the infrastructure, processes and resources are in place to deliver the program. This might involve practical considerations such as administrative support and office space as well as the formalising and communication of governance arrangements and updating of policies.

Stage 3: Implement

This stage marks the start of the program delivery. Implementation activities move towards supporting staff through the change, monitoring progress, providing feedback and adapting implementation as required.

Quality assurance and quality improvement are the primary focus, ensuring that the program is being delivered as intended and processes are in place to address any identified challenges.

Initial training will need to be reinforced by follow-up sessions, ongoing supervision, coaching or other technical assistance. Support could be provided by external bodies or internal supervision and peer support.

Creating processes for staff to provide feedback on progress and troubleshooting around any issues as they arise will be important in creating a supportive environment, especially in the early stages of change.

A process evaluation is a vital strategy to assess how well implementation is progressing and how it can be improved. It provides answers to questions such as:

- Is the program being implemented as intended? To what extent?
- Are staff confident in delivering the program elements?
- Do staff believe the program is appropriate and effective?
- How do clients experience the program?
- Are there barriers to implementation? Can they be addressed through adaptations?

Ideally, the evaluation should be planned for before delivery begins and occur in the first two years of delivery. The evaluation plan should document what data will be collected, how often, and which tools will be used.

Ahead of the evaluation, data on implementation outcomes should be regularly monitored and mechanisms for providing practical feedback to all stakeholders should be developed. This might involve regular reports on progress in team meetings or online portals which allow staff to access relevant data.

Using implementation data to address challenges and capitalise on strengths will not only improve the implementation process but also demonstrate to staff that data collection is meaningful, which can lead to greater accuracy and timeliness of data reporting.

Stage 4: Sustain

Sustainability refers to the successful continuation of an intervention or program over the longer term. Whilst it is presented as the final stage of implementation, it should be considered throughout the implementation process.

Identifying what scale-up might look like will help to guide activities to support sustainability. It might require expansion of training to a greater number of staff, providing advanced training to those already delivering the program, or it might involve expanding the scope of the program to a greater number of young people.

Strategies should be used to embed the new program as 'business as usual' within the organisation. This might involve formal changes to policies and procedures, for example orientation for new staff or operations guides. Program expertise within the organisation should be developed so that reliance on external support diminishes over time. Contingencies should be put in place for situations which might undermine the delivery of the program e.g. staff turnover.

Review the implementation process and the outcomes achieved, so that learnings can be fed back into the ongoing delivery and decisions can be made about whether the program needs to be adapted to meet changing needs and demands.

Efforts should be made to communicate the program's successes and experience of implementation to stakeholders. This might involve engaging the local community, funders or even other agencies who may be interested in adopting the program.

Finally, securing the resources required to continue delivering the program is vital for sustainability. While this may involve identifying new funding streams or recruitment of more staff, opportunities for leveraging existing resources and building on existing capacity should be identified and used wherever possible.

Measuring implementation

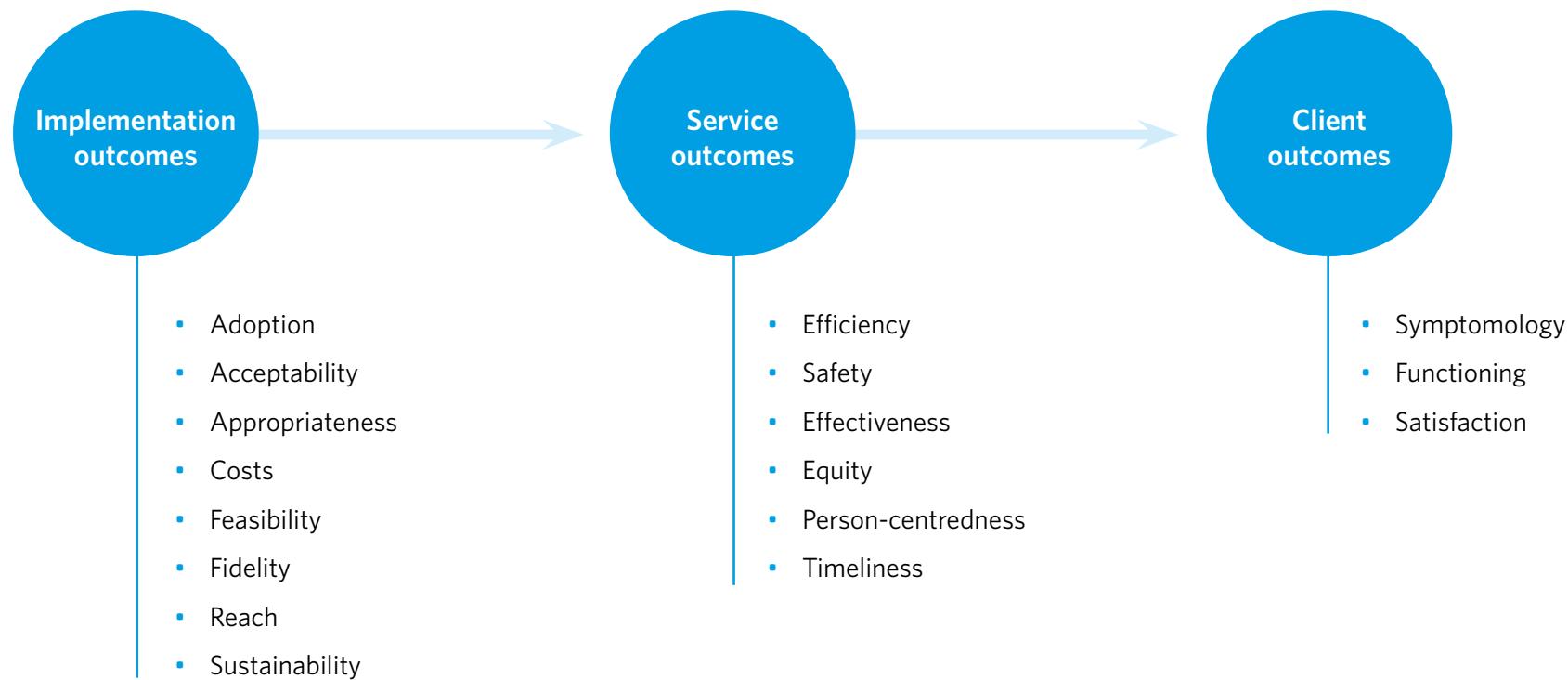


Figure 3: Implementation outcomes can be seen as intermediate outcomes which contribute to service and client outcomes, adapted from Proctor et al.¹⁸

Measuring implementation (continued)

Implementation outcomes are 'the effects of deliberate and purposive actions to implement new treatments, practices, and services'.¹⁸ They can be used as indicators of how well implementation is progressing.¹⁹

They can also be seen as intermediate outcomes, which contribute to service outcomes and clinical outcomes. In other words, an EBP's effectiveness is dependent on it first achieving implementation outcomes.¹⁸

There are a growing number of validated measurement tools available, however, it is generally infeasible to measure all outcomes. Prior to delivery, consideration needs to be given to which outcomes are most appropriate and feasible to measure.

Outcome	Definition
Adoption	The intention, initial decision, or action to try to employ a new practice or program.
Acceptability	The perception among stakeholders (e.g. consumers, providers, managers, policy-makers) that a practice or program is agreeable.
Appropriateness	The perceived fit or relevance of the practice or program in a particular setting, or for a particular target audience or issue.
Feasibility	The extent to which a practice or program can be carried out in a particular setting or organisation.
Fidelity	The degree to which a practice or program was implemented as it was designed in an original protocol, plan, or policy.
Implementation cost	The incremental cost of the delivery strategy (e.g. how the services are delivered in a particular setting).
Reach	The degree to which the population that is eligible to benefit from a practice or program actually receives it.
Sustainability	The extent to which a practice or program is maintained or institutionalised in a given setting.

Table 2: Definitions of implementation outcomes, adapted from Proctor et al.¹⁸

Implementing the CYP IAPT service transformation program

What is CYP IAPT?

Led by the Department of Health (UK), the Children and Young People's Improving Access to Psychological Therapies (CYP IAPT) program ran between 2011 and 2015. The program aimed to 'transform' Child and Adolescent Mental Health Services (CAMHS) across England, by helping them to embed a number of core principles:²⁰

- To improve access through self-referral
- To work in partnership with the young person and their parent/carer in service delivery and design
- To deliver evidence-based psychological treatments
- To deliver outcomes-focused psychological treatments

- To work in partnership with the young person and their parent/carer throughout treatment
- To provide supervision to support the delivery of evidence-based, service user-informed, and outcomes-informed practice
- To support whole service transformation through leadership

What implementation models or theories were drawn on?

The approach and strategies selected were based on Fixsen and colleagues'^{8,21} Active Implementation Frameworks. There were five stages: exploration, installation, initial implementation, full installation, and sustainability.

What implementation strategies were used?

The program set up five regional collaboratives, which were tasked with leading implementation locally. Each collaborative included a higher education institution, local services from both state and voluntary sectors, and local commissioners.²²

Funding was made available to collaboratives to support backfill of staff on training, or training fees; developing IT infrastructure; local participation by children and young people; and improvement to access.²²

A selection of service staff received training on a range of evidence-based interventions, supervision, leadership, and demand and capacity management. Training involved intense workshops followed by ongoing consultation. The vision was that these staff would lead service transformation and more effective practices within their own services.²³

Services were required to submit data (including clinical outcomes) to a national dataset, and meet a set of agreed service standards. The regional collaboratives also shared learning and best practice at national forums.²²

What were the implementation outcomes?

Adoption - By the end of the program, 70% of CAMHS were working toward the CYP IAPT principles²²

Reach - Approximately 95,000 cases were seen²⁰

Sustainability - CYP IAPT principles included in national policy, the program is aiming for 100% coverage of CAMHS²²

Implementing metabolic monitoring in a first episode psychosis clinic²⁴

The implementation setting

The EPPIC program is a specialist early intervention program for young people aged between 15 and 25, experiencing a first episode of psychosis in the north western region of Melbourne.

What was the issue that needed to be addressed?

Routine monitoring of physical health and in particular screening for metabolic disturbance amongst individuals prescribed second-generation antipsychotics has been identified as essential in order to prevent long-term negative health outcomes.

Standard clinical care protocols outlining the required metabolic monitoring were in place at EPPIC, supported by a monitoring form attached to the clinical file. Despite this, a file

audit found that monitoring was not routinely taking place as per the protocol and monitoring forms were not being used by clinicians.

What implementation models or theories were drawn on?

A barrier analysis was undertaken to identify the reasons why clinicians weren't following metabolic monitoring guidelines. The analysis was informed by the Theoretical Domains Framework (TDF)²⁵ – a framework which integrates the various theories of behaviour change into a set of overarching domains. The TDF is used within implementation science as a basis for assessing potential barriers to change within a given implementation context and matching barriers with evidence-based strategies.

The analysis, undertaken through semi-structured interviews, identified barriers including:

- Time and effort too great
- Lack of priority
- Perception as being unnecessary for everyone
- Perception that it was too difficult
- Lack of equipment
- Perception that it would impact on rapport
- Lack of confidence

What implementation strategies were used?

A multifaceted intervention was developed to target the identified barriers, with strategies chosen based on evidence for the mechanisms underlying the desired behavior change and the effectiveness of behaviour change strategies.^{25,26}

Strategies implemented were targeted at both the individual and organisational level, and included education interventions (didactic education seminars, the use of opinion leaders to disseminate information, visual reminders), audit and feedback interventions (electronic database with alerts and reminders), structural interventions (updated monitoring forms, embedding of reminders in team meeting processes), and provision of resources (scales, blood pressure cuffs, tape measures, pathology form stamps).

What were the implementation outcomes?

There were significant improvements in the rates of both metabolic screening - increasing from 22% to more than 80% - and metabolic monitoring - increasing from 2% to almost 40% - following the implementation.

The number of active interventions offered to clients by clinicians also increased from 7% to 30%.

Next steps

This guide has only scratched the surface of what is a rapidly evolving field. However, hopefully it has highlighted why attention should be given to trying to achieve quality implementation and has provided some initial ideas about how this might be approached.

Whilst it is best to consider implementation concepts and strategies before the delivery of new interventions and programs begins, implementation is not a linear process. Stages often need to be revisited, so even if you are midway through an implementation project it is worth considering how these concepts could be applied.

Some useful implementation resources are included here to help with your implementation project.

Implementation Science models and frameworks

The Consolidated Framework for Implementation Research (CFIR)¹⁰ can be used to identify the barriers and enablers to implementation that may present at the different levels of the healthcare system.

The Theoretical Domains Framework²⁵ integrates the various theories of behaviour change into 14 overarching domains, which can be used to identify and develop appropriate implementation strategies.

The R=MC² model²⁷ frames organisational readiness as a combination of an organisation's motivation to adopt the intervention, its general capacity for change and its innovation-specific capacity.

The Expert Recommendations for Implementing Change (ERIC)¹⁵ project compiled 73 implementation strategies, rated by their importance and feasibility.

The Quality Implementation Framework¹² synthesises information from 25 implementation frameworks to provide a conceptual overview of the implementation process. It describes 14 steps over four distinct phases.

Other Resources

Orygen - A quick reference guide to evidence translation <https://www.orygen.org.au/Education-Training/Resources-Training/Resources-Free/Clinical-Practice/Evidence-translation>

Orygen - Program evaluation: Laying the right foundations https://www.orygen.org.au/Education-Training/Resources-Training/Resources-Free/Toolkits/Program-evaluation/Orygen_evaluation_toolkit.aspx?ext=

Ontario Centre of Excellence for Child and Youth Mental Health - Implementing evidence-informed practice: A practical toolkit http://www.excellenceforchildandyouth.ca/sites/default/files/resource/toolkit_implementing_evidence-informed_practice.pdf

References

1. Powell BJ, Proctor EK, Glass JE. A Systematic Review of Strategies for Implementing Empirically Supported Mental Health Interventions. *Res Soc Work Pract* 2014; 24: 192-212.
2. Rabin BA, Brownson RC, Haire-Joshu D, et al. A Glossary for dissemination and implementation research in health. *J Public Health Manag Pract* 2008; 14: 117-123.
3. Durlak JA. The Importance of Quality Implementation for Research, Practice, and Policy. US Department of Health and Human Services, <https://aspe.hhs.gov/report/importance-quality-implementation-research-practice-and-policy> (2013).
4. Metz A, Albers B. What Does It Take? How Federal Initiatives Can Support the Implementation of Evidence-Based Programs to Improve Outcomes for Adolescents. *J Adolesc Health* 2014; 54: S92-S96.
5. Ghate D. From Programs to Systems: Deploying Implementation Science and Practice for Sustained Real World Effectiveness in Services for Children and Families. *J Clin Child Adolesc Psychol* 2016; 45: 812-826.
6. Rapport F, Clay-Williams R, Churruca K, et al. The struggle of translating science into action: Foundational concept of implementation science. *J Eval Clin Pract* 2016; 24: 117-126.
7. Eccles MP, Mittman BS. Welcome to Implementation Science. *Implement Sci* 2006; 1: 1.
8. Fixsen DL, Blase KA, Naom SF, et al. Core Implementation Components. *Res Soc Work Pract* 2009; 19: 531-540.
9. Nilsen P. Making sense of implementation theories, models and frameworks. *Implement Sci* 2015; 10: 1-13.
10. Damschroder LJ, Aron DC, Keith RE, et al. Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. *Implement Sci* 2009; 4: 50-64.
11. Durlak J, DuPre E. Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *Am J Community Psychol* 2008; 41: 327-250.
12. Meyers DC, Durlak JA, Wandersman A. The Quality Implementation Framework: A Synthesis of Critical Steps in the Implementation Process. *Am J Community Psychol* 2012; 50: 462-480.
13. Franks Robert P, Bory Christopher T. Who Supports the Successful Implementation and Sustainability of Evidence-Based Practices? Defining and Understanding the Roles of Intermediary and Purveyor Organizations. *New Dir Child Adolesc Dev* 2015; 2015: 41-56.
14. Powell BJ, Waltz TJ, Chinman MJ, et al. A refined compilation of implementation strategies: results from the Expert Recommendations for Implementing Change (ERIC) project. *Implement Sci* 2015; 10: 21.
15. Powell BJ, McMillen JC, Proctor EK, et al. A Compilation of Strategies for Implementing Clinical Innovations in Health and Mental Health. *Med Care Res Rev MCRR* 2012; 69: 123-157.
16. Aarons GA, Hurlburt M, Horwitz SM. Advancing a Conceptual Model of Evidence-Based Practice Implementation in Public Service Sectors. *Adm Policy Ment Health Ment Health Serv Res* 2011; 38: 4-23.
17. Sharples J, Albers B, Fraser S. Putting Evidence to Work: A School's Guide to Implementation. The Education Endowment Foundation, <https://educationendowmentfoundation.org.uk/public/files/Publications/Campaigns/Implementation/EEF-Implementation-Guidance-Report.pdf> (2018).
18. Proctor E, Silmere H, Raghavan R, et al. Outcomes for Implementation Research: Conceptual Distinctions, Measurement Challenges, and Research Agenda. *Adm Policy Ment Health Ment Health Serv Res* 2011; 38: 65-76.
19. Peters DH, Tran NT, Adam T (eds). Implementation research in health: a practical guide. Geneva, Switzerland: World Health Organization, 2013.
20. Wolpert M, Jacob J, Napoleone E, et al. Child- and Parent-reported Outcomes and Experience from Child and Young People's Mental Health Services 2011-2015. 2016; 84.
21. Fixsen DL, Naom SF, Blase KA, et al. Implementation Research: A Synthesis of the Literature. Tampa: Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network, 2005.
22. Fonagy P, Clark DM. Update on the Improving Access to Psychological Therapies programme in England. *BJPsych Bull* 2015; 39: 248-251.
23. Wolpert M, Rutter H. Using flawed, uncertain, proximate and sparse (FUPS) data in the context of complexity: learning from the case of child mental health. *BMC Med* 2018; 16: 82.
24. Hetrick S, Álvarez-Jiménez M, Parker A, et al. Promoting Physical Health In Youth Mental Health Services: Ensuring Routine Monitoring of Weight and Metabolic Indices in a First Episode Psychosis Clinic. *Australas Psychiatry* 2010; 18: 451-455.
25. Michie S, Johnston M, Abraham C, et al. Making psychological theory useful for implementing evidence based practice: a consensus approach. *BMJ Qual Saf* 2005; 14: 26-33.
26. Grimshaw J, Thomas R, MacLennan G, et al. Effectiveness and efficiency of guideline dissemination and implementation strategies. *Health Technol Assess*; 8. Epub ahead of print February 2004. DOI: 10.3310/hta8060.
27. Scaccia JP, Cook BS, Lamont A, et al. A practical implementation science heuristic for organizational readiness: R = MC². *J Community Psychol* 2015; 43: 484-501.



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