

The Triple P Implementation Framework: the Role of Purveyors in the Implementation and Sustainability of Evidence-Based Programs

Jenna McWilliam^{1,2} · Jacquie Brown¹ · Matthew R. Sanders³ · Liz Jones²

Published online: 11 May 2016 © Society for Prevention Research 2016

Abstract Evidence-based programs are considered critical in the human services field if major social and health problems are to be addressed. Despite the large number of programs that have been developed and implemented, there is much to learn about how to effectively implement these programs in community settings. One perspective that is rarely represented in the literature is that of the purveyor organization (an organization that actively works to disseminate and support the implementation of a program or practice). This paper introduces the Triple P Implementation Framework, developed by the program's purveyor organization, and discusses principles underlying the design and implementation of the Framework. The Framework incorporates two key underlying principles of the Triple P system: minimal sufficiency and self-regulation. Lessons learned from the application of these principles and the implementation process are discussed, along with directions for future research.

Keywords Implementation \cdot Evidence-based programs \cdot Triple P \cdot Purveyor \cdot Public health

Triple P Implementation Framework

Successful application and sustainability of any evidencebased program (EBP) depends not only on the intervention's

- ¹ Triple P International, Brisbane, Australia
- ² Griffith University, Brisbane, Australia
- The University of Queensland, Brisbane, Australia

 $\underline{\underline{\mathscr{D}}}$ Springer

effectiveness but also on how it is implemented and sustained (Fixsen et al. 2005). Despite the development and implementation of a growing number of EBPs, there is much to learn about effectively implementing programs in community settings. There is often a gap between how EBPs are intended to be delivered and how they are actually delivered in real-world settings, which presents a major challenge for program developers, purveyors, funding organizations, implementing organizations, practitioners, and consumers alike. This paper presents a case example of one program purveyor's approach to working toward a solution to this challenge. It documents how Triple P International (TPI), the purveyor of the Triple P-Positive Parenting Program® (Triple P), developed a collaborative consultation framework to enhance the effective implementation of the program and provides an overview of the Triple P Implementation Framework (the Framework). Furthermore, this paper seeks to highlight the benefits of combining recommendations from implementation science literature with knowledge from multiple implementation experiences across a range of contexts to enhance the development of practical strategies for implementing organizations.

The importance of high-quality implementation is well established and evidenced across multiple sectors (Durlak and DuPre 2008; Fixsen et al. 2005). Without high-quality implementation, EBPs are unlikely to achieve their intended effects in practice (Fixsen et al. 2005). Poor or incomplete implementation may lead to core elements being left out, the intervention being used inconsistently, the wrong intervention being used (Damschroder and Hagedom 2011), or poorer clinical outcomes (Washington State Institute for Public Policy 2004).

Implementation is defined as "a specified set of activities designed to put into practice an activity or program of known dimensions" (Fixsen et al. 2005, p. 5). Implementation can also be defined through the distinctions between diffusion,

dissemination, and implementation, and the continuum between passive and active approaches to knowledge transfer (Greenhalgh et al. 2004). The distinctions between these concepts can be described as the difference between letting it happen (diffusion; e.g., Rogers 1995), helping it happen (dissemination, research on facilitators, and barriers to program uptake; e.g., Brownson et al. 2012), and making it happen (implementation; e.g., Fixsen et al. 2005). Diffusion literature informs up to the point of deciding to adopt an innovation but does not explain how to implement that innovation with fidelity (Rogers 1995), nor is diffusion sufficient to reliably produce and sustain positive benefits to consumers (Fixsen et al. 2005). As the field of implementation science advances, focus has turned to strategies and processes that improve uptake and outcomes (Proctor et al. 2013). Powell et al. (2012) define an implementation strategy as "a systematic intervention process to adopt and integrate evidencebased health innovations into usual care" (p. 124), and distinguish between implementation strategies that are "discrete" (single action), "multifaceted" (combining two or more actions), and "blended" (multiple strategies packaged as a protocolized implementation intervention).

This paper illustrates how a purveyor organization can draw from implementation experiences across a range of contexts to enhance the applicability and usability of strategies. This is done by integrating these experiences with recommendations from implementation science literature and tailoring strategies to suit the characteristics of the EBP to be implemented. Through examining the experiences of TPI, this paper also demonstrates how purveyor organizations can play a vital role in deploying these strategies to support implementation across a range of contexts.

The Role of the Purveyor Organization

Developments in the implementation science field have increased understanding of elements of effective implementation and the different roles played by various groups in implementing EBPs. One such group, purveyors, has received increased attention in recent years (Oosthuizen and Louw 2013). A purveyor is "an individual or group of individuals representing a program or practice who actively work to implement that practice or program with fidelity and good effect" (Fixsen et al. 2005, p. 82). Purveyors play a vital role in how EBPs are disseminated and implemented. Over time, the purveyor of an EBP accumulates knowledge from repeated implementation attempts (Winter and Szulanski 2001; Schofield 2004), which gives the purveyor experience in the facilitators and barriers that support and hinder implementation, and how these may be enhanced or overcome. With experience, the purveyor can alert implementation sites to issues that may arise and suggest solutions.

In the case of the Triple P-Positive Parenting Program[®] (Triple P), the purveyor organization, TPI, was established to increase the reach of the program through focusing on program dissemination and maintaining program quality. TPI's accumulated implementation experience as a purveyor prompted the exploration of how it could be more active in supporting the implementation process.

The Triple P-Positive Parenting Program®

Triple P, developed at The University of Queensland, is a multilevel system of parenting interventions that increase parents' knowledge, skills, and competence in parenting by teaching strategies to raise healthy, well-adjusted children. Triple P is supported by an extensive evidence base (see Sanders et al. 2014), and the World Health Organization (2009) reported that Triple P has some of the strongest evidence for a parenting program's ability to prevent child maltreatment. Triple P is currently implemented in 25 countries, with more than 65,000 trained practitioners from varied disciplines (e.g., health, education, and social services), by a diverse range of organizations and as a population-based approach in some local and state jurisdictions.

The Triple P system is based on two core principles: *minimal sufficiency* and *self-regulation*. *Minimal sufficiency* means using the strength of intervention that is just enough to solve a problem, without providing more or less than required (Sanders 2012). To address this, the Triple P system comprises a number of programs that differ in complexity, intensity, target population, and delivery mode. *Self-regulation* is the process of learning to change one's behavior and become an independent problem solver. Self-regulation refers to "processes, internal and/or transactional, that enable an individual to guide his/her goal-directed activities over time and across changing circumstances" (Karoly 1993, p. 25), including self-sufficiency, self-efficacy, self-management, personal agency, and problem solving.

Triple P adopts a public health approach to parenting support to achieve meaningful change at a population level in children's emotional and behavioral outcomes. The positive impact of the Triple P system when implemented as a population approach has been demonstrated in four population trials (Zubrick et al. 2005; Sanders et al. 2008; Prinz et al. 2009; Fives et al. 2014). These and other trials and evaluations (e.g., Frantz et al. 2015; Little et al. 2012) have demonstrated the complexity of effectively implementing a population health initiative. Key findings include the importance of considering the planning, time, and supports required to make an impact at a population level, and the importance of supporting organizations to fit the program into their service delivery system (Shapiro et al. 2010). Salient factors to achieving impact at a population level include whether trained service providers use the program in which they have received training (reported



program utilization rates of Triple P by trained practitioners in these and other evaluations range between 62.85 % and 97 %; Asgary-Eden and Lee 2012; Turner et al. 2011), the extent to which trained practitioners use the program (Asgary-Eden and Lee 2012), whether program use is sustained over time (Shapiro et al. 2015), and whether the program is delivered with fidelity (Little et al. 2012).

Triple P International

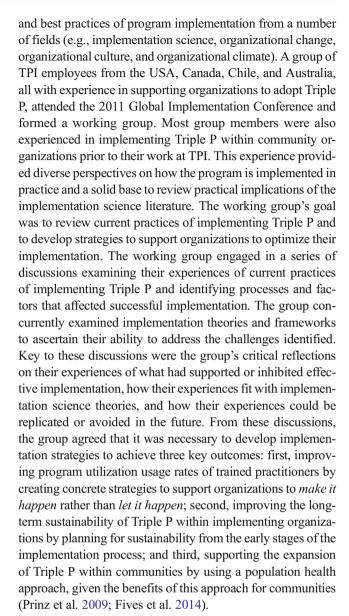
Triple P is disseminated by the purveyor organization Triple P International (TPI). TPI was established in 2001 to disseminate information on the program, train practitioners, and publish practitioner and parent resources. Initially, TPI acted as a knowledge purveyor (e.g., Greenhalgh et al. 2004), with implementing organizations responsible for diffusing knowledge in their organization and translating this knowledge into program implementation. Until 2011, TPI adopted a systemscontextual approach to dissemination, focusing on knowledge sharing and practitioner training. Attention was given to the ecological fit between the program and the organizations and communities in which practitioners delivered the program. A well-established range of Triple P Provider Training Courses ensured that practitioners received high-quality, standardized training (Sethi et al. 2014). Support was provided posttraining (e.g., the Triple P Workshop Series) to enhance practitioners' skills. While these considerations allowed for widescale dissemination of Triple P, TPI did not play an active role in supporting the implementation of the program within organizations.

Developing the Triple P Implementation Framework

Developments in implementation science prompted TPI to explore how Triple P was being implemented by organizations, how TPI supported this, and how the approach used compared with that of other programs, organizations, and sectors. This exploration was also prompted by feedback from organizations regarding the challenges associated with implementing Triple P, such as understanding the particular needs of implementing Triple P in the adoption phase and how to effectively sustain implementation. Following is a description of the process TPI undertook to provide more effective support to organizations implementing Triple P, which provides a roadmap for how other purveyor organizations could approach this issue.

Review of Current and Best Practices in Implementation and Initial Development Work

The development process began with an internal literature review, which examined the concepts, theories, frameworks,



Despite the wealth of literature on implementation science, the working group concluded that there was no one model or framework that provided a solution to facilitate all of the outcomes TPI set out to achieve. The majority of the models examined provided a theoretical framework for understanding implementation but offered few practical strategies for use in the field. The working group concluded that the best way of supporting organizations would be to determine the information and strategies organizations would benefit from when implementing Triple P and to then develop these into a comprehensive blended package of strategies. This led the working group to create a framework tailored to Triple P's specific implementation processes that both integrated the best practices and concepts of implementation science and reflected Triple P's core principles. This approach is consistent with Grol and Wensing's (2005a) recommendation to tailor an approach to the implementation situation by linking specific



strategies to known features of the EBP, the setting, and the target of behavior change. Two key frameworks guided the development process: the RE-AIM framework (Glasgow et al. 1999) and the National Implementation Research Network's Active Implementation Frameworks (AIF; Fixsen et al. 2005). These were selected for their applicability at a public health level, and the level of development and accessibility of their conceptual framework, resources, and tools.

The RE-AIM framework is designed to enhance the translation of research into practice. It attends to key factors that can improve public health impact and sustainable implementation (Glasgow et al. 1999): Reach (target population), Effectiveness (efficacy of the intervention), Adoption (by target staff, settings, or institutions), Implementation (consistency, costs, and adaptions made during delivery), and Maintenance (of intervention effects in individuals and settings over time). RE-AIM considers both individual and organizational factors, which provides valuable information on intervention impacts and is useful when planning large-scale implementations of EBPs.

The Fixsen et al. (2005) AIF describe the implementation process through four stages: Exploration, Installation, Initial Implementation, and Full Implementation. Fixsen et al. (2005) also define core implementation components, or Implementation Drivers, which are described as the engine of change. These drivers are integrative and compensatory processes that influence staff behavior and organizational culture. The AIF highlight that a critical element of success is the Implementation Teams that use the Implementation Drivers (Fixsen et al. 2001; Balas and Boren 2000). Implementation Teams provide a focused, accountable structure to increase the chance of successful implementation and sustained service delivery. These two frameworks provided a conceptual framework for the working group to further develop, which was aided by NIRN's openness to adapting their tools and sharing their work.

The working group then identified a number of factors involved in the dissemination and implementation of Triple P: the required flow of activity, critical decision points in the process, processes that consistently occurred, the point at which organizations typically required support, and consistent facilitators and barriers to the implementation process. The working group considered the processes and activities necessary for implementing Triple P across a range of different contexts. This analysis was undertaken based on the experience of the working group and used data routinely collected by TPI, including reports from trainers, practitioner training satisfaction data, and program resource sales, as well as the previously undertaken review of implementation science literature (e.g., AIF and the RE-AIM framework). This led to the identification of five key phases in the implementation process: Engagement, Commitment and Contracting, Implementation Planning, Training and Accreditation, and Implementation and Maintenance. Also identified were the key outcomes and activities required to effect change within these phases, which were based on the core implementation components from the AIF and the RE-AIM framework and tailored to the specific requirements of implementing Triple P. Factors from the RE-AIM framework were considered to ensure that the activities enabled initiatives to scale up to achieve population-level impact (e.g., Is population reach being considered? Is program fidelity adequately supported?). The group also consulted with the program founder and others at TPI, including TPI management, to ensure consistency with the vision of these stakeholders.

The working group aimed to develop an implementation process that was robust but flexible enough to deliver contextually appropriate support for a range of organizations and that was influenced by and reflected the core principles of Triple P: minimal sufficiency and self-regulation. This was an important consideration given that Triple P is implemented by practitioners and organizations from diverse backgrounds, sectors, and cultures, with differing levels of experience and capacity to implement EBPs. TPI's approach needed to be suitable across a range of contexts, be delivered cost effectively, be designed to build on existing organizational strengths, collaborate with intermediary organizations as necessary, and help build capacity for first-time implementers. Triple P's core principles of self-regulation and minimal sufficiency are central to its strategies and programs, and it was important that any development work used and supported these principles.

Content Development and Refinement

To further develop the content and processes of the Framework, and how the Framework would be used at TPI, three specific working groups were established. The Content Working Group focused on developing implementation strategies, processes, tools, and resources. For each EBP, there are different elements that are critical building blocks for effective program implementation. It was the Content Working Group's role to identify these elements and develop strategies to target them. Another group met to develop the Triple P Capacity Calculator[©], an epidemiological planning tool designed to assist policy makers, funders, and organizations with planning the implementation of Triple P (see Dirscherl et al. 2015). Finally, the Strategy Working Group was established to act as the internal Implementation Team and ensure the successful implementation of the work developed within TPI. A key function of this group was to embed the new roles and processes required to expand TPI's role from knowledge purveyor to providing active implementation support.

The next stage in the development process was to determine how the identified principles, concepts, and processes could be operationalized into specific implementation strategies. Given that Triple P programs are delivered in a range of



contexts by a multidisciplinary workforce, it was critical to consider an approach that could accommodate these differences and be tailored to specific contexts. A manualized approach was considered, but this would not have accommodated the variations and combinations of Triple P or anticipated all possible implementation contexts (e.g., Triple P is implemented in single organizations as well as across multiple organizations in a community, all with different workforces, accountability, governance structures, and funding arrangements that need to be accommodated). To provide sufficient support across the full range of possible contexts and to develop implementation capacity and self-regulation in implementing organizations, the Content Working Group determined that the most suitable approach was a collaborative consultative support process. This required a new role within TPI to carry out this work with implementing organizations. A key task for the Strategy Working Group was to create and embed this new role—the Implementation Consultant (IC).

The IC acts as a "coach" to implementing organizations and tailors their support to each context, thus supporting the application of effective implementation strategies. For example, Joyce and Showers (2002) identify one example of coaching as preparing a practitioner for potential negative reactions or resistance to new behaviors. Similarly, the IC can support the organization by alerting them to potential barriers that may arise and providing support to solve these problems as they arise. The IC uses strategies developed by the Content Working Group to support organizations adopting Triple P. The support provided by the IC is referred to as the Triple P Implementation Framework.

The Triple P Implementation Framework

The Framework involves five phases that correspond to key decision-making and activity sequences in effective implementation of Triple P. These phases are not linear but follow a logical sequence, which allows for concurrent activity. Each phase has critical activities to be addressed by the implementing organization or community, and is informed by implementation science literature, experience, and experiential data. For each set of activities, guiding questions, tools, and resources have been developed. An IC is assigned to support the organization or community through the implementation process to ensure it is smooth, timely, and responsive to local contextual needs and constraints. The level of support is decreased or increased to match the needs and available resources for a given organization or community. The IC also promotes ownership of the implementation within the organization or local community, which enhances sustainability. For these reasons, the Framework supports the full range of potential implementation possibilities, from small, single

organizations to complex, multisector public health applications.

Phase 1: Engagement

The Engagement phase begins with initial contact between the organization and TPI in which a dialogue is established that focuses on mutual information sharing. Two important issues considered during initial discussions are the scope and fit of the potential implementation and the context within an organization or community that may contribute to or impede implementation. Engaging with a knowledgeable source such as the program purveyor at this stage increases the likelihood of successful implementation (Panzano and Roth 2006). The main activities of this phase reflect key attributes that Rogers (1995) identified as influencing dissemination, such as compatibility of the innovation with the existing social system and relative advantage of the new innovation over other treatments. This phase overlaps with the Exploration stage of implementation identified by Fixsen et al. (2005) and draws on social marketing processes for mapping consumer needs and understanding the context in which the intervention will occur.

Throughout Engagement, to ensure a good fit between the organization's needs and Triple P, activities focus on gathering information about the interested organization or community and sharing information about the Triple P system. A key outcome is to develop understanding of how the different levels and variants of Triple P may best suit the needs of the organization and community and what may need to be considered for effective implementation and sustainability based on the programs selected (e.g., partnerships, referral pathways, supervision arrangements, interagency collaboration). Key considerations include whether there are gaps in the existing services available in the community, which Triple P services might fit these gaps best, how organizations could collaborate, and how referrals between services could happen. This phase concludes with a decision about whether to proceed with detailed implementation planning or to disengage.

Phase 2: Commitment and Contracting

The Commitment and Contracting phase involves confirming the scope of the implementation and signing an agreement between the organization and TPI. During this phase, bidirectional information sharing continues between the interested organization and the IC, with exchanges intensifying in complexity and operational detail. Information is reviewed and consolidated to determine the relative importance and fit for the proposed implementation. During this phase, the organization must consider the level of support required to ensure that the Triple P implementation can be maintained, as organizations will differ in their level of experience and capacity



(Aarons and Palinkas 2007; Henggeler et al. 1997). A shared understanding is developed regarding the scope of the implementation, local capacity to implement and sustain Triple P, and the costs associated with installing and maintaining the implementation. This phase overlaps with, and draws from, the Exploration stage of implementation (Fixsen et al. 2005) and Diffusion of Innovations (Rogers 1995). It also draws on the RE-AIM framework (Glasgow et al. 1999) to help focus attention on the factors salient to planning for public health impact, such as achieving a sufficient level of population reach to achieve prevalence rate reductions of target problems.

During this phase, organizations looking to adopt Triple P as a community-wide approach are encouraged to establish partnerships with other organizations to support the community's implementation of Triple P. Through these partnerships and shared planning, the combination of programs can be aligned with each organization's mandate, workforce, and service delivery methods, and provide for broad and balanced availability of services in the community.

Phase 3: Implementation Planning

It is important to develop an effective implementation plan before practitioner training begins to ensure that practitioners, managers, and the organizational context are adequately prepared. Frequently, organizations move directly from deciding what they want to do to doing it, engaging only in the training of practitioners and then expecting them to deliver the service within the unchanged context of the organization. This approach does not support the sustainability and long-term success of the program and can result in resistance and cost inefficiencies (Romney et al. 2014). For practitioners to achieve Triple P's proven outcomes, organizations must have appropriate support and infrastructure in place to sustain the program (e.g., time for practitioners to prepare and engage in peer support and supervision, an effective communications strategy, appropriate data collection systems).

During the Implementation Planning phase, organizations are supported to assess their existing capacity and resources through four key activities: considering organization readiness, preparing to plan, organizational assessment, and developing an implementation plan. These activities support organizations to develop awareness of their capacity to implement Triple P and put in place the planning and implementation structures and processes required. Using the Implementation Drivers (Fixsen et al. 2005), organizations are encouraged to identify how existing functions operate within their organization and consider the changes needed to support effective implementation. This phase overlaps with the Installation stage defined by Fixsen et al. (2005) and is focused on planning and preparing for implementation, as well as identifying and allocating required resources.

Organizations are supported through a comprehensive implementation planning process, with the aim of developing plans for communications strategies, training and accreditation, service delivery, quality assurance, and evaluation. This process assists the organizations to identify the actions and sequences of activities that need to be accomplished to support effective implementation. The processes required to effectively address these elements typically involve several organizational functions, such as service delivery planning and organizational expectations, and supervisory, coaching, and managerial support.

Phase 4: Training and Accreditation

In the Training and Accreditation phase, the agreed-upon training and accreditation are conducted. This was created as a distinct phase of the Framework as Triple P Provider Training Courses are an essential part of Triple P's strategy to maintain high-quality program delivery and fidelity. TPI manages all aspects of the training process in compliance with the quality assurance requirements specified by Uniquest and the Parenting and Family Support Centre at The University of Queensland. A rigorous and quality-assured training process is required to ensure that practitioners are adequately trained to support program fidelity (Sanders et al. 2016). While not effective without other supports, training is a necessary prerequisite for effective service delivery of EBPs and is an efficient way to impart the necessary information to practitioners (Ross et al. 1991).

During this phase, the IC works with the organization to ensure careful selection and preparation of practitioners before attending training and sufficient time to prepare for accreditation. This phase concludes when there are an adequate number of trained practitioners to offer the planned service.

Phase 5: Implementation and Maintenance

During the Implementation and Maintenance phase, the implementation plan is put into action and the trained practitioners start delivering the service. It is essential that the impact of the implementation is actively evaluated during this phase to improve and refine the effectiveness of the implementation and the sustainability plan. The period of initial implementation is typically a time of significant change for practitioners and organizations, and the changes put in place during implementation planning require support and reinforcement throughout the practice environment (Kitson et al. 1998). The IC supports organizations to consider changes at multiple levels, including with practitioners (e.g., delivering Triple P with fidelity, attending peer support), managers (e.g., clarifying performance expectations and outcomes, encouraging service delivery), leadership (e.g., reflecting on challenges and variances, implementing processes for peer support,



coaching and supervision, and funding), and at the systems level (e.g., using data to review processes, service delivery, administrative support, and leadership structures).

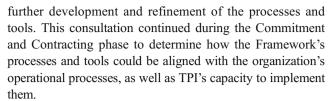
As practitioners become more familiar with the intervention, the IC supports the organization to engage in an implementation evaluative or process refinement stage for about 6 months to 1 year to accumulate enough service delivery data for the organization to analyze. Ideally, these outcome evaluations show the organization which systems and supports can effectively sustain the successful delivery of Triple P. The data also shows the organization areas that need refinement or revision for effective service delivery to continue over time. Concurrent to process refinement, organizations should gather ongoing clinical outcomes, quality assurance outcomes (such as fidelity monitoring), and overall program utilization statistics. Regular reporting of program outcomes should also be used to inform process refinements and to document the extent to which the overall project goals specified during planning have been achieved.

During this phase, the IC will also provide guidance on considerations for maintenance and sustainability by building on preparatory work from previous phases. This guidance is considered from four perspectives: the practice, supporting structures, organizational responsibilities, and system responsibilities. Using a sustainability planning matrix, the IC supports the identification of stakeholders and outlines their responsibility and commitment with respect to sustaining the service delivery. The performance measures and evaluation plan provide the mechanism to determine if the outcomes of implementing Triple P are being accomplished and if the practitioner support processes are working. These cycles and processes will have been planned during the Implementation Planning phase. Data should be reviewed at established intervals to facilitate improvement cycle activity and revisions to service delivery. Improved implementation processes may need to be developed based on the review. This phase encompasses the Initial Implementation and Full Implementation stages of the AIF and draws on the Implementation and Maintenance elements of RE-AIM.

Dissemination and Implementation of the Framework

The final step in the development process of the Framework was to embed the use of the Framework within TPI. This involved a parallel process of using the phases and tools from the Framework to provide a structure to guide the activities and maintain momentum for the organizational change. This process was managed by the Strategy Working Group.

Beginning with the Engagement phase, the Strategy Working Group consulted with TPI staff and with Triple P's founder at The University of Queensland to share information about the Framework and determine its fit with existing services offered by TPI. Feedback from these briefings informed



During the Implementation Planning phase, the Strategy Working Group began to function as the Implementation Team and drove change throughout the organization to prepare for the introduction of the Framework. Two members of the Content and Strategy Working Groups acted as Implementation Leads, who oversaw the implementation of the Framework at TPI. Implementation planning activities were undertaken, with a strong focus on using the Implementation Drivers to consider existing functions within the organization and how these needed to change to support effective implementation. The Training and Accreditation Phase involved training ICs and staff who would interact with them to ensure they understood the Framework and how it would be used in their work.

During the Implementation and Maintenance phase, ICs began to use the Framework with organizations. The two Implementation Leads supported the ICs and continued to consult with and provide support to management teams to maintain the ongoing adoption and integration of the IC role. IC Peer Support Groups were established to allow regular sharing and support for ICs based on the Peer-Assisted Supervision and Support process recommended for Triple P practitioners. These activities provided for refinement of processes and laid the foundation for ongoing continuous improvement of the Framework. This, along with the Peer Support Groups and the continued operation of the Content and Strategy Working Groups, built a culture of feedback and revision for ICs, operations, and management staff, which has improved and sustained the implementation of the Framework across the organization.

Discussion

This paper describes a systematic approach to developing a tailored implementation framework to optimize the implementation of Triple P and is part of a growing literature on how implementation and sustainability of EBPs can be enhanced. Given the number of implementation models, frameworks, and tools that exist in the literature, organizations looking to implement EBPs may find it challenging to determine which provides the best fit, which elements are relevant, and how to tailor activities and tools to their context and to the EBPs being adopted. This paper highlights the role and responsibility that purveyor organizations have in helping organizations navigate this literature, as well as the unique perspective that purveyor organizations have to not only



contribute to this literature but also help to put learnings into practice in the field.

TPI's recognition of the need to select the most relevant implementation frameworks, and to create and tailor strategies and tools specifically to suit the process of implementing Triple P, resulted in the development of a comprehensive blended implementation package of strategies tailored to the intervention characteristics of Triple P. In their review of the implementation science literature, Powell et al. (2014) found that few studies used implementation strategies that targeted intervention characteristics, which they theorized could improve the potential for implementation success.

Another critical element in TPI's approach to supporting organizations to implement Triple P was to develop the infrastructure and systems within TPI to provide this support to implementing organizations as required and with minimal costs. The solution created is flexible enough to function in a range of contexts (e.g., varied levels of experience with implementing EBPs, low-resource environments), with intermediary organizations or within the context of broader implementing systems (e.g., Communities that Care, Community Development Teams). Powell et al. (2014) also highlight that the specific and changing contextual demands of differing implementations require iterative, not linear, approaches to implementation and suggest that "protocolized adaptions" are integrated into blended implementation strategies that are similar to modular treatments or the common elements approach to treatment. In the Triple P Implementation Framework, this flexibility and adaptation is achieved through the role of the IC, who helps stakeholders to select and apply relevant implementation strategies.

Through the development of the Framework, TPI created the capacity for organizations to adopt effective implementation practices as they are implementing Triple P. TPI's preparation work creates efficiencies because organizations do not need to learn implementation science as well as the specifics of adopting the EBP before beginning implementation. The process of developing the Framework required multiple groups within TPI to examine their practices and, where necessary, modify these practices to align with the goal of providing support to organizations to effectively implement Triple P. This culture of feedback and revision supports the sustainability of the Framework.

The development and use of the Framework have demonstrated the unique contribution a purveyor organization can make to the field of implementation science. Without experience, it is difficult to develop processes, activities, and tools to support implementation activities efficiently and in a meaningful way. The experience gathered by a purveyor organization enables the development of a solution that is generalizable to the full range of organizations that will implement the EBP. Providing a baseline amount of support with a framework that is minimally sufficient and encourages self-

regulation reduces inefficiencies while also promoting ownership and innovation by building on existing strengths and experiences within organizations, and providing guidelines and a framework to expand their knowledge base. Furthermore, purveyor organizations are in a unique position to share learnings with multiple implementing organizations due to existing relationships, which means that any expertise developed can be deployed and scaled up to support organizations as needed.

While a formal evaluation of the TPI framework is yet to be completed, the process undertaken by TPI can provide a guide for other purveyor organizations who are looking to enhance the support provided to implementing organizations. The emerging nature of these learnings, along with many factors that vary between different EBPs and purveyor organizations, necessitates some caution and consideration in approaching this. In developing their own approach, purveyor organizations should consider the nature of the EBPs for which they are providing support and how they operate as an organization. They should also gather data from their own experiences to inform the development of the most effective, and aligned, implementation practices to support their work.

Salient key learnings for other purveyor organizations looking to support implementing organizations include the following: (1) ensure that purveyor management supports the process and advocates for the importance of the work; (2) engage a core group of people with a strong understanding of the program and experience in implementing the program and supporting its implementation in a range of different organizations; (3) ensure that the core development team has a thorough understanding of implementation science and is open to considering advances in the field; (4) engage regularly with the program developers to ensure congruence of the developing work with their vision for the program; and (5) understand that the process of embedding the newly developed procedures within the purveyor organization is equally as important and challenging as it is for organizations looking to implement EBPs.

Conclusions and future directions

Developments in implementation science, combined with extensive experience working with organizations adopting Triple P, led to a deliberate shift in TPI's role from knowledge purveyor to actively supporting organizations throughout the process of implementing Triple P. The development process was resource intensive but transformative in its impact on the operations of TPI. The development and subsequent implementation of the Framework changed how TPI works with organizations and communities seeking to adopt and implement Triple P, which shows the unique contribution purveyor organizations can have on the implementation of EBPs and on



the field of implementation science. TPI's experience illustrates the value of integrating implementation science with experience to increase the usability of implementation science. While theory informs what needs to be done, experience informs how what needs to be done can be done in real-world settings.

Consistent with Triple P's ongoing commitment to research and innovation (Sanders et al. 2016), a number of areas for future research and development have been identified for the Framework. Ultimately, the aim is to examine the effectiveness of the Framework in a large-scale rollout of Triple P (e.g., Chamberlain et al. 2008; Hurlburt et al. 2014). Immediate priorities include developing a research agenda to determine the effectiveness of the Framework, starting with an exploration of the factors and processes associated with effective implementation and outcomes for organizations and families.

Acknowledgments The development of the Triple P Implementation Framework was funded by Triple P International Pty Ltd. A number of employees at Triple P International contributed to the development of the Framework. The core working group members included Jenna McWilliam, Jacquie Brown, Debbie Easton, Randall Ahn, Sara van Driel, and Sarah Munro. The authors thank Natasha Smouha and Felicity Smith for her help in editing this paper.

Compliance with Ethical Standards

Conflict of Interest The Triple P-Positive Parenting Program (Triple P) is owned by The University of Queensland. The University, through its technology transfer company, UniQuest Pty Ltd, has licensed Triple P International Pty Ltd to publish and disseminate the program worldwide. Royalties stemming from published Triple P resources are distributed to the Parenting and Family Support Centre, School of Psychology, Faculty of Health and Behavioural Sciences, and contributory authors. No author has any share or ownership in Triple P International Pty Ltd. Jenna McWilliam is an employee of Triple P International. Jacquie Brown is a consultant with Triple P International. Matthew Sanders is the founder of Triple P, an author, and a part-time consultant with Triple P International Pty Ltd.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. For this type of study, formal consent is not required.

Informed Consent Informed consent was obtained from all individual participants included in the study.

References

- Aarons, G. A., & Palinkas, L. A. (2007). Implementation of evidence-based practice in child welfare: service provider perspectives. Administration and Policy in Mental Health, 34, 411–419. doi:10. 1007/s10488-007-0121-3.
- Asgary-Eden, V., & Lee, C. M. (2012). Implementing an evidence-based parenting program in community agencies: what helps and what gets

- in the way? *Administration and Policy in Mental Health, 39*, 478–488. doi:10.1007/s10488-011-0371-y.
- Balas, E. A., & Boren, S. A. (2000). Managing clinical knowledge for health care improvement. In J. Bemmel & A. T. McCray (Eds.), Yearbook of medical informatics 2000: patient-centred systems (pp. 65–70). Stuttgart: Schattauer.
- Brownson, R. C., Colditz, G. A., & Proctor, E. K. (2012). Dissemination and implementation research in health: translating science to practice. New York: Oxford University Press, Inc.
- Chamberlain, P., Price, J., Reid, J., & Landsverk, J. (2008). Cascading implementation of a foster and kinship parent intervention. *Child Welfare*, 87, 24–48.
- Damschroder, L. J., & Hagedorn, H. J. (2011). A guiding framework and approach for implementation research in substance use disorders treatment. *Psychology of Addictive Behaviors*, 25, 194–205. doi: 10.1037/a0022284.
- Dirscherl, T., Dirscherl, R., McWilliam, J., & Sanders, M. R. (2015). CAPCAL: a planning tool for scaling up evidence-based public health interventions. Manuscript in preparation.
- Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: a review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Clinical Psychology*, 41, 327–350. doi:10.1007/s10464-008-9165-0.
- Fives, A., Pursell, L., Heary, C., Nic Gabhainn, S., & Canavan, J. (2014). Parenting support for every parent: a population-level evaluation of Triple P in Longford Westmeath. Final report. Athlone: Longford Westmeath Parenting Partnership (LWPP).
- Fixsen, D. L., Blase, K. A., Timbers, G. D., & Wolf, M. M. (2001). In search of program implementation: 792 replications of the teachingfamily model. In G. A. Bernfeld, D. P. Farrington, & A. W. Leschield (Eds.), Offender rehabilitation in practice: Implementation and evaluating effective programs (pp. 149–166). London:Wiley.
- Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). *Implementation research: a synthesis of the literature*. (FMHI Publication No. 231). Tampa: University of South Florida, Louis de la Parte Florida Mental Health Institute, National Implementation Research Network.
- Frantz, I., Stemmler, M., Hahlweg, K., Plük, J., & Heinrichs, N. (2015). Experiences in disseminating evidence-based prevention programs in real-world settings. *Prevention Science*, 16, 789–800. doi:10. 1007/s11121-015-0554-y.
- Glasgow, R. E., Vogt, T. M., & Boles, S. M. (1999). Evaluating the public health impact of health promotion interventions: the RE-AIM framework. *American Journal of Public Health*, 89, 1322–1327. doi:10. 2105/AJPH.89.9.1322.
- Greenhalgh, T., Robert, G., MacFarlane, R., Bate, P., & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: systematic review and recommendations. *The Milbank Quarterly*, 82, 581–629. doi:10.1111/j.0887-378X.2004.00325.x.
- Grol, R., & Wensing, M. (2005). Effective implementation: a model. In R. Grol, M. Wensing, & M. Eccles (Eds.), *Improving patient care: the implementation of change in clinical practice* (pp. 41–57). Edinburgh: Elsevier.
- Henggeler, S. W., Melton, G. B., Brondino, M. J., Scherer, D. G., & Hanley, J. H. (1997). Multisystemic therapy with violent and chronic juvenile offenders and their families: the role of treatment fidelity in successful dissemination. *Journal of Consulting and Clinical Psychology*, 65, 821–833. doi:10.1037/0022-006X.65.5.821.
- Hurlburt, M., Aarons, G. A., Fettes, D., Willging, C., Gunderson, L., & Chaffin, M. J. (2014). Interagency collaborative team model for capacity building to scale-up evidence-based practice. *Children and Youth Services Review*, 39, 160–168.
- Joyce, B., & Showers, B. (2002). Student achievement through staff development (3rd ed.). Alexandria: Association for Supervision and Curriculum Development.



Karoly, P. (1993). Mechanisms of self-regulation: a systems view. Annual Review of Psychology, 44, 23–52. doi:10.1146/annurev.ps.44. 020193.000323.

- Kitson, A., Harvey, G., & McCormack, B. (1998). Enabling the implementation of evidence based practice: a conceptual framework. *Quality in Health Care*, 7, 149–158.
- Little, M., Berry, V., Morpeth, L., Blower, S., Axford, N., Taylor, R., Bywater, T., Lehtonen, M., & Tobin, K. (2012). The impact of three evidence-based programmes delivered in public systems in Birmingham, UK. *International Journal of Conflict and Violence*, 6, 260–272.
- Oosthuizen, C., & Louw, J. (2013). Developing program theory for purveyor programs. *Implementation Science*, 8. doi: 10.1186/1748-5908-8-23.
- Panzano, P. C., & Roth, D. (2006). The decision to adopt evidence-based and other innovative mental health practices: risky business? *Psychiatric Services*, 57, 1153–1161. doi:10.1176/appi.ps.57.8. 1153.
- Powell, B. J., McMillen, J. C., Proctor, E. K., Carpenter, C. R., Griffey, R. T., Bunger, A. C., ... & York, J. L. (2012). A compilation of strategies for implementing clinical innovations in health and mental health. *Medical Care Research and Review*, 69, 123–157. doi:10. 1177/1077558711430690.
- Powell, B.J., Proctor, E.K., & Glass, J. E. (2014). A systematic review of strategies for implementing empirically supported mental health interventions. *Research on Social Work Practice*, 24. doi: 10.1177/ 1049731513505778.
- Prinz, R. J., Sanders, M. R., Shapiro, C. J., Whitaker, D. J., & Lutzker, J. R. (2009). Population-based prevention of child maltreatment: the U.S. Triple P System Population Trial. *Prevention Science*, 10, 1–12. doi:10.1007/s11121-009-0123-3.
- Proctor, E. K., Powell, B. J., & McMillen, J. C. (2013). Implementation strategies: recommendations for specifying and reporting. *Implementation Science*, 8. doi: 10.1186/1748-5908-8-139.
- Rogers, E. M. (1995). *Diffusion of innovations* (4th ed.). New York: Free Press
- Romney, S., Israel, N., & Zlatevski, D. (2014). Exploration-stage implementation variation: its effect on the cost-effectiveness of an evidence-based parenting program. Zeitschrift für Psychologie, 222, 37–48. doi:10.1027/2151-2604/a000164.
- Ross, J. G., Luepker, R. V., Nelson, G. D., Saavedra, P., & Hubbard, B. M. (1991). Teenage health teaching modules: impact of teacher training on implementation and student outcomes. *Journal of School Health*, 61, 31–34.
- Sanders, M. R. (2012). Development, evaluation, and multinational dissemination of the Triple P positive parenting program. *Annual Review of Clinical Psychology*, 8, 345–379. doi:10.1146/annurev-clinpsy-032511-143104.
- Sanders, M. R., Ralph, A., Sofronoff, K., Gardiner, P., Thompson, R., Dwyer, S., & Bidwell, K. (2008). Every family: a population

- approach to reducing behavioural and emotional problems in children making the transition to school. *Journal of Primary Prevention*, 29, 197–222. doi:10.1007/s10935-008-0139-7.
- Sanders, M. R., Kirby, J. N., Tellegen, C. L., & Day, J. J. (2014). The Triple P-positive parenting program: a systematic review and metaanalysis of a multi-level system of parenting support. *Clinical Psychology Review*, 34, 337–357. doi:10.1016/j.cpr.2014.04.003.
- Sanders, M. R., Turner, K., & McWilliam, J. (2016). The Triple P—positive parenting program: a community-wide approach to parenting and family support. In M. J. Van Ryzin, K. L. Kumpfer, G. M. Fosco, & M. T. Greenberg (Eds.), Family-based prevention programs for children and adolescents. Psychology Press.
- Schofield, J. (2004). A model of learned implementation. *Public Administration*, 82, 283–308. doi:10.1111/j.0033-3298.2004.
- Sethi, S., Kerns, S. E. U., Sanders, M. R., & Ralph, A. (2014). The international dissemination of evidence-based parenting interventions: impact on practitioner content and process self-efficacy. *International Journal of Mental Health Promotion*, 16, 126–137. doi:10.1080/14623730.2014.917896.
- Shapiro, C. J., Prinz, R. J., & Sanders, M. R. (2010). Population-based provider engagement in delivery of evidence-based parenting interventions: challenges and solutions. *The Journal of Primary Prevention*, 31, 223–234. doi:10.1007/s10935-010-0210-z.
- Shapiro, C. J., Prinz, R. J., & Sanders, M. R. (2015). Sustaining use of an evidence-based parenting intervention: practitioner perspectives. *Journal of Child and Family Studies*, 24, 1615–1624. doi:10.1007/ s10826-014-9965-9.
- Turner, K. M. T., Nicholson, J. M., & Sanders, M. R. (2011). The role of practitioner self-efficacy, training, program and workplace factors on the implementation of an evidence-based parenting intervention in primary care. *Journal of Primary Prevention*, 32, 95–112. doi:10. 1007/s10935-011-0240-1.
- Washington State Institute for Public Policy (2004). Outcome Evaluation of Washington state's research-based programs for juvenile offenders. Retrieved from: http://wsipp.wa.gov/ReportFile/852.
- Winter, S. G., & Szulanski, G. (2001). Replication as strategy. Organization Science, 12, 730–743. doi:10.1287/orsc.12.6.730. 10084.
- World Health Organization. (2009). Preventing violence through the development of safe, stable and nurturing relationships between children and their parents and caregivers. Series of briefings on violence prevention: the evidence. Geneva: World Health Organization.
- Zubrick, S. R., Ward, K. A., Silburn, S. R., Lawrence, D., Williams, A. A., Blair, E., ... & Sanders, M. R. (2005). Prevention of child behavior problems through universal implementation of a group behavioral family intervention. *Prevention Science*, 6, 287–304. doi: 10.1007/s11121-005-0013-2.

