National Implementation Plan: Internet Parent Child Interaction Therapy (I-PCIT) Program for the Treatment of Childhood Behaviour and Conduct Disorders: Aligned With the National Children's Mental Health Strategy

Karitane Submission 1

Pre budget Submission for Commonwealth funding January 2021

Recommendation

That the Federal government invest $15.1M over 5 years to support Karitane to undertake a national implementation and scaling of the Karitane Internet-Parent Child Interaction therapy (I-PCIT) service for young children across Australia with moderate to severe disruptive behaviours (currently delivered in NSW only).

With this funding, Karitane will employ an additional 15 additional full time I-PCIT therapists, 1 FTE program leader, 2 FTE support staff (administration and intake) and 1 FTE trainer/supervisor, plus relevant IT equipment and copyrighted clinical assessment materials.

Executive Summary

It is estimated that more than 22,000 children aged 2-7 years in Australia display clinically significant disruptive behaviours [1, 2]. Behavioural difficulties in young children often lead to a poor developmental trajectory consisting of ongoing and increasingly significant mental health concerns across the lifetime [3-5]. This can place tremendous stress and financial burden upon the affected individual, his or her family, and the larger community.

Parent-Child Interaction Therapy (PCIT) is one of the most effective early treatment approaches for early disruptive behaviour concerns. There is a large body of evidence demonstrating long-lasting positive parent and child psychological outcomes [6], and substantial cost savings to the larger community [7].

Some challenges of scaling the program in Australia have historically included stringent training requirements, specialized equipment and limited access to services for families living outside of metropolitan areas. Fortunately, empirical research now demonstrates that outcomes for internet-based PCIT (I-PCIT) meet, and in some cases, exceed those of clinic-based PCIT [8, 9]. The digital health delivery of PCIT through the I-PCIT adaptation thus now serves to decrease health disparities due to accessibility difficulties between urban and rural families in Australia.

Karitane has pioneered PCIT efforts in NSW and across Australia since 2005 with the establishment of Australia's first community-based PCIT clinic [10], and by training dozens of therapists, publishing numerous empirical PCIT research papers, and presenting at international conferences. Most recently, in 2018, with support from NSW Health, Karitane established Australia's first I-PCIT clinic for families from rural and remote NSW. Preliminary evaluations indicate large treatment effects and high levels of consumer satisfaction [9, 11, 12], highlighting the potential impact of a larger scale treatment dissemination effort.

The current proposal is innovative and impactful as it poses the first national Internet-PCIT service, positioning Karitane and the Australian Government to evaluate and publish noteworthy, large-scale evaluation outcomes as part of the National Children's Mental Health Strategy.

Specifically, it is proposed that the Federal government undertake a national implementation and scaling of the Karitane I-PCIT service for young children across Australia with disruptive behaviours. This would enable expansion of Karitane's current NSW-based I-PCIT service through the employment of 15 additional full time I-PCIT therapists, 1 FTE program leader, 2 FTE support staff (administration and intake) and 1 FTE trainer/supervisor, 0.4 FTE Technology/Data Assistant, plus relevant IT equipment and copyrighted clinical assessment materials. This will allow I-PCIT treatment to be provided to over 4000 children and families from across Australia over the course of five years.

The total required budget of the proposed effort is estimated at $15.1M, for which a return on investment of up to $302M is calculated [5].

Background

Behavioural disturbance in young children

While some difficulty adjusting to parenthood is common and normal, without the right support and intervention, problems can develop into chronic mental health concerns for parents and behavioural issues for children. Left untreated, these problems typically persist, putting the child at greater risk of developing a severe and disruptive behaviour disorder [3, 4].

Disruptive behaviour disorders are diagnosed when child behaviours are severe, excessive in comparison to peers, and persistent over time [13]. Disruptive behaviour disorders involve acting out and showing unwanted behaviour towards others (e.g., aggression), and so they are often called externalizing disorders.

Disruptive behaviour disorders negatively impact both the child and the people around them - putting stress on families, and making it difficult for the child to learn at school and make friends. This can lead to social and emotional difficulties or mental illness and has been linked with eventual substance misuse and criminal activity [5].

Prevalence of childhood disruptive behaviour disorders in Australia

Based on the known prevalence of disruptive behaviour disorders [1] and Australian population statistics [2], it is estimated that approximately 88,796 children aged between 2 and 7 years may be experiencing disruptive behavioural issues, and that for around 25% of these children (over 22,000 children) the behaviours are likely to be at a level that is having a clinically signifiant impact on their functioing at home or school.

Early childhood: An opportune time for early intervention

The first 2000 days of life (0-5 years) are a time of heightened neuro-developmental plasticity and thus a 'sensitive' period for child brain development [14, 15]. Social and physical experiences during this time, both positive and negative, can have a profound effect on a child's early brain development, and thus on capacities for social-emotional, psychological and cognitive wellbeing.

The early parenting environment is the most important environmental factor during this time, and so interventions that enhance parenting quality in the early childhood period are recommended [16].

Financially, return on investment research estimates have also consistently found that early intervention serves as a long-term investment toward preventing serious and costly psychopathological conditions later on [17, 18].

The Role of Parent-Child Interaction Therapy (PCIT)

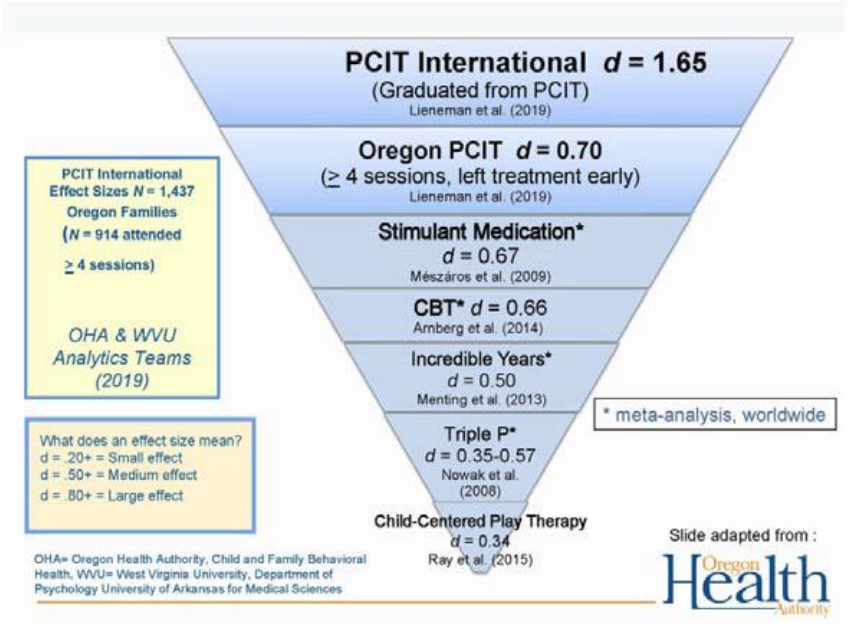
Parent-Child Interaction Therapy (PCIT) [19] is a highly effective parent-training program that aims to improve two facets known to be critical to healthy development: the quality of the parent-child relationship and child compliance.

PCIT centres around the delivery of live parent coaching during parent-child play sessions. It reduces child behavioural problems by strengthening parent-child relationship quality and enhancing parenting skills, typically through weekly sessions at a face-to-face treatment clinic, delivered over a 3-4 month period.

The evidence-base for PCIT is impressive. Over 50 years of empirical research including numerous longitudinal and randomised controlled trials show that PCIT dramatically improves child behaviour [6]. Treatment gains have been found to extend to the home and school settings [20], generalize to untreated siblings [21], and maintenance up to six years post-treatment [22]. Positive impacts in terms of parenting skills and parenting stress have also been demonstrated [23].

Furthermore, in comparison to other well-known evidence-based programs including Triple P, the Incredible Years, and Child-Centered Play Therapy, the size of the improvements seen following PCIT are substantial. Effect size calculations allow researchers to ascertain the relative impact of interventions by examining the strength of the relationship between outcomes. A small effect is generally classified as ≥ 0.2, while a medium effect is ≥ 0.5, and a large effect is ≥ 0.8. As shown in the figure below, the effect size for PCIT is 1.65, indicating an extremely large effect. In contrast, the effect sizes for Triple P, a well-known and widely disseminated parent program in Australia, range from .35 - .57 (a small- medium effect). In addition, recent research indicates an

effect size of .7 (medium to large effect size) for those families receiving only 4 sessions of PCIT prior to discontinuing the program [24]. Such striking results highlight the unique impact of each successive session "dose" on children's clinical outcomes.



The robust nature of the PCIT treatment has lent itself well to successful adaptations for populations beyond typically developing children with clinically significant disruptive behavior difficulties including children with trauma histories [25], autism [26], separation anxiety [27], selective mutism [28] , children with developmental delays [29] and younger toddlers from the age of 18 months [30]. PCIT also has demonstrated efficacy with diverse and vulnerable populations [31] including maltreated children [32], parents with significant mental health concerns [33] and child welfare populations [32, 34, 35].

The impact of PCIT on families and wider society is also clear, with returns for society from PCIT calculated to be over US$15 per dollar invested [7]. These clinical and economic benefits, along with the known benefits and government commitment to early intervention [15-17], highlight PCIT as a program clearly worth investing in.

PCIT Fidelity

PCIT practice is developed and governed by PCIT International. The US organization espouses excellent treatment integrity and fidelity within implementation of the evidence-based model via ongoing training, certification, and continuing education of therapists and trainers [19]. By creating an interface between the scholarly activities of PCIT researchers and the expertise of front-line clinicians, PCIT International builds upon the strong scientific base of treatment implementation while maintaining delivery of high-quality clinical care for children and families.

PCIT in Australia: Treatment Access Barriers

PCIT has been disseminated widely in the United States [19] but various service-based and implementation-based barriers have impeded PCIT's widespread dissemination across Australia. Specifically, stringent therapist training requirements and reliance on specialised equipment (e.g., one-way mirrors, wireless communication systems) has meant that delivery of PCIT is challenging for many under-resourced Australian community-based mental health clinics, particularly those in regional and remote areas. Although alternative clinic-based early intervention exists, services are often delayed, far past the point in which families are referred, forcing them to sit on long waitlists through times of increasing stress and behavioral escalation. Furthermore, oftentimes, only those regional and remote families with economic and social means are able to travel thousands of kilometers for specialist services, thereby further widening the disparity in developmental outcomes for children in families with and without available resources.

Internet-delivered PCIT (I-PCIT)

PCIT is particularly amenable to internet-based delivery given its use of live coaching using a one way-mirror and bug-in-the-ear microphone. This clinic-based technology can be easily replaced with a video-conferencing screen and blue tooth microphone/earpiece, enabling families to receive treatment from their own homes.

In recent years, the adaptation of the PCIT model from an 'in-clinic' to 'telehealth' model has gained momentum, with the feasibility and clinical effectiveness of I-PCIT having been demonstrated both internationally [8] and in Australia by our own team at Karitane [9, 11, 12]. Emerging evidence suggests that I-PCIT may in some instances be even more effective than traditional face-to-face delivery [8].

However, like clinic-based PCIT services, dissemination of the internet-based adaptation in real world Australia has notably lagged, thereby providing a ripe opportunity for large-scale dissemination of this cost-effective, highly effective early intervention model.

Proposed Solution: Expansion from a NSW to National Karitane I-PCIT service

Proposed national Karitane I-PCIT service

We propose that the early parenting organisation, Karitane, be resourced to expand its current I-PCIT service to create a national I-PCIT service.

$15.1M is requested over 5 years. With this funding, Karitane will employ an additional 15 additional full time I-PCIT therapists, 1 FTE program leader, 2 FTE support staff (administration and intake) and 1 FTE trainer/supervisor, plus relevant IT equipment and copyrighted clinical assessment materials.

The Karitane National I-PCIT service will operate from the Karitane site in South Western Sydney, and will provide I-PCIT treatment to over 4000 families from across Australia, over 5 years.

Karitane: organisational overview

Established in 1923, Karitane is a trusted leader in parenting, early intervention & prevention services across New South Wales (NSW). Karitane delivers high-quality, evidence-based support for families with a range of needs and vulnerabilities. We are internationally recognised for our expertise in PCIT for children with behaviour and conduct disorders, supporting teenage parents, young parents in custody and parents with perinatal anxiety and depression. Karitane supports families from aboriginal and culturally and linguistically diverse backgrounds and designs innovative services, including place-based and digital health delivery to ensure that families receive the right level of care, in the right place, at the right time.

We have formal academic partnerships with UNSW and Western Sydney University, and academic collaborations with multiple other universities, and a long-standing and extensive history of clinically-oriented multidisciplinary health research and research translation in child and family health, perinatal and infant mental health, early intervention, parenting, early childhood development and psychopathology.

Karitane is the Australian centre of excellence and lead provider of PCIT. We have the only accredited Regional PCIT trainer in Australia and we maintain a network of four PCIT within-agency trainers, certified PCIT therapists, and psychologists and social workers many of whom are in the process of advancing their PCIT training status, thereby increasing organisational training reach and capacity. We have pioneered use of PCIT with toddlers and have published numerous papers, book chapters, and conference presentations about the treatment model. Over the past 12 years, Karitane clinicians have consecutively attended 8 PCIT conferences internationally to present research and run training workshops to a growing, international network of PCIT researchers and clinicians. At the most recent 2019 PCIT International Conference in Chicago, Illinois, USA, Susan Morgan (MMH, PCIT Regional trainer) at Karitane was awarded the prestigious Research and Innovation award for her multi-decade long empirical contributions to PCIT at Karitane.

Karitane's Digital Parenting Hub

Karitane is highly committed to, and well positioned for, innovation and development. An example of this was the establishment in February 2019 of our innovative Digital Parenting Hub to support and treat early parenting and toddler behavioural difficulties. The hub has fostered new digital-first evidence-based parenting programs and has encouraged innovation across the child and family health sector.

Karitane's I-PCIT service for families in NSW

As part of the Karitane Digital Parenting Hub, we developed and implemented a new Internet-Parent Child Interaction Therapy (I-PCIT) service for families living across NSW.

The service was initially piloted in 2018 with funding from a NSW Health Mental

Health Innovations Grant and it was then expanded throughout 2019 with support from the NSW Ministry of Health. It is now a permanent component of the service delivery model at Karitane, delivered alongside face-to-face PCIT services at the Karitane Toddler Clinic.

Our I-PCIT service has been particularly pertinent with the onset of the COVID-19 pandemic, with both increased demand for services and decreased capacity for face-to-face treatment modalities due to social distancing restrictions and enforced lock-downs.

We demonstrated our ability to rapidly scale up our program with the onset of the COVID-19 pandemic, when we trained all of our staff and expanded services to convert our face-to-face PCIT clinic into a fully I-PCIT model during the height of the pandemic.

Benefits of a National Karitane I-PCIT service

Potential benefits of a National Karitane I-PCIT service

The potential benefits of a National Karitane I-PCIT service are numerous and significant, including:

- Allowing families from across all states and territories of Australia to access effective, evidence based specialist treatment for young children with disruptive behaviours.
- Improving health and mental health service delivery to families with young children across Australia, providing tangible social and economic benefits across our communities. This is more important now more than ever with the mental health impacts of COVID-19.
- Increasing interstate partnerships between parenting support service providers to encourage better integrated care, promote and advocate for better digital care options for young families, and foster development of innovative evidence-based parenting support programs.
- Advancing the Australian Government Digital Health Strategy, COVID-19 response planning and the emerging National Children's Mental Health Strategy.

Karitane as service provider

As an organisation, Karitane is uniquely placed to develop and deliver this service for the following reasons:

1. **A proven track record in the training and supervision of PCIT (and I-PCIT) therapists.** We have had the only accredited Regional PCIT trainer in Australia and this trainer is currently under review as a global trainer (the highest level of credentialing achievable). We have four PCIT within-agency

trainers and a number of certified PCIT therapists, and psychologists and social workers many of whom are in the process of advancing their PCIT training status, thereby increasing organisational training reach and capacity.

2. **Demonstrated ability to deliver I-PCIT and scale-up services.** We established and delivered Australia's first I-PCIT clinic in 2018. Since then have been successfully delivering I-PCIT to families from rural and remote areas of NSW since 2018, with rapid scaling to include service provision to families from metropolitan areas since the commencement of the COVID-19 pandemic.
3. **Established national networks and capacity for national reach.** Karitane's Chief Executive leads the Australasian Association of Parenting & Children's Health (AAPCH) and has fostered strong interstate referral pathways to support an integrated continuum of care for families. This will link up services nationally in a way that has not been available before in child and family health.

Indicative budget (negotiable)

Summary

$15.1M over 5 years is required to support Karitane to undertake a national implementation and scaling of the Karitane Internet-Parent Child Interaction therapy (I-PCIT) service for young children across Australia with disruptive behaviours (currently delivered in NSW only).

With this funding, Karitane will employ 15 full time I-PCIT therapists, 1 FTE program leader, 2 FTE support staff (administration and intake), 1 FTE trainer/supervisor, 0.4 FTE Technology/Data Assistant, plus relevant IT equipment and copyrighted clinical assessment materials.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Staff Salaries & Wages with oncost						
Program Director	139,901	143,398	146,983	150,658	154,424	735,365
Administrative Assistant / Intake (2 FTE per year)	188,866	193,588	198,427	203,388	208,473	992,742
Clinicians (15 FTE per year)	1,923,636	1,971,727	2,021,020	2,071,546	2,123,334	10,111,263
I-PCIT Qualified Trainer (1 FTE per year)	146,896	150,568	154,332	158,191	162,146	772,133
Data Analyst (0.4 FTE)	49,920	51,168	52,447	53,758	55,102	262,396
TOTAL:	**2,449,219**	**2,510,449**	**2,573,210**	**2,637,541**	**2,703,479**	**12,873,898**
Other Overheads						
Training Materials/Measures	9,500	6,690	6,824	6,960	7,206	37,181
Computers & IPCIT Equipment	70,000	8,000	8,160	8,323	8,576	103,059
Telephone & Internet Charges	3,000	3,060	3,121	3,184	3,247	15,612
Staff Training cost	3,850	2,850	3,850	2,850	2,850	16,250
Program Evaluation Cost				4,000	25,000	29,000
Administration Overheads for support services (HR, WHS, Quality,IT, Insurance, Education, Governance, Finance & Payroll, utilities)	400,000	400,000	400,000	400,000	400,000	2,000,000
Marketing and Promotion	5,000	5,000	5,000	5,000	5,000	25,000
Total	**491,350**	**425,600**	**426,955**	**430,317**	**451,879**	**2,226,102**
Grand total	**2,940,569**	**2,936,049**	**3,000,165**	**3,067,858**	**3,155,359**	**15,100,000**

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