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EVALUATION OF THE FAMILY START PROGRAMME

Synthesis of process and impact evaluation findings

April 2021

ALLEN+CLARKE

ORANGA TAMARIKI
Ministry for Children

The Oranga Tamariki Evidence Centre works to build the evidence base that helps us better understand wellbeing and what works to improve outcomes for New Zealand's children, young people and their whānau.

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EXECUTIVE SUMMARY

This report provides findings from an evaluation of the Family Start programme ('Family Start'), a voluntary home-visiting programme that supports whānau to improve children's health, learning and relationships, whānau circumstances, environment and safety.

Evaluation purpose and focus

The purpose of this evaluation is to assess the Family Start programme's impact and effectiveness. To achieve this purpose, the evaluation was undertaken through two workstreams:

- an **impact evaluation**, the purpose of which was to assess the impact that Family Start participation is having on the wellbeing of New Zealand children and their whānau. The evaluation examined a range of health, educational, and social outcomes for children, including separate analyses for Māori and Pasifika children.
- a **process evaluation**, the purpose of which was to explore the effectiveness of the programme's design and delivery, including how client whānau experience the programme, and how Family Start providers can optimise positive impacts for children and their whānau.

Evaluation approach

The evaluation was informed by a Bridging Cultural Perspectives approach which comprises the He Awa Whiria and Negotiated Spaces models (Superu, 2018)

In the impact evaluation, reviewers representing the three knowledge streams (Māori, Pasifika, Pākehā) worked together to assist with the interpretation of the findings at an aggregate level, and through the lens of each worldview.

In the process evaluation, data collection and analysis under the three streams was led by a kaitiaki who had overall responsibility and accountability for their knowledge stream. Data were initially analysed and written up under each separate stream, and the evaluators then worked together to synthesise findings under the evaluation questions.

Evaluation methods

The impact evaluation was conducted using data from Statistics New Zealand's Integrated Data Infrastructure (IDI), using two quasi-experimental methods: Propensity Score Matching (PSM) for the period from 2009 to 2015 and Difference-in-Differences (DiD) for the period from 2003 to 2015. As DiD measures change across a given area (e.g., a Territorial Local Authority, TLA), results from the DiD analyses should be treated with caution; this is because the number of Family Start participants is a small proportion of the total population of each TLA, which makes it difficult to detect any changes. The evaluation therefore relies more heavily on the PSM results, which are more reliable in this context.

The process evaluation, conducted in 2019, drew strongly on qualitative data from five provider-level case studies (three kaupapa Māori providers, one Pasifika provider and one Pākehā provider) which included in-depth interviews with Family Start managers, workers, referrers and whānau that were clients of Family Start. Other data collection methods included interviews with Oranga

Tamariki officials and other key stakeholders, an electronic diary activity during which Family Start workers recorded their experiences and perceptions in their role working with whānau, a review of key documents and analysis of Family Start administrative data.

Key findings

Participation in Family Start improves child safety

The impact evaluation PSM analysis estimated that children's participation in Family Start is associated with a reduction in deaths from all causes in their first year of life from 2.9 to 1.7 deaths per 1,000 children (a reduction of 42%). Children who participate in Family Start are also estimated to be less likely to die due to injury or SUDI (Sudden Unexpected Death in Infancy) in their first year of life.

Whānau that participate in Family Start reported that they had made changes to enhance their children's physical safety and prevent injuries through modifying the home environment, for example by putting latches on cupboards, storing cleaning products out of reach, and installing baby gates. Some whānau also made changes to their infant's sleeping arrangement to enhance safety, such as using safe co-sleeping practices. The Child Safety Tools (CST) component of the Family Start Programme was viewed by the case study providers and staff as an important component in supporting child safety.

Whānau received an effective, reliable and safe service from the Family Start Programme

Whānau that participated in the evaluation viewed the service as meeting their needs and effectively supporting them in their parenting. Whānau had a good understanding of the programme and what they hoped to get out of it. Almost all said they were very happy with the Family Start worker they had been matched with and had successfully built a relationship of trust.

Whānau considered goal setting, through the development of a Child Family Plan (CFP), to be a key feature of the programme. The process of setting goals and being supported to achieve them by their Family Start worker was instrumental in achieving positive change for whānau.

Client whānau consider that Family Start has improved their parenting skills

Family Start workers use a strengths-based approach to support whānau with parenting, encouraging whānau by highlighting and praising their strengths and skills as parents, and working to build on what they already know. Whānau appreciated the opportunity to learn more about child development and new, positive ways to parent and interact with their children. Family Start workers also helped whānau with decision-making by acting as a 'sounding board' for whānau to talk things through, but did not make decisions for them.

Whānau described changes that they had made as a result of their engagement with Family Start. These included changes to the way they discipline their children, greater interaction and play with their children, improving their nutrition and physical activity, and enrolling them in early childhood education. They had observed changes in their children's, and their own, wellbeing.

Family Start increases participation in health services

The impact evaluation PSM analysis estimated that Family Start participants were more likely to be enrolled with a Primary Health Organisation (PHO) and more likely to be fully immunised at every milestone by their first birthday. The analysis also estimated that the programme increased the likelihood of attending the Before School Check (B4SC). Some whānau reported that their

confidence in dealing with health services had increased after engaging with Family Start, which may have contributed to the increased PHO enrolment, immunisation rates and B4SC attendance.

The PSM analysis also estimated that participants' mothers were more likely to receive publicly funded mental health and addiction services after engaging with the programme. Additionally, child participants were estimated to be more likely to be hospitalised for maltreatment-related injuries and long-bone fractures. Although these results could be interpreted unfavourably (suggesting that Family Start participation has not benefited children and whānau with respect to these outcomes), the finding may reflect that Family Start increased the rate of identification and provision of support for the physical and mental health issues of children and mothers. This aligns with findings from the process evaluation, in which Family Start workers reported that they frequently refer whānau members to mental health services, alcohol and drug services, and counselling.

Participants reported that the Early Learning Payment was helpful in supporting their children to participate in early childhood education

Whānau interviewed stated that access to the Early Learning Payment (ELP) provided a valued opportunity for their children to participate in early childhood education (ECE) at a younger age. No statistically significant impact was found on overall rates of child enrolment with an ECE provider (one of Family Start's goals) in the impact evaluation, however measures of the duration or timing of ECE participation were not examined.

Participants in Family Start are more likely to experience interactions with Oranga Tamariki

Impact evaluation PSM results suggested that Family Start participants were more likely to interact with Oranga Tamariki (e.g., Reports of Concern, Care Placements, Police Reports of Family Violence events). While interaction with Oranga Tamariki could be perceived as a concerning finding (as it may indicate deterioration in child/whānau circumstances), it may reflect the programme's success in identifying and addressing family violence and other child health and safety issues. In other words, these findings may be the result of safeguarding and observational activities associated with Family Start. Additionally, the findings may reflect 'reverse causality', in that contact with Oranga Tamariki may be the reason for referral to the programme and would therefore be more common among Family Start participants.

Some aspects of the Family Start model do not align with Māori worldviews and practices

The process evaluation found that the design of the Family Start programme is effective, in that it enables providers to maintain fidelity to the core principles of the programme while also tailoring service delivery in response to the needs of the whānau as well as the values and principles of the contract holding organisation. The Family Start model is largely effective for service providers that deliver the programme through a Pākehā/Western framework.

However, Kaupapa Māori Family Start providers stated that the time-bound nature of some activities does not fit with principles of whanaungatanga. For example, producing the expected output of a Strengths and Needs Assessment within six weeks does not allow adequate time to build relationships of trust. The programme model also focuses on Western concepts of a child's development as an individual, rather than his or her development in the holistic context of whānau, hapū and iwi. Adapting programme concepts and resources to align with Māori worldviews and approaches is an additional burden for Māori providers. They also noted that whānau Māori typically responded well to intensive engagement, particularly at the beginning of the trust building process, but they were not funded to undertake these additional activities.

Family Start workers are feeling stretched by the challenge of working with whānau who need intensive support

Family Start workers and managers reported that they are working with more high needs whānau that need intensive support. These whānau lead complex lives and may be affected by issues such as family violence, alcohol and drug addictions and mental health issues. As a result, workers tend to provide longer visits and more frequent contact via phone and text messaging between visits. Family Start workers described feeling stressed, exhausted and overwhelmed due to long work hours and the mental energy required to support whānau in crisis.

There was a strong call from Family Start providers and workers for a change to the current funding model and caseload expectations to reflect the increased workload from working mainly with high needs whānau.

Family Start providers identified a need for nationally-consistent training

Induction, initial training and ongoing professional development of the Family Start workforce is undertaken onsite by Family Start providers. The quality and comprehensiveness of this training is variable as it relies on the time, resource allocation, personnel skill and systems of each provider organisation. In addition, the training generally focuses on the operational aspects of the job, with little focus on technical or clinical aspects such as child development. Family Start managers and workers expressed a desire for nationally consistent training. They called for additional support from Oranga Tamariki to enable them to offer high quality training, such as by co-designing a training package.

Some changes have been made to the programme following the Process Evaluation report

The process evaluation, conducted in 2019, included a recommendation to reduce caseload expectations to enable Family Start workers to work more intensively with and better support high needs whānau. In response, Oranga Tamariki has implemented a revised caseload model, under which Family Start worker caseloads have changed from 1 full-time equivalent (FTE) to 16 whānau to 1 FTE to 12–16 whānau, with a median of 14 whānau per worker.

The process evaluation also recommended increasing funding for Family Start worker salaries to enable programme providers to attract and retain suitably qualified and experienced staff. To address this, Oranga Tamariki has increased the contracted funding for each provider.

Conclusion

Overall, the results of the evaluation indicate that Family Start is having a positive impact on the wellbeing and safety of participant children and their whānau, and improving engagement with health-promoting public health services.

Whānau are receiving an effective service that they value, and that they perceive to be creating meaningful change in their lives.

Family Start providers are putting in considerable effort to deliver a service that aligns with the parameters of the programme model but is tailored to best meet the needs of their clients. However, the programme model is primarily grounded in a Pākehā/Western framework, and Māori providers are undertaking additional (unfunded) work to adapt the programme to the cultural context of their client whānau.

BACKGROUND

The Family Start Programme

The Family Start Programme ('Family Start') is a voluntary home-visiting programme funded, monitored and overseen by Oranga Tamariki. The programme is aimed at supporting families and whānau at risk of facing health and social challenges to realise better outcomes for their children.

Children are typically enrolled in the programme before birth or in their first year,[1] and may remain enrolled in the programme until they transition into school or until support is no longer needed.[2] In order to enrol in the programme, families or whānau must be experiencing or have experienced:[3]

- mental health issues
- addiction problems
- childhood history of abuse (for the parent/caregiver)
- care or protection history
- relationship problems (including family and whānau violence)
- parenting or child health and development issues, or
- young parenthood with additional challenges or needs.

Referrals are made directly to Family Start providers by local health and social services, or through family or self-referral. Family Start providers then aim to contact the family within five days to organise an initial visit to confirm eligibility and willingness to engage in the programme (Oranga Tamariki, n.d.).

Once a child is enrolled with Family Start, home visits are undertaken by a Family Start worker, who is expected to have a qualification and experience relevant to working with children and their whānau/families in social work, education or health. Service delivery is guided by a programme manual developed by Oranga Tamariki. The manual specifies core service delivery components (the Parenting Resource, Strengths and Needs Assessments (SNA), Child Safety Tools (CST) and Child Family Plans (CFP)). The delivery of these core components follows a cyclic process.

Family Start workers respond to the unique needs of the whānau they are working with, and ultimately the way in which service delivery is undertaken depends on the needs of the whānau.

The programme works from a child-centred, strengths-based approach, to encourage whānau to explore options available for managing problems and difficulties encountered when raising young

1 Children may be enrolled between ages one and two in exceptional circumstances; see Oranga Tamariki (2020a).

2 Support is no longer needed where families have "achieved their goals, the child's wellbeing is enhanced, parents' confidence is increased, and living circumstances are improved" (p2, Oranga Tamariki, n.d.).

3 Alternatively, they can be accepted to the programme by satisfying a combination of sudden unexplained death indicators (e.g. smoking during pregnancy), lack of positive support networks, multiple births or short inter-pregnancy intervals, criminal justice involvement, financial and material resource difficulties, frequent change of address or housing issues, and parent educational difficulties.

children. This includes supporting whānau to seek support for issues such as mental health and addiction, family violence and housing.

The programme is also designed to help parents enjoy raising their children in a way which promotes healthy outcomes. The programme facilitates outcomes by:

- encouraging whānau to build strong bonds between the parent and child
- developing whānau safety awareness
- teaching whānau about healthy lifestyle choices and child nutrition, health visits and immunisations
- developing parenting confidence.

Ultimately, the programme aims to improve child health and wellbeing outcomes across New Zealand; build healthy and resilient whānau; reduce child maltreatment; and decrease child injuries and deaths.

Delivery of Family Start

Family Start was introduced in 1998 in three pilot sites: Rotorua, Waitakere and Whangārei. Following the initial pilot, the programme was introduced to an additional 13 Territorial Local Authorities (TLAs) during the period 1999-2000. Family Start later became available in an additional 14 TLAs during the period 2005-2007 (referred to in this report as 'the 2005-2007 Family Start expansion'). For the next nine years Family Start did not expand further, although a number of changes to the programme content and structure occurred throughout this time.

The 2017 Budget allocated an additional $28 million over four years to expand Family Start. In 2019/20 financial year $50.7 million was spent on the programme, with an additional 7.5% funding increase provided for the 2020/21 financial year.

The nationwide expansion, which began in 2017, has extended the availability of Family Start to all TLAs, except in Christchurch where the Early Start programme provides similar services.

Data shows that from July to November 2020 the programme provided support for an average of just over 5,200 children and their whānau per month (Oranga Tamariki, 2020b). Around 60 percent of Family Start clients are Māori, 16 percent are Pasifika, 16 percent are Pākehā and 9 percent are of other ethnicities. These percentages have remained relatively consistent since 2017.

Oranga Tamariki early support operating model

The Family Start Programme sits within the suite of Oranga Tamariki early support programmes. A recently published synthesis of research and evaluations of its early support services (Oranga Tamariki Evidence Centre, 2020a) notes that Oranga Tamariki is developing a new operating model, which includes a new early support service.

Alongside its new operating model, Oranga Tamariki has several contracts with early support service providers. Family Start is the largest contracted programme by budget, with just over $50 million spent in 2019/20. Other contracted early support programmes include Social Workers in Schools, medium/high intensity wraparound family support services, Children's Health Camps, low to medium intensity family support services, and Strengthening Families. In addition, the Oranga Tamariki Children's Team is an internal stand-alone operation or programme that is not contracted to an NGO.

Local and international evidence on home-visiting programmes

A review of literature was out of scope for this evaluation. A summary of the review prepared by Vaithianathan et al. (2016) is presented below.

There is a body of evidence showing that intensive home visiting programmes in pregnancy and early childhood can improve parenting practices and have positive impacts on child health, school readiness and adjustment in adolescence (Robertson, 2014; Avellar et al., 2014; Howard & Brooks-Gunn, 2009; Peacock et al., 2013). There is also evidence that even if only some of the adversities facing at-risk children are averted, the return on investment from effective early support programmes can be substantial (Kilburn & Karoly, 2008).

In a small number of studies, home visiting programmes have been shown to be effective in reducing child maltreatment (MacMillan et al., 2009; Robertson, 2014; Avellar et al., 2014; Howard & Brooks-Gunn, 2009). In the Elmira trial of the Nurse Family Partnership, children in the intervention group had fewer substantiated reports of abuse, and fewer maltreatment reports at 15 years of age than the control group (Olds et al., 1986; Olds et al., 1997). Additionally, families in the intervention group in the Early Start trial in New Zealand had more positive and less punitive parenting and lower rates of parent-reported childhood physical abuse (Fergusson et al., 2005; Fergusson et al., 2012).

International evidence also suggests that home visiting programmes are a promising means of reducing child mortality. In the Memphis Nurse Family Partnership trial, home visiting for very low-income first-time mothers reduced all-cause mortality in mothers and preventable cause mortality to age 20 in children (Olds et al., 2014). A quasi-experimental study of a community implementation of the Nurse Family Partnership also found participation in the programme reduced the frequency of adverse perinatal outcomes, including infant mortality, for first-time single mothers (Carabin et al., 2005). The promise of home visiting in this respect is reinforced by evidence on the mortality effects of introducing nurse home visits on a universal basis. An area-level study of the introduction of a universal nurse home visiting programme for Danish mothers and their infants from 1937 through 1949 found reduced infant mortality (Wüst, 2012).

Previous evaluations of Family Start

Since its inception, the Family Start programme has received ongoing review and evaluation, which has resulted in changes to its design, delivery, and geographical reach. In emphasising the need to reach vulnerable children at risk of maltreatment, a number of process and impact evaluations of Family Start have previously been conducted.

An evaluation of the impact of Family Start (Centre for Child and Family Policy Research, 2005) involving four programme sites (West Auckland, Hamilton, Whakatāne, and Nelson) found that Family Start appeared to improve rates of parenting knowledge, caregiver participation in education and employment, and access to a child health worker. However, findings suggested that the programme did not increase rates of breastfeeding or child immunisation, nor decrease caregiver smoking. Notably, this evaluation did not include control or comparison groups, but instead measured differences in outcomes across a 12-month period. It was concluded that further impact evaluations were required to assess the effect of Family Start on longer-term outcomes for children and their whānau.

An independent review of the Family Start and Early Start programmes (Cribb, 2009) included a review of Family Start monitoring data and interviews with providers, enrolled programme participants, and other stakeholders. The review found that Family Start appeared to have a positive effect on breastfeeding, Early Childhood Education (ECE) enrolment, immunisation, and completed Well Child visits. However, the effectiveness of the programme was found to vary across providers. The review concluded that Family Start had "considerable potential" (p. 2) to effect positive outcomes for children, but that consistency in programme content and delivery was required, supported by changes in the contracting structure. This led to the standardisation of contracted programme elements across providers in 2011.

A quasi-experimental study conducted in 2016 (Vaithianathan et al., 2016) provided the first empirical evidence of Family Start's effectiveness. The evaluation found a small but statistically significant reduction in post neonatal infant mortality during the first year after their birth for children who participated in Family Start. It also found that the programme had positive impacts on whānau utilisation of health services and engagement with early childhood services; and that programme users were more likely than others to be referred to Oranga Tamariki.

An extension study published in 2017 (Vaithianathan et al., 2017) looked at the effectiveness of the programme for different participant groups. This found that there were significant reductions in post-neonatal infant mortality across a range of sub-groups, including teen and non-teen mothers, children in families with and without previous contact with Child Youth and Family (now Oranga Tamariki) and Māori children enrolled with kaupapa Māori and mainstream providers.

The extension analyses also suggested that positive outcomes for Māori children, including increased enrolment with a Primary Health Organisation (PHO) at age one and immunisation rates, were more likely to be achieved for those children enrolled with a kaupapa Māori organisation than those enrolled with mainstream service providers.

THE EVALUATION

Evaluation purpose

The purpose of this evaluation was to assess the Family Start programme's impact and effectiveness. In the context of the nationwide expansion of Family Start, Oranga Tamariki commissioned a process and impact evaluation which builds on previous studies that have examined the impact of the programme (i.e., Vaithianathan et al., 2016). The evaluation was undertaken through two workstreams:

- a process evaluation, conducted in 2019, to explore the effectiveness of the programme's design and delivery, including how client whānau experience the programme, and how Family Start providers can optimise positive impacts for children and their whānau.
- an impact evaluation, conducted in 2020, to assess the impact that Family Start participation is having on the wellbeing of New Zealand children and their whānau. The

evaluation examined a range of health, educational, and social outcomes for children, including separate analyses for Māori and Pasifika children.[4]

The evaluation was also intended to provide accountability for the Oranga Tamariki investment in Family Start, inform future investment in the programme, and support continuous improvement and learning.

Key evaluation questions

The key evaluation questions (KEQs) the Family Start evaluation sought to answer were:

1. To what extent is Family Start achieving programme outcomes and impacts for vulnerable children and their whānau?
2. How well is Family Start delivering its service for vulnerable children and their whānau?
3. How can Family Start be optimised to ensure positive outcomes for children and their whānau?

KEQ1 has been primarily answered by the impact evaluation, with data from the process evaluation offering contextual information from qualitative interviews with Family Start providers and client whānau. A detailed discussion of the impact of Family Start is available in the full impact evaluation report (Oranga Tamariki Evidence Centre, 2021).

KEQ2 and KEQ3 were answered through the process evaluation. A summary of the process evaluation findings is presented in this report, with full findings available in the process evaluation report (Oranga Tamariki Evidence Centre, 2020b).

Evaluation approach

The evaluation was informed by the Bridging Cultural Perspectives approach (Superu, 2018) which comprises two models: He Awa Whiria (Braided Rivers) and Negotiated Spaces.

He Awa Whiria provides the framework for knowledge creation. It provides two separate streams of knowledge – Māori and Pākehā – each stream of equal strength, with information about what is valued, and to what degree. For the Family Start evaluation, a Pasifika knowledge stream[5] was also woven into the evaluation process to produce findings based in each of the three knowledge streams: Māori, Pasifika and Pākehā.

Negotiated Spaces provides the dialogue tool for exchanging knowledge across the streams. Implicit to Negotiated Spaces is balancing the desire to uphold distinctive cultural knowledge spaces with an openness to innovation and change.

[4] Ethnicity was based on Statistics NZ's standard ethnicity measure (i.e. total ethnicity) rather than prioritised ethnicity, meaning that participants could be counted as both Māori and Pasifika.

5 The Pasifika knowledge stream comprised the cultural beliefs and world views of at least seven ethnic groups. These worldviews and beliefs can be considered together through the concept of Fofola e fala kae talanoa e kāinga, a metaphor of which one underlying meaning is an invitation to family members to come together and talanoa – to talk (see Ministry of Social Development, 2012). Multiple mats can be rolled out simultaneously relating to both different ethnic groups and different parts of the evaluation.

In implementing the impact evaluation, reviewers representing the three knowledge streams (Māori, Pasifika, Pākehā) worked together to assist with the interpretation of the findings at an aggregate level, and through the lens of each worldview.

For the process evaluation, each knowledge stream was led by a kaitiaki (caretaker) who had overall responsibility and accountability for data collection and analysis under each knowledge stream. While the process evaluation was guided by a shared evaluation framework, the evaluation team under each stream conducted the data collection in a way that suited different groups of evaluation participants. Data collected under each stream (particularly the case studies) were analysed and written up separately, led by the team members from each stream. The process evaluation report was written collaboratively, with each of the three kaitiaki taking responsibility for ensuring that the integrity of their knowledge stream was retained.

An evaluation advisory group (EAG), comprising experts in Family Start and child and whānau development programmes, provided subject matter and technical advice related to the evaluation design, planning, and data collection, analysis and interpretation. The EAG functioned as a negotiated space to ensure that a culturally appropriate framework was woven throughout the evaluation from design to reporting using the He Awa Whiria approach.

Further details on the Bridging Cultural Perspectives approach are provided in Appendix A.

Evaluation methodology

Quasi-experimental impact evaluation

The impact evaluation was conducted using data from Statistics New Zealand's Integrated Data Infrastructure (IDI), using two quasi-experimental methods: Propensity Score Matching (PSM) and Difference-in-Differences (DiD). A summary of the methodology is provided below, with further details in Appendix A.

Propensity Score Matching

The PSM approach compared the outcomes of Family Start participants to the outcomes of non-participants that had similar characteristics. This was done via a matching process that focused on finding non-participants that were similar in terms of observed characteristics that are known to predict programme participation. This was achieved by first identifying which factors are most strongly associated with individuals participating in Family Start (i.e. identifying relevant characteristics of individuals in the group that participated in the programme, based on theory and previous research). Using these characteristics, a formula was developed (via an analytical technique known as logistic regression) for calculating the probability of a child participating in the programme – this is known as the "propensity score". A propensity score was calculated for all individuals who participated in the programme ("treated individuals"), as well as for all untreated individuals who could potentially be used as controls in the evaluation ("control individuals"). Treated individuals were then matched with control individuals who had similar propensity scores; this means that theoretically, each treated individual is matched with a control individual who had an equal probability of participating in the programme.

Outcomes for the matched treatment and control groups were then compared using standard analytical techniques. The underlying assumption is that once the characteristics predicting participation are controlled for by propensity score matching, the difference in mean outcomes between groups is determined by their participation (or absence of participation) in the programme.

A limitation of this approach is that it is not possible to control for some possibly important but unmeasured variables, such as willingness to participate.

The PSM sample included children born between 2009 and 2015. Children who participated in the programme before 2009 were excluded as Family Start data available in the IDI (FS-Net data) began in late 2008, with data on children born prior to 2009 not collected systematically. Children born after 2015 were excluded due to a lack of key outcomes data, in particular neo-natal mortality data, available for these children.

Difference-in-Differences

The DiD approach focused on the effects that introducing the programme had on children that were expected to be affected by it (regardless of whether they actually participated in Family Start or not) at an area level (Territorial Local Authorities, or TLAs). Changes in average outcomes (i.e. before and after the programme became available) were estimated and compared to the changes experienced (over the same period) in TLAs where Family Start was not available.

Note that the PSM analysis examined outcomes across participants from TLAs that had the programme between 2009 and 2015. On the other hand, the DiD analysis examined the 2003 to 2015 period, focusing on outcomes in the 14 TLAs where the programme became available between 2005 and 2007. Both methods examined outcomes within the child's first, second, and sixth years of life.

The methodologies used were based on the previous evaluation conducted by Vaithianathan et al. (2016), including some amendments aimed at increasing the reliability and validity of the findings.

Presentation of impact evaluation findings

This report focuses on PSM model results rather than DiD model results.[6] While conceptually the DiD approach is commonly considered to be a more robust method, in practice there were methodological issues affecting the current evaluation, primarily that the number of Family Start participants is a small proportion of the total population of each TLA. This means that it is difficult to measure changes in the 'treated' TLA, particularly for rare events (such as child mortality). In addition, most of the observed DiD outcomes did not pass the "parallel trends test" (used to ensure changes can be attributed to the programme). As a result, our ability to draw conclusions about whether the observed estimates accurately reflected the true effect (or lack thereof) of Family Start was limited for the DiD analyses.

Process evaluation

A summary of the data collection methods used in the process evaluation is provided below, with details of each method in Appendix A.

The process evaluation drew strongly on qualitative data. An important data collection method was five provider-level case studies (three kaupapa Māori providers, one Pasifika provider and one Pākehā provider) which included in-depth interviews with Family Start managers, workers, referrers and whānau that were clients of Family Start. Other data collection methods included interviews with Oranga Tamariki officials and other key stakeholders, and an electronic diary activity during which Family Start workers recorded their experiences and perceptions in their role working with

[6] Full results from both approaches are provided in the impact evaluation report (Oranga Tamariki Evidence Centre, 2021).

whānau. This was supported by a review of key documents provided by Oranga Tamariki and analysis of administrative data related to Family Start service provision.

The collected data was analysed thematically and was assessed against key evaluation criteria and performance standards to determine the evaluation findings.

Strengths and limitations

The strengths and limitations of the methodology are discussed in Appendix B.

IMPACT OF THE FAMILY START PROGRAMME

This section addresses KEQ1: To what extent is Family Start achieving programme outcomes and impacts for vulnerable children and their whānau?

The evaluation explored the extent to which the Family Start Programme is making a difference for whānau Māori, Pasifika families and other families experiencing disadvantage. This section provides the synthesised findings of the process and impact evaluations related to programme impact.

Post-neonatal mortality

Participation in Family Start reduces the likelihood of children dying in their first year of life

The Family Start Programme is intended to reduce child maltreatment and, ultimately, decrease child injuries and deaths. Family Start workers aim to realise these outcomes by supporting parents and whānau to enhance the safety of the home environment, access healthcare for their children, and provide warm, safe and loving care.

The evaluation examined whether participation in Family Start is related to a reduction in overall child deaths, as well as two specific causes of death: post-neonatal mortality due to injury, and post-neonatal sudden unexplained death in infants (SUDI). While child mortality is a rare occurrence overall, the PSM analyses found statistically significant reductions in all three measures for children who participated in Family Start in their first year of life.

The PSM analysis estimated that participation in Family Start reduces overall post-neonatal infant mortality from 2.9 deaths per 1,000 children to 1.7 deaths per 1,000 children in the first year of life (42% reduction).

For Māori children, participation in Family Start was estimated to reduce mortality from all causes from 3.5 to 2.2 per 1,000 children (37% reduction).[7]

For Pasifika children, participation in Family Start was estimated to reduce mortality from all causes from 3.1 to 1.2 per 1,000 children (62% reduction).

The DiD analyses did not find evidence that the introduction of Family Start significantly reduced post-neonatal mortality. Although all first-year estimates were negative, indicating a reduction in mortality, there were wide confidence intervals around each estimate indicating a low level of reliability.

Children who participate in Family Start are less likely to die due to injury or SUDI in their first year of life

[7] Note that this was significant at the p<.10 or 90% confidence level, but not the p<.05 or 95% confidence level.

The analysis also explored child deaths due to injury. The findings showed that across all ethnicities, participation in Family Start was estimated to reduce injury-related child deaths in the first year of life from 0.8 per 1,000 children to 0.3 per 1,000 children (67% reduction). For Māori, injury-related deaths were estimated to reduce from 1.3 to 0.5 per 1,000 children (63% reduction). There were no statistically significant reductions in injury-related deaths among Pasifika children in the first year of life.

Across all ethnicities, Family Start was estimated to reduce SUDI-related deaths among participants in the first year of life from 1.3 per 1,000 children to 0.6 per 1,000 children (51% reduction). For Māori, SUDI-related deaths were estimated to reduce from 1.3 per 1,000 children to 0.5 per 1,000 children (63% reduction). There was no statistically significant change in SUDI-related deaths among Pasifika children in the first year of life.

The positive findings regarding reduced child deaths (including deaths from all causes) amongst Family Start participants were strongest in the first year of children's lives. Family Start participation was not found to produce a statistically significant reduction in child deaths in the second year of life, nor when children were aged three to six years.

The DiD results did not find any statistically significant reductions in any of the mortality outcomes.

Some Family Start clients had made changes to enhance the safety of their children's home environment

Qualitative data from the process evaluation included details of whānau views and perceptions of how Family Start has helped them to provide a safer environment for their children, which may have contributed to the reduction in death rates outlined above.

Most of the whānau interviewed gave examples of how they had worked with Family Start to enhance their children's physical safety and prevent injuries through modifying the home environment. Examples included putting latches on cupboards, storing cleaning products out of reach, and installing baby safety products.

Several whānau, particularly in Māori and Pasifika households, described making changes to their infant's sleeping arrangement to enhance safety. Many of these whānau co-slept with their pēpi, and typically continued to do so after engaging with Family Start. They stated that Family Start workers respected cultural norms around bed sharing, and had provided culturally appropriate advice on how to co-sleep safely.

> *The Plunket nurse told me not to do it [co-sleep], but I ignored her. [Family Start worker] didn't try to make me stop, she just gave me advice about not having loose blankets and pillows and stuff. I was happy to follow that.*
>
> - *Family Start client*

Safety plans were an important tool to support whānau to keep children safe

The Child Safety Tool (CST) component of the Family Start Programme was viewed by the case study providers and staff as an important component in supporting child safety. The importance of developing a safety plan was particularly emphasised in the Māori-centred case studies. Family Start kaimahi, referrers and many of the whānau themselves highlighted safety plans as an effective way of identifying and mitigating risks to their children's safety.

Family Start kaimahi in kaupapa Māori providers emphasised the importance of developing safety plans that align with a Te Ao Māori worldview. One Māori provider developed kaupapa-based safety

plans by drawing on the four pillars of whānau hauora,[8] and incorporating tikanga such as karakia. Another Māori-centred provider similarly took a holistic view of safety planning, covering issues from strategies to keep children safe from violence, to addressing parental mental health, and practical issues such as safe sleeping spaces and storing chemicals out of reach. Client whānau in the Māori-centred case studies verbally reported stronger safety outcomes from Family Start than in the Pasifika and Pākehā case study sites.

Health and education-related outcomes

Participation in Family Start increases participants' enrolment with a primary care practice

The Family Start programme's short-term goals include enrolling children with a primary health organisation (PHO). Family Start workers encourage whānau to enrol their children in a general practice or hauora. This enables them to gain the benefits associated with belonging to a PHO, such as cheaper doctors' visits and reduced costs of prescription medicines.

The impact evaluation PSM analysis found that Family Start was estimated to increase rates of enrolment with a PHO from 95.9 to 97.5 per 100 children by their first birthday (1.7% increase). Rates of PHO enrolment at the child's second birthday increased from 98.3 to 99.0 per 100 children (0.7% increase).

The analysis also estimated a statistically significant increase in Māori and Pasifika participants' likelihood of PHO enrolment by the end of their first and second years of life.

There was no significant difference in PHO enrolment for any participant groups in their sixth year.

The DiD analyses did not find any significant differences in PHO enrolments among the target group.

Children who participate in Family Start are more likely to be fully immunised and attend a Before School Check (B4SC)

The PSM analysis estimated that participation in the Family Start programme increased the likelihood of being fully immunised at every milestone age in their first year from 60.6 to 64.3 per 100 children (6.1% increase). This means that Family Start participants were more likely than children in the control group to have received their 6 week, 3 month, and 5 month immunisations. Family Start participants were also more likely to be fully immunised at two years and at six years. Māori and Pasifika children who participated in Family Start also had statistically significant increases in the likelihood of being fully immunised.

The PSM analysis also found that the programme increased the likelihood of attending the B4SC for all participants (increased from 78.5 to 80.7 per 100 children, a 2.8% increase). Māori and Pasifika children were also more likely to attend the B4SC.

These findings suggest that Family Start is making progress towards meeting its expected short-term outcomes related to children's health and safety, namely that children and their whānau are enrolled with a PHO, and that childhood immunisations are up-to-date.

[8] The Te Whare Tapa Whā model (Dr Mason Durie, 1982) emphasises four domains of health: te taha hinengaro (psychological health); te taha wairua (spiritual health); te taha tinana (physical health); te taha whānau (family health).

The DiD analyses did not include B4SC or immunisation outcomes due to data availability limitations in the IDI.

Some whānau reported increased confidence to engage with health services

Qualitative data from the process evaluation and quantitative data from the impact analysis shows that nearly all whānau that participated in the evaluation were enrolled with a PHO, although most whānau interviewed stated that this pre-dated their engagement with Family Start. Families typically reported that their Family Start worker had checked that their children had received Well Child Tamariki Ora checks and immunisations, with most noting that they were already up-to-date and this had not been impacted by their engagement with Family Start.

A small number of whānau reported that their confidence in dealing with health services had increased after engaging with Family Start. They stated that the Family Start worker had helped them book appointments, preparing them for the type of situations they may encounter (for example, through role playing) and, in some cases, provided transport to appointments. This may have contributed to the increased rates of PHO enrolment, immunisation rates and B4SC attendance.

While the impact analysis did not find any evidence that the Family Start programme had a significant impact on enrolments in early childhood education, whānau reported positive effects on affordability

One of the Family Start goals is to increase participation in early childhood education (ECE). Qualitative information from the process evaluation found that Family Start workers are led by the clients regarding whether they wish to enrol their child in ECE. They provide information on the benefits of ECE, but if the family states that they would like to keep their child at home they respect this and do not 'push' to enrol the child.

In the Māori-centred case studies, Family Start kaimahi noted that some of their client whānau were reluctant to enrol their children in ECE at a young age, preferring to care for them at home.

Families/whānau enrolled in Family Start are eligible to access the Early Learning Payment (ELP). This subsidises the cost of attendance at ECE for children aged 18 to 36 months, up to a maximum of 20 hours a week. Despite the availability of the ELP, the PSM analysis conducted during the impact evaluation did not find any statistically significant differences in the likelihood of Family Start children having ever enrolled in an ECE (measured for children by the end of their sixth year, as the ECE IDI data used do not include dates). This was found for children of all ethnicities, and Māori and Pasifika children.

However, it is important to note that the PSM analysis looked at outcomes over the period 2009-2015. During this period, the ELP was not available in all areas.[9] Since 2017, the ELP has been available nationally and remains available to whānau even if they leave the programme. These changes may support higher rates of ECE participation in the future. The evaluation did not explore other outcomes related to the duration or timing of ECE participation.

DiD analyses did not include ECE enrolment rates due to data availability limitations in the IDI.

[9] Vaithianathan et al. (2016) note that from December 2005 – October 2006 the ELP was rolled out to Rotorua, Horowhenua, Hamilton, Hastings, Gisborne, Kawerau, Christchurch (Early Start), Wanganui, Nelson, Kaitaia, Invercargill, Waitakere, Dunedin, Whangarei, Masterton, Porirua, and Whakatane. It was not extended to remaining 'phase in' areas.

Qualitative data suggested that the ELP is valued by families as it provides an opportunity for their children to participate in ECE at a younger age. One Family Start manager noted that:

> *Without the ELP it would be difficult if not impossible to attend ECE before the children are three years old, as early learning is far too expensive for Family Start whānau. Access to ECEs is essential for whānau who are under stress and living in crisis mode, and the ELP has helped a lot.*
>
> - *Family Start manager*

Most whānau interviewed across all five case studies confirmed that they would not have been able to enrol their child in ECE prior to three years old without the ELP.

Family Start workers and managers also noted that the ELP functioned as an incentive for some families to enrol in Family Start. However, some reported that they had observed a higher number of unplanned exits since the programme change that allowed families to continue receiving ELP after leaving Family Start.

Mothers of children enrolled in Family Start were more likely to receive mental health and addiction services

The PSM analysis estimated that mothers of Family Start client children were more likely to receive publicly-funded mental health and addiction services in the first year of their child's life (from 17.4 to 26.1 per 100 children; an increase of 50%). The increased likelihood of accessing these services remained in the child's second and sixth years of life.

Increased likelihood of receiving publicly-funded mental and addiction services was seen for mothers of all ethnicities as well as for Māori and Pasifika.

This may reflect a 'safeguarding' effect, in that Family Start may be assisting mothers to access support for mental health and addiction issues which may have gone undetected had they not participated in the programme. This aligns with findings from the process evaluation, in which Family Start workers reported that they frequently refer whānau members to mental health services, alcohol and drug services, and counselling. For many of the client whānau interviewed, Family Start's assistance to access mental health support services had a substantial impact on their wellbeing.

> *Before I started [Family Start] I had anxiety and depression. Family Start helped me to access maternal mental health, and [Family Start worker] provides ongoing support and checks in on how I'm doing. It's been a huge help… I was in a dark place and now I can see the positive side of life. It's helped me and baby.*
>
> - *Family Start client*

The DiD analyses found statistically significant reductions in the likelihood of participants' mothers receiving publicly-funded mental health and addiction services in the child's first and second year. However, parallel trends tests indicated that these outcomes are more likely a continuation of trends that were present before participating in Family Start, rather than outcomes that can be attributed to the programme.

Child protection outcomes

Participants in Family Start are more likely to interact with Oranga Tamariki

The PSM analyses estimated that children that participated in Family Start were significantly more likely to have interactions with Oranga Tamariki. The evaluation found that in their first year of life, Family Start children had an estimated:

- increase in the likelihood of being the subject of a report of concern to Oranga Tamariki from 20.7 to 37.3 per 100 children (80% increase)
- increase in the likelihood of being assessed by Oranga Tamariki from 15.0 to 28.5 per 100 children (90% increase)
- increase in the likelihood of being placed into state care from 2.1 to 2.8 per 100 children (37% increase)
- increase in the likelihood of being recorded in a Family Violence Report of Concern or Contact Record by Police to Oranga Tamariki from 18.7 to 28.1 per 100 children (50% increase).[10]

Statistically significant increases in the above outcomes were also seen in the second and sixth years of participant children's lives.

The PSM analyses also showed significant increases in the likelihood of Oranga Tamariki contact for Māori and Pasifika participants in Family Start.

It is challenging to interpret these findings. On the one hand, higher rates of contact with Oranga Tamariki and reports of family violence may indicate deteriorating circumstances within the whānau (and potentially the lack of any positive impact from Family Start participation).

On the other hand, Family Start is intended to support whānau to increase their children's safety, so working with Family Start may be making participant whānau or their workers more willing or able to report health and safety concerns to agencies. Qualitative data from the process evaluation shows Family Start workers put considerable effort into nurturing trust with clients and working with them to get help for issues such as family violence. Workers talked of the necessity of sharing information with other agencies and issuing reports of concern to Oranga Tamariki[11] when they felt the safety of children was at risk – and of the importance of communicating this to the client whānau. Despite this responsibility to report, almost all whānau interviewed said they felt safe to be open with their Family Start workers and share confidential information with them.

Additionally, as noted by Vaithianathan et al. (2016), the findings related to increased contact with Oranga Tamariki may reflect 'reverse causality', in that contact with Oranga Tamariki may be the reason for referral to the programme.[12] This is supported by the fact that across all Oranga Tamariki-related measures, the estimated increased likelihood is strongest in year one of the child's

[10] This includes the Family Start participant child and/or their siblings being recording in a Family Violence Report of Concern or Contact Records.

[11] Page 62 of the Family Start programme manual states that Family Start workers "have a responsibility for ensuring that children are safe, by passing on relevant information and quality assessments which describe perceived risk, and by acting in collaboration with Oranga Tamariki.".

[12] From 1 June 2017 to 31 May 2019, 7.7% of all referrals to Family Start came from Oranga Tamariki.

life (when most referrals to Family Start occur), and either reduce by the sixth year or are no longer statistically significant.

The DiD analyses, which are not subject to reverse causality, did not find any effect of Family Start on children's likelihood of being the subject of a Report of Concern, being assessed, or placed into care by Oranga Tamariki. There were also no significant differences in the likelihood of hospitalisation for a maltreatment-related injury or a long bone fracture. However, the DiD analyses found an 11% increase (or 1.8 per 100 children) in the likelihood of children (or their siblings) being recorded in a Family Violence notification by Police to Oranga Tamariki in the first year of life. This result satisfied the parallel trends test, indicating that the finding could be attributed to the programme.

Family Start participants were more likely to be hospitalised with long-bone fractures and maltreatment-related injuries

The PSM analyses found that Family Start participants of all ethnicities were estimated to be more likely than the control group to be hospitalised with long-bone fractures[13] in their first year (increased from 1.5 to 2.6 per 1,000 children; 68% increase).

There were no significant differences in rates of hospitalisation for long-bone fractures for Māori or Pasifika children.

The analysis also found that children of all ethnicities that participate in Family Start experienced an estimated increase in being hospitalised for maltreatment-related injuries in their first year of life (from 4.1 to 6.3 per 1,000 children; 53% increase). The evaluation did not find any significant differences in hospitalisations for maltreatment-related injuries for Māori or Pasifika children.

While these findings appear negative, the overall increase in hospitalisation rates for Family Start participants may indicate an increased likelihood of children receiving the treatment they need, rather than an increase in instances of maltreatment. The increase in hospitalisation may also reflect reverse causality, in that hospitalisation may be the reason for referral to the programme.

The DiD analyses, which are not subject to reverse causality, did not find significant differences in the likelihood of hospitalisation for a long-bone fracture or a maltreatment-related injury.

Whānau reported being motivated to change living situations that exposed their children to violence, and take a gentler approach to discipline

Qualitative data from the process evaluation suggests that participation in Family Start motivates and supports whānau to remove their children from situations in which they may experience violence or injuries. About half the interviewed whānau reported making changes such as reducing their children's exposure to people who they considered unsafe. Several whānau interviewed had changed their housing situation by moving to a safer environment. For example, one mother stated that when her baby was first born, she lived in a house where there was frequent drinking, parties and violence. After engaging with Family Start, she moved to a different area of the region to provide a safer environment for herself and her child. Family Start workers had assisted others to seek help to escape situations of domestic violence.

[13] While it is possible to sustain these injuries accidentally, long-bone fractures in very young children are strongly associated with abuse.

Several of the whānau interviewed reported that prior to engaging with Family Start they had used physical punishment and/or yelling and shouting as a way of disciplining their children. Family Start workers provided tools to deal with children's behaviour differently, for example using 'time out', as well as techniques for managing parental anger. Parents stated that they were now actively trying to use a more gentle, positive approach to discipline.

> *I was bought up in the "school of hard knocks" and that's all I knew. I used to smack my children on the hand or bottom, but [Family Start worker] gave me techniques to manage my anger. I can [now] deal with situations without hitting.*
>
> - *Family Start client*

DELIVERY OF THE FAMILY START PROGRAMME

This section addresses KEQ2: How well is Family Start delivering its service for vulnerable children and their whānau?

The discussion provides a summary of key findings from the process evaluation related to how client whānau experience Family Start, and how effectively contracted service providers have operationalised and delivered the programme.

Whānau experiences of the Family Start Programme

The majority of client whānau received an effective and reliable service from the Family Start programme

The evaluation found that the processes used to deliver Family Start are working effectively for the majority of its clients. Family Start providers ensure that whānau have a good understanding of the programme prior to entry, setting clear expectations for whānau during the initial assessment phase. Whānau were aware of why they were involved with Family Start. Many talked openly about the issues they were facing and what they hoped to get out of the programme in terms of receiving parenting support and improving whānau wellbeing for the benefit of their children.

> *I had my first two children removed [from my care] when I was younger, and I really wanted to keep this one. I knew I needed some help with my parenting and that was what motivated me to engage with Family Start.*
>
> - *Family Start client*

The Family Start case study providers all used very similar processes to match whānau with workers. The guiding principle is to match worker strengths and skill sets to whānau needs. For some whānau, including for some whānau Māori, matching by ethnicity is important and providers seek to meet these needs where they have the capacity to do so. Matching on the basis of language was a key consideration for many Pasifika aiga and fāmili. Practical considerations such as the current caseload of workers were also factored in. Almost all whānau said they were very happy with the Family Start worker they had been matched with. The minority of whānau who were not happy with their worker had been able to change to someone more suitable and stated that this had been easy to do and that the transition had been seamless.

The whānau who participated in the evaluation had a trusting relationship with their Family Start worker and felt safe to be open and honest with them and "talk about everything". Trust was built on the strengths-based, non-judgemental, respectful, and open and honest approach of the workers who follow the pace of the whānau making them feel safe, supported, comfortable, listened to, understood, affirmed and empowered.

> *She feels like a part of my family, like an aunty… she's by my side through everything.*
>
> - *Family Start client*

Almost all whānau interviewed told us the service they received from their Family Start workers was reliable and consistent. Their workers arrived on time and advised them in advance if a visit needed to be rescheduled or if they were running late. A number of whānau said they sometimes needed to reschedule visits, and appreciated the flexibility of their workers to enable this. Whānau reported meeting with their workers regularly and were able to contact them via phone or text when needed outside of their scheduled visits. Most whānau said they were visited by the same worker, although some had experienced a change in their worker due to staff turnover.

Family Start clients lead the process of setting their goals, assisted and supported by workers

Almost all of the whānau that participated in the evaluation were happy with the progress they were making on their Child Family Plans (CFPs). Each had developed their plans in conjunction with their Family Start worker through processes of whakawhitiwhiti kōrero, talanoa or respectful discussion.

Goal setting was led by the whānau, with the goals reflecting their priorities, needs and aspirations – with support, guidance and validation provided by workers where needed. To help facilitate goal setting, Family Start workers used language and concepts that whānau relate to, such as what they want for their children as opposed to 'goals'.

> *I didn't have any goals initially, then [Family Start worker] prompted me to think about what I wanted for my daughter – those were my goals! This was a bit of a revelation for me, I thought goal setting was hard.*
>
> - *Family Start client*

Many of the whānau interviewed were clear that working with Family Start had been the catalyst for setting goals and making changes to their whānau circumstance, with many noting that they had never really thought about or been encouraged to set goals prior to their engagement with the service. Family Start workers were also instrumental in translating goals into practical actions, and in encouraging clients to realise that their goals were realistic.

Some of the Māori providers talked of the importance of taking time to first build trust and rapport with whānau before turning to making plans and setting goals, with the plan and goal setting process taking up to six weeks. Family Start workers at the Pasifika provider also took time to develop trusting, open relationships with aiga and fāmili before moving to develop CFPs and set goals.

Family Start workers use a strengths-based approach to support whānau with parenting

Whānau interviewed stated that Family Start workers encouraged them by highlighting and praising their strengths and skills as parents and worked to build on what they already knew. They did not criticise or tell them what they were doing was wrong, but instead suggested new approaches, offered useful tips and shared their own experiences of what worked.

> *She gives us good advice. Encouragement helps… when you're feeling down, she'll say you're doing fine. It makes me feel so much better in myself.*
>
> - *Family Start client*

Whānau appreciated the opportunity to learn more about child development and new, positive ways to parent and interact with their children. Family Start workers also helped whānau with decision-making by acting as a 'sounding board' for whānau to talk things through, but did not make decisions for them.

Family Start workers shared a range of parenting resources with whānau, including print outs from the Parenting Resource website and Strategies with Kids, Information for Parents (SKIP) booklets. Workers also drew on other sources of parenting information, such as the health.org website and Brainwave Trust resources. Some have developed their own tools to provide whānau with practical and useful information to meet their needs. For example, one Family Start worker developed a suite of trait-based resources to support whānau with children who face behavioural and learning challenges such as attention deficit hyperactivity disorder (ADHD) and dyslexia.

Family Start workers said they frequently used the Parenting Resource website[14], and found it easy to navigate and said it contained a lot of useful resources. They also appreciated the less structured nature of the resources on the website compared with the previously-used Ahuru Mowai Born to Learn resources, which workers considered more prescriptive and deficit-based.

In the Pākehā case study, the Parenting Resource was particularly valued as a source of useful information to discuss with whānau.

Family Start workers based in Māori providers talked of the lack of kaupapa-based and te reo Māori resources in the Parenting Resource website,[15] and of the lack of such parenting and child development resources more generally. This point was also raised by some whānau.

Client whānau felt culturally safe in the Family Start Programme

Operating in a culturally safe way with culturally competent workers was important to all of the Family Start providers interviewed. Providers sought to recruit culturally competent workers and to provide training and other supports, such as drawing on the knowledge of in-house cultural advisors, to ensure their Family Start teams are able to work with whānau, aiga, fāmili and families in culturally appropriate and safe ways.

For many whānau Māori, it was important that their provider delivered the programme through a kaupapa framework. They considered that their kaupapa service had particular cultural expertise and knowledge to support the wellbeing of their whānau in a holistic way. Whānau talked of their Māori Family Start workers sharing te reo and waiata resources with them, helping them create whakapapa trees and assisting them to locate kōhanga reo for their tamariki.

> *She's really easy to get along with and she understands me. It's that Māori bond.*
>
> - *Family Start client*

A small number of the whānau Māori we met with raised issues related to the cultural safety of the Family Start Programme – that it was not based in te ao Māori and lacked kaupapa and te reo based parenting resources.

Having a culturally competent Family Start worker was especially important to Pasifika aiga/fāmili. Almost all of the Pasifika aiga/fāmili interviewed stated that being matched with a Family Start worker of the same ethnicity was very important to their sense of safety and being able to engage successfully with the programme. Being able to converse in a shared Pasifika language and work with someone who had an understanding of their cultural values and ways of life was important.

[14] https://www.parentingresource.nz/

[15] Additional te reo and te ao Māori resources have been added to the Parenting Resource since the evaluation data collection period.

> *My Family Start worker is Samoan and it does make a difference as she understands the cultural way of life as a Samoan, particularly the family setting.*
>
> - *Family Start client*

Client whānau consider that Family Start has improved their parenting skills

Client whānau that participated in the evaluation were unanimous in their view that engagement with Family Start had positively impacted on themselves and their children. Nearly all whānau interviewed reported an increase in their confidence and ability to provide warm, safe and loving care for their children. Many whānau interviewed stated that prior to engaging with Family Start they had doubted their ability to parent effectively due to not having had strong parenting role models themselves, being first time parents, or experiencing anxiety which made them question their parenting decisions. After working with Family Start, nearly all of the whānau reported increased confidence in their parenting skills:

> *When I had my daughter, I didn't have a clue what to do and I used to question myself and beat myself up about it... Family Start gave me good advice about her milestones and reaffirmed that I'm doing a good job. Now I'm much more confident in my parenting.*
>
> - *Family Start client*

Through the provision of parenting education and support, whānau had reduced their anxiety related to parenting, had learned core parenting skills and were provided with emotional support and reassurance.

Whānau described changes that they had made as a result of their engagement with Family Start. These included changes to the way they discipline their children, greater interaction and play with their children, improving their nutrition and physical activity, and enrolling them in early childhood education. They had observed changes in their children's, and their own, wellbeing.

Whānau drew a strong connection between these positive outcomes and their engagement with Family Start, with many stating that change would not have occurred without support from the programme. Nearly all of the whānau interviewed stated that they were more optimistic about the future since their engagement with Family Start.

> *Since working with Family Start, I don't feel scared about the future anymore. I've addressed my issues. I know that there will be challenges, but overall I feel hopeful, and that the future will be bright.*
>
> - *Family Start client*

Service provider delivery of the Family Start Programme

The Family Start programme is delivered with fidelity to its intended design

The Family Start programme model is based on the parameters described in the programme manual (Oranga Tamariki, 2020a). Service providers are expected to maintain fidelity to the core principles of the programme (e.g., strict adherence to referral criteria, timeframes for initial contact, and always sighting the Family Start child).

Qualitative engagement with Family Start service managers and workers, as well as observations from the Oranga Tamariki Partnering for Outcomes (PFO) Advisor in each region, confirmed that the delivery of Family Start is aligned with its intended design.

The process evaluation found that the design of the Family Start programme is effective, in that it enables providers to maintain fidelity to the core principles of the programme while also tailoring service delivery in response to the needs of the whānau as well as the values and principles of the contract holding organisation. Family Start providers at times make adjustments to:

- the content of the visit (for example, by supporting the whānau to address immediate needs like housing and food first, and then focussing on parenting and child development when immediate needs are met)
- the duration of visits and frequency of contact (for example, by developing a kaupapa-based framework to guide whānau Māori through the CFP process, or using the talanoa with Pasifika aiga/fāmili to develop CFP goals).

Some aspects of the programme design do not align with Māori and Pasifika worldviews and approaches

The process evaluation found that the Family Start model is largely effective for service providers that deliver the programme through a Pākehā/Western framework. Kaupapa Māori and Pasifika service providers, however, highlighted a tension between aspects of the programme design and Māori and Pasifika worldviews and approaches. This was particularly apparent in the time-bound nature of the activities, which does not fit with principles of whanaungatanga. For example, the Family Start manual states that a SNA needs to be completed within six weeks, which kaimahi, managers and referrers in Māori and Pasifika services stated is sometimes inadequate to build the required relationship with whānau.

> *Often it takes longer to build trust, especially with clients who have negative past experiences with government agencies. We have to overcome that history and build a relationship of trust before we start talking about goals and SNA and CFP.*
>
> *- Family Start worker*

Māori and Pasifika Family Start providers noted that the programme model tended to focus on a Pākehā conceptualisation of family, in that the service was set up to engage with a primary caregiver(s) rather than the wider whānau, aiga or fāmili who play a role in the child's care and development. They also stated that while the programme model focuses on child development as an individual, this does not align with Māori and Pasifika emphasis on the importance of the child developing and existing as a whānau/aiga/fāmili member.

Māori providers emphasised the importance of developing programme resources for whānau Māori and Māori children that were framed around kaupapa and supported the holistic cultural wellbeing of whānau, and which were not simply translations of existing Pākehā resources into te reo Māori. Adapting programme concepts and resources to align with Māori worldviews and approaches is an additional burden for Māori providers. In order to meet the needs of client whānau, kaimahi undertake activities such as developing kaupapa-based and reo Māori resources to share with whānau, such as recordings of oriori (lullabies). They also noted that whānau Māori typically responded well to intensive engagement, particularly at the beginning of the trust building process, but providers were not funded to undertake these additional activities. The Pasifika case study provider highlighted similar challenges.

Forming partnerships with health and social service providers is key to successful programme delivery

It is a contractual obligation for Family Start providers to develop and maintain relationships and connections with relevant services (including government agencies and NGOs) in their areas. The process evaluation found that most Family Start providers had strong connections and working relationships with key partner organisations. Connections were typically stronger in areas in which Family Start had been operating for some time, with new providers (those that had been contracted through the 2017 expansion) typically still in the process of establishing connections.

At the organisational level, relationships have mainly been developed and consolidated through attendance at multi- and inter-agency forums with health and social service providers. This was the main way of maintaining relationships with local services across all the case study sites, except for one case study provider in which there were no such forum to attend. Most of the time these meetings are attended by Family Start managers or supervisors, but Family Start workers sometimes attend so that they have the opportunity to build relationships that can help with their work. However, managers and workers noted that this can add to their overall workload.

The strong relationships between Family Start providers and other services have led to inter-agency collaboration, supporting programme outcomes by creating referral pathways to other relevant agencies (such as mental health services or budgeting advisors).

Health and social service providers considered it beneficial to have the Family Start worker regularly visiting the whānau and supporting them to provide appropriate care for their children. The frequency of interaction and trusting relationships that Family Start workers build with hard-to-reach and transient whānau means they are able to assist other providers in reaching these groups. Referrers said that they felt reassured that Family Start workers have regular contact with the children and whānau that need support.

Family Start providers find it difficult to recruit and retain qualified and experienced staff

The process evaluation found that service providers are finding it challenging to recruit and retain qualified and experienced Family Start workers. Family Start service managers reported that they seek to build and maintain Family Start teams with a range of backgrounds, including social work, education and health, to ensure they have a range of skill sets to meet whānau needs and priorities.

> *Finding good staff is the hardest thing. We always get quite a number of applicants, but it's hard finding the right fit, the right qualifications and the right attitude.*
>
> *- Family Start manager*

The main barrier noted by providers was that the salaries for Family Start workers are not competitive: other organisations are able to offer significantly higher salaries for similar work, such as Oranga Tamariki and District Health Boards (DHBs). The 2018 pay equity settlement for Oranga Tamariki social workers resulted in a salary gap of about 30 percent. Several of the case study providers reported that this had led to the loss of experienced staff from Family Start providers.

Analysis of Family Start monitoring data does not show an increase in staff turnover since the pay settlement, with turnover remaining steady at about 24 percent over the past twelve months. However, the data do show that the level of qualifications held by workers is falling, with fewer workers being degree qualified.

Given the critical importance of a qualified workforce that can respond to the needs of vulnerable whānau, there was a strong call from Family Start managers, supervisors and workers for salary rates to be increased to a level commensurate with Oranga Tamariki social workers.

Since completing the process evaluation, Oranga Tamariki has provided an 'NGO stabilisation uplift', which increases the funding to its contracted service providers by 7.5% in the 2020/21 and 2021/22 financial years. The funding model has also been changed from being based on whānau volumes to Family Start worker FTE. The intent is that Family Start will be funded at a level that reflects the actual costs of delivery, helping to address the concerns expressed during the process evaluation.

Family Start workers would like a greater investment in training, particularly related to child development

There was some consistency in the initial training provided to Family Start workers across the case study providers. Providers typically have a two-part induction process, which includes training in the organisation's processes and in Family Start processes. The induction into Family Start processes includes practical training delivered on-the-ground where new workers buddy up with and shadow a more experienced Family Start worker. There were also significant differences. For example, in some providers, workers build up to a full case load over time while in other providers, workers are assigned a full case load within weeks.

Most Family Start workers raised significant concerns about the adequacy and effectiveness of the initial training they received. They reported that the buddy system can be inconsistent, as it was dependent on the availability of other workers and the needs of whānau at the time of induction. Some managers and supervisors noted that induction and initial training is an additional cost that falls on providers outside of their Family Start contracts and that more was needed from Oranga Tamariki to support providers to deliver initial training to their Family Start workers.

All of the providers interviewed talked positively of the training that used to be delivered to support use of the Ahuru Mowai Born to Learn parenting resource. Workers would receive multi-day training from Child Youth and Family/Oranga Tamariki, which included a focus on child development and especially brain development. Training to support use of the Parenting Resource website was now the responsibility of providers, with materials supplied by Oranga Tamariki. This was seen as much less adequate, as the focus is on how to navigate the website and excludes training in infant and child development. The providers interviewed held the view that an understanding of child development was important to equip Family Start workers to do their jobs effectively, and as such, would like the content of this training reinstated in some way.

Ongoing training and professional development for Family Start workers was mostly delivered at the local level and all providers set aside a number of professional development days per year for their workers. There was mixed feedback about the effectiveness of these arrangements. Many of the workers said their heavy workloads meant it was often difficult to take time out for training and that there were few opportunities to access quality and relevant professional development, including for supervisors. Child protection training provided by Child Matters was an exception, which workers said they found useful.

Managers and workers reported that more ongoing training is needed for Family Start teams, specifically training tailored to the complex needs of the whānau they work with. There was a consistent view that the Family Start contract should be better supported in terms of ongoing training.

Family Start workers are feeling stretched by the challenge of working with whānau who need intensive support

At the time of process evaluation data collection, the contracted caseload was 16 families per Family Start worker. Analysis of Family Start monitoring data shows that the average caseload was 13.8 whānau per worker in May 2019. Family Start workers, supervisors and some Oranga Tamariki personnel stated that while the number of whānau they work with has remained steady, the intensity of support required by these clients has increased. Across all case study sites, Family Start workers and managers reported that they are working with more high-needs whānau that require intensive support. These whānau lead complex lives and may be affected by issues such as family violence, alcohol and drug addictions and mental health issues.

Family Start workers reported that, over time, their role has moved beyond providing support for parenting. High-needs whānau frequently need wrap-around support to address crises. As a result, workers spend time undertaking activities such as helping whānau to secure housing, prepare for Family Group Conferences or alleviating anxieties about the health and wellbeing of their children.

Family Start workers described feeling stressed, exhausted and overwhelmed due to long work hours and the mental energy required to support whānau in crisis. Most of the Family Start workers interviewed said that due to the intensive support required by high-needs whānau, workers are unable to complete both their home visits and administrative work within their contracted hours. They reported that they are regularly putting in significant additional unpaid hours before or after work or on weekends to complete case notes and to support whānau.

> *At the moment I am working at least 50 hours a week. I work with 16 high needs families and all my work hours are taken up with supporting them. I do my admin in the evenings.*
>
> *- Family Start worker*

The national expansion of Family Start in 2017 has also meant that the programme is now reaching larger numbers of whānau in rural areas. Some Family Start workers said this has also contributed to increased workloads due to the travel time required to service rural areas.

There was a strong call from Family Start providers and workers for a change to the current funding model and caseload expectations to reflect the increased workload from working exclusively with high needs whānau.

Since completing the process evaluation, Oranga Tamariki has taken action to address this point. As noted above, the funding model has been amended, and is based on Family Start worker FTE, rather than whānau volumes. In addition, a 'variable caseload' model has been implemented in recognition of the complexity of whānau needs. Under this model, the caseload changed from 16 client whānau per full time worker to 12-16 whānau with a median of 1 FTE per 14 whānau. Oranga Tamariki also recognised that this would impact the total number of client whānau that Family Start providers work with, and has amended the standard from 95-100% of a provider's contracted volume to a guideline of 85-100%.

CONCLUSION

This section sets out the overall evaluative conclusions related to each of the Key Evaluation Questions (KEQs).

KEQ1: To what extent is Family Start achieving programme outcomes and impacts for vulnerable children and their whānau?

Overall, the results of the PSM analyses indicate that Family Start is having a positive impact on the wellbeing and safety of participant children and their whānau.

The PSM analyses conducted for the impact evaluation suggest that Family Start is having a positive impact on the lives and wellbeing of New Zealand's children and their whānau. Most notable was the finding that participation in Family Start reduces the likelihood of children dying in their first year of life. These results replicate key findings from the previous impact evaluation (Vaithianathan et al., 2016).

These positive findings align with qualitative data from the process evaluation, which found that interaction with Family Start supports whānau to make changes in their parenting practices, to enhance the safety of their children.

The PSM results also suggest that Family Start participants were more likely to enrol with a PHO, be fully immunised at milestone ages, and attend a B4SC. Qualitative evidence shows that some whānau reported that their confidence in dealing with health services had increased after engaging with Family Start. They stated that the Family Start worker had helped them book appointments, prepared them for the type of situations they may encounter (for example, through role playing) and, in some cases, provided transport to appointments. This may have contributed to the increased PHO enrolment, immunisation rates and B4SC attendance.

On the other hand, the impact evaluation also found that Family Start participants had a greater likelihood of interaction with Oranga Tamariki, and a greater likelihood of children being hospitalised for maltreatment-related injuries. There was also a statistically significant increase in mothers receiving mental health and addiction support services.

These outcomes are difficult to interpret. Higher likelihood of engagement with child protection and mental health and addiction services might indicate that whānau are experiencing deteriorating circumstances. However, it is possible that Family Start participation is associated with these outcomes because of Family Start workers' efforts to ensure that whānau are being connected with services, where they might otherwise have gone without support. This would be consistent with the Family Start goal of increased identification of, and provision of supports for, health and safety issues for children and their whānau, and may indicate that Family Start is working as intended. The process evaluation found evidence that Family Start workers put considerable effort into nurturing trust with clients and working with them to get help for issues such as family violence, mental health and addictions. Workers also stated that they would report concerns to Oranga Tamariki where they felt the safety of children was at risk. These findings from the impact evaluation may also be due to reverse causality, in that contact with child protection or health services may be the reason for the referral to Family Start.

Despite the impact evaluation findings identifying an increase in maltreatment-related injuries, qualitative interviews found that Family Start motivates and supports whānau to remove their children from situations in which they may experience violence or injuries. Whānau also reported that they had changed their approach to discipline from physical punishment and/or yelling to more gentle, positive methods.

KEQ2: How well is Family Start delivering its service for vulnerable children and their whānau?

The evaluation concludes that whānau are receiving an effective service that they value, and that is creating meaningful change in their lives. Family Start providers are putting in considerable effort to deliver a service that aligns with the parameters of the programme model, but is tailored to best meet the needs of their clients.

Whānau experienced a smooth journey through the programme, having a good understanding as to how the programme could help them, and being matched with a Family Start worker that they trusted. The processes used to set goals were empowering, being led by whānau and reflecting their priorities, needs and aspirations. Whānau that participated in the evaluation valued the supportive, strengths-based way in which Family Start workers engaged with them. Workers identified and built on pre-existing areas of strength and gently provided advice and suggestions for change. They were non-judgemental and never told whānau that their current practice was 'wrong', instead offering alternative options that parents could choose from.

Whānau appreciated the opportunity to learn more about child development and new, positive ways to parent and interact with their children. Family Start workers also helped whānau with decision-making by acting as a 'sounding board' for whānau to talk things through, but did not make decisions for them.

Family Start resources, including the Parenting Resource website, are generally viewed as effective, particularly for Pākehā. However, there is a lack of kaupapa-based and te reo Māori resources, with Family Start kaimahi in some Māori providers developing their own resources to fill this gap. To deliver an effective service to whānau Māori it is important for providers to offer a diversity of resources, including those drawn from a Māori worldview and from Pākehā models of child development.

At the time of the process evaluation data collection, providers also reported challenges in recruiting qualified workers, largely due to a large discrepancy in salary to other social work roles. Oranga Tamariki has recently increased the contracted funding allocation for each provider to address this issue.

Induction, initial training and ongoing professional development of the Family Start workforce is undertaken onsite by Family Start providers. The quality and comprehensiveness of this training is variable as it relies on the time, resource allocation, personnel skill and systems of each provider organisation. In addition, the training generally focuses on the operational aspects of the job, with little focus on technical or clinical aspects such as child development.

Working exclusively with whānau with high needs has put pressure on Family Start workers. These clients typically need more frequent interaction with their workers, and the scope of services they require is broader. Consequently, workers with a full caseload of 16 clients are often unable to complete both home visits and administrative work within their contracted hours. Family Start workers stated that reduced workloads would mean they could work more intensively with and

better support high needs whānau and have time for regular supervision, ongoing training and self-care. A revised model has now been implemented, under which Family Start worker caseloads have changed from the current 1 FTE to 16 whānau to 1 FTE to 12–16 whānau with a median of 14 whānau per worker.

Many of the whānau interviewed were clear that working with Family Start had been the catalyst for making changes to their parenting, and family life more broadly. The most commonly reported change was increased confidence in their parenting, and enhanced ability to provide warm, emotionally safe care to their children. Whānau described making positive changes such as interacting with their children more and taking a gentler approach to discipline, which they attributed to their engagement with Family Start.

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APPENDIX A: METHODOLOGY

Evaluation approach: Bridging Cultural Perspectives

The evaluation was implemented through the Bridging Cultural Perspectives approach, which is comprised of two models: He Awa Whiria (the Braided Rivers) and Negotiated Spaces.

He Awa Whiria provides the framework for knowledge creation. The approach was developed by Professor Angus Macfarlane (Macfarlane, 2009) in an attempt to reconcile Western science with kaupapa Māori perspectives. He Awa Whiria provides two separate streams of knowledge – Māori and Pākehā – each stream of equal strength, with information about what is valued, and to what degree. In He Awa Whiria, the knowledge streams spend more time apart than together. When they converge on the riverbed, the space created is one of learning, not assimilation.

Negotiated Spaces provides the dialogue tool for exchanging knowledge across two streams (Māori and Western science). The Negotiated Space is a mandated, deliberately depoliticised space that provides room for engagement and knowledge exchange. It is 'neutral' yet requires an acknowledgement of the shared histories of both parties and a commitment to ongoing relationships. Implicit to the Negotiated Space is balancing the desire to uphold distinctive cultural knowledge spaces with an openness to innovation and change.

The Bridging Cultural Perspectives approach and these two models provide a process by which these distinct systems of knowledge can meet and connect in an effective, respectful, and productive manner.

Along with applying these models, a Pasifika knowledge stream was also woven into the evaluation process to produce findings based in each of the three knowledge streams: Māori, Pasifika and Pākehā.

Process evaluation

In implementing the process evaluation, each knowledge stream had a kaitiaki (caretaker) who had overall responsibility and accountability for data collection and analysis under each knowledge stream.

The process evaluation was guided by a shared evaluation framework, including overarching key evaluation questions (KEQs), criteria and performance indicators across the three knowledge streams. Data collection instruments such as interview guides were developed to gather data under these KEQs and criteria. These were reviewed by the kaitiaki of each knowledge stream, and adapted as required, to ensure that the questions were asked in a way that was appropriate to the three worldviews.

The five case studies (see below for details) were designed to follow a shared methodology, such as engaging with similar stakeholders in each case (e.g., whānau/families, providers), the evaluation team under each stream conducted the data collection in a way that suited different groups of evaluation participants. For example, evaluators in the Māori-centred case studies participated in a mihi whakatau with case study providers, and evaluators in the Pasifika case study engaged in talanoa with the Family Start provider prior to undertaking the formal data collection.

Data collected under each stream (particularly the case studies) were analysed and written up separately, led by the team members from each stream. Cultural knowledge and understandings

were taken as given. For example, kaupapa Māori and Pasifika terms and concepts were not explained or translated into English during the analysis and case study reporting process.

The process evaluation team held a full day analysis workshop, during which members of each stream came together to share their findings from the case studies, and consider data from the other data collection mechanisms. The workshop was led by an independent kaupapa Māori researcher.

The workshop focused on first looking across the three streams and identifying areas of convergence of findings. Each stream was then individually considered to identify any unique findings for each stream. The role of the other teams in this discussion was to ask questions, seek clarification of areas of uncertainty, and challenge each stream on the evidence behind their conclusions – but the worldviews, priorities and values of each stream were taken as given.

The process evaluation report was peer reviewed by each kaitiaki to ensure it accurately reflects the worldviews and findings related to each stream. The report was also reviewed by the independent kaupapa Māori researcher to ensure it captured the agreed findings developed through the He Awa Whiria analysis workshop.

Impact evaluation

In implementing the impact evaluation, reviewers representing the three knowledge streams (Māori, Pasifika, Pākehā) worked together to assist with the interpretation of the findings at an aggregate level, and through the lens of each worldview.

Throughout the evaluation, the full (process and impact) evaluation team came together at agreed "touch points" during the Family Start programme evaluation as a way of operationalising Bridging Cultural Perspectives. The purpose and objectives of the touch points are to share updates on the progress of the different knowledge streams, reflect on the He Awa Whiria process, and discuss any issues, challenges and successes in applying the approach.

Process evaluation methods

The six data collection approaches used for the process evaluation are described below.

Review of contextual documents

Oranga Tamariki provided the evaluation team with 41 documents for the contextual review. This included previous Family Start evaluation reports, Oranga Tamariki presentations about Family Start, programme design documentation such as the programme manual and budget bid documents, and Family Start provider documentation, such as outcome agreements and programme consent forms.

The document review ensured the evaluation team had a good understanding of the background and context of the programme and assisted with development of standards and criteria for the evaluation.

Key informant interviews

We conducted interviews with 23 representatives from a range of national-level organisations with an interest in the design, delivery, management and/or outcomes of the programme. The interviews collected primary data relating to perceptions of the programme's effectiveness and impact. The interviews included:

- Oranga Tamariki personnel (*n* = 11);

- other government departments, including the Ministry of Health, Ministry of Social Development, and Ministry of Education and Department of Corrections (*n* = 9);
- non-government organisations contracted to undertake programme resource development (*n* = 2); and
- a representative from the Family Start Executive (*n* = 1).

The interviews were semi-structured, based on a suite of interview guides tailored to the various roles of the people to be interviewed. To ensure evaluative rigour, each question in every interview guide was developed in relation to one or more of the KEQs. In keeping with our interpretive methodological stance, we developed open rather than closed questions.

Interviews were carried out by two members of the evaluation team: an interviewer and a note-taker. Key informants were interviewed either individually, in pairs, or in some instances in small groups. Informed consent was obtained prior to the start of each interview.

Case studies

Family Start is delivered by 43 service providers across New Zealand. The evaluation team undertook case studies at five of these providers to explore the delivery of the programme. This included:

- three Māori-led case studies
- one Pasifika case study
- one Pākehā case study.

These cases studies focused on provider, worker, referrer and client experiences of Family Start. The number of case study interviews conducted is outlined in Table 1.

Table 1: Family Start process evaluation case study participants

Characteristics	Case study 1	Case study 2	Case study 3	Case study 4	Case study 5	Total
Managers and supervisors	3	4	2	3	3	15
Workers	5	4	2	8	6	25
Referrers	4	3	3	2	4	16
Client whānau	8	6	7	9	7	37
Total	20	17	14	22	20	93

Whānau, family, aiga and fāmili interviews

Incorporating the perspectives of Family Start clients was an important component of this evaluation. Because Family Start whānau can be considered vulnerable, it was important that the proposed methods of engagement be reviewed by an ethics committee. An ethics application was lodged with the New Zealand Ethics Committee, who agreed that "the project meets appropriate ethical standards for social research".

For the case study client interviews, Family Start providers recruited whānau to participate in the evaluation on behalf of *Allen + Clarke*. The selection criteria for participation ensured that a diverse group of whānau took part, including those who had been on the programme for different periods of time (e.g., less than six months, over six months, over one year), lived in rural and urban settings, and had differing types of need and intensity of home visits. Family Start providers identified whānau that fit within these subgroups and invited them to participate. Evaluation participants reflect those who accepted the invitation.

A potential limitation of this approach was that although Family Start service providers were asked to identify clients with a range of experiences, there was a chance that service providers might only approach clients with whom they had established a positive relationship. In practice, we found that the service providers arranged for the evaluation team to meet with a varied sample of whānau who reflected a range of experiences.

Whānau interviews were semi-structured around a set of questions based on the evaluation criteria. Interviewees were given a copy of interview notes and invited to provide feedback to ensure the data accurately reflected their responses.

E-diaries

We invited Family Start workers to take part in an electronic diary (e-diary) activity to record their personal observations and reflections on Family Start and collect feedback on issues as they arose. Eleven workers participated in the e-diaries.

The e-diary activity ran from late April to the end of July 2019. Participants provided their demographic details and informed consent through a preliminary 'survey' prior to being provided with access to the e-diary portal.

The e-diary was administered through SurveyMonkey, an online information collection tool. Participants were asked to make fortnightly diary entries. The e-diary activity asked three questions at a time, which were refreshed every two weeks. The questions were designed to align with the evaluation criteria and KEQs, and asked workers to comment on aspects of their role (for example, 'How are you finding your caseload at the moment?') as well as specific issues that occurred during the course of the evaluation (for example, exploring worker experiences of assisting clients to access the Early Learning Payment). None of the questions were assigned a 'mandatory' status, enabling diarists to omit any question posed that they did not wish to address.

Analysis of Family Start monitoring data

The evaluation team accessed Family Start monitoring data to contribute to the assessment of programme processes. The data were sourced from the centralised data repository (FSNet), with the data request managed by Oranga Tamariki and provided to the evaluation team.

Data received primarily related to programme outputs relevant to the evaluation criteria and KEQs, including annual programme enrolments, planned and unplanned exits, frequency of home visits and adherence to the suggested average workload ratio. The data included in this report cover the period between 1 June 2017 and 31 May 2019 to align with the evaluation scope and time period following the programme's Budget 2016 expansion – the design and delivery of the programme prior to 2017 was out of scope.

These data have been used primarily to triangulate qualitative data to provide more complete information on the effectiveness of Family Start delivery.

Quasi-experimental impact evaluation

An overview of the quasi-experimental[16] methodology is provided below. A full description of the analytical approach used for the impact evaluation is detailed in the impact evaluation report Oranga Tamariki Evidence Centre, 2021).

The impact evaluation assessed the impact of Family Start on outcomes for children and their whānau across three broad outcome domains: post-neonatal mortality; health and education-related outcomes; and child protection outcomes.

The evaluation was conducted using data from Statistics New Zealand's Integrated Data Infrastructure (IDI). It used two quasi-experimental methods: Propensity Score Matching (PSM) and Difference-in-Differences (DiD). These methods provide potentially complementary approaches with different strengths and weaknesses in the context of this evaluation.

PSM provides an individual-level analysis of the impacts of Family Start by comparing the outcomes of Family Start participants with those of matched non-participants who had similar characteristics. For PSM to be valid (and provide unbiased estimates) all characteristics that predict participation and affect outcomes of interest need to be included in the model. This is unlikely to be the case in the current study due to the variety of referral channels, a lack of administrative data on many of the referral criteria, and because participation in Family Start is voluntary. The bias could be in either direction (i.e., could artificially under- or over-estimate the true impact of Family Start), and the extent of this bias unknown[17].

DiD provides an area-level analysis and compares changes in average outcomes in Territorial Local Authorities (TLAs) before and after the programme became available, relative to the changes experienced in TLAs where Family Start was not available, over the same time period.

While DiD is generally considered the stronger method (because it controls for time-invariant unobserved factors that may introduce bias in approaches such as PSM) we faced several challenges when applying this method in this study. Most significantly, we were not able to accurately identify the 'target group' (i.e., the children who might participate in the Family Start programme within each TLA where it was available). Of the children in the target group used in the final DiD analyses, only 13% had participated in Family Start. Additionally, the observation period prior to Family Start being expanded was relatively short (and hence the sample size relatively small), and some outcomes were rarely observed. There was also evidence that time trends in

[16] Quasi-experimental research involves the comparison of outcomes between two or more groups where there is no random assignment of participants to the research groups. Quasi-experimental methodologies are typically considered to be the most robust alternative to randomised control trials (RCTs) in situations where RCTs are not practically or ethically possible. The two quasi-experimental methods employed in the impact evaluation, Propensity Score Matching and Difference-in-Differences, both attempt to measure the difference in outcomes between treatment and control groups but differ in their approach to controlling the potential biases introduced by the non-random nature of participant groupings.

[17] For example, if participants are more motivated than non-participants, and outcomes are on average better for more motivated whānau, then the PSM estimates will capture both the benefits from the programme and the benefits from the additional motivation amongst participants. In that instance, the benefit from the programme will be over-stated. In contrast, the fact that many whānau are referred to the programme from social services may indicate that they face additional challenges that are difficult to measure, which could lead to understating any benefits from participation.

outcomes were not similar across TLAs, which is a requirement for DiD analysis to be valid (assessed using parallel trends tests). These factors all materially decreased the likelihood of detecting the effects of Family Start using the DiD method.

Regardless of these potential limitations, because the uptake of Family Start was not universal in the treated TLAs, measures of the average area-level impact (i.e., the impact on all potential, rather than actual participants) are expected to result in smaller estimates of the impact of Family Start.[18]

The PSM analysis examined outcomes across participants from TLAs that had the programme between 2009 and 2015 (reflecting the availability of Family Start data in the IDI and the need for follow-up time). On the other hand, the DiD analysis examined the 2003 to 2015 period, focusing on outcomes in the 14 TLAs where the programme became available between 2005 and 2007. Both methods examined outcomes within the child's first, second, and sixth years.

Samples used and estimation strategies

Propensity Score Matching (PSM)

The primary PSM analyses focused on children born during the period 2009-2015. Table 2 below presents the key characteristics of Family Start children who were born during this period and who met inclusion criteria for the PSM analyses. These characteristics have been presented for the total participant sample, and by ethnicity. Full details of the participant sample can be found in the impact evaluation report (Oranga Tamariki Evidence Centre, 2021).

Close to 60% of children in the participant sample identified as Māori, andj ust under 30% identified as Pacific (including 18.4% of the total sample who identified as Pacific but not Māori). Just under half of the participant sample were females. Demonstrating the high need profile of Family Start children and their whānau, the proportion of children born in NZ Dep 9 or 10 area units was relatively high (64.3% total, 69.5% Māori, and 74.7% Pacific in the Family Start sample, compared with 20% of the total New Zealand population).

Table 2. Mean characteristics of Family Start participant sample, by ethnicity, 2009-2015

Variable	Māori	Pacific	Non-Māori Non-Pacific	Total
Total individuals	**9,972**	**4,980**	**3,711**	**16,764**
Māori ethnicity	100.0%	38.2%	0.0%	59.5%
Pacific ethnicity	19.1%	100.0%	0.0%	29.7%
Pacific and not Māori	0.0%	61.8%	0.0%	18.4%
Female	48.3%	47.7%	48.6%	48.1%
Child born in meshblock with NZDEP 9-10	69.5%	74.7%	40.2%	64.3%

[18] PSM provides an estimate of the direct impact on participants, whereas DiD provides an estimate of the impact on those in the target group identified (which includes both participants and non-participants). If the impact of Family Start is only experienced by participants, DiD estimates are expected to be around a fifth of size of those obtained in PSM.

These participants were then matched with up to five control individuals who did not participate in the programme (selected from areas where Family Start was available), based on the propensity score calculated for each child as well as a number of other key matching criteria (e.g., ethnicity).

The matching process was largely successful in identifying comparable treated and control groups, although 936 out of the total 16,764 children (5.6%) from the full participant sample were not able to be matched to an appropriate control and were therefore not included in the final analyses. Separate analyses were carried out for Māori and Pasifika children using the same approach but slightly different matching criteria.

Full details of the matching procedure are provided in the impact evaluation report (Oranga Tamariki Evidence Centre, 2021). In addition, the impact evaluation explores how the current PSM estimates relate to PSM estimates produced in the previous Family Start evaluation. Although a number of changes were made to the previous evaluation's PSM methodology, results were reassuringly similar particularly with regard to the post-neonatal mortality outcomes.

Difference in Difference (DiD)

A 'matching model' was used to identify the research sample for the DiD analyses. Applying criteria to identify the appropriate research sample (i.e. the 'target group') allows the point of comparison to be narrowed from all births within a community to an at-risk sub-group that is more likely to represent the target population of Family Start. This provides a more fair and valid assessment of Family Start's impact at a community level, compared with including populations that would not reasonably be affected by Family Start.

To achieve this, propensity scores were generated for all children in the area (regardless of Family Start participation status) in a similar fashion to the PSM analyses. Then, children who had a propensity score in the top 25% of children born between 2003 and 2015 were retained in the analyses. Note that as in the previous Family Start evaluation (Vaithianathan et al., 2016), we did not include children that were born in Christchurch City (as they received a different programme), and children that were born in TLAs where Family Start was already available before 2005.

Using this sample, the DiD estimations used individual child-level data to measure the impact of Family Start, including a wide range of controls to account for potential biases in the data.

Table 3 presents the key characteristics of different groups of children from the overall DiD sample, including the total child sample, the target group used in the DiD analyses, and Family Start participants; full details are provided in the full impact evaluation report. Note that the number of participants (23,670) is only 3% of the total sample (494,730) because we collected births from 2003 for the total and research samples,[19] whereas we only included children that participated in Family Start from 2009 (due to data reliability issues) in the 'participant' group.

The comparison below allows for an assessment of the representativeness of the DiD sample compared with the overall child population and the Family Start participant population. For example, 27% of children in the general population sample were born in a TLA with a Deprivation Index of 9 or 10, compared with 63% of children in the research sample, and 60% of children enrolled in Family Start. Overall, the matching criteria used to identify the research sample was successful in providing a relatively good fit between the children in the research sample and the children who enrolled in

[19] Note that children born prior to 2003 were excluded from analyses due to issues with data reliability.

Family Start, suggesting that the research sample can act as a valid comparison group for DiD analyses.[20]

[20] Although note the aforementioned issue of the low Family Start participation rate among the research sample, which is likely to contribute to an under-estimation of the true impact of Family Start for participants.

Table 3. Characteristics of children overall, for the DiD research sample and for Family Start participants

Characteristics	All Births	Research sample	Family Start participants
	2003-2015		2009-2015
Total individuals	**494,730**	**91,524**	**23,670**
Born in TLA with Family Start	62%	71%	91%
Participant in Family Start (2009-2015)	3%	13%	100%
Female	49%	48%	48%
Maori	29%	64%	59%
Pacific Islands	15%	27%	28%
Birth at NZDEP9-10	27%	63%	60%

Full details of the DiD approach are provided in the impact evaluation report (Oranga Tamariki Evidence Centre, 2021). In addition, the impact evaluation explores how the current DiD estimates relate to DiD estimates produced in the previous Family Start evaluation (Vaithianathan et al., 2016), as a number of changes were made to the previous evaluation's DiD methodology. When we attempted to replicate the previous evaluation in terms of time period analysed and key model characteristics, we were not able to replicate a key finding (reduced year one post-neonatal mortality). However, some modifications to the original model did detect a similar and statistically significant reduction in mortality consistent with the original estimates for the same time period.

APPENDIX B: STRENGTHS AND LIMITATIONS

Key strengths of the evaluation approach and methodology include the following:

Overall

- He Awa Whiria. Using He Awa Whiria in the evaluation has enabled the impact of the Family Start programme to be assessed using Māori, Pasifika and Pākehā frameworks. This allowed for interpretation of evaluation findings through te ao Māori and Pasifika worldviews, rather than using an exclusively Pākehā framework.
- The evaluation used mixed methods to seek evidence from a variety of sources. This included context-rich, qualitative information from stakeholders at the national, programme and client levels, as well as quantitative data sourced from the IDI. The mixed-method approach allowed quantitative impact findings to be triangulated with qualitative data related to stakeholder views and perceptions.

Impact evaluation

- Relatively large sample sizes. Due to the use of the IDI, the sample sizes used in the current evaluation were larger than is typical for programme evaluations in the social services. This increases the statistical power to detect a significant treatment effect (although this is dampened for rare outcomes, as outlined in the limitations section below).
- Longitudinal data. The outcomes data sourced from the IDI were longitudinal in nature, allowing for a more robust analysis of the maintenance of treatment effects over time. This also allowed for tighter controls around the direction of causality, which is an issue with cross-sectional research designs.

Process evaluation

- The emphasis on gathering rich qualitative data through a semi-structured style of interviewing enabled the evaluation team to undertake 'explanation building' under each of the KEQs, to identify not only 'what' is occurring in relation to the design, delivery and outcomes of Family Start, but also 'how' and 'why'.

Limitations of the evaluation approach include the following:

Impact evaluation

- No randomised assignment. The methodological approach for this study did not involve randomised assignment to treatment and control groups. This limits the ability to draw robust causal inferences about the impact that Family Start has on enrolled children and their whānau.
- Lack of wellbeing data. The data contained in the IDI are largely drawn from administrative data related to interventions carried out by government agencies and reflect service provision and interventions. The identified outcome measures therefore do not directly capture child and whānau wellbeing, particularly as conceptualised using a Māori or Pasifika knowledge framework.
- Identifying ethnicity. Although a 'total ethnicity' approach was used in the analysis, we acknowledge the inherent limitations of administrative ethnicity data, in that not all individuals will be categorised in a way that aligns with their own understanding of their ethnicity.
- Reliance on service engagement. We were not able to use survey data in the analyses as the number of respondents from the Family Start population would be too low to provide robust statistics.

- Safeguarding effects. Some of the selected outcome measures (e.g., Oranga Tamariki notifications, mental health service use) may be subject to a "safeguarding effect", whereby engagement with Family Start increases identification of, and service referral for, particular whānau issues that otherwise would have gone unaddressed. This could have the effect of increasing outcomes that may be perceived as negative for children and whānau.
- Bias in service engagement data for Māori. Previous research has indicated that Māori, and to a lesser extent Pasifika, individuals and whānau may be more likely to be subject to the attention of government agencies (and therefore appear in their datasets) than non-Māori individuals and families (Milne et al., 2020). Given that many outcomes measured by government agencies and included in the IDI are deficits-framed, this may skew results in a more negative direction for Māori compared with other ethnicities (potentially via a more intense safeguarding effect).
- Power to detect differences in outcomes. Some of the outcomes measured in the current study were relatively rare events, such as measures of maltreatment and mortality. Because of the low base-rates of these outcomes in the general population, the statistical power to detect any effect of Family Start on these outcomes was low. This means that care needs to be taken when interpreting results for these outcomes, because the lack of a significant finding may not indicate an absence of an effect.
- Measuring a wide array of effects. Care must be taken when interpreting the size of the effects estimated in the current study. This is because it is unlikely that all whānau who engaged with Family Start required support in all of the areas that were able to be addressed by the programme, but instead required more specific support in some wellbeing domains than others. This can cause overall effect sizes to be smaller, because the effect is averaged across all families who engaged with Family Start, not just families who required or received support in each domain.
- Limited timeframes of available data. In some cases, development of administrative data in electronic form and that are able to be included in the IDI is relatively recent; therefore, some limitations exist around the timeframe of data available. In addition, year six outcome indicators are only available for 2015 and earlier.
- Lack of information about exact interventions received. The Family Start data available in the IDI do not contain information on the exact interventions received by children and whānau. Effects were therefore only able to be estimated at the programme level, rather than the intervention level. We explored whether there was value in stratifying analyses by the length of time a child participated in the programme but concluded that this was a poor indicator of engagement.
- Delivery of other services to participants. It is likely that individuals in both the treatment and control groups received assistance through services outside of Family Start. However, information about these other services was not available in the IDI.
- Presence of Family Start participants in control samples. Additionally, due to the use of the propensity to participate criterion as a proxy for programme eligibility in the DiD analyses, some individuals who participated in Family Start may be included in non-Family Start samples or areas. This is expected to reduce the size of the estimated treatment effect.
- Multiple comparisons. The current evaluation explores the impact of Family Start on numerous outcomes, which increases the risk of false positives. We have not adopted one of the formal methods available for explicitly addressing this issue and simply note it here.
- Lack of clarity about policy-significant effect size. We were unable to identify information or documentation that provides clarity on what a meaningful effect size might be for many of the measures of interest. This provided a challenge when attempting to make evaluative judgements about the success of Family Start.

Process evaluation

- The findings from the qualitative interviews on perceptions of the Family Start programme's effectiveness provided data only on the perspectives of those interviewees – the findings are not generalisable to the entire programme participant cohort. Those interviewed were selected to represent a range of characteristics (e.g., ethnicity, location). This strengthens the relevance of the findings, but nonetheless those engaged were only a small portion of all Family Start clients.
- Family Start Programme providers, workers and clients, as captured by the qualitative interviews, are likely to have an interest in the programme's continuation. Whilst their perspective is valuable and critical for the evaluation, it is not neutral. The evaluation included engagement with parties other than those who have an interest in the continuation of the programme, including national-level organisations (government departments and NGOs) and individuals in the case study sites (referrers).
- The process evaluation effectiveness criterion relies heavily on self-reported data from service providers, workers and clients. Such self-reported data is vulnerable to biases such as social desirability bias. Where feasible, self-reported data has been triangulated and compared with programme monitoring data and findings from the impact evaluation.
- Five Family Start providers out of a total of 43 were selected as case studies for in-depth exploration. While this provides rich data on programme delivery at these five sites, the findings do not necessarily represent the views and experiences of delivery at other provider sites. The evaluation triangulated the case study data with that from interviews with personnel with a regional or national viewpoint, such as Oranga Tamariki Pa Harakeke Family team members and Partnering For Outcomes (PFO) Advisors.