HEALTHY FAMILIES NZ

Summative Evaluation Report of Healthy Families NZ

September 2018

The evaluation, and this report, were commissioned by the Ministry of Health and carried out by public health researchers within the **School of Health Sciences**, **Massey University.**







Massey University Evaluation Team

- Dr Anna Matheson (Co-principal investigator)
- Dr Mat Walton (Co-principal investigator)
- Dr Rebecca Gray
- Dr Kirstin Lindberg
- Mathangi Shanthakumar
- Nan Wehipeihana
- Kathleen Fisher
- Kellie Spee
- Roxanne Smith
- Nikki Chilcott

Contacts: Anna Matheson a.g.matheson@massey.ac.nz (04) 979 3094

Mat Walton mathew.walton@esr.cri.nz

Acknowledgements

We sincerely thank the members of the Healthy Families NZ national team within the Ministry of Health, all members of the Healthy Families NZ workforce, Lead Providers and Strategic Leadership Groups across the locations for their time and engagement with the evaluation, all participants who have generously given their time and the Environmental Health Indicators (EHI) programme.

Our gratitude goes to the members of the evaluation Māori advisory group: Dr Lis Ellison-Loschmann; Associate Professor Bridget Robson; Dr Amohia Boulton; Dr Heather Gifford; and Nan Wehipeihana. Our thanks also to Dr Jonathan Wistow (Durham University) for advice on using QCA, and Emeritus Professor – Statistics, Dr Stephen Haslett for statistical advice.

Citation: Matheson, A., Walton, M., Gray, R., Lindberg, K., Shanthankumar, M., Wehipeihana,

N. (2018) Summative Evaluation Report: Healthy Families NZ. Massey University

Evaluation Team. Ministry of Health. Wellington.

CONTENTS

Executive Summary						
	Eva	V				
	Int	troduction Immary conclusions of View 2 changes				
	Sui	viii				
	Re	Х				
Intr	odu	iction	1			
Eva	13					
	2	Overall evaluation approach	13			
	3	The method behind this Summative Evaluation Report	17			
Find	25					
	4	Themes across Healthy Families NZ locations	25			
	5	Qualitative Comparative Analysis	44			
	6	Monitoring changes in chronic disease risk factors over time	46			
7	Answers to the evaluation questions					
8	Significant changes that have occurred in View 2					
9	Recommendations					
10) References					
11	Annendices					

EXECUTIVE SUMMARY

Evaluation highlights

- 1. Healthy Families NZ continues to be implemented with integrity to its intention and purpose across the 10 locations, where teams are implementing a systems approach to preventing chronic disease. Systems approaches to health and other social initiatives are becoming increasingly utilised both locally and internationally as the evidence of the need for explicit 'whole system' responses to these challenges is becoming clearer.
- 2. The design of Healthy Families NZ has prioritised and supported Māori ownership, participation and partnership. Healthy Families NZ is creating space for Māori perspectives on health and the environment. The systems approach of Healthy Families NZ resonates strongly with traditional Māori world views.
- 3. The principle of achieving equity has been a guiding value in the design and implementation of the initiative. The systems focussed design, and the way Healthy Families NZ has been implemented, has enabled diverse cultural and contextual perspectives to be included, valued and utilised to underpin action. Prioritising equity has enabled the workforce to create and adapt initiatives to suit diverse communities, promoting and legitimising community perspectives on local health and wellbeing needs through methods such as co-design and the deep local connections that have been made.
- 4. In the Healthy Families NZ locations, there has been a shift towards organisations increasingly valuing and acting on prevention for better health outcomes. The majority of those interviewed for this evaluation, within the Healthy Families NZ teams and those outside them, agreed that the initiative had strengthened the prevention system.
- 5. Leadership has been a key focus of efforts to date. There is evidence of progress towards more 'joined up' community leadership for prevention, as well as the Healthy Families NZ workforce being empowered to be leaders themselves. The Healthy Families NZ workforce have access to key leaders and influencers within their communities and are using these connections to drive and influence change.
- 6. Maintaining the adaptive ability of the initiative has been key to its effectiveness to date.

 An adaptive and flexible workforce has enabled teams to be responsive to local community needs and action, and/or react to opportunities as they arise. This ability to adapt activities to

- suit diverse communities promotes and legitimises communities' perspectives on health. To support strengthened collaboration and community voice, strategic local communication has been identified as a skill required within the teams.
- 7. It is too soon to see Healthy Families NZ making a change to chronic disease risk factors. This is in part because of the short timeframes in which changes to risk factor indicators could have occurred, as well as the challenges of attribution with Healthy Families NZ being one activity amongst many occurring in these locations. Improvements in local data are needed, especially in how data and knowledge is managed and accessed to enable greater insights into local community contexts, and improve community advocacy.
- 8. Local action on some issues has been constrained by regulatory inaction. Action on alcohol-related harm is a clear example requiring the removal of system barriers.
- 9. Mental health and wellbeing were highlighted as an underlying community concern, with an opportunity apparent for Healthy Families NZ teams to support action in this area.
- 10. The opportunity and realisation of strengthened community voice and action on prevention within the current 10 locations suggest a need to undertake further investigation of other regions that would benefit from increased investment in prevention through this approach.
- 11. Collaborative working within communities more generally was found to be increasing, but there remained substantial constraints to collaborations being effective. Competitive government investment strategies within communities appear to play a key role. The approach to funding and contracting of health and social service initiatives in communities should be reviewed to consider their impact on the ability of communities to work towards shared goals, such as preventing chronic disease.

Introduction

Healthy Families NZ is a large-scale initiative that brings community leadership together in a united effort for better health. It aims to improve people's health where they live, learn, work and play by taking a dynamic systems approach to preventing chronic disease. It is focussed on supporting and improving health promoting environments across the community that enable people to make good food choices, and be physically active, smoke-free and free from alcohol-related harm. This involves working with early childhood education, schools, workplaces, food outlets, sports clubs, marae, businesses, places of worship, local governments, health professionals and more to create healthier environments.

The initiative is in 10 locations in areas with predominantly higher than New Zealand rates of risk factors for preventable chronic diseases or high levels of deprivation. The locations are geographically spread and are a mixture of urban and rural areas. The locations in which Healthy Families NZ is being implemented are: Far North, Waitakere Ward, Manukau Ward, Manurewa-Papakura Ward, Lower Hutt City, East Cape, Rotorua District, Whanganui District (now Whanganui, Rangitīkei, Ruapehu), Spreydon-Heathcote Ward (now Christchurch), and Invercargill City.

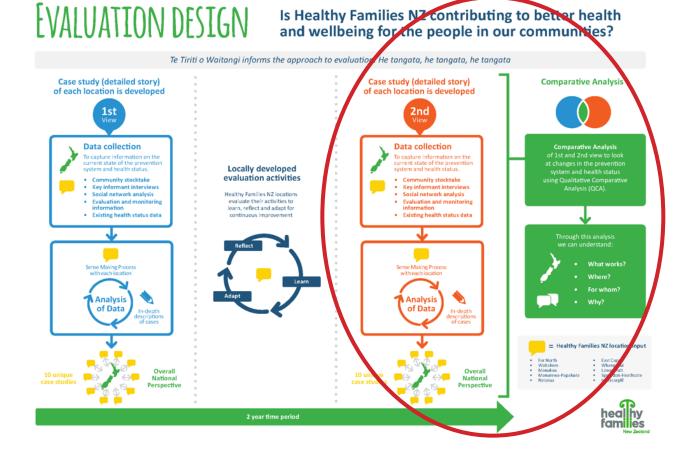
Purpose of Summative Evaluation Report

In 2015 the Ministry of Health contracted a three-and-a-half-year evaluation of Healthy Families NZ to Massey University. An Interim Evaluation Report was published in September 2017, providing a high-level summary and descriptive analysis of the early implementation of the Healthy Families NZ initiative. This Summative Evaluation Report updates the findings of the national evaluation of Healthy Families NZ following the first three years of implementation of the initiative (late 2014 until end of 2017). This report:

- 1. details the evaluation design, methods and analysis.
- 2. provides an in-depth picture of activities, successes and challenges in each of the 10 Healthy Families NZ locations.
- 3. answers the evaluation questions and suggests recommendations to inform ongoing refinement and development of Healthy Families NZ, and other significant initiatives.

The evaluation design

At the heart of the national evaluation is a case-comparison study which is illustrated in the Evaluation Design diagram below. The 10 Healthy Families NZ locations are different in many ways including people, geography, priorities, and opportunities for action and the presence of other work that is also contributing to the prevention of chronic disease. To understand change and outcomes achieved in each location, we have developed detailed stories (case study) of each location, and a national Healthy Families NZ team perspective which we have compared at two points in time. Information in the Interim Evaluation Report was from View 1 in the Evaluation Design where baseline case studies were developed. This summative evaluation report provides summary and analysis of the View 2 Healthy Families NZ location case studies, as well as comparison between the View 1 and View 2.



Summary conclusions of View 2 changes

Overall the initiative continues to be implemented with integrity to its design. There are examples of a paradigm shift away from silo thinking and practices to focusing on relationships between settings, and the wider determinants of health. There is also evidence of shifts towards greater action on prevention, and a widely held perception that the prevention system has been strengthened through the activities of Healthy Families NZ.

View 2 has seen a deepening understanding of systems change occur. This growth in understanding was evident among the Healthy Families NZ teams, but also shown more widely as other local and national organisations and agencies have been moving to systems-oriented approaches.

There has been continued prioritisation and emphasis on Māori ownership and participation as well as on equity. Māori ownership has been actively supported whilst the systems approach taken within the initiative resonates strongly with Māori world views through its emphasis on connections and relationships, enabling greater Māori participation.

The strong focus on equity within the initiative has shed light on the need to enable and amplify diverse local perspectives on health issues and solutions. Locally relevant knowledge, data and stories of change were increasingly being gathered through engaging co-design methods and other experimental, learning methods. The Healthy Families NZ teams were focussing heavily on these methods to incorporate local insight to inform their actions. A challenge for locations however has been finding existing appropriate local-level quantitative data and information to use for community advocacy and to complement gathered local insights.

There has been significant evolution in the initiative. The early implementation phase is now complete for most locations and there is significant progress being made on system change actions.

There was a common view expressed that the initiative was just coming into its strides and had significant potential to meet its goals longer term. Since View 1 there has been substantial progress on developing a flexible systems-thinking-and-acting workforce which has been enabled through adaptive learning, flexible use of resources, professional development and a responsive national team within the Ministry. There has also been substantial progress in activating local leadership and empowering the Healthy Families NZ teams to become champions themselves, and to gain access to other leaders and influencers.

The relationship between the locations and the national Healthy Families NZ team continues to be constructive and responsive. Both the national team within the Ministry and the location teams have begun to influence the norms of the organisations they are located within. This influence includes encouraging greater appreciation of systems change as an approach; greater awareness of and action on the health consequences of their activities; a more explicit focus on equity; and the engagement of active and adaptive leadership across partners in the initiative.

There was a continuing strong focus on relationships and networks for collective action. In addition, the underpinning Principles of the initiative were seen as useful to guide action on systems change and provide a set of values which binds the intent of the initiative across locations, as well as resonating with other organisations. There has been significant investment in professional development of the Healthy Families NZ workforce to strengthen leadership and other methods for creating systems change such as co-design and local communications. However, there is an opportunity to further strengthen these skills across the Healthy Families NZ workforce.

An important issue highlighted has been the impact of public health and social investment strategies for enabling action on collective goals. Our findings suggest that current government

investment strategies are a barrier to greater community cooperation, local adaptation and responsiveness. Current health and social service investment strategies set community organisations up in competition with each other even when working towards the same goals. It is also useful to note here that community members and organisations are frequently more stable over time than the staff, and organisational structures of wider health and other public organisations. A compelling observation was the numerous barriers to communities acting on shared goals.

The case studies showed that the *moral and technical support provided by the Healthy Families*NZ teams to other local community organisations was considered invaluable highlighting this gap in existing support within the way that communities are organised.

Prevention is clearly in need of strengthening in New Zealand and there are some significant system barriers to addressing the risk factors for chronic diseases at both the community and national level. For example, in South Auckland poverty has only been increasing over the last decade, despite the amount of resource going into this community. Addressing alcohol harms was particularly difficult for the Healthy Families NZ teams because of the systems set up nationally which disadvantaged community voice. Mental health was also seen as an underlying and critically important issue within communities, but has to date been poorly addressed.

This evaluation offers a unique deep exploration of the Healthy Families NZ communities and their efforts to effect change over time. The evaluation to date provides direction for improvements in how the initiative could be implemented into the future and provides an opportunity to build further upon the quantitative and qualitative data, and indicators developed, to better understand how, and whether, systems change towards stronger prevention is occurring.

Recommendations

- **Recommendation 1:** Continue prioritisation and purposeful focus on supporting and resourcing Māori ownership, participation, and use of Māori world views within the initiative.
- **Recommendation 2:** Retain and strengthen the Principle of equity as an underpinning value and goal of the initiative.
- **Recommendation 3:** Undertake a review to identify other regions that would benefit from increased investment in prevention through this approach.

- **Recommendation 4:** Review government funding and contracting for health and social services and outcomes in communities to consider their impact on communities' ability to work towards shared goals especially the impact on cooperation and trust.
- **Recommendation 5:** Review how health data and knowledge is managed and accessed to enable better insights into local community contexts and community advocacy.
- **Recommendation 6:** Build upon the qualitative and quantitative indicator development within this evaluation to improve measurement of systems change.
- **Recommendation 7:** Urgently consider barriers to community voice and action on the availability of alcohol.
- **Recommendation 8:** Review the Principles in light of the growing sophistication in understanding the approach to systems change being taken across Healthy Families NZ.
- **Recommendation 9:** Conduct an in-depth review of what is working across Strategic Leadership Groups and opportunities to enhance practice and impact.
- **Recommendation 10:** Continue to develop a suite of professional development opportunities to support use of a range of co-design and systems change methods and related skills.
- Recommendation 11: Ensure flexibility remains in how Healthy Families NZ locations determine the workforce needed and enable the employment of staff to fill particular skill gaps and identified needs, and provide tailored professional development.
- **Recommendation 12:** Support use of strategic communications and evaluation as an integral part of the initiative within Healthy Families NZ location teams by building their capacity in these areas.
- Recommendation 13: Ensure all Healthy Families NZ location teams have the right mix of skills, and are empowered, to carry out two functions that have been identified as important 1) work with leaders within organisations and communities to facilitate ongoing engagement and collective action; and 2) meaningfully engage members of the community to ensure diverse voices are included in identifying needs, opportunities and designing initiatives.

- **Recommendation 14:** Consider including mental health or wellbeing as a focus area for Healthy Families NZ locations.
- **Recommendation 15:** Reconsider the set-up of the initiative in locations where there are existing context challenges and limited evidence of impact to date.
- **Recommendation 16:** In any changes to the initiative, ensure that the ability of the initiative to be adaptive and responsive to context and change in local and national circumstances is retained and enhanced.
- Recommendation 17: Establish a national level Strategic Leadership Group, similar to locations, that could bring in wide perspectives and spheres of influence to support the Healthy Families NZ national team within the Ministry of Health, and the initiative, including strong Māori leadership.
- **Recommendation 18:** Strengthen the ability of the Healthy Families NZ national team within the Ministry of Health, to support local level change through acting on national level barriers.

INTRODUCTION

1.1 Purpose of Summative Evaluation Report

This Summative Evaluation Report describes the findings of the national evaluation of Healthy Families NZ following the first three years of implementation of the initiative (late 2014 until end of 2017). Further detail on the overall evaluation design is provided in Section 2. The evaluation is set-up to enable potential long-term monitoring of both changes in chronic disease risk factors, as well as more contextual, qualitative features of the activities and communities. Subsequent evaluation reports will build on the findings within this report.

In this Report we:

- 1. detail the evaluation design, methods and analysis.
- 2. provide an in-depth picture of activities, successes and challenges in each of the 10 Healthy Families NZ locations.
- 3. answer the evaluation questions and suggest recommendations to inform ongoing refinement and development of Healthy Families NZ, and other significant initiatives.

1.2 How to read this report

- Section 1 outlines the Report and the approach of Healthy Families NZ.
- **Sections 2** and **3** describe our evaluation approach and the methods.
- Section 4 presents findings of our cross-case analysis and includes our analysis on the implementation of Healthy Families NZ across the locations.
- Section 5 presents further findings on implementation and systems change using Qualitative Comparative Analysis.
- **Section 6** presents a summary of change in chronic disease risk factors from before and after the implementation of Healthy Families NZ.
- **Section 7** synthesises the findings and answers the evaluation questions.
- **Section 8** provides a summary conclusion.
- **Section 9** includes recommendations for the future design and implementation of Healthy Families NZ.

1.3 Background to systems change initiatives

Healthy Families NZ is being implemented at a time when there is a growing recognition of the need to better understand social complexity to improve practice within health promotion and public health¹⁻⁵. There has also been a recent move within international health systems literature arguing the need for a paradigm shift towards complex systems thinking⁶⁻⁸. Moreover, there is increasing use of methods from the complexity sciences focusing on intervening to address non-communicable diseases⁹⁻¹¹ and for engaging communities, in line with the 'new' public health concerns of participation and empowerment of community actors¹²⁻¹⁴. This trend is also apparent in the numerous opinion articles across health discipline journals calling for greater awareness and use of complexity sciences in how interventions are both designed and evaluated ¹⁵⁻¹⁸. There are, however, far fewer examples, of public health initiatives that are designed explicitly drawing on complex systems theories.

In parallel, a growing body of evidence ¹⁹⁻²¹ has argued for a comprehensive and coordinated approach to chronic disease prevention, that is sustained over the longer-term. There are examples of integrated community and area-based interventions and other large-scale initiatives globally that have aimed to improve health, including chronic disease, and reduce health inequalities. Largely, these initiatives have not taken explicit systems change approaches, however, the literature demonstrates that the challenges and successes identified from these initiatives point to a need to think more explicitly about complexity and systems. Among these initiatives are the Health Action Zones in the UK²², the Healthy Cities initiative carried out a number of European countries²³, the Healthy Islands initiatives within the Western Pacific²⁴, the New Deal for Communities intervention in England²⁵, and the Steps to a Healthier US programme²⁶.

Reflections within the literature from these, and other interventions, highlight a compelling consistency in the challenges and potential of such approaches²²⁻²⁷. First of these, is the challenge of evaluating these types of large context-specific initiatives, where attributing specific impacts can be difficult, if not impossible – especially in the short-term. Second, is the key role that leaders and champions play in achieving systems change – and the related challenge of how to mitigate against this high dependence on the capacity of individuals. Third, is how to prioritise limited resources, especially in the pursuit of shared goals. Fourth, is how to ensure context responsiveness, while also recognising and responding to multi-level influences.

A final challenge for these types of initiatives has been their vulnerability to political change.

Because they are large-scale initiatives, which often have high public awareness and a strong brand, they are frequently associated with the government that first implemented them, making

them less palatable when there is a change in government. This vulnerability has seen many stopped before their value has been able to be evaluated. This challenge undercuts any potential understanding or achievement of effectiveness given the long time-frames needed to see change in population health trends.

1.4 Context matters when evaluating interventions as an event within a system

More sophisticated conceptualisations of health intervention, grounded in complex systems thinking, are developing. Hawe⁵, for example, discusses the explicit use of intervention theory to orientate evaluation towards better understanding of context and intervention interaction. Recognising that interventions are "events in a system"²⁸ highlights the need for interventions to be able to adapt to the specific social, economic, cultural and geographical circumstances of a community. When interventions are intentionally adapting the detail of activity to match local context, there are two considerations for evaluation. First, how well the programme components are functioning as intended, according to the intervention theory. Second, how well activities undertaken are consistent with local context²⁹.

The complex systems concept of 'initial conditions' is relevant, where two systems that are similar to each other, and undergo similar interventions, may end up with different outcomes depending on the nature of their starting point or 'initial conditions'30. An example of the importance of initial conditions and context was evident in a multi-community health project in New Zealand, Intersectoral Community Action for Health (ICAH) implemented in early 2000's. It was found that across the four communities involved, existing relationships meant the connection between the community level and central government actors were quite different. This difference in relationships led to a different experience of the programme for communities³¹. A more recent evaluation of the Big Local community empowerment programme for action on social inequalities, in the United Kingdom, also identified the impact of context. In some communities existing relationships allowed for faster development of the Big Local functions. In other communities, more fractured existing relationships meant that a longer period of relationship building was required before more visible activities could take place. Past experience of community development and community empowerment programmes could also act to either support or hinder roll-out of the Big Local programme. Across these different communities, the evaluation showed that the ability to adapt the form of intervention to suit context was crucial in the work towards function of the programme³².

1.5 Detailed description of Healthy Families NZ

Healthy Families NZ as a large-scale initiative that brings community leadership together in a united effort for better health. It aims to improve people's health where they live, learn, work and play by taking a dynamic systems approach to preventing chronic disease. It is focussed on creating many health promoting environments across the community that enable people to make good food choices, and be physically active, smoke-free and free from alcohol-related harm. This involves working within and between settings including, early childhood education, schools, workplaces, food outlets, sports clubs, marae, businesses, places of worship, local governments, health professionals and more to create healthier environments.

Healthy Families NZ has an explicit focus on systems change to strengthen the prevention system within communities through building on existing assets and actions at multiple levels. The rationale for the initiative is the recognition that for action on health to be effective there needs to be a move away from disconnected, small-scale and time-limited projects and programmes. Improved health demands a strategic move towards whole-of-community approaches that make sustainable and long-term changes to the systems that influence the health and wellbeing of individuals, families and communities.

The initiative is in 10 locations, predominantly in areas with higher than the New Zealand rates of risk factors for preventable chronic diseases, or high levels of deprivation. The locations are geographically spread and are a mixture of urban and rural areas. Within the regions covered by Healthy Families NZ there is the potential to impact over a million New Zealanders. The locations are Far North, Waitakere, Manukau, Manurewa-Papakura, Lower Hutt, East Cape¹, Rotorua, Whanganui (including Rangitīkei and Ruapehu), Christchurch and Invercargill.

In each location, a locally-based Lead Provider is responsible for implementing the initiative in their community. This has included establishing a dedicated prevention workforce, and bringing together a partnership of key stakeholders in the community. Leadership at all levels is a strong building block of the Healthy Families NZ approach. There is a local Strategic Leadership Group in each Healthy Families NZ location that comprises of leaders with strong spheres of influence across a multitude of sectors and settings. These include local government, iwi, Pasifika, sports and recreation, business, education, health and more, who are supporting, driving and influencing change in their communities. Strategic Leadership Group participants are chosen for their personal influence and reach, and are expected to activate their spheres of influence to drive healthy and sustainable change in their communities.

¹ Includes Opotiki and Gisborne Districts

There has been a strong focus on enabling leadership across organisations, sectors, and communities with the aim of "scaling up" change and making change more sustainable. The kinds of initiatives delivered in each location are necessarily different because of the adaptive nature of Healthy Families NZ and recognition of the need for action to be locally driven in response to local needs. The initial tendering process to select Lead Providers sought to identify locally embedded organisations who were best placed to lead transformational change in their communities. The Lead Providers for Healthy Families NZ comprise Māori and Pasifika organisations, Regional Sports Trusts, and local Councils.

A critical component of the initiative is its ability to be adaptive. It is designed be adaptive to the local community context and wider influences. An important part of this adaptability is the way that the Ministry of Health has commissioned the local teams.

1.5.1 A new way of commissioning prevention

The Healthy Families NZ approach represents a significant departure from the way the Ministry of Health has traditionally commissioned services aimed at preventing chronic disease. Traditionally, services are funded to address a specific risk factor (for example, tobacco control), and are highly specified with pre-determined outputs (for example, the delivery of a particular programme). Healthy Families NZ instead focuses on multiple risk factors for chronic disease, and takes a placed-based, whole-of-community approach that enables the initiative to be driven by local leadership and responsive to the local context. A tight-loose-tight, high-trust contracting approach is employed: tight in terms of the specified resource and the outcomes sought, and loose in terms of how the initiative is operationalised 'on the ground'. This approach required the Ministry of Health to adopt multiple responsibilities beyond that of the traditional funder-provider relationship.

Service contracts between the Ministry of Health and Lead Providers in each location outlined the implementation of Healthy Families NZ. Providers are expected to:

- maintain an agreed number of Full Time Equivalent (FTE) positions as part of the Healthy
 Families NZ workforce, participate in workforce development and actively contribute to the
 evaluation of Healthy Families NZ;
- establish shared leadership arrangements to guide local action;
- establish a Prevention Partnership of key stakeholders best placed to influence change in the community;
- develop an Implementation Roadmap; and

work collaboratively with other Lead Providers, the Ministry of Health and other key partners
on the ongoing implementation of Healthy Families NZ.

1.5.2 The approach of Healthy Families NZ

The approach of Healthy Families NZ has drawn on the WHO's Building Blocks for a strong health system and adapted to be the cornerstones of a strong prevention system². The Healthy Families NZ Building Blocks (shown in Figure 1) include:

- Workforce resourcing and supporting a dedicated, reflective and skilled workforce at a local level to engage, activate and influence at multiple levels of the system
- Leadership building leadership for sustained prevention across the system to drive effective and long-lasting change
- **Relationships** building relationships with prevention partners across the system, and across sectors and industries, to strengthen positive health outcomes on multiple fronts
- Resources allocating resources based on best possible investment to effect change and
 population need, seeding long term change by resourcing local organisations to lead action
 towards public health
- **Knowledge and data** capturing and feeding back knowledge and data on progress, impact and effectiveness and calling for new types of research, policy and practice collaborations.

Figure 1. Healthy Families NZ Building Blocks of a strong prevention system



² The Building Blocks were adapted by the Department of Health and Human Services, Victoria, from the WHO Building Blocks of a Strong Health System

While the initial design for Healthy Families NZ drew on overseas models, the approach has been adapted, and continues to adapt, to reflect the special relationship between Māori and the Crown, including obligations under Te Tiriti o Waitangi. The approach of Healthy Families NZ utilises a te ao Māori lens, with an explicit focus on equity that reflects the intent of improving Māori health, and improving equity for groups at increased risk of chronic disease.

From its beginnings, Healthy Families NZ has continued to adapt as the realities of implementing the initiative have become apparent. Figure 2 below depicts how the Healthy Families NZ initiative was initially conceptualised to operate in each location, identifying the key settings within that community and the resources and activities that support the implementation of the initiative.

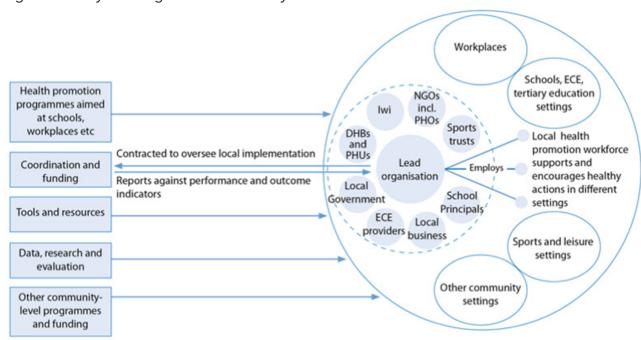


Figure 2. Early thinking model of Healthy Families NZ³³

A Healthy Families NZ Community

1.6 Key features of Healthy Families NZ

1.6.1 Workforce

The core investment in Healthy Families NZ is in the dedicated systems-thinking prevention workforce who are established within their local community. Healthy Families NZ teams are tasked with working collaboratively with local leaders and organisations to drive sustainable, healthy change in the places where people live, learn, work and play. This involves working with early childhood education providers, schools, workplaces, food outlets, sports clubs, marae, businesses, places of worship, local governments, health providers and more to create healthier environments.

Each Healthy Families NZ location was established with a minimum of four Full Time Equivalent (FTE) positions, but scaled to reflect population size of the area covered. The workforce comprised the following roles:

- a Healthy Families NZ location Manager, responsible for leadership and coordination of the initiative and management of the team.
- a Settings Coordinator, focussed on supporting systems change in communities and settings such as early childhood centres, schools, marae, workplaces and other key community settings.
- a Partnerships and Engagement Coordinator, focussed on local level communication, social marketing and community engagement.
- a Health Promoter³, responsible for assisting early childhood education, schools and workplaces in supporting the implementation of health promotion frameworks. Larger communities had additional Health Promoters.

Eighty percent of the funding for Healthy Families NZ is invested in this workforce, with the remaining twenty percent allocated towards an Action Budget to support local initiatives that seed scalable sustainable change in the community. It is important to note that as the initiative has evolved, both the number of FTEs in each location has changed, as well as the roles and focus of the workforce.

1.6.2 Leadership

Shared leadership at a local level has been a critical component of each Healthy Families NZ location. Lead Providers are responsible for establishing appropriate leadership arrangements. Part of their role as Lead Provider is to chair a Strategic Leadership Group which engages local leaders who have influence over the systems and environments where Healthy Families NZ is wanting to make change. Strategic Leadership Group members are expected to provide strategic oversight of Healthy Families NZ and actively champion the initiative, utilising their own spheres of influence to activate, drive or support change in the community. The Strategic Leadership Group also has a key role in signing off the Implementation Roadmap and overseeing the investment of the Action Budget, ensuring all spending is in alignment with the Principles of Healthy Families NZ. A member of the Ministry of Health's national Healthy Families NZ team participates as an equal partner in all local Strategic Leadership Groups.

³ Many of the Healthy Families NZ teams chose not to call these positions Health Promoters – instead using titles such as 'Community Activator'

1.6.3 Establishment of local 'Prevention Partnerships'

Healthy Families NZ Lead Providers are responsible for bringing together a 'Prevention Partnership' of key stakeholders in the community. In each location these groups have been established with varying degrees of formality. Prevention Partnership groups were intended to:

- develop a 'prevention system' at a local level that will help the coordination of activities within each community.
- support community engagement, leadership and participation in determining local solutions.

The Prevention Partnership Groups provide a mechanism for enabling organisations working within chronic disease prevention to work together to achieve greater collective impact. In practice, the approach to Prevention Partnerships has been different across the locations, with some having less formal networks and collaborations, and others having formalised groups that meet regularly.

1.6.4 Development of Implementation Roadmaps

All Healthy Families NZ teams are required to create a high-level Implementation Roadmap, oriented around the Building Blocks of the prevention system. This method of implementation planning enables the Healthy Families NZ workforce to take a dynamic and adaptive approach that is responsive to changing circumstances, learnings and opportunities that arise, rather than being limited by a detailed strategic plan that would quickly become outdated or a plan that focuses on health issue areas (for example nutrition) which would limit innovative action.

To inform the development of their Implementation Roadmap, each Healthy Families NZ location was asked to undertake a mapping and stocktake activity to identify:

- key demographics and health needs in their area;
- existing programmes and the capacity of the health promotion workforce;
- existing networks;
- the number of key settings such as school, marae and workplaces etc;
- features of the environment such as food and alcohol retailers;
- · key local policies that influence the environment; and
- local champions and leaders.

1.6.5 Principles for a whole-of-systems approach to prevention

The design of Healthy Families NZ provides a large degree of autonomy to Healthy Families NZ locations about what change they drive. A set of underpinning principles to guide decision making at every level ensures integrity to a whole-of systems approach to prevention (Table 1). The Healthy Families NZ Principles are also key to guiding the allocation of Action Budget investment.

Table 1: Healthy Families NZ Principles⁴

Implementation at Scale Strategies are delivered at a scale that impacts the health and wellbeing of a large proportion of the population, in the places where they spend their time – in schools, workplaces and communities. **Collaboration for Collective Impact** Long term commitment is required by multiple partners, from different sectors, at multiple levels, to generate greater collective impact on the health of all New Zealanders. Knowledge is co-created and interventions co-produced, supported by a shared measurement system, mutually reinforcing activities, ongoing communication and a 'backbone' support organisation. **Equity** Health equity is the attainment of the highest level of health for all people. Healthy Families NZ will have an explicit focus on improving Māori health and reducing inequalities for groups at increased risk of chronic diseases. Māori participation at all levels of the planning and implementation of Healthy Families NZ is critical. Experimentation Small scale experiments provide insight into the most effective interventions to address chronic disease. These experiments are underpinned by evidence and experience and are monitored and designed to then be amplified across the system, if they prove effective. Adaptation Strengthening the prevention system requires constant reflection, learning and adaption to ensure strategies are timely, relevant and sustainable. **Line of Sight** The line of sight provides a transparent view on how investment in policy is translated into measured impacts in communities, ensuring best value from every dollar spent on prevention. Leadership Leadership is supported at all levels of the prevention effort including senior managers, elected officials, and health champions in our schools, businesses, workplaces, marae, sporting clubs and

other settings in the community.

⁴ The Healthy Families NZ Principles were developed in partnership with the Department of Health and Human Services, Victoria, Australia

1.6.6 National level support for Healthy Families NZ

The Ministry of Health provides leadership and coordination of Healthy Families NZ at a national level. Some of the key aspects of Healthy Families NZ at a national level include:

- identifying and acting on national systems change opportunities;
- providing tools and information to support local action;
- workforce development, support and training;
- funding and performance monitoring;
- participating in local Strategic Leadership Groups;
- participating in recruitment of key roles;
- evaluating the initiative;
- identifying opportunities for local connections and introductions through national organisations; and
- providing support for national-level systems mobilisation and leadership networks.

The Ministry's national Healthy Families NZ team, comprising four staff members, has overall responsibility of the initiative. The nature of Healthy Families NZ has meant the Ministry of Health has had to adopt additional responsibilities beyond that of the traditional 'arms-length' funder-provider relationship. For example, to de-centralise decision-making and provide greater autonomy and agency at the local level, the Ministry does not sign off on Implementation Roadmaps or Action Budget spending, but instead participates in the Strategic Leadership Group, and has one vote as part of decision-making processes. Participation at the leadership level also enables the Ministry to have an in-depth understanding of how the initiative is operationalised locally, rather than being solely reliant on six-monthly performance monitoring reports.

1.6.7 Healthy Families NZ locations and Lead Providers

The 10 Healthy Families NZ locations and nine Lead Providers are shown below in Figure 3. Since the beginning of the initiative, there have been some changes to the nature of the location teams and the Lead Providers. Early on, Healthy Families Manukau and Healthy Families Manurewa-Papakura were joined as one location, when Auckland Council were awarded the contract for both Manukau and Manurewa-Papakura, and formed the Tāmaki Healthy Families Alliance. Since the initial Request for Proposal (RFP) process, Healthy Families Spreydon-Heathcote has had a change in Lead Provider from Pacific Trust Canterbury to Sport Canterbury, and a change in title to Healthy Families Christchurch.

Figure 3. Healthy Families NZ locations



EVALUATION DESIGN AND METHODS

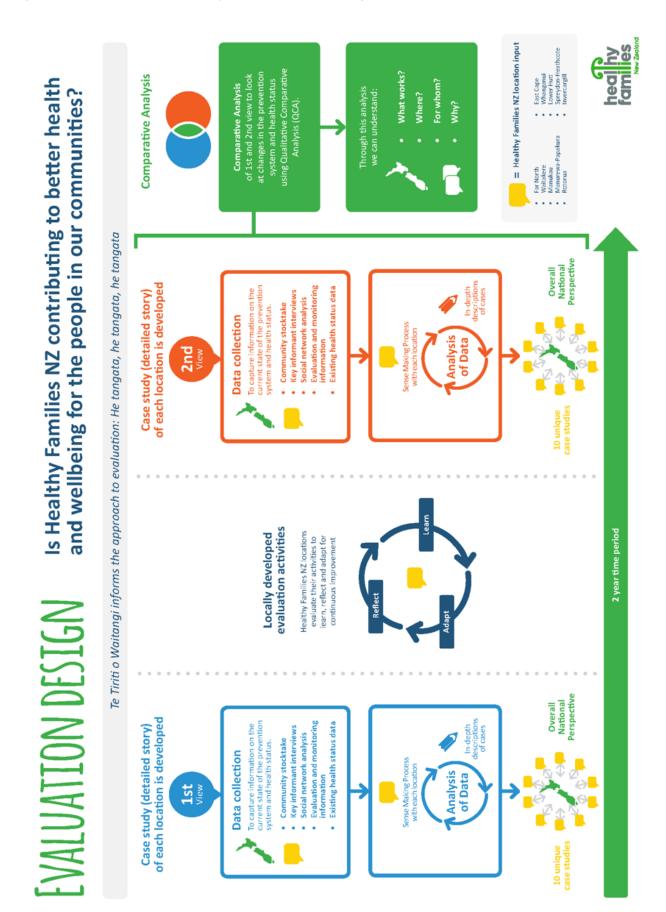
2 Overall evaluation approach

The evaluation has two purposes. The first is to support the 10 Healthy Families NZ locations to evaluate, learn from, and continuously adapt their approaches through developmental evaluation. Developmental evaluation provides a way to innovate through evaluation activity 34. The Massey evaluation team provided a set of resources to the Healthy Families NZ locations from mid-2016. These tools support regular collection and review of data to provide rapid feedback on activities.

The second purpose is to understand how Healthy Families NZ has been implemented locally and whether it is contributing to the prevention of chronic disease (national evaluation). An infographic of the overall Healthy Families NZ evaluation design follows (Figure 4).

This second purpose – the national evaluation – is the focus of this Summative Evaluation Report.

Figure 4. Evaluation of Healthy Families NZ - Design



2.1 National Evaluation — Identifying what works, for whom and why

At the heart of the national evaluation is a case-comparison study. The 10 Healthy Families NZ locations are different in many ways including people, geography, priorities, opportunities for action and the presence of other initiatives that are also contributing to the prevention of chronic disease. To understand outcomes achieved in each location, we have developed detailed stories (case studies) of each location at two points in time View 1 (mid 2015 to late 2016) and View 2 (early 2017 to early 2018). National case perspectives have also been developed for these two Views. Healthy Families NZ aims to contribute to prevention of chronic disease. Our approach is to look at change over time in the chronic disease risk factors of nutrition behaviours, physical activity behaviours, tobacco use and exposure, and harmful alcohol use. We also included body weight, as a known chronic disease risk factor that is strongly influenced by both nutrition and physical activity behaviours.

2.2 Why a Case Study Comparison Approach?⁵

As illustrated in Figure 4, comparison across the View 1 and View 2 case studies for each Healthy Families NZ location highlight how the initiative has developed over time and how it is meeting the objective of strengthening the prevention system.

Case studies provide rich contextual information whilst comparison between Healthy Families NZ locations will identify combinations of factors that have contributed to the outcomes in which we are interested, including strengthening of the prevention system and the impact on chronic disease risk factors. The analysis also considers what has worked and in what circumstances.

The evaluation is using two comparison approaches. The first is a qualitative rich description – the detailed story of what has occurred in each location and its changes over time. The second approach is a structured comparative method called Qualitative Comparative Analysis (QCA) ³⁵. QCA has been increasingly used in recent years as an evaluation approach from a complex adaptive system perspective ³⁶⁻³⁸.

The rich case studies provide a fuller story of what has been occurring in each community context whilst the QCA enables us to identify combinations of factors associated with prioritised outcomes

⁵ For more detailed discussion of the overall design and the rationale for taking this approach please see: Matheson, A., Walton, M., Gray, R., Lindberg, K., Shanthakumar, M., Fyfe, C., Wehipeihana, N., Borman, B., Evaluating a community-based public health intervention using a complex systems approach. (2017) Journal of Public Health 10.1093/pubmed/fdx117

across the cases. Findings from the rich case studies are reported in Section 4 and you will find the QCA results in Section 5. The factors included in the QCA are referred to as 'conditions'. Conditions can be features of the case context such as continuity of staffing and development of relationships and networks, or outcomes such as understanding of prevention. A collaborative process was used to develop indicators within conditions and outcomes against which to make judgements about direction of change.

Together, the rich case studies and structured QCA process provide a more complete picture of changes and sets the evaluation up for long-term monitoring of the initiative.

2.3 Te Tiriti o Waitangi

The evaluation is underpinned by Te Tiriti o Waitangi. The evaluation design allows for diversity in perspectives, values, and approaches, to be understood and respected. We have engaged experienced Māori researchers and evaluators to embed a Māori perspective into the evaluation design, methods and analysis. We have drawn on the expertise of a Māori Advisory Group to assist with thinking through issues that might be relevant to Māori. We have provided multiple opportunities for diverse stakeholders to engage in the evaluation, including making evaluative judgements about the findings. We specifically explored how Te Tiriti o Waitangi has been operationalised within the Healthy Families NZ approach and implementation.

2.4 Ethics

This research has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 17/41. If you have any concerns about the conduct of this research, please contact Dr Lesley Batten, Chair, Massey University Human Ethics Committee: Southern A, telephone 06 356 9099 x 85094, email humanethicsoutha@massey.ac.nz

3 The method behind this Summative Evaluation Report

Two main activities have been undertaken to inform the analysis within this evaluation. First is the process of case-building – where rich, detailed case studies have been constructed of each of the 10 Healthy Families NZ locations, and a national perspective case. Second is the indicator development process – where we developed criteria to enable judgements on whether changes are occurring in outcomes, as well as the quality of implementation. The indicator development processes drew on both qualitative, and quantitative case study data. The qualitative indicators have been used for the QCA analysis as well as to enable longer-term monitoring of quality and outcomes.

This section briefly summarises the sources of data for the evaluation, the case-building and indicator development processes, and the analytic strategies we have deployed, including a process of sense making.

3.1 The Evaluation Questions

The questions below build upon the original evaluation questions set in 2015. The process for their revision included:

- consultation with the Ministry of Health's Healthy Families NZ team and the Massey Evaluation team;
- 2. brainstorming and refining by the Massey Evaluation team given results of initial consultation;
- 3. consultation hui with a group of Ministry of Health stakeholders;
- 4. consultation hui with location Managers and/or staff from the majority of Healthy Families NZ locations; and
- 5. consultation hui with the evaluation Māori advisory group.

There are two types of evaluation questions. Questions one to five are descriptive, providing details of how Healthy Families NZ has been implemented. Questions six to twelve are evaluative, seeking to make judgements about change, quality or effectiveness of Healthy Families NZ.

Descriptive Questions

1. How has Healthy Families NZ been implemented in each location?

- 2. How has the Te Tiriti o Waitangi been operationalised within planning and implementation in each Healthy Families NZ location?
- 3. How has equity been addressed in planning and implementation of Healthy Families NZ in each location?
- 4. How have Healthy Families NZ locations engaged and worked with prioritised settings?
- 5. How have Healthy Families NZ locations prioritised areas and types of activity?

Evaluative Questions

- 6. What has been the quality of Healthy Families NZ implementation in each location?
- 7. Which approaches to working with settings across Healthy Families NZ locations have been successful?
- 8. Has the prevention system in each Healthy Families NZ location been strengthened?
- 9. What has contributed to changes identified in the prevention system of each Healthy Families NZ Location?
- 10. Has there been change in the chronic disease risk factors in Healthy Families NZ locations?
- 11. Is Healthy Families NZ as a whole making a difference, including equity?
- 12. What implementation lessons have been learnt?

We developed evaluative criteria and outcome indicators to answer the evaluation questions. Specific data collection methods were designed to populate indicators.



3.2 Indicator development process

To answer evaluation questions about quality of implementation, whether the prevention systems has been strengthened, and whether change was being observed in the chronic disease risk factors in each Healthy Families NZ location, we developed criteria for making evaluative judgements.

For the quantitative indicators of the chronic disease risk factors we developed a conceptual model for each risk factor, in line with best practice indicator development. The conceptual model provides the scope and definition of the risk factor, detailing all the elements that can be used to represent the risk factor. Indicators were then sought that would provide information on the different elements of each risk factor. We purposively sought multiple indicators for each chronic disease risk factor because the risk factors are multi-dimensional and any indicator only provides information against a part of it. We also wanted to increase the opportunity to see change occurring, considering that numbers from some data sets are often small at the Healthy Families NZ location level.

We present the quantitative results, and indicator development process, as a possible approach for future monitoring of changes in chronic disease risk factors in the 10 geographic locations, as well as to provide a picture of the pre-existing context within which the initiative is operating.

For the purpose of feeding into the QCA process, and understanding what contributed to quality of implementation and prevention system outcomes, evaluative criteria were identified for all five Building Blocks of a strong prevention system. Evaluative criteria were also developed for two aspects of a strengthened prevention system: prevention infrastructure, which includes policy changes, physical environment changes and new resources dedicated to prevention; and an increase in understanding and focus on prevention (or a change in attitudes and paradigm towards prevention). Evaluation criteria were defined so that each Building Block and prevention system outcome could be categorised into either consistently present (e.g. Strategic Leadership Group operating during entire evaluation period) or inconsistently present (e.g. periods where the Strategic Leadership Group was not operating). Full description of the criteria are included in Appendix 2.

The process for identifying and agreeing criteria ran in parallel to that of the evaluation questions (above), including consultation with the Ministry of Health, Healthy Families NZ location managers and the evaluation Māori advisory group.

3.3 The Case-Building Process

For each of the 10 Healthy Families NZ locations the data sources described below were brought together to create a rich detailed story of the implementation of the initiative, key contextual features and areas where changes in outcomes were anticipated (See Figure 6). Draft case studies were provided to each Healthy Families NZ location to check the accuracy of the information presented, and to reflect on the qualitative data. Key reflections have been captured and included in updated case studies.

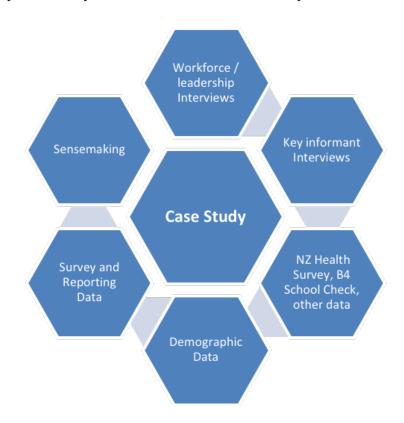


Figure 5. Summary of Healthy Families NZ Local Case Study Data

3.4 Summary of Data sources

Key informant interviews

Semi-structured key informant interviews were carried out with members of the Healthy Families NZ workforce, Strategic Leadership Groups, and selected partners and national stakeholders in each of the 10 locations (View 1 - 120 interviews in total; View 2 – 107 interviews in total). The Ministry of Health Healthy Families NZ team and other national stakeholders were also interviewed to provide a national perspective (View 1 – seven interviews; View 2 – eight interviews).

Healthy Families NZ Location Manager Phone Interviews

To aid understanding of development and adaptation during the View 2 period (2016-17), regular phone interviews were conducted with Managers in each Healthy Families NZ location. The total number of interviews conducted was 65. The number of interviews conducted with each location ranged from four to 13, with an average of seven.

Survey

An online survey was developed to elicit further data on different views and perspectives on the Healthy Families NZ initiative in each of the 10 locations. Three versions of the survey were tailored to workforce, Strategic Leadership Groups and partners in each area. Surveys were sent out progressively to each location from October to early November 2017. The survey was open for three weeks with two email reminders sent during this time, if needed. While there was variation across Healthy Families NZ locations, overall there were 326 responses to the partner organisation survey (response rate of 38%), 57 responses to the workforce survey (response rate of 66%), and 35 responses to the Strategic Leadership Group survey (response rate of 47%).

Documents

Key documents were collected in relation to the initiative. Documents were used in the case-building process as well as being a source for triangulation of data on activities and outcomes.

Documents included service contracts and Performance Monitoring Reports submitted by locations to the Ministry of Health every six months.

Quantitative data

Indicator data were sourced from the New Zealand Health Survey (NZHS), Before School Checks (B4SC), the National Maternity Collection (MAT), the National Minimum Dataset hospital events (NMDS), the Health and Lifestyle Survey (HLS), the Household Economic Survey (HES) and the New Zealand Household Travel Survey (NZHTS). Census data were also used to describe the Healthy Families NZ location population by New Zealand Deprivation Index classification, ethnic groups, age and gender.

3.5 Thematic Analysis

Following the creation of the case studies, a thematic analysis process was carried out to determine shared and divergent issues emerging from the implementation of the initiative. Each case study was analysed separately through a thematic analysis where emergent themes were identified. This involved identifying, coding and categorising the primary patterns in the data³⁹. Multiple researchers were involved in this process to verify interpretations of the data. The qualitative analysis software Dedoose was used to help organise the thematic codes. This process was then repeated to identify the shared and divergent themes across all the case studies. A process of improvement and validation was then carried out where case studies were given to participants in each area to provide feedback and refine the accuracy and interpretation of the data.

3.6 Qualitative Comparative Analysis (QCA)

We used Crisp Set QCA for this evaluation. QCA is a method for systematic comparison across cases. The method is gaining in popularity where there is an explicit recognition of social complexity such as when evaluating public health interventions ^{36 40 41}. QCA provides a way to identify combinations of factors, or configurations, which may be associated with particular outcomes. An assumption behind QCA is that there are likely multiple configurations of factors that lead to the same outcome. QCA illustrates the elements across the configurations that may be particularly important for understanding whether an outcome has, or has not, been achieved.

There are three broad steps within the process of QCA 42:

- 1. Selecting cases and describing the cases, where each Healthy Families NZ location is a case, and a set of conditions and outcomes to include are defined with criteria for allocating cases to one of two categories ('present' or 'absent') for each condition and outcome.
- 2. QCA Analysis, where each case is attributed as 'present' or 'absent' against all conditions and outcomes in what is called a 'truth table'. QCA software is then used to identify different configurations of conditions associated with an outcome being present or absent.
- 3. Interpretation, where identified configurations are used to highlight areas within the detail of cases that can be further explored for greater understanding.

3.7 Strengths and Limitations of the Evaluation

There are a number of challenges we wanted to explicitly acknowledge and address in the way that the evaluation of Healthy Families NZ has been designed. These challenges included:

- 1. the contextual differences between each Healthy Families NZ location;
- 2. the influences from the wider social/political environment that potentially impact on local activities, practices and policies; and
- 3. the long time-frame needed, along with the depth and breadth of change required in the environment, to see change in population-level chronic diseases and their risk factors.

Recognising these challenges, we selected a comparative case study design⁶. We considered the design most appropriate as it is underpinned by a theoretical position that recognises that the

⁶ For more detailed discussion of the overall design and the rationale for taking this approach please see: Matheson, A., Walton, M., Gray, R., Lindberg, K., Shanthakumar, M., Fyfe, C., Wehipeihana, N., Borman, B., Evaluating a community-based public health intervention using a complex systems approach. (2017) Journal of Public Health 10.1093/pubmed/fdx117

context for the initiative is 'complex'. The inherent challenges of evaluating this kind of initiative, which is characterised by a high level of contextual diversity and complex causality, makes causal attribution difficult.

The boundaries for each location, and therefore each case study, are geographic. The quantitative data reported here are about these geographic boundaries, whilst the focus for of the qualitative data relates closely to the actions of the team who are also loosely operating within these same geographic boundaries. However, the link between the actions of the initiative and area outcomes is confounded by the many other contextual and national influences occurring. The rich data design of the evaluation provides information that can help to understand what this relationship might be. Given the short time period of the initiative so far, we are very unlikely to see significant changes in risk factor and disease outcomes yet, although there will be more intermediary factors that may show change via the qualitative data such as the quality of collaboration or cultural norms within organisations.

There are clear strengths in producing rich case studies that can show what is occurring in different contexts and also where the levers might be for further action on systems change. A limitation with the key informant interview and document data is the extent to which they are mostly from participants 'inside' or close to the initiative. Although this gives rich data, it emphasises the identified successes and challenges from perspectives of those involved in Healthy Families NZ rather than from a wider perspective. This insider perspective is most relevant for understanding implementation. To address this limitation the survey attempted to capture an 'outside' perspective of the initiative as well as developing the national case.

There are also important limitations for understanding the quantitative analysis. Our assessments of the overall trend in the chronic disease risk factor groupings of harmful alcohol use and child physical activity should be treated with caution. These assessments are based on very few main indicators, and these indicators are not as high quality as indicators for other risk factor groupings.

We grouped data over multiple years to help give reliable results and detect change over time. This meant we had only two time points with which to examine time trends. Furthermore, indicators from administrative datasets heavily influenced our assessments of the overall trends in the chronic disease risk factors, due to the higher number of observations and associated sensitivity to detect change in these datasets.

The time period since Healthy Families NZ started, for which there is quantitative data available, is short for some datasets (e.g. the national Maternity Collection only up to end 2016). In addition,

there was only one year of data available since Healthy Families NZ started for the NZ Health and Lifestyle Survey and NZ Household Travel Survey. This means the results are more likely to reflect the pre-existing influences on the chronic disease risk factors. QCA techniques allow systematic comparison of cases, with the help of formal tools and with a specific conception of cases. Each case is considered a complex configuration (or set) of conditions linked to an outcome and this configuration is kept intact throughout analysis. Causality is established by comparing cases which are or are not linked with an outcome to see which combinations of conditions are present when an outcome occurs 43. An example could be effective leadership, where looking across cases with effective leadership, the presence of a stable workforce is consistently seen. By understanding and comparing how cases change or remain stable over time, we can learn something about the conditions that influence change. While QCA was designed to be used with small number of cases, having only ten cases does present a 'limited diversity' problem, where there are not enough cases showing different configurations of conditions and outcomes to identify a few groupings of configurations across cases. To limit the impact of the limited diversity problem, QCA is used to provide another lens to view case study data, rather than using the QCA outputs in a way that is abstracted from the detail of cases.

FINDINGS FROM ANALYSIS OF NATIONAL AND LOCATION CASE STUDIES

In this section we outline the findings from the View 2 case studies. Appendix 1 provides a summary of the national perspective case, and the nine case study summaries for the 10 Healthy Families NZ locations. Each case summary covers the following topics: local context, implementation (local arrangements and timelines, understanding of systems change, the Principles and Building Blocks, prioritised approaches, settings and activities, including Te Tiriti o Waitangi and Equity), outcomes and changes in the prevention system, change in the last two years in chronic disease risk factors, and challenges and successes.

The case studies provide the data from which the cross-case study analysis presented in this summative evaluation report is drawn. We begin with a summary of View 1 findings, before moving to View 2 findings.

4 Themes across Healthy Families NZ locations

4.1 Summary themes and conclusions from View 1

The findings from View 1 – reported in the Interim Evaluation Report 2017 – suggested there was much that was promising about the approach of Healthy Families NZ and that the initiative had been implemented with integrity to its intention and purpose. Eight cross-cutting themes emerged from the descriptive analysis of the View 1 case study findings. These themes captured the overarching observations of the early implementation phase of Healthy Families NZ. These themes were:

- building the plane while flying it;
- negotiating boundaries;
- balancing top-down/bottom up decisions and actions;
- working with a hands-on Healthy Families NZ national team;
- getting to grips with systems thinking and acting;
- emphasising leadership;

- enabling Māori ownership and leadership; and
- making equity an integral part of the initiative.

The key features of the initiative, as directed by the Building Blocks, were, for the most part, successfully put in place. The Principles were shown to have helped focus activities to those more likely to achieve systems change. Part of the journey involved an evolution in the location teams' understanding of what systems change is. Within View 1 this understanding was beginning to inform actions and their ability to communicate about the initiative more widely and effectively.

Two significant on-going processes of the initiative included the requirement for local adaptation and the role of the Ministry of Health's Healthy Families NZ national team in influencing their own areas of practice. The View 1 findings showed there had been a strong emphasis on local adaptation, which resulted in the location teams being able to tailor the initiative to local cultural and environmental circumstances. This was evidenced by the variation in how location teams were organised and by the diversity of activities undertaken. The national team also was shown to have an ongoing and close relationship with locations that contributed to local adaptation. Furthermore, the Healthy Families NZ national team themselves were actively engaged with their own areas of system influence by working for the greater alignment of relevant policies and initiatives within the Ministry of Health and beyond.

Overall the recruitment of the workforce within Lead Provider organisations had been successful. There had been and remain some challenges, but largely the workforce was well supported and engaged. The evolution, and deepening understanding of systems change, within the Strategic Leadership Groups was apparent, however, shifting the mind-set of influential leaders from enacting a governance function to enacting outward-looking systems change had taken time. During the later stages of the implementation period, it was clear that there had been a leap in the numbers of initiatives focused on 'systems change'. Most locations had consolidated their stakeholder relationships, as well as their own purpose, and were collaborating on substantial activities within their communities.

4.2 View 2 thematic analysis results

In the following section we describe the main findings from the thematic analysis of the case comparison process for View 2. The themes described are in two broad sections. The first section is related closely to the key mechanisms of the initiative, and the second are higher-level overarching themes which further highlight the opportunities and barriers in the implementation of the initiative.

The themes related to the **nuts and bolts** of the initiative are described below and include:

- wider successes of the initiative;
- specific areas of successful activities within Healthy Families NZ;
- a flexible systems thinking and acting workforce;
- a responsive Healthy Families NZ national team;
- active and adaptive leadership;
- locally relevant knowledge, data and stories of change;
- flexible resources;
- relationships and networks for collective action; and
- challenges to the initiative.

The higher level overarching themes are:

- 1. What does systems change to strengthen the prevention system look like? A shifting paradigm;
- 2. Māori ownership and responsiveness;
- 3. Equity and enabling and amplifying diverse local perspectives;
- 4. Getting local meaning to inform action from local and national data;
- 5. More agencies getting on the systems waka;
- 6. Rethinking public investment strategies for collective goals adaptation and responsiveness; and
- 7. Wider context of health sector and legacy issues.

4.3 Design of Healthy Families NZ: the nuts and bolts

A number of themes emerged about the Building Blocks and other key mechanisms of the initiative across the locations.

4.3.1 Wider successes of the initiative

The findings clearly show, whilst far from universal, that there is a paradigm shift towards systems change thinking, and the normalising of systems change as an approach to improving prevention and addressing health issues. Evidence for this change can be found closest to where

the teams are located, especially in terms of the influence on Lead Providers and the Ministry of Health. This influence has seen Lead Providers generally becoming more health promoting and, particularly among the Regional Sports Trusts, to be more focussed on equity. There is also a wider environmental shift to using systems thinking and approaches. Another key success has been the continuing adaptive ability of the initiative, at both the national and local levels.

There was also a movement towards Māori Systems Return, illustrating a resonance between Māori world views and systems thinking, incorporating strengths-based approaches and Māori concepts and practices that have sustained wellbeing for Māori in the past. In Appendix 4 you can find out more about this model and its use within Healthy Families NZ.

We observed the inclusion of diverse world views into activities, enabling activities to focus on aspects of environment and social connections with indirect connections to the focus chronic disease risk factors. The use of methods such as co-design and the deep local connections made are another demonstration of a systems thinking approach.

4.3.2 Specific areas of successful activities within Healthy Families NZ

Common areas of successful action on the targeted chronic disease risk factors included workplace wellbeing, working with local government, water/wai only movement and improving the food system.

Workplace Wellbeing - several initiatives to support workplace wellbeing have occurred across Healthy Families NZ locations.

- Within several Healthy Families NZ locations, workplace wellbeing criteria and/or awards have been developed and incorporated into local business awards. A variety of workplace wellbeing events have taken place to stimulate action in this area, often in collaboration with local Chambers of Commerce.
- A range of other collaborative groups and networks have been established to support an increased focus on workplace wellbeing.
- Several locations have been working closely with workplaces to test approaches to workplace
 wellbeing, and to showcase these workplaces as examples for others.
- The WorkWell programme, developed by Toi Te Ora (Public Health Unit in Bay of Plenty), was funded by Healthy Families NZ to expand to cover much of the country, with Healthy Families NZ locations supporting roll-out locally (Healthy Families Rotorua, Healthy Families Whanganui Rangitīkei and Ruapehu, Healthy Families Lower Hutt and Healthy Families Invercargill).

Working with Local Government

- There has been success in working with local government in several locations including making
 city events healthier, leading and supporting the water only movement (including removal
 of sugar sweetened beverages from council facilities), influencing smokefree policies, driving
 the build of community gardens, influencing the planting of fruit trees on council land /
 distribution of fruit trees by council to marae, and other sustainability and resilience initiatives.
- Smokefree outdoor places policies were introduced or significantly updated. There was
 increased coverage in Whanganui and Lower Hutt, and a smokefree CBD policy introduced
 in Invercargill. We found some focus on smokefree initiatives in Auckland also, with some
 Auckland Council Local Boards planning to support smokefree events and spaces.

Water Only Movement

- We found Healthy Families NZ locations influencing the provision and promotion of water and removal of sugar sweetened beverages in Council facilities, schools and events.
- Council and community funding has been identified, accessed and used for additional water fountains in schools and public places. We also found support (both practical and policy) for water only events, resource kits and direct support for Schools to be water-only.

Improving the food system

- Within most Healthy Families NZ locations, food gardens have been established in community spaces, schools, backyards and marae through working in collaboration with partners. Gardens have been supported by training on growing food, composting and cooking. The gardens are a focus for collaborative activity and provide an additional resource to support healthy nutrition practices. Healthy Families NZ did not fund the gardens and by working in partnership, the gardens are owned by the community setting it is in. An example is the partnership between Healthy Families Manukau, Manurewa-Papakura, the Supreme Sikh Society Gurudwara Sri Kalgidhar Sahib temple in Takanini and the Auckland Teaching Gardens Trust which has established vegetable, fruit and nut gardens on 11 acres of Temple land.
- Another focus has been supporting development of innovation and social enterprise within local food systems, such as Ka Pai Kai in Rotorua; the Kitchen Project involving a collaboration between Healthy Families Waitakere and Healthy Families Manukau, Manurewa-Papakura and Panuku Development Agency; and the Hutt Real Food Challenge in Lower Hutt.

4.3.3 Principles to guide action

Overall, the Principles have been an effective underlying mechanism for guiding both the workforce and Strategic Leadership Groups on what systems change activities they should be prioritising and what they are trying to achieve in their own areas. There was also a strong alignment in personal values with the Principles as well as the Principles being aligned to some extent with Māori world views. There were however suggestions for improvements to the Principles. These included:

- Broadening the view on actions for systems level change. A review of the principles should broaden the scope of the existing ways of defining systems change directed action.
- Expanding the set of Principles. Two of the Healthy Families NZ teams located in Māori Lead
 Provider organisations were using additional principles (with two opting not to use them) alongside
 the Healthy Families NZ Principles, to provide perspective from te ao Māori on collaborative
 working to support health. Further integration of these principles could be considered.
- Adding 'sustainability' as a principle.

4.3.4 A flexible systems thinking and acting workforce

The data collected have shed light on what attributes in the workforce are required to strengthen prevention within communities. We identified three key attributes:

- 1. Flexibility in the nature of the workforce in order to meet local needs and adapt as initiatives change;
- A workforce that can develop deep, local connections into diverse communities while
 focusing on the bigger picture of systems level change instead of service or programme
 delivery; and
- 3. A highly skilled workforce, able to facilitate strategic alignment between organisational and community leaders, gather local insight into issues through a variety of methods, run co-design and co-production processes, amplify effort, tell the story of their work through strategic communications, and evaluate initiatives for the purpose of adaptation.

All locations have employed additional FTE for roles in managing strategic relationships and networks, communications and evaluation, and undertaken significant professional development of staff. Additional FTE and professional development have both been used to fill gaps in skills across initially recruited workforce, many of whom had a more traditional public health programme delivery background which was problematic. A strength of the workforce has been

the deep community connections many already had coming into Healthy Families NZ, and ability to make new connections.

Effective supports for the workforce were identified as:

- being a good fit with lead provider organisation;
- professional development organised by the national Healthy Families NZ team with Public
 Health Leadership training and Crucial Conversations training commonly identified as worthwhile;
- support in the use of practical tools to enable responsiveness including co-design methods and planning tools and structured reflection and evaluation processes;
- willing collaborative partners and allies, including within Strategic Leadership Groups;
- the Healthy Families NZ national team making connections between Healthy Families NZ locations and external organisations; and
- the Healthy Families NZ national team responding effectively to find solutions and keep continuity of the initiative in the face of significant local challenges.

Areas where further support for the workforce was needed included:

continued professional development specifically relating to systems thinking and systems
change. The field of systems is very wide with no proven formulae in the innovative area that
Healthy Families NZ is operating. Therefore, the Healthy Families NZ workforce would likely
benefit from understanding a range of systems change approaches for problem structuring and
generating initiatives.

4.3.5 A responsive Healthy Families NZ national team

As noted above, the Ministry of Health's Healthy Families NZ national team were often recognised as being responsive, supportive and helpful to Healthy Families NZ locations. The national team were usually viewed as a respected partner at the table on Strategic Leadership Groups. At times, however, tension arose in some locations when they were seen to act as contractor and funder. A strength of the national team sitting in Strategic Leadership Groups was that they were able to immediately respond to issues arising and support the location teams.

There were different perspectives on the required size of the team, roles and capabilities within the national team to continue to support Healthy Families NZ in phase two. There were aspirations by some key informants for a larger, better resourced national team, but people also recognised the practical reality of the Ministry of Health committing more resource to the team.

Several areas which could improve the capacity of the national Healthy Families NZ team were identified as:

- establishing a national level Strategic Leadership Group, similar to locations, that could bring
 in wide perspectives and spheres of influence to support the team and the initiative, including
 strong Māori leadership;
- establishing developmental evaluation processes within the national team to enhance the ability to reflect and respond to information and feedback they receive from Healthy Families NZ locations;
- strengthening and supporting local strategic communications;
- supporting national level collective action; and
- continuing to encourage and promote innovation within the Ministry of Health to support systems change.

4.3.6 Active and adaptive leadership

The involvement and quality of leadership was widely viewed by key informants as an essential ingredient to creating systems change. This quality issue was around leaders being both adaptive and utilising their own 'spheres of influence' to progress the goals of Healthy Families NZ.

Some specific areas where Strategic Leadership Groups were considered important included:

- providing direction on tailoring activities of a location to the needs of that location and working in with existing activities and programmes;
- ensuring that resources were aligned and avoiding duplication; and
- amplifying work of teams through the spheres of influence held by Leadership Group members.

It was observed that Strategic Leadership Groups appeared effective when members were influential, well connected community members, senior managers, chief executives of partner organisations from a range of sectors, or others who could make decisions quickly about their own organisation to be actively involved.

Across the locations the effectiveness of the Strategic Leadership Groups has varied. Challenges have included ensuring diversity within the group so that a range of perspectives are heard and connections to a range of communities supported. However, the advantages of diversity were found to be undermined if there was not active engagement from the group members.

Where the Strategic Leadership Group was viewed as less effective, reasons given included a lack of:

- a. clear and consistent understanding amongst members of the leadership role for supporting the systems change approach of Healthy Families NZ;
- b. lack of diversity in membership of the group, and inconsistent engagement of group members, often related to lack of clarity of why they were meeting or perception that meetings were not productive; and
- c. effective administration of the meetings and follow-up actions.

On the other hand, where Strategic Leadership Groups were viewed as effective in supporting and amplifying the work of Healthy Families NZ teams, members of the group often commented on a strengthened and increased range of relationships. They saw meetings as productive and worth their time attending and they could see the potential for collective action to support the work of their own sectors and community more widely.

4.3.7 Locally relevant knowledge, data and stories of change

The majority of Healthy Families NZ teams have taken time to prioritise and embed evaluation practices within their work planning. One challenge has been getting the right skills within the team as well as leadership from the Manager. A number of teams found themselves with too many activities and opportunities for action, meaning systematic planning, reflection and evaluation was pushed to the side. This was explicitly recognised by many we interviewed, and most location teams who undertook a process of revising how they worked and prioritised during 2017.

Despite this, there has been positive development of capacity within teams for developmental evaluation, with many of the teams using reflective developmental evaluation practices to improve and adapt their work. We saw several examples of surveys, interviews, or observational data that had been designed to support evaluation of particular initiatives, although additional work in this area may enhance evaluation efforts for some locations.

In some Healthy Families NZ locations, limited data analysis capacity within partner organisations (e.g. DHB, PHO) was seen as symptom of stretched resources more generally. The need for data at the local level was considered very important in being able to communicate stories of change. A commonly voiced frustration was the design of national level data sets, and analysis of these, which provided limited support for community level insights.

4.3.8 Flexible resources

The Action Budget has been useful in some areas but will likely remain limited in use. Teams found it a challenge to use the Action Budget for systems change action and it was frequently recognised that funding was not needed to effect systems change. Often, when an activity was checked using the Action Budget decision-making tool, either the activity was deemed out of scope or it was realised that funding was not needed to support the activity.

In all Healthy Families NZ locations, the use of operating surplus has been important in enabling flexibility in activities and supporting adaptation of the teams. This operating surplus resulted as full FTE funding was paid to Lead Providers since the beginning of contracts, and accrued as full team recruitment took several months. It is noted that the Ministry anticipated there would be operating surplus and that it could be reinvested to support the locations to adapt and fill capability gaps in the workforce as they arose.

All Healthy Families NZ locations have hired additional staff capacity to fill particular skill gaps or to support particular initiatives. Besides hiring staff (or contractors), operating surplus has been used for indirect costs, such as professional development, and other resources that can be used across initiatives. The Action Budget on the other hand has related to seeding specific initiatives and direct costs associated with these.

4.3.9 Relationships and networks for collective action

Almost all activities of the Healthy Families NZ teams have been carried out in collaboration with other organisations. Teams found that organisational relationships and partnerships were much more useful if they were developed and focused around particular activities.

Subsequently there had been a move away from attempts to create large and connected Prevention Partnerships, to instead focus on 'working with the willing' on particular initiatives. It was clear that partnerships and collaborations operated more effectively if they were purposeful. There were a number of examples from most of the locations, where organisations were jointly contributing resources to an initiative, mostly in the form of staff time.

It was also apparent that collaborative working within communities more generally was increasing, but there remained substantial constraints to collaborations being effective. These constraints on organisations' ability to collaborate centred mainly on resource issues and the way that services in the community were funded, including:

- siloed and competitive government funding processes that inhibited action on shared goals including through degrading trust across local community organisations;
- small community-based organisations relying on volunteers or small number of paid staff; and
- organisations running services funded by contracts that focussed upon particular outputs. In these cases, collaborative initiatives, if outside of contracted service area, were frequently funded through overheads of organisations.

4.3.10 Challenges to the Initiative

Barriers to action on alcohol were highlighted throughout the key informant interviews. This was particularly evident in the licensing processes. Informants believed community input and voice were severely disadvantaged, while the opinions of the alcohol industry were strongly favoured. One initiative involving Healthy Families Manukau Manurewa-Papakura has been exploring opportunities to increase community voice within licencing processes. Two Healthy Families NZ locations have been involved in discussions within Councils regarding how Local Alcohol Policies may be designed, and these discussions are continuing. While Local Government has the power under legislation to create a Local Alcohol Policy that may impose restrictions on opening hours or location of alcohol outlets, in practice the policy development process has been slow and hampered by legal challenges to draft policies⁴⁴.

Where action on alcohol has taken place, it is within quite specific circumstances, such as in the organisation of local events, or how sports clubs manage alcohol or gathering community insights into alcohol issues. The data showed that the teams found there were significant barriers to acting on availability, price or promotion of alcohol, outside of particular organised events. Shifting these barriers to effective local action on alcohol requires legislative change and higher-level action that has been a challenge for the teams themselves to address.

Key informants also eluded to the interconnected nature of social issues. These issues included drug use and addiction, family violence, access to affordable and healthy housing and mental health. Teams felt that these additional issues needed to be addressed for action on the target chronic disease risk factors could be successful. Mental health and wellbeing in particular was an issue that was frequently identified and was considered to underline the health issues being focussed upon, but was seen as inadequately funded and addressed.

Specific location challenges included:

- Healthy Families Far North and East Cape both have high socio-economic inequality as well as being geographically dispersed and remote;
- Healthy Families Christchurch, located within post-earthquake Christchurch, identified the
 challenge of continuing associated trauma, but also that the health and community sectors
 were highly engaged in collaboration and innovation in the wake of the earthquakes to
 rebuild the city. Within this context the role for Healthy Families Christchurch as an enabler of
 collaboration and innovation was less clear;
- Healthy Families Manukau, Manurewa-Papakura is the largest of the location teams and
 operates within a large and diverse population. A consistent theme was that poverty in South
 Auckland had increased over time, despite significant investment to address its impacts.

Other challenges included:

- local health sector scepticism about an approach that was not seen as the public health norm;
- supporting Māori engagement in those locations that were not based within Māori-led organisations;
- a lack of clarity in how to achieve systems change, although progress has been made;
- the type of action required for achieving systems change is high energy and requires resilience.
 Across locations, many workforce key informants discussed feeling burnt out by the nature of the work they were involved in. Several of the workforce also cited this as a reason for why they had decided to move on from Healthy Families NZ;
- effectively embedding evaluation within the teams;
- reliably engaging with Strategic Leadership Group members because of demands on their time,
 and for some groups, the lack of clarity around the group's purpose;
- reliance on a small number of influential people, either staff or leaders. Often it was identified
 that particular individuals were driving effectiveness of initiatives areas or of the Strategic
 Leadership Group, raising questions about sustainability of momentum in locations if key
 people leave;
- inadequate incentives for collective action on shared goals within the way that health and social services are funded and contracted for within communities.

4.4 Overarching themes

Seven higher level, overarching themes emerged through the case building and analysis processes, these are:

- What does systems change to strengthen the prevention system look like? A shifting paradigm;
- 2. Māori ownership and responsiveness;
- 3. Equity and enabling and amplifying diverse local perspectives;
- 4. Getting local meaning to inform action from local and national data;
- 5. More agencies getting on the systems waka;
- 6. Rethinking public investment strategies for collective goals adaptation and responsiveness; and
- 7. Wider context of health sector and legacy issues.

4.4.1 What does systems change to strengthen the prevention system look like? A shifting paradigm.

Across many key informants a sophisticated understanding of the prevention system was apparent. The prevention system was frequently described as multi-level, with a difficult tension between the community level and higher national-level influences. There was a recognition that there was indeed a 'system' that was operating and that connections between elements within the prevention system were viewed as being influenced widely by factors such as the social and economic determinants of health, service funding and contracting, and the legitimacy of perspectives.

Examples of what sustainable systems change might look like were commonly expressed as:

- bringing health into the conversation as a default, including changing the way people think about how their actions can impact on health. Examples include – workplace wellbeing and design of urban spaces.
- creating policy change, so that the default position becomes one of promoting health through
 easy choices. Examples include smokefree policies and Council funding for events requiring
 healthy food and beverage options be available.
- meeting the needs of local communities. Examples include creating places and processes that support community action for health.

Many key informants felt that the prevention system was actually not distinct from the 'whole system' that produced health outcomes. This view was often discussed most specifically in relation to health inequality where the wider social system was viewed as creating health outcomes experienced by different groups.

Since View 1, there was clearly an improved understanding of what systems change to achieve better health outcomes entailed. It is also clear that Healthy Families NZ has evolved significantly from its starting point, providing a more nuanced understanding of a prevention system. For example, in the earlier establishment phase of Healthy Families NZ there was a key focus on settings - underpinned by the initiative tagline "Leading healthy change in the places we live, learn, work and play". However, the evolving practice within Healthy Families NZ has been to work less with individual settings (a school, a church, a workplace), but rather to set up resources and processes to support action across multiple settings (for example Healthy Families Manukau Manurewa-Papakura – Business Community of Practice; Healthy Families Lower Hutt – Turning the Tide; Healthy Families Waitakere – Early Childhood Education network).

The teams were also employing "prototyping" methods in order to scale up promising actions. For example, where individual settings are being worked with, focus has been on developing and testing an initiative within the setting, which can then be rolled out to other settings and used as a way to illustrate potential actions through communication activities. This evolution in thinking sees setting as elements within a system – more in line with how Hawe and colleagues conceptualise interventions as events in systems²⁸.

In an evolution from what was found in View 1, there was a deeper understanding of what actions might be required to strengthen the prevention system for good health. Examples of actions included:

- strengthening connections across the prevention system (for example through Strategic
 Leadership Groups, collaborative initiatives, sharing resources and sharing stories of change);
- using innovation and co-design approaches to uncover barriers to health and test solutions;
- elevating community voices as an important part of understanding issues and creating solutions;
- supporting policy change to make healthier environments;
- working with settings as elements within a system, rather than primary focus of activity; and
- legitimising diverse world views about health and prevention and using these within design of initiatives.

This development in understanding systems change potentially has implications for what is meant by the Implementation at Scale Principle, the content of Implementation Roadmaps and expectations on activities from the Ministry of Health. A significant system challenge identified throughout the initiative has been how to prioritise, balance and connect up high level strategy with lived, and felt, local experiences. Local experiences might suggest different approaches to action are needed to meet the health challenges in that area. There has been an increasing focus on bringing in co-design methods and gathering insights from community. For example, linking community voice to policy, such as Healthy Families Manukau, Manurewa-Papakura sharing community insights with government departments and engaging with Auckland Council, or Healthy Families Invercargill influence and input into the smokefree CBD policy. While there has been an upskilling of the workforce for running co-design processes, there does not seem to be an equivalent focus on creating and supporting policy action. More widely, there is a need to think more about how to connect up community voice with policy action, and what professional development is required.

4.4.2 Māori ownership and responsiveness

An important success of the initiative to date has been the leadership shown by Māori- Lead Provider organisations, and Māori staff within other Healthy Families NZ locations. This leadership has supported engaging with Māori communities and settings using strengths-based approaches and Māori concepts and practices that sustained wellbeing in the past – referred to by the Healthy Families NZ location teams as 'Māori Systems Return'.

A precursor to this was contracting with Māori organisations in four of the Healthy Families NZ locations. Another precursor was the Ministry of Health encouraging flexibility within locations to work on initiatives of relevance to the communities and in a way that is relevant to the communities. This has created space to explore approaches based in mātauranga Māori.

A theme across many of the key informants who were Māori, was that they viewed systems thinking as resonating strongly with traditional Māori world views which see holism and connection as integral.

It must also be noted that two of the locations that have had limited identified outcomes to date are Healthy Families Far North and Healthy Families East Cape – two of the four Māori organisations. These areas faced the challenges of geographical spread and high levels of deprivation within the population and both had significant delays with recruitment and or retention of staff. Additionally the East Cape provider deployed a far more service delivery

approach, with limited activities focusing on strengthening networks as a resource for prevention.

Although, a strength of the Healthy Families Far North team has been the contribution to showing how practice using mātauranga Māori within local tikanga can shape initiatives to strengthen prevention.

Overall, engagement in Māori settings was considered a strength in most Healthy Families NZ locations, with a range of collaborative initiatives with marae, kohanga reo and kura, including healthier food and water only practices, creation of vegetable gardens, planting of fruit trees and traditional Māori games.

A key success was Healthy Families NZ being endorsed by the Iwi Chairs' Forum in February 2018. The Forum passed a resolution unanimously endorsing the approach of Healthy Families NZ, and requesting that Healthy Families NZ become a standing agenda item for the Pou Tangata (social issues facing Māori) at the regular meetings of the Iwi Chairs' Forum. Through this process a resource was produced which highlighted that the Healthy Families NZ approach was explicitly relevant for Māori (refer Appendix 4).

There were very different ways in which key informants discussed Te Tiriti o Waitangi and Māori responsiveness depending upon the location. In the predominantly Māori communities it was felt it was just the way things were done. In areas without Māori ownership and with smaller Māori populations — there was a need for a conscious focus on ways to ensure responsiveness to Māori and inclusion in leadership and decision-making. There was also a challenge noted, in some areas, of impacting Māori who had less iwi affiliation and those who did not frequent local marae.

4.4.3 Equity and enabling and amplifying diverse local perspectives

Equity is a priority focus for action within both the design of Healthy Families NZ and in its implementation. Equity was a consideration in how the 10 locations were selected and in the choice of Lead Providers – with Māori and Pasifika leadership prioritised.

Through the interviews, it was also clear that equity was a priority for action for all locations. Some Lead Providers – especially the Regional Sport Trusts – showed movement towards a greater focus on equity where this has been limited in the past. A diverse workforce had been employed, reflecting diversity within communities. Deep local relationships were being established through methods being used to amplify community experiences and voices. These diverse local perspectives were viewed as legitimate within the activities being undertaken by the Healthy Families NZ teams. Part of this legitimising has been the empowering of the Healthy Families NZ workforce to have access to community, and other leaders in order to progress their work.

4.4.4 Getting local meaning to inform action from local and national data

From the case study data, it was clear that the need for data at the local level was considered very important in both being able to inform actions and in being able to communicate stories of change. A commonly voiced frustration was the design of national level data sets, and analysis of these, which provided limited support for community level insights.

Through our quantitative indicator development process, we found there was a limited amount of data available for indicators of physical activity, particularly for children, let alone at the level of Healthy Families NZ locations. Similarly, for harmful alcohol use, a change in the measurement of key indicators available at the location level left less than ideal indicators, to compare before and after implementation of Healthy Families NZ. Some potential data sets were unavailable to access, or data was held in such a way that did not allow geographic disaggregation by Healthy Families NZ location.

Given the need that was apparent within Healthy Families NZ locations for better local data and also the limitations with the data that was available for the evaluation, it seems that there is a need for improvements in health data and knowledge, and access to it, to enable local community insights.

4.4.5 More agencies getting on the systems waka

During View 2, purposeful sharing and joint working between Healthy Families NZ locations had begun to increase.

These joined up activities included:

- Māori Rōpū championing Māori Systems Return;
- Regional Sports Trust based teams, sharing and jointly working together, and with Sport New Zealand on systems approaches to their work;
- The Chairs of the Strategic Leadership Groups meeting looking at opportunities for collective action across locations; and
- sharing experience of working with Councils.

Moreover, the wider environment within which Healthy Families NZ is operating has become more supportive, with like-minded systems focussed initiatives led by different agencies. For example, Social Sector Trials and Place Based Initiatives, NGO Collective Action approaches such as Inspiring Communities, and innovation and co-design focused initiatives such as The Southern Initiative

(funded by multiple government agencies and based within Auckland Council). During the View 2 period, Sport New Zealand has reorganised community sport work to take a locally led approach, supported in part by the three Healthy Families NZ locations based within Regional Sports Trusts.

Indeed, it seems that systems initiatives are more common and accepted, outside of the health sector. This provides Healthy Families NZ with allies and collaborators, and helps shape opportunities for developing cross-sectoral practice.

4.4.6 Rethinking public investment strategies for collective goals - adaptation and responsiveness

The approach of Healthy Families NZ involves a new way of service commissioning by the Ministry of Health. It is a conscious move away from traditional, uncoordinated 'service delivery' to an approach that prioritises 'sustainability' as well as 'scalability'. As a result, the national team have taken a much more hands-on role to be more responsive to issues and local needs. The reporting requirements for the location teams used more narrative than is usual for reporting requirements. Teams appreciated this move away from 'tick-box' reporting.

While all Healthy Families NZ locations showed examples of effective collaborative initiatives, resourcing issues were commonly identified as local barriers to further collective action. Specifically, the differing resources available to partners and their contractual obligations, which constrained spending, and competition for resources.

How other organisations within the community were funded and contracted appeared to impact on the ability to carry out some activities for collective action. This limited some of the activities undertaken by Healthy Families NZ locations, because of this challenge of getting multiple organisations to be responsive and adaptive to changing community needs and opportunities.

Silos and uncoordinated service contracts were described as a constraint on effective collaboration because:

- organisations needed to prioritise contracted service outcomes;
- there is little room in resourcing to commit staff or organisational funding to activities not directly related to contracted services;
- there may be a delivery model specified in the contract that hampers involvement in prototypes of new forms of delivery and adaptation; and

• there may be competing priorities between different contracts from different government agencies or local funders.

Outside of single contracts, an environment of competitive service contracting can also be a barrier to collaborative and trusting relationships – with organisations looking to collaborate in one forum and competing against each other in another. This situation was evident through several key informant interviews from multiple locations.

The findings about Healthy Families NZ suggest that the government funding and contracting environment is still not always conducive for collaboration and collective action. This is a key area where the approach to government investment within communities could be enhanced to better support collective action on shared goals such as it through Healthy Families NZ. Within the UK, Collaborate have recently been investigating approaches to funding to support responsiveness and adaptation for communities⁴⁵.

4.4.7 Wider context of health sector and legacy issues

The political context, and legacy of past initiatives, are part of the prevention system Healthy Families NZ aims to strengthen. Key informant interviews for View 2 were conducted close to the general election period in 2017. With the recent change in Government there was optimism that more attention would be given to health, and to prevention in particular, but also anxiety because of the uncertainty of the direction this attention might go.

Interestingly, establishing collaborative relationships within the health sector has posed a challenge for most of the Healthy Families NZ teams. The interviews showed that there has been a particular tension between the traditional public health sector and the Healthy Families NZ approach. This was evident in some of the relationships between local teams and public health units as well as staff within the Ministry of Health where different views were held about the best approach for addressing community health issues. Equally there were some very positive relationships described between local teams and public health units as well as some particularly strong relationships with some DHBs.

There has been confusion about the role and delivery of Healthy Families NZ, and as a result, the approach is often misinterpreted and/or spoken of as 'replacing' legacy initiatives across the health sector, particularly HEHA. In 2003, Healthy Eating Healthy Action (HEHA) was established to be a comprehensive obesity prevention strategy, under which programmes were funded to promote healthy nutrition and physical activity. Healthy Families NZ has frequently been compared to HEHA, even though its scope is different (chronic disease prevention not obesity) and it has not

undertaken funding of programme delivery for nutrition and/or physical activity. The approach of Healthy Families NZ focuses on building the capacity and capability of its people (not delivering interventions), including working with local leaders to determine local solutions. As identified in View 1, comparison with HEHA was still raised within interviews, as it was for View 2, some 10 years after it ended. HEHA was also raised throughout the interviews as a cautionary tale of the fickleness of politics and policy, and also as an opportunity to learn from the past and strengthen the work of Healthy Families NZ.

5 Qualitative Comparative Analysis (QCA)

Section 5 presents further findings on implementation and systems change using QCA. We used Qualitative Comparative Analysis (QCA) to provide an additional way to explore the influences on Healthy Families NZ meeting its goal of strengthening the prevention system. Full details of the QCA are included in Appendix 2. QCA findings were used alongside the qualitative themes discussed in the previous section to synthesise our conclusions and recommendations.

QCA is a method for systematic comparison across cases. The method is being increasingly used in circumstances where social complexity is important such as when evaluating public health interventions ^{36 40 41}. QCA provides a way to identify combinations of factors, or configurations, which may be associated with particular outcomes. An assumption behind QCA is that there are likely multiple configurations of factors that lead to the same outcome. QCA illustrates the elements across the configurations that may be particularly important for understanding whether an outcome has, or has not, been achieved.

QCA is used here to consider two aspects of Healthy Families NZ locations:

- 1. quality of implementation of the Building Blocks of a Strong Prevention System; and
- 2. identifying configurations of factors associated with systems change for prevention.

Two outcomes of systems change for a strengthened prevention systems were used for QCA considered within the QCA:

 Prevention Infrastructure Development – where policy and changes to the environment have been made that support a focus on prevention and healthier practices, including through policy changes, changes in the built environment, and additional resources dedicated to prevention. 2. **Prevention Attitudes and Paradigm** – where organisations have demonstrated an increased commitment to prevention or majority of respondents to workforce and partner survey agreed to statements identifying an increase in organisations seeking out opportunities to collaborate for the purpose of prevention.

More detailed methods can be found in Appendix 2, including criteria against which judgements of quality or prevention system outcome have been made. In this section we outline the main findings.

The important insights that have come from this analysis include:

- where a Healthy Families NZ location was doing consistently well in three or more Building Blocks, achieving Systems Change also occurred;
- where a Healthy Families NZ location had a period of disruption to implementation over 2016/17, they were less likely to have achieved System Change; and
- where Healthy Families NZ locations had achieved System Change this was related to substantial actions undertaken by Local Government in the area.

More specifically, and described in more detail in Appendix 2:

- Two Healthy Families NZ locations were categorised as having consistent quality
 implementation of all Building Blocks of a strong prevention system. One Healthy Families NZ
 location was categorised as having inconsistent quality implementation of all Building Blocks.
 All other Healthy Families NZ locations had a mixture of consistent quality and inconsistent
 implementation of the Building Blocks.
- Leadership was the Building Block least often categorised as consistent quality, while
 Resources was most often identified as consistent quality across locations.
- Nine of the ten Healthy Families NZ locations could demonstrate organisations showing greater understanding of prevention and how they could contribute to prevention, or willingness to change their organisational practices to support health.
- Five of the 10 Healthy Families NZ locations could demonstrate increased capacity in
 Prevention Infrastructure, showing examples of policy changes, physical environment changes
 and new resources dedicated to prevention. A common characteristic across these five
 Healthy Families NZ locations was demonstrated action within City and District Councils.

6 Monitoring changes in chronic disease risk factors over time

In this section we present a possible approach for future monitoring of the chronic disease risk factors in the 10 geographic areas. We provide a picture of the pre-existing and current context within which the initiative is operating, as well as a summary of the identified changes over time in chronic disease risk factors for each of the Healthy Families NZ locations and all Healthy Families NZ locations combined. We also provide comparisons of these results to the rest of New Zealand, and discuss patterns in these risk factor changes across the Healthy Families NZ locations.

At this stage of the initiative, we cannot detect relationships between risk factor changes and the activities of the Healthy Families NZ teams. This is because of the short timeframe the initiative has been in place in which changes to the indicators could have occurred, which means the results are more likely to reflect pre-existing influences on the chronic disease risk factors. It is also because of the challenges in attribution, which we have described in section 3.7.

There are two purposes for providing this summary.

- 1. To indicate how we have set up a possible system for longer-term monitoring of the identified risk factors in Healthy Families NZ locations.
- 2. To illustrate some of the existing health contexts for these communities.

6.1.1 Methods

A description of methods used in monitoring changes in chronic disease risk factors are described in more detail in Appendix 3.

In addition to the risk factors of nutrition behaviours, physical activity behaviours, tobacco use and exposure, and harmful alcohol use, the framework includes indicators of body weight, as this is a risk factor that is strongly influenced by both nutrition and physical activity behaviours.

We separated the risk factor indicators into adult and child sub-groups where possible. This is because their associated indicators measured different aspects of the risk factors, and because there are different influences for adults' and children's health, including the potential for children's health to change more quickly. These groupings are:

- Adult nutrition
- Child nutrition

- Adult physical activity
- Child physical activity
- Adult body weight
- Child body weight
- Tobacco use and exposure
- Harmful alcohol use

For each chronic disease risk factor group, a pre and post Healthy Families NZ implementation period was compared. The pre-period covers from July 2011 up until June 2015. The post period is from July 2015 onwards. Different data sources provided different coverage of the post period.

Two groupings of results have been used to help provide insights: each Healthy Families NZ location and all Healthy Families NZ locations combined. Two perspectives on the results have been explored: change over time, and the change over time compared to the Rest of New Zealand (all of New Zealand excluding all Healthy Families NZ locations combined). For example if the change in the Rest of New Zealand is in a direction that is worsening while in a Healthy Families NZ location there has been no change, then the location could be seen as having positive results compared to the Rest of New Zealand.

We grouped data over multiple years to help give reliable results and detect change over time. This meant we had only two time points with which to examine time trends.

All findings discussed are based on results adjusted for age to take into account changes in the age structure of the population over time.

We looked at equity by examining inequalities in chronic disease risk factors for Māori in all Healthy Families NZ locations combined. To show changes in inequalities for Māori over time for each indicator, we used both rate ratios (Māori result vs non-Māori result) and rate differences (Māori result minus non-Māori result). The rate ratio is a relative measure of inequality, while the rate difference gives the absolute difference of inequality. Both measures were calculated for the pre-period and post-period using the age-adjusted results. We examined the decrease and increase in these measures of inequality over time to see if inequalities for Māori were improving, worsening or staying the same. We also examined the decrease and increase in these measures compared to the rest of New Zealand.

For each risk factor grouping, we assessed the pattern of improvement and worsening for the indicators, to classify the risk factor grouping as improving (\checkmark) or worsening (\times) or showing no evidence of change (*). Thus, an improving or worsening trend refers to the overall pattern in the risk factor grouping. A similar approach was used to make assessments about inequalities for Māori at the level of the risk factor groupings.

For information on actual levels of chronic disease and chronic disease risk factors in the locations prior to Healthy Families NZ, see the Interim Evaluation report and Results Tables in Appendix 3.

6.1.2 Key Findings:

Although these changes over time cannot be linked to Healthy Families NZ activities, across the locations, there were a variety of changes in chronic disease risk factors. Findings ranged from two locations not showing any improvement over time to one location showing improvement in four out of eight chronic disease risk factor groupings, when compared to the Rest of New Zealand.

Tobacco use and exposure had the highest number of Healthy Families NZ locations showing an improving trend. When compared to the Rest of New Zealand, both tobacco use and exposure, and child nutrition had the highest number of locations with an improving trend.

Adult overweight and obesity had the highest number of Healthy Families NZ locations showing a worsening trend, but after taking into account the Rest of New Zealand, child nutrition and child physical activity had the highest number of locations with a worsening trend.

All Healthy Families NZ locations combined showed an improving pattern, greater than the Rest of New Zealand, in tobacco use and exposure, and harmful alcohol use. Conversely, all Healthy Families NZ locations showed a worsening pattern for child nutrition, adult physical activity, child physical activity and adult overweight and obesity, when compared to the Rest of New Zealand.

Where a trend of improving or worsening was identified for a risk factor, it was often a change in a single indicator that accounted for the trend.

There was at least some evidence of both relative and absolute inequalities for Māori in almost all the risk factor groupings in the pre-period for all Healthy Families NZ locations combined.

For all Healthy Families NZ locations combined, the relative inequalities for Māori over time showed improvement in adult obesity and overweight, and worsening in child obesity and overweight, and tobacco use and exposure. The absolute inequalities for Māori over time showed improvement in child obesity and overweight, and tobacco use and exposure.

After taking into account the trends in the Rest of New Zealand, the relative inequalities for Māori over time showed improvement in adult obesity and overweight, and worsening in tobacco use and exposure. After taking into account the trends in the Rest of New Zealand, the absolute inequalities for Māori over time showed improvement in adult and child obesity and overweight, and tobacco use and exposure, but worsening in child nutrition.

Therefore, while there has been worsening in adult obesity and overweight in all Healthy Families NZ locations combined for the total population, inequalities for Māori in adult obesity and overweight have improved after comparing to the Rest of New Zealand.

However, while there has been improvement in tobacco use and exposure in all Healthy Families NZ locations combined (and consistently in many of the Healthy Families NZ locations) for the total population, relative inequalities for Māori in tobacco use and exposure have worsened. This means gains in tobacco use reduction have not benefitted Māori as much as non-Māori.

6.1.3 Key limitations

Due to data availability, the risk factor groupings of adult and child physical activity, and harmful alcohol use were restricted to a few indicators, and in some cases these indicators were less than optimal. So, our assessments of the overall trend in the chronic disease risk factor groupings of harmful alcohol use and child physical activity should be treated with caution.

Combining all locations together provided a way of looking at equity for Māori over time and detecting change in multiple indicators for a more robust assessment of change over time.

However, it masked the potential diversity of what was happening in individual Healthy Families NZ locations.

6.2 Summary Results

The following tables show the assessments of changes over time, as well as comparisons to the Rest of New Zealand, for each risk factor grouping by each Healthy Families NZ location, and all Healthy Families NZ locations combined. These are accompanied by tables about inequalities for Māori in the chronic disease risk factors for all Healthy Families NZ locations combined.

Detailed discussion of the following tables is provided in Appendix 3.

Table 2. Change over time for risk factor groups, by Healthy Families NZ location, all Healthy Families NZ locations combined, and Rest of New Zealand.

Difference (Post - Pre)								
Location Name	Nutrition (Adult)	Nutrition (Child)	Activity	Physical Activity (Child)	weight		Tobacco	Alcohol
Far North	×	×	✓	\$	⇔	✓	⇔	✓
Waitakere	×	×	×	1)	×	×	✓	×
Manukau	⇔	×	⇔	1)	×	✓	✓	⇔
Manurewa-Papakura	✓	✓	⇔	✓	×	⇔	~	×
East Cape	×	⇔	*	✓	×	✓	✓	×
Rotorua	⇔	√	×	×	×	✓	⇔	*
Whanganui Rangitīkei Ruapehu	⇔	×	✓	✓	✓	⇔	✓	⇔
Lower Hutt	⇔	✓	⇔	✓	\$	\$	⇔	⇔
Spreydon-Heathcote	⇔	⇔	*	\$	~	⇔	⇔	⇔
Invercargill	×	×	⇔	\$	×	⇔	⇔	⇔
All 10 Healthy Families NZ locations combined	×	×	×	\$	×	⇔	✓	\$
Rest of New Zealand (areas outside Healthy Families NZ locations)	×	×	×	✓	×	✓	✓	×

Table 3. Change over time for risk factor groups compared to the Rest of New Zealand, by Healthy Families NZ location and all Healthy Families NZ locations combined.

Difference (Post - Pre)								
Location Name	Nutrition (Adult)	Nutrition (Child)	Activity	Physical Activity (Child)	weight		Tobacco	Alcohol
Far North	×	×	✓	\$	\$	✓	\$	✓
Waitakere	×	×	×	Û	×	×	~	×
Manukau	⇔	×	⇔	1)	×	✓	✓	\$
Manurewa-Papakura	✓	✓	⇔	✓	×	\$	✓	×
East Cape	×	û	*	✓	×	✓	~	*
Rotorua	⇔	✓	*	×	×	✓	⇔	\$
Whanganui Rangitīkei Ruapehu	⇔	×	~	✓	√	\$	✓	\$
Lower Hutt	\$	✓	⇔	✓	13	\$	\$	\$
Spreydon-Heathcote	⇔	\$	*	\$	✓	\$	≎	≎
Invercargill	×	×	⇔	0	×	0	\$	\$
All 10 Healthy Families NZ locations combined	*	×	×	\$	×	\$	✓	\$
Rest of New Zealand (areas outside Healthy Families NZ locations)	×	×	×	✓	æ	✓	✓	×

Table 4. Change over time in Māori/non-Māori inequalities for risk factor groups, by all Healthy Families NZ locations combined

Difference (Post - Pre)									
Location Name	Measure	Nutrition (Adult)	Nutrition (Child)	•	Physical Activity (Child)	weight	-	Tobacco	Alcohol
All 10 Healthy Families NZ locations combined, for Māori versus Non-Māori	Difference in Rate Ratio	⇔	⇔	⇔	⇔	√	×	×	\$
	Difference in Rate Difference	⇔	\$	\$	⇔	\$	√	✓	\$
Rest of New Zealand (areas outside Healthy Families NZ locations), for Māori versus Non-Māori	Difference in Rate Ratio	⇔	√	\$	⇔	√	×	×	\$
	Difference in Rate Difference	⇔	✓	\$	⇔	×	⇔	⇔	×

Table 5. Change over time in Māori/non-Māori inequalities for risk factor groups, compared to the Rest of New Zealand, by all Healthy Families NZ locations combined

Difference (Location vs Rest of NZ)									
Location Name	Measure	Nutrition (Adult)	Nutrition (Child)	-	Physical Activity (Child)	weight	_	Tobacco	Alcohol
All 10 Healthy Families NZ locations combined, for Māori versus Non-Māori	Difference in Rate Ratio	⇔	⇔	⇔	⇔	√	⇔	*	\$
	Difference in Rate Difference	⇔	*	⇔	⇔	√	√	✓	

Adult nutrition:

- Four Healthy Families NZ locations showed evidence of a worsening trend and one an improving trend in adult nutrition.
- After taking into account the worsening trend in the Rest of New Zealand, two Healthy Families
 NZ locations showed evidence of a worsening trend and two an improving trend.
- All Healthy Families NZ locations combined showed evidence of a worsening trend, however,
 there was no evidence that this was different to the worsening trend in the Rest of New Zealand.

Findings

- Where there was a worsening or improving trend, a decrease or increase in adequate vegetable intake was a consistent feature, for both Healthy Families NZ locations and all Healthy Families NZ locations combined.
- There was no evidence of change in both relative and absolute inequalities for Māori over time for all Healthy Families NZ locations combined, after taking into account the stable trends in the Rest of New Zealand.

Child nutrition:

- Five Healthy Families NZ locations showed evidence of a worsening trend and three an improving trend in child nutrition.
- After taking into account the worsening trend in the Rest of New Zealand, four Healthy
 Families NZ locations showed evidence of a worsening trend and four an improving trend.
- Where Healthy Families NZ locations showed a worsening or improving trend a decrease or increase in healthy teeth and gums among four-year-olds was a consistent feature.
- All Healthy Families NZ locations combined showed evidence of a worsening trend, and this
 trend was worse than the worsening trend in the Rest of New Zealand.
- There was no evidence of a change in relative inequalities for Māori over time in all Healthy Families NZ locations combined, after taking into account the improving trend in the Rest of New Zealand. However, there was at least some evidence that the stable trend in absolute inequalities for Māori in all Healthy Families NZ locations combined was poorer, after taking into account the improving trend in the Rest of New Zealand.

Adult physical activity:

- Four Healthy Families NZ locations showed a worsening trend and two an improving trend in child physical activity.
- After taking into account the worsening trend in the Rest of New Zealand, three Healthy
 Families NZ locations showed a worsening trend and three an improving trend.
- All Healthy Families NZ locations combined showed evidence of a worsening trend, and this
 trend was worse than the worsening trend in the Rest of New Zealand.
- There was no evidence of change in both relative and absolute inequalities for Māori over time
 in all Healthy Families NZ locations combined, after taking into account the stable trend in the
 Rest of New Zealand.

Child physical activity:

- Four Healthy Families NZ locations showed evidence of an improving trend and one a worsening trend in child physical activity.
- After taking into account the improving trend in the Rest of New Zealand, none of the Healthy
 Families NZ locations showed evidence an improving trend and three a worsening trend.
- All Healthy Families NZ locations combined showed no evidence of change, but there was
 evidence this stable trend was worse compared to the improving trend in Rest of New Zealand.
- Where there was a worsening trend this was driven by a decrease in active travel to school, while an improving trend was driven by a decrease in TV watching for over 2 hours daily, for individual Healthy Families NZ locations and all Healthy Families NZ locations combined.
- There was no evidence of change in both relative and absolute inequalities for Māori over time in all Healthy Families NZ locations combined, after taking into account the stable trend in the Rest of New Zealand.

Adult body weight:

- Six Healthy Families NZ locations showed evidence of a worsening trend and two an improving trend in adult obesity and overweight.
- After taking into account the worsening trend in the Rest of New Zealand, two Healthy Families
 NZ locations showed evidence of a worsening trend and three showed an improving trend.
- All Healthy Families NZ locations combined showed evidence of a worsening trend, and that this trend was worse than the worsening trend in the Rest of New Zealand.
- The worsening trend was for the most part due to an increase in obesity, while the improving trend was due to a decrease in overweight, for individual Healthy Families NZ locations and all Healthy Families NZ locations combined.
- There was at least some evidence of an improvement in relative inequalities for Māori over time in all Healthy Families NZ locations combined, after taking into account the improving trend in the Rest of New Zealand. Plus, there was at least some evidence of an improvement in absolute inequalities for Māori over time in all Healthy Families NZ locations combined, after taking into account the worsening trend in the Rest of New Zealand.

Child body weight:

 Four Healthy Families NZ locations showed evidence of an improving trend and one a worsening trend in child obesity and overweight.

- After taking into account the worsening trend in the Rest of New Zealand, two Healthy Families
 NZ locations showed a worsening and two showed an improvement.
- All Healthy Families NZ locations combined showed no evidence of change, or that this stable trend was different to the improving trend in the Rest of New Zealand.
- There was no evidence of a change in relative inequalities for Māori over time in all Healthy
 Families NZ locations combined, after taking into account the worsening trend in the Rest
 of New Zealand. However, there was at least some evidence of an improvement in absolute
 inequalities for Māori over time in all Healthy Families NZ locations combined, after taking into
 account the stable trend in the Rest of New Zealand.

Tobacco use and exposure:

- Five of the Healthy Families NZ locations showed evidence of an improving trend and none a worsening trend in tobacco use and exposure.
- After taking into account the improving trend in the Rest of New Zealand, four Healthy Families
 NZ locations showed evidence of an improving trend and none a worsening trend.
- All Healthy Families NZ locations combined showed evidence of an improving trend, and that this trend was better than the improving trend in the Rest of New Zealand.
- The improving trends were commonly driven by a decrease in postnatal maternal smoking, for individual Healthy Families NZ locations and all Healthy Families NZ locations combined.
- There was at least some evidence of worsening in relative inequalities for Māori over time in all Healthy Families NZ locations combined, after taking into account the worsening trend in the Rest of New Zealand. However, there was at least some evidence of improvement in absolute inequalities for Māori over time in all Healthy Families NZ locations combined, after taking into account the stable trend in the Rest of New Zealand.

Harmful alcohol use

- Three of the Healthy Families NZ locations showed evidence of a worsening trend and one an improving trend in harmful alcohol use.
- After taking into account the worsening trend in the Rest of New Zealand, one Healthy Families
 NZ location showed evidence of a worsening trend and two an improving trend.
- All Healthy Families NZ locations combined showed no evidence of change, but there was evidence that this stable trend was better than the worsening trend in Rest of New Zealand.

- The indicators that influenced improving and worsening trends were a decrease or increase in hospitalisations involving alcohol intoxication, and/or past-year drinkers respectively, for both Healthy Families NZ locations and all Healthy Families NZ locations combined.
- There was no evidence of change in relative inequalities for Māori over time in all Healthy
 Families NZ locations combined, after taking into account the stable trend in the Rest of New
 Zealand. Similarly, there was no evidence of change in absolute inequalities for Māori over
 time in all Healthy Families NZ locations combined, after taking into account the worsening
 trend in the Rest of New Zealand

ANSWERS TO THE EVALUATION QUESTIONS

This section brings together the main findings of all the analyses described in previous sections. Evaluation questions help to focus evaluation activities to key areas of interest regarding how an initiative is working and its impacts. The evaluation of Healthy Families NZ was guided during the first phase of data collection and analysis by a set of evaluation questions designed collaboratively in 2015 by the Ministry of Health's Healthy Families NZ team and colleagues across the Ministry, and the Massey University Evaluation team. Given developments of the Healthy Families NZ initiative since 2015, and the findings of the Interim Evaluation Report, there was a need to update the evaluation questions to ensure the correct focus of data collection and analysis for phase two of the evaluation.

The questions below build upon the original evaluation questions set in 2015. The process for revision and consultation included: 1) consultation with the Ministry of Health's Healthy Families NZ team and the Massey Evaluation team, 2) brainstorming and refining by the Massey Evaluation team given results of initial consultation, 3) consultation hui with a group of Ministry of Health stakeholders, 4) consultation hui with managers or staff from the majority of Healthy Families NZ locations, and 5) consultation hui with the evaluation Māori advisory group.

The key findings from a synthesis of the all the data collected and analyses are summarised below for each of the evaluation questions.

7 Evaluation Questions

7.1 Question One: How has Healthy Families NZ been implemented in each location?

It was clear that the initiative continues to be implemented with integrity to the design and principles of the initiative.

In all Healthy Families NZ locations, there were indications that serious thought has been given to prioritising Māori ownership and participation in activities and prioritising activities to positively impact equity.

During the two-year evaluation period (2015-2017) there has been a developing understanding across the Healthy Families NZ workforce and some community leaders of the actions necessary to

support prevention for health through systems change. There have also been numerous changes made in the approach taken across locations, reflecting the principles of experimentation and adaptation embedded within the initiative.

Progress has not been even across all Healthy Families NZ locations. Some locations experienced delays in recruiting staff, retaining staff, or establishing effective Strategic Leadership Groups. Factors associated with more positive outcomes are identified under questions nine, twelve, and reflected in the recommendations (section 8).

7.2 Question Two: How has the Te Tiriti o Waitangi been operationalised within planning and implementation in each Healthy Families NZ location?

The design and implementation of Healthy Families NZ has prioritised Māori ownership, partnership, and participation through: inclusion of equity as an operating principle; locating four of the nine Healthy Families NZ location teams within Māori led organisations; and a clear expectation from the Healthy Families NZ national team that mana whenua are included in Strategic Leadership Groups and activities carried out with Māori settings.

Of particular note is the prominence given to traditional Māori knowledge and practices to support health and guide collaborative activities of some Healthy Families NZ location teams.

Further strengthening engagement and partnership with iwi and other Māori leaders would enhance the work of some Healthy Families NZ locations and the national team.

7.3 Question Three: How has equity been addressed in planning and implementation of Healthy Families NZ in each location?

The design and setup of Healthy Families NZ emphasised equity and the prioritisation of Māori through the selection of locations, Lead Providers and the inclusion of equity as an underpinning principle.

Importance is increasingly placed on including and legitimising a diverse range of communities' perspectives within activities, supported by approaches such as co-design.

It was evident in all Healthy Families NZ locations that potential impact on equity was a consideration given when planning and prioritising activities, at times balanced by where opportunities presented themselves through willing collaborators.

Lead providers described an increased focus on equity, particularly identified for Regional Sports Trusts lead providers.

- 7.4 Question Four: How have Healthy Families NZ locations engaged and worked with prioritised settings? AND
- 7.5 Question Seven: Which approaches to working with settings across Healthy Families NZ locations have been successful?

Given their relatedness, questions four and seven are considered together here.

Working with settings (such as schools, workplaces or marae) is a key part in the design of Healthy Families NZ. While settings remain a focus for Healthy Families NZ teams, there has been an interesting shift from viewing working within settings as a focal point of activity, to influencing 'whole systems' of which settings are a part. The implication of this shift is to focus on supporting networks of practice across settings, or when a single setting is worked with it is for the purpose of trialling an activity and using this as a demonstration to others.

Positive ongoing engagement with settings is most often supported through relationships held within teams and by members of Strategic Leadership Groups. Working with settings through participatory co-design of activities appears important to gaining and maintaining engagement.

7.6 Questions Five: How have Healthy Families NZ locations prioritised areas and types of activity?

As stated under questions two and three, and with integrity to the design of Healthy Families NZ, it is clear that activities have been designed to ensure participation and collaboration with iwi, Māori settings and potential positive impact on equity when prioritising activities.

Understanding local communities' needs, priorities and opportunities – informed through local data and insights – have also been key when prioritising activities.

Activities given priority can be broken down into two groups across Healthy Families NZ locations: those focused on the chronic disease risk factors, and broader activities focused on strengthening the prevention system.

A common experience during 2017 was the need for most Healthy Families NZ locations to review the range of activities they were involved in and begin a process to refocus on a smaller number of activities with greater strategic importance.

7.7 Question Six: What has been the quality of Healthy Families NZ implementation in each location?⁷

For the purpose of this evaluation, quality of implementation has been defined as demonstrating practices informed by the Principles, and activities that consistently build capacity within the Building Blocks of a strong prevention system.

As stated under questions two and three, all Healthy Families NZ locations demonstrated consideration of equity and Te Tiriti o Waitangi in their prioritisation and planning, two principles prioritised as indicating quality implementation.

In relation to the Building Blocks of a strong prevention system, two Healthy Families NZ locations were categorised as having had consistent quality implementation of all Building Blocks, while one Healthy Families NZ location was categorised as having inconsistent quality implementation of all Building Blocks. All other Healthy Families NZ locations had a mixture of consistent quality and inconsistent implementation of the Building Blocks.

Leadership was the Building Block least often categorised as consistent quality, while Resources was most often identified as consistent quality across locations. Question nine considers how quality of implementation may contribute to a strengthened prevention system.

How well teams 'fit' within lead provider organisation appears to have been an enabling factor for Healthy Families NZ teams in most locations.

⁷ See Appendix 2 QCA for further detail of the categorisation process for quality

7.8 Question Eight: Has the prevention system in each Healthy Families NZ location been strengthened?8

We defined a prevention system as strengthened when there was evidence of organisations within the Healthy Families NZ location demonstrating a greater understanding and commitment to prevention (a paradigm shift towards prevention), and when there has been at least one example of policy changes, physical environment changes and new resources dedicated to prevention. Other aspects to consider relate to the Building Blocks of leadership and of relationships and networks.

Most key informants felt the prevention system had been strengthened through the activities of Healthy Families NZ.

Eight of the nine Healthy Families NZ locations could demonstrate that other organisations were showing greater understanding of prevention. This included how they could contribute to prevention and their willingness to change their organisational practices to promote health.

Five of the nine Healthy Families NZ locations could demonstrate increased capacity in Prevention Infrastructure, showing examples of policy changes, physical environment changes and new resources dedicated to prevention.

Five of the nine Healthy Families NZ locations demonstrated increased connection and collaboration between agencies within the location, while four of the locations demonstrated consistent leadership for prevention across partners.

Question nine considers possible contributions to the prevention system outcomes identified.

7.9 Question Nine: What has contributed to changes identified in the prevention system of each Healthy Families NZ Location?

Comparing across Healthy Families NZ locations, using both themes identified through key informant interviews and results from QCA, a number of factors appear to contribute to changes in prevention system being achieved or not.

Where the prevention system has been strengthened, this has often been despite (rather than because of) the way that government traditionally invests in communities and barriers that current

⁸ See appendix 2 on QCA for further detail

policies and regulations create. Collective action has often been supported through in-kind staff time across organisations, with financial resources more difficult to share. Existing contract processes (across many government departments) create competition for funding, which strains collaborative relationships, or restrict the activities that providers can do. There were system constraints evident on the ability of the teams to act on some local issues, such as availability of alcohol. Strong national level action is needed to facilitate community voice and action.

Legitimising Māori world views and approaches as well as other diverse local community perspectives has been important to achieving outcomes. Also important is the value-based design of Healthy Families NZ, including the Building Blocks and Principles, has helped focus on activities that contribute to a strengthened Prevention System.

When Healthy Families NZ locations show consistent quality implementation of three or more Building Blocks, positive Prevention System outcomes are also shown.

A period of disruption, such as major workforce changes or team restructure, is related to fewer positive changes in the Prevention System being identified.

Influence by Healthy Families NZ locations on Local Government in adopting changes in policy and practice to support health was a key driver of positive changes in Prevention System.

7.10 Question Ten: Has there been change in the chronic disease risk factors in Healthy Families NZ locations?

The long term aim for Healthy Families NZ is to prevent the risk factors of chronic disease, including impacting on the chronic disease risk factors of nutrition behaviours, physical activity behaviours, tobacco use and exposure, and harmful alcohol use. A set of indicators has been established as a possible framework for monitoring change, over time in these chronic disease risk factors, along with body weight.

To understand the context within which Healthy Families NZ locations are operating, changes in chronic disease risk factors prior to the start of Healthy Families NZ have been looked at compared to after mid-2015. As would be expected at this early stage of the initiative, there are no plausible links between the activities of Healthy Families NZ locations and changes in these chronic disease risk factors.

Across individual Healthy Families NZ locations, there were numerous changes observed in one or more chronic disease risk factors, including both improving and worsening trends. Tobacco use and exposure had the highest number of locations showing an improving trend, regardless of the trend in the Rest of New Zealand. Adult obesity and overweight had the highest number of locations showing a worsening trend.

When trends in the Rest of New Zealand are taken into account, both tobacco use and exposure and child nutrition had the highest number of Healthy Families NZ locations showing an improving trend. Child physical activity and child nutrition had the highest number of locations showing a worsening trend.

On balance, all Healthy Families NZ locations combined showed more worsening than improving trends in the chronic disease risk factors groups, when compared to the Rest of New Zealand. This highlights the potential value of the initiative within these locations.

While there has been worsening in adult obesity and overweight in all Healthy Families NZ locations combined for the total population, inequalities for Māori in adult obesity and overweight have improved after comparing to the Rest of New Zealand.

However, while there has been improvement in tobacco use and exposure in all Healthy Families NZ locations combined (and consistently in many of the Healthy Families NZ locations) for the total population, relative inequalities for Māori in tobacco use and exposure have worsened. This means gains in tobacco use reduction have not benefitted Māori as much as non-Māori.

The process of indicator development highlighted some of the limitations in New Zealand of the ability of routinely collected data to provide local community use and insight.

7.11 Question Eleven: Is Healthy Families NZ as a whole making a difference, including equity?

It is clear for most Healthy Families NZ locations, that the teams are making a difference in their communities through: the dedicated prevention resource provided by Healthy Families NZ teams; the technical expertise in systems and co-design approaches; and the support provided to those trying to improve health through prevention in communities.

Also evident is an increased capacity to apply traditional Māori concepts in design and delivery of health promoting activities and environments. This increased capacity is within Healthy Families NZ locations, but is also reaching wider as the teams look to work together and collaborate beyond regional boundaries.

The potential for movement to scale beyond Healthy Families NZ locations is shown through influencing leadership across a variety of organisations, many of which go beyond the geographical boundaries of Healthy Families NZ locations.

Healthy Families NZ is part of, and further influences, a wider move in public and community services to a systems change focus. Effort is still needed to ensure these approaches are not undermined by ineffective investment strategies.

Given the limited time Healthy Families NZ has been operating, it is too early to tell if Healthy Families NZ as a whole is making a difference to chronic disease risk factors.

7.12 Question Twelve: What implementation lessons have been learnt?

Eight overall themes were identified relating to both the design and implementation of Healthy Families NZ, and the wider context within which Healthy Families NZ operates. The identified themes are:

- To maintain and enhance adaptive local action to strengthen the prevention system we need
 continued purposeful action to involve Māori leadership and world views within the initiative,
 support for a systems thinking and acting workforce, flexibility of resources, commitment to
 strengthening local leadership and strengthening national leadership and support.
- Māori ownership and responsiveness has been a success with opportunities for continued strengthening.
- For those involved in Healthy Families NZ, there appears to have been a shift in understanding
 prevention from a systems thinking perspective, which can be built upon further for wider
 reaching change.
- More agencies are getting on the systems waka, both within health and across local and national organisations in other sectors.
- To support systems change approaches to prevention, current government investment strategies should be reviewed for their impact on collective goals.
- Enabling and amplifying diverse local perspectives has been a key way that equity is being addressed.
- An important component of the context within which health initiatives are introduced is the remaining influence of past initiatives and the history of the health sector itself.

Answers to Evaluation Questions

• Improving the management of administrative data, including local access, to enable local insights and better community advocacy is important to a systems change approach.

These themes directly relate to the evaluation recommendations (section 9).

SUMMARY CONCLUSION

8 Significant changes that have occurred in View 2

There has been significant evolution in the initiative. The overriding message from the case studies included within this evaluation is that the early implementation phase is complete for most locations and there is significant progress being made on system change actions.

There was a common view expressed that the initiative was just coming into its strides and had significant potential to meet its goals longer term. Since View 1 there has been substantial progress on developing a flexible systems-thinking-and-acting workforce which has been enabled through adaptive learning, flexible use of resources, professional development and a responsive national team. There has also been substantial progress in activating local leadership and empowering the Healthy Families NZ teams to become champions themselves, and to gain access other leaders and influencers.

Overall the initiative continues to be implemented with integrity to its design. In general, there are examples of a paradigm shift away from silo thinking and practices to focusing on relationships between settings, and the wider determinants of health.

There is also evidence of shift towards greater action on prevention and a widely held perception that the prevention system has been strengthened through the activities of Healthy Families NZ. There have been challenges within specific locations especially where multiple organisations have jointly taken on the Lead Provider role and where the shift to understanding systems change, as opposed to traditional programme delivery, has been slower.

View 2 has seen a deepening understanding of systems change occur. This growth in understanding was evident among the teams, but also shown more widely as other local and national organisations and agencies have been moving to systems-oriented approaches.

There has also been a continued prioritisation and emphasis on Māori ownership and participation, as well as on equity. Māori ownership has been actively supported whilst the systems approach of the initiative resonates strongly with Māori world views through its emphasis on connections and relationships, enabling greater Māori participation.

The strong focus on equity within the initiative has shed light on the need to enable and amplify diverse local perspectives on health issues and solutions. Locally relevant knowledge, data and stories of change were increasingly being gathered through engaging co-design methods. Data collected shows great motivation by the Healthy Families NZ teams to incorporate local insight to inform their actions. A challenge for locations however has been finding existing appropriate local-level quantitative data and information to use for community advocacy and to complement gathered local insights.

The relationship between the locations and the national Healthy Families NZ team continues to be constructive and responsive. Both the national team and the location teams have begun to influence the norms of the organisations they are located within. This influence includes encouraging greater appreciation of systems change as an approach; greater awareness of and action on the health consequences of their activities; a more explicit focus on equity; and the engagement of active and adaptive leadership across partners in the initiative.

There was a continuing strong focus on relationships and networks for collective action. In addition, the underpinning Principles of the initiative were seen as useful to guide action on systems change and provide a set of values which binds the intent of the initiative across locations, as well as resonating with other organisations. There has been significant investment in professional development to strengthen leadership and other methods for creating systems change such as co-design and local communications, however, there is opportunity to further strengthen these skills.

An important issue highlighted has been the impact of public health and social investment strategies for enabling action on collective goals. Our findings suggest that current government investment strategies are a barrier to greater community cooperation, adaptation and responsiveness. It is also useful to note here that community members and organisations are frequently more stable over time than the staff, and organisational structures of wider health and other public organisations. A compelling observation was the numerous barriers to communities acting on shared goals. Current health and social service investment strategies, for example, set community organisations up in competition with each other even when working towards the same goals.

The case studies showed that the moral and technical support provided by the Healthy Families NZ teams to other community organisations was considered invaluable highlighting this gap in existing support within the way that communities are organised.

Prevention is clearly in need of strengthening in New Zealand and there are some significant system barriers to addressing the risk factors for chronic diseases at both the community and national level. For example, in South Auckland poverty has only been increasing over the last decade, and the abundant resources going into the community have not been improving this. Addressing alcohol harms was particularly difficult for the teams because of the systems set up which disadvantaged community voice. Mental health was seen as an underlying and critically important issue within communities, but has to date been poorly addressed.

This evaluation offers a unique deep exploration of the Healthy Families NZ communities and their efforts to effect change over time. The evaluation to date provides direction for improvements in how the initiative should be implemented into the future and provides an opportunity to build further upon the quantitative and qualitative data, and indicators developed, to better understand how, and whether, systems change towards stronger prevention is occurring.

RECOMMENDATIONS

In this section we bring together all the components of the evaluation to highlight the opportunities and challenges for the Healthy Families NZ initiative. Sixteen recommendations are detailed below that we think will strengthen the impact the Healthy Families NZ initiative can have on the prevention of chronic disease.

- 9 Recommendations for improvement to the implementation of Healthy Families NZ:
- 9.1 Continued prioritisation and development of Māori ownership, partnerships and focus on equity

The systems focussed design, and the way Healthy Families NZ has been implemented, has enabled diverse cultural and contextual perspectives to be included, valued and utilised to underpin activities. The principles of Equity and Collaboration for Collective Impact have also supported the inclusion of diverse perspectives. A systems approach that values connections and relationships has been shown to resonate strongly with Māori world views enabling Māori participation. Having Māori led organisations as lead providers has supported approaches embedded within te ao Māori. However, the successes to date should be not taken for granted, and continued purposeful focus on inclusion of Māori within activities and leadership of Healthy Families NZ needs to be maintained and resourced.

- **Recommendation 1:** Continue prioritisation and purposeful focus on supporting and resourcing Māori ownership, participation and use of Māori world views within the initiative.
- **Recommendation 2:** Retain and strengthen the Principle of Equity as an underpinning value and goal of the initiative.

9.2 Scaling up Healthy Families NZ and removing system barriers

The 10 Healthy Families NZ locations have benefitted from the increased focus and resourcing on prevention and greater coordination of community action in pursuit of the shared goal of reducing the risk factors of chronic disease and improving equity. It is likely that other communities in New Zealand would also benefit from increased investment in coordination and collaborative prevention through the Healthy Families NZ approach.

Recommendation 3: Undertake a review to identify other regions that would benefit from increased investment in prevention through this approach.

While collaboration and collective action were increasing in locations, the current way government invests in communities through competitive and siloed service delivery contracts was highlighted as a significant barrier to effective collective action.

Recommendation 4: Review funding and contracting for health and social services and outcomes in communities to consider their impact on communities' ability to work towards shared goals – especially the impact on cooperation and trust.

There was a strong need expressed for better local contextual data and knowledge as well as improved measurement of systems change.

Recommendation 5: Review how health data and knowledge is managed and accessed to enable better insights into local community contexts and community advocacy.

Recommendation 6: Build upon the qualitative and quantitative indicator development within this evaluation to improve measurement of systems change.

While there were a number of encouraging activities and outcomes identified across Healthy Families NZ locations, it was also clear that there were system barriers to action on some issues which required wider national policy and regulatory actions to remove local constraints. The common example across Healthy Families NZ locations were the barriers encountered to reducing harm from alcohol.

Recommendation 7: Urgently consider barriers to community voice and action on the availability of alcohol.

9.3 The Healthy Families NZ locations

The Principles that underpin the initiative have been valuable to guide direction and activities of Healthy Families NZ teams. However, as the experience of implementing Healthy Families NZ develops, there would be value in reviewing the Principles to keep pace with practice.

Recommendation 8: The Principles should be reviewed in light of the growing sophistication in understanding the approach to systems change being taken across Healthy Families NZ.

Strategic Leadership Groups were seen as an important opportunity to connect up and promote activities within locations for greater impact, yet they were also commonly identified as not working to their full potential.

Recommendation 9: Conduct an in-depth review of what is working across Strategic Leadership Groups and opportunities to enhance practice and impact.

Professional development has been well supported to date, but there is opportunity for further professional development to support a systems thinking and acting workforce.

Recommendation 10: Continue to develop a suite of professional development opportunities to support use of a range of co-design and systems change methods and related skills.

It was clear that the ability to use operating surplus within locations was an important enabler of flexibility and adaptation within teams. Such a flexible mechanism needs to be maintained within the initiative.

Recommendation 11: Ensure flexibility remains in how Healthy Families NZ locations determine the workforce needed and enable employment of staff to fill particular skill gaps and identified needs, and provide tailored professional development.

Most Healthy Families NZ location teams have contracted in additional staff to support evaluation and communication. There is a strong argument for ensuring these skills are part of the expected mix of skills within teams. It was also clear that staff being able to operate at a strategic level across organisations, as well as engaging in deep and genuine community relationships, were key skills required.

Recommendation 12: Support strengthened use of strategic communications and evaluation as an integral part of the initiative by Healthy Families NZ location teams by building their capacity in these areas.

Recommendation 13: Ensure all Healthy Families NZ location teams have the right mix of skills, and are empowered, to carry out two functions that have been identified as important 1) work with leaders within organisations and communities to facilitate ongoing engagement and collective action; and 2) meaningfully engage members of the community to ensure diverse voices are included in identifying needs, opportunities and designing initiatives.

Mental health was identified as a major challenge facing communities and was related to all the risk factors for chronic disease.

Recommendation 14: Consider including mental health or wellbeing as a focus area for Healthy Families NZ locations.

For Healthy Families NZ locations where disruption to the initiative was related to the more difficult and disadvantaged community contexts, additional or differently configured implementation and resources may be required.

Recommendation 15 Reconsider the set-up of the initiative in locations where there are existing context challenges and limited evidence of impact to date.

Recommendation 16 In any changes to the initiative, ensure that the ability of the initiative to be adaptive and responsive to context and change in local and national circumstances is retained and enhanced.

9.4 The Healthy Families NZ national team

The national team within the Ministry of Health were identified as an important part of the initiative, enabling adaptations with locations and facilitating national level relationships. We consider the role of the national team can be strengthened to further lead engagement and collective action at the national level, amplify activities being undertaken by locations and respond to system barriers to action identified through the initiative.

Recommendations

Recommendation 17: Establishing a national level Strategic Leadership Group, similar to locations, that could bring in wide perspectives and spheres of influence to support the national team and the initiative, including strong Māori leadership.

Recommendation 18: Strengthen the ability of the Healthy Families NZ national team within the Ministry of Health, to support local level change through acting on national level barriers.

10 References

- 1. Salway S, Green J. Towards a critical complex systems approach to public health. *Critical Public Health* 2017;27(5):523-24. doi: 10.1080/09581596.2017.1368249
- Signal LN, Walton MD, Ni Mhurchu C, et al. Tackling 'wicked' health promotion problems: a New Zealand case study. *Health Promotion International* 2012 doi: DOI:10.1093/heapro/das006
- 3. Tremblay M-C, Richard L. Complexity: a potential paradigm for a health promotion discipline. Health Promotion International 2011 doi: DOI: 10.1093/heapro/dar054
- 4. Sharma SR, Matheson A. Systems thinking in 21st century: a call to health promoters. *Health Prospect* 2016;15(2) doi: dx.doi.org/10.3126/hprospect.v15i2.15810
- 5. Hawe P. Lessons from Complex Interventions to Improve Health. *Annual Review of Public Health* 2015;36(1):307-23. doi: doi:10.1146/annurev-publhealth-031912-114421
- 6. Braithwaite J. Changing how we think about healthcare improvement. *British Medical Journal* 2018;361:k2014
- 7. Greenhalgh T, Papoutsi C. Studying complexity in health services research: desperately seeking an overdue paradigm shift. *BMC Medicine* 2018;16(95)
- 8. Matheson A, Bourke C, Verhoeven A, et al. Lowering the walls of hospitals to acheive health equity. *The BMJ* 2018 in press
- 9. Jayasinghe S. Social determinants of health inequalities: towards a theoretical perspective using systems science. *International Journal for Equity in Health* 2015;14:71. doi: 10.1186/s12939-015-0205-8
- 10. Lee BY, Bartsch SM, Mui Y, et al. A systems approach to obesity. *Nutrition Reviews* 2017;75(suppl_1):94-106. doi: 10.1093/nutrit/nuw049
- 11. Loyo HK, Batcher C, Wile K, et al. From Model to Action: Using a System Dynamics Model of Chronic Disease Risks to Align Community Action. *Health Promotion Practice* 2013;14(1):53-61.
- 12. Siokou C, Morgan R, Shiell A. Group model building: a participatory approach to understanding and acting on systems. *Public Health Research & Practice* 2014;25(1)
- 13. Foote JL, Gregor JE, Hepil MC, et al. Systemic Problem Structuring Applied to Community Involvement in Water Conservation. *The Journal of the Operational Research Society* 2007;58(5):645-54.

- 14. Signal LN, Walton MD, Ni Mhurchu C, et al. Tackling 'wicked' health promotion problems: a New Zealand case study. *Health Promotion International* 2013;28(1):84-94. doi: 10.1093/ heapro/das006
- 15. Rutter H, Savona N, Glonti K, et al. The need for a complex systems model of evidence for public health. *The Lancet* 2017 doi: 10.1016/S0140-6736(17)31267-9
- 16. Shiell A, Hawe P, Gold L. Complex interventions or complex systems? Implications for health economic evaluation. *BMJ* 2008;336(7656):1281-83. doi: 10.1136/bmj.39569.510521.AD
- 17. Eppel E, Matheson A, Walton M. Applying complexity theory to New Zealand public policy: Principles for practice. *Policy Quarterly* 2011;7(1):48-55.
- 18. Matheson A. Reducing social inequalities in obesity: complexity and power relationships. *Journal of Public Health* 2016;38(4):826-29. doi: 10.1093/pubmed/fdv197
- 19. Foresight. Tackling obesities: Future choices project report. 2nd ed. London, UK: Government Office for Science, 2007.
- McKinsey Global Institute. Overcoming obesity: An initial economic analysis: McKinsey & Company, 2014.
- 21. Gluckman P, Nishtar S, Armstrong T. Ending childhood obesity: A multidimensional challenge. *The Lancet* 2015;385:1048-50.
- 22. Judge K, Bauld L. Learning from policy failure? Health Action Zones in England. *European Journal of Public Health* 2006;16(4):341-44.
- 23. De Leeuw E. Evidence for Healthy Cities: reflections on practice, method and theory. *Health Promotion International* 2009;24(S1)
- 24. Galea G, Powis B, Tamplin S. Healthy Islands in the Western Pacific international settings development. *Health Promotion International* 2000;15(2)
- 25. Stafford M, Badland H, Nazroo J, et al. Evaluating the health inequalities impact of areabased initiatives across the socioeconomic spectrum: a controlled intervention study of the New Deal for Communities, 2002–2008 *Journal of Epidemiology and Community Health* 2014;68:979–86.
- 26. Cheadle A, Bourcier E, Krieger J, et al. The Impact of a Community-Based Chronic Disease

 Prevention Initiative: Evaluation Findings From Steps to Health King County. *Health Education*& Behavior 2011;38(3)

- 27. Petticrew M, Anderson L, Elder R, et al. Complex interventions and their implications for systematic reviews: A pragmatic approach. Journal of Clinical Epidemiology 2013;66(11):1209-14. doi: 10.1016/j.jclinepi.2013.06.004
- 28. Hawe P, A. S, Riley T. Theorising Interventions as Events in Systems. *American Journal of Community Psychology* 2009;43:267-76.
- 29. Walton M. Applying complexity theory: A review to inform evaluation design.

 Evaluation and Program Planning 2014;45(0):119-26. doi: http://dx.doi.org/10.1016/j.evalprogplan.2014.04.002
- 30. Rickles D. Causality in complex interventions. *Medicine, Health Care and Philosophy* 2009;12(1):77-90.
- 31. Matheson A, Dew K, Cumming J. Complexity, evaluation and the effectiveness of community-based interventions to reduce health inequalities. *Health Promotion Journal of Australia* 2009;20(3):221-26.
- 32. Orton L, Halliday E, Collins M, et al. Putting context centre stage: evidence from a systems evaluation of an area based empowerment initiative in England. *Critical Public Health* 2017;27(4):477-89. doi: 10.1080/09581596.2016.1250868
- 33. Office of the Minister of Health. Healthy Families NZ. In: Committee CB, ed. Wellington: New Zealand Parliament, 2013.
- 34. Patton MQ. Developmental Evaluation: Applying complexity concepts to enhance innovation and use. New York: The Guilford Press 2011.
- 35. Byrne D. Evaluating complex social interventions in a complex world. *Evaluation* 2013;19(3):217-28. doi: 10.1177/1356389013495617
- 36. Blackman T, Wistow J, Byrne D. Using Qualitative Comparative Analysis to understand complex policy problems. *Evaluation* 2013;19(2):126-40.
- 37. Warren J, Wistow J, Bambra C. Applying Qualitative Comparative Analysis (QCA) to evaluate a public health policy initiative in the North East of England. *Policy and Society* 2013;32(4):289-301.
- 38. Verweij S, Gerrits LM. Understanding and researching complexity with Qualitative Comparative Analysis: Evaluating transportation infrastructure projects. *Evaluation* 2013;19(1):40-55. doi: 10.1177/1356389012470682
- 39. Patton MQ. Qualitative research and evaluation methods. (3rd ed.) Thousand Oaks, CA: Sage 2002.

- 40. Warren J, Wistow J, Bambra C. Applying qualitative comparative analysis (QCA) in public health: a case study of a health improvement service for long-term incapacity benefit recipients.

 Journal of Public Health 2013 doi: 10.1093/pubmed/fdt047
- 41. Blackman T, Wistow J, Byrne D. A Qualitative Comparative Analysis of factors associated with trends in narrowing health inequalities in England. *Social Science and Medicine* 2011;72(12):1965-74.
- 42. Rihoux B, Lobe B. The Case for Qualitative Comparative Analysis (QCA): Adding Leverage for Thick Cross-Case Comparison. In: Byrne D, Ragin CC, eds. The SAGE Handbook of Case-Based Methods. London: SAGE 2009:222-42.
- 43. Rihoux B, Marx A, Ragin CC, et al. QCA, 25 Years after "The Comparative Method": Mapping, Challenges, and Innovations-Mini-Symposium. *Political Research Quarterly* 2013;66(1):167-235.
- 44. Randerson S, Casswell S, Huckle T. Changes in New Zealand's alcohol environment following implementation of the Sale and Supply of Alcohol Act (2012). *New Zealand Medical Journal* 2018;131(1476)
- 45. Knight AD, Lowe T, Bossard M, et al. A whole new world: Funding and commussioning in complexity. Newcastle: Collaborate for social change, 2017.
- 46. Ministry of Health. New Zealand Healthy Survey 2011/12. Wellington: Ministry of Health 2012

11 Appendices

The following appendices accompanying this report are collated in the attached separate document entitled "Appendices for the Healthy Families NZ Summative Evaluation Report, 2018"

- Appendix 1 National perspective and Healthy Families NZ location case summaries
- Appendix 2 Qualitative Comparative Analysis and definition of conditions used in QCA
- Appendix 3 Monitoring chronic disease risk factors
- Appendix 4 An introduction to Healthy Families NZ: Māori approach