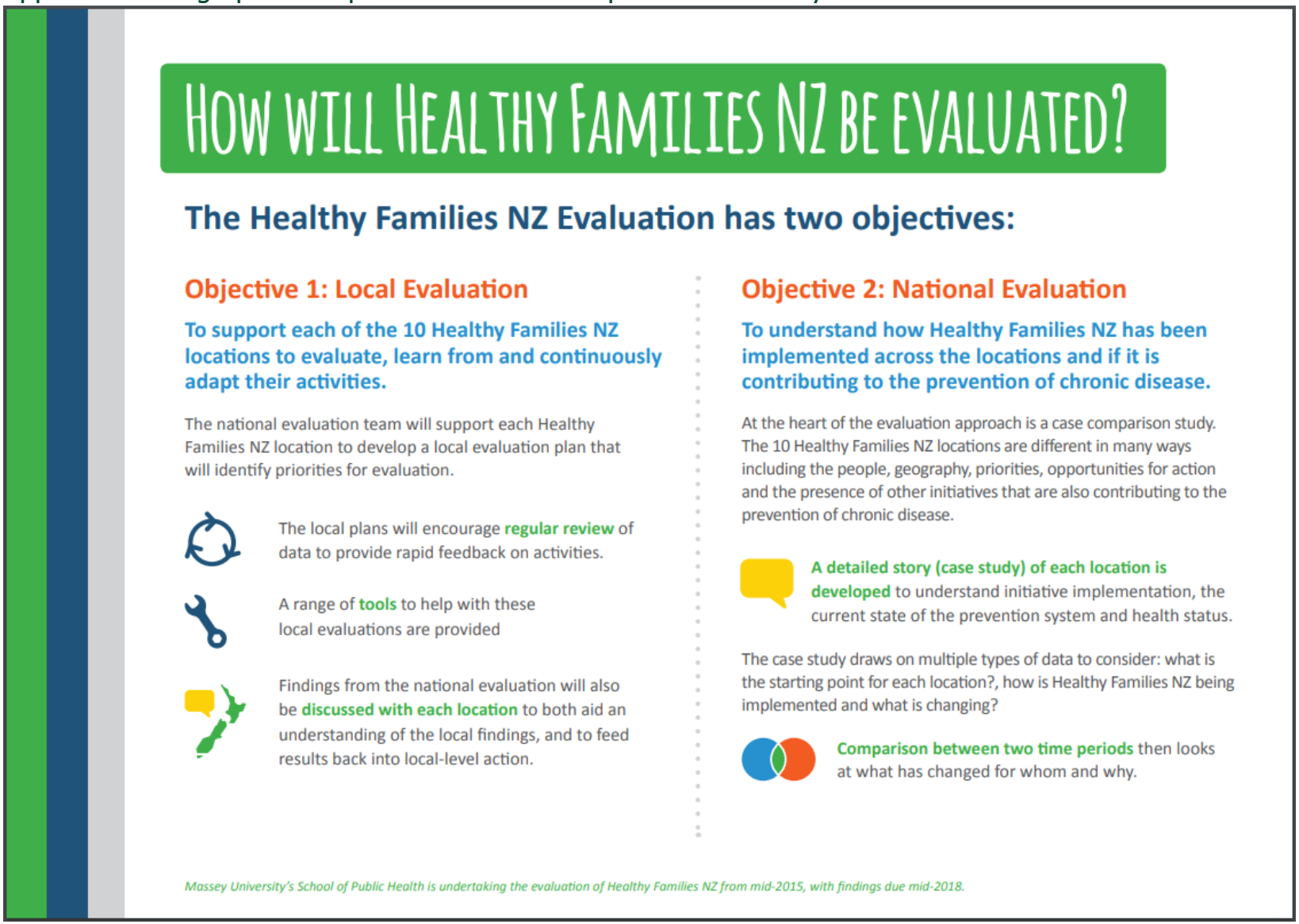
Appendices

Contents

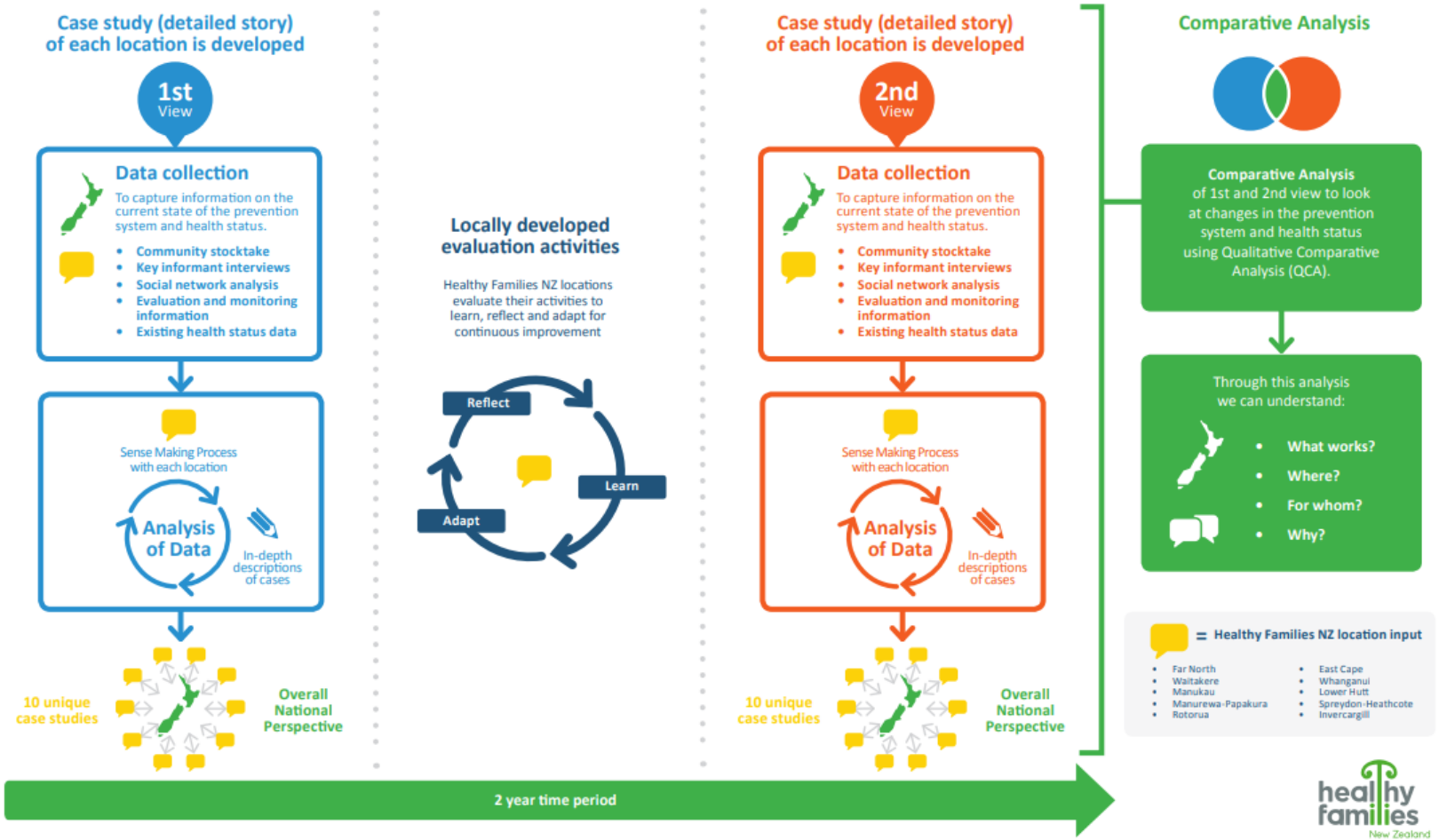
Appendix 1 Infographics for previous and current phases of Healthy Families NZ evaluation



EVALUATION DESIGN

Is Healthy Families NZ contributing to better health and wellbeing for the people in our communities?

Te Tiriti o Waitangi informs the approach to evaluation: He tangata, he tangata, he tangata



HOW WILL HEALTHY FAMILIES NZ BE EVALUATED?

View 3 (to 2022) comparative local case studies

Case studies for each of the 9 Healthy Families NZ locations.
Case studies will draw on multiple types of data to show a detailed story of:

- how the initiative has been implemented, and
- what has changed, for whom and why.

Comparative analysis (including qualitative and indicator analyses) will identify what is helping or hindering success in different contexts. A cost-consequence analysis will show evidence for return on investment.

Final reporting (mid-2022) will describe impacts on the prevention system and lessons learned from Healthy Families NZ implementation.

What is Healthy Families NZ?

a large-scale initiative that brings together community leadership in a united effort for better health

What are we looking at?

For each Healthy Families NZ location:

- Quality of implementation
- Strengthening the prevention system
- Factors contributing to change
- Change in health and wellbeing
- Making a difference to Māori health and equity
- Relationship between initiative costs and consequences

Where is it being implemented?

- Far North
- Waitakere
- South Auckland
- Rotorua
- East Cape
- Whanganui Rangitīkei Ruapehu
- Hutt Valley
- Christchurch
- Invercargill

EVALUATION DESIGN

Is Healthy Families NZ strengthening the prevention system to improve health and wellbeing?

VICTORIA UNIVERSITY OF WELLINGTON TE HERENGA WAKA

View 3

Data collected by evaluation team

- Location context
- National context
- Cost data
- Stakeholder survey
- Qualitative interviews
- Quantitative health/wellbeing statistics

Data provided by location teams

- Outcome stories showing changes achieved

Analysis of Data

9 community case studies + 1 national case study

Comparative Analysis

Define prevention system and measures

Case comparison

- Qualitative Comparative Analysis (QCA)
  - rich analysis
  - indicator analysis
- Cost-consequence analysis

Through this analysis we can understand:

- What works?
- Where?
- For whom?
- Why?
- How the prevention system has been influenced
- Whether the initiative shows value for money

2014 - 2018

2018 - 2022

Appendix 2 Te Pae Māhutonga[1]

Te Pae Māhutonga is based on the Southern Cross constellation and developed by Professor Sir Mason Durie (1999). The model identifies four key tasks (representing the stars) as needed to promote health in communities:

- Mauriora (cultural identity)
- Waiora (physical environment)
- Toiora (healthy lifestyles)
- Te Oranga (participation in society)

Two pointer stars represent Ngā Manukura (community leadership) and Te Mana Whakahaere (autonomy).

These three models of Māori health have a strong whakapapa Māori, developed by two distinguished Māori scholars Professor Sir Mason Durie and Dr Rose Pere and high levels of credibility in te ao Māori and te ao hauora tauiwi (Public health). Based on our analysis, feedback from people associated with Healthy Families NZ and the findings of our literature review, it was evident that participation in society, community leadership and autonomy are very important factors in a prevention system; and one that is able to change to meet the needs of those most affected by health inequities. We therefore decided to use Te Pae Māhutonga as a framework or framing lens to ensure indicators reflected a te ao Māori, indigeneity and Te Tiriti perspective.

Mauriora: Access to Te Ao Māori

Mauriora rests on a secure cultural identity. Good health depends on many factors, but among indigenous peoples the world over, cultural identity is considered to be a critical prerequisite. Deculturation has been associated with poor health, whereas acculturation has been linked to good health. A goal of health promotion therefore is to promote security of identity, and in turn access to te ao Māori.

In addition, there are also reduced opportunities for cultural expression and cultural endorsement within society's institutions. Too many are unable to have meaningful contact with their own language, customs, or inheritance. And too few institutions in modern New Zealand are geared towards the expression of Māori values let alone language.

Identity means little if it depends only on a sense of belonging without actually sharing the group's cultural, social and economic resources. In the context of the Healthy Families NZ evaluation indicators, Mauriora directs us to indicators that facilitate access to Te Ao Māori:

- access to language and knowledge

[1] This detailed description for this Te Pae Māhutonga section, is sourced from a 1999 paper by Professor Sir Mason Durie - D, Mason (1999), 'Te Pae Ma¯hutonga: a model for Ma¯ori health promotion', Health Promotion Forum of New Zealand Newsletter 49.)

- access to culture and cultural institutions such as marae
- access to Māori economic resources such as land, forests, fisheries
- access to social resources such as whānau, Māori services, networks
- access to societal domains where being Māori is facilitated not hindered.

Waiora: Environmental Protection

Waiora is linked to the external world and to a spiritual element that connects human wellness with cosmic, terrestrial and water environments. Good health is difficult to achieve if there is environmental pollution; or contaminated water supplies, or smog which blocks out the sun's rays, or a night sky distorted by neon lighting, or earth which is hidden by concrete slabs, or the jangle of steel which obliterates the sound of birds. Something is lost when the spiritual connection between people and the environment is felt second hand through a television screen or via a computer simulation.

Health promotion must consider the nature and quality of the interaction between people and the surrounding environment. It is not simply a call for a return to nature, but an attempt to strike balance between development and environmental protection and recognition of the fact that the human condition is intimately connected to the wider domains of Rangi and Papa.

In the context of the Health Families NZ evaluation indicators, Waiora directs us to indicators that are about harmonising people with their environments and protecting the environment:

- water is free from pollutants
- air can be breathed without fear of inhaling irritants or toxins
- earth is abundant in vegetation
- noise levels are compatible human frequencies and harmonies
- opportunities are created for people to experience the natural environment.

Toiora: Healthy Lifestyles

Major threats to health come from the risks that threaten health and safety and have the capacity to distort human experience. Risk-laden lifestyles have well-known and largely preventable consequences. Risks can be found in the patterns of nutritional intake, the use of alcohol and drugs, unsafe roadway practices (seatbelts, helmets), tobacco use, disregard for the safety of others, unprotected sex, sedentary habits, reckless spending, and the use of unsound machinery, including motor vehicles.

Protection from injury, self-harm, and illness are major challenges facing health promoters. Too many Māori, young and old, are trapped in risk-laden lifestyles and as a consequence will never be able to fully realise their potential. The loss to Māori wealth, and to the wealth of the nation is correspondingly high. Further, entrapment in lifestyles which lead to poor health and risk taking is so closely intertwined with poverty traps and deculturation that

macro-solutions become as important, if not more important, than targeted interventions at individual or community levels.

Nor does it help to have mixed messages broadcast - with Government blessing. It makes little sense for example to discourage risky alcohol habits among youth if the laws of the land increase the number of alcohol outlets and lower the drinking age. Nor do confused laws regarding alcohol advertising make sense: discouraging alcohol use on the one hand and marketing alcohol products on the other.

Toiora depends on personal behaviour. But it would be an oversimplification to suggest that everyone has the same degree of choice regarding the avoidance of risks.

- Risks are highest where poverty is greatest.
- Risks are high where risk-taking behaviour is the norm within a whānau or community.
- Risks are more pronounced in populations which are youthful.
- Risks are increased if risk-taking behaviour is condoned or implicitly encouraged.

In the context of the Health Families NZ evaluation indicators, Toiora directs us to indicators that demonstrate a shift from harmful lifestyles to healthy lifestyles, often requiring actions at several levels and include:

- Harm minimisation
- Targeted interventions
- Risk management
- Cultural relevance
- Positive development.

Te Oranga: Participation in Society

It is now well recognised that health promotion cannot be separated from the socioeconomic circumstances. Wellbeing is not only about a secure cultural identity, or an intact environment, or even about the avoidance of risks. It is also about the goods and services which people can count on, and the voice they have in deciding the way in which those goods and services are made available. In short, wellbeing, Te Oranga, is dependent on the terms under which people participate in society and on the confidence with which they can access good health services, or the school of their choice, or sport and recreation. And while access is one issue, decision-making and a sense of ownership is another. There is abundant evidence that Māori participation in the wider society falls considerably short of the standards of a fair society. Disparities between Māori and non-Māori are well enough documented and confirm gaps on almost every social indicator. Worse still, the gaps are growing in several key result areas. Strengthening Families and Family Start may go some way to compensating for handicaps at the start of life. But the immediate reality is that Māori tend to lie up on the side of the poor, the homeless, and the powerless. Good health

will not be attained where there are policies which lead to unemployment or diminished access to education.

It is likely that this state of affairs will assume even greater national significance as demographic patterns change and the Māori proportion of society increases. Currently Māori account for around 15% but within three to four decades that proportion is likely to increase to around 25%.

In the context of the Health Families New Zealand evaluation indicators, *Te Oranga* directs us to indicators that enhance the levels of wellbeing, Te Oranga, by increasing the extent of Māori participation in society:

- participation in the economy
- participation in education
- participation in employment
- participation in the knowledge society
- participation in decision making.

Health promotion is not the province of any one group nor is there a simple formula which can always be applied. But if it is to be effective there are two important prerequisites, Ngā Manukura (leadership) and Te Mana Whakahaere (autonomy).

Ngā Manukura: Leadership

Leadership in health promotion should reflect a combination of skills and a range of influences. Regardless of technical or professional qualifications, unless there is local leadership it is unlikely that a health promotional effort will take shape or bear fruit. Health professionals have important roles to play but cannot replace the leadership which exists in communities; nor should they. Moreover, given the nature of health promotion and the several dimensions which must be considered, there must be some co-ordination of effort. Health promotional leadership will be more effective if a relational approach is fostered and alliances are established between groups who are able to bring diverse contributions to health promotional programmes. No single group has enough expertise to encompass the range of skills and linkages necessary for effecting change. Often most progress will be made simply by bringing the leaders together. In health promotion there is no place for rigid sectoral boundaries, or institutional capture, or isolated initiative.

Health promotional workers form an important part of the leadership network but there is a relative lack of skilled and well-informed workers available. The number of health professionals in a community is not a good measure of the health promotional workforce since most health professionals are working in the field of treatment and do not have the time - or necessarily the skills - to actively promote good health.

The Health Promotion forum has contributed in a huge way to the development of a health promotional workforce but if the aim is to have a least one worker for every active marae in the county, and one worker for every community of 3000 people, then much remains to be done. The skills required for health promotion are quite different from those required for

personal treatment services. Importantly, health promotional workers must be able to establish working alliances with a range of community and professional leaders. Moreover, they must be able to relate to communities in terms which make sense to those communities. Sometimes cultural barriers will reduce the effectiveness of campaigns; sometimes differences in socio-economic status will impose barriers. And always the language used and the idiom with which messages are expressed will be a key factor.

In the context of the Health Families New Zealand evaluation indicators, *Ngā Manukura* directs us to indicators that reflect:

- community leadership
- health leadership
- tribal leadership
- communication
- alliances between leaders and groups.

Te Mana Whakahaere: Autonomy

No matter how dedicated and expertly delivered, health promotional programmes will make little headway if they operate in a legislative and policy environment which is the antithesis of health, or if programmes are imposed with little sense of community ownership or control. Good health cannot be prescribed. Communities - whether they be based on hapū, marae, iwi, whānau or places of residence - must ultimately be able to demonstrate a level of autonomy and self-determination in promoting their own health. It is important therefore that health workers do not assume such a high level of leadership that community autonomy is unwittingly undermined.

Autonomy is reflected in the participation people have in health promotion and their control over it. Autonomy is also evident in the unique aspirations of a community. While official priorities might be at one level, quite different priorities might be contained in the aspirations of a marae, or local community. And it goes without saying that the processes adopted in health promotion - the way in which it is done - should make sense to a particular community. No point in running an elaborate health campaign if it is couched in a language or a style that bypasses local custom. Further, in evaluating the success of a campaign, it is important that the indicators used, the measures, are relevant to the group in question.

The capacity for self-governance, not only for a specific health promotional programme but more importantly for the affairs and destinies of a group, are central to notions of good health and positive wellbeing. Self-governance should exist at several levels-local, marae, hapū, iwi and at national levels. It does not necessarily mean separatism or total independence - indeed collaboration and alliances are critical in a small country such as New Zealand - but it does mean a capacity to organise and assert a measure of control over future development. To the extent that self-governance is only occasionally realised, then opportunities for good health are correspondingly limited.

In the context of the Health Families New Zealand evaluation indicators, Te Mana Whakahaere: directs us to indicators that promote autonomy:

- control
- recognition of aspirations
- relevant processes
- sensible measures
- self-governance.

Original Te Pae Māhutonga Indicators

The original Te Pae Māhutonga indicators developed for each star and pointer stars are outlined below.

1. Mauri Ora: Access to Te Ao Māori

- access to language and knowledge
- access to culture and cultural institutions such as marae
- access to Māori economic resources such as land, forests, fisheries
- access to social resources such as whānau, Māori services, networks
- access to societal domains where being Māori is facilitated not hindered.

2. Waiora: Environmental protection

- water free from pollutants
- clean air
- earth abundant in vegetation
- healthy noise levels
- opportunities to experience the natural environment.

3. Toiora: Healthy lifestyles

- harm minimisation
- targeted interventions
- risk management
- cultural relevance
- positive development.

4. Te Oranga: Participation

- in the economy
- in education
- in employment
- in the knowledge society

- in decision making.

5. Ngā Manukura: Leadership

- community leadership
- health leadership
- tribal leadership
- communication
- alliances between leaders and groups.

6. Te Mana Whakahaere: Autonomy

- control
- recognition of group aspirations
- relevant processes
- sensible measures and indicators
- the capacity for self-governance.

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Appendix 4 Definitions of prevention system, from comparison of literature review and interview findings summaries

We summarised the literature and interview data into themes describing what a "New Zealand prevention system" could be expected to include. We then listed groupings of themes alongside Meadows' list of levers. The themes under which we listed the components starting at those that align with lever 1 (paradigms) are set out below.

1. Norms, beliefs and values (looking at the values and beliefs which shape the system and people's support for action to change it)
2. System goals (looking at priorities, power and goal sharing)
3. System structure (particularly connections and sustainability)
4. Rules and incentives (policy, regulation, practices and how prevention can be incentivised)
5. Information/access (particularly the kind of information that is used and valued, how it is shared, how it informs action)
6. Feedback and influencing relationships (a key focus of Healthy Families NZ: relationships, collaborations and enabling of leadership and influence)
7. Material influence (resources in environments and organisations)
8. Buffers
9. Numbers and counts (data, some changeable some not, that contextualise and can indicate change resulting from, health initiatives)

After drafting the framework under the themes listed above, we then considered more concise frameworks that draw on the work of Meadows and others, and how these broader groupings could apply to our listed factors. Informed by the work of authors who have adapted Meadows' framework to analyse food systems, we then divided the framework into several sections under more concise definitions. In these authors' versions, the 12 levers have been collapsed into five main areas: Paradigms, Goals, System Structure, Feedback and Delays, and Structural Elements (Malhi et al., 2009).

Others working on food system intervention points have also used Meadows framework, mapping three themes onto it (Purpose and Values; Interconnections and System Regulations; and Actors and Elements) (McIsaac et al., 2019). Similarly, during the current phase of Healthy Families NZ some location teams have adopted a framework called the Waters of Systems Change, which was based on Meadows' as well as several other subsequent systems thinkers' work. This framework lists six conditions for systems change: one for transformative change ("Mental Models"), two for Relational Change ("Relationships and Connections" and "Power Dynamics") and three for structural change ("Policies", Practices" and "Resource Flows") (Kania, Kramer, & Senge, 2018).
On balance and after weighing up the respective framework and considerations around utility we have decided to use four headings to summarise the information we have collected. These are:

1. Paradigms, values and goals
2. System structure, regulation and interconnection
3. Information, feedback and relationships
4. Structural resources, elements and actors.

Summary of findings and suggested definition of prevention system

Basis of systems-thinking evaluation	**Basis of current location teams' analyses**	**Themes from literature review**	**Themes from interviews**	**Summary of the columns to the left**
Meadows' 12 intervention points	6 Conditions of Systems Change	Prevention system factors, from referenced frameworks	Measures to address interview themes regarding NZ prevention system	Suggested definitions of the NZ prevention system
1,2 Paradigms: knowing they exist	Mental models	Systems thinking ideas: Complex systems paradigm Commitment to holism"; reflexivity Culture-centred Community norms and support for prevention Making health a shared value Health equity paradigm System norms -Assumptions about why things are done the way they are, and values	Norms Shifts in mindset towards prevention	Values (shifting towards health, equity, holistic/ interconnected responsibilities, valuing the local perspective, indigenous worldview shaping the system) Support for prevention (evident at community, government and commercial levels) Social norms and the culture underpinning them

		(local perspectives – using local methods and focus)		
3 Goals: what the system does, despite intent		Whole of society goals/ community goals Relationship between systems, shared goals, between social levels	Structural change: policy and who has power to change it More parts of the system addressing poverty/ inequity Evidence for the commercial determinants of health being addressed – likely through regulatory change Policy systems becoming more responsive to local needs	Priorities (Pivot from commercial interests/ economic growth as a default, towards equality, community health and wellbeing) Systemic change (policy, regulation and increased sharing of the power to change these/ explicit consideration of power as part of understanding systems) Shared goals between different systems (towards equity and wellbeing)
4 Structure of the system: Self-organisation – ability to evolve	Relationships – quality of connections Power dynamics	Structure: how levels of the system work together Sustainability Adaptation Knowledge translation	Collaboration (cross-sector, local and national, community-led) Greater alignment of resources between organisations	A well-connected system (multi-level, cross-sector collaboration with resources, goals, understandings)

		Power and decision-making Relationships Resources: investment, mobilisation Multi-sector collaboration		Ability to evolve and adapt Sustainable structures that support prevention (i.e. are able to continue despite changes in organisations, personnel, governments. Things set up with consideration for longer timeframes and future sustainability)
5 Rules: incentives, punishments and constraints		Policy system: funders, services Regulatory change, and who has the ability to influence it Incentivising prevention focus Contracts and organisational practice	Evidence for actors within the system being more joined up to address systemic issues increases in incentives to focus on prevention	A funding system that incentivises prevention, wellbeing focus (for health and all other sectors), and longer-term planning Regulations, organisational practices and agreements (contracts) that support prevention (and enforcement of these)
6 Information flows: the structure of	Resource flows including	Community engagement	Improvement in access to health-promoting	Community voice and knowledge (showing that

who has access to information	Infrastructure and how evidence, information, people and money are distributed	and collaboration Information systems/ knowledge and data/ learning and planning	facilities and services Community voice in prevention policy development Increase in organisational use of matauranga, and in collaborations to teach ways of using the knowledge	this is valued by decision-makers/ that communities are decision-makers) Indigenous knowledge and values (incorporated into planning and practice) Evidence informing action (and vice versa – reflexive, adaptive use of information to plan actions - developmental evaluation principle) Strong information, communication and delivery systems (information and resources getting to the people who need it)
7,8 Feedback loops – reinforcing, adaptive **9 Delays – response times**	Practices Policies	System interdependencies Governance Changes in settings and environments	Organisational relationships Non-health organisations promoting health through their practices, partnerships or	Contracting (timeliness and responsiveness; including feedback that enables adaptation) Policy process (responsive to local priorities,

		Policy response to local knowledge Resource mobilization, contracts	organisational goals Evidence of Heathy Families NZ teams leveraging influence to promote community priorities	including non-health organisations in prevention goals) Local perspective influencing policy process Relationship between local and national policy in key (community health-related) areas
10 Material stocks and flows: physical system, actors		Leadership: who has authority to make change	Healthy environment change Emergence of champions Infrastructure improvements	Environments that encourage health Local prevention infrastructure Organisational entities Leadership: sharing of authority to make changes; emergence of champions for health and prevention (local and national, cross-sector)
11 Buffers		Environments? The existence of enough resources/ allowance for need?		Contingency planning for changing circumstances – enough resources, enough flexibility

12 Parameters, numbers, constants		Data showing change? Participation? Budget allocation?		Data showing change Participation/ access/ behaviour Budget allocation Workforce (quantity, stability, quality/ systems thinking and acting)

Appendix 5 Indicators and their alignment with prevention system framework

Indicator Type	Indicator Description	Alignment with Prevention System Framework
Prevention System Outcome Indicators (Tier 1) Used as outcome conditions in QCA	**Community Self Determination** Involvement of diverse communities within leadership, projects and initiatives. Sharing of power and decision making, supported by two way communication. Collaborative ways of working. Processes that reflect prevention values, commitment to Te Tiriti o Waitangi principles, culturally safe processes, sharing power and resources.	**Level 1: Processes that reflect:** • Showing commitment to values of equity and holistic health. • Valuing local perspectives • Intentionally upholding Te Tiriti o Waitangi principles of tino rangatiratanga, options and partnership • Commitment to disrupting systems of power • Commitment to prevention across multiple organisations. • Supporting development of shared goals by building connections across communities. **Level 2: Processes that contribute to** • A well-connected system through engagement and building trust **Level 3: Processes that supports impact of** • Community voice and knowledge • Incorporating indigenous knowledge and values • Information, communication and delivery systems • Policy process to meet community needs • Leadership across the system
	Communities defining issues and solutions Partnership involvement of groups in defining issues of focus, designing solutions and advocating for changes in power, resources and system structures. Processes that reflect prevention values, commitment to Te Tiriti o Waitangi principles, culturally safe processes, sharing power and resources.	

	Leadership Mana whenua co-design of leadership structures. Support for community leaders. Connecting organisational leaders with kaimahi and communities. Processes that reflect Te Tiriti o Waitangi principles, sharing power and supporting more equitable system structures.	**Level 1: Processes that reflect:** • Intentionally upholding Te Tiriti o Waitangi principles of tino rangatiratanga, equity, active protection, options and partnership • Support for prevention through commitment of leaders across diverse organisations • Valuing and inclusion of diverse cultural beliefs and practices • Commitment to disrupting systems of power **Level 2: Processes that contribute to** • A well-connected system by engaging diverse leaders • Sustainable and adaptive organisational structures by supporting leadership at multiple levels **Level 3: Processes that supports impact of** • Community voice and knowledge through support of leaders • Inclusion of indigenous knowledge and values by engagement of indigenous leaders
	Systems Practice Processes that actively seek multiple perspectives in defining issues and designing solutions. Recognition of multiple interacting causes of issues, reflected in design of solutions. Activities target multiple levels of Prevention	**Level 1: Processes that reflect:** • Valuing local perspectives • Systemic change **Level 2: Processes that contribute to** • A well-connected system

	System Framework, and multiple causal influences. How processes support understanding of prevention as complex system and supporting change in complex systems.	**Level 3: Processes that supports impact of** • Community voice and knowledge through integration of diverse perspectives and interrelated causes • Incorporating indigenous knowledge and values • Evidence informing action

Explanatory Indicators (Tier 2) Used as explanatory conditions in QCA	**Level of connection and collaboration** Increasing levels of connection between diverse organisations within the prevention system. Both depth (quality e.g. levels of trust) and breadth (diversity of connected organisations) are important. No one organisation controls the prevention system. Joined up action across people and organisations is needed.
	Policy changes that support prevention Policy changes that support prevention efforts at multiple levels, such as local government, workplaces, marae, sports clubs and schools. Policy and regulations act to limit possible futures of the system. Changes in policy can support positive prevention outcomes.
	Funding and contracting practices support prevention Changes in funding and contracting practices that support involvement and ability to adapt across diverse organisations. How resources are distributed into organisations across communities can impact ability to engage in collaborative work, equity of processes, and access of communities to decision-making.

Analytical Lens Indicators (Tier 3) Used as explanatory conditions in QCA	**Level of deprivation** The distribution of New Zealand Deprivation Index deciles within geographic area as proxy for level of poverty, access to resources across community, socio-economic conditions that support or hinder positive health outcomes.
	Disruption to implementation Whether the Healthy Families NZ location had any major disruptions to implementation, where it could reasonably be expected that fewer outcomes will be seen in that location.
	Location setting Whether the Healthy Families NZ location is in a large urban or more rural locations that could reasonably be expected to have fewer additional organisational supports and increased geographic distance.
	Change in health promoting environments Whether there have been changes through non-Healthy Families NZ initiatives that could reasonably be expected to increase or decrease health promoting environments in area. Change in operating context for Healthy Families NZ.

Illustrative descriptions of outcomes of a strengthened prevention system to support qualitative assessment

Suggested factors for action in the NZ prevention system	**What would outcomes look like within collected data?**	**How do these outcomes contribute strengthened prevention system?**
1. Paradigms, values and goals **Norms, beliefs and values**		
Values Values for a prevention system include shifting towards health and equity lenses, holistic/ interconnected responsibilities, valuing the local perspective,	Staff, members of Strategic Leadership Groups and those from external organisations would provide similar description of the values that underpin the work of	Values relate to what is prioritised, what relationships are formed and maintained, and how work is conducted. Values are related to mental model, which acts

Suggested factors for action in the NZ prevention system	What would outcomes look like within collected data?	How do these outcomes contribute strengthened prevention system?
indigenous worldview shaping the system)	Healthy Families NZ locations. Initiative and projects would be prioritised in line with values of equity, inclusion of community voices, potential systemic impact. Demonstration of values would be seen in processes related to community engagement; community voice; challenging power structures and embedding principles of Te Tiriti o Waitangi.	to shape structures within a system. If the approach and work of Healthy Families NZ is driven by values of equity, interconnected responsibilities, valuing Māori perspectives and attention to who has power, then it is more likely that work of Healthy Families NZ will support changes in prevention system that take a systemic approach and strengthen prevention activities that achieve equitable outcomes.
Intention to uphold Te Tiriti o Waitangi principles Principles derived from Waitangi Tribunal (2019) WAI2575 Hauora: Report on Stage One of the Health and Services Outcome Kaupapa Inquiry, • Tino Rangatiratanga, providing for Māori self-determination and mana motuhake in design and delivery • Equity, commitment to achieving equitable health outcomes for Maori • Active Protection, act to achieve equity, that Treaty Partners are well informed • Options, provide for and resource activities	Staff, members of Strategic Leadership Groups and mana whenua representatives provide similar descriptions of ways that Healthy Families NZ actively work to give effect to Te Tiriti o Waitangi principles. Mana whenua have designed involvement on Strategic Leadership Group in partnership with lead agency. Projects and initiatives have been prioritised to give effect to Te Tiriti o Waitangi principles. Examples are provided of projects and initiatives	Te Tiriti o Waitangi provides a set of expectations and values that act to guide a prevention system that supports equitable outcomes and hauora. If the approach and work of Healthy Families NZ is driven by values and principles of Te Tiriti o Waitangi, then it is likely the mahi would support changes in prevention system that take a systemic approach, support hauora, and strengthen prevention activities that achieve equitable outcomes.

Suggested factors for action in the NZ prevention system	What would outcomes look like within collected data?	How do these outcomes contribute strengthened prevention system?
that are culturally appropriate and supports hauora Māori • Partnership, working in partnership in governance, design, delivery and monitoring	designed from Māori worldview. Examples are provided of projects and initiatives led by Māori, supported by Healthy Families NZ teams. Demonstration of values would be seen in processes related to community engagement; community voice; challenging power structures	
Support for prevention (evident at community, government and commercial levels)	Projects and initiatives would increasingly involve a wide collection of partner organisation, including government agencies, mana whenua and Māori led organisations, NGO and commercial collaborators. Inclusion of diverse partners demonstrates strengthened networks for prevention, and breadth of support for prevention aligned with values. Demonstration of support for prevention would be seen in prioritisation of projects and initiatives aligned with values, including community voice and challenging power structures.	Increasing breadth of support for prevention activities across diverse partners strengthens shared mental model that prioritises prevention, aligned with values (see above). Systems structures are more likely to develop to embed prevention with widely shared mental model.
Social norms and the cultural beliefs and practice underpinning them	Demonstration would be seen in processes related to community	Inclusive processes of community engagement, prioritisation, design and

Suggested factors for action in the NZ prevention system	**What would outcomes look like within collected data?**	**How do these outcomes contribute strengthened prevention system?**
(space is created for different cultural beliefs to have legitimacy; norms perpetuated among community groups support wellbeing)	engagement; community voice; challenging power structures and embedding principles of Te Tiriti o Waitangi. Processes are inclusive of different cultural practices, work in strengths-based ways.	delivery of project will create spaces for diversity of cultural beliefs and practices that support hauora. If diverse communities are involved with projects, projects will be more relevant to supporting health practices for those communities. Equity of outcomes will be supported.
System Goals		
Systemic change (changes throughout the whole system from policy, regulation to access to healthcare or affordable fruit and veg. Real devolution of power and resources).	Projects and initiatives of Healthy Families NZ articulate a systemic theory of change. That is, actions are purposely designed to impact multiple interconnected determinants across policies, institutions and social practices.	Through design, even seemingly small projects can support action at multiple points of Prevention System Framework, such as increasing number and access to healthy settings, changing organisational policy, strengthening implementation networks, and supporting prevention and equity paradigm. If designed with an understanding of systemic change, then systemic change is more likely to take place.
Shared goals between different systems (towards equity and wellbeing). Being mindful where goals exist in conflict.	Projects and initiatives are developed and delivered through collaborations, with explicit shared goals. Wide variety of organisations would describe similar goals for	Goals shape how projects and activities are structured. Values are embedded within goals. Goals that align with prevention system values are more likely to

Suggested factors for action in the NZ prevention system	What would outcomes look like within collected data?	How do these outcomes contribute strengthened prevention system?
	their work in supporting prevention.	strengthen prevention system.
Maintaining or disrupting systems of power	Processes that support examining and challenging who has power to define issues and design solutions. Processes of community engagement; community voice; and embedding principles of Te Tiriti o Waitangi. Increasing diversity of organisations involved within networks to support prevention. Processes that bring communities and decision makers closer together.	The mental model of those with power in a system, shapes the system. By designing processes that explicitly increase diversity of those with power to make decisions, the mental models underlying prevention are more likely to be inclusive, which in turn will support equity.
2. System structure, regulation and interconnection **System Structure**		
A well-connected system (intensely local, recognising diverse perspectives, multi-level, cross-sector collaboration with resources, goals, understandings)	We would see a greater range of organisations involved in collaborative projects. For example, more diversity of businesses or communities of interest. Increased sharing of resources between organisations to support collaboration.	Hauora is supported through interaction of multiple environments, social, economic and cultural determinants of health. No one organisation control all these determinants. Therefore, successful prevention activity often relies upon collaborative efforts, working towards shared goals and values. Trusting relationships support collaboration. A well connected system allows transfer of ideas, information of resources.

Suggested factors for action in the NZ prevention system	What would outcomes look like within collected data?	How do these outcomes contribute strengthened prevention system?
		The more inclusive the network, the more opportunity for positive equity impacts.
Sustainable, adaptive organisational structures that support prevention (i.e. are able to continue despite changes in organisations, personnel, governments. Things set up with consideration for longer timeframes and future sustainability)	When people on strategic leadership groups change, organisational connections and momentum of group is maintained. Projects and initiatives, if considered successful, would carry-on past initial phase, even if Healthy Families NZ involvement reduces.	Individual leaders can act to bring people together and create momentum in projects. Systemic change is more likely when momentum carries on past the involvement of such individuals. Organisational structures and support are needed.
Policy and regulatory environment. (A government funding system that incentivises prevention, wellbeing focus and longer-term planning	There would be evidence that policies have been changed to support health through prevention. Examples might include local government catering guidelines, smokefree places policies. Development of strategy that supports prevention may also be seen. For example, Councils promoting healthy environments for wellbeing, with associated funding prioritised.	Organisations that have power to set standards, rules and direct funding can support prevention through policy decisions. Policy changes will likely have longer term impacts that one off projects. Mental models that prioritise prevention and holistic concept of hauora may support organisations prioritising prevention.
Regulations, organisational practices and agreements (contracts) that support prevention (and enforcement of these)	Evidence that policies are being implemented by flow of funding, what does (and does not) get contracted	Policies need to be implemented to be effective. Funding and design of contracts are key implementation pathways.

Suggested factors for action in the NZ prevention system	What would outcomes look like within collected data?	How do these outcomes contribute strengthened prevention system?
Te Tiriti o Waitangi principles upheld in regulatory system	There is an increase in Māori led organisations receiving funding and support for activities related to prevention. This may be displayed in availability and willingness for Māori led organisations to be involved, and lead, collaborative projects.	Not all organisations are resourced to operate equally within prevention system. Resources would support Māori led organisations enact principles of tino rangatiratanga, options and active protection.
3. Information, Feedback and Relationships **Information / Access**		
Community voice and knowledge (showing that this is valued by decision-makers/ that communities are decision-makers; evidence of co-design processes that enable communities to shape priorities)	Through description of projects and initiatives, we would see a diversity of communities engaged in co-design. There would be different communities leading co-design processes (with Healthy Families NZ supporting). Healthy Families NZ would be active advocating for solutions developed through co-design. Heathy Families NZ teams are seen supporting communities to give voice to policy and priorities of organisations	A manifestation of values and intentionally upholding Te Tiriti o Waitangi principles. If prevention system values inform processes of supporting community voices in identifying priorities for action, designing solutions, and implementation, then it is more likely that inclusive and equitable impacts will be achieved.
Indigenous knowledge and values (incorporated into planning and practice)	Descriptions of some projects and initiatives would articulate a theory of change framed from Māori worldview.	Another manifestation of values and intentionally upholding Te Tiriti o Waitangi principles. Moving from mental model that prioritises Te Tiriti

Suggested factors for action in the NZ prevention system	What would outcomes look like within collected data?	How do these outcomes contribute strengthened prevention system?
	Māori partners would describe Healthy Families NZ supporting their work. Mainstream partner organisations would describe Healthy Families NZ championing projects designed within Māori worldview.	principles, to actions that strengthen system structure.
Evidence informing action (reflexive, adaptive use of information to plan actions - developmental evaluation principle)	Descriptions of projects and initiatives would reference evaluative data that has supported prioritisation and design of project. Across Healthy Families NZ teams, strategic leadership group and partners, similar descriptions would be provided of how data has informed activities.	Because the prevention system is a complex system, causes of issues are many and interacting. This causes uncertainty regarding how any activity will impact, requiring ongoing evaluative activity and adjustment. If evaluative activity is well embedded in how Healthy Families NZ teams work, there is more likelihood strengthened prevention system.
Strong information, communication and delivery systems (information and resources getting to the people who need it	Communication activities are used to increase impact of projects and initiatives. For example, by inviting more organisations to join a demonstration project or sharing knowledge resources. Healthy Families NZ teams use communication skills to support prevention activities of other organisations, utilising local reach.	Strategic use of communications can act to support desired negative or positive feedback loops; increase connections across organisational networks; and amplify community voice. Communications act as a support to multiple system structure elements of prevention system framework.

Suggested factors for action in the NZ prevention system	What would outcomes look like within collected data?	How do these outcomes contribute strengthened prevention system?
Feedback and Influencing Relationships		
Contracting (timeliness and responsiveness; including feedback that enables adaptation)	Across Healthy Families NZ team, strategic leadership groups and partner organisations, there would be an absence of identifying service contracts as barriers to collaborative working for prevention.	During the first four years of Healthy Families NZ, structure of service contracts and funding relationships were regularly identified as one barrier to collaboration
Policy process (responsive to local priorities, including non-health organisations in prevention goals)	There would be an alignment between areas that communities are advocating for policy change, and policy change taking place. Evidence that health lens is being applied by wider range of non-health organisations, influencing policy decisions.	Effective policy to support the prevention system should reflect aspirations and ideas of communities. If not, communities may loose trust needed for engagement, and policies do not meet the needs of communities.
Leadership: **Distributed leadership** across the whole system, sharing of authority to make changes; emergence of champions for health and prevention (local and national, cross-sector)	Through descriptions of projects and initiatives, there would be an increase in these being led outside of Healthy Families NZ teams and from increasing range of organisations and communities.	For the prevention system to strengthen, leadership cannot rest solely within Healthy Families NZ. Increasing leadership from outside teams suggests increasing capacity for prevention focused activity, as well as increase in shared value of prevention and associated values of equity, participation and Te Tiriti o Waitangi principles.

Suggested factors for action in the NZ prevention system	What would outcomes look like within collected data?	How do these outcomes contribute strengthened prevention system?
4. Structural elements, resources and actors **Material influence**		
Physical environments that encourage health	Descriptions of projects and initiatives will identify changes in quality and connection to natural environment, as well as improvements to built environment that support health. There may be increased investment from government (central and local), or private and NGO organisations to healthy environment projects.	Natural and built environments contribute directly to health and wellbeing. They act as a resource for health. Increasing quality and access to health promoting environments show they are increasingly valued by decision-makers.
Healthy settings – education, workplaces, sporting	Descriptions of projects and initiatives will identify changes in number and quality of health promoting settings that support health. There may be increased investment from government (central and local), or private and NGO organisations to healthy settings projects.	Healthy settings contribute directly and indirectly to health and wellbeing. The support healthy practices, and act as resource for health. An increasing trend in health promoting settings show an increase in this resource, and value by decision-makers.
Buffers		
Contingency planning for changing circumstances – enough resources, enough flexibility	Funders of health and community services are providing sufficient resources to support flexibility in service provision to meet changing needs and circumstances.	Complex systems contain uncertainties. Uncertainty in the impact of interventions, and uncertainty in the size and nature of problems. Services and interventions

Suggested factors for action in the NZ prevention system	What would outcomes look like within collected data?	How do these outcomes contribute strengthened prevention system?
	Contracts may be provided over longer time periods to support sustainability within system.	need to be able to adapt and adjust to uncertainty. Funding and contracting arrangements can support the ability for flexibility and adaptation.
Socioeconomic position, remoteness	Healthy Families NZ planning recognises the interconnected issues of socioeconomic position and urban/rural locations.	Socioeconomic position is related to availability of resources for health, and likelihood of experiencing multiple vulnerabilities to health. Geographically remote or dispersed areas may be challenged to support collaborative and co-design processes with diverse organisations and communities. Socioeconomic position and remoteness provide a context that influences what and how Healthy Families NZ locations operate.
Local employment opportunities	Healthy Families NZ planning recognises regional employment markets and how these shape availabilities of resources to support health.	Employment is a factor within socioeconomic position. Workplaces as a setting can support health.
Availability of skilled workforce	Through discussions with Healthy Families NZ team and strategic leadership groups, the ability to recruit and retain skilled and connected staff is considered.	In order to achieve positive and equity focused prevention impacts, skilled staff and those with community connections are required. Both within Healthy Families NZ teams, and across organisations

Suggested factors for action in the NZ prevention system	What would outcomes look like within collected data?	How do these outcomes contribute strengthened prevention system?
	Stability, quantity and capability of other organisations within local prevention system is not described as barrier to more and effective actions.	(e.g. Public Health Units) within area.
Locally relevant data showing change Participation/ access/ behaviour Budget allocation	Evidence within documents and discussions that Healthy Families NZ teams are knowledgeable regarding availability of local data to support planning and delivery.	Access to local data will support understanding issues and opportunities. Data is also important for evaluating initiatives in an ongoing and developmental approach. Relevant local data is an input into co-design processes and community voice.

Appendix 6 Detailed description of quantitative indicators

This appendix describes the proposed quantitative indicators of health and wellbeing to look at improvement over time in Healthy Families NZ locations. The indicators have been rated as listed below.

Indicator rating system

A = Primary

B = Supplementary

I = Pending feedback from Ministry of Health

Te Oranga – Participation in society

ADULT

Indicator	Data source	Rationale and comment	Rating	Topic
Good or better self-rated health	NZHS (Adult)	Self-reported sense of health and wellbeing. NZHS Tier 1 indicator.	A	Self-rated health
Psychological distress (K10 score of 12+)	NZHS (Adult)	Taps into psychological well-being that is more than just 'diagnosed' mental illness. NZHS Tier 1 indicator.	A	Mental health
Mood or anxiety disorder (diagnosed)	NZHS (Adult)	Common mental illness.	B	Mental health
Ischaemic heart disease (diagnosed)	NZHS (Adult)	Major chronic disease affecting substantial portion of New Zealanders. To note, there has been very little to no change in the cardiovascular indicators at the national level even since 2006/07. (The prevalence is very low for things like heart failure, stroke, angina. So they are not very sensitive indicators to look at over time.)	A	Long term health conditions

Diabetes (diagnosed)	NZHS (Adult)	Major chronic disease affecting substantial portion of New Zealanders.	A	Long term health conditions
Asthma (diagnosed and medicated)	NZHS (Adult)	Major chronic disease affecting substantial portion of New Zealanders.	A	Long term health conditions
Chronic pain	NZHS (Adult)	Taps into hidden suffering. And closely linked to mental health and general functioning. More common than people realise.	A	Long term health conditions
Arthritis (medicated)	NZHS (Adult)	Can significantly impacts on health and wellbeing, often in an unrecognised way as does not necessarily show up in hospitalisation and mortality statistics. Common in older adults.	B	Long term health conditions
Unmet need for primary health care is defined for adults (aged 15+ years) as having experienced one or more of the following types of unmet need for primary health care in the past 12 months: • Unmet need for a GP due to cost • Unmet need for an after-hours medical centre due to cost • Unmet need for a GP due to lack of transport • Unmet need for an after-hours	NZHS (Adult)	Participation in society includes access to key service such as primary health care. NZHS Tier 1 indicator.	A	Access to health care

medical centre due to lack of transport • Inability to get an appointment at their usual medical centre within 24 hours.				
Visited emergency department in last 12 months (proxy for acute illness, accident etc)	NZHS (Adult)	ED visits as proxy for acute illness, accident. To complement long term conditions indicators and unmet for primary health care. (ED visits also influenced by proximity to ED and/or access to primary health care.)	B	Acute conditions/ Access to health care
Teeth removed due to decay within last 12 months	NZHS (Adult)	Oral health can be considered part of health and wellbeing. Related to nutrition but also represents access to water fluoridation and preventive dental care. Being without teeth impacts on how people see you in society.	A	Oral health

Tiora – Healthy Lifestyles

ADULT

Indicator	Data source	Rationale and comment	Rating	Topic
Meets adult vegetable intake guidelines	NZHS (Adult)	Vegetable and fruit intake are the cornerstone of good nutrition leading to health and wellbeing. NZHS Tier 1 indicator. We would consider improvement to be an improvement in one or both of fruit and veg intake.	A	Nutrition

Meets adult fruit intake guidelines	NZHS (Adult)		A	Nutrition
Little or no physical activity lines	NZHS (Adult)	NZHS Tier 1 indicators use the 'meets adult physical activity guidelines'. On the other hand, doing 'little or no physical activity' is really bad for your health. We would consider a change in 'little or no physical activity' an improvement, even without change in the other indicator.	A	Physical activity
Meets adult physical activity guide	NZHS (Adult)		B	Physical activity
Obese	NZHS (Adult)	One of the major influences on health and wellbeing of our times. NZHS Tier 1 indicator. Need both indicators to judge 'improvement'. eg if overweight goes down but obese goes up, that is hardly improvement.	A	Body weight/ BMI
Overweight	NZHS (Adult)		A	Body weight/ BMI
Current smoker (has smoked more than 100 cigarettes in lifetime and currently smokes at least once a month)	NZHS (Adult)	Standard and commonly used tobacco use indicator. NZHS Tier 1 indicator.	A	Tobacco use
Daily current smoker	NZHS (Adult)	Gives a sense of the intensity and frequency of smoking. If this goes down, even if current smoker does not, we would still consider this an improvement.	A	Tobacco use

Quit attempt (past 12 months)	NZHS (Adult)	Gives a different perspective on tobacco use. Even if current smoker does not change, increases in quit attempts would be considered improvement. Helps to interpret changes in current smoker.	A	Tobacco use
Frequent drinker 4+ times/week	NZHS (Adult)	Best available harmful alcohol use indicator over the time period of interest. Long term overconsumption is related to several chronic conditions. Hazardous drinking unavailable due to break in time series.	A	Alcohol use
High blood pressure (medicated)	NZHS (Adult)	Common condition. Significant risk factor for cardiovascular disease. Influenced by nutrition, physical activity, obesity, mental health, and diabetes etc.	A	Physiological risk factors
High cholesterol (medicated)	NZHS (Adult)	Common condition. Significant risk factor for cardiovascular disease. Not related to quite as many other aspects of health and well-being as high blood pressure.	B	Physiological risk factors

Te Mana Whakahaere – Autonomy

ADULT

Indicator	Data source	Rationale and comment	Rating	Topic
Household owns/partly owns home (for occupied private dwellings)	Census (Dwelling)	Provides a perspective on security of housing, and autonomy and control over the housing environment. Best available indicator from data sources that can be used.	A	Housing
Home ownership (someone in household owns home with or without a mortgage)	NZHS(Adult)	To assist in interpretation of changes over time in Census data on household ownership.	B	Housing

Te Oranga – Participation in society

CHILD

Indicator	Data source	Rationale and comment	Rating	Topic
Good or better parent-rated health	NZHS (Child)	Self-reported sense of health and wellbeing	A	Self-rated health
Emotional or behavioural problems (diagnosed depression, anxiety disorder, and/or ADHD)	NZHS (Child)	Taps into mental health of children. Child respondents (aged 2–14 years) are defined as having emotional or behavioural problems if the child's parents or caregivers had ever been told by a doctor that the child has	A	Mental health

		depression, anxiety disorder (this includes panic attack, phobia, post-traumatic stress disorder, and obsessive compulsive disorder), attention deficit disorder (ADD) or attention deficit hyperactivity disorder (ADHD).		
SDQP (Strengths and Difficulties questionnaire) shows "Children are happy, confident and developing well".	B4SC	Based on Well Child indicator - Children's well-being and resilience is supported. Defined as "Percentage of children that have low (< 17) behavioural screening questionnaire (SDQ-P) scores. According to the Ministry of Health WCTO latest publication of indicator results, a "Low score is an indication that children are happy, confident and developing well." Gives wider perspective than just mental illness.	I (Needs discussion with MoH)	Child development/ Mental health
Physical punishment (in past 4 weeks)	NZHS (Child)	Taps into home environment, wider perspective than just mental illness.	A	Mental health
Depression	NZHS (Child)	Similar mental illness indicators to adults.	B	Mental health
Anxiety	NZHS (Child)		B	Mental health
Teeth removed due to decay (1-14 years)	NZHS (Child)	Oral health can be considered part of health and wellbeing. Related to nutrition but also represents access to water fluoridation and preventive dental care. Being without	A	Oral health

		teeth impacts on how people see you in society. The NZHS covers a wider age range than the 4-year olds in B4SC, but is a narrower indicator of oral health, at the severe end of the spectrum.		
Healthy teeth and gums (Lift the Lip score of 1). OR the alternative of bad teeth (Lift the Lip score of 5-6) depending on what the Ministry of Health advise with the use of this measure.	B4SC	Healthy Together Auckland used the B4SC Lift the Lip data for their HFNZ monitoring report and set of indicators. And it is a higher quality indicator than the NZHS.	A	Oral health
Asthma (diagnosed and medicated)	NZHS (Child)	Common long-term condition in children.	A	Long term conditions
Unmet need for primary health care is defined for children (aged 0–14 years) as having experienced one or more of the following types of unmet need for primary health care in the past 12 months:	NZHS (Child)	Participation in society includes access to key service such as primary health care. NZHS Tier 1 indicator for adults.	A	Access to healthcare

• Unmet need for a GP due to cost • Unmet need for an after-hours medical centre due to cost • Unmet need for a GP due to lack of transport • Unmet need for an after-hours medical centre due to lack of transport • Unmet need for a GP due to lack of childcare for other children Inability to get an appointment at their usual medical centre within 24 hours				
Visited emergency department in last 12 months	NZHS (Child)	ED visits as proxy for acute illness or accident. To boost number and range of health outcome indicators for children. And complement unmet for primary health care. (ED visits also influenced by proximity to ED and/or access to primary health care.)	B	Acute conditions/ Access to healthcare

Childhood immunisations up-to-date	B4SC	Health outcome in form of (probable) absence of infectious illness. To boost the number and range of health outcome indicators for children. Also, a measure of access to preventive primary health care.	I (Needs discussion with MoH)	Acute conditions, Access to healthcare

Tiora – Healthy Lifestyles

CHILD

Indicator	Data source	Rationale and comment	Rating	Topic
Meets child vegetable intake guidelines (2-14 years)	NZHS (Child)	We would consider improvement to be an improvement in one or both of fruit and veg intake.	A	Nutrition
Meets child fruit intake guidelines (2-14 years)	NZHS (Child)	We would consider improvement to be an improvement in one or both of fruit and veg intake	A	Nutrition
Fizzy drink intake 3+ times/week (2-14 years)	NZHS (Child)	More straightforward link to health outcomes. And change easy to interpret and understand. More likely to see change based on what we know HFNZ locations have been doing?	A	Nutrition
Fast-food intake 3+ times/week (2-14 years)	NZHS (Child)	Not a very easily interpreted indicator. Complicated relationship with change and outcomes.	B	Nutrition

		But one of the Healthy Kids MoH obesity prevention plan indicators.		
Active travel to school (5-14 years)	NZHS (Child)	Best available indicator of child physical activity. One of the Healthy Kids obesity prevention plan indicators.	A	Physical activity
Obese (2-14 years)	NZHS (Child)	One of the major influences on health and wellbeing of our times. Need both obese and overweight (separately) to judge 'improvement'. Eg, if overweight goes down but obese goes up, that is not improvement. NZHS data covers a wider age range than just 4-year olds, so provides more information about all children than B4SC.	A	Body weight/BMI
Overweight (2-14 years)	NZHS (Child)		A	Body weight/BMI
Obese	B4SC	One of the major influences on health and wellbeing of our times. Need both obese and overweight (separately) to judge 'improvement'. Ie if overweight goes down but obese goes up, that is hardly improvement. B4SC data is more likely to show change, both statistically and in terms of the younger cohort	A	Body weight/BMI

		being affected by the interventions (ie easier to prevent 4-year olds becoming obese than reverse it in older kids). This is the official data source and indicator for Ministry of Heath childhood obesity target, Well Child Tamariki Ora indicators of body weight, and the Healthy Kids obesity plan indicators.		
Overweight	B4SC		A	Body weight/ BMI

Te Mana Whakahaere – Autonomy

CHILD

Indicator	**Data source**	**Rationale and comment**	**Rating**	**Topic**
Lives in household with homeowner (someone in household owns home with or without a mortgage)	NZHS (Child)	Provides a perspective on security of housing, and autonomy and control over the housing environment. Best available indicator from data sources that can be used.	A	Housing

Appendix 7 Presentation on Cost-consequence Value for Money approach

Value for Money

Economic component of the Evaluation of Healthy Families NZ

Dr. Maite Irurzun-Lopez

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VfM_Purpose and Objective

- The economic analysis will contribute to the overall evaluation in valuing what have been the results of the interventions and at what cost.
- The **purpose** is to provide the funding agency (MoH), the HF team and HF participating communities, with evidence and understanding of the value for money of the intervention.
- The **objective** is to provide information on the costs and consequences/benefits of the HF intervention as well as an interpretation/judgement of the value of both in different contexts.

VfM_Research Questions

Overall RQ: How and to what extent is HF initiative showing value for money?

Specific RQs:

- What are the costs of HF interventions, overall and in each location?
- What are the consequences/benefits brought about by HF, overall and in each location?
- How do HF intervention costs compare with consequences overall?
- What are the main value for money similarities and differences across HF locations?
- How are costs and benefits distributed across population groups and particular Māori?
- How sensitive are these results to changes in model parameters and uncertain values (sensitivity analysis)?

VfM_Methodology

- **Cost-consequence analysis**: setting out the costs of the initiative against the range of benefits/outcomes.
- **Societal approach:** costs and benefits irrespective of who pays or enjoys them.
- **Time horizon:** since the start of HF.
- **Financial and economic costs:** considering resources employed regardless of financial transactions.
- **Sensitivity analysis:** around model parameters and uncertain values (e.g. attribution of HF intervention, decay rate of effects over time, …).
- **Aoteaora context**: Te ao Māori lens and explicit focus on equity

Cost data collection process

To collect readily available financial/cost data in *programme documentation*- budgets, resources, utilization and prices of activities

To assess information and data gaps - cost information missing

Follow ups- complementary information, more details and clarifications.

To identify and collect economic costs data - costs not paid by the HF intervention, those not included in HF budgets

VfM_information needed from team

- **Cost information**
  - Resources paid by program: budgeted & spent
  - Resources not paid by program: e.g. volunteers time, utilization of schools or library rooms, …
  - *Cost = quantity * unit price*
- **Benefits information**
  - Benefits of the intervention (by evaluation team)
  - *Determining the plausible range of variation for each variable for the sensitivity analysis
  - *Identify combination of variables that would most likely show interaction effects

Value for Money

Economic component of the Evaluation of Healthy Families NZ

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Cost categories

Costs/Resource categories:

- Human resources: HF staff, MoH staff, volunteers
- Materials: photocopying, computers, …
- Infrastructure: room rental, …
- Communication: mobiles, airtime credit,
- Travel: tickets, petrol, accommodation, use of vehicles
- Community in-kind resources: ?
- Training
- Other- less conventional: knowledge, networks, influence/leadership capacity, …