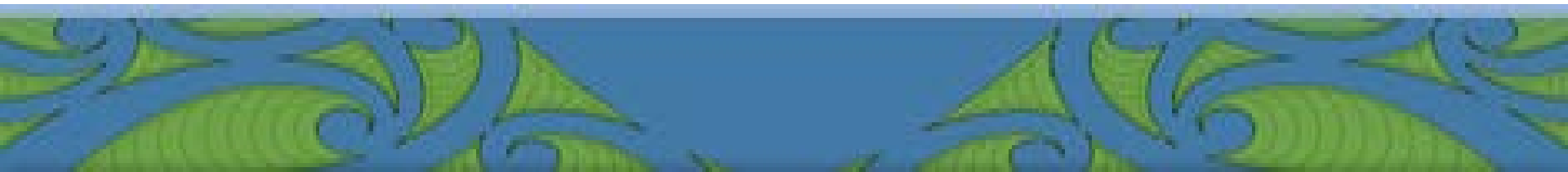


HEALTHIER
LIVES

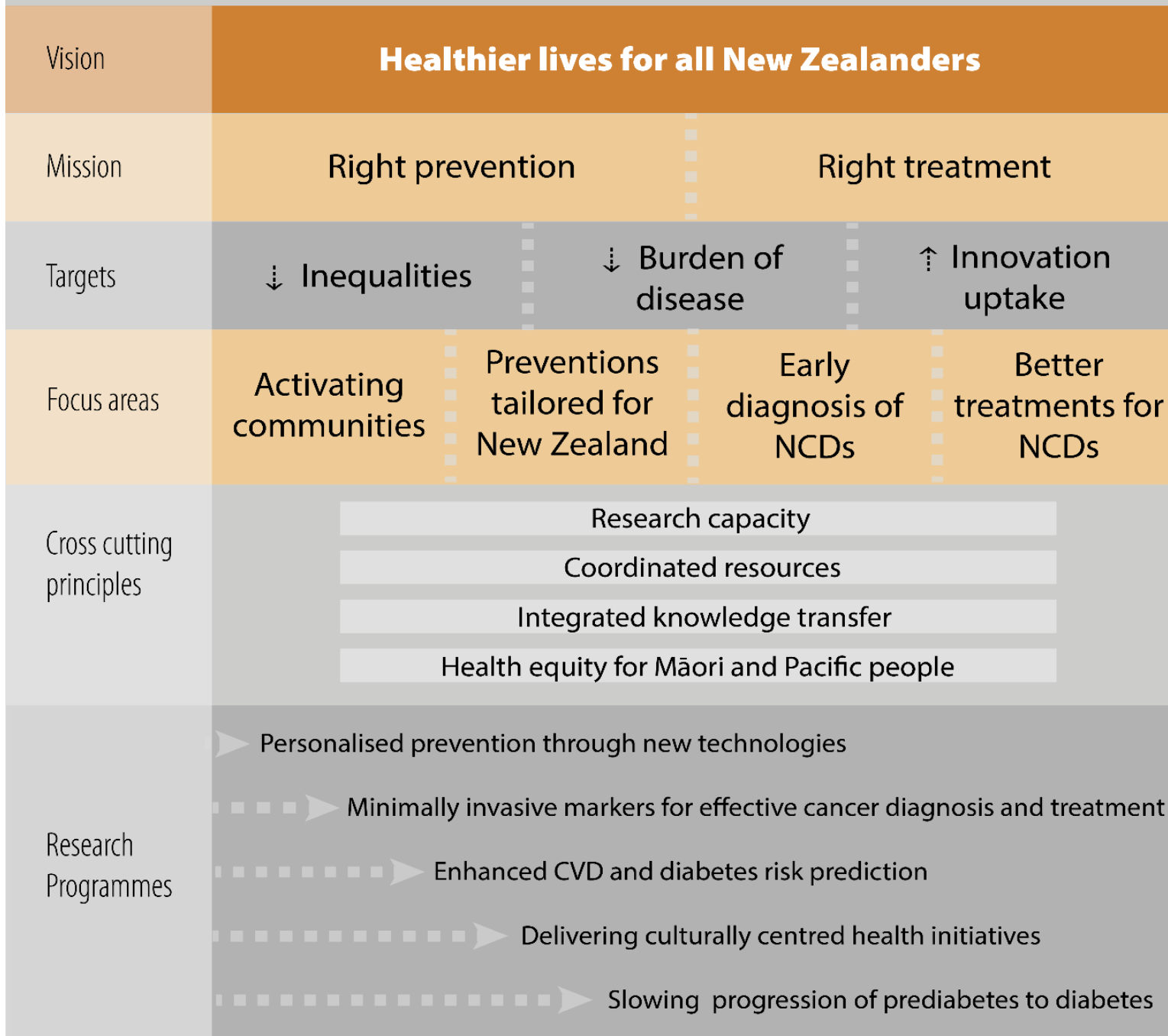
He Oranga
Hauora

He Pikinga Waiora – Making health interventions work in Māori communities

AProf Maui Hudson, Prof John Oetzel, Dr Nina Scott,
Moana Rarere, Dr Jeff Foote



HEALTHIER LIVES NATIONAL SCIENCE CHALLENGE OVERVIEW



Challenge of Implementation

Interventions that work in a research setting may fail in the **real world**

Interventions that work for some communities may fail in **indigenous communities**

Proven interventions for issues that indigenous communities want addressed may be **underutilised** or not even tried

Implementation Science

understanding why implementation succeeds or fails

translating research into practice

Implementation science for Indigenous peoples

Enablers & barriers to the implementation of PHC interventions for Indigenous people with chronic diseases: a systematic review.
(Gibson et al 2015)

He Pikinga Waiora team

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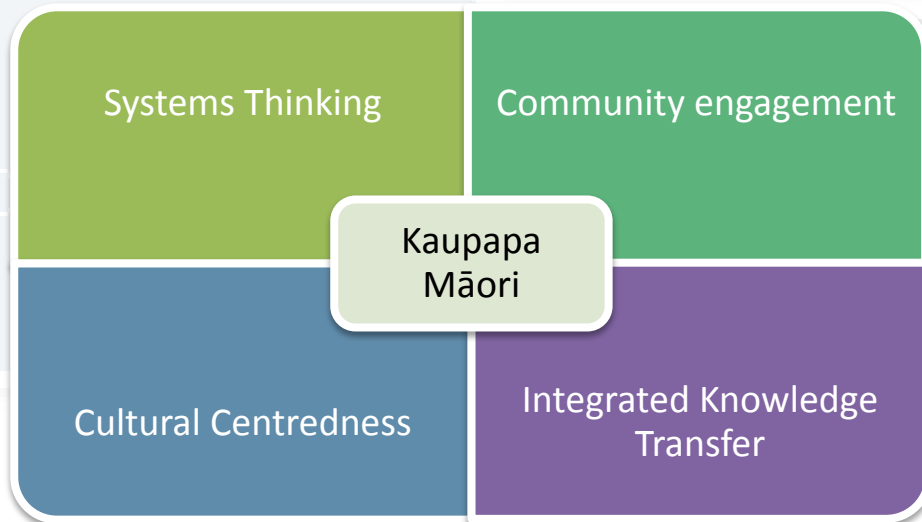
Maori health providers, community researchers, Wintec, Universities, PhD student, DHB, ESR, psychology, nursing, systems expert, public health, Kaupapa Maori methodology, community members



Maori Implementation Science

creating best practice models for working with Māori communities

so that effective interventions are developed and then implemented successfully



Kaupapa Māori

Integrated Knowledge Transfer

HE PIKINGA WAIORA IMPLEMENTATION FRAMEWORK

CULTURAL - CENTEREDNESS

*Ko tōku reo, tōku ohooho,
Ko tōku reo, tōku Māpihi Maurea*

Community voice

Community is involved in defining the problem and developing the solution.

Reflexivity

Implementation team is reflexive and identifies adjustments to the intervention as a result.

Structural transformation and resources

The intervention results in significant structural transformation and resources which are sustainable over time.

COMMUNITY ENGAGEMENT

*He urunga tangata he urunga pāhekeheke,
he urunga oneone mau tonu*

Partnering between researchers and community members/ organizations in all phases of the project. Guided by principles of action, social justice, and power sharing.

Decision-making and communication is shared and a strong partnership is identified throughout the intervention process. Relationships build capacity of communities and researchers.

KAUPAPA MĀORI

He oranga ngakau, he pikinga waiora

The Framework has indigenous self-determination at its core. All four elements have conceptual fit with Kaupapa Māori aspirations and all have demonstrated evidence of positive implementation outcomes.

A coding scheme derived from the Framework was applied to 13 studies of diabetes prevention in indigenous communities in Australia, Canada, New Zealand, and the United States. Cross-tabulations demonstrated that cultural centeredness ($p=.008$) and community engagement ($p=.009$) explained differences in diabetes outcomes and community engagement ($p=.098$) explained difference in blood pressure outcomes.

The Framework is intended as a planning tool to guide the successful development and implementation of interventions. Funders can use the Framework to assess the likely effectiveness of proposed interventions. Community organizations can use the Framework to work with researchers or policy makers to strengthen each of the four elements.

Please let us know how you are using the Framework and any feedback you may have:
hpwadmin@waikato.ac.nz

SYSTEMS THINKING

He tina ki runga, he tāmore ki raro

Systems perspectives

Intervention considers multiple perspectives, world views, and values. It considers multiple causes, has a broad focus and offers multiple solutions.

System relationships

Demonstrates strong understanding of the complex relationships between variables including feedback loops, time delays and multi-level effects.

Systems levels

Intervention targets change at the macro, meso and micro levels.

INTEGRATED KNOWLEDGE TRANSLATION

Toi te kupu, toi te mana, toi te whenua

Integration of knowledge translation activities within the context of the community in which the knowledge is to be applied.

There is a process of bi-directional learning established so that information is tailored to knowledge users needs.

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He Oranga Hauora

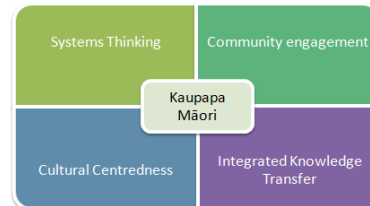
National
SCIENCE
Challenges

Kaupapa Māori

“E tipu e rea mo ngā rā o tō ao”

Grow and branch forth for the days destined to you

- **Approach** has indigenous **self-determination** at its core
- **Methodology** includes critical theory – **conflict** between the **powerful** and those with **less power** Notions of resistance
- Importance of **tikanga** and **mātauranga** in **relationships** and **programme**
- **Community participation** and **control**
- *Practice what you preach* - the need for KM **principles** to be in an **active relationship with practice** (Graham Smith)



National
SCIENCE
Challenges

HEALTHIER
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He Oranga Hauora

Cultural Centredness

Community voice

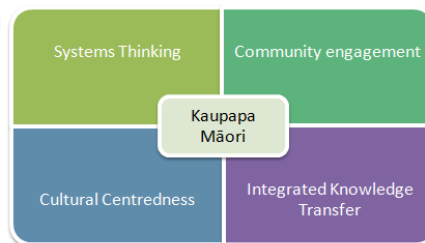
Community is involved in **defining the problem and developing the solution**

Reflexivity

How the **power and privilege of the researcher**, relative to the community, is **recognised and dealt with**

Structural transformation and resources

Significant **structural transformation and resources which are sustainable over time**



Community Engagement

Strong community or bi-directional leadership

all phases

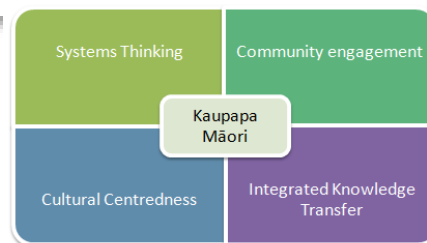
Guided by principles of

action, social justice, and power sharing

Decision-making and communication is shared

and a strong partnership is identified throughout the intervention process

Relationships build capacity of communities and researchers.



National
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Challenges

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He Oranga Hauora

Systems Thinking

Systems perspectives

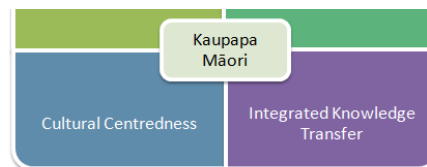
Intervention considers **multiple perspectives, world views, and values**. It considers **multiple causes**, has a broad focus and offers **multiple solutions**

System relationships

Demonstrates strong understanding of the **complex relationships between variables** including **feedback loops, time delays** and **multi-level effects**

Systems levels

Intervention targets change at the **macro, meso and micro** levels



National
SCIENCE
Challenges

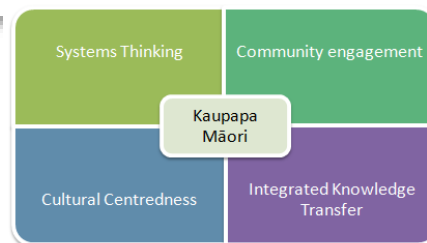
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He Oranga Hauora

Integrated Knowledge Transfer

people delivering the intervention (knowledge users) are heavily involved in designing and redesigning the intervention

There is a process of mutual or bi-directional learning established so that information is tailored to knowledge users needs



Development of the Implementation Framework

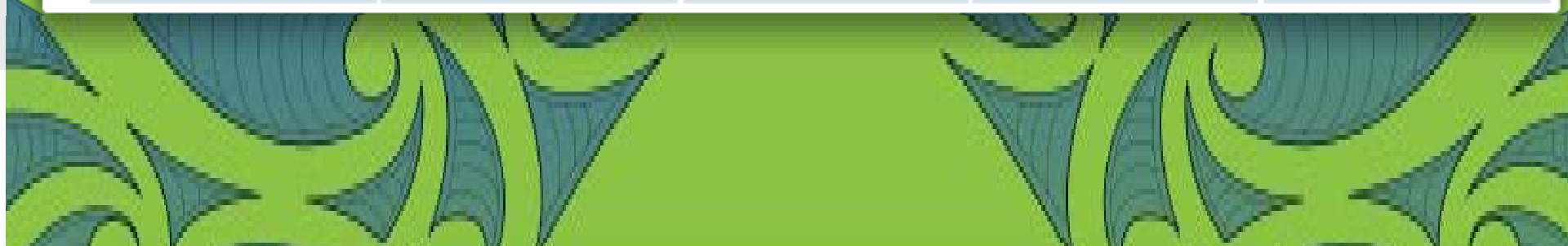
A coding scheme derived from the Framework was applied to 13 studies of diabetes prevention in indigenous communities in Australia, Canada, New Zealand, and the United States.

Cross-tabulations demonstrated that culture centeredness ($p=.008$) and community engagement ($p=.009$) explained differences in diabetes outcomes and

Community engagement ($p=.098$) explained difference in blood pressure outcomes.

HE PIKINGA WAIORA IMPLEMENTATION FRAMEWORK

	Variable	High	Medium	Low	Negative
Cultural Centredness	Community voice How groups, that the intervention is focused on are involved in defining the problem and solutions.	Community involved in defining the problem and developing the solution.	Community involved in either defining the problem or developing the solution.	Community only informed but has no direct involvement in the definition of problem or solution development.	Intervention implemented in the face of significant community opposition.
	Reflexivity How the power and privilege of the researcher, relative to the community, is recognised and dealt with.	The implementation team explicitly states their reflexivity and identifies adjustments to the intervention as a result.	The implementation team identifies efforts to engage in reflexivity or states they were aware of it; adjustments to the intervention are unclear.	No evidence that the team was reflexive about its processes or no changes made in response to team learnings.	Victim blaming, unintended bias or overt racism in intervention design, implementation or evaluation.
	Structural transformation and resources How much the system is improved to better fit community needs.	Significant structural transformation and resources which are sustainable over time.	Intervention receives significant resources but has a limited focus on structural transformation.	Intervention receives minimal resources and is only sustainable over a short term.	Less resources available or lower quality resources as a result of the intervention compared with no intervention.
Community Engagement	Community engagement The level of involvement, impact, trust and communication with community members.	Strong community or bi-directional leadership. Decision-making and communication is shared and strong partnership is identified throughout the intervention process.	Communication is two-way and there is co-operation to implement the intervention with a partnership becoming apparent.	Communication primarily flows from intervention team to community and the intervention team has ultimate control over the intervention and relevant communication.	Intervention is placed in the community with no consultation with community organizations or stakeholders responsible for implementation.
	Integrated knowledge translation How involved the people delivering the intervention (knowledge users) are in designing the intervention.	There is a process of mutual or bi-directional learning established so that information is tailored to knowledge users needs.	Medium level support for knowledge user by intervention team for implementing the intervention. Intervention is not tailored to the knowledge user.	Minimal or no support for implementing intervention or outsiders implement the intervention for the knowledge users.	Knowledge users have major concerns which they are not able to discuss with the intervention team.
Systems Thinking	System perspectives How much the team show they understand that there are multiple ways of viewing issues and solutions.	Intervention includes all three of the following: 1) multiple causes, 2) broad focus/multiple solutions; and 3) multiple perspectives, world views, and values of multiple actors.	Intervention includes only 2 of the 3 factors in the high category.	Intervention includes only 1 or none of the 3 factors in the high category.	Intervention has a negative impact due to a lack of consideration of multiple perspectives necessary to support implementation.
	System relationships The degree that relationships between variables/factors are prioritised.	Demonstrates a strong understanding of the complex relationships between variables including feedback loops, time delays and multi-level effects.	Demonstrates moderate understanding of the complex relationships between variables including feedback loops, time delays and multi-level effects.	Limited or weak understanding of the complex relationships between variables including feedback loops, time delays and multi-level effects.	Intervention has a negative impact due to lack of consideration of system relationships important for implementation.
	System levels The degree to which different levels of analysis are taken into account.	The intervention targets change at the macro, meso and micro levels, and provides sufficient rationale and context for each level.	The intervention targets change at 2 levels with some rationale and context for each level.	The intervention targets change at 2 levels or less without providing rationale and context.	Intervention has a negative impact due to lack of consideration of systems levels necessary to support implementation.



Test driving the HPW Framework

lots of community hui

Maori AAA screening pilot study

Maori co-design virtual breastfeeding RCT

Projects with Te Kohao Health and Poutiri Trust
underway – preventing progression from pre-
diabetes to diabetes

Te Kohao Health and Poutiri Trust preventing progression from pre-diabetes to diabetes

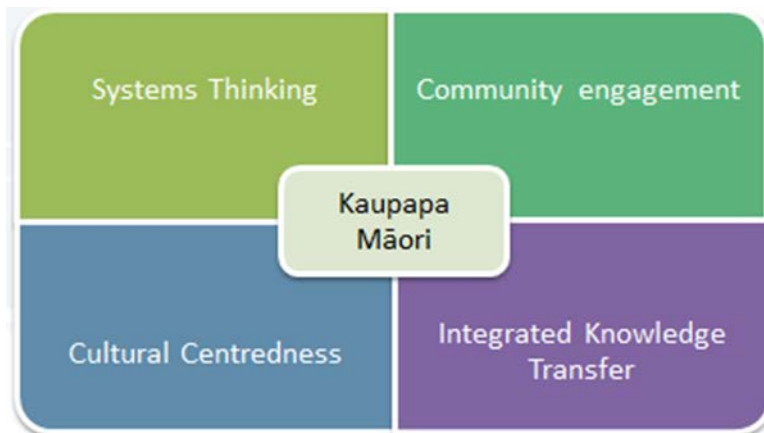
Community engagement + Cultural Centeredness

- Meeting and requesting partnership Contracts
- Employing community researchers
- Meetings to discuss where everyone is at
- Meetings to discuss approaches
- Meetings to agree approaches
- Meetings to plan actions

Systems thinking

- Literature review
- Systems map – national
- Case study – provider level – formal and informal

So far . . .



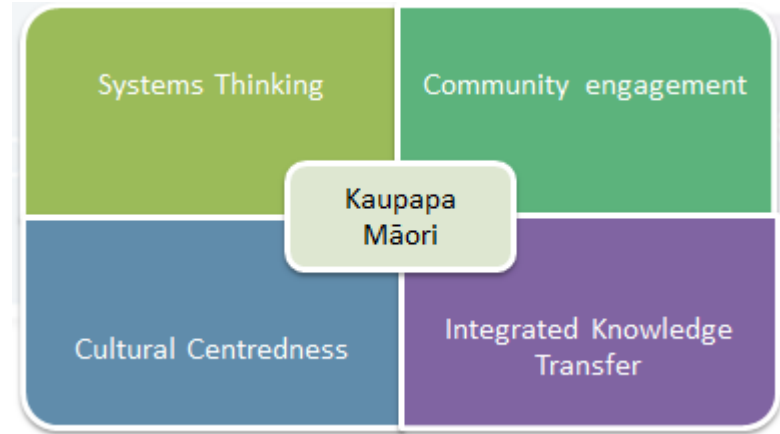
Integrated Knowledge Transfer

- Meetings with clinical staff
- Co- design hui with clinical staff

Literature - Interventions

1. Lifestyle interventions are as effective as pharmacology. Various models work so long as they are tailored to needs of individuals, whanau, and community (e.g., could be technology or face-to-face; can be delivered by various people, include diet and exercise and sometimes other elements like smoking, etc.). Seems that a lifestyle intervention needs to be part of the solution.
2. Recent evidence shows promise of interventions to improve the food environment.
3. Primary care/health services intervention are varied and have mixed results. They include elements such as best practices/quality improvement, screening/monitoring (using data to make inequities apparent and have better follow up)
4. Systematic reviews and meta analysis shows the following features as having a positive impact: a) lifestyle, b) case management, c) mobile phones (although face-to-face is just as good), d) collaborative goal setting, e) mostly positive, but some mixed evidence for community health workers delivering intervention; f) professionals (pharmacist, nurses, etc) show more consistent positive evidence.
5. Multi-level interventions are rarely delivered so hard to assess effectiveness. Primary care review does note that multifaceted interventions are more effective than single aspects. However, that review did not identify any common characteristics of successful interventions as there were too few studies.
6. Only a few reviews have been done on diabetes intervention with Maori (Ngati and Healthy and Te Wai o Rona are the two biggest). Nothing stands out about the interventions themselves—it is more about the factors we discussed earlier —community engagement, culture-centeredness etc

Interventions



↑ impact of intervention for individuals

Individual - clinical pathway of care

Health services - lifestyle, case management, mobile phones, collaborative goal setting. Multifaceted more effective.

Individual + whanau level - kai and exercise

Lifestyle intervention needs to be part of the solution

↑ # people reached by intervention

Community level - built + food environment, schools, mara kai, shops, groups

Improving the food environment

↓ Population level interventions - poverty, sugar tax, gst free fruit and veges

Conclusion

- 1. Doing something is important*
- 2. How you do it makes a difference*

The He Pikinga Waiora Implementation Framework appears to be well suited for advancing implementation science for indigenous and Māori communities

The Framework has promise as a policy and planning tool for designing and evaluating effective interventions for chronic disease prevention in Māori and indigenous communities

Kia ora and thank you from us

The He Pikinga Waiora team

