He Pikinga Waiora Implementation Framework

A tool for chronic disease intervention effectiveness in Māori and other indigenous communities

Presented by Moana Rarere
1st Asia-Pacific Conference on Integrated Care
6-8th November 2017, Brisbane, QLD, Australia

He Pikinga Waiora research team:
Prof John Oetzel, Dr Nina Scott, AProf Maui Hudson, Dr Bridgette Masters-Awatere, Moana Rarere, Dr Jeff Foote, Dr Angela Beaton, Terry Ehau
Maori health providers, community researchers, Wintec, Universities, PhD student, DHB, ESR, psychology, nursing, systems expert, community research expert, public health, Kaupapa Māori methodology, community members
Outline

• Background – why important?
• The He Pikinga Waiora Implementation Framework
• Application of the Framework
• Results & conclusions
Health burden & inequity

• 40% burden → CVD, cancer, diabetes & obesity

• Inequity Māori:non-Māori
  – Obesity 47% : 29%
  – Diabetes 7% : 5%
  – CVD mortality 2 x higher for Māori
  – Cancer mortality 1.5 x higher for Māori
  – Health burden 1.8% higher for Māori
National Science Challenges – ‘Healthier Lives’

• NZ Govt research funding for science-based issues
  – Scalability and nationwide impact

• Healthier Lives
  – Right prevention to the right population
  – Right treatment to the right patient
  – the burden of chronic/NCDs by 25% by 2025
  – inequities for Māori & other communities
Translational research & implementation science

• ✔ achieving health equity

• Translation, dissemination, uptake & implementation → transitioning innovative health research into policy & practice BUT

• Include community/stakeholder knowledge
HE PIKINGA WAIORA IMPLEMENTATION FRAMEWORK

CULTURAL - CENTEREDNESS
Ko tōku reo, tōku hohoho,
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.

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

SYSTENS 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.

HEALTHIER LIVES
He Oranga Hauora

National Science Challenges

Kōrero Tahi October 2020
He Pikinga Waiora
Implementation Framework

- Systems Thinking
- Community engagement
- Kaupapa Māori
- Cultural Centredness
- Integrated Knowledge Transfer
Kaupapa Māori

- Self-determination at core
- Importance of cultural protocols (tikanga) & cultural knowledge (mātauranga)
- 3 aims:
  - Address unequal power
  - Priorities cultural protocols & knowledge in relationships & programmes
  - Community participation
Culture Centredness

• Community involved → defining problem & identifying solution

• 3 characteristics
  – Community voice
  – Reflexivity
  – Structural transformation & resources
Community Engagement

- Collaboration
- Partnership

Across all phases of research & intervention development
Systems Thinking
Integrated Knowledge Transfer

• Co-innovation
• Knowledge users = Researchers

• Adapt to Māori/indigenous communities
Application of Framework

• Coding scheme applied to 13 studies of diabetes prevention in indigenous communities.

• Cross-tabulations:
  – Culture centeredness ($p = 0.008$) & community engagement ($p = 0.009$) explained differences in diabetes outcomes
  – Community engagement ($p = 0.098$) explained difference BP outcomes
Conclusion

• The He Pikinga Waiora Implementation Framework appears to be well suited for advancing implementation science for indigenous communities in general and Māori communities in particular.

• The Framework has promise as a policy and planning tool for designing and evaluating effective interventions for chronic disease prevention for indigenous communities.
Implementation framework for chronic disease intervention effectiveness in Māori and other indigenous communities.

Oetzel J., Scott N., Hudson M., Masters-Awatere B., Rarere M., Foote J., Beaton A., Ehau T.

Kia ora
## PIKINGA WAIORA IMPLEMENTATION FRAMEWORK

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cultural Centredness</th>
<th>Community Engagement</th>
<th>Integrated Knowledge Translation</th>
<th>IKT</th>
<th>Systems Thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Community voice</strong></td>
<td>Community involved in defining the problem and developing the solution.</td>
<td>Community involved in either defining the problem or developing the solution.</td>
<td>Community only informed but has no direct involvement in the definition of problem or solution development.</td>
<td>Community only informed but has no direct involvement in the definition of problem or solution development.</td>
<td>Community only informed but has no direct involvement in the definition of problem or solution development.</td>
</tr>
<tr>
<td><strong>Reflexivity</strong></td>
<td>The implementation team identifies adjustments to the intervention as a result.</td>
<td>The implementation team identifies efforts to engage in reflexivity or states they were aware of it; adjustments to the intervention are unclear.</td>
<td>No evidence that the team was reflexive about its processes or no changes made in response to team learnings.</td>
<td>Victim blaming, unintended bias or overt racism in intervention design, implementation or evaluation.</td>
<td>Victim blaming, unintended bias or overt racism in intervention design, implementation or evaluation.</td>
</tr>
<tr>
<td><strong>Structural transformation and resources</strong></td>
<td>Significant structural transformation and resources which are sustainable over time.</td>
<td>Intervention receives significant resources but has a limited focus on structural transformation.</td>
<td>Intervention receives minimal resources and is only sustainable over a short term.</td>
<td>Less resources available or lower quality resources as a result of the intervention compared with no intervention.</td>
<td>Less resources available or lower quality resources as a result of the intervention compared with no intervention.</td>
</tr>
<tr>
<td><strong>Community engagement</strong></td>
<td>Strong community or bi-directional leadership. Decision-making and communication is shared and strong partnership is identified throughout the intervention process.</td>
<td>Communication is two-way and there is co-operation to implement the intervention with a partnership becoming apparent.</td>
<td>Communication primarily flows from intervention team to community and the intervention team has ultimate control over the intervention and relevant communication.</td>
<td>Communication primarily flows from intervention team to community and the intervention team has ultimate control over the intervention and relevant communication.</td>
<td>Communication primarily flows from intervention team to community and the intervention team has ultimate control over the intervention and relevant communication.</td>
</tr>
<tr>
<td><strong>Integrated knowledge translation</strong></td>
<td>There is a process of mutual or bi-directional learning established so that information is tailored to knowledge users needs.</td>
<td>Medium level support for knowledge user by intervention team for implementing the intervention.</td>
<td>Minimal or no support for implementing intervention or outsiders implement the intervention for the knowledge users.</td>
<td>Knowledge users have major concerns which they are not able to discuss with the intervention team.</td>
<td>Knowledge users have major concerns which they are not able to discuss with the intervention team.</td>
</tr>
<tr>
<td><strong>System perspectives</strong></td>
<td>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.</td>
<td>Intervention includes only 2 of the 3 factors in the high category.</td>
<td>Intervention includes only 1 or none of the 3 factors in the high category.</td>
<td>Intervention has a negative impact due to a lack of consideration of multiple perspectives necessary to support implementation.</td>
<td>Intervention has a negative impact due to a lack of consideration of multiple perspectives necessary to support implementation.</td>
</tr>
<tr>
<td><strong>System relationships</strong></td>
<td>Demonstrates a strong understanding of the complex relationships between variables including feedback loops, time delays and multi-level effects.</td>
<td>Demonstrates moderate understanding of the complex relationships between variables including feedback loops, time delays and multi-level effects.</td>
<td>Limited or weak understanding of the complex relationships between variables including feedback loops, time delays and multi-level effects.</td>
<td>Intervention has a negative impact due to lack of consideration of system relationships important for implementation.</td>
<td>Intervention has a negative impact due to lack of consideration of system relationships important for implementation.</td>
</tr>
<tr>
<td><strong>System levels</strong></td>
<td>The intervention targets change at the macro, meso and micro levels, and provides sufficient rationale and context for each level.</td>
<td>The intervention targets change at 2 levels with some rationale and context for each level.</td>
<td>The intervention targets change at 2 levels or less without providing rationale and context.</td>
<td>Intervention has a negative impact due to lack of consideration of systems levels necessary to support implementation.</td>
<td>Intervention has a negative impact due to lack of consideration of systems levels necessary to support implementation.</td>
</tr>
</tbody>
</table>