

Implementing Equitable Health Interventions

TOOLS FOR USE IN THE AOTEAROA NEW ZEALAND CONTEXT

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1. Health Equity Focus and Implementation Science

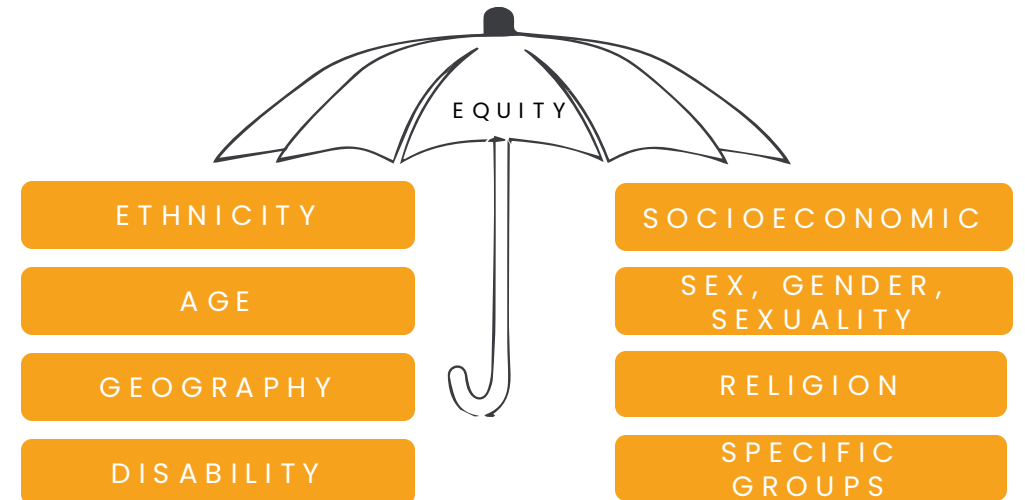
Health Equity

FOCUS OF THE HEALTHIER LIVES NATIONAL SCIENCE CHALLENGE PROJECT

- Range of equity parameters
- Pervasive and ongoing ethnic-specific inequities in health access, quality of care and outcomes across a range of indicators
- Inequities are often intersectional, however there are inequities by ethnicity when other inequities are 'accounted for'
- Needs and rights; Māori (Indigenous people) have the right to health under:
 - *Te Tiriti o Waitangi*
 - *The United Nations Declaration on the Rights of Indigenous People (UNDRIP)*
 - *Legislation (Pae Ora (Healthy Futures) Act)*
- Also obligation to act on unlawful discrimination under the Bill of Rights Act (BORA)

EQUITY DEFINITION

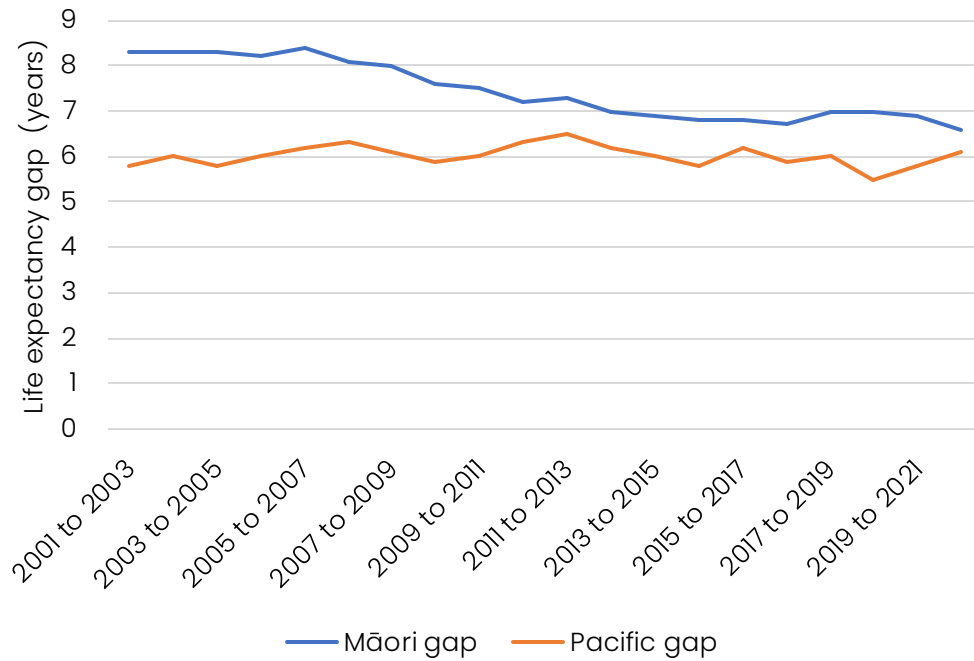
People have differences in health that are not only avoidable but unfair and unjust. Equity recognises different people with different levels of advantage require different approaches and resources to get equitable health outcomes. (MoH 2019)



Life Expectancy

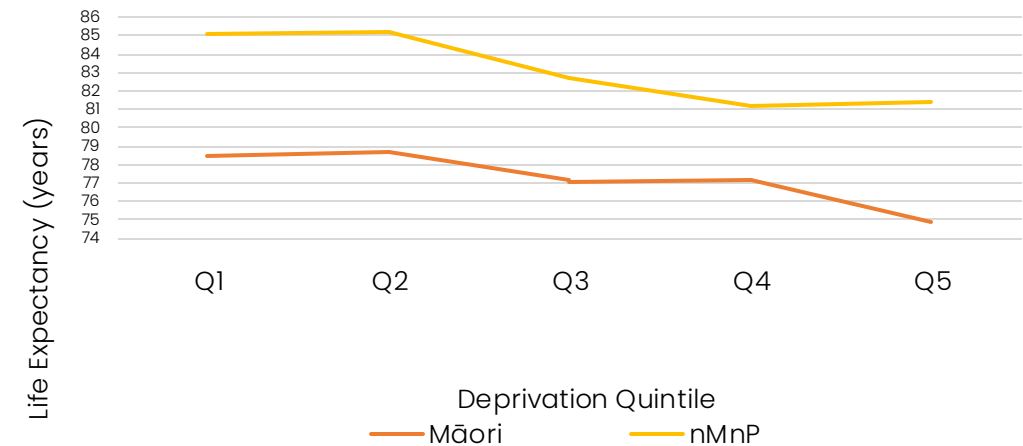
BY ETHNICITY AND DEPRIVATION, ETHNICITY AND RURALITY

Trend in Life Expectancy Gap for Māori and for Pacific people, national (2001-2003 to 2020-2022)

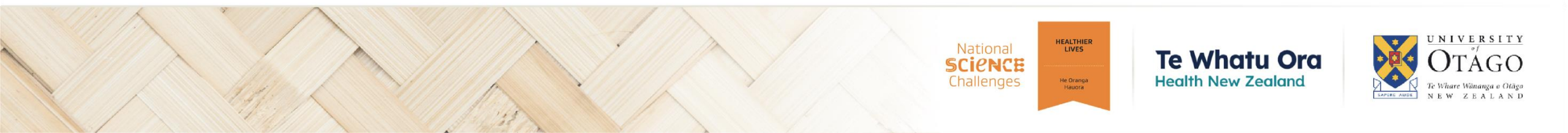


Source: M Walsh, LE Gap analysis, Equity team SII 2023, NMNP=Non Māori, Non-Pacific

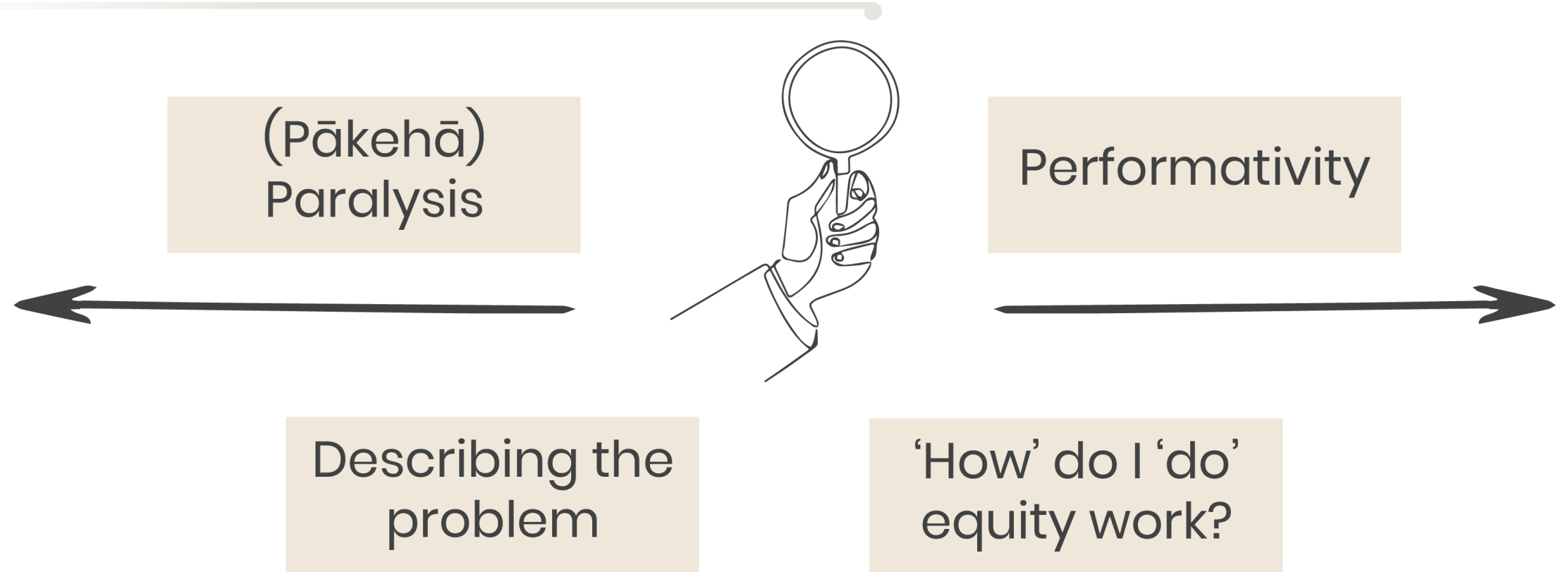
Life Expectancy by Ethnicity by Deprivation Quintile and by Rurality (2020-2022)



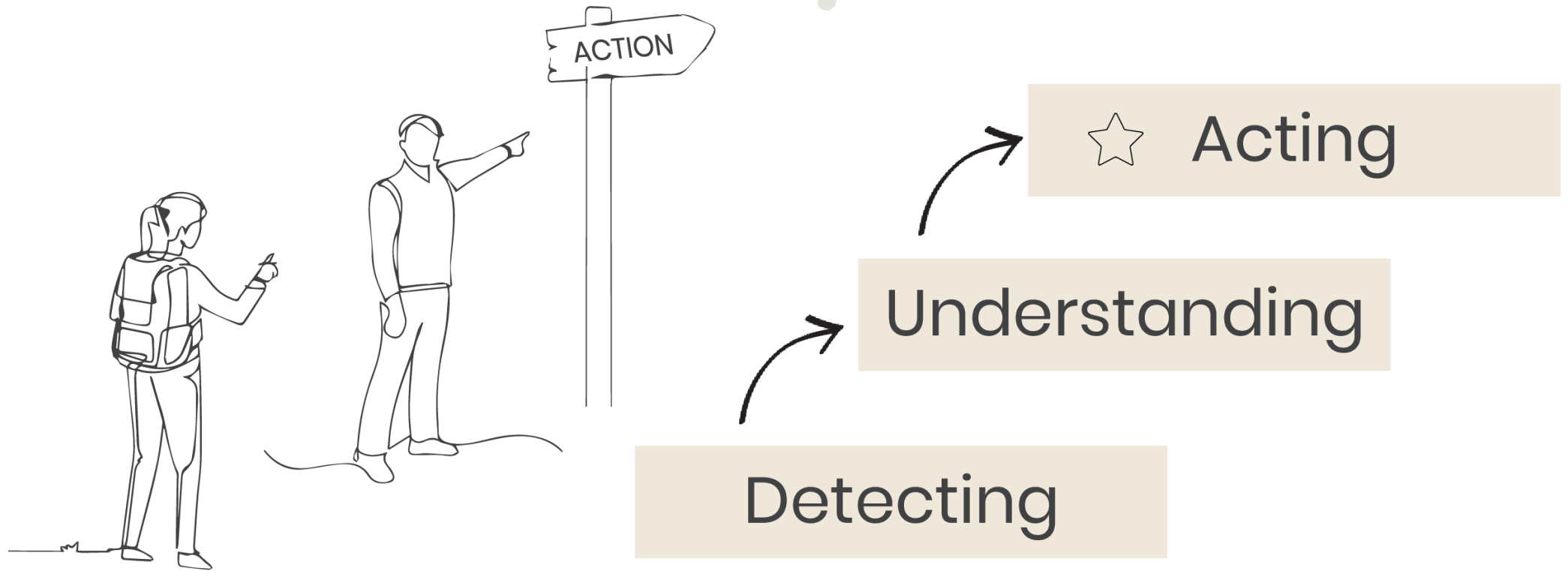
GHC Classification	Māori	nMnP	Gap
U1 (Most Urban)	76.5	83.8	7.3
U2	77.1	82.1	5.0
R1	76.4	82.6	6.2
R2	75.7	83.2	7.5
R3	74.0	82.2	8.2



Equity Inaction



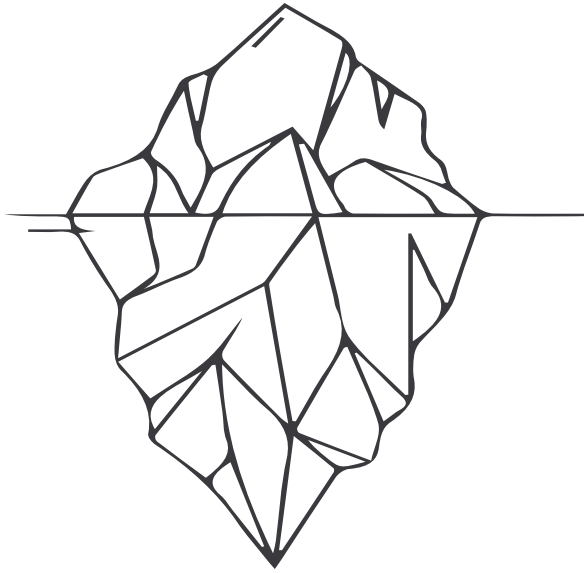
Equity Action?



Adapted from source: Kilbourne AM, Switzer G, Hyman K, et al. Advancing health disparities research within the health care system: a conceptual framework. *American Journal of Public Health*. 2006;96(12):2113-21

Opportunities to Eliminate Inequities

WHERE MIGHT WE THINK ABOUT USING IMPLEMENTATION SCIENCE AND EQUITY TOOLS?



*Drivers of inequity. Reid & Robson (2006)
based on Camara Jones (2001)*

- Differences in the **quality** of care
- Differences in **access** to care
- Differences in the **determinants** of health, exposures, and opportunities
(Individual, whānau/family, neighbourhood, collective, intergenerational, intersecting, cumulative; racism, colonisation, economic)

Implementation Science

WHAT IS IT?

“Scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice.”
– Eccles, Implementation Science, 2006

- Takes an average of 17 years for evidence-based practices (EBP) to become ‘routine’
- Only ~ ½ EBPs will have widespread clinical usage

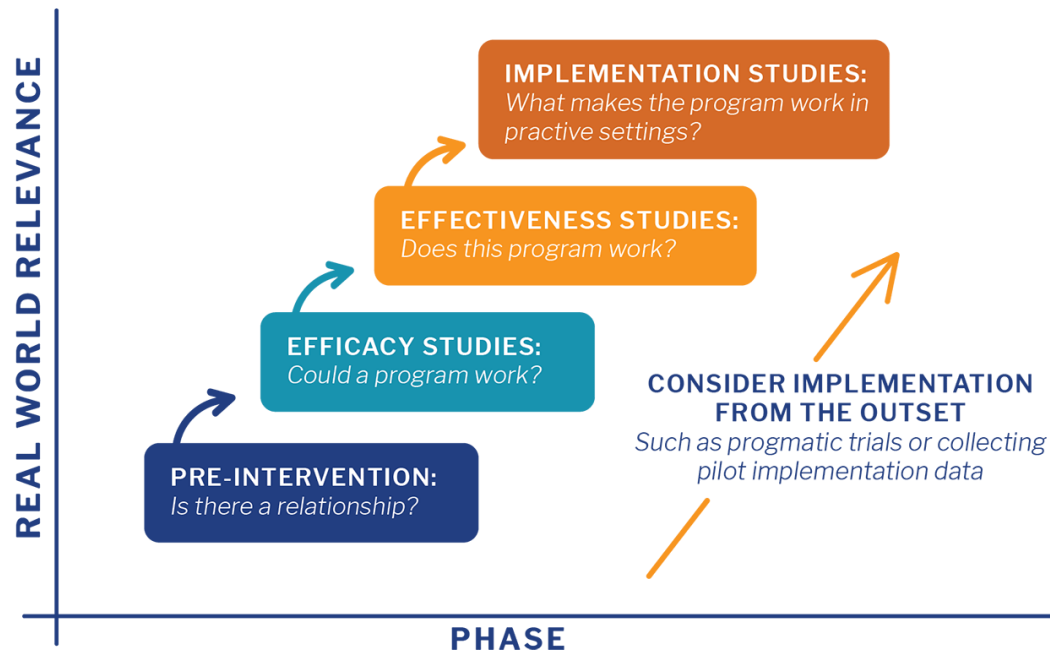
Many factors influence EBP uptake, e.g.:

- Competing priorities
- Resources, e.g. funding, staff
- Knowledge/skills
- Accessibility and availability of the intervention/practice/service
- Culturally appropriate
- Strategies are needed to promote uptake of EBPs to improve the quality and effectiveness of health services and public health, and to maximise benefit in resource-constrained settings

Bauer, BMC Psychology 2015

Implementation Science

WHAT IS IT?



TRADITIONAL CLINICAL RESEARCH:

What **intervention** produces the **largest** average **effect** in (tightly) controlled trials on the major (clinical) outcome?

IMPLEMENTATION STUDY QUESTIONS:

What programme/policy **components** are most **effective** for producing what implementation **outcomes for which populations** / recipients when implemented by what type of **persons** using what **strategies** under what **conditions**, with how many resources and how/why do these results occur?

Implementation Science

WHEN AND HOW TO USE IT?

1. Start with a description of the intervention and intervention strategy

2. What is the right design – is it implementation science?

- Subway track (Lane-Fall et al)
- Objective and research question(s)

3. What is the right TMF (Theory, Model or Framework)?

- Familiarity vs selection
- Many tools and methods to use for each TMF
- Our Equity focused framework and tools sit here

1. Implementation Interventions

Actions/efforts to change behaviour at the patient, provider, system, or policy level

Implementation **intervention**

- A single method or technique to facilitate change
- Deliberative, purposive, action

Implementation **strategy**

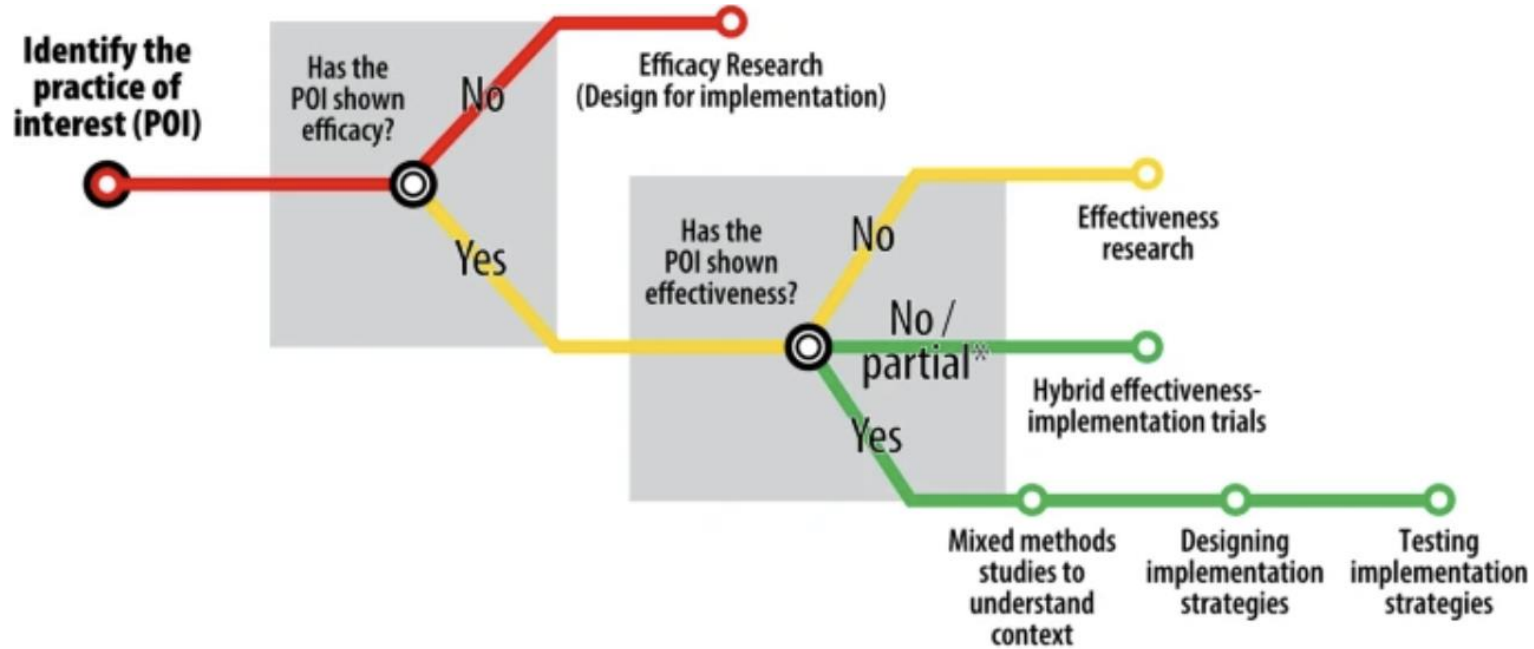
- An integrated set, bundle, or package of discreet implementation interventions ideally selected to address specific identified barriers to implementation success

Examples

- Education/training, audit-feedback, QI techniques, community engagement, coaching, changing processes

2. Design

WHEN IS IMPLEMENTATION SCIENCE THE RIGHT APPROACH?



Source: Lane-Fall, M.B., Curran, G.M. & Beidas, R.S. Scoping implementation science for the beginner: locating yourself on the “subway line” of translational research. *BMC Med Res Methodol* 19, 133 (2019). <https://doi.org/10.1186/s12874-019-0783-z>

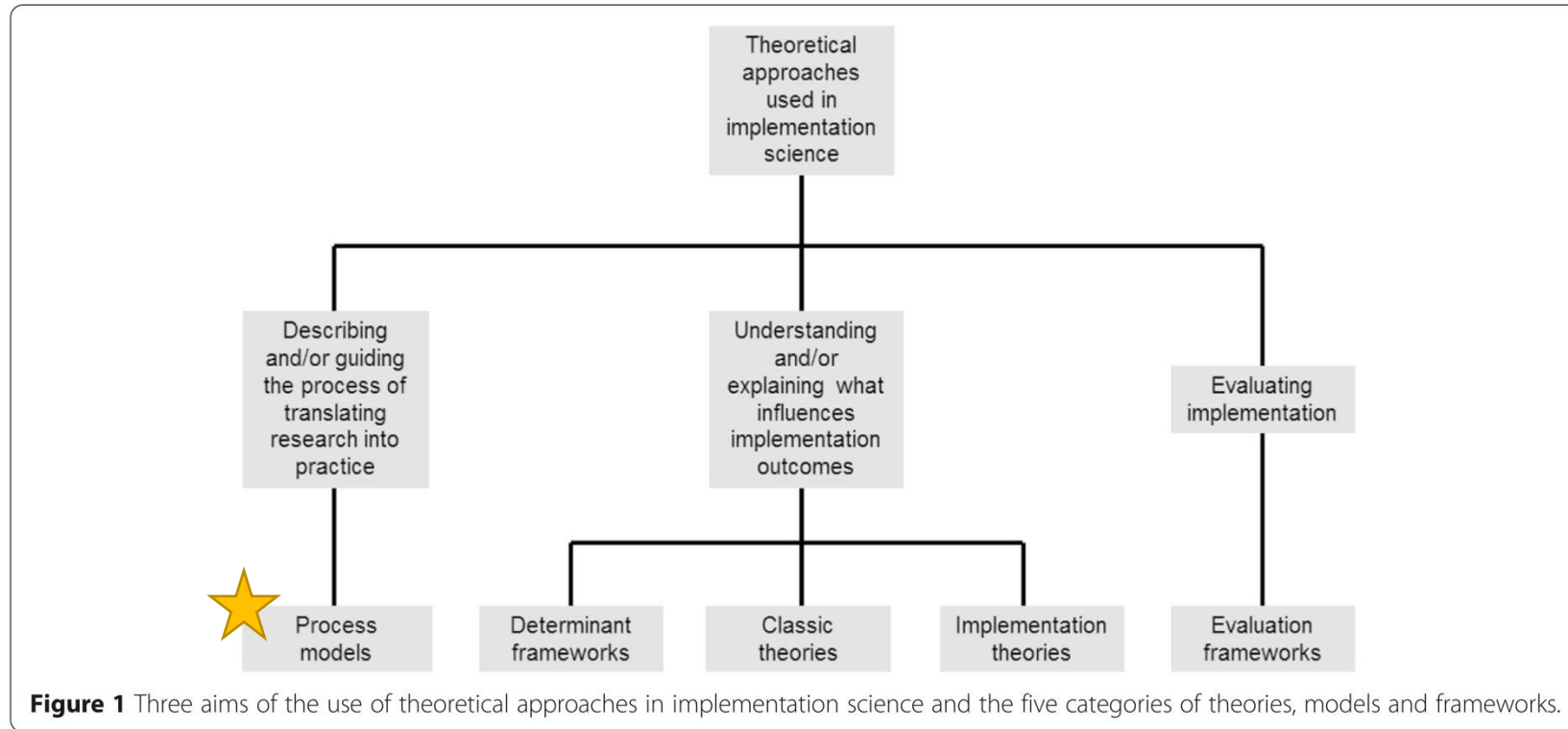
3. Theory, Model, and Frameworks (TMF)

WHAT ARE THEORIES, MODELS AND FRAMEWORKS?

- Provide a structure for understanding what drives implementation success or failure
- There are lots of them! > 100 implementation science TMFs, very few have an equity focus
- Terminology:
 - **T H E O R Y**: describes and explains phenomena; helps to predict/examine which factors influence outcomes
 - **M O D E L**: simplifies a phenomenon; descriptive rather than explanatory
 - **F R A M E W O R K**: a structure, overview, outline or plan made of descriptive categories (concepts, constructs, variables) and relationships between them; descriptive rather than explanatory

Nilsen, *Implementation Science*, 2015; <https://medium.com/knowledgenudge/unpacking-kt-theories-models-frameworks-bc816de36a97>

TMF 5 Categories



Nilsen, Implementation Science, 2015

Health Equity & Implementation Science

INCREASING ATTENTION TO EQUITY IN IMPLEMENTATION SCIENCE OVER THE LAST FIVE YEARS

DEBATE

Open Access

Implementation science should give higher priority to health equity



Ross C. Brownson^{1,2*}, Shiriki K. Kumanyika³, Matthew W. Kreuter⁴ and Debra Haire-Joshu⁵

Harnessing Implementation Science to Increase the Impact of Health Equity Research

Matthew Chinman, PhD,^{1*} Eva N. Woodward, PhD,^{2,3}
Geoffrey M. Curran, PhD,^{4,5} and Leslie R.M. Hausmann, PhD⁶ ||

Equity Is Fundamental to Implementation Science

Implementation science has not advanced equitable outcomes routinely, explicitly, or intentionally. Here's how it can.

By Audrey Loper, Beadsie Woo & Allison Metz | Summer 2021

PERSPECTIVE

Closing the health equity gap: A role for implementation science?

Beryne Odeny^{1*}

PLOS Medicine, San Francisco, California, United States of America

FRONTIERS IN CARDIOVASCULAR OUTCOMES RESEARCH

Health Equity and Implementation Science in Heart, Lung, Blood, and Sleep-Related Research Emerging Themes From the 2018 Saunders-Watkins Leadership Workshop

DEBATE

Open Access

Grounding implementation science in health equity for cancer prevention and control



Prajakta Adsul^{1*}, David Chambers², Heather M. Brandt³, Maria E. Fernandez⁴, Shoba Ramanadhan⁵, Essie Torres⁶, Jennifer Leeman⁷, Barbara Baquero⁸, Linda Fleischer⁹, Cam Escoffery¹⁰, Karen Emmons¹¹, Montserrat Soler¹², April Oh¹³, Ariella R. Korn¹⁴, Stephanie Wheeler¹⁵ and Rachel C. Shelton¹⁶

Methodologies to Advance
Health Equity

IMPLEMENTATION RESEARCH METHODOLOGIES FOR ACHIEVING SCIENTIFIC EQUITY AND HEALTH EQUITY

Moira McNulty, MD, MSc^{1,2}; J.D. Smith, PhD^{3,4}; Juan Villamar, MEd^{5,6};
Inger Burnett-Zeigler, PhD⁷; Wouter Vermeer, PhD^{8,9};
Nanette Benbow, MAS¹⁰; Carlos Gallo, PhD¹¹; Uri Wilensky, PhD¹²;
Arthur Hjorth, PhD¹³; Brian Mustanski, PhD¹⁴;
John Schneider, MD, MPH¹⁵; C. Hendricks Brown, PhD¹⁶

BLOG CENTER FOR DISSEMINATION & IMPLEMENTATION

Bringing a Health Equity Lens to Implementation Science Frameworks

By *Guest Author* • March 15, 2021

Written by Eva Woodward, Prajakta Adsul, Rachel Shelton, Leopoldo J. Cabassa and Ana Baumann

Five Recommendations for How Implementation Science Can Better Advance Equity

Implementation researchers, practitioners, and funders considered how to better support equitable implementation and outcomes. They make five recommendations from changing how we talk about implementation science to how we execute it and who we engage along the way.

POSTED Apr 05, 2019 BY Kim DuMont Allison Metz, Ph.D. Beadsie Woo

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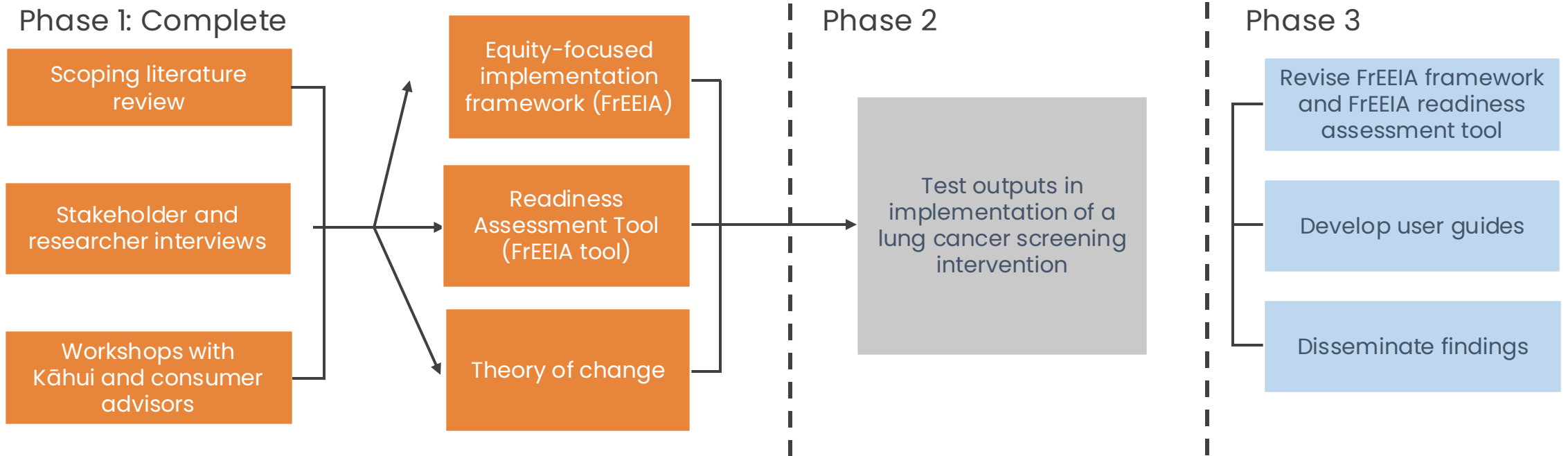
Te Whatu Ora
Health New Zealand



2. National Science Challenge Project

Supporting the Health System

IMPLEMENT INTERVENTIONS AND IMPROVE HEALTH EQUITY IN AOTEAROA



3. Scoping Literature Review

TMFs – Scoping Review

- 15 Theories, Models and Frameworks identified where equity may have been considered
- 12 equity-focused, either explicitly or implicitly
- 3 general TMFs applied in an equity context (i.e. supporting implementation of interventions in populations experiencing ethnic health inequities) .
- 6 TMFs were process models, that is they provide guidance through the implementation process as steps or stages

Source: Gustafson, P et al. Supporting implementation of interventions to address ethnicity-related health inequities: frameworks, facilitators and barriers – a scoping review protocol, *BMJ Open* 2023 Vol. 13 Issue 2, [doi.10.1136/bmjopen-2022-065721](https://doi.org/10.1136/bmjopen-2022-065721)



Equity-focused TMFs

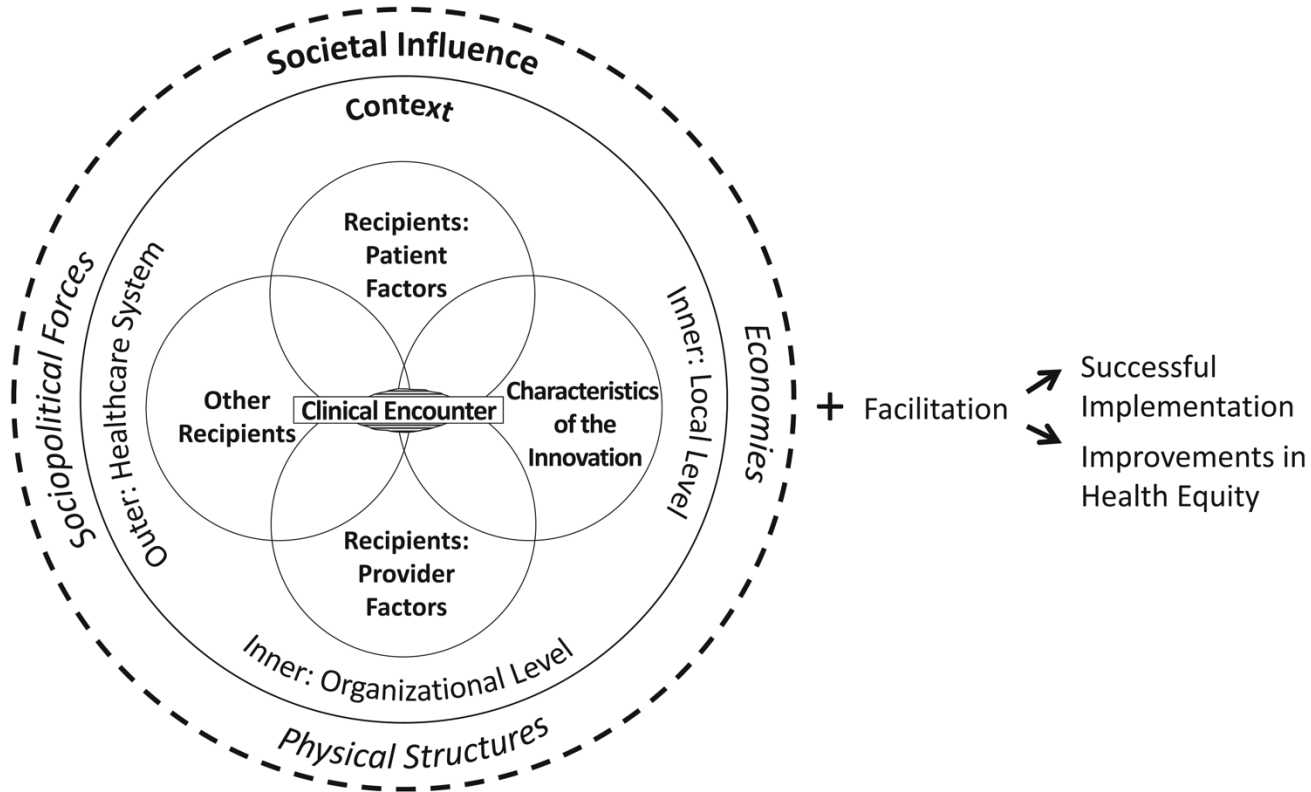
Grey: novel or adapted TMFs
Orange: established TMFs

PROCESS	DETERMINANT	IMPLEMENTATION THEORY	EVALUATION	HYBRID
Equity-focused Implementation Research for Health Programs (EquIR)	Health Equity Implementation Framework (HEIF)	COM-B model of behaviour (Capability, Opportunity, Motivation and Behaviour)	Adapted Proctor et al. framework	EQ-DI framework
Transcreation framework	He Pikinga Waiora (HPW)		Extension of RE-AIM for sustainability	
Intervention and Research Readiness Engagement and Assessment of Community Health Care (I-RREACH)	Integrated PRISM and SEM framework		RE-AIM (Reach, Effectiveness, Adoption, Implementation and Maintenance)	
Collaborative intervention planning framework	Consolidated Framework for Implementation Research (CFIR)			
ConNECT framework				
Indigenous Health Promotion Tool Implementation Model				

Using the Nilsen, Implementation Science, 2015 categories

(HEIF) – Determinant

HEALTH EQUITY IMPLEMENTATION FRAMEWORK



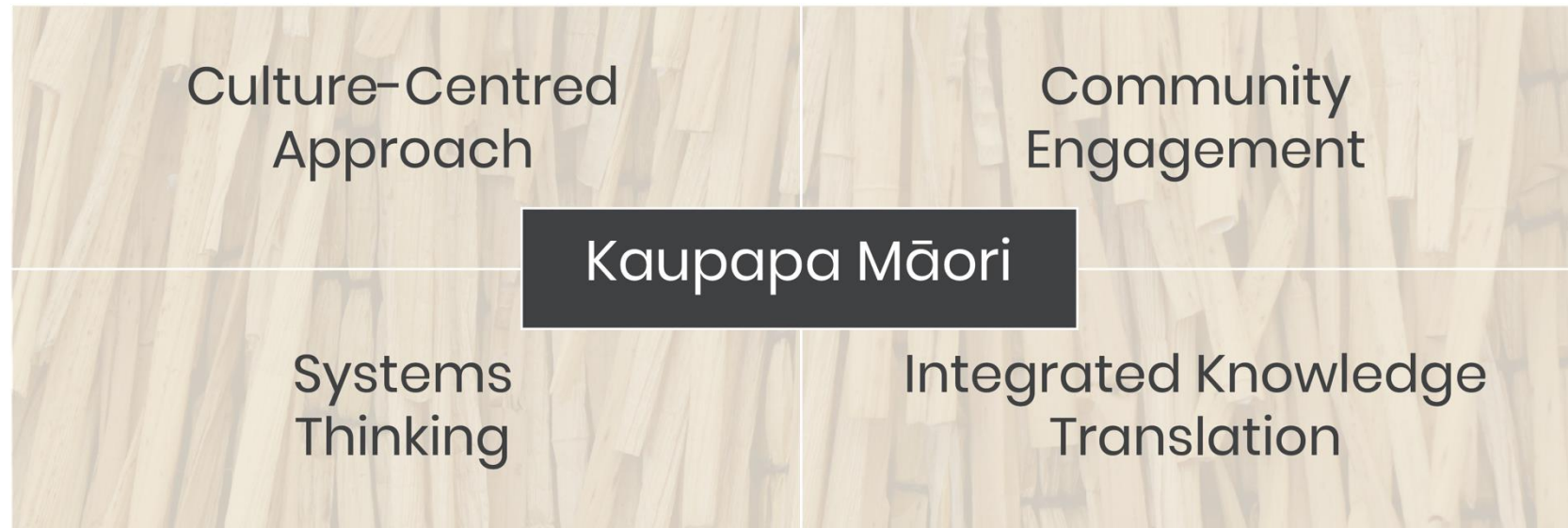
Explains factors relevant to implementation and healthcare disparities

FIVE OVERARCHING DOMAINS:

1. Characteristics of the Innovation (intervention)
2. Clinical Encounter
3. Patient & Provider Factors
4. Inner & Outer Context
5. Societal Influence

He Pikinga Waiora (HPW) – Determinant

CO-DESIGN IMPLEMENTATION FRAMEWORK



Key elements of implementation framework for Māori communities

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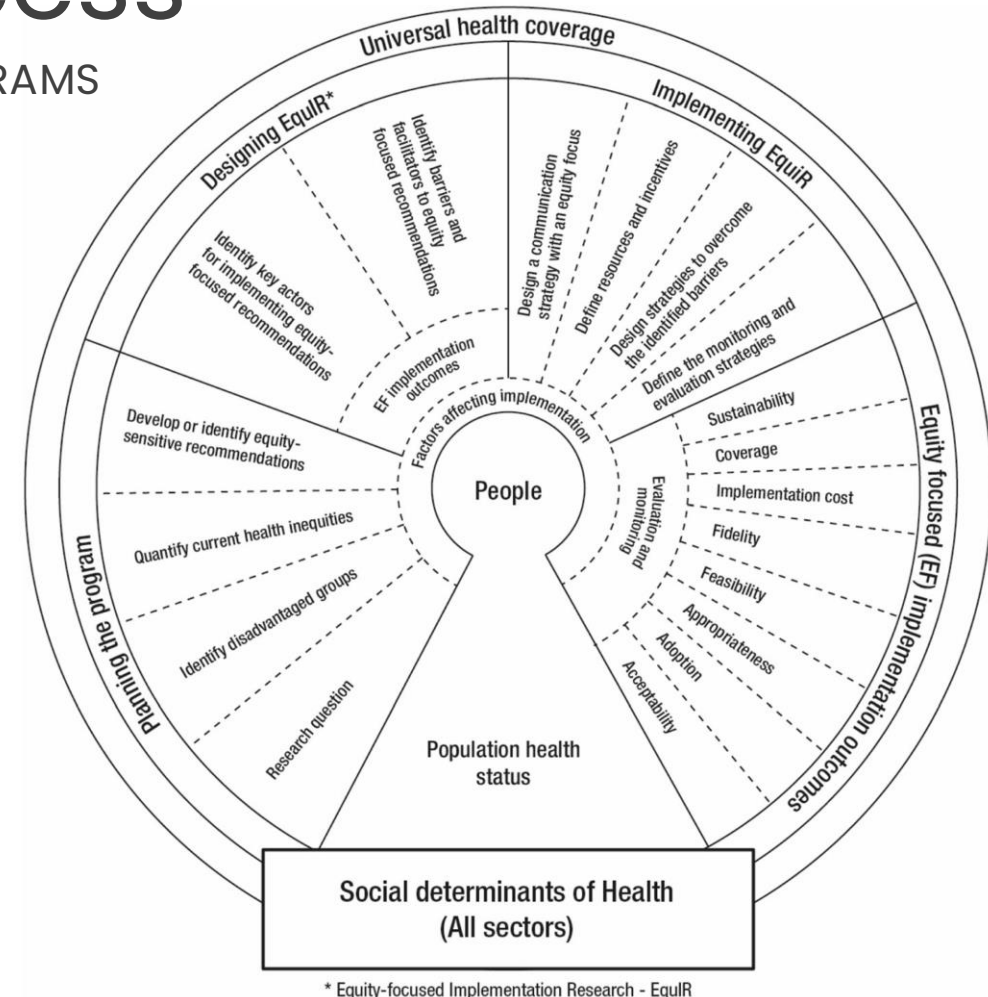


Oetzel et al., *Globalization and Health*, 2017

(EquiR) Framework – Process

EQUITY-FOCUSED IMPLEMENTATION RESEARCH FOR HEALTH PROGRAMS

- Intended to facilitate implementation of equity-focused interventions/application of an equity lens to implementation research
- FIVE STEP PROCESS:
 1. Consider the population's health status
 2. Plan the programme
 3. Design equity-focused implementation research
 4. Implement equity-focused implementation research
 5. Equity-focused implementation outcomes

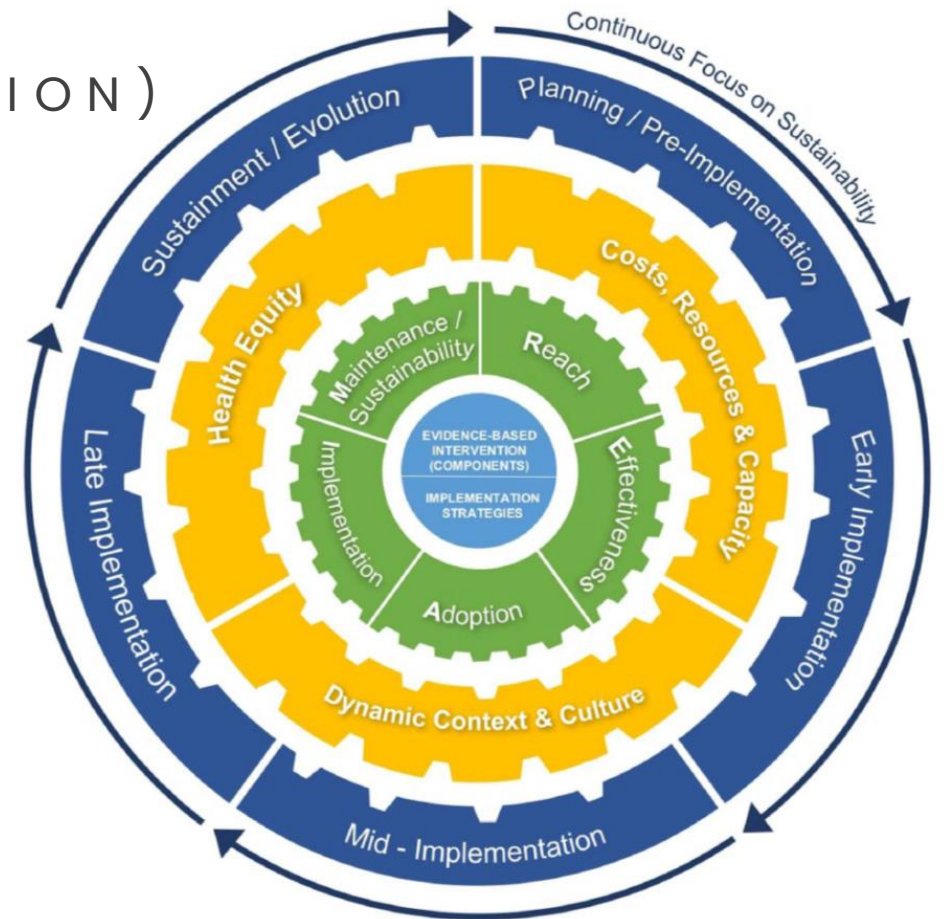


Eslava-Schmalbach et al., *International Journal for Equity in Health*, 2019

RE-AIM 2.0

(SUSTAINABILITY AND EQUITY EXTENSION)

- **REACH** – did we offer to the people we intended to? The most underserved?
- **EFFECTIVENESS** – did it create the change we expected? Robust effects across diverse populations?
- **ADOPTION** – did (all) of our providers adopt the intervention all the time? Who applied it, when? Is it feasible across a range of settings? In low resource settings?
- **IMPLEMENTATION** – did we implement the programme well / as we intended? (includes fidelity, adaptation, cost – and qualitative info on WHY changes came about), context
- **MAINTENANCE** – will reach, effectiveness, adoption, and implementation continue in the future? Providers, scale?



Source: Shelton et al, *Frontiers in Public Health*, 2020

4. Development of Framework for Effective and Equitable Implementation in Aotearoa (FrEEIA)

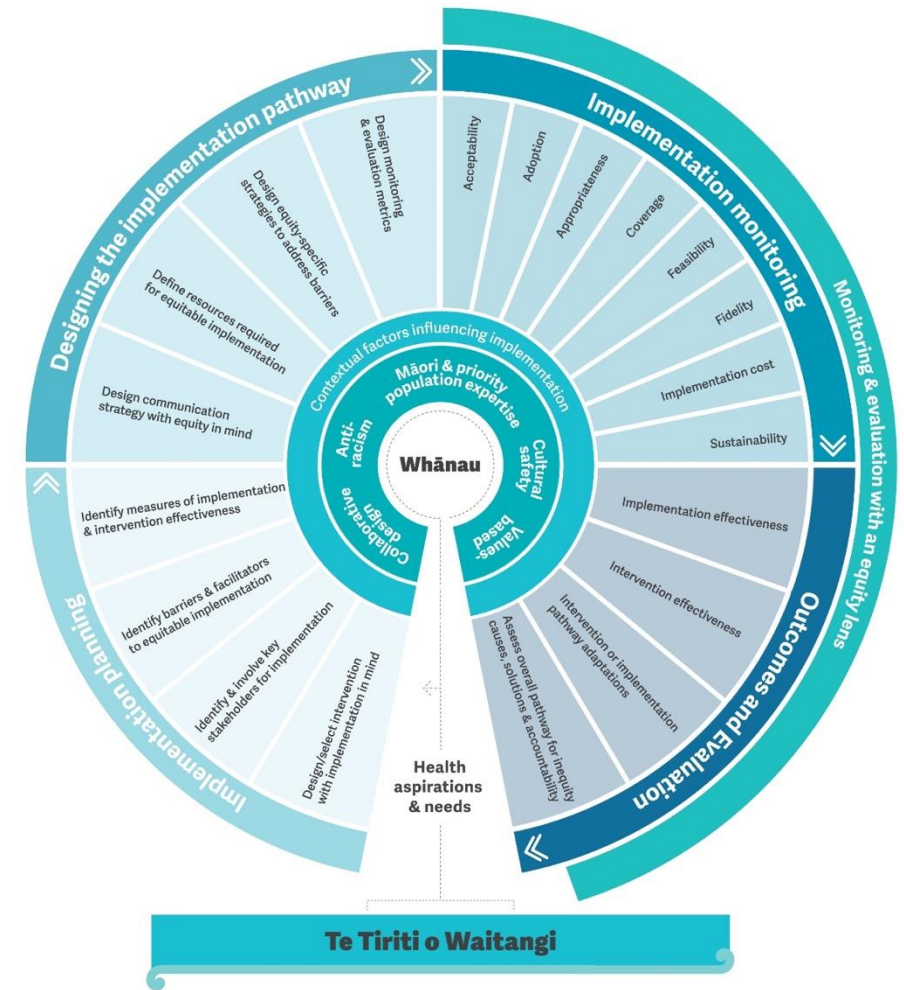
The Development Process

6 KEY STEPS

1. Literature review of equity focused TMFs
2. Interviews of stakeholders and researchers
3. Selection of a TMF to adapt - The Equity-based framework for Implementation Research (EquiR)
4. Adaptation of the framework
5. Mapping emergent themes from interviews against the adapted framework
6. Consultation and iterative revision

Framework for Effective and Equitable Implementation (FrEEIA)

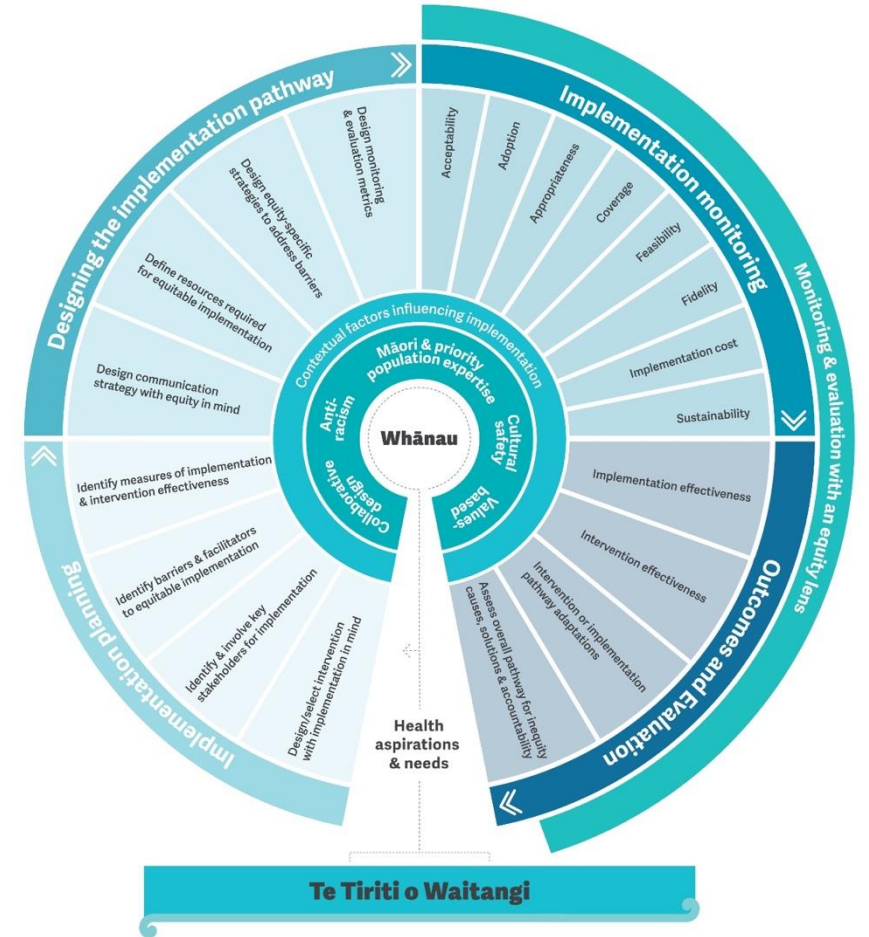
- Is comprehensive – aims to show the whole (equity lens at every step) but also the key steps
- Whānau aspirations and needs at centre
- Foundation Te Tiriti o Waitangi
- Underpinned by collaborative design, anti-racism, Māori and priority population expertise, cultural safety and values-based
- Recognises contextual influences social, economic, commercial and political determinants of health



The Framework

4 Sections:

1. Implementation planning
2. Designing the implementation pathway
3. Implementation monitoring
4. Outcome and evaluation



Source: Gustafson, P., Lambert, M., Bartholomew, K. et al. Adapting an equity-focused implementation process framework with a focus on ethnic health inequities in the Aotearoa New Zealand context. *Int J Equity Health* 23, 15 (2024). <https://doi.org/10.1186/s12939-023-02087-y>



5. Development of the FrEEIA readiness assessment tool

The FrEEIA readiness assessment tool

- Identified a need to assist with the '**how**' of equity work in health services
- **Organisational readiness** is a well described concept in organisational psychology, project management and quality improvement = are we ready to roll out this intervention / project?
 - Interested in whether we could scaffold/leverage that knowledge with an equity tool?
- Readiness assessment has whole range of tools already in use – in addition to the scoping review we completed a peer reviewed and grey literature search for existing tools
- After the search the research team decided to use the Wandersman Center 'Readiness Thinking Tool' as a basis and to significantly adapt it to meet the requirements of Aotearoa

Assessing equity readiness

- **Equity readiness** is the willingness and ability of a service/organisation to implement an intervention (implementation strategies) in an equity-enhancing (pro-equity) way
- We have adapted and developed a FrEEIA readiness assessment tool that helps health staff think about the intervention and about equity across **three levels**:
 - i. Self
 - ii. Team/service
 - iii. Organisation
- Quick and relatively simple **survey** for each team member to complete was a key requirement – online 29 self-rated items across the three levels
- The aim of the tool is to generate **facilitated discussion** between teams who are planning to implement an intervention – and create an **action plan**
- The FrEEIA tool has been reviewed, amended and approved by our project Kāhui and consumer groups, and undergone preliminary testing with two teams within Te Whatu Ora

The FrEEIA readiness assessment tool



Equity Readiness Assessment Tool

Version 1.5 - August 2023

Improving equity when implementing interventions, programmes and services in the health sector

In Aotearoa New Zealand there are inequities in health service design and delivery. While not intentional, the implementation process and the organisation context can build inequities into the service delivery model.

The Healthier Lives National Science Challenge funded the University of Otago to lead the development of a set of tools to support the implementation planning process. These tools are designed to support organisations implementing health services to maximise the likelihood they advance equity.

How was this tool developed?

This tool was developed through research with stakeholders who design and implement interventions to advance equity. This research highlighted critical facilitators and barriers to implementation. The research was then combined with international equity assessment and organisational readiness tools* to develop a robust and user-friendly tool for use in Aotearoa New Zealand.

Intended users

This tool is to be used by those who are:

- Implementing services specifically designed to improve equity.
- Delivering services and want to improve equity.
- Designing interventions to advance equity.

The Readiness Thinking Tool was used as the basis of this equity readiness assessment tool. This is available under a Creative Commons License and adapted with permission from the authors. Available from: https://www.andersmancenter.org/uploads/1/2/3/5/128593635/rwc_readiness_thinking_tool.pdf



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How to complete this tool

As a health professional/staff member who provides lung cancer care or is involved or interested in the lung cancer screening (LCS) study being implemented at your service/organisation, you have been invited to use this tool to assess your service/organisation's readiness to implement LCS in an equitable way. The LCS study has been designed with the intention of improving lung cancer health equity.

Ideally, you will already have attended an introductory session that described the tool and the LCS study. If you did not attend this in person, you should have received a link to view more information about the process. Although not required, we strongly encourage you to view this before proceeding.

Each person in your service/organisation who provides lung cancer care or who is involved or interested in the LCS study (referred to as 'the intervention' in the tool) should complete Sections 1-3 of the tool individually first before meeting together as a team to review your responses and complete the discussion questions.

The aim of this tool is to generate discussion. Coming out of the discussion is an agreement about whether your organisation is ready to deliver the intervention in an equity-enhancing way, and on a set of actions to further improve your organisation's readiness for improving equity.

Equity Readiness Assessment Tool

Section 1: Motivation for the intervention

The following statements relate to how motivated individuals are to implement this intervention. Your responses to these statements can be used to build an understanding of the team's thinking in regard to the intervention.

Individual readiness: the extent to which I believe this is important and I want it to happen.		Disagree	Partially agree	Strongly agree	Unsure
Alignment	This intervention fits with how I usually do things around here	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relative advantage	This intervention seems better (or is likely to be better) than what I am currently doing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evidence	The evidence for how this intervention will improve equity is clear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flexibility	This intervention can be adapted to my local context	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outcomes	I can see how this intervention will lead to improved equity outcomes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Priority	Getting this intervention working is a priority amongst other things I need to do	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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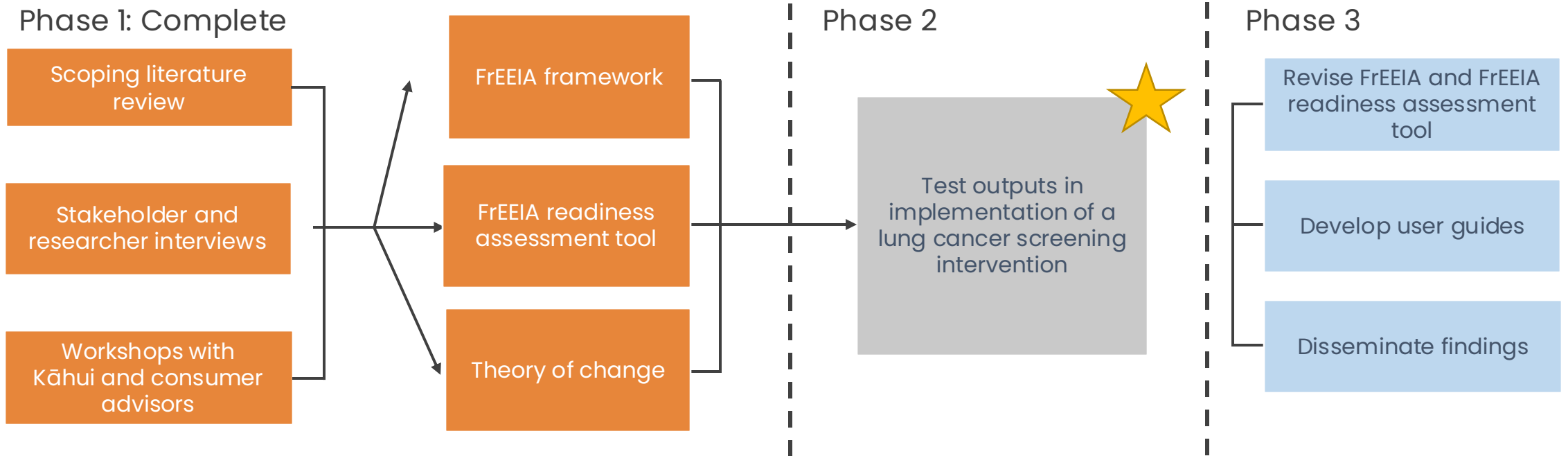


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Phase 2: Feedback From Pre-testing

- Self-completion ~10 min online (can do on paper) with team collating responses
- Hybrid with some online some in person doesn't seem to be a big disadvantages
- Allocating time (30-40 min) seems to work well
- Testing with a pro-equity team, with a high level of trust – as we move our testing into other teams we will likely encounter greater variability in levels of understanding and engagement around equity
- Suggestion that the FrEEIA tool could be used as part of project development process to support building a roadmap that highlights areas to think about as this progresses
- Comment around considering “who is in the room” and how this shapes the responses. People’s responses will be informed by their understanding of equity. Also consider who is providing the data that informs the responses to the tool
- Facilitated discussion felt to be important
- Some interest in a more nuanced maturity-type scale, but the simplicity of the tool was also appreciated

Phase 2: Testing the FrEEIA readiness assessment tool

- We are currently in the process of more rigorous testing of the FrEEIA tool with multidisciplinary teams involved in lung cancer screening research
- This involves testing the FrEEIA process and using the results to help refine the FrEEIA Readiness Assessment Tool for wider use
- Our goal is to produce a tool that is simple to complete, user friendly and will help teams develop a plan to ensure an equitable implementation of interventions in the future

Summary

- Implementation science offers a structured way to get evidence into practice
- There is increasing interest in *equity* in the field of implementation science
- We can build in an equity focus into frameworks and tools to help the process of implementing evidence into practice
- We have developed a framework and a readiness assessment tool with a focus on ethnic health inequities, with potential for translation across any equity parameter/group
- We are testing these in the Aotearoa context and would love to have others join us in using and testing them and building our collective knowledge and application alongside other equity tools