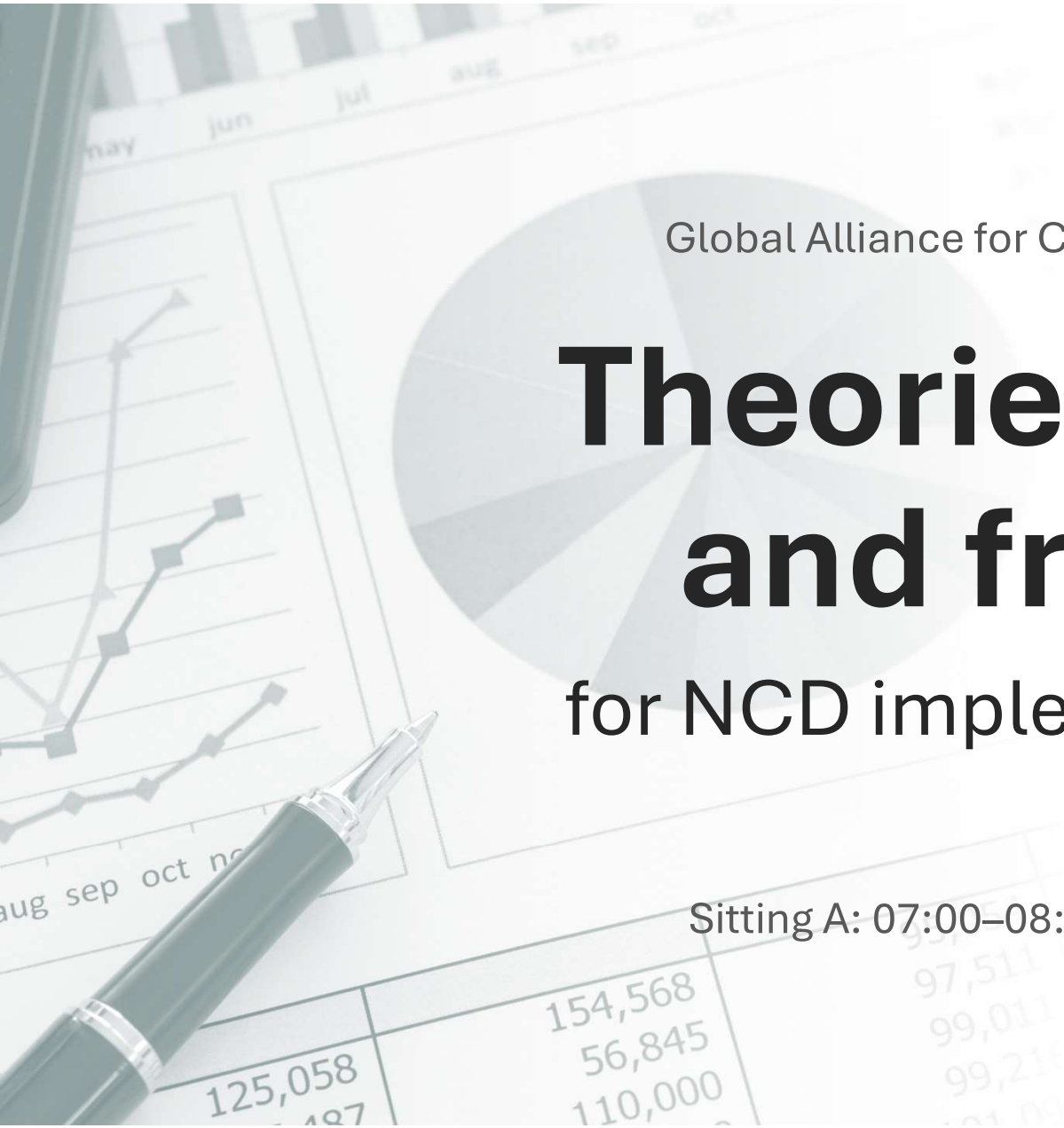


GACD
GLOBAL ALLIANCE FOR CHRONIC DISEASES
AN ALLIANCE OF HEALTH RESEARCH FUNDERS

Global Alliance for Chronic Diseases mid-year workshop

Theories, models, and frameworks

for NCD implementation research

Wednesday 12 June 2024

Sitting A: 07:00–08:45 UTC // Sitting B: 17:00–18:45 UTC


GACD
GLOBAL ALLIANCE FOR CHRONIC DISEASES
AN ALLIANCE OF HEALTH RESEARCH FUNDERS
Қош келдіңіз
Qoş keldiñiz
स्वागतम्
Fáilte
환영
Hwan-yeong
स्वागतम्
Svāgatam
G'day!
ਸਵਾਗਤ ਹੈ
Savāgata hai
Witamy
ようこそ
Yōkoso
Bienvenue
Welcome
добре дошли
dobre doshli
Karibu
ยินดีต้อนรับ
Yindī t̂xnrạb
Bienvenido
أهلا بك
'ahlaan bik
欢迎
Huānyíng
Tervetuloa
Selamat datang
خوش آمدید
Afio mai

Housekeeping

 The workshop will be **recorded** and will be publicly available after the event

 If you can, **switch on your webcam**

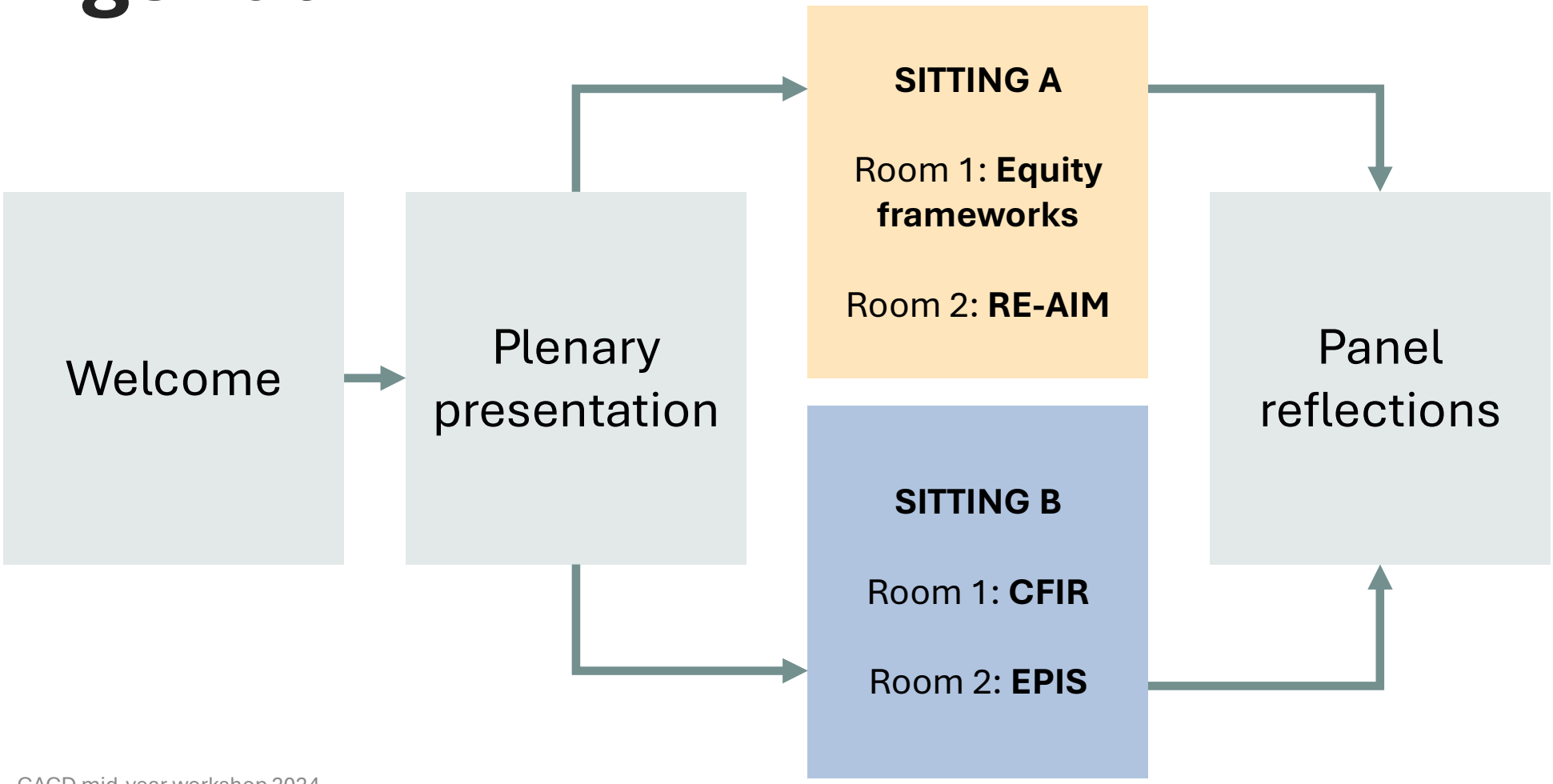
 To reduce background noise, **please mute yourself** when not asking a question or making a comment

 **Please use the 'raise hand' reaction** to ask a question or make a comment

 You can use the **chat box** at any time to share a comment or reflection

 Slides and links to resources will be available on the GACD website after the event

Agenda


Welcome
Plenary presentation
SITTING A
Room 1: Equity frameworks
Room 2: RE-AIM
SITTING B
Room 1: CFIR
Room 2: EPIS
Panel reflections

GACD

AL ALLIANCE FOR CHRONIC DISEASES
NCE OF HEALTH RESEARCH FUNDERS

National Health and Medical Research Council, Australia

Sao Paulo Research Foundation, Brazil

Canadian Institutes of Health Research

European Commission

Indian Council of Medical Research

Agency for Medical Research and Development, Japan

Health Research Council of New Zealand

South African Medical Research Council

Health Systems Research Institute, Thailand

UK Medical Research Council

UK Department of Health and Social Care

US National Institutes of Health

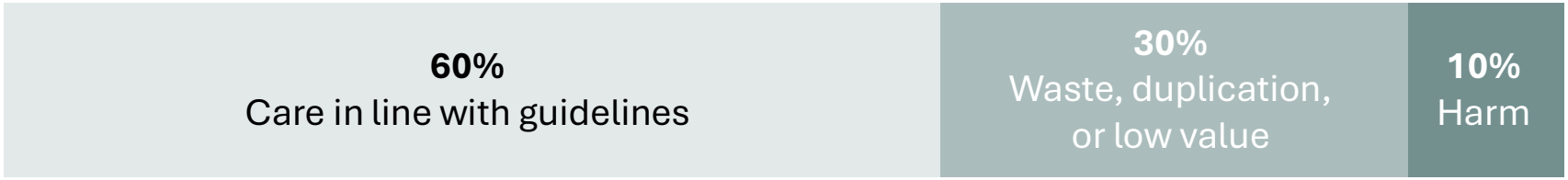
www.gacd.org/about/people-and-organisation/associate-members

GACD's strategic objectives

Invest in **impactful implementation research**

Facilitate **collaborations and partnerships** to support impact

Build **implementation science capacity** in relation to NCDs



Braithwaite, Glasziou & Westbrook (2020) BMC Med 18, 102

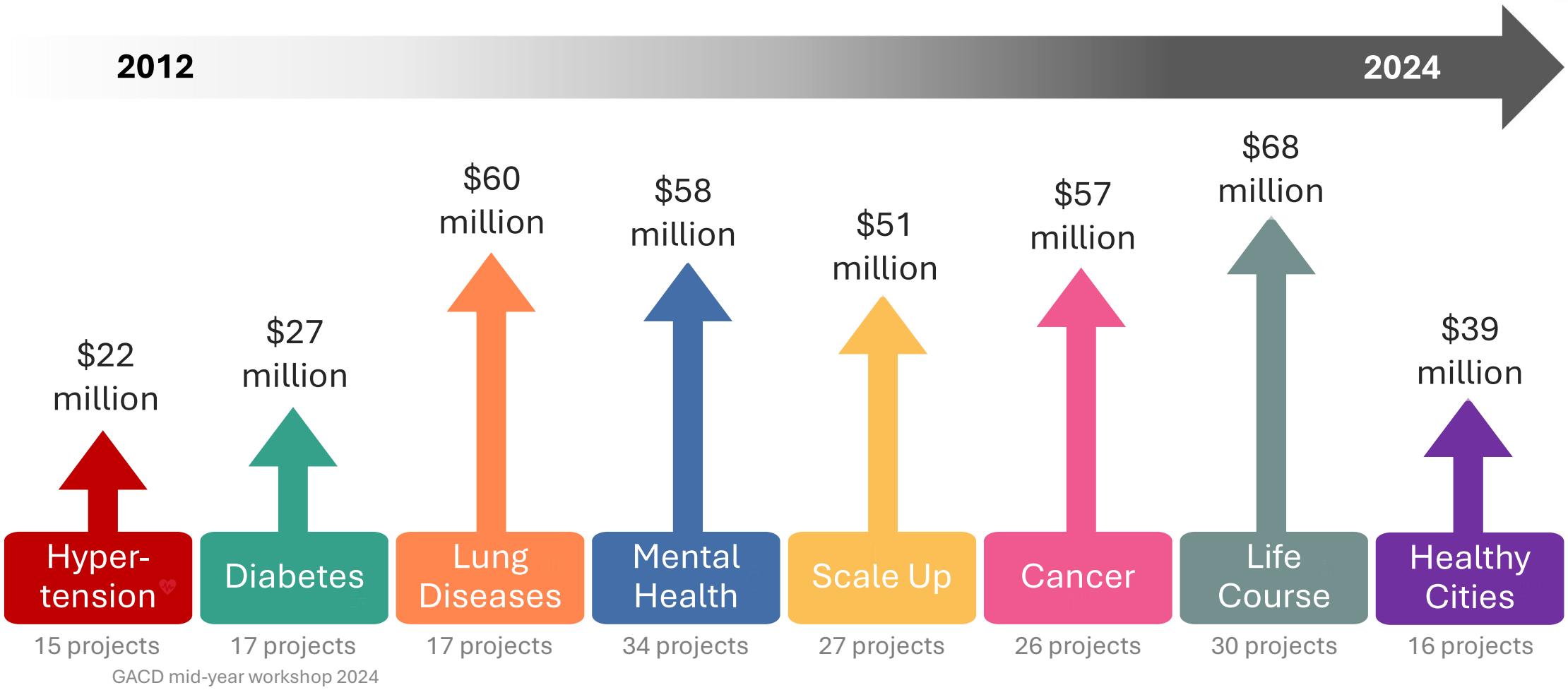
In the past two decades, it has been estimated that

more than half of cancers could have been prevented

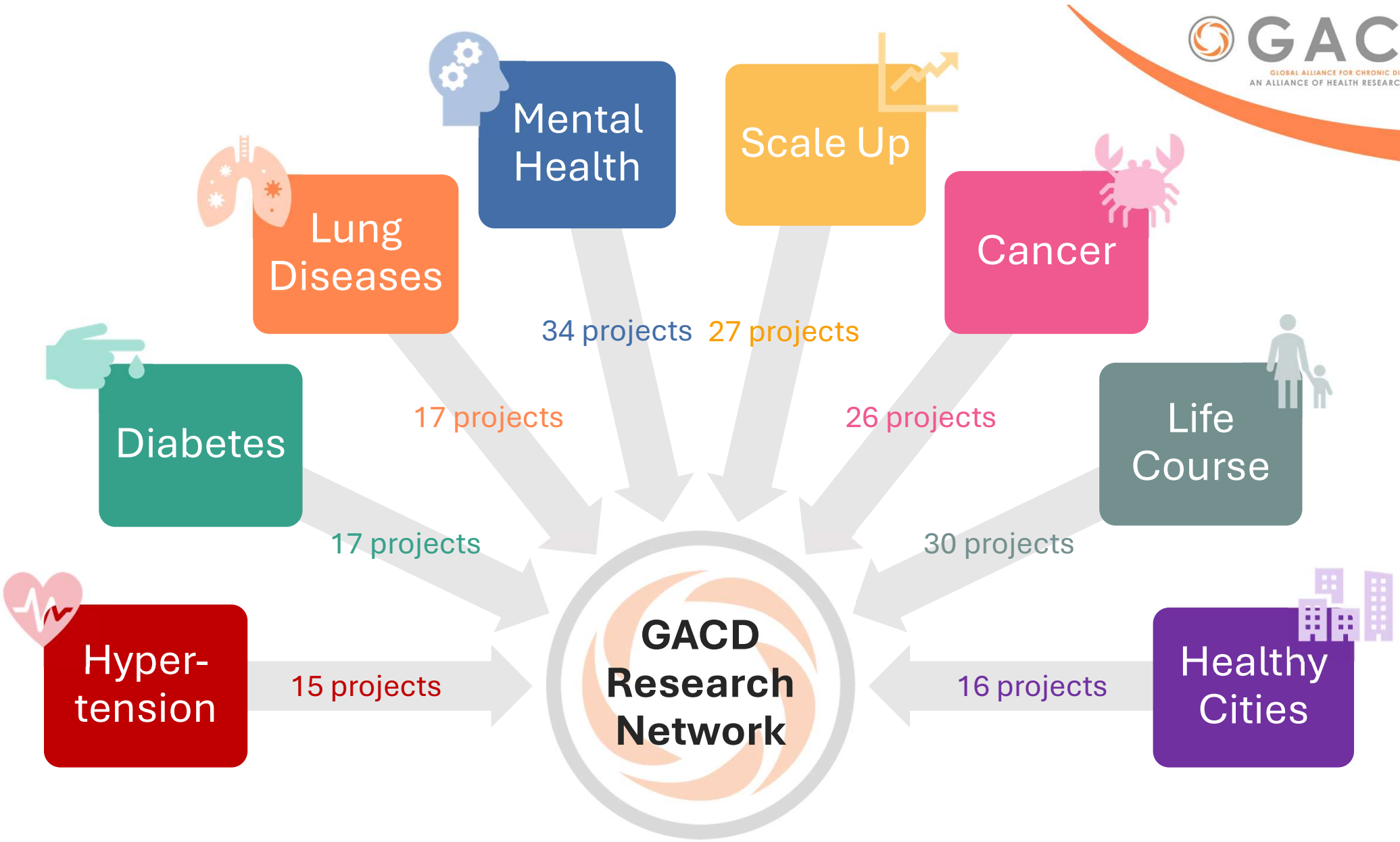
by applying knowledge that we already have

Emmons and Colditz (2017) N Engl J Med 376(10):986-990.

GACD has invested US $375+ million



GACD mid-year workshop 2024


GACD
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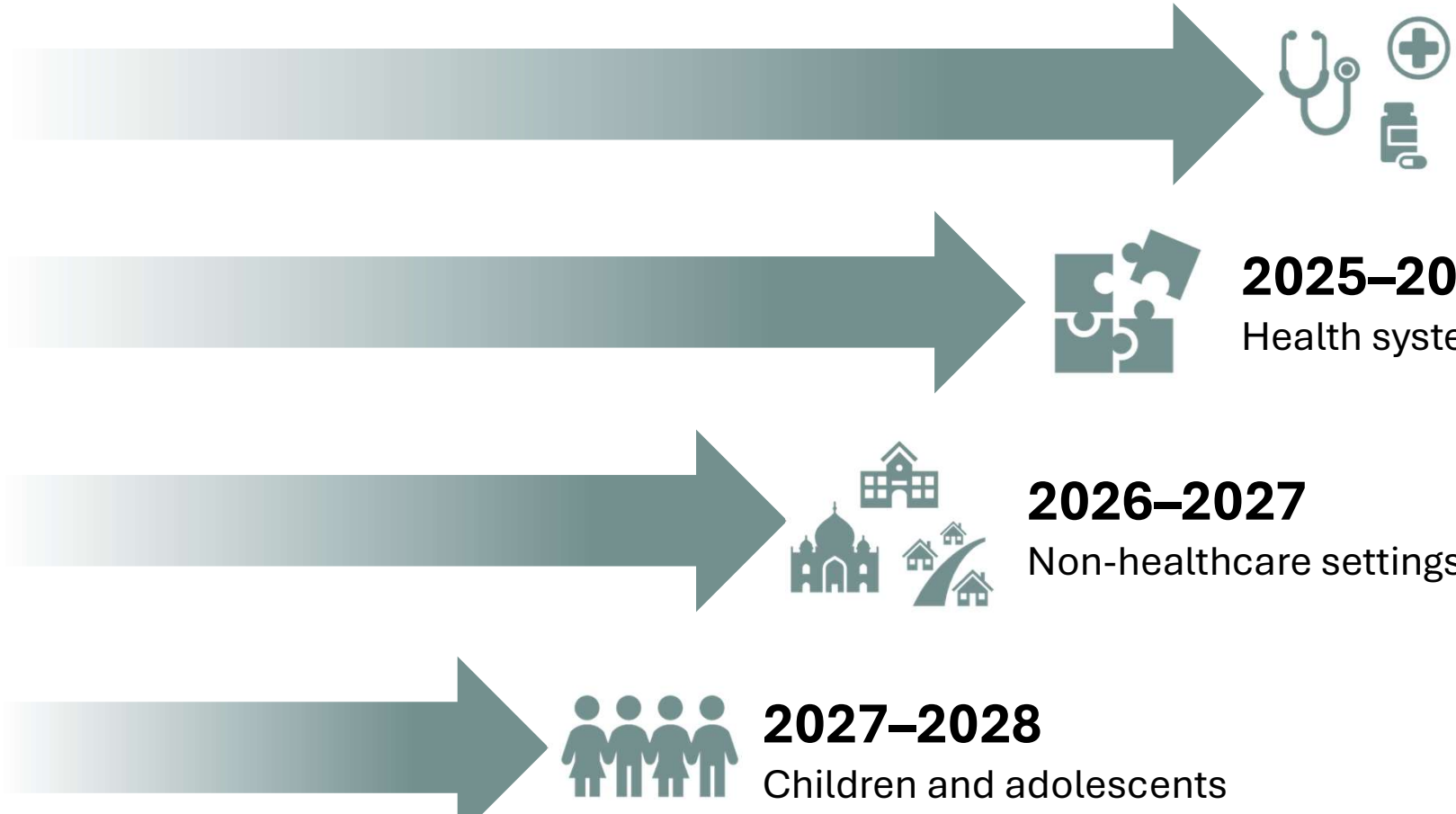
Mental Health
Scale Up
Lung Diseases
Cancer
Diabetes
Life Course
Hyper-tension
Healthy Cities
34 projects
27 projects
17 projects
26 projects
17 projects
30 projects
15 projects
16 projects
GACD Research Network

Ongoing and future funding calls



2024–2025
Multimorbidity and long-term conditions

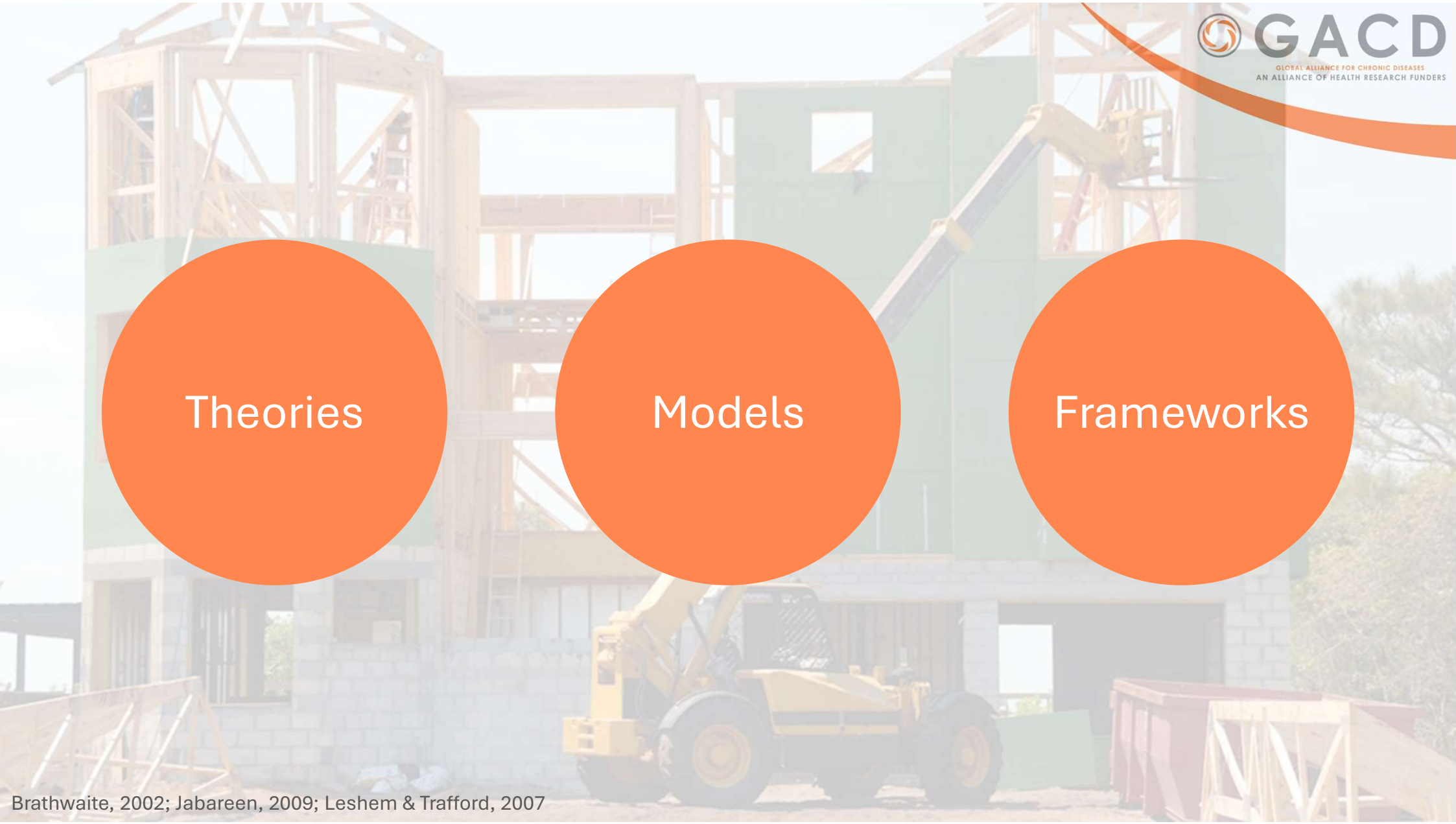
2025–2026
Health systems

2026–2027
Non-healthcare settings

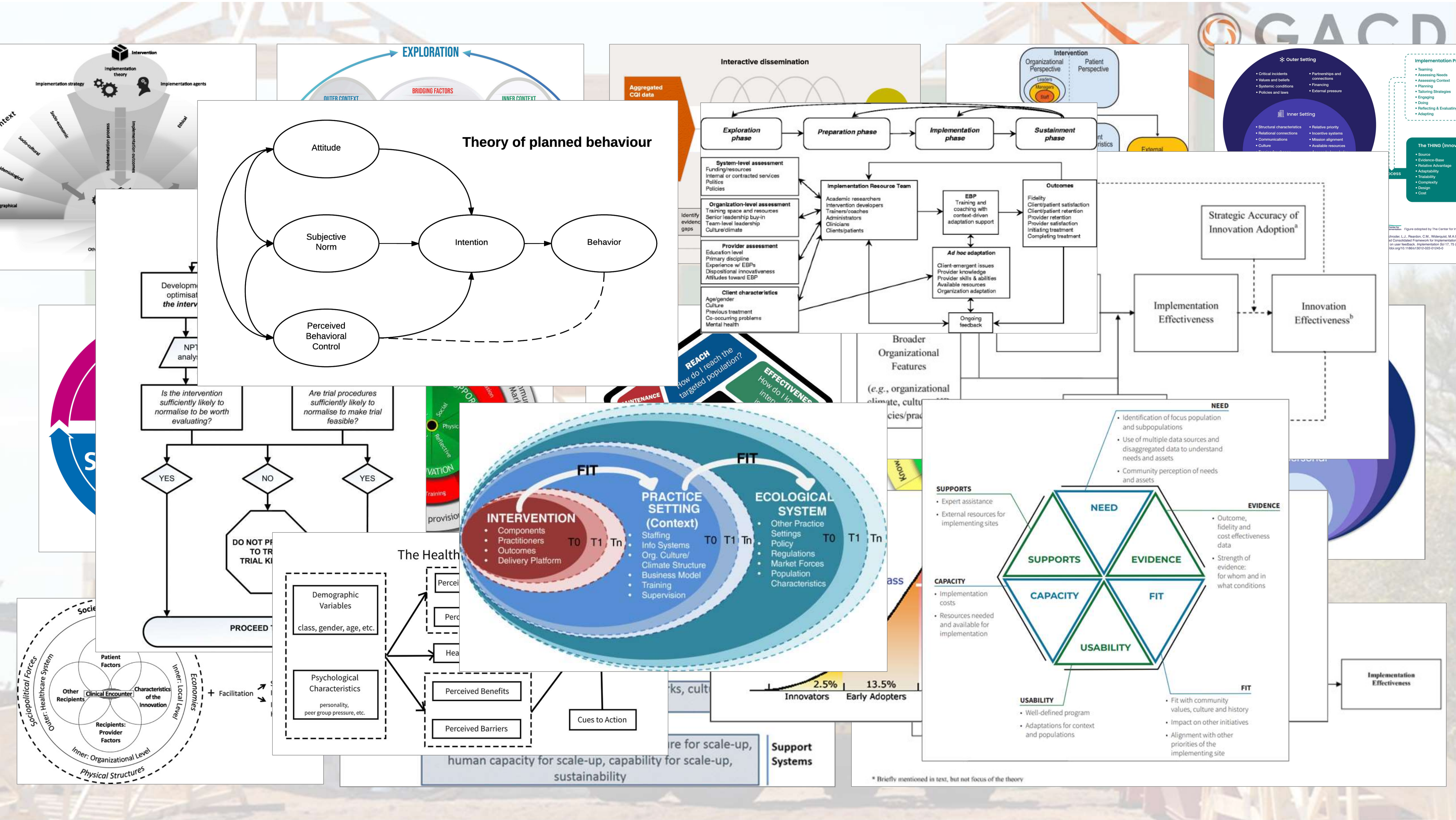
2027–2028
Children and adolescents

For more info, please visit: www.gacd.org/funding

Image source: Pixabay



Brathwaite, 2002; Jabareen, 2009; Leshem & Trafford, 2007



Theory of planned behaviour
Attitude
Subjective Norm
Perceived Behavioral Control
Intention
Behavior
EXPLORATION
BRIDGING FACTORS
OUTER CONTEXT
INNER CONTEXT
Interactive dissemination
Aggregated CQI data
Exploration phase
Preparation phase
Implementation phase
Sustainment phase
System-level assessment
Funding/resources
Internal or contracted services
Politics
Policies
Organization-level assessment
Training space and resources
Senior leadership buy-in
Team-level leadership
Culture/climate
Provider assessment
Education level
Primary discipline
Experience w/ EBPs
Dispositional innovativeness
Attitudes toward EBP
Client characteristics
Age/gender
Culture
Previous treatment
Co-occurring problems
Mental health
Implementation Resource Team
Academic researchers
Intervention developers
Trainers/coaches
Administrators
Clinicians
Clients/patients
EBP
Training and coaching with context-driven adaptation support
Outcomes
Fidelity
Client/patient satisfaction
Client/patient retention
Provider retention
Provider satisfaction
Initiating treatment
Completing treatment
Ad hoc adaptation
Client-emergent issues
Provider knowledge
Provider skills & abilities
Available resources
Organization adaptation
Ongoing feedback
Strategic Accuracy of Innovation Adoption
Implementation Effectiveness
Innovation Effectiveness
Broader Organizational Features
Is the intervention sufficiently likely to normalise to be worth evaluating?
Are trial procedures sufficiently likely to normalise to make trial feasible?
YES
NO
YES
PROCEED
REACH
How do I reach the targeted population?
EFFECTIVENESS
FIT
INTERVENTION
Components
Practitioners
Outcomes
Delivery Platform
PRACTICE SETTING (Context)
Staffing
Info Systems
Org. Culture/ Climate Structure
Business Model
Training
Supervision
ECOLOGICAL SYSTEM
Other Practice Settings
Policy
Regulations
Market Forces
Population Characteristics
T0
T1
Tn
The Health
Demographic Variables
class, gender, age, etc.
Psychological Characteristics
personality, peer group pressure, etc.
Perceived Benefits
Perceived Barriers
Cues to Action
NEED
Identification of focus population and subpopulations
Use of multiple data sources and disaggregated data to understand needs and assets
Community perception of needs and assets
SUPPORTS
Expert assistance
External resources for implementing sites
EVIDENCE
Outcome, fidelity and cost effectiveness data
Strength of evidence: for whom and in what conditions
CAPACITY
Implementation costs
Resources needed and available for implementation
FIT
USABILITY
Well-defined program
Adaptations for context and populations
Fit with community values, culture and history
Impact on other initiatives
Alignment with other priorities of the implementing site
* Briefly mentioned in text, but not focus of the theory
Innovators
Early Adopters
2.5%
13.5%
Support Systems
human capacity for scale-up, capability for scale-up, sustainability
Patient Factors
Other Recipients
Clinical Encounter
Characteristics of the Innovation
Recipients: Provider Factors
Facilitation
Inner: Organizational Level
Inner: Local Level
Outer: Healthcare System
Sociopolitical Forces
Physical Structures
Economies
Implementation strategy
Implementation agents
Intervention
Outer Setting
Inner Setting
Implementation Process
The THING (Innovation)
Intervention
Organizational Perspective
Patient Perspective

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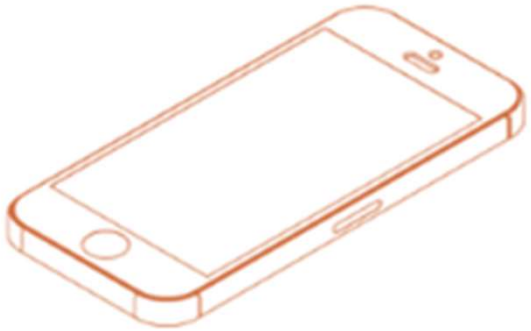
Grab your phone
(or open a browser window)

1



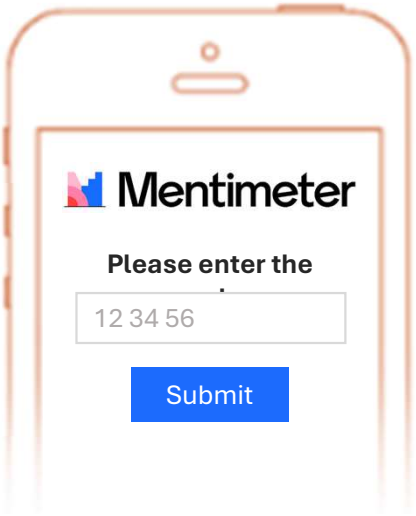
Go to www.menti.com

2

www.menti.com

Enter the code

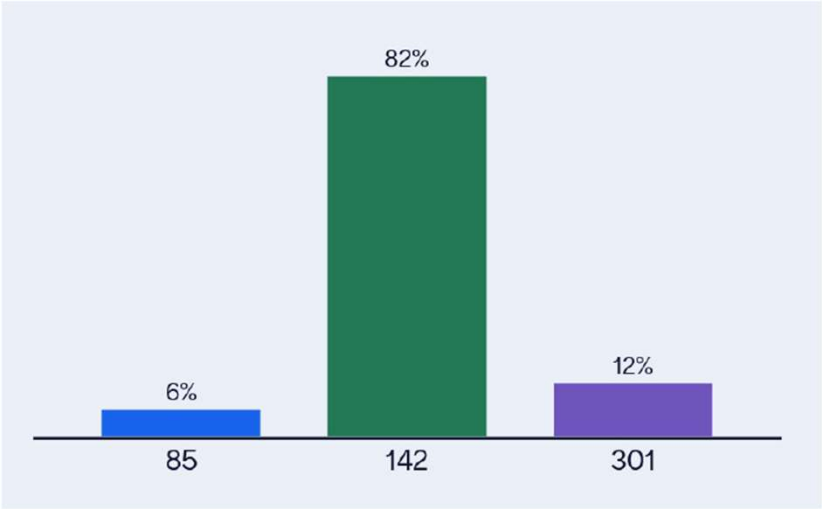
3



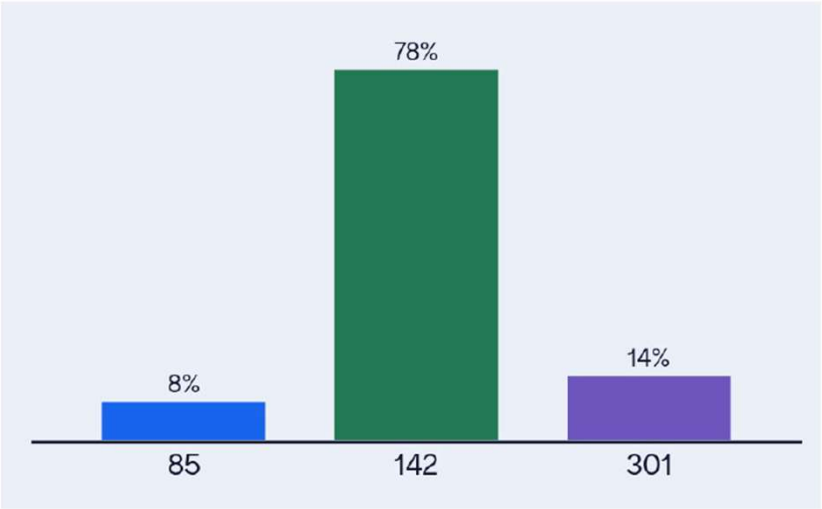
Your phone (or browser window) will be like a games console for the voting

How many TMFs did Wang and colleagues identify and include in their recent scoping review?

Sitting A



Sitting B

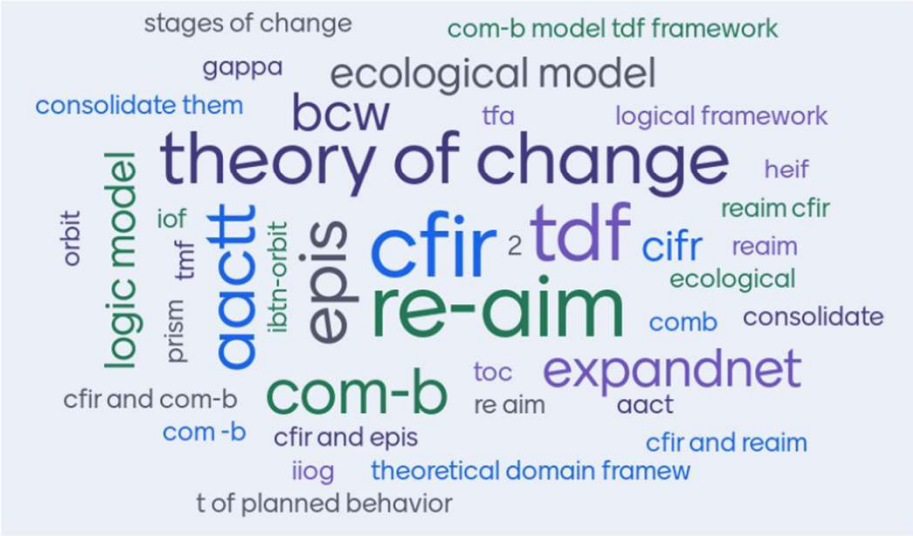


Wang Y et al. Implementation Sci 18, 43 (2023).

Which TMFs do you use in your work or research?

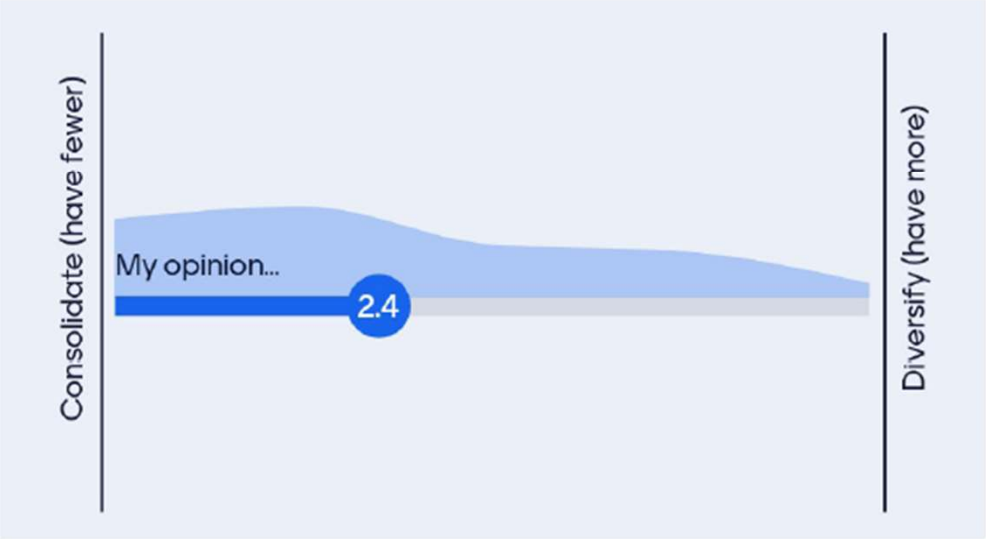
Sitting A

Sitting B



Should we try to diversify (have more) or consolidate (have fewer) the TMFs we use?

Sitting A



Sitting B

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Plenary presentation – Sitting A

Advancing theories, models, and frameworks

Jaime Miranda – University of Sydney, Australia

Implementation Research Theories, Models & Frameworks workshop

J. Jaime Miranda, MD, MSc, PhD, FFPH

Global Alliance for Chronic Diseases

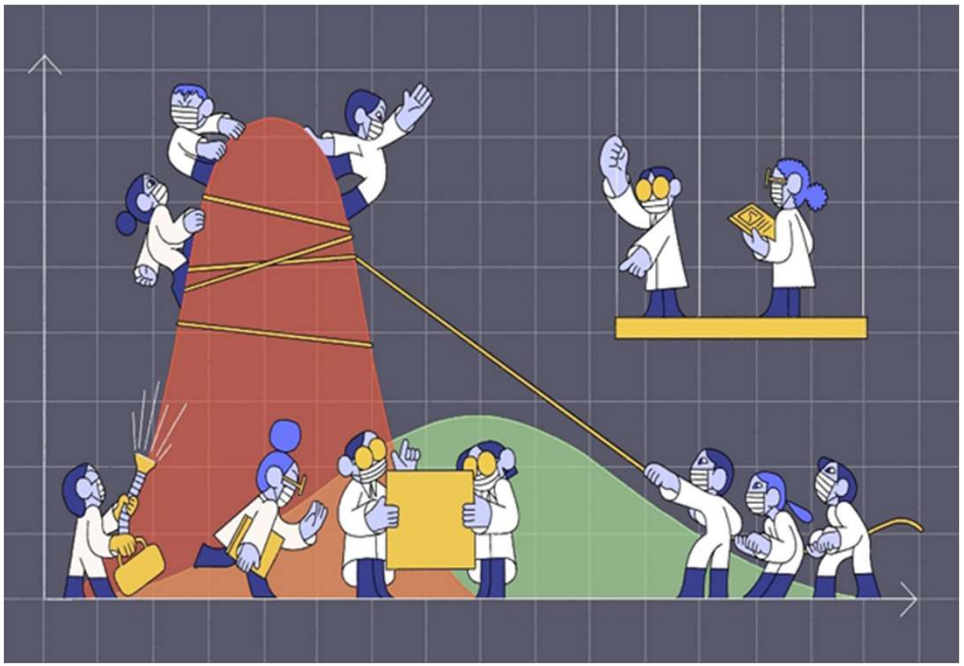
12 June 2024

Conflicts of interests

- Funding
  - Wellcome, NIH, MRC, AHPSR/WHO, Bloomberg Philanthropies, CONCYTEC, GCC, IDRC, SNF, NIHR, NHMRC
  - No pharma funding

- @jjaimemiranda

With thanks to



www.cronicas-upch.pe

Our values

Generosity

Innovation

Integrity

Quality

Nature in 2018

"CRONICAS has evolved into one of Latin America's leading NCD research centres…

"A model of interdisciplinary research that is scarce in any part of the world"

Source: https://www.nature.com/articles/d41586-018-06974-1

Peru has struggled to get a handle on the geographical distribution of non-communicable diseases throughout the nation. Credit: Jacob

Implementation Science

Definitions of *Implementation Science*

- "the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice, and, hence, to improve the quality and effectiveness of health services" *Implementation Sci* 2006;1:1.

- "This field incorporates a scope broader than traditional clinical research, focusing not only at the patient level but also at the provider, organization, and policy levels of healthcare" *BMC Psychol* 2015; 3(1): 32.

The 'Know-Do' Gap

Implementation research takes what we know and turns

Implementation science is the study of the methods and research uptake into practice. Implementation science is and middle-income countries, where it can help ensure t invested in cost-effective interventions.

Implementation research is needed to account for the c in which interventions are implemented since other appr address these. Results of implementation research supp policymaking that can build robust programmes to impr

"Implementation science examines what works, for whom and under what circumstances"

Source: https://www.gacd.org/about/what-we-do/implementation-science

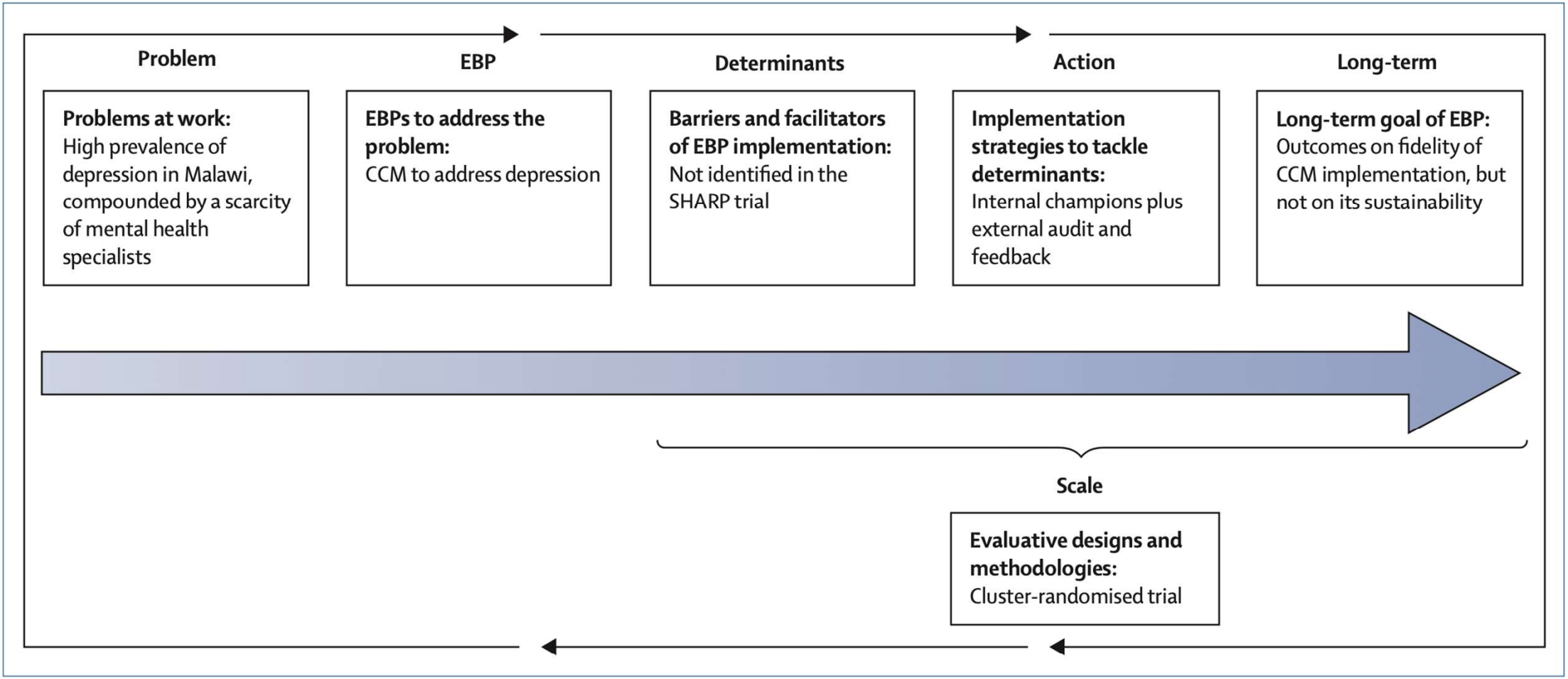


Figure: **The SHARP trial illustrated with the PEDALS framework**
EBP=evidence-based practice. CCM=collaborative care model.

How do I imagine it?

Discovery science

Reality

• • •

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• • •

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Implementation science

The health system

Again, in my mind

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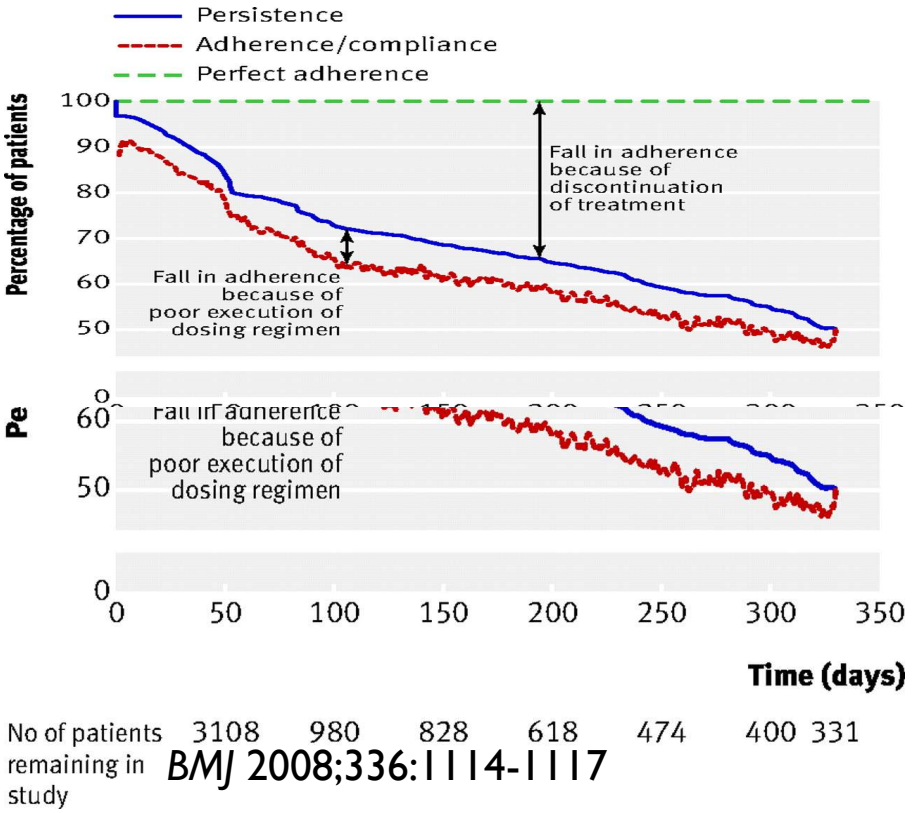
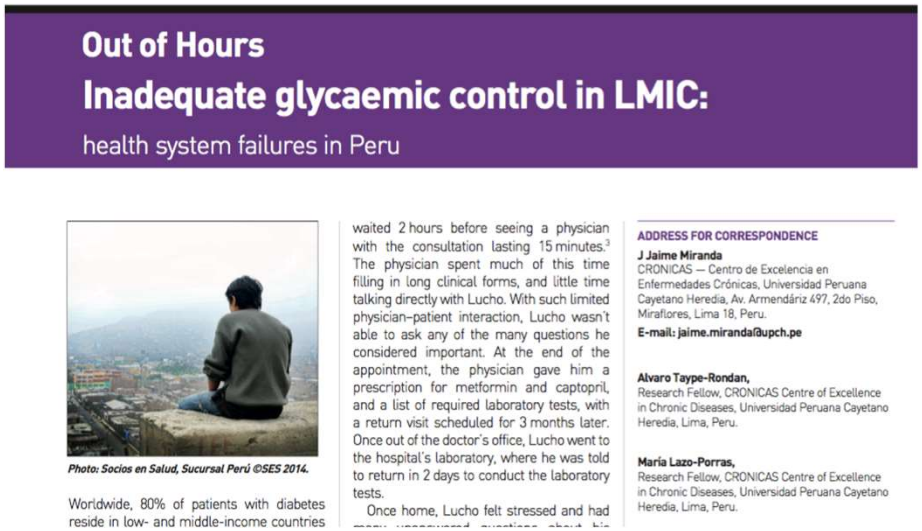
What does it mean for the health system?

But, if we know already, its so simple!



BMJ 2008;336:1114-1117



Br J Gen Pract 2016;66(645):197.

And… immediate failures are in front of us!

PLOS ONE

RESEARCH ARTICLE

Adherence to Pharmacotherapy and Medication-Related Beliefs in Patients with Hypertension in Lima, Peru

Marta Fernandez-Arias [1,2☯] Ana Acuna-Villaorduna [1,3*☯] J. Jaime Miranda [1,4], Francisco Diez-Canseco [1], German Malaga [1,3,4,5]

1. CRONICAS Centre of Excellence in Chronic Diseases, Universidad Peruana Cayetano Heredia, Lima, Peru, **2.** Global Health, Brighton and Sussex Medical School, Brighton, United Kingdom, **3.** Unidad de Conocimiento y Evidencia, Universidad Peruana Cayetano Heredia, Lima, Peru, **4.** Facultad de Medicina "Alberto Hurtado", Universidad Peruana Cayetano Heredia, Lima, Peru, **5.** Servicio de Medicina Interna, Hospital Nacional Cayetano Heredia, Lima, Perú

*ana.acuna.vi@gmail.com

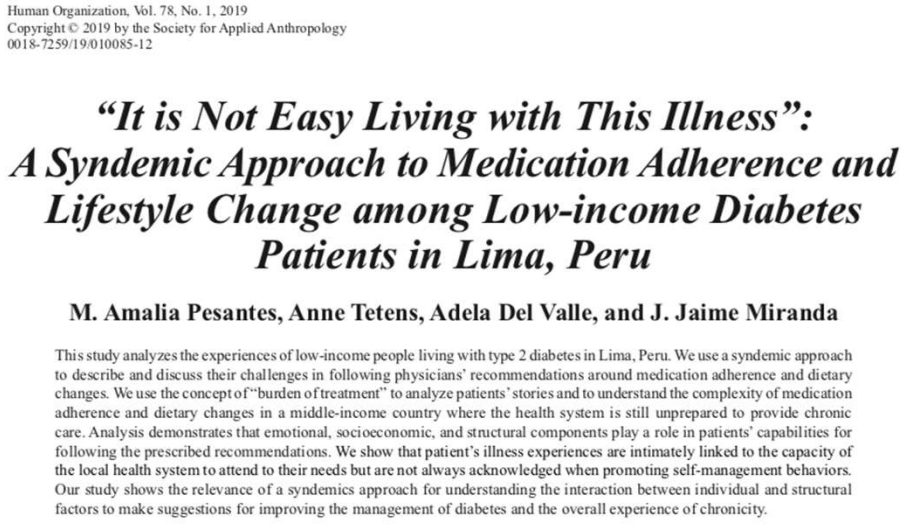
☯ These authors contributed equally to this work.

¶ These authors are joint first authors on this work.

CrossMark

OPEN ACCESS

Citation: Fernandez-Arias M, Acuna-Villaorduna A, Miranda JJ, Diez-Canseco F, Malaga



Human Organization, Vol. 78, No. 1, 2019

0018-7259/19/010085-12

"It is Not Easy Living with This Illness": A Syndemic Approach to Medication Adherence and Lifestyle Change among Low-income Diabetes Patients in Lima, Peru

M. Amalia Pesantes, Anne Tetens, Adela Del Valle, and J. Jaime Miranda

This study analyzes the experiences of low-income people living with type 2 diabetes in Lima, Peru. We use a syndemic approach to describe and discuss their challenges in following physicians' recommendations around medication adherence and dietary changes. We use the concept of "burden of treatment" to analyze patients' stories and to understand the complexity of medication adherence and dietary changes in a middle-income country where the health system is still unprepared to provide chronic care. Analysis demonstrates that emotional, socioeconomic, and structural components play a role in patients' capabilities for following the prescribed recommendations. We show that patient's illness experiences are intimately linked to the capacity of the local health system to attend to their needs but are not always acknowledged when promoting self-management behaviors. Our study shows the relevance of a syndemics approach for understanding the interaction between individual and structural factors to make suggestions for improving the management of diabetes and the overall experience of chronicity.

PLoS One 2014;9(12):e112875.

Human Organization 2019;78(1)

The experience of individuals and their families

Arriving to health services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The experience of individuals and their families

After leaving health services


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Research adventures

The importance of context

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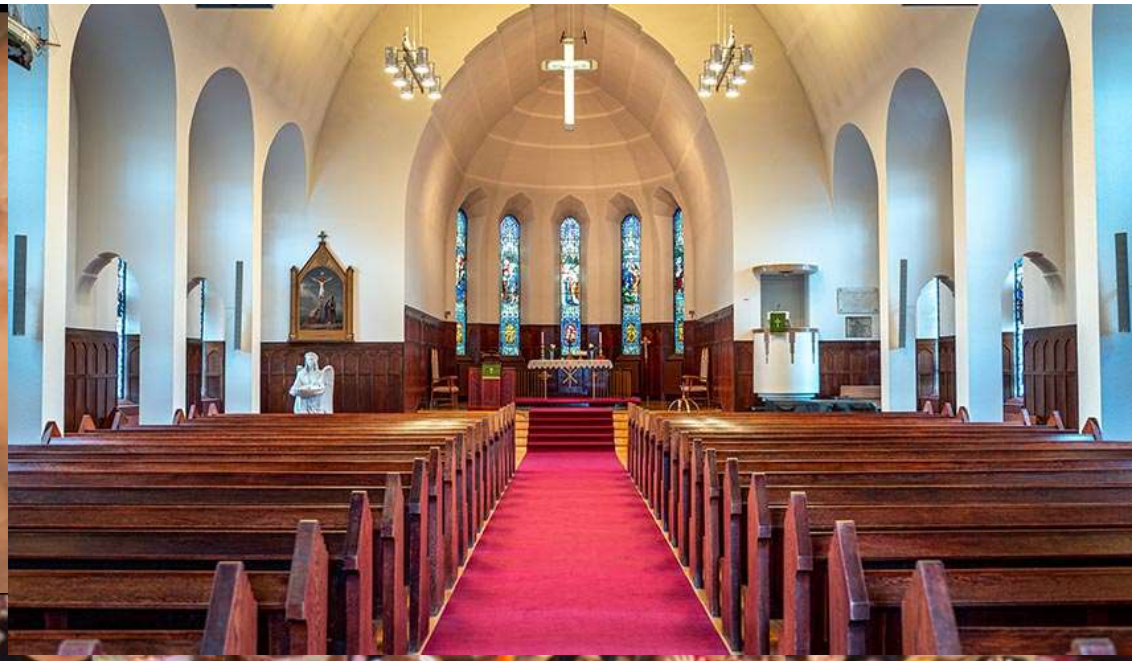
OCEANO
ATLANTICO
OCEANO
PACIFICO
OCEANO
ATLANTICO
CINARE



Wellcome Open Research

Wellcome Open Research 2020, 5:23 Last updated: 03 JUL 2020

Check for updates

RESEARCH ARTICLE

REVISED Foot thermometry with mHeath-based supplementation to prevent diabetic foot ulcers: A randomized controlled trial

Maria Lazo-Porras [1], Antonio Bernabe-Ortiz [1,2], Alvaro Taype-Rondan[1], Robert H. Gilman[3,4], German Malaga[1,5], Helard Manrique[6], Luis Neyra[6], Jorge Calderon[6], Miguel Pinto[7], David G. Armstrong[8], Victor M. Montori[9], J. Jaime Miranda [1,5]

Community Trials

nature medicine

ARTICLES

https://doi.org/10.1038/s41591-020-0754-2

Effect of salt substitution on community-wide blood pressure and hypertension incidence

Antonio Bernabe-Ortiz[1], Víctor G. Sal y Rosas[2], Vilarmina Ponce-Lucero[1], María K. Cárdenas[1], Rodrigo M. Carrillo-Larco[1,3], Francisco Diez-Canseco[1], M. Amalia Pesantes[1], Katherine A. Sacksteder[4], Robert H. Gilman[4] and J. Jaime Miranda[1,5*]

Replacement of regular salt with potassium-enriched substitutes reduces blood pressure in controlled situations, mainly among people with hypertension. We report on a population-wide implementation of this strategy in a stepped-wedge cluster randomized trial (NCT01960972). The regular salt in enrolled households was retrieved and replaced, free of charge, with a combination of 75% NaCl and 25% KCl. A total of 2,376 participants were enrolled in 6 villages in Tumbes, Peru. The fully adjusted intention-to-treat analysis showed an average reduction of 1.29 mm Hg (95% confidence interval (95% CI) (−2.17, −0.41)) in systolic and 0.76 mm Hg (95% CI (−1.39, −0.13)) in diastolic blood pressure. Among participants without hypertension at baseline, in the time- and cluster-adjusted model, the use of the salt substitute was associated with a 51% (95% CI (29%, 66%)) reduced risk of developing hypertension compared with the control group. In 24-h urine samples, there was no evidence of differences in sodium levels (mean difference 0.01; 95% CI (0.25, −0.23)), but potassium levels were higher at the end of the study than at baseline (mean difference 0.63; 95% CI (0.78, 0.47)). Our results support a case for implementing a pragmatic, population-wide, salt-substitution strategy for reducing blood pressure and hypertension incidence.

Primary care setting

Research

JAMA | Original Investigation

Effect of a Digital Intervention on Depressive Symptoms in Patients With Comorbid Hypertension or Diabetes in Brazil and Peru
Two Randomized Clinical Trials

Ricardo Araya, MD, PhD; Paulo Rossi Menezes, MD, PhD; Heloísa Garcia Claro, PhD; Lena R. Brandt, MA; Kate L. Daley, MSc; Julieta Quayle, PhD; Francisco Diez-Canseco, MPH; Tim J. Peters, PhD; Daniela Vera Cruz, MSc; Mauricio Toyama, BA; Suzana Aschar, BA; Liliana Hidalgo-Padilla, MSc; Hellen Martins, BA; Victoria Cavero, BA; Thais Rocha, BA; George Scotton, MSc; Ivan F. de Almeida Lopes, PhD, MSc; Mark Begale, BA; David C. Mohr, PhD; J. Jaime Miranda, MD, PhD

IMPORTANCE Depression is a leading contributor to disease burden globally. Digital mental health interventions can address the treatment gap in low- and middle-income countries, but the effectiveness in these countries is unknown.

Visual Abstract
Editorial page 1839
Related article page 1863

Task shifting

ORIGINAL ARTICLE

Chronic Obstructive Pulmonary Disease Self-Management in Three Low- and Middle-Income Countries

A Pilot Randomized Trial

Suzanne L. Pollard[1,2*], Trishul Siddharthan[2,4*], Shakir Hossen[1,2], Natalie A. Rykiel[1,2], Oscar Flores-Flores[2,5,6,7], Patricia Alupo[8], Shumonta Quaderi[9], Ivonne Ascencio[5], Julie A. Barber[10], Ram Chandyo[11], Santa K. Das[12], Gonzalo Gianella[13], Bruce Kirenga[8], Kelli Grunstra[3], J. Jaime Miranda[14], Sakshi Mohan[15], Federico Ricciardi[16], Arun K. Sharma[11], Laxman Shrestha[11], Marta O. Soares[15], Adaeze C. Wosu[2], John R. Hurst[9‡], and William Checkley[1,2‡]; for the GECo2 Trial Investigators

[1]Division of Pulmonary and Critical Care, [2]Center for Global Non-Communicable Disease Research and Training, School of Medicine, and [3]School of Nursing, Johns Hopkins University, Baltimore, Maryland; [4]Division of Pulmonary and Critical Care, Miller School of Medicine, University of Miami, Miami, Florida; [5]Unidad de Investigación Biomédica, A. B. PRISMA, Lima, Perú; [6]Facultad de Ciencias de la Salud, Universidad Cientifica del Sur, Lima, Peru; [7]Facultad de Medicina Humana, Centro de Investigación del Envejecimiento, Universidad de San Martin de Porres, Lima, Peru; [8]Makerere Lung Institute, Makerere University, Kampala, Uganda; [9]University College London Respiratory and [10]Department of Statistical Science, University College London, London, United Kingdom; [11]Kathmandu Medical College, Kathmandu, Nepal; [12]Institute of Medicine, Tribhuvan University, Kathmandu, Nepal; [13]Facultad de Medicina and [14]Centro de Excelencia en enfermedades crónicas CRONICAS, Universidad Peruana Cayetano Heredia, Lima, Peru; [15]University of York, York, United Kingdom; and [16]Owlstone Medical, Cambridge, United Kingdom

Only RCTs?

Research

JAMA | Original Investigation

Discriminative Accuracy of Chronic Obstructive Pulmonary Disease Screening Instruments in 3 Low- and Middle-Income Country Settings

Trishul Siddharthan, MD; Suzanne L. Pollard, PhD, MSPH; Shumonta A. Quaderi, MBBS, BSc; Natalie A. Rykiel, MSc; Adaeze C. Wosu, PhD, MPH; Patricia Alupo, MB, ChB, MMed; Julie A. Barber, PhD; Maria Kathia Cárdenas, MSc; Ram K. Chandyo, PhD; Oscar Flores-Flores, MD, MSc; Bruce Kirenga, MB, ChB, MMed, PhD; J. Jaime Miranda, MD, PhD; Sakshi Mohan, MA; Federico Ricciardi, PhD; Arun K. Sharma, MD; Santa Kumar Das, MD; Laxman Shrestha, MD; Marta O. Soares, PhD; William Checkley, MD, PhD; John R. Hurst, MB, ChB, PhD; for the GECo Study Investigators

IMPORTANCE Most of the global morbidity and mortality in chronic obstructive pulmonary disease (COPD) occurs in low- and middle-income countries (LMICs), with significant economic effects.

OBJECTIVE To assess the discriminative accuracy of 3 instruments using questionnaires and peak expiratory flow (PEF) to screen for COPD in 3 LMIC settings.

Editorial page 126

Supplemental content

CME Quiz at jamacmelookup.com

Churches

Annals of Behavioral Medicine

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Article Contents

- Abstract
- Introduction
- Materials and Methods
- Results
- Discussion
- Conclusion
- Funding

The Effect of a Priest-Led Intervention on the Choice and Preference of Soda Beverages: A Cluster-Randomized Controlled Trial in Catholic Parishes

J Jaime Miranda, MD, MSc, PhD ✉, Alvaro Taype-Rondan, MD, MSc, Janina Bazalar-Palacios, RN, Antonio Bernabe-Ortiz, MD, MPH, PhD, Dan Ariely, PhD

Annals of Behavioral Medicine, kaz060, https://doi.org/10.1093/abm/kaz060
Published: 16 December 2019

- Why theories, models & frameworks?
- Which ones?


on bad roads
ndia

BMC Part of Springer Nature

Implementation Science

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Commentary | Open access | Published: 13 March 2024

Navigating the field of implementation science towards maturity: challenges and opportunities

David A. Chambers & Karen M. Emmons

Implementation Science **19**, Article number: 26 (2024) | Cite this article

"The implementation science community should embrace the goal of a "big tent," in which all partners can contribute to the development and execution of implementation studies."

Navigating the field of implementation science towards maturity: challenges and opportunities

https://implementationscience.biomedcentral.com/articles/10.1186/s13012-024-01352-0

Muchas gracias

Jaime.Miranda@sydney.edu.au
@jjaimemiranda

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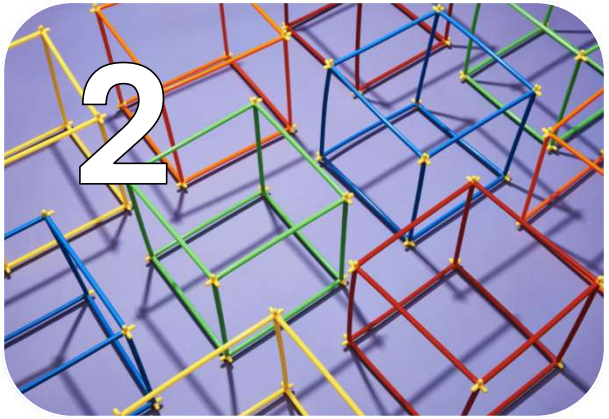
AN ALLIANCE OF HEALTH RESEARCH FUNDERS

Plenary presentation – Sitting B

Advancing theories, models, and frameworks

Vilma Irazola – Instituto de Efectividad Clinica y Sanitaria (IECS), Argentina

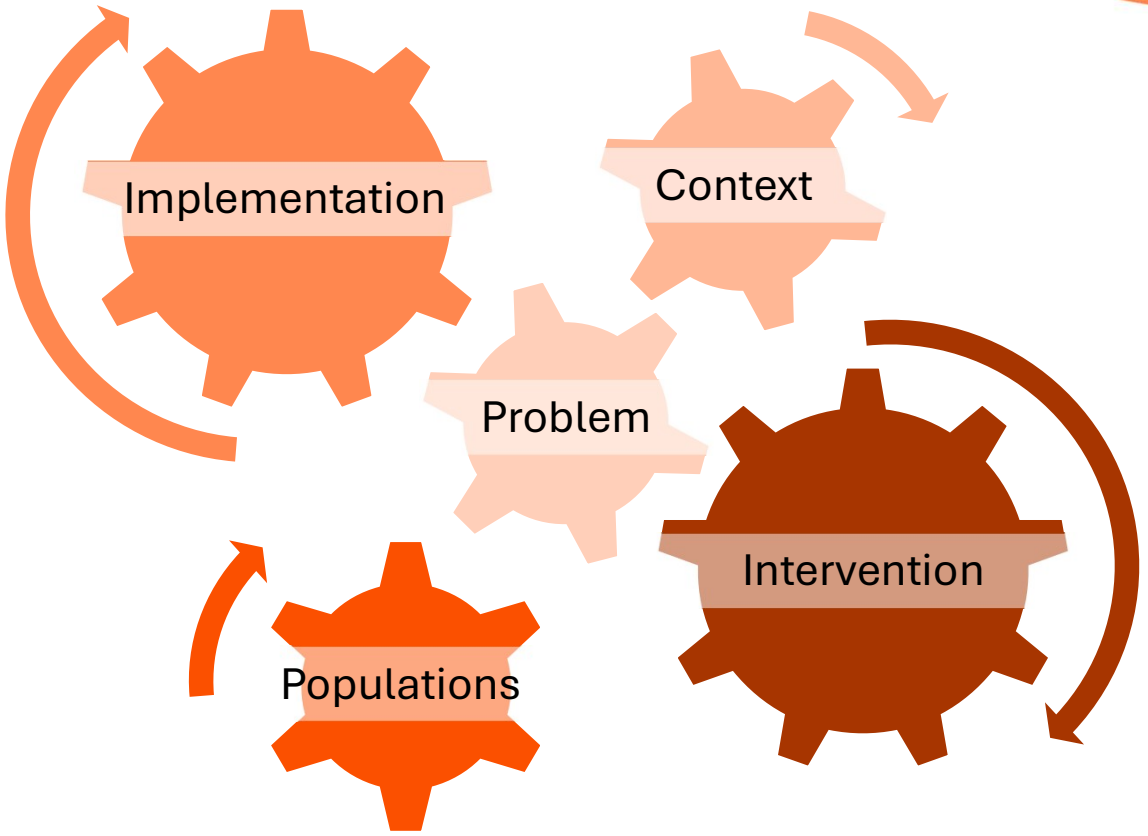
Complexity is part and parcel of implementation science



Implementation science relies on **theories, models, and frameworks**

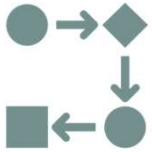
Some **questions and reflections**

Complexity is part and parcel of implementation science



Implementation science relies on theories, models and frameworks

Understand and identify mechanisms of change → **Theories of change**



Guide the whole process → **Process models**

Evaluate process, outcomes, and impact → **Evaluation frameworks**

Implementation science relies on theories, models and frameworks

Understand and identify mechanisms of change

Theories of change

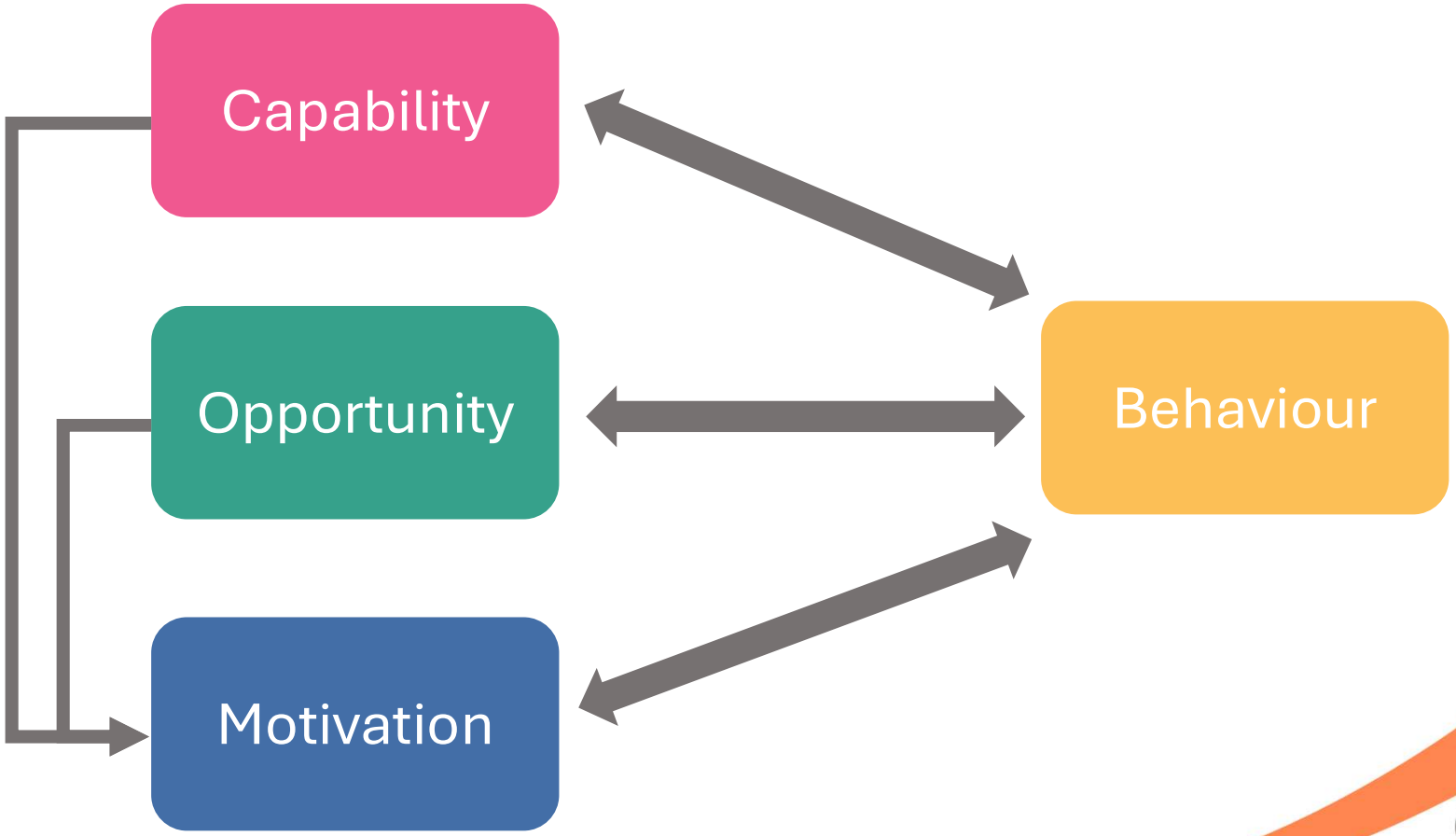
Guide the whole process

Process models

Evaluate process, outcomes, and impact

Evaluation frameworks

Example of theory of change: **COM-B**



Michie, 2014

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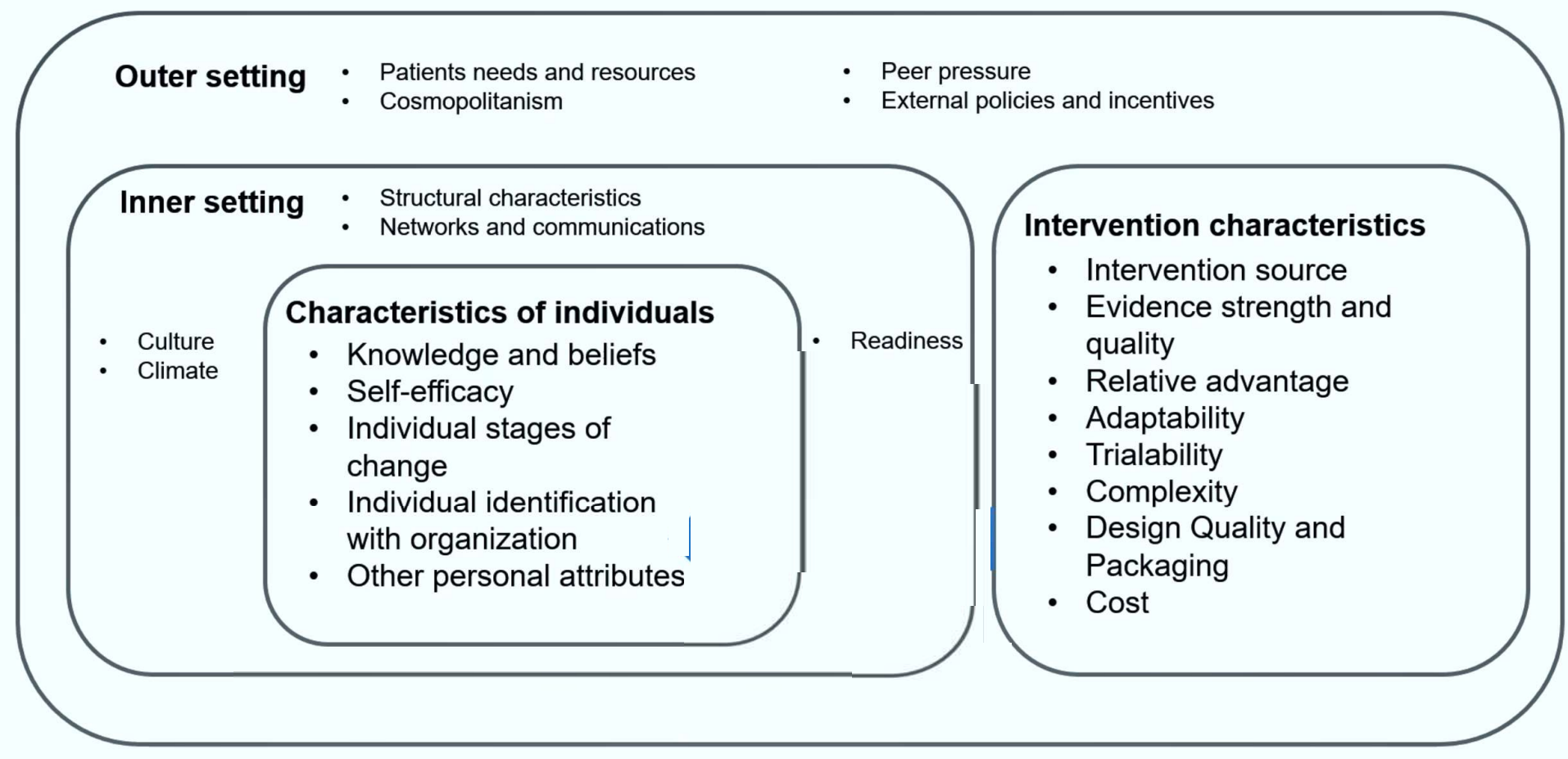
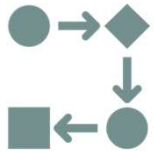
Example of determinant framework: **CFIR**



Implementation science relies on theories, models and frameworks

Understand and identify mechanisms of change

Theories of change



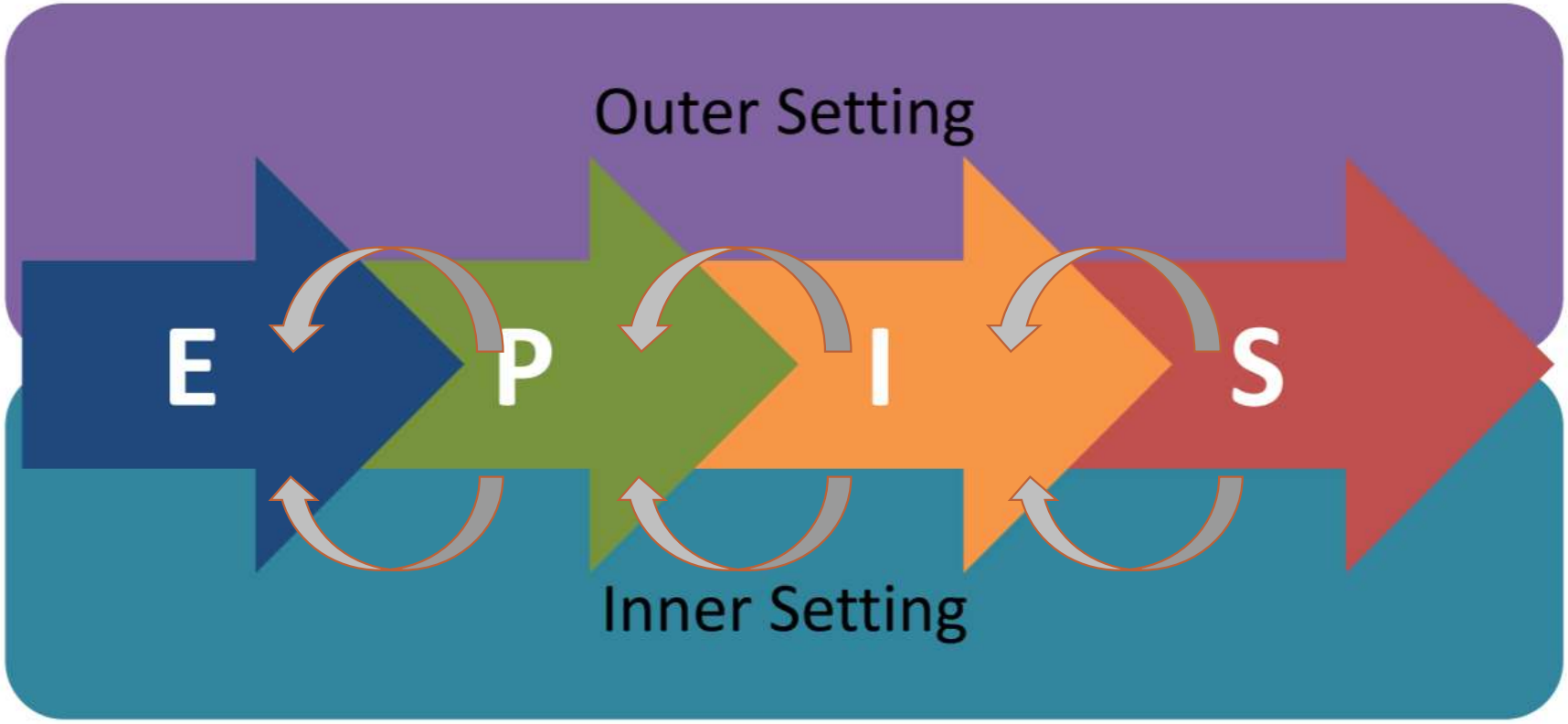
Guide the whole process

Process models

Evaluate process, outcomes, and impact

Evaluation frameworks

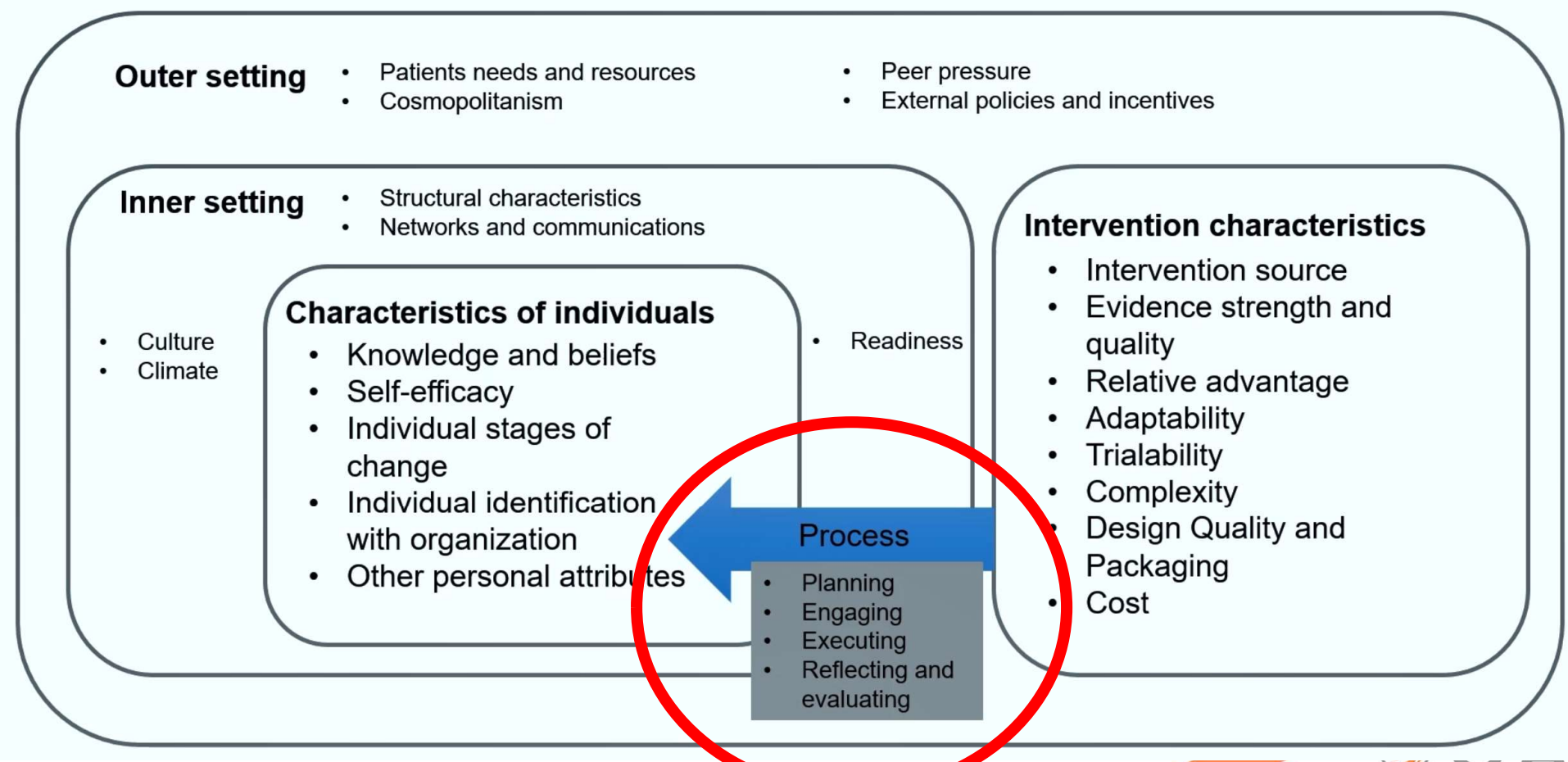
Example of process model: **EPIS**



Exploration, **P**reparation, **I**mplementation, **S**ustainment

https://episframework.com/

Example of process model: **CFIR**



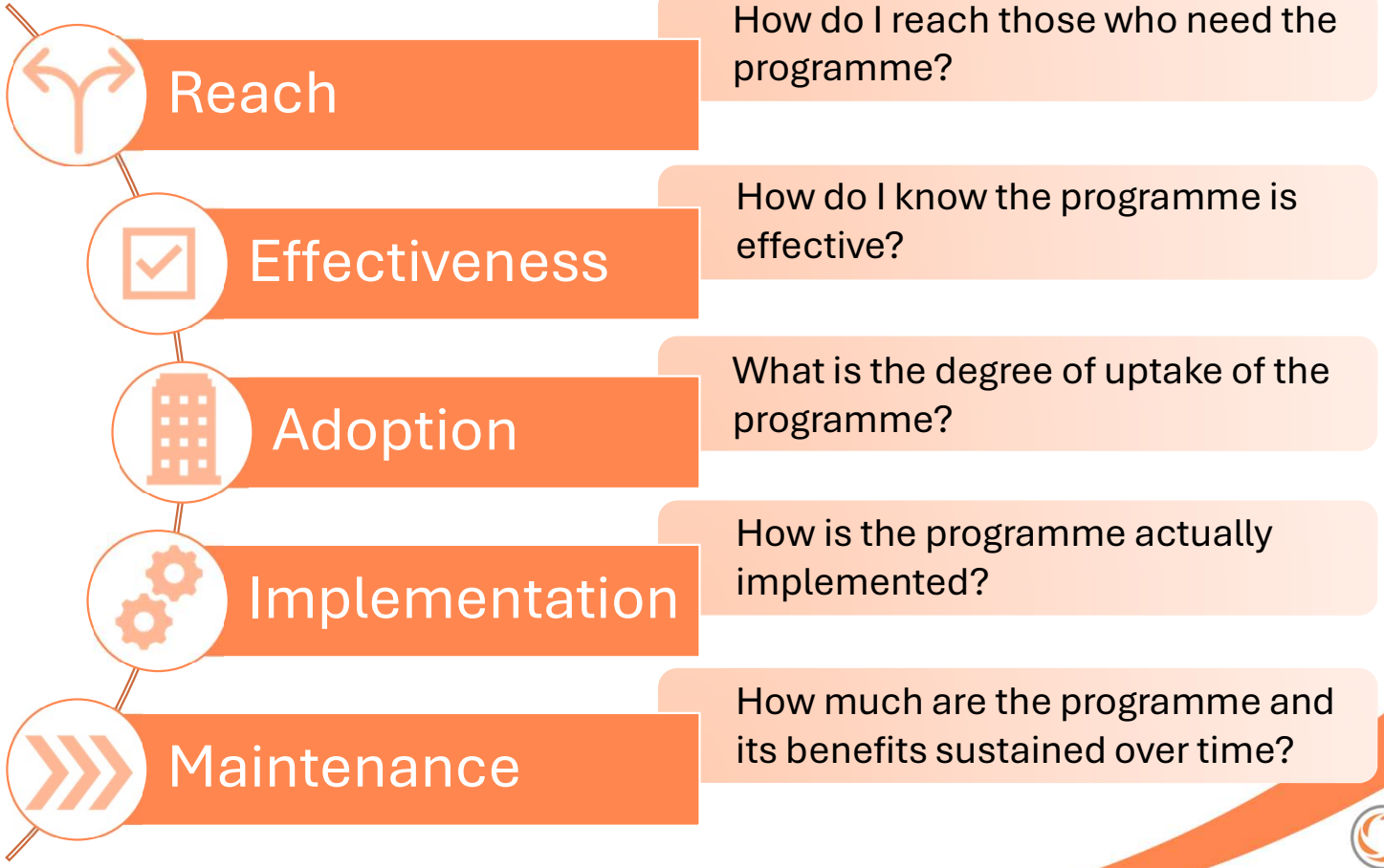
Implementation science relies on theories, models and frameworks

Understand and identify mechanisms of change → Theories of change

Guide the whole process → Process models

Evaluate process, outcomes, and impact → **Evaluation frameworks**

Example of evaluation framework: **RE-AIM**



Glasgow 1999

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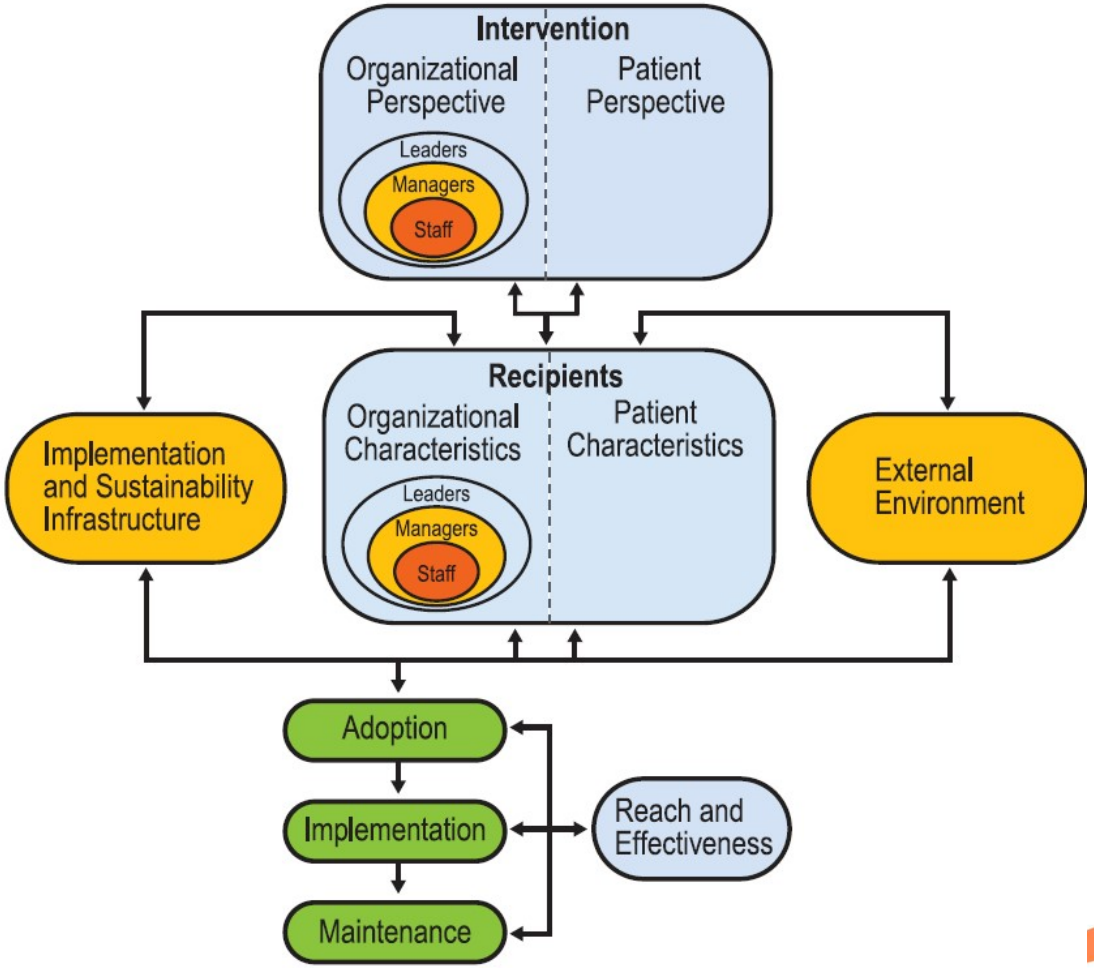
Example of evaluation framework:
RE-AIM PRISM



Feldstein & Glasgow, 2008

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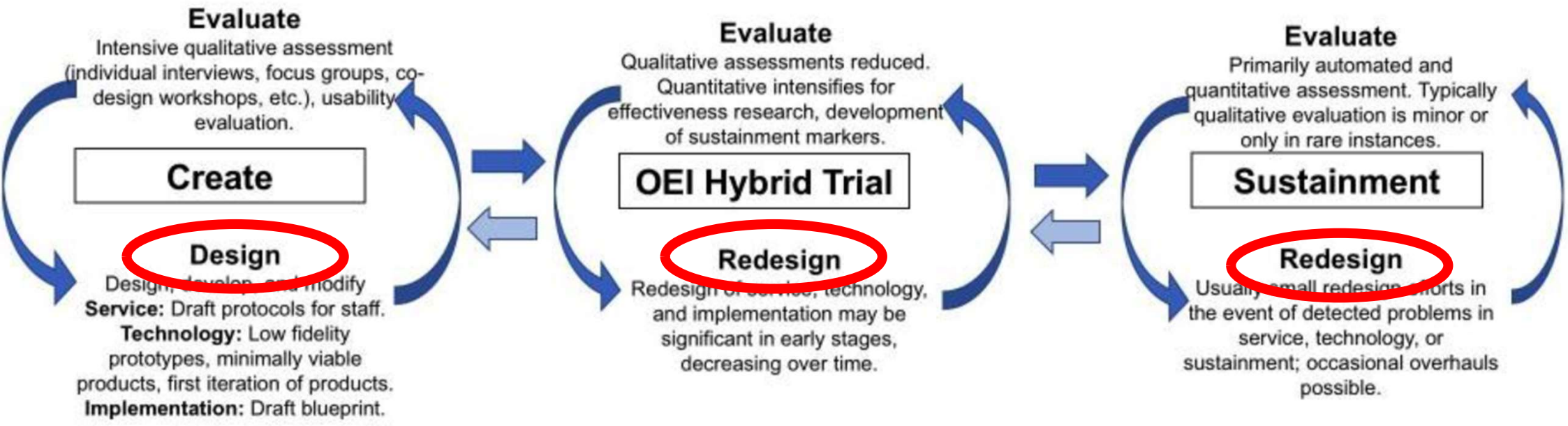
Sometimes we need additional conceptual frameworks

Sometimes we need additional conceptual frameworks: **Digital interventions**

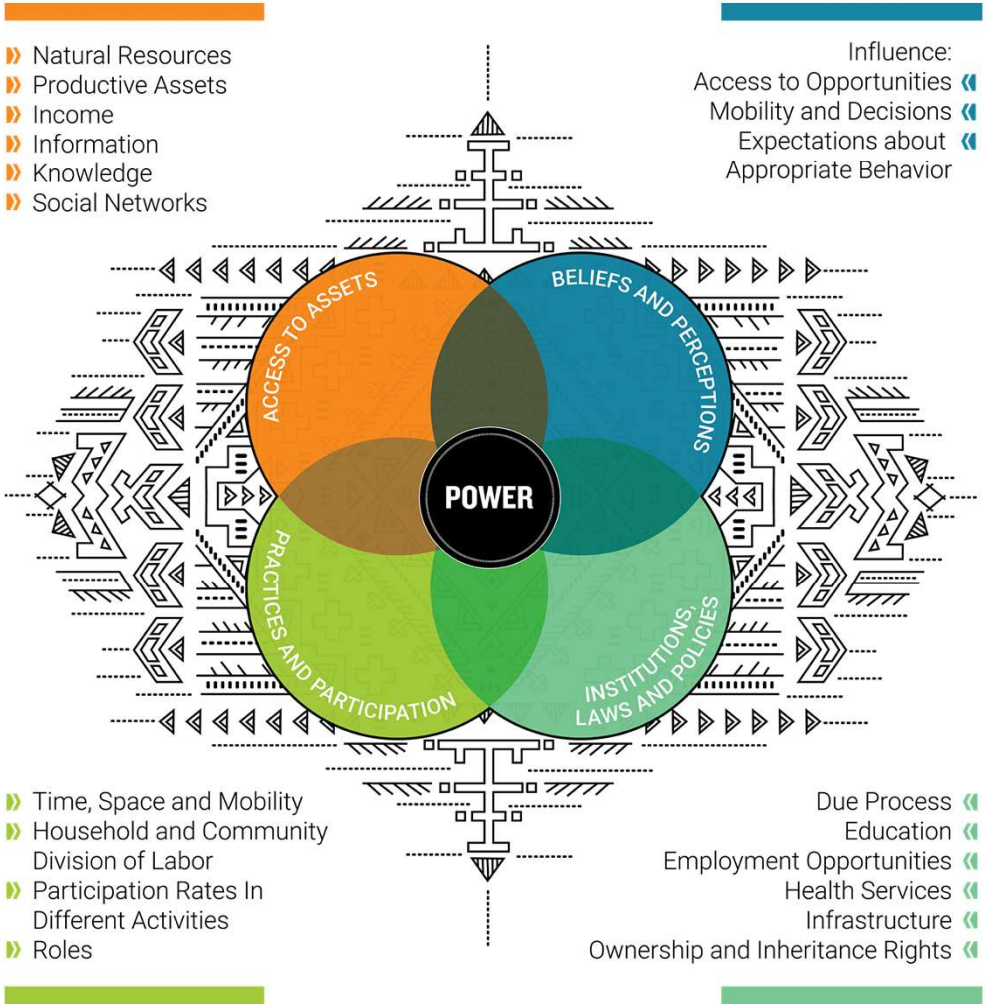
ACTS



Mohr 2017

Sometimes we need additional conceptual frameworks: **Gender focus**

JHPIEGO



https://www.jhpiego.org/

Sometimes we need additional conceptual frameworks: **Equity**

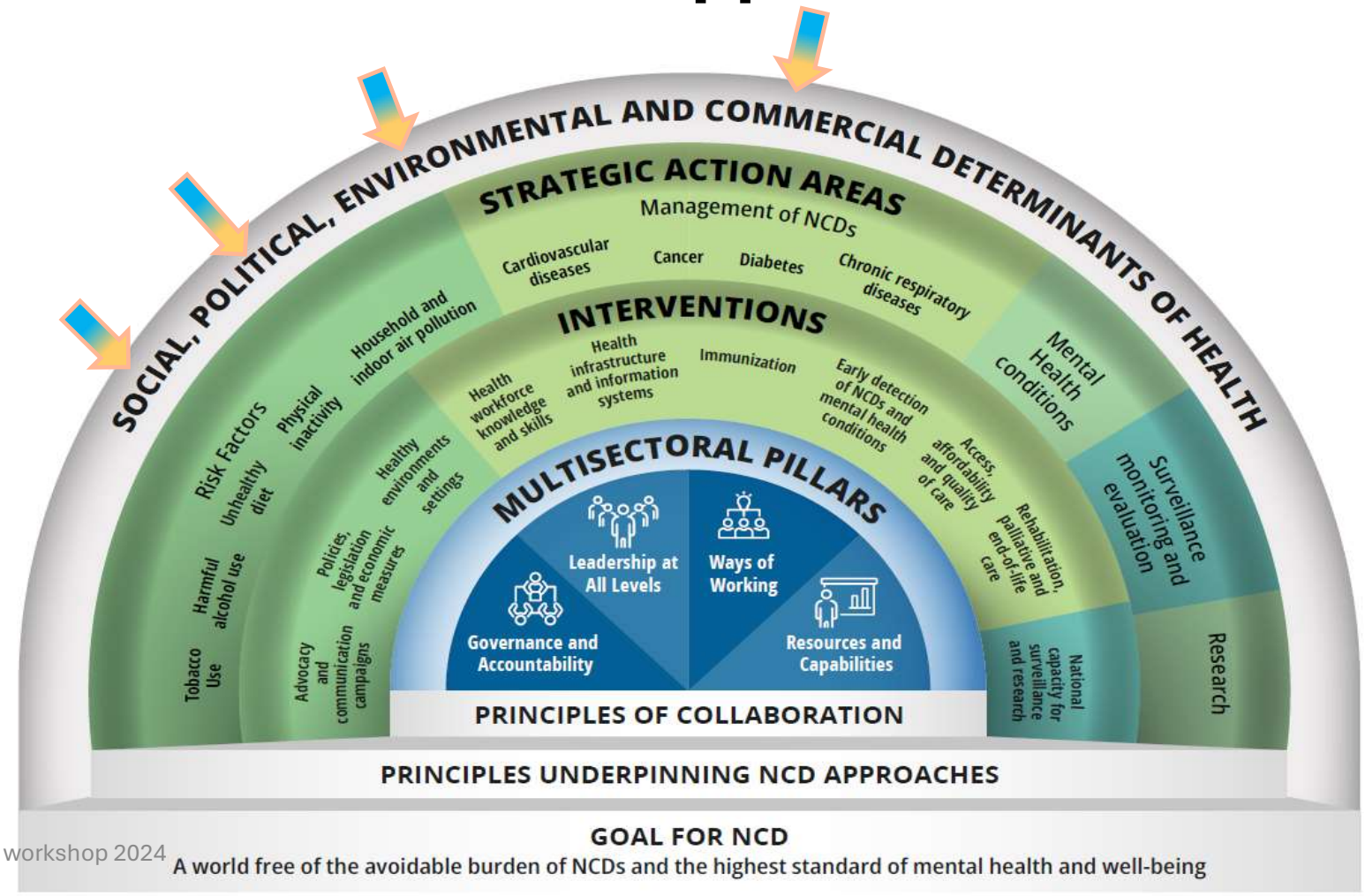
NIMHD Minority Health and Health Disparities Research Framework
Health Disparity Populations: Race/Ethnicity, Low SES, Rural, Sexual/Gender Minority
Other Fundamental Characteristics: Sex/Gender, Disability, Geographic Region

Domains of Influence	Levels of Influence			
	Individual	Interpersonal	Community	Societal
Biological	Biological Vulnerability and Mechanisms	Caregiver-Child Interaction Family Microbiome	Community Illness Exposure Herd Immunity	Sanitation Immunization Pathogen Exposure
Behavioral	Health Behaviors Coping Strategies	Family Functioning School/Work Functioning	Community Functioning	Policies and Laws
Physical/Built Environment	Personal Environment	Household Environment School/Work Environment	Community Environment Community Resources	Societal Structure
Sociocultural Environment	Sociodemographics Limited English Cultural Identity Response to Discrimination	Social Networks Family/Peer Norms Interpersonal Discrimination	Community Norms Local Structural Discrimination	Societal Norms Societal Structural Discrimination
Healthcare System	Insurance Coverage Health Literacy Treatment Preferences	Patient-Clinician Relationship Medical Decision-Making	Availability of Health Services Safety Net Services	Quality of Care HealthCare Policies
Health Outcomes	Individual Health	Family/Organizational Health	Community Health	Population Health

Lifecourse

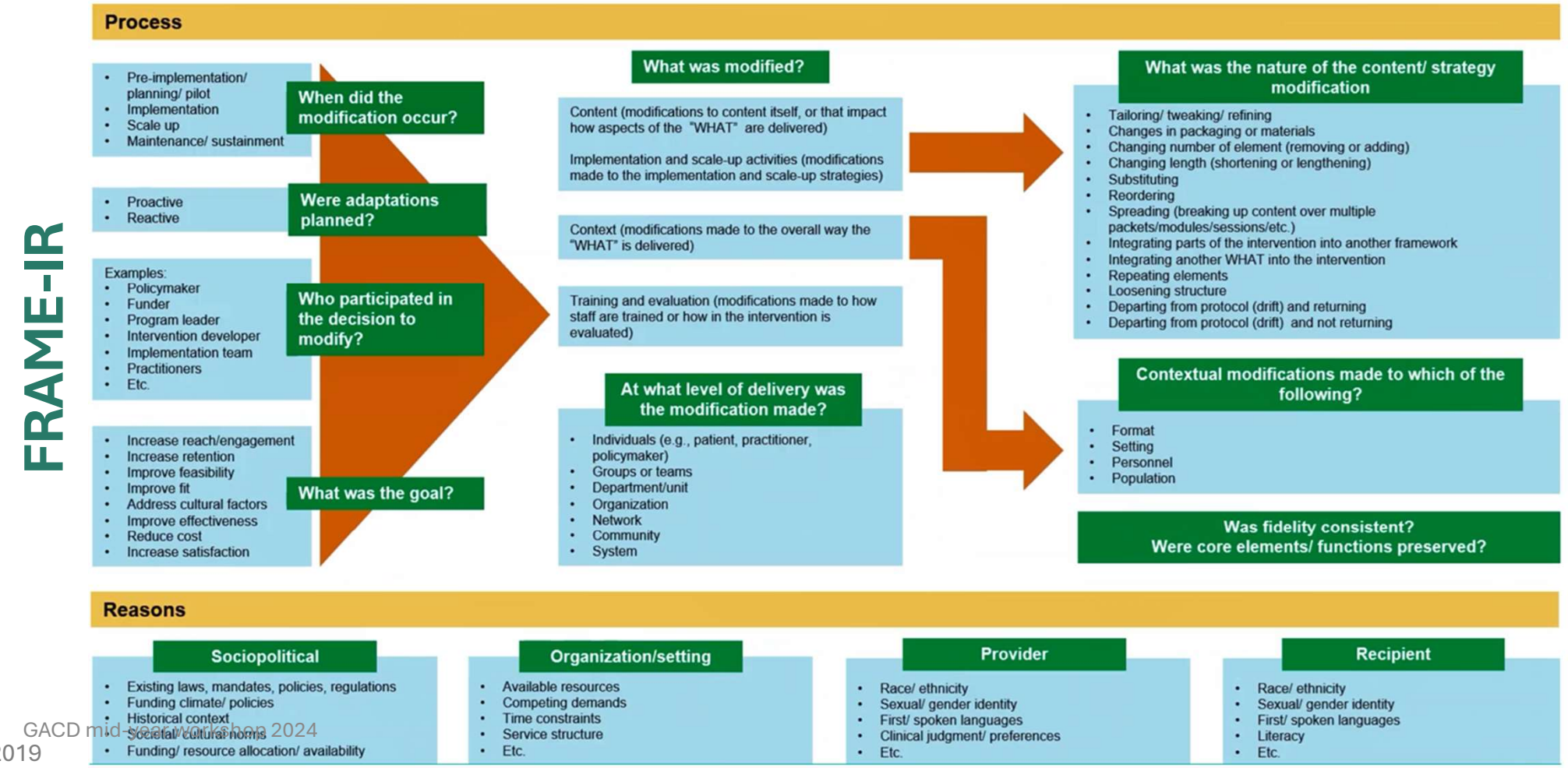
NIMHD Framework

Sometimes we need additional conceptual frameworks: **Multisectoral approach**



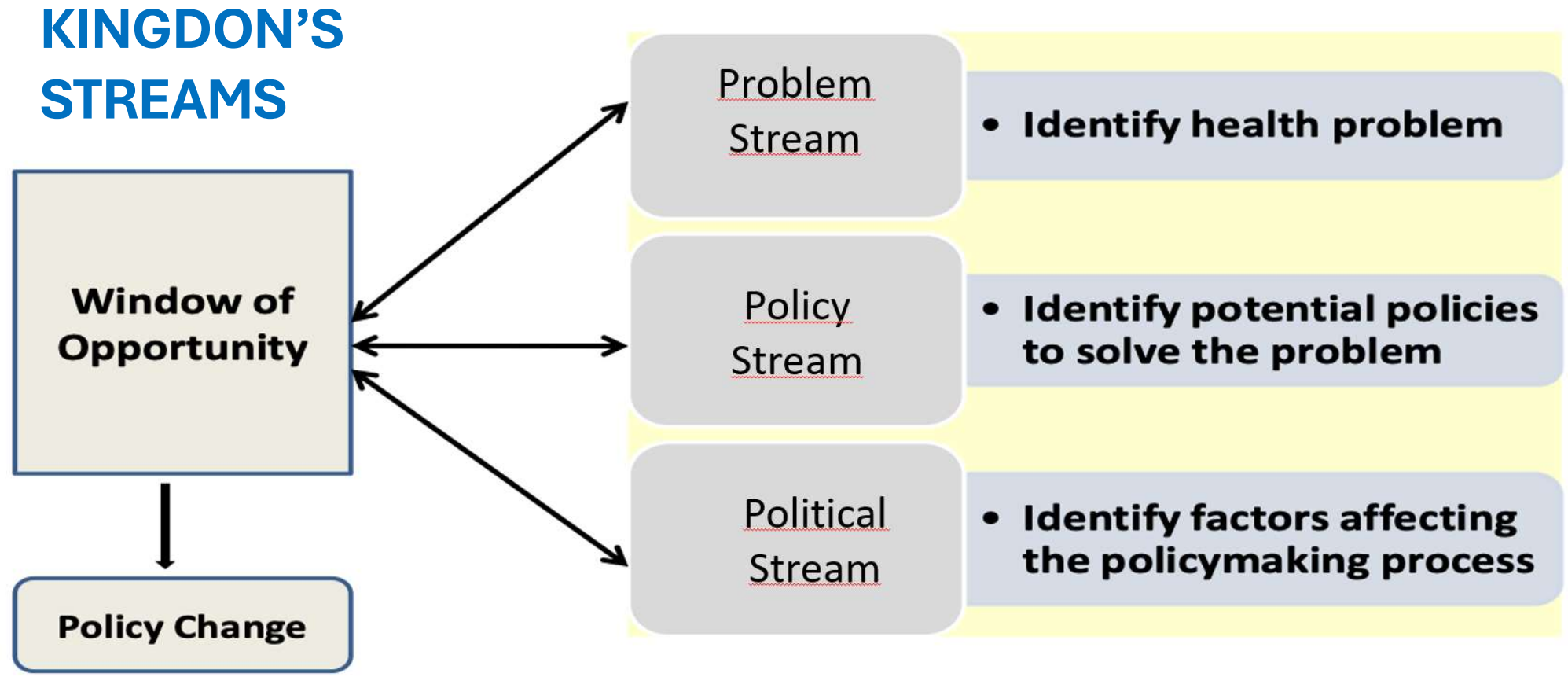
WHO 2021

Sometimes we need additional conceptual frameworks: **Adaptation**



Stirman 2019

Sometimes we need additional conceptual frameworks: **Policy**



Kingdon, 2010

Questions and reflections…

- Are all frameworks **equal**?
- What counts as **scientific justification** for choosing a framework?
- Should we all be using the **same** ones?

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Thank you !!

Vilma Irazola
virazola@iecs.org.ar
virazola@hsph.harvard.edu

Breakout room 1

Equity frameworks

Moderator: Bindu Patel
The George Institute for Global Health, Australia

Speakers:

Sue Crengle
University of Otago, New Zealand

Priscilla Poga
Papua New Guinea Institute of Medical Research, Papua New Guinea

Andrew Vallely
University of New South Wales, Australia *and* PNGIMR, Papua New Guinea

Breakout room 2

The RE-AIM framework

Moderator: Gillian Gould
Southern Cross University, Australia

Speakers:

Urvita Bhatia
Sangath, India *and* London School of Hygiene and Tropical Medicine, UK

Yashi Gandhi
Sangath, India *and* London School of Hygiene and Tropical Medicine, UK

Jaap Koot
University of Groningen, Netherlands

Sitting A

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Sitting A | Breakout room 1

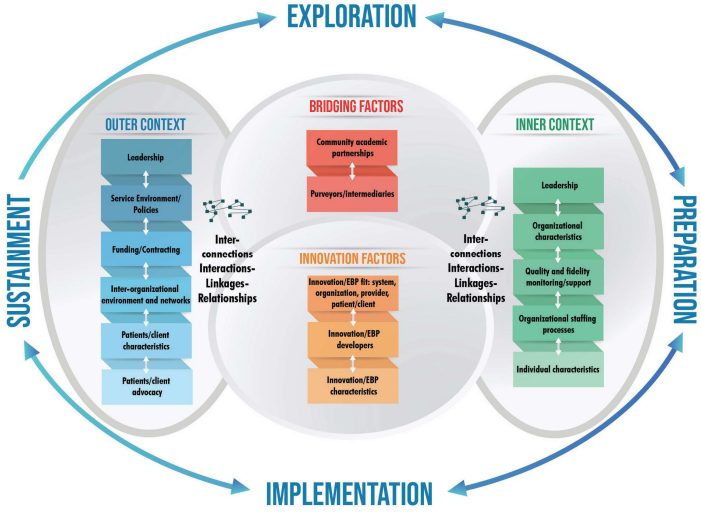
Equity frameworks

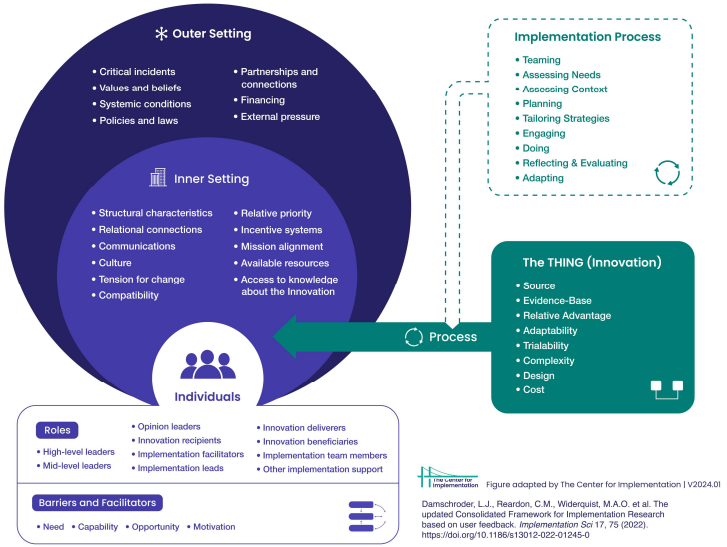
BINDU PATEL (moderator)
The George Institute for Global Health, Australia

SUE CRENGLE
University of Otago, Aotearoa New Zealand

PRISCILLA POGA[1], **LISA VALLELY**[1,2], **ANDREW VALLELY**[1,2]
[1]Papua New Guinea Institute of Medical Research, Papua New Guinea
[2]University of New South Wales, Australia


REACH
How do I reach the targeted population?
EFFECTIVENESS
How do I know my intervention is effective?
MAINTENANCE
How do I incorporate the intervention so it is delivered over the long term?
RE-AIM
Translating Research into Action
re-aim.org
ADOPTION
How do I develop the institutional support to deliver my intervention?
IMPLEMENTATION
How do I ensure the intervention is delivered properly?


EXPLORATION
PREPARATION
IMPLEMENTATION
SUSTAINMENT
OUTER CONTEXT
Leadership
Service Environment/ Policies
Funding/Contracting
Inter-organizational environment and networks
Patients/client characteristics
Patients/client advocacy
Inter-connections Interactions-Linkages-Relationships
BRIDGING FACTORS
Community academic partnerships
Purveyors/intermediaries
INNOVATION FACTORS
Innovation/EBP fit: system, organization, provider, patient/client
Innovation/EBP developers
Innovation/EBP characteristics
Inter-connections Interactions-Linkages-Relationships
INNER CONTEXT
Leadership
Organizational characteristics
Quality and fidelity monitoring/support
Organizational staffing processes
Individual characteristics


Outer Setting
• Critical incidents
• Values and beliefs
• Systemic conditions
• Policies and laws
• Partnerships and connections
• Financing
• External pressure
Inner Setting
• Structural characteristics
• Relational connections
• Communications
• Culture
• Tension for change
• Compatibility
• Relative priority
• Incentive systems
• Mission alignment
• Available resources
• Access to knowledge about the Innovation
Individuals
Process
Implementation Process
• Teaming
• Assessing Needs
• Assessing Context
• Planning
• Tailoring Strategies
• Engaging
• Doing
• Reflecting & Evaluating
• Adapting
The THING (Innovation)
• Source
• Evidence-Base
• Relative Advantage
• Adaptability
• Trialability
• Complexity
• Design
• Cost
Roles
• High-level leaders
• Mid-level leaders
• Opinion leaders
• Innovation recipients
• Implementation facilitators
• Implementation leads
• Innovation deliverers
• Innovation beneficiaries
• Implementation team members
• Other implementation support
Barriers and Facilitators
• Need • Capability • Opportunity • Motivation
Figure adapted by The Center for Implementation | V2024.01
Damschroder, L.J., Reardon, C.M., Widerquist, M.A.O. et al. The updated Consolidated Framework for Implementation Research based on user feedback. Implementation Sci 17, 75 (2022). https://doi.org/10.1186/s13012-022-01245-0

Cultural safety?

Unique social and cultural contexts?

Systematically and historically underserved communities?

Colonialism?

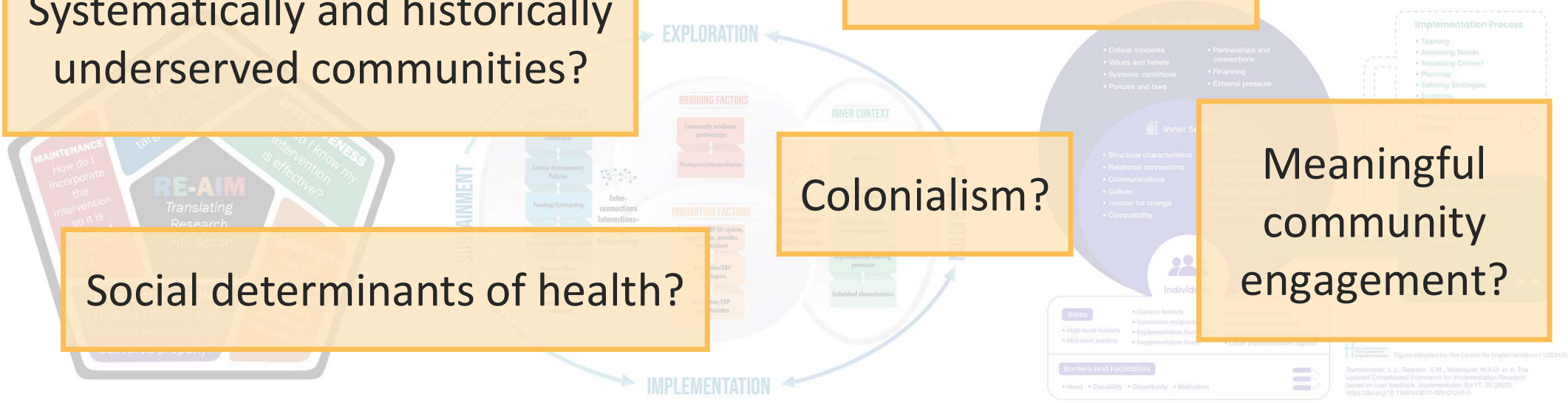
Meaningful community engagement?

Social determinants of health?

Structural racism?

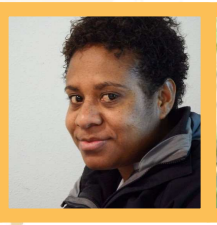
Co-design?

Power dynamics?



HPVTATE: HPV-based testing and treatment for the elimination of cervical cancer in Papua New Guinea

- Papua New Guinea
- HPV infection and cervical cancer
- Determine the reach, effectiveness, cost-effectiveness, acceptability and scalability of HPV self-collect, test and treat among women in rural and remote communities


Optimising lung cancer screening for Māori: comparing invitation processes

- Aotearoa New Zealand
- Lung cancer prevention
- Determine the effectiveness of two lung cancer screening invitation strategies (primary care vs central hub); describe key outcomes; and evaluate contextual implementation factors to optimise a future national screening programme

Implementing Equitable Health Interventions

TOOLS FOR USE IN THE AOTEAROA NEW ZEALAND CONTEXT

Professor Sue Crengle, University of Otago on behalf of the project team

Te Whatu Ora
Health New Zealand

HEALTHIER LIVES | He Oranga Hauora | National SCIENCE Challenges

University of Otago
Te Whare Wānanga o Otāgo
New Zealand

Why implementation science? Why an equity focus?

Evidence based interventions

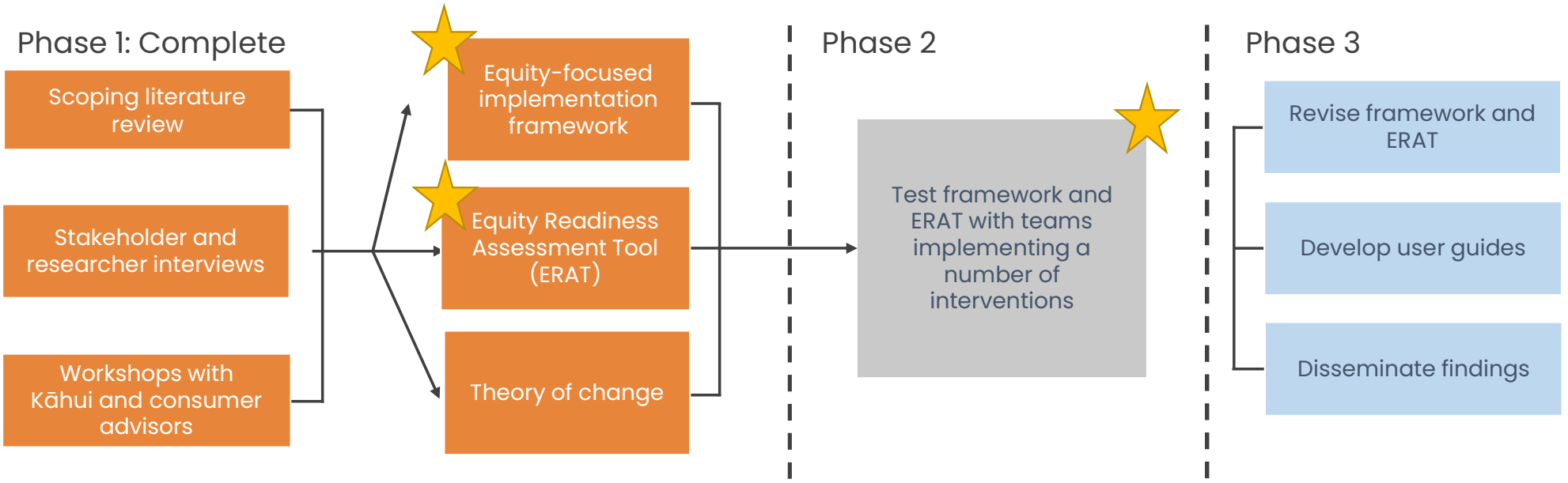
- Few are implemented
- Among those that are
  - implementation takes many years
  - Universally inequitable for Māori (SIDS, CVDRA and management)

Our project

1. Developing a new equity focused implementation science framework
2. Developing a new equity readiness assessment tool (ERAT)

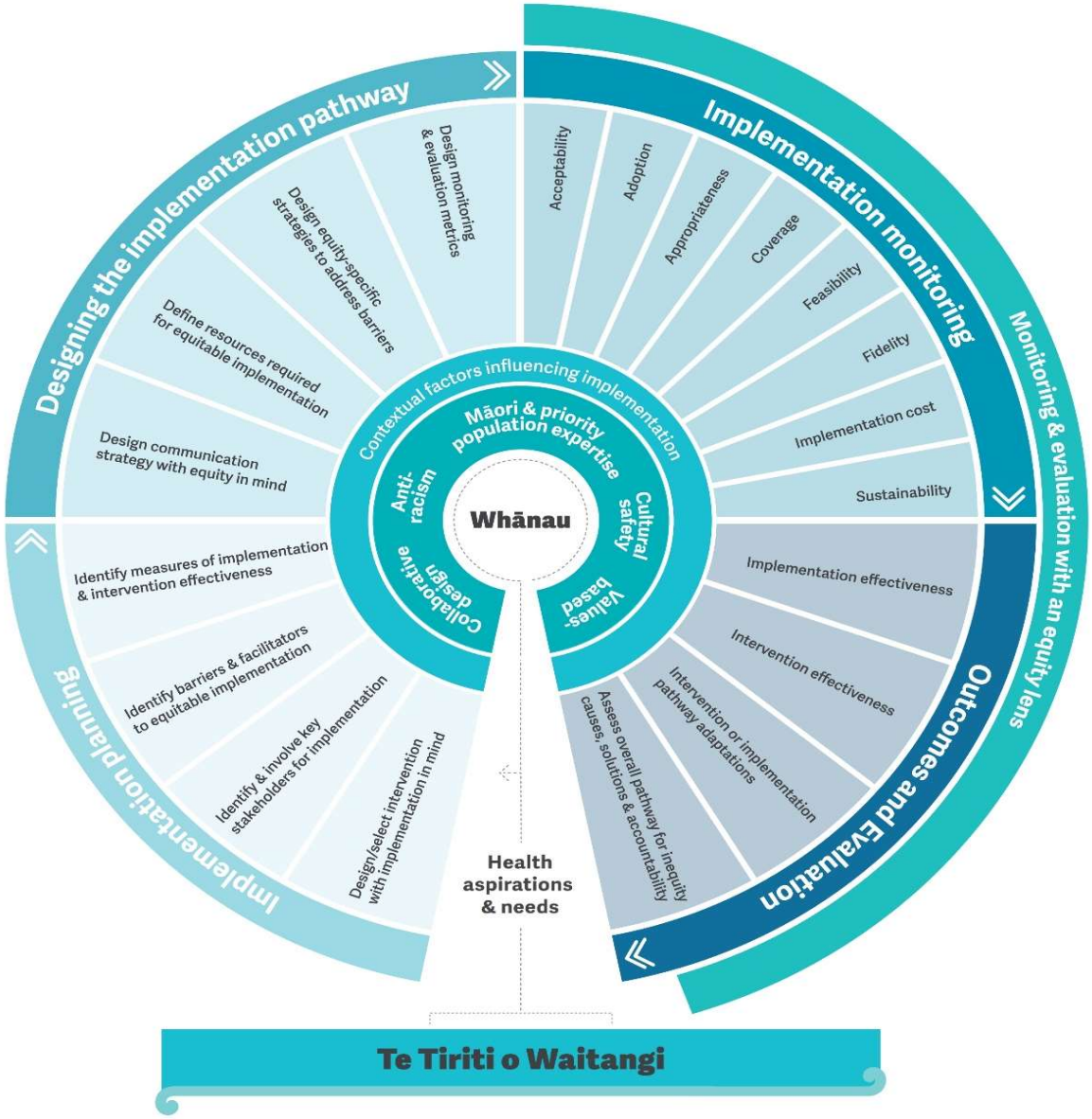
National science challenge project

Implement interventions and improve health equity in Aotearoa



The Framework

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



The Equity Readiness Assessment Tool

ERAT

- Identified a need to assist with the 'how' of equity work in health services
- Organisational readiness
- Equity readiness

The ERAT

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.wandersmancenter.org/uploads/1/2/9/5/129593635/wc_readiness_thinking_tool.pdf

University of Otago Te Whare Wānanga o Otāgo New Zealand | Te Whatu Ora Health New Zealand | National Science Challenges | National Hauora Coalition | Equity Readiness Assessment Tool

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				
Relative advantage	This intervention seems better (or is likely to be better) than what I am currently doing				
Evidence	The evidence for how this intervention will improve equity is clear				
Flexibility	This intervention can be adapted to my local context				
Outcomes	I can see how this intervention will lead to improved equity outcomes				
Priority	Getting this intervention working is a priority amongst other things I need to do				

National Science Challenges – Healthier Lives – He Oranga Hauora | Te Whatu Ora Health New Zealand | University of Otago Te Whare Wānanga o Otāgo New Zealand

Feedback from ERAT pre-testing

- Self-completion ~10 min online (can do on paper) with team collating responses
- Facilitated discussion - time (30-40 min) seems to work well
- Testing with teams who have good understanding of equity and a high level of trust within the team
- In other teams / contexts will be greater variability understanding and engagement around equity
- More guidance on use – esp for developing the action plan
- Comment around considering "who is in the room" and how this shapes the responses. Facilitated discussion felt to be important

What has happened since then or is underway

- Stakeholder group
    - contribution to review of tools and build awareness of the tools across health services completed
- Finalising ERAT tool and user guides for framework and ERAT
- Developing
    - Action plan template and example for the ERAT
    - Developing a facilitators guide for the ERAT
    - Developing a 'workbook' to include in framework user guide

What has happened since then or is underway

- Implementation Science workshop series for interested health care professionals to learn more about equitable implementation science – first series completed. Planning for another later in year.
- Developing website for ERAT – interactive survey tool, automated reporting of results, other resources (framework and ERAT related and other resources)
- Choosing a name for the framework!

What has happened since then or is underway

- Ensuring it doesn't just sit on shelves is a major challenge going forward
- Working with Service Improvement and Innovation to consider whether a train-the-trainer approach may be useful
- Thinking about how to develop a communty of practice around Implementation Science

Ngā mihi

Te Whatu Ora
Health New Zealand

HEALTHIER LIVES | He Oranga Hauora | National SCIENCE Challenges

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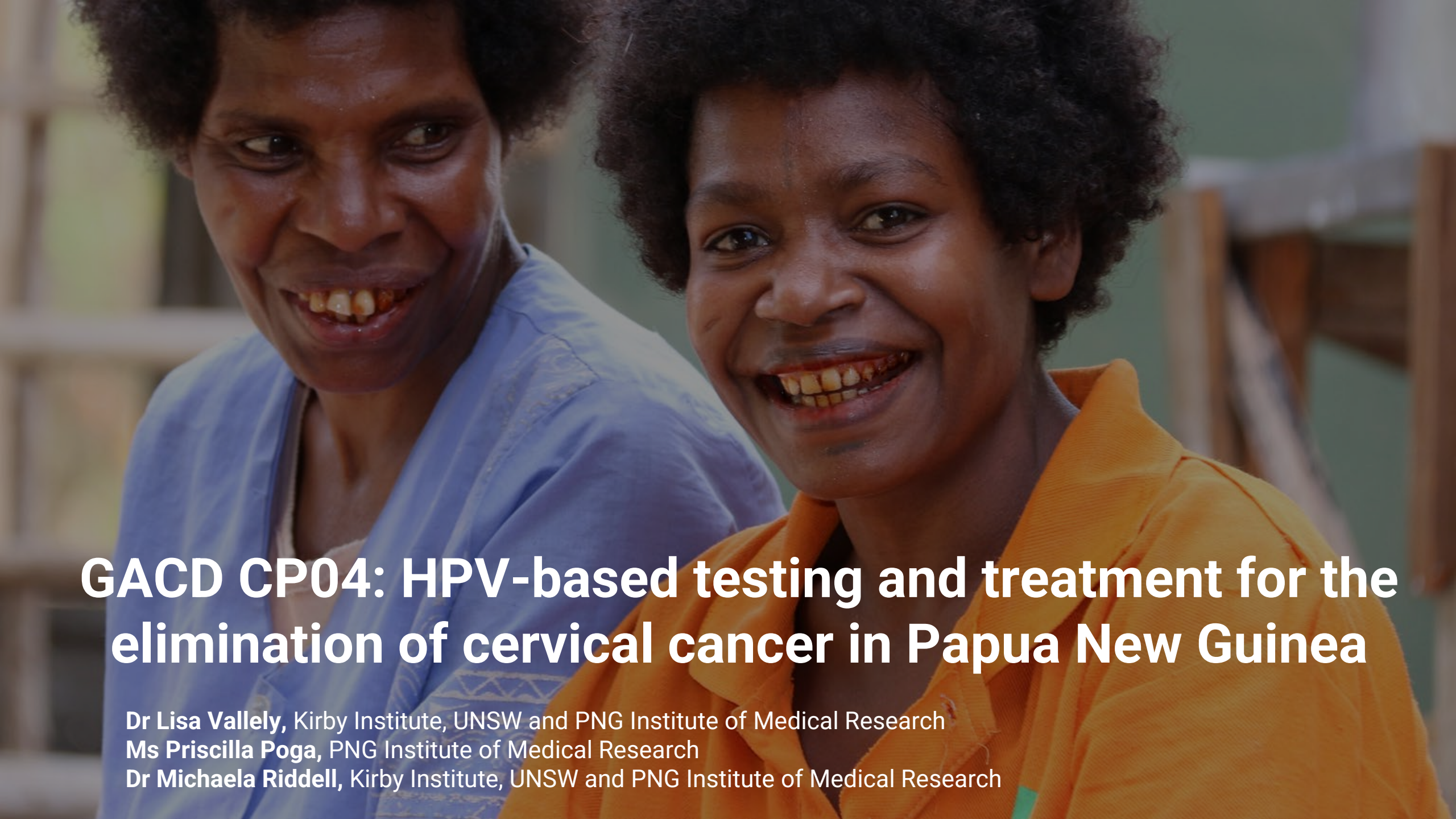
New Zealand

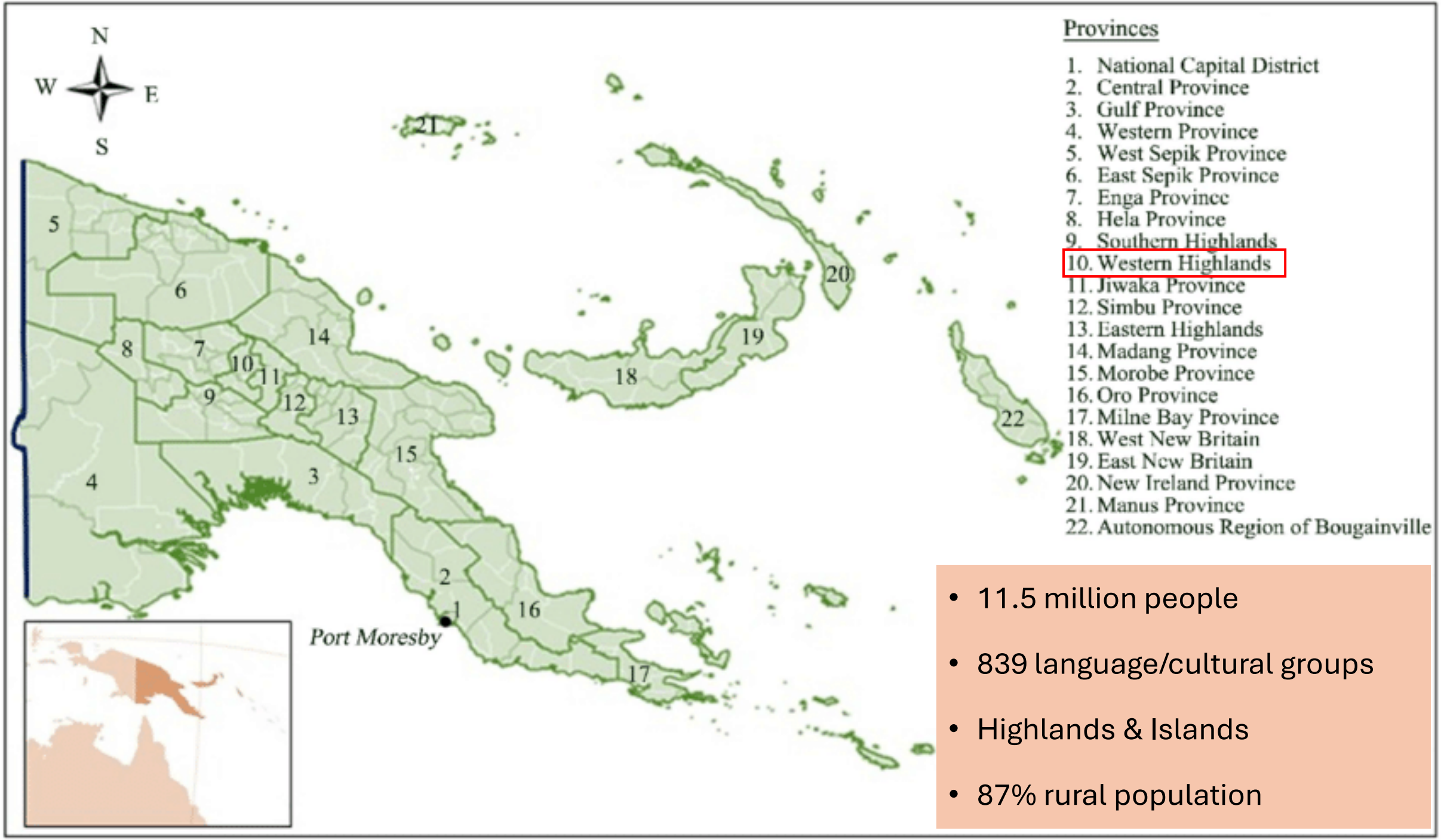


GACD CP04: HPV-based testing and treatment for the elimination of cervical cancer in Papua New Guinea

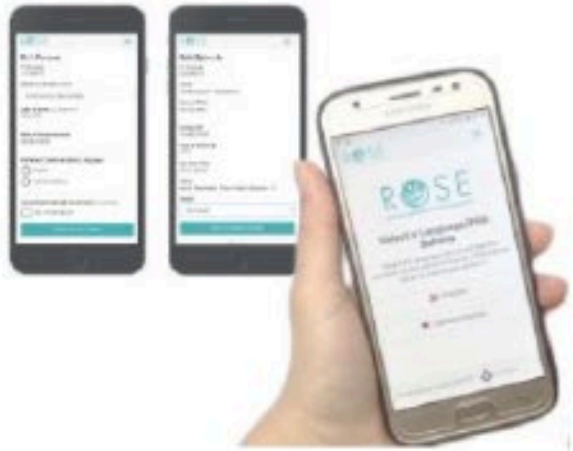
Dr Lisa Vallely, Kirby Institute, UNSW and PNG Institute of Medical Research
Ms Priscilla Poga, PNG Institute of Medical Research
Dr Michaela Riddell, Kirby Institute, UNSW and PNG Institute of Medical Research

Research Aim

To determine the reach, effectiveness, acceptability, cost-effectiveness, and scalability of HPV self-collect, test and treat among women in rural and remote communities in Papua New Guinea.


N
W
E
S
Provinces
1. National Capital District
2. Central Province
3. Gulf Province
4. Western Province
5. West Sepik Province
6. East Sepik Province
7. Enga Province
8. Hela Province
9. Southern Highlands
10. Western Highlands
11. Jiwaka Province
12. Simbu Province
13. Eastern Highlands
14. Madang Province
15. Morobe Province
16. Oro Province
17. Milne Bay Province
18. West New Britain
19. East New Britain
20. New Ireland Province
21. Manus Province
22. Autonomous Region of Bougainville
Port Moresby
• 11.5 million people
• 839 language/cultural groups
• Highlands & Islands
• 87% rural population

HPV screen-and-treat model



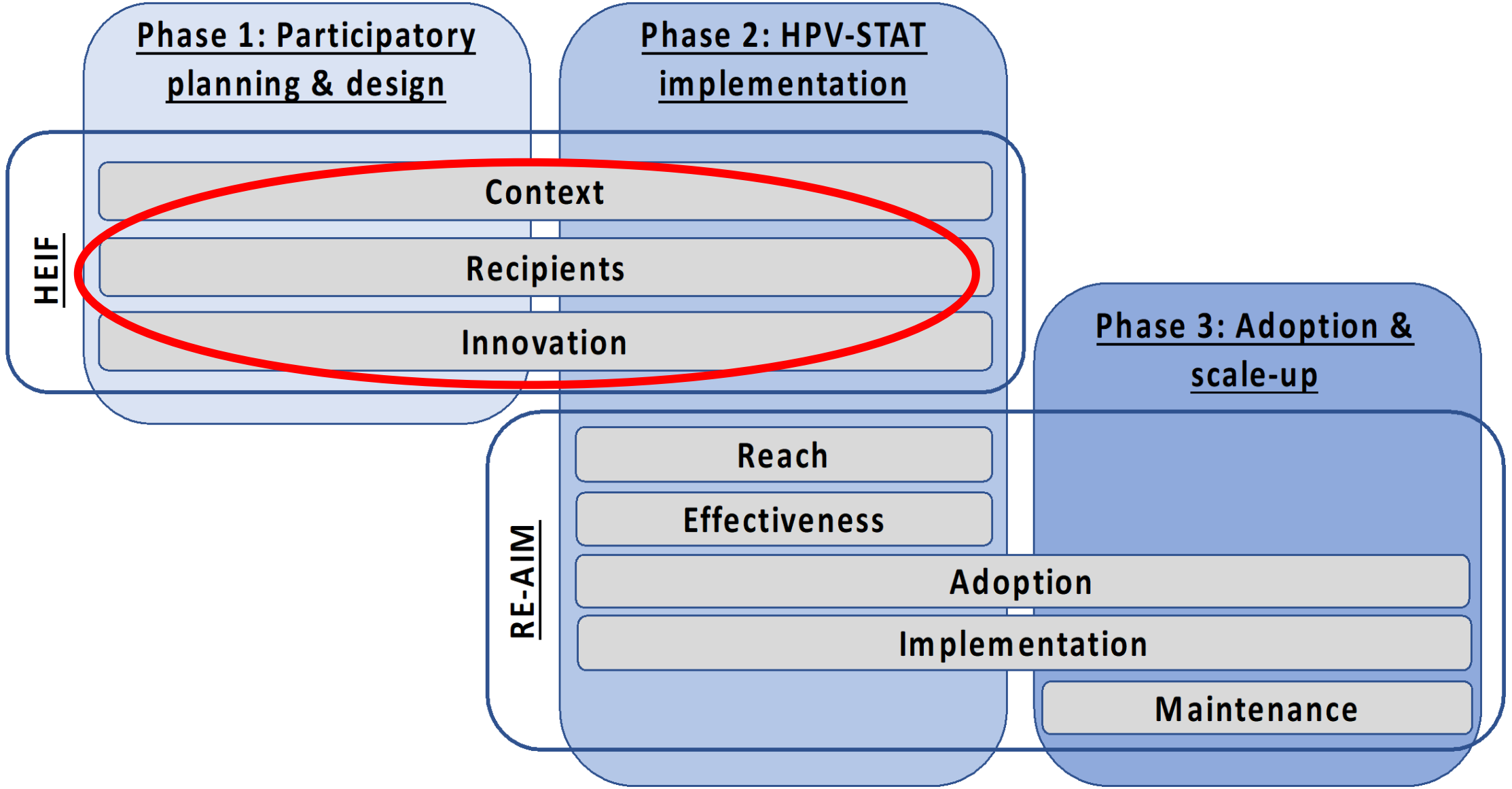
Self-collect 1

Test 2

Treat 3

Register 4

Conceptual Framework: HEIF/RE-AIM



Construct	Outcomes / determinants	Measurement
Context (HEIF) • Inner: local level • Inner: organisational • Outer: health system • Outer: societal	Anticipated and experienced facilitators and barriers to implementation (local geographical, socio-economic, cultural, political, health system, language, religious, other).	Participatory workshops, semi-structured interviews (SSIs) with key stakeholders and partners. SSIs with key stakeholders and partners.
Recipients (HEIF) • Patient • Provider • Community	Beliefs, knowledge, understanding, misconceptions, attitudes; barriers and facilitators to access; bias related to women, gender, cervical cancer, reproductive health, marginalised populations, and communities. Experience of the clinical encounter among patients, providers.	Participatory workshops, SSIs with key stakeholders and partners. SSIs with women, their families, health providers, health managers, community stakeholders
Innovation (HEIF)	Anticipated and experienced positive and negative effects related to characteristics of the innovation and key components.	Participatory workshops, SSIs with key stakeholders and partners. SSIs with women, their families, health providers, managers, stakeholders.

SSI participants (n=34):

- 24 women who had attended for cervical screening
- 4 women who had not attended for cervical screening
- 5 health care workers providing HPV screen-and-treat
- 1 senior-level key informant in local public health policy

Knowledge, understanding, beliefs, misconceptions

“From my understanding, I used to think that cervical cancer…develops when a man goes out with another woman then he gets this what [infection] into his body then come stay [have sex] with the wife again…

I used to think that during our monthly period, some dirt [blood] does not come out and some are is still in the body and I used to think that it develops this cancer too.

Emma 38 years

"They normally believe that it is to do with the religion, this is like a punishment from God for stealing a church property while some believe that it is a curse, we don't know the real cause of "that" cancer."

Arinta, 40 years

"The grandparents or the parents talks, I heard them mentioned that there is a tree bark in the bush, the trees they used to go, chop them and bring then they will drink its liquid".

Emma, 38 years

"…I know nothing about it. Even though I'm educated…I was really surprised this morning when I came and they said that the only cause of cervical cancer is through sex."

Melek, 51 years

Barriers & facilitators to access

"Personally, I really liked it because this service is free, everything is free, we didn't spend any money and the service is at the [our] doorstep waiting to serve us"

Mete, 45 years

"If they start charging fees it will be difficult for us to go…like only people with money will go. Only the wives of bigshots will access this [service]. I think regular people like us we'll just die at home or such"

Vane, 38 years

“We are unfortunate people [and live] remote and the road is also not in good condition and the bridge is almost washed away by the river…the town is far away …but once when we heard that the machine is already in the area, all of us were happy and we left whatever we were doing, our programs, we stopped it and we all came”.

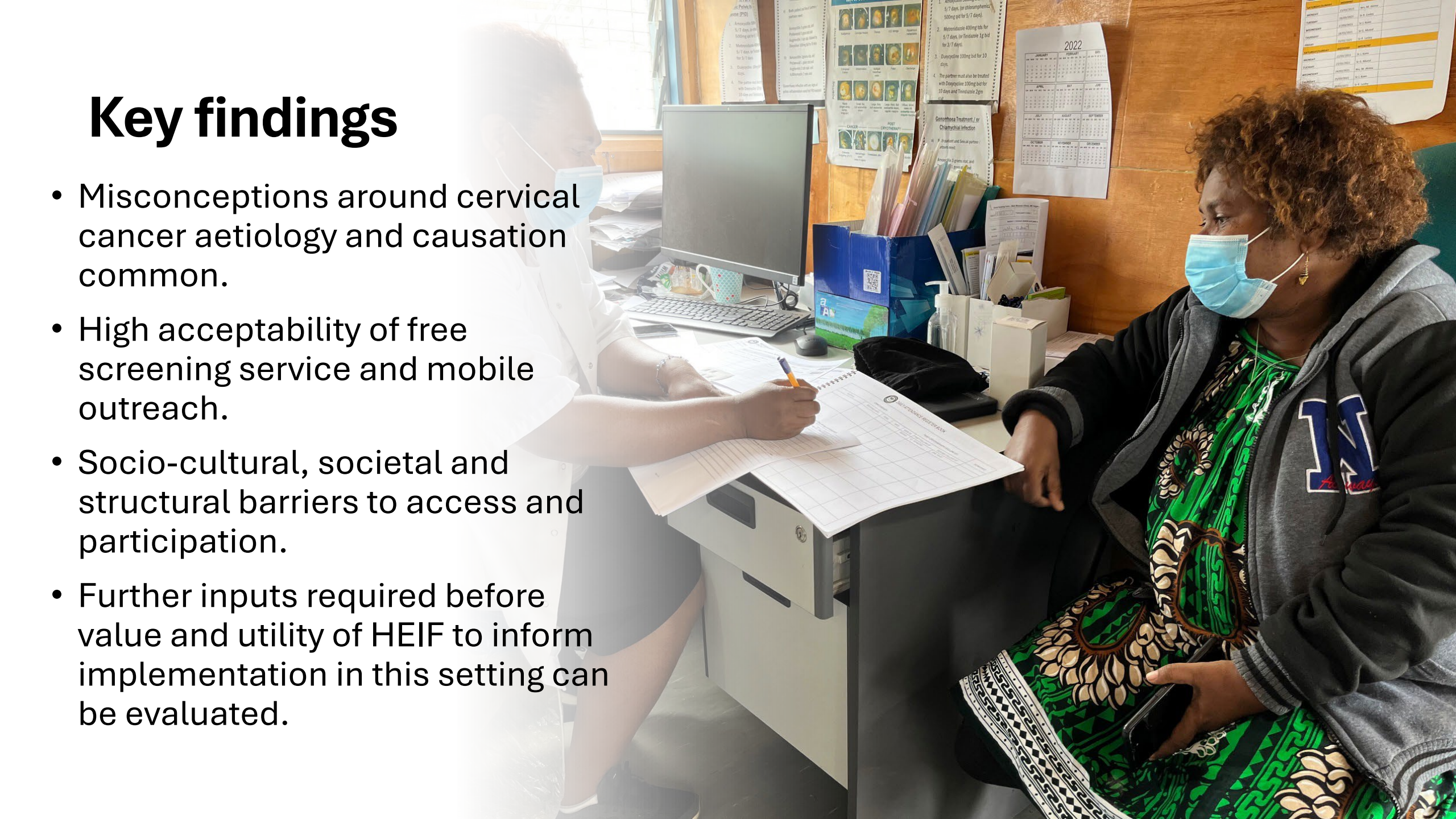
Mete, 45 years

“We already educated the community on the importance of respecting women’s right in the safe house and prohibit violence…. and people respect [the] safe house. [But] for them to access the screening services is a walking distance and I fear bringing them here…their spouses might be at the road and prevent her from coming or might beat us both while we are on our way here [for screening]… in such cases can [there be assistance] in bringing the women from the safe house to the screening location and after they are done they can assist them back to the safe house…”

Arinta, 40 years

Key findings

- Misconceptions around cervical cancer aetiology and causation common.
- High acceptability of free screening service and mobile outreach.
- Socio-cultural, societal and structural barriers to access and participation.
- Further inputs required before value and utility of HEIF to inform implementation in this setting can be evaluated.



Mipla laik givem bikpla tenikiu tumas lo...

- National and provincial health authorities in PNG
- PNG Institute of Medical Research
- PNG Obstetrics & Gynaecology Society
- PNG TWG on Comprehensive Cervical Cancer Control
- PNG Cancer Foundation
- Kirby Institute, UNSW Sydney
- Daffodil Centre, University of Sydney and Cancer Council New South Wales
- Australian Centre for Prevention of Cervical Cancer (ACPCC)
- Family Planning Australia
- NHMRC Centre of Research Excellence on Cervical Cancer Control (C4)
- GACD, ECCWP and other donor partners

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Australian Government

National Health and Medical Research Council

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Sitting A | Breakout room 2

RE-AIM

GILLIAN GOULD (moderator)
Southern Cross University, Australia

URVITA BHATIA
Sangath, India
and London School of Hygiene and Tropical Medicine, UK

YASHI GANDHI
Sangath, India
and London School of Hygiene and Tropical Medicine, UK

JAAP KOOT
University of Groningen, Netherlands

https://re-aim.org/ | Figure: https://azhin.org/cummings/re-aim

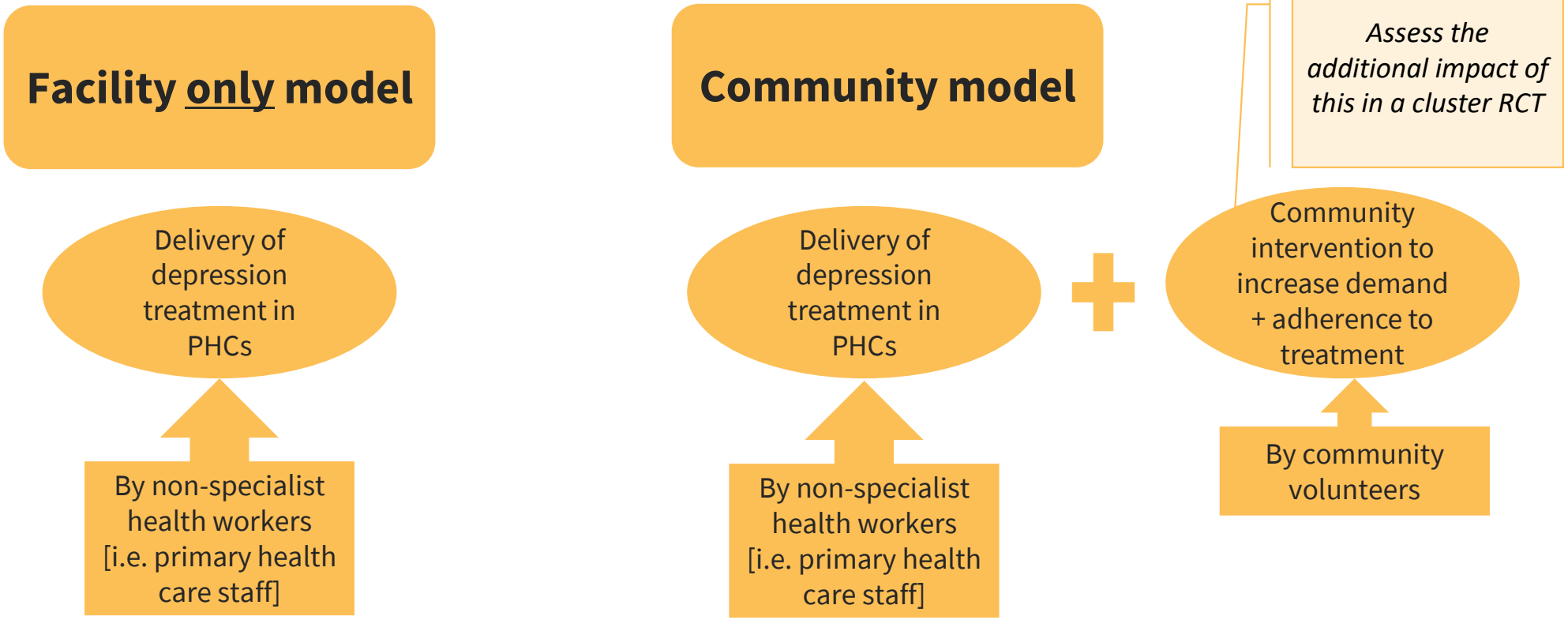
IMPRESS: IMPlementation of evidence-based facility and community interventions to reduce the treatment gap for depression

- India
- Depression
- Reduce the treatment gap for depression through the integrated implementation of evidence-based interventions in facility and community platforms

SUNI-SEA: Scaling-Up NCD Interventions in South-East Asia

- Indonesia, Myanmar (Burma), and Vietnam
- Prevention of hypertension and diabetes
- Measure the effectiveness and cost effectiveness of scaling up interventions in communities and primary healthcare facilities in South-East Asia

A brief about the project



IMPRESS x RE-AIM

Why did our project team decide to use RE-AIM?

- Used extensively in implementation research
- Enables to measurement of a logical flow of outcomes
- Better facilitation of translation of research findings
- External validity of research findings
- All the five dimensions were of direct relevance to our research:
  - the use of hybrid trials,
  - focus on health systems research and,
  - sustainability beyond the funding of the project.

Adopting the framework

Step 1: Determine outcomes of interest

- Just as you would map a Theory of Change for the programme.

Step 2: Determine how the outcomes are best measured.

- Mixed methods are best suited for the RE-AIM framework.

Step 3: Determine the stakeholder(s) you would need to collect information from.

- It is important to list all the relevant stakeholders to facilitate triangulation and better translation of research findings.

Step 4: Determine sources and timepoints.

Step 5: Piloting, reviewing and revising based on feasibility of data collection.

Some examples

Dimension	Data collection	Time point	Stakeholders
REACH	[Quant] Number of people with depression referred to health facility	During implementation	Community volunteers
	[Qual] Acceptability of the community intervention	After completing 6-month outcome evaluation	People living with depression
ADOPTION	[Quant] Characteristics of counsellors agreed to join the programme	During training	Primary health care staff; community volunteers
	[Qual] Perceived benefits and barriers of implementing the programme	During implementation	Primary health care staff; community volunteers
	[Quant] Retention	During implementation	Primary health care staff; community volunteers

TAKEAWAY

There is no one prescription on how many indicators should ideally be collected from a stakeholder type or how many stakeholders you need to collect one domain type from (e.g. reach) – **Let your research aim guide you!**

The use of RE-AIM in SUNI-SEA

Standardised method of evaluation is favourable

- In the project for **comparison between countries**, research arms, in our case three country programmes
- Among projects for **comparison between projects**, in our case GACD scaling up projects

The model is multi-dimensional (5 dimensions)

- Helps to make the evaluation more **comprehensive** and **multidisciplinary** beyond purely medical research, in our case health systems focus
- Focuses on **sustainability**, and triggers attention for relevance of society, in our case scaling-up focus

Adaptation of the framework

Formulate relevant indicators for the different dimensions

- Balance between **contextualising** (in order to be locally achievable) and **generalising** (in order to be comparable)
- Apply the **KISS** (Keep It Simple Stupid) principle to make it manageable and avoid overwhelming numbers of indicators and data sets

Mixed method approach necessary

- Not all indicators can be measured quantitatively
- **In-depth interviews** with key stakeholders and **focus group discussions** part of analysis (especially in dimension maintenance)

Study of community groups in Vietnam

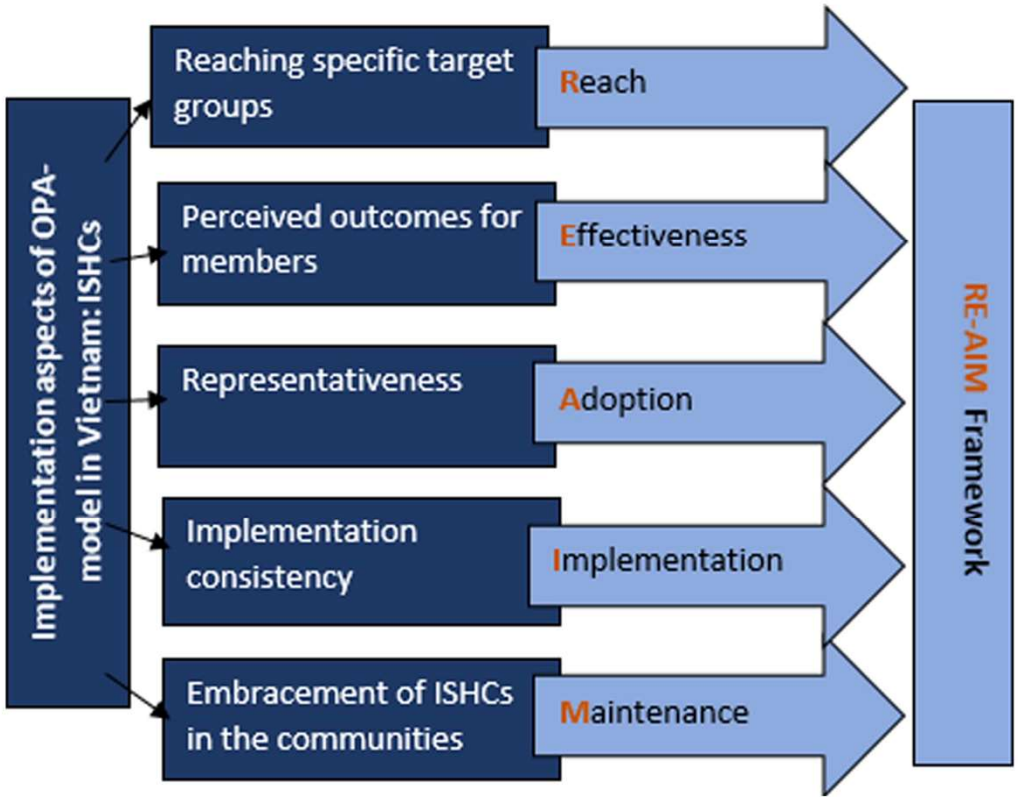


Figure: The relationship between implementation aspects of ISHCs and the RE-AIM framework

- The study focused on **Intergenerational Solidarity Clubs** (ISHCs) with broader interest than health alone
- The indicators for the study were strongly contextualised, and beyond medical topics
- Routine data, surveys, interviews and focus group discussions

Pardoel ZE et al. (2023) The implementation of community-based programs in Vietnam is promising in promoting health. Front Public Health. 11:1182947. PMID: 37415708.

Study of overall SUNI-SEA project

Stakeholders' identification very important step

- Make thorough analysis of health system first
- Decentralised health systems in Vietnam and Indonesia: decisions on human and financial resources taken locally
- Each stakeholder has its own set of indicators and critical questions

Community members of groups

Volunteers and primary health care staff

Managers of primary health care facilities

District and Provincial Health Managers and local and provincial authorities

Policy makers, national level actors

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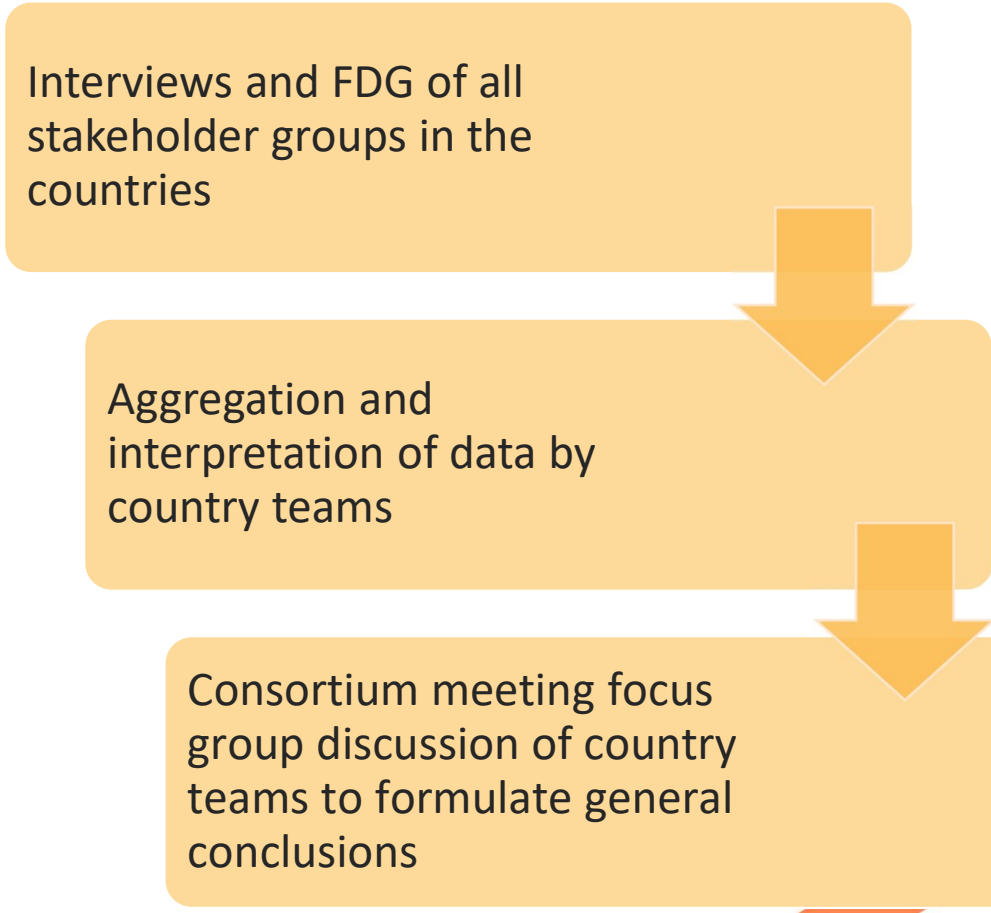
Staged data collection process of qualitative data in RE-AIM analysis

- The evaluation requires to come from very local and context specific findings to general conclusions
- **Indicators** and **interview guides** for local data collection by national teams
- Thereafter **focus group discussions** of national teams in conference by international team
- Conclusions formulated by international team, and agreed in **consensus meeting** by whole consortium
- Publication in preparation



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Breakout room 1

Consolidated Framework for Implementation Research (CFIR)

Moderator: Simon Bacon
Concordia University, Canada

Speakers:

Zinzi Pardoel
University of Groningen, Netherlands

Anusha Ramani-Chander
Monash University, Australia

Bana Salameh
WHO-Collaborating Centre on Nutrition Changes and Development *and* University of Montreal, Canada

Breakout room 2

Exploration, Preparation, Implementation, Sustainment (EPIS) Framework

Moderator: Karen Yeates
Queen's University, Canada

Speakers:

Greg Aarons
University of California San Diego, US

Farah Allouche
Tulane School of Public Health and Tropical Medicine, US

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Sitting B | Breakout room 1

CFIR

*Consolidated Framework for Implementation Research

SIMON BACON (moderator)
Concordia University, Canada

ZINZI PARDOEL
University of Groningen, Netherlands

ANUSHA RAMANI-CHANDER
Monash University, Australia (via recorded video)

BANA SALAMEH
WHO-Collaborating Centre on Nutrition Changes and Development

BREAKOUT ROOM 1: Consolidated Framework for Implementation Research (CFIR)

Simon L. Bacon, PhD, FTOS, FCCS, FABMR

- Titulaire de la Chaire du FRQS en intelligence artificielle et en santé numérique pour la modification de comportements de santé
- Titulaire de la Chaire SRAP-IRSC sur les essais cliniques comportementaux novateurs axés sur les patients
- Professeur titulaire, Département de santé, kinésiologie et physiologie appliquée, Université Concordia
- Co-directeur, Centre de médecine comportementale de Montréal, CIUSSS-NIM

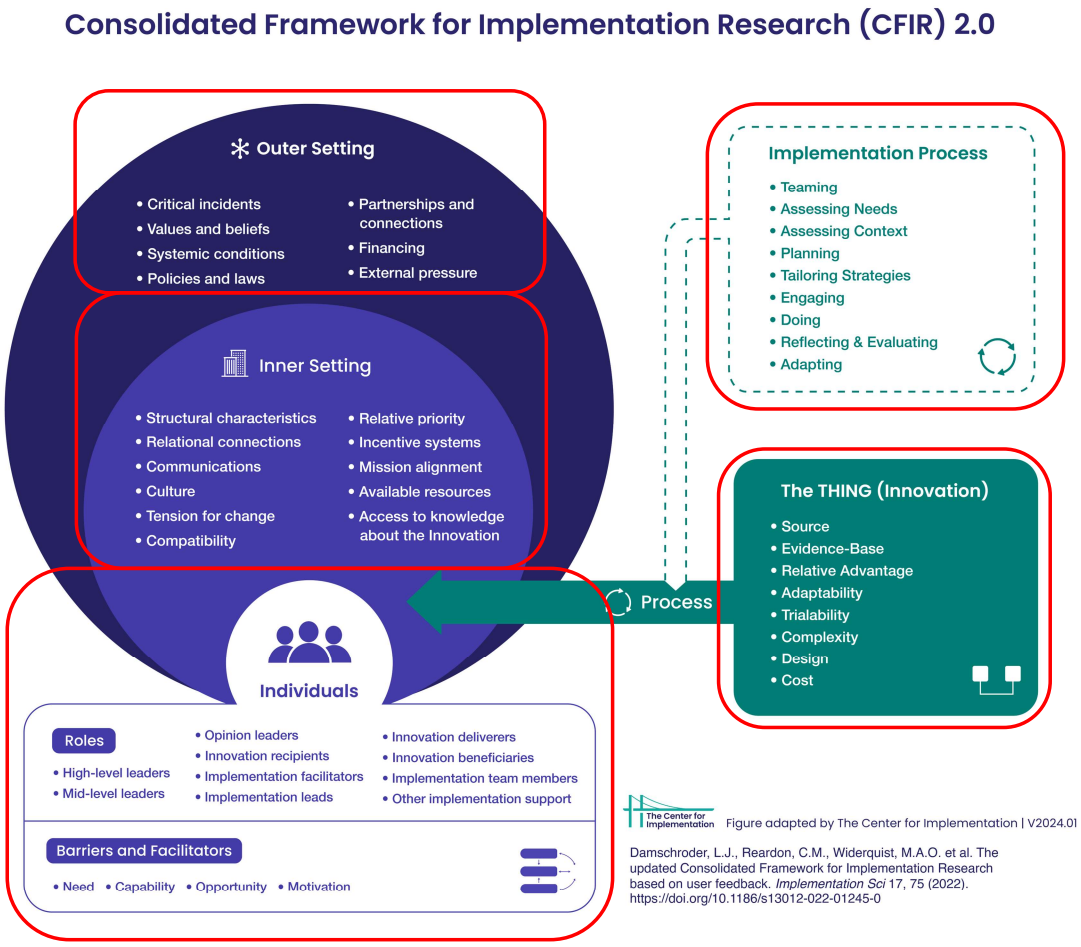
Global Alliance for Chronic Diseases mid-year workshop 2024
12th June 2024, Online

Land acknowledgement

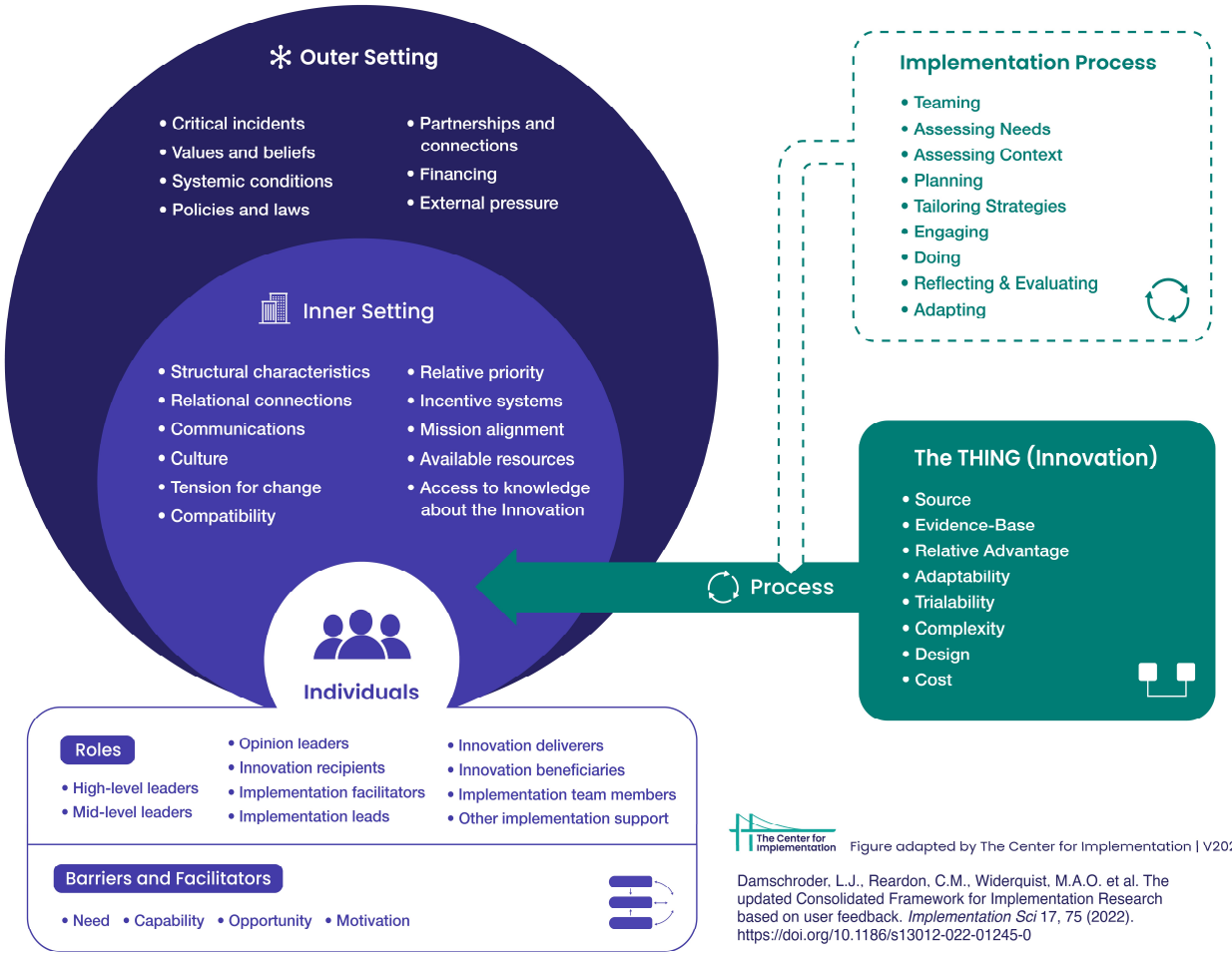
- I acknowledge that Concordia University and the CIUSSS-NIM are located on unceded Indigenous lands. The Kanien'kehá:ka Nation is recognized as the custodians of the lands and waters on which Concordia University and the CIUSSS-NIM stands today. Tiohtiá:ke, commonly known as Montreal, is historically known as a gathering place for many First Nations. Today, it is home to a diverse population of Indigenous and other peoples.
- I also acknowledge that our ability to live and work on these lands today is a direct benefit of policies of expulsion and assimilation of Indigenous peoples during the time of settlement and Confederation, and since.
- *The harms of these policies are many and are still being felt in Indigenous communities today.* I express gratitude towards the Indigenous peoples who have and will continue to steward these lands. I am committed to amplifying the voices of Indigenous peoples and working against the everyday forces of white supremacy and colonialism present in the research sector.

Consolidated Framework for Implementation Research (CFIR) 2.0

- A framework that can help guide the implementation of an innovation (e.g., intervention)
  - Amalgam of a number of different frameworks
  - Updated in 2022
- Assessment of **barriers and facilitators** across 5 domains
  - The innovation
  - Implementation process
  - Individuals (people within a setting)
  - Inner setting (where the innovation will be implemented)
  - Outer setting (things that will influence the inner setting)
- Provides a consistent, but flexible, structure to ensure that all aspects of implementation can be considered



Consolidated Framework for Implementation Research (CFIR) 2.0



The Center for Implementation Figure adapted by The Center for Implementation | V2024.01

Damschroder, L.J., Reardon, C.M., Widerquist, M.A.O. et al. The updated Consolidated Framework for Implementation Research based on user feedback. *Implementation Sci* 17, 75 (2022). https://doi.org/10.1186/s13012-022-01245-0

Consolidated Framework for Implementation Research (CFIR)

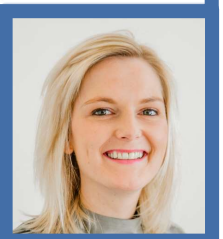
- A framework that can help guide the implementation of an innovation (e.g., intervention)
  - Amalgam of a number of different frameworks
  - Updated in 2022
- Assessment of barriers and facilitators across 5 domains
  - The innovation, implementation process, individuals (people within a setting), inner setting (where the innovation will be implemented), and outer setting (things that will influence the inner setting)
- Provides a consistent, but flexible, structure to ensure that all aspects of implementation can be considered

Evaluating and bringing to scale alternative food networks to address diabetes mellitus and hypertension

- Ecuador
- Diabetes and hypertension
- Understand the ways in which Alternative Food Networks (AFNs) create healthier local food environments and act on social determinants of health to reduce the risks of nutrition-related chronic diseases

GACD Systems approach to upscaling working group

- 27 projects
- 27 countries
- Diabetes and hypertension
- Identify the challenges, enablers, and barriers to upscaling interventions for hypertension and diabetes in implementation research projects under the GACD Scale Up Research Programme.



Showcasing the application of CFIR to the joint research activities of the *GACD Systems approach to upscaling working group*

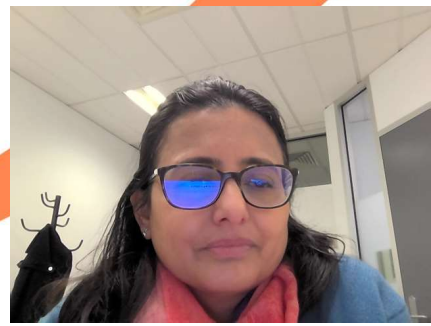
Jointly prepared and presented by:

- Anusha Chander (Monash University, Australia)
- Zinzi Pardoel (University Medical Center Groningen, Netherlands)

Outline of presentation

- Introduction to **collaborative research** by upscaling working group

- Application of CFIR to:
  - Phase 1 of the study
  - Phase 2 of the study



Methods

Timepoint 1

- Early implementation
- 44 semi-structured multi-stakeholder interviews
- 19 projects 20 countries
- **Completed**

Timepoint 2

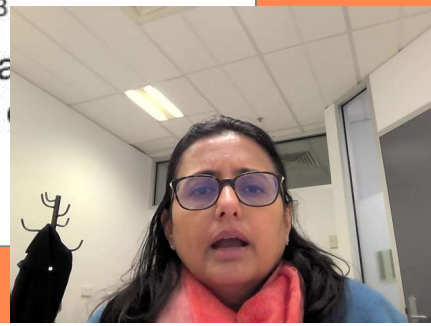
- End of implementation
- Semi-structured multi-stakeholder interviews
- 2 to 5 per project
- **In Progress**

Original research

BMJ Public Health

Challenges and enablers for scaling up interventions targeting non-communicable diseases: a qualitative study applying the Consolidated Framework for Implementation Research to 19 research projects worldwide

Anusha Ramani-Chander ,[1,2] Amanda G Thrift,[1] Josefien van Olmen,[3] Edwin Wouters,[4] Peter Delobelle,[5,6] Rajesh Vedanthan,[7] J Jaime Miranda[8] Stephen Sherwood,[10,11] Helena Teede,[2] Rohina Joshi ,[12,13] On behalf of the Global Alliance for Chronic Diseases Upscaling Working Group



https://bmjpublichealth.bmj.com/content/2/1/e000710

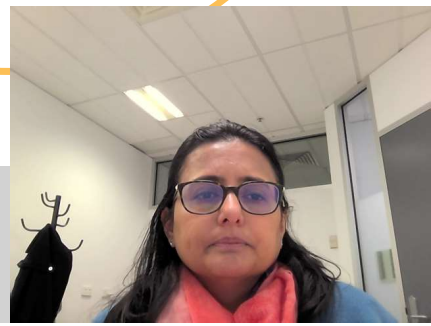
Data collection process

19 funded hypertension and/or diabetes scale up projects

Early implementation phase (qualitative)

45 multi-stakeholder semi-structured interviews

1. Principal Investigators (PIs)
2. Other project investigators
3. Project members, implementors and staff
4. Policymakers



Ramani-Chander A, Joshi R, van Olmen J, et al. *BMJ Open.*

Analytic process

Step 1: Thematic analysis [1]

Inductive

Retains richness of data

Helps to identify patterns across stakeholder groups

Step 2: Framework mapping [2]

Deductive

CFIR Mapping

Systematic mapping of challenges and enablers to identify implementation factors

[1] Braun V, Clarke V. *Qual Res Psychol*. 2008
[2] Damschroder LJ, Reardon CM, Opra Widerquist MA, et al. *Implement Sci*. 2022

Coding Process

Increasing range of responses within grouping

Open coding

- Statements are converted into codes (186 codes)

Sub-themes

- Combining similar codes to form sub-themes (45 sub-themes)

Themes

- Combining similar sub-themes to form larger themes (28 themes)

Results: Mapping themes on CFIR

CFIR Domain	Themes	Codes / Sub-themes	
	Enablers and Challenges	Challenges (Examples)	Enablers (Examples)
4 out 5 Domains	28 themes	186 codes; 45 sub-themes	
I. Innovation Domain	n/a		
II. Outer Context Domain	Challenge constructs (3): critical incidents, local attitudes, local conditions Enabling constructs (1): partnerships & connections Both (1): policies & laws	Political unrest ;Regional differences in health systems	Past project with same policymakers; High-level institutional connections
III. Inner context Domain	Challenge constructs (2) availability of resources, access to knowledge; Enabling constructs (4): structural characteristics, relational connections, communications, culture	Availability of resources to support implementation	Strengthening within existing resources; positive work culture
IV. Individuals Domain	Enabling constructs (2): Role of high-level leaders, Implementation leads	Power of high and mid level policy makers	Leadership engagement; past linkages to stakeholders
V. Implementation Process Domain	Enabling constructs (6): teaming, assessing needs, assessing context, planning, reflecting and evaluating, adapting Both (2): tailoring strategies, engaging	Multitier engagement is complicated; Local adaptation	Comprehensive planning; brinings stakeholders togther during engagement; maintaining communication

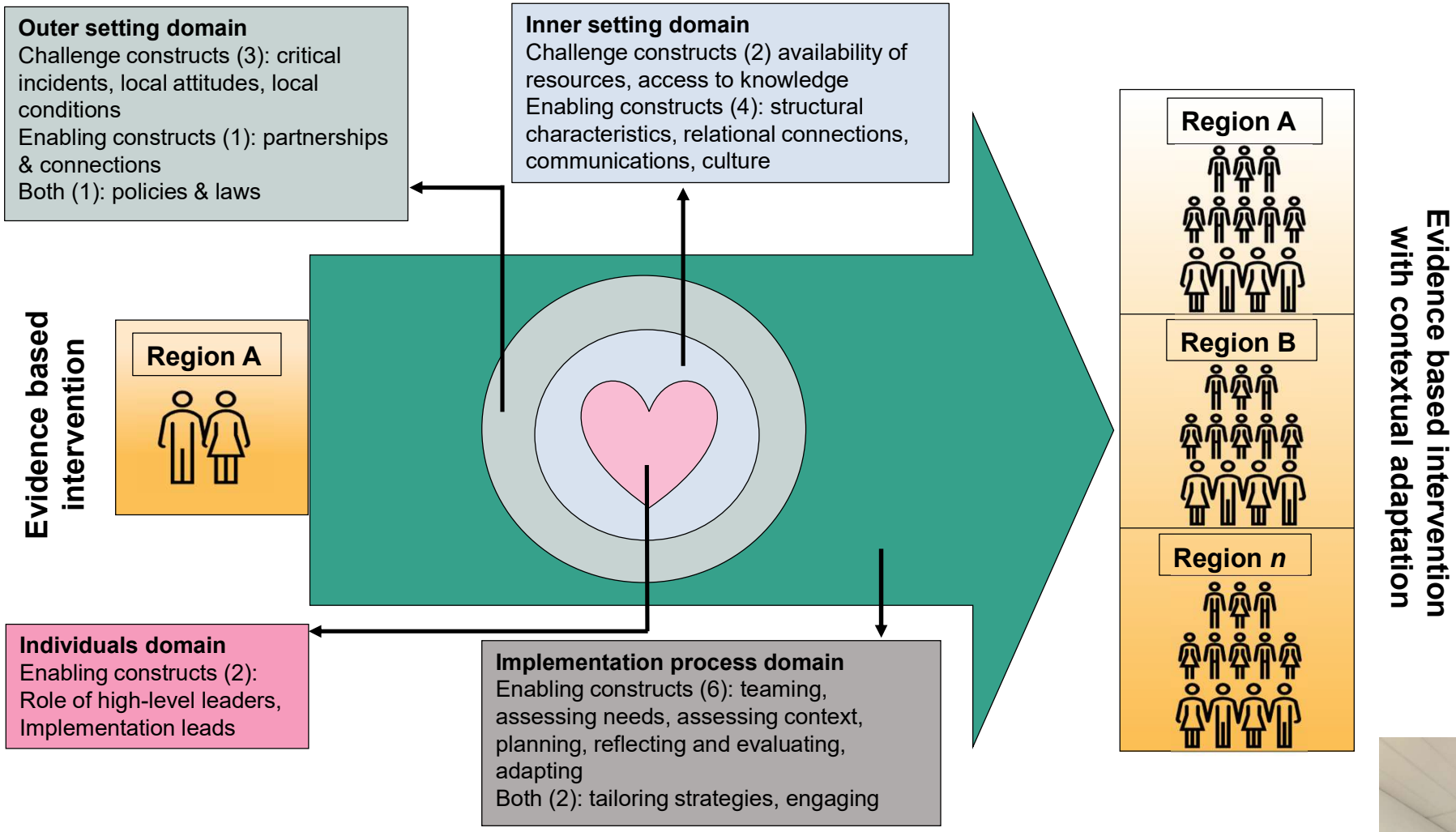
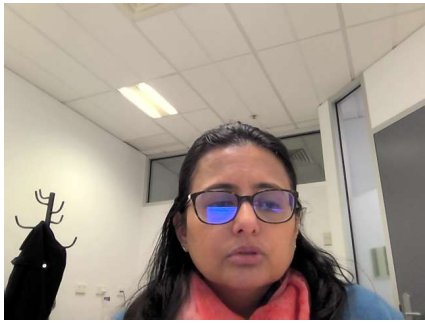


Figure 2. Summary of findings from application of the CFIR[1] to identify the major challenges and enablers in the early implementation phase of scale-up studies.

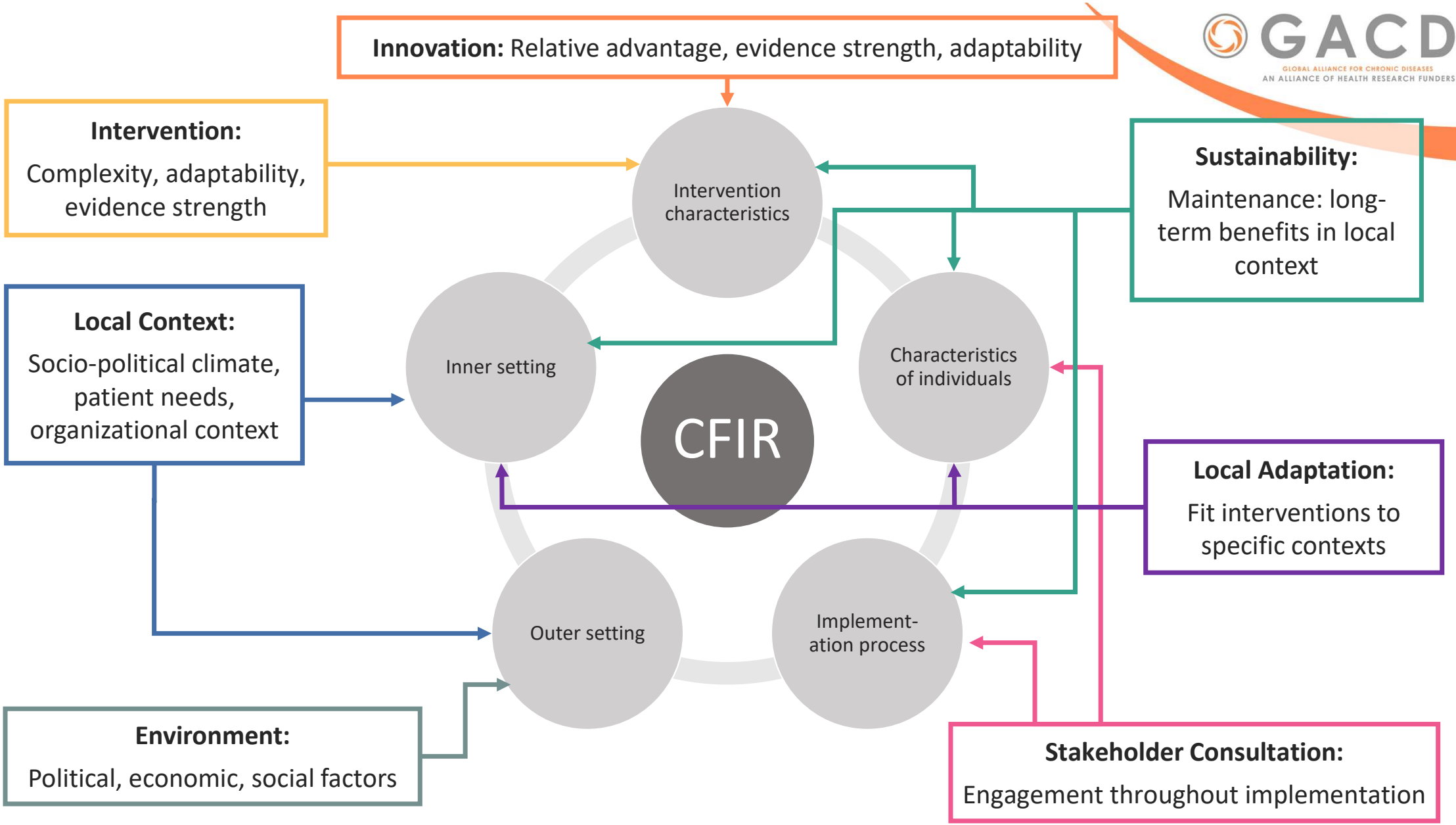
[1] Consolidated Framework for Implementation Research; Note: The innovation domain falls outside the scope of this study.



Phase 2: Follow-up study

- **Study objective:** Identifying and understanding enablers and challenges in scaling up NCD-related interventions. Focus on diverse political, socio-cultural, and health policy contexts for sustainability.

- **Data collection and analysis approach:**
  - Document analysis & Interviews
  - Focus on 7 key elements: intervention, innovation, local context, environment, local adaptation, stakeholder consultation, sustainability


Innovation: Relative advantage, evidence strength, adaptability
Intervention:
Complexity, adaptability, evidence strength
Local Context:
Socio-political climate, patient needs, organizational context
Environment:
Political, economic, social factors
Sustainability:
Maintenance: long-term benefits in local context
Local Adaptation:
Fit interventions to specific contexts
Stakeholder Consultation:
Engagement throughout implementation
Intervention characteristics
Inner setting
Characteristics of individuals
CFIR
Outer setting
Implement-ation process
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Conclusion and lessons learnt

- CFIR provides a **structured approach** to understanding and evaluating implementation factors in complex systems.
- **Rich and varied** insights: Data from diverse studies across countries and contexts
- **Complex and time-consuming** analysis to allocate themes to CFIR categorisations
- Synthesised the information to CFIR which allowed us to **reflect on patterns** of implementation challenges and enablers

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Sitting B | Breakout room 2

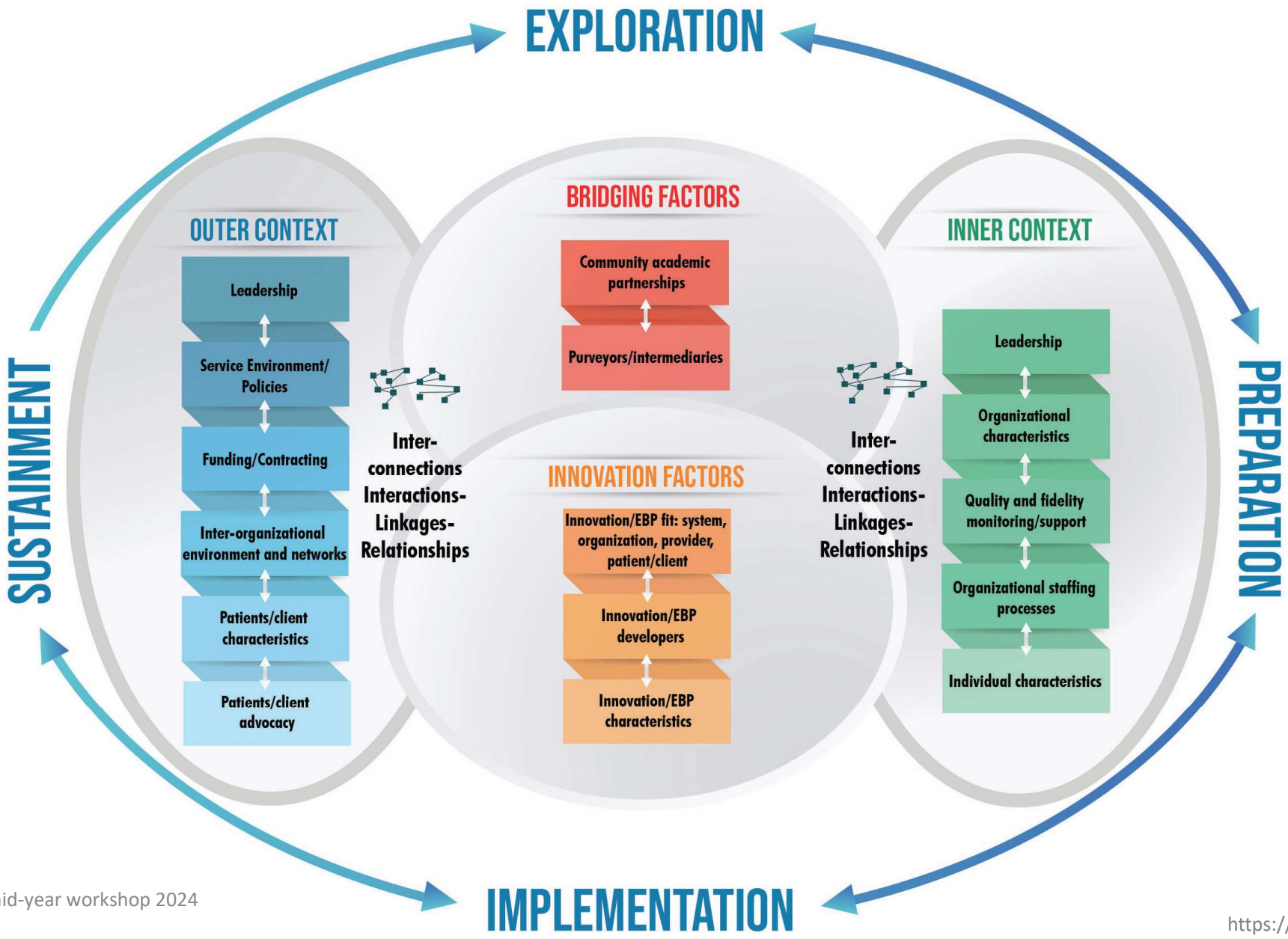
EPIS

*Exploration, Preparation, Implementation, Sustainment Framework

KAREN YEATES (moderator)
Queen's University, Canada

GREG AARONS
University of California San Diego, US

FARAH ALLOUCH
Tulane School of Public Health and Tropical Medicine, US



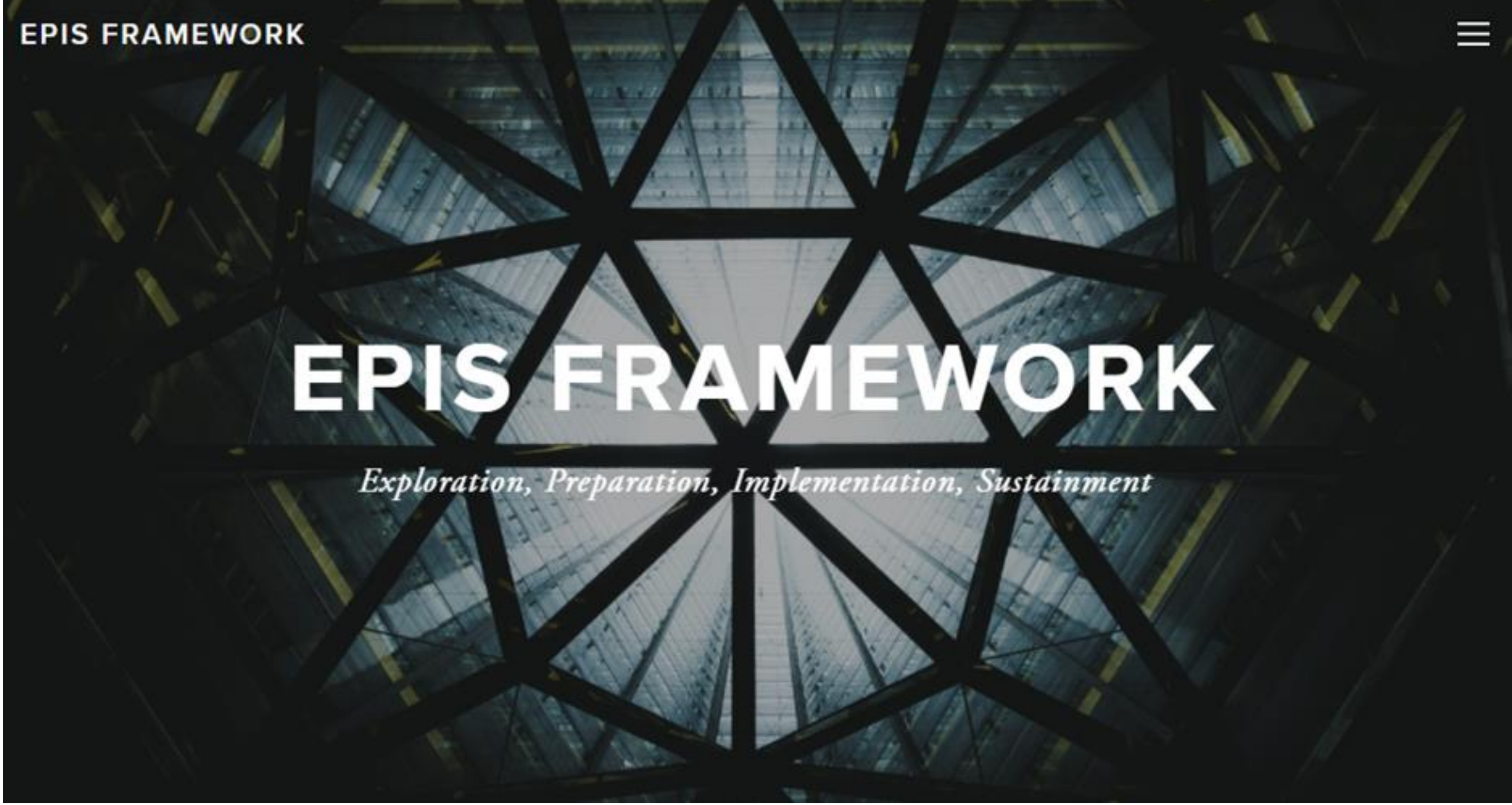
https://episframework.com/

The CATCH study: Implementing and scaling up a team-based care strategy for hypertension control

- Colombia and Jamaica
- Hypertension
- Test the reach, effectiveness, adoption, fidelity, and sustainability of implementing a team-based care strategy in primary care settings in Colombia and Jamaica.

DAPPER: Depression And Primary-care Partnership for Effectiveness-implementation Research

- Kenya
- Depression
- Evaluate non-specialist delivery of evidence-based depression treatment integrated within existing healthcare centres regarding clinical effectiveness and implementation parameters


EPIS FRAMEWORK
Exploration, Preparation, Implementation, Sustainment

Adm Policy Ment Health (2011) 38:4–23
DOI 10.1007/s10488-010-0327-7

ORIGINAL PAPER

Advancing a Conceptual Model of Evidence-Based Practice Implementation in Public Service Sectors

Gregory A. Aarons · Michael Hurlburt · Sarah McCue Horwitz

Moullin *et al. Implementation Science* (2019) 14:1
https://doi.org/10.1186/s13012-018-0842-6

Implementation Science

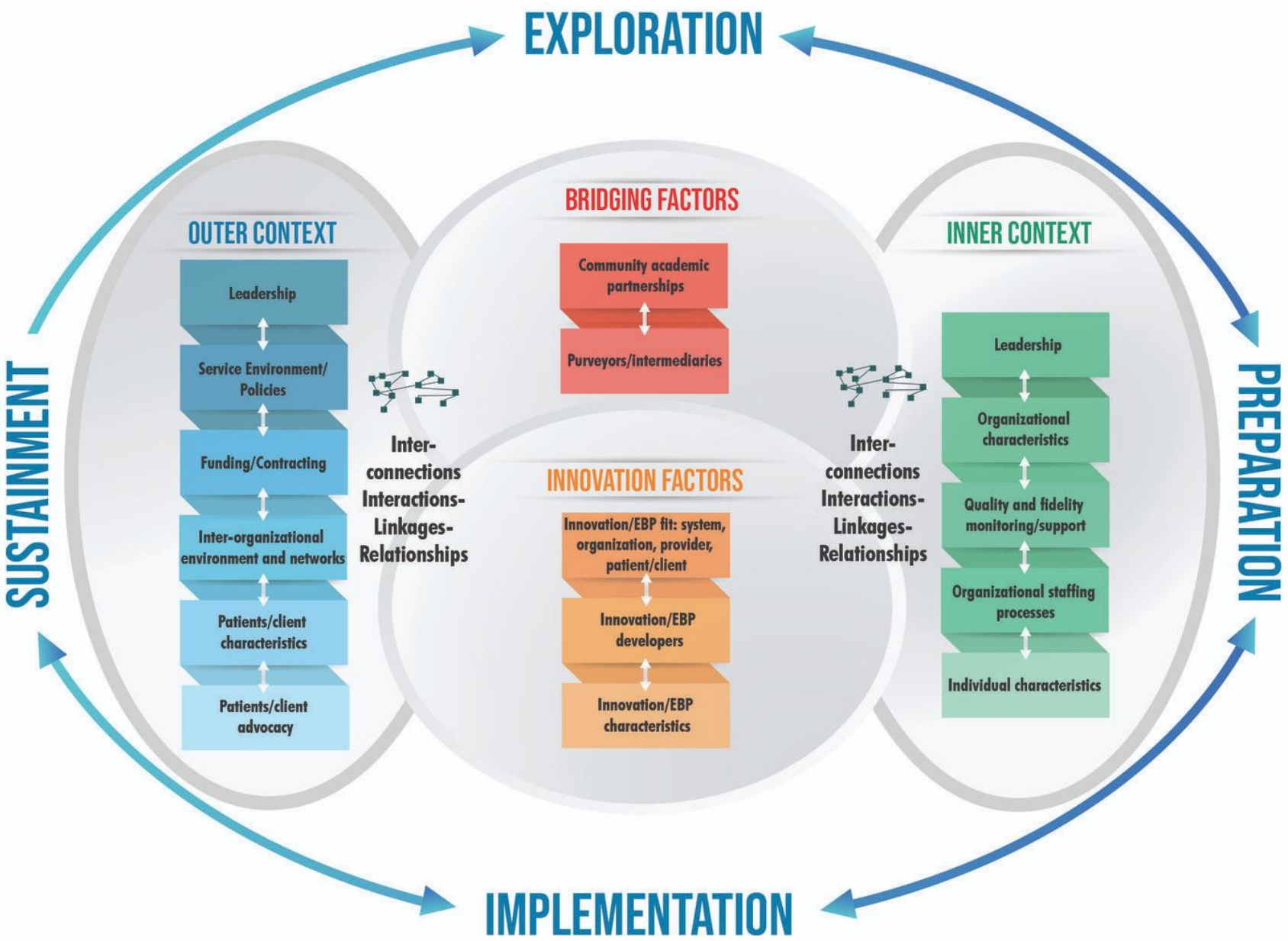
SYSTEMATIC REVIEW Open Access

Systematic review of the Exploration, Preparation, Implementation, Sustainment (EPIS) framework

Joanna C. Moullin[1,2], Kelsey S. Dickson[2,3], Nicole A. Stadnick[2,4], Borsika Rabin[5] and Gregory A. Aarons[2,4*]

Exploration, Preparation, Implementation, Sustainment (EPIS) Framework Process and Determinant

1. Phases
2. Outer context
3. Inner context
4. Bridging factors
5. Innovation Factors
6. Linkages/relationships



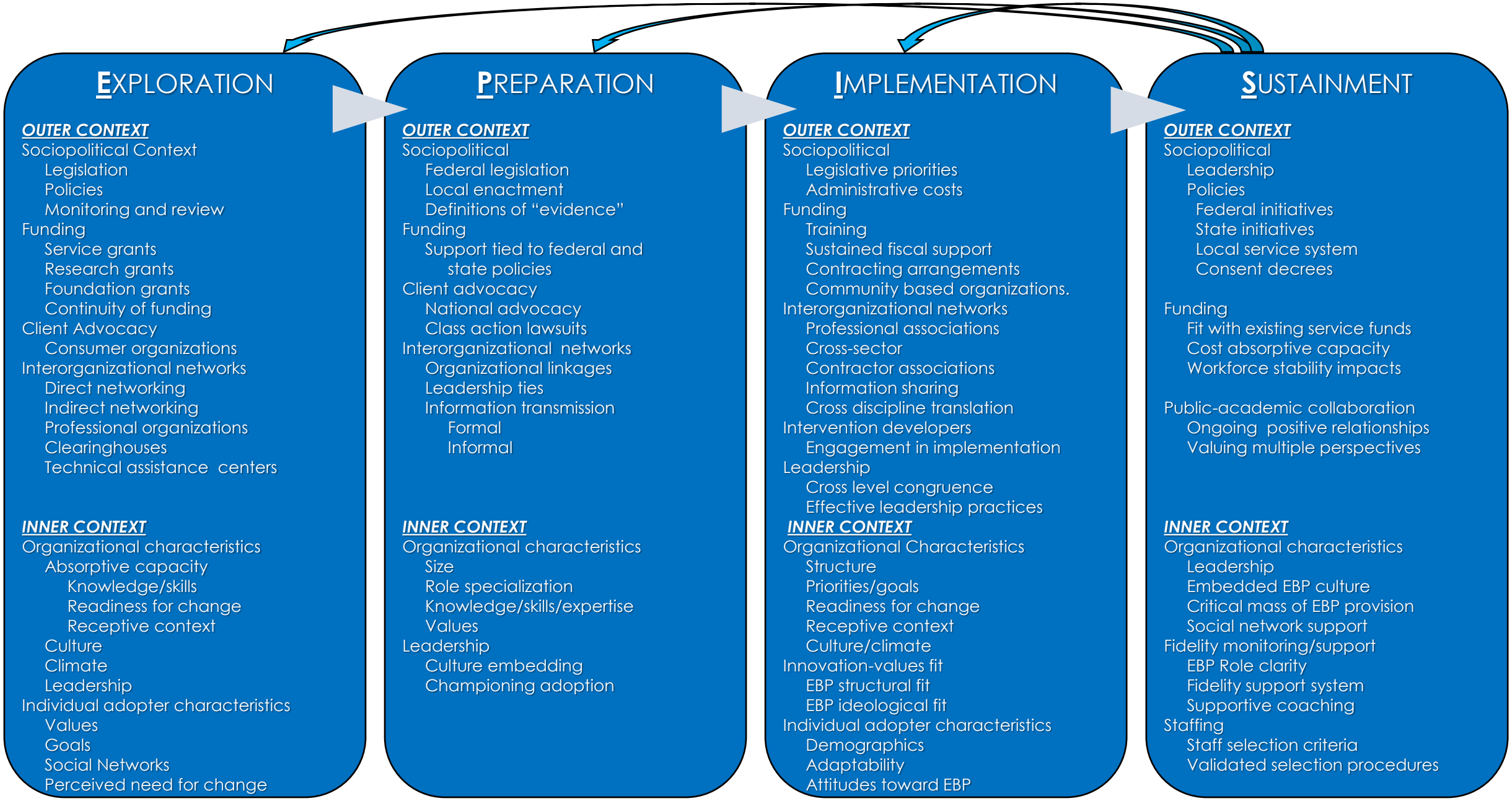
- Aarons GA, Hurlburt M, Horwitz SM. Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health*. 2011;38(1):4-23.
- Moullin JC, Dickson KS, Stadnick NA, Rabin B, Aarons GA. Systematic review of the Exploration, Preparation, Implementation, Sustainment (EPIS) framework. *Implement Sci.* 2019.14(1):1.

Exploration, Preparation, Implementation, Sustainment (EPIS) Framework

- EPIS is both a Determinant AND Process framework
- Key phases of the implementation process E, P, I, S
- Multilevel across system and organizations
  - Outer and inner contexts
  - Levels within contexts
- Frames implementation determinants and mechanisms across levels within each phase
- Enumerates common and unique determinants and mechanisms across levels and across phases
- Allows for recursive process (i.e., returning to earlier phases)

Aarons, G. A., Hurlburt, M., & Horwitz, S. M. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health and Mental Health Services Research*, *38*(1), 4-23.

Moullin, J.C., Dickson, K.S., Stadnick, N.A,, Rabin, B., & Aarons, G.A. (2019). Systematic Review of the Exploration, Preparation, Implementation, Sustainment, (EPIS) Framework. *Implementation Science, 14*(1).



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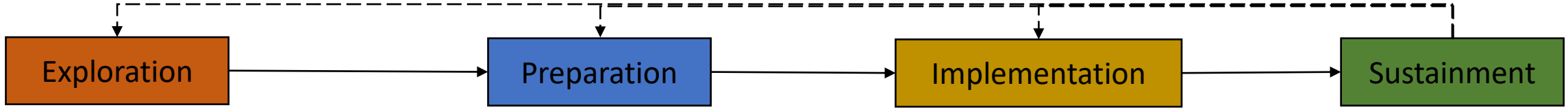
Activities in EPIS Phases



A service system, organization, research group, or other stakeholder(s) consider the emergent or existing health needs of the patients, clients, or communities

Work to identify the best EBP(s) to address those needs, and subsequently decides whether to adopt the identified EBP.

Consideration is given to what might need to be adapted at the system, organization, and/or individual level(s) and to the EBP itself.

Once a decision is made to adopt, one or more EBPs or innovations… then identify potential barriers and facilitators of implementation, further assess needs for adaptation, and develop a detailed plan to capitalize on implementation facilitators and address potential barriers.

Planning of implementation supports (e.g., training, coaching, audit, and feedback) to facilitate use of the EBP in the next two phases (Implementation and Sustainment) and develop an implementation climate that indicates that EBP use is expected, supported, and rewarded."

"In the Implementation phase and guided by the planned implementation supports from the Preparation phase, EBP use is initiated and instantiated in the system and/or organization(s). It is essential that ongoing monitoring of the implementation process is incorporated to assess how implementation is proceeding and adjust implementation strategies to support efforts accordingly."

"In the Sustainment phase, the outer and inner context structures, processes, and supports are ongoing so that the EBP continues to be delivered, with adaptation as necessary, to realize the resulting public health impact of the implemented EBP."

Moullin, J.C., Dickson, K.S., Stadnick, N.A,, Rabin, B., & Aarons, G.A. (2019). Systematic Review of the Exploration, Preparation, Implementation, Sustainment, (EPIS) Framework. *Implementation Science, 14*(1).

Crable et al. Implementation Science (2022) 17:80
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Implementation Science

DEBATE Open Access

Where is "policy" in dissemination and implementation science? Recommendations to advance theories, models, and frameworks: EPIS as a case example

Erika L. Crable[1,2,3*], Rebecca Lengnick-Hall[4], Nicole A. Stadnick[1,2,3], Joanna C. Moullin[5] and Gregory A. Aarons[1,2,3]

Abstract

Background: Implementation science aims to accelerate the public health impact of evidence-based interventions. However, implementation science has had too little focus on the role of health policy — and its inseparable politics, polity structures, and policymakers — in the implementation and sustainment of evidence-based healthcare. Policies can serve as determinants, implementation strategies, the evidence-based "thing" to be implemented, or another variable in the causal pathway to healthcare access, quality, and patient outcomes. Research describing the roles of policy in dissemination and implementation (D&I) efforts is needed to resolve persistent knowledge gaps about policymakers' evidence use, how evidence-based policies are implemented and sustained, and methods to de-implement policies that are ineffective or cause harm. Few D&I theories, models, or frameworks (TMF) explicitly guide researchers in conceptualizing where, how, and when policy should be empirically investigated. We conducted and reflected on the results of a scoping review to identify gaps of existing Exploration, Preparation, Implementation, and Sustainment (EPIS) framework-guided policy D&I studies. We argue that rather than creating new TMF, researchers should optimize existing TMF to examine policy's role in D&I. We describe six recommendations to help researchers optimize existing D&I TMF. Recommendations are applied to EPIS, as one example for advancing TMF for policy D&I.

Recommendations: (1) Specify dimensions of a policy's function (policy goals, type, contexts, capital exchanged).

(2) Specify dimensions of a policy's form (origin, structure, dynamism, outcomes).

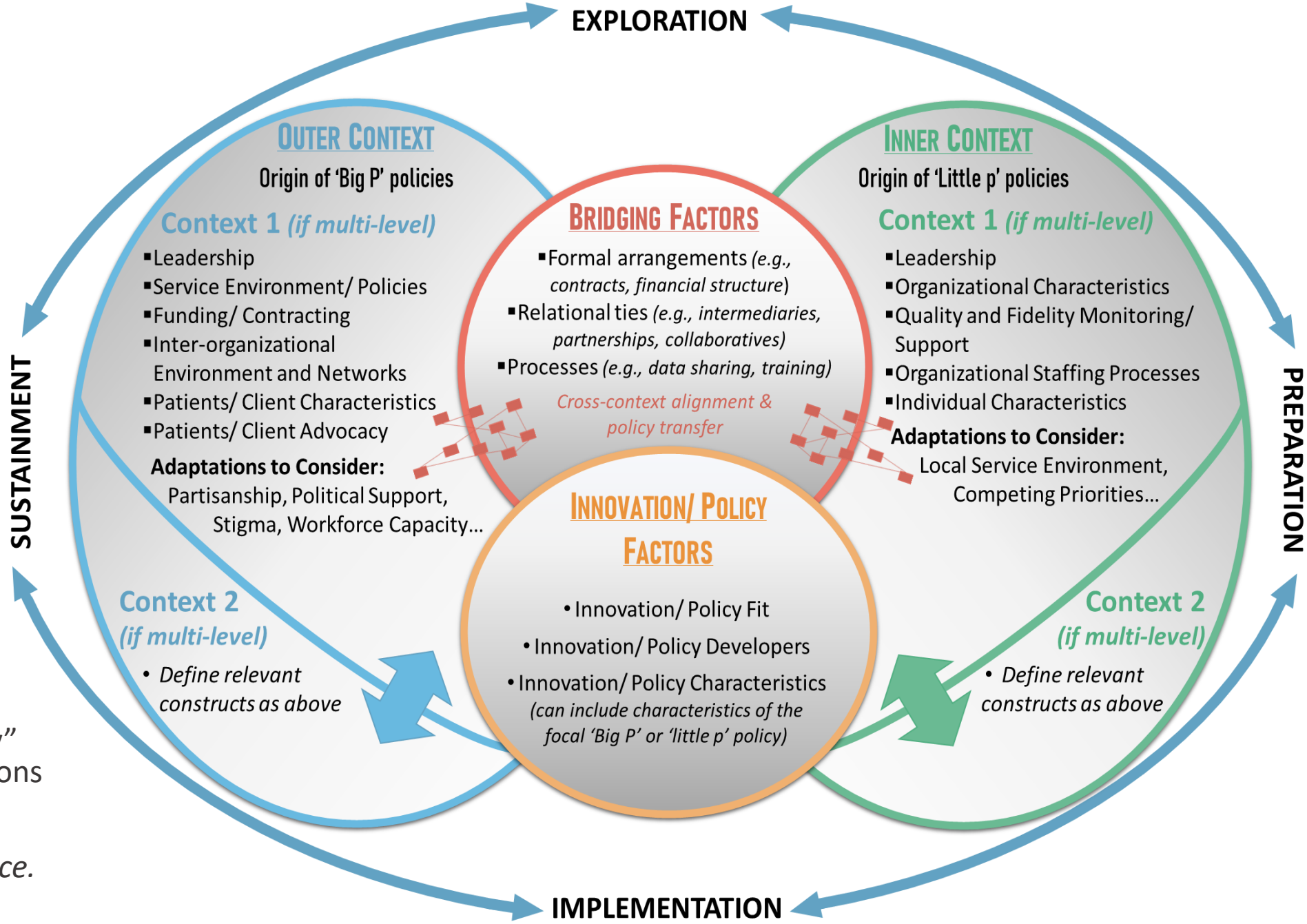
(3) Identify and define the nonlinear phases of policy D&I across outer and inner contexts.

(4) Describe the temporal roles that stakeholders play in policy D&I over time.

(5) Consider policy-relevant outer and inner context adaptations.

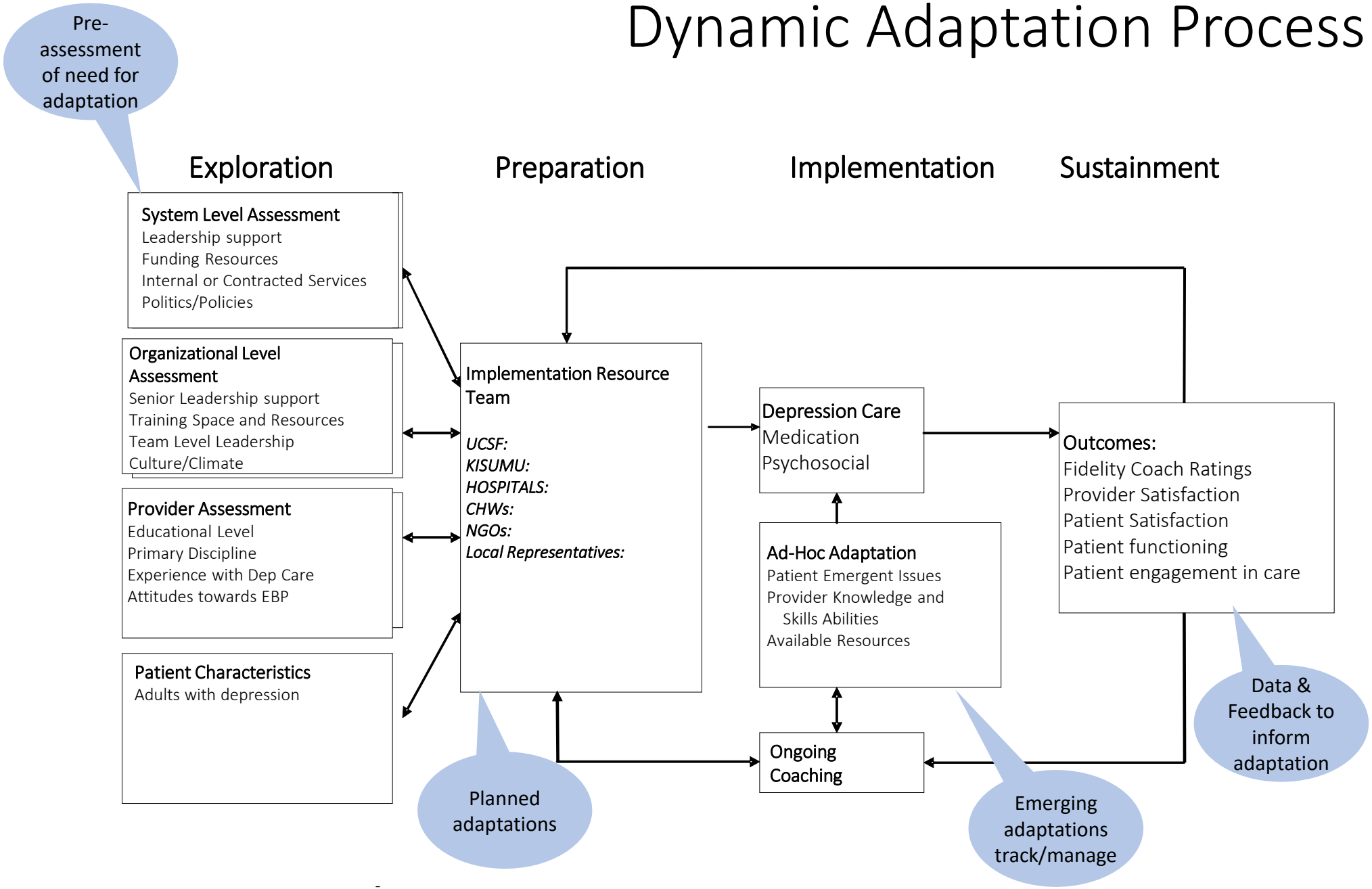
(6) Identify and describe bridging factors necessary for policy D&I success.

Policy Optimized Exploration, Preparation, Implementation, Sustainment (EPIS) Framework



Crable EL et al. Where is "policy" in D&I science? Recommendations to advance theories, models, & frameworks: EPIS as a case example. *Implementation Science.* 2022; 17:80.

Dynamic Adaptation Process



Adapted from: Aarons, G.A., Green, A.E., Palinkas, L.A. *et al.* Dynamic adaptation process to implement an evidence-based child maltreatment intervention. *Implementation Sci* **7**, 32 (2012).

A collaborative, adaptive, local, national and international team

Team Goal:

SUSTAINABLE strategy for SCALABLE, non-specialist delivery of depression and trauma-related disorder outpatient treatment, integrated with public sector primary care outpatient services

Team Members:

Study team, diverse roster of investigators, Implementation Resource Team (**IRT**), participants and patients, other East African mental health stakeholders

Team Process:

Collaborative discussion and **ongoing adaptation** for optimal sustainability and scalability

Team Strategies:

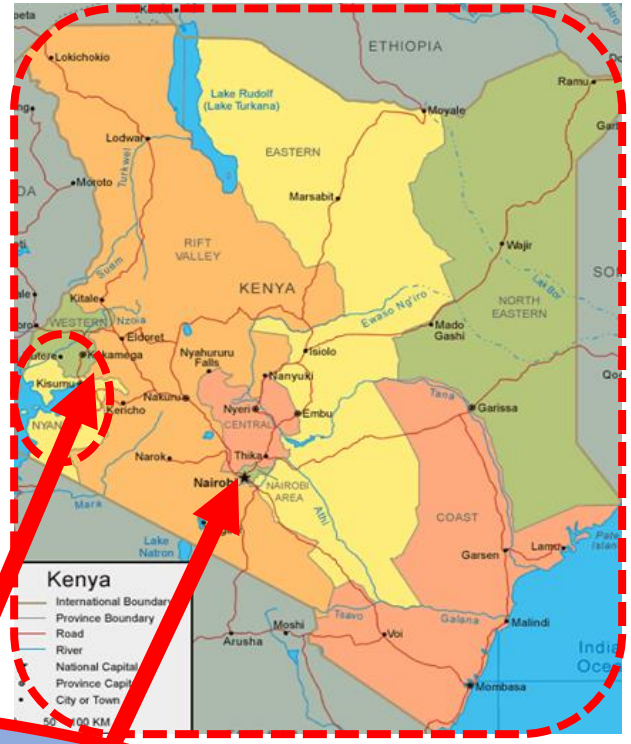
Collaborative and diverse roster of investigators and consultants, Exploration, Preparation, Implementation and Sustainment (**EPIS**), Implementation Resource Team (**IRT**), Dynamic Adaptation Process (**DAP**)

Local, National and Regional Activities involve key mental health stakeholders in SMART-DAPPER

Goal: An evidence-based, sustainable model of delivering integrated, evidence based mental health care appropriate for and implemented by many counties across Kenya and in Uganda.

Engagement and scale up Tools:

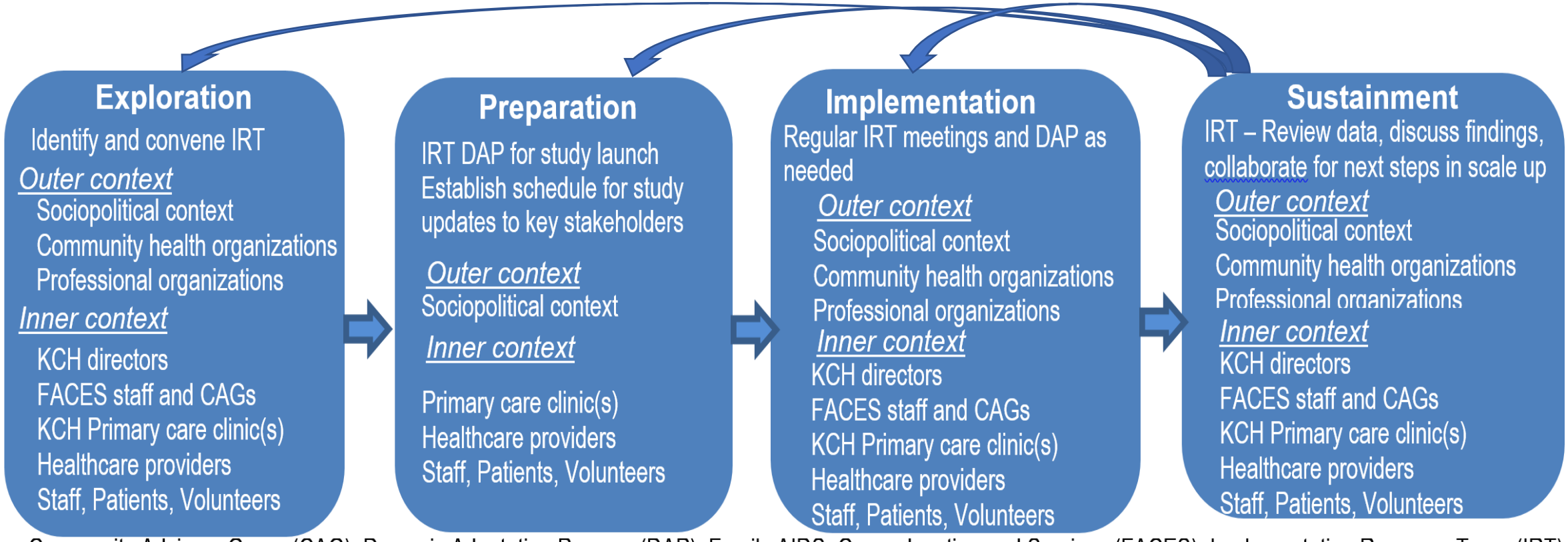
EPIS, IRT, DAP



Kisumu County Hospital (KCH)

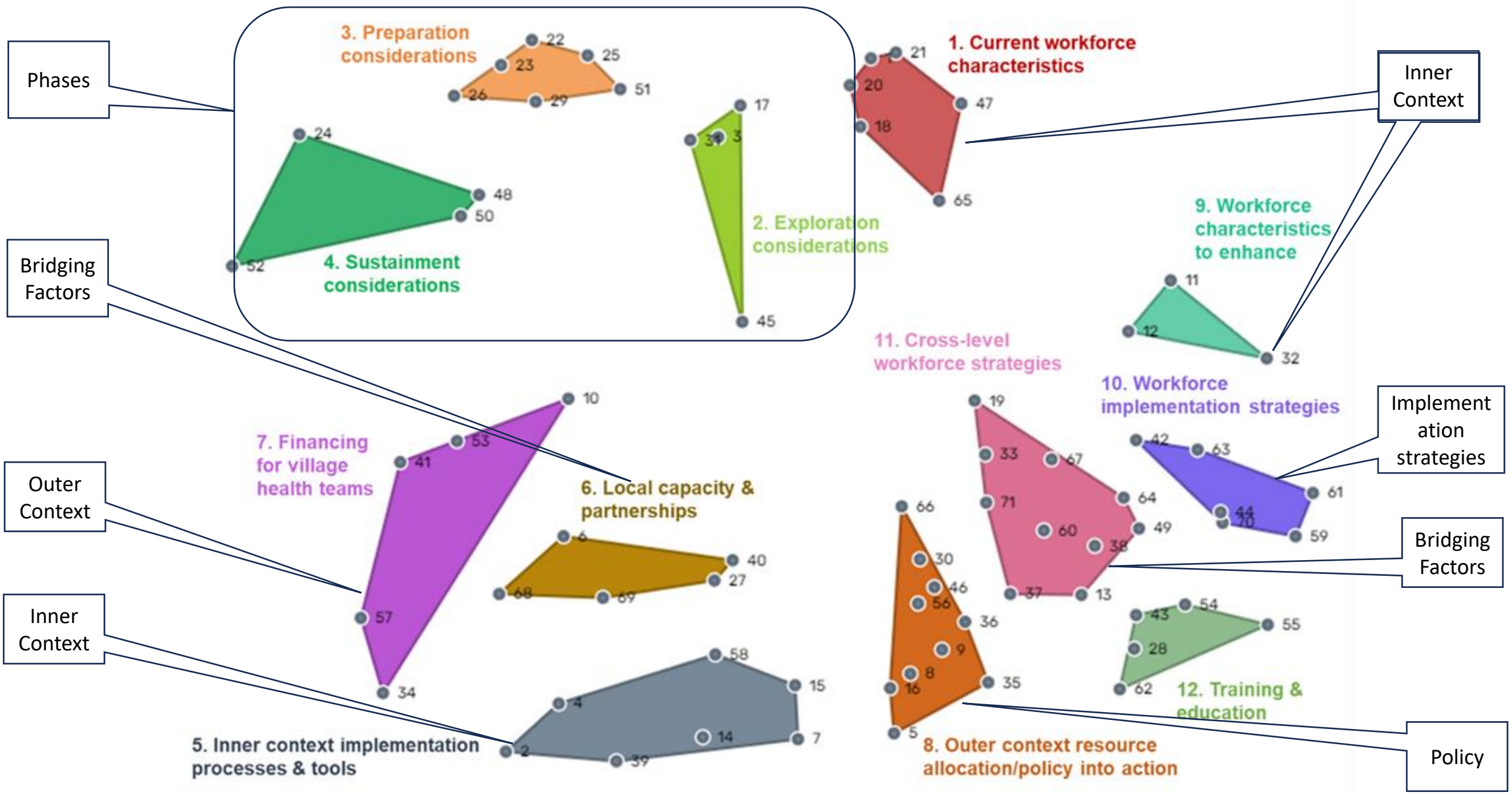
The Exploration, Preparation, Implementation and Sustainment (EPIS) Model:

Role of the Implementation Research Team



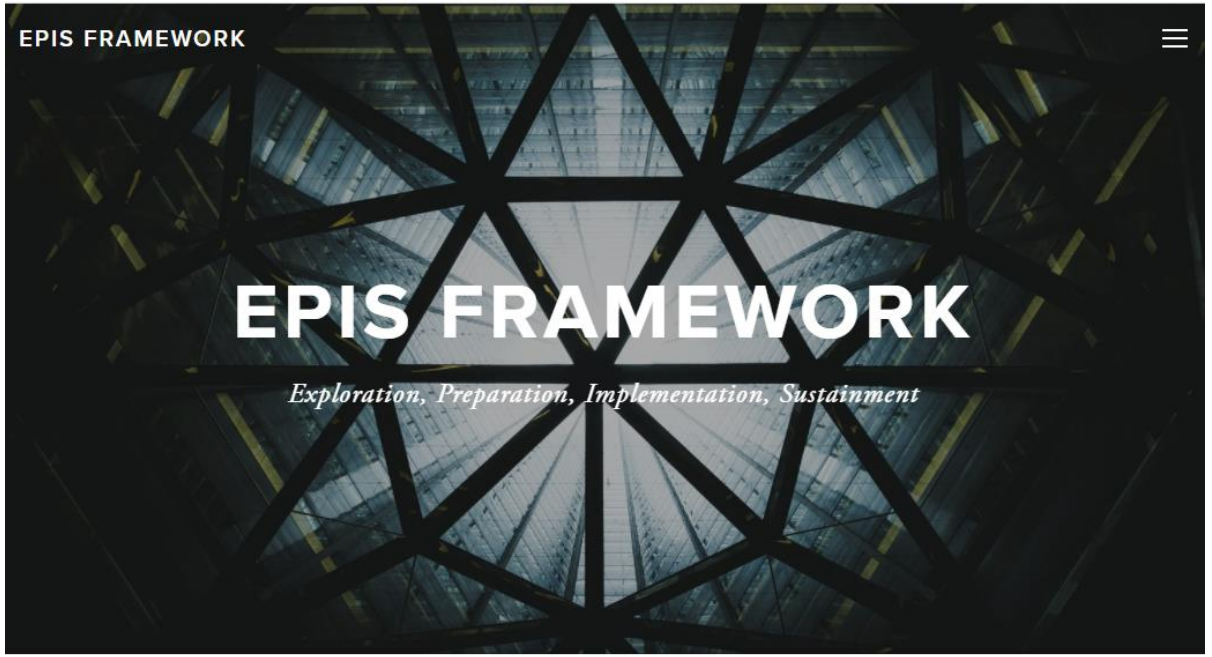
Community Advisory Group (CAG); Dynamic Adaptation Process (DAP); Family AIDS, Care education and Services (FACES); Implementation Resource Team (IRT); Kisumu County Hospital (KCH). **NOTE:** Adapted from Aarons et al (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. Adm Policy Ment Health. 38: 4–2 (Figure 2).

SMART-DAPPER Implementation Resource Team (IRT) Concept Map Determinants



The EPIS Website provides:

- Descriptions of EPIS
- Phases
- Constructs
- Resources
- Webinars
- Examples of use
- Measures
- Publications
- Worksheets and Tools
- Guidance for activities
- Funded projects using EPIS



The EPIS Implementation Framework

Welcome to the Exploration, Preparation, Implementation, Sustainment (EPIS) Website! This site was created to explain and support the EPIS Framework and provides resources for using EPIS including measures and tools (e.g., worksheets, guides).

The EPIS Framework highlights key phases that guide and describe the implementation process and enumerates common and unique factors within and across levels of outer context (system) and inner (organizational) context across phases, factors that bridge outer and inner context, and the nature of the innovation or practice being implemented and the role of innovation/practice developers.

This site is continually being developed and improved. Please send us your comments and suggestions using the "Contact Us" link.

https://episframework.com/

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Panel reflections

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