



## Process evaluations for the scale-up of complex interventions

### A scoping review

Martin Heine (PhD)

- Julius Global Health, UMC Utrecht (NL)
- Institute of Sport and Exercise Medicine, Stellenbosch University (ZA)



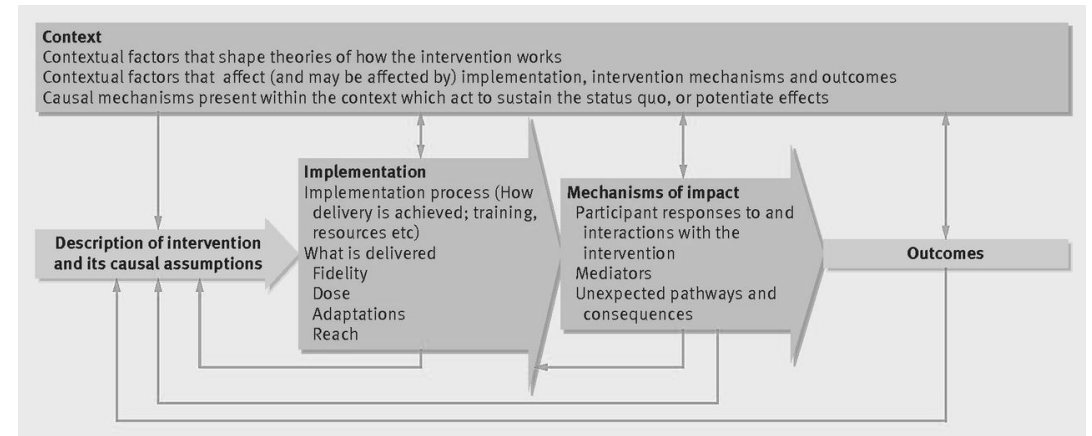
UMC Utrecht

# Process evaluation

A process evaluation (PE) is an essential part of **designing and testing complex health interventions** and is vital in building an evidence base that informs policy and practice.

A pivotal understanding related to

- context (contextual factors and causal mechanisms)
- implementation (fidelity, dose, adaptations, reach),  
and
- mechanisms of impact (participant responses, mediators, and unanticipated pathways and consequences)



*MRC Framework for Process Evaluations in CHIs*

# Background

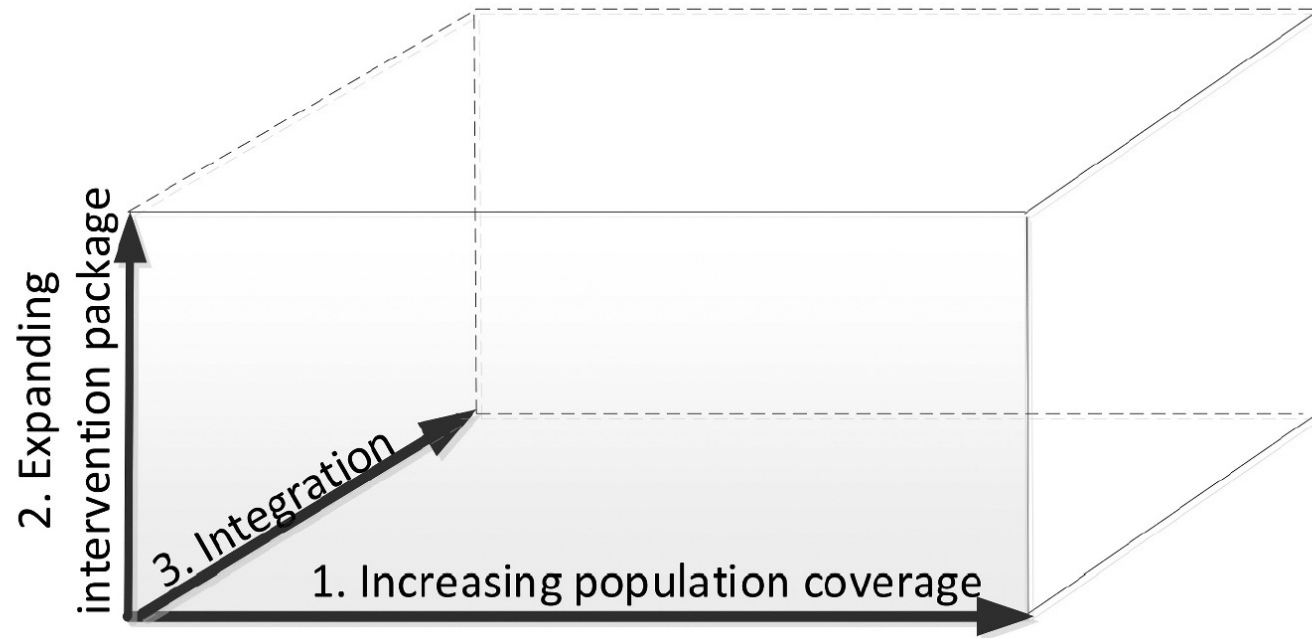
---

For many **urgent health needs**, the key question is not about testing or developing new CHIs, but **rather scaling-up already existing interventions** through uptake of evidence-based practices and research findings into clinical practice.



# Scale-up

---



**Testing / Development  $\neq$  scaling up**

# Objective

---

To describe the current practice of process evaluation (PE) in the **scale-up of complex health interventions**.

- Key functions of a PE in terms of the scale-up of a CHI
- Methods for conducting the PE
- Stakeholders were involved
- Enabling and inhibiting factors for PE in terms of scale-up.



# Methods

---

- Systematic search in **eight data sources** (PubMed, Embase, CENTRAL, Web of Science, CINAHL, Global Health, Scielo and African Index Medicus; **August 2022**)
- **Eligibility criteria**
  - Explicitly during / following scale-up (*not to inform future scale-up*)
  - Complex Health Interventions (due to the of properties of the intervention, e.g., multiple components)
  - Explicitly state that a PE was conducted as part of the research study

# Results

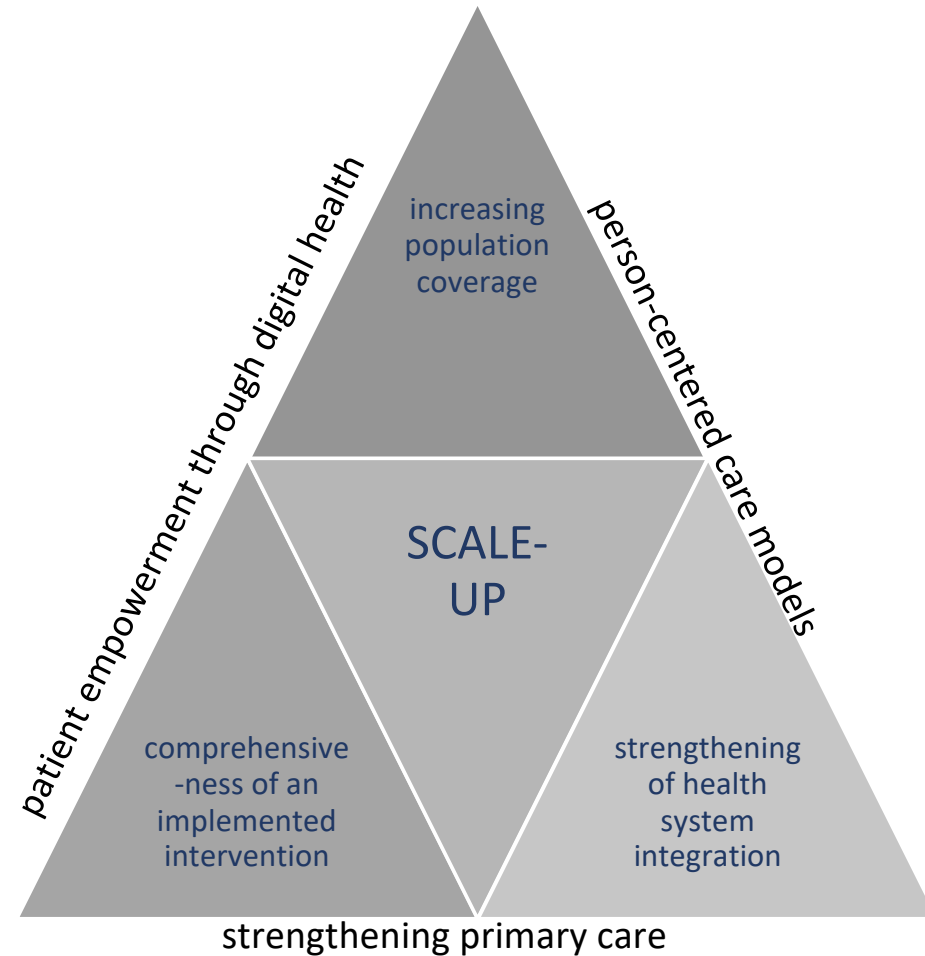
---

- Screened: 10k+
- Full-text review: 81
- **Included: 35**
  
- Published between 2010 and 2022
- **Majority RCTs**
- **Majority on non (51%) - communicable disease (43%)**



# Nature of interventions being scaled-up

- LMIC (n = 20; 57%)
- Vulnerable populations in HIC (n = 3)
  
- **Facility (57%)**
- **Community (34%)**
- **Systems (9%)**





# Main functions of PE during scale-up

---



## Context

- To evaluate the (health)system elements that inform (successful) scale-up of the intervention being scaled

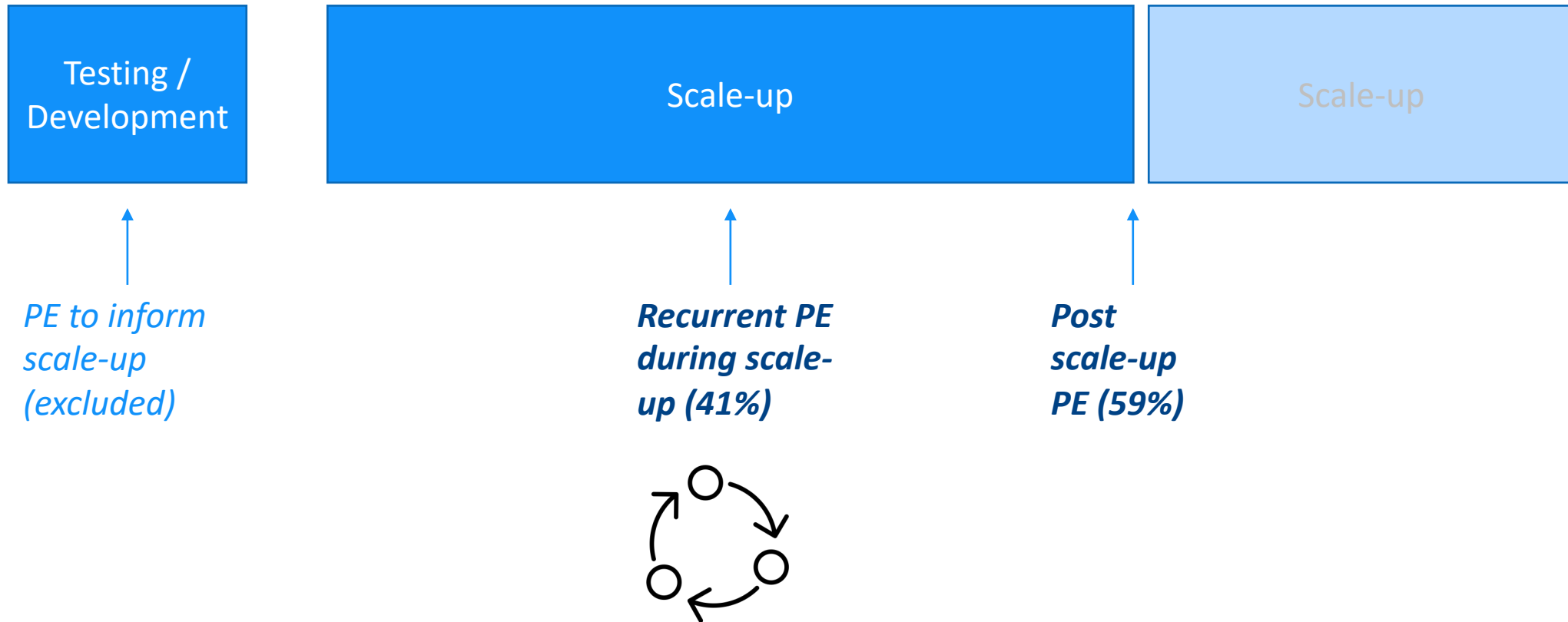
## Mechanisms of impact

- Enables / Inhibitors of scale-up

## Implementation

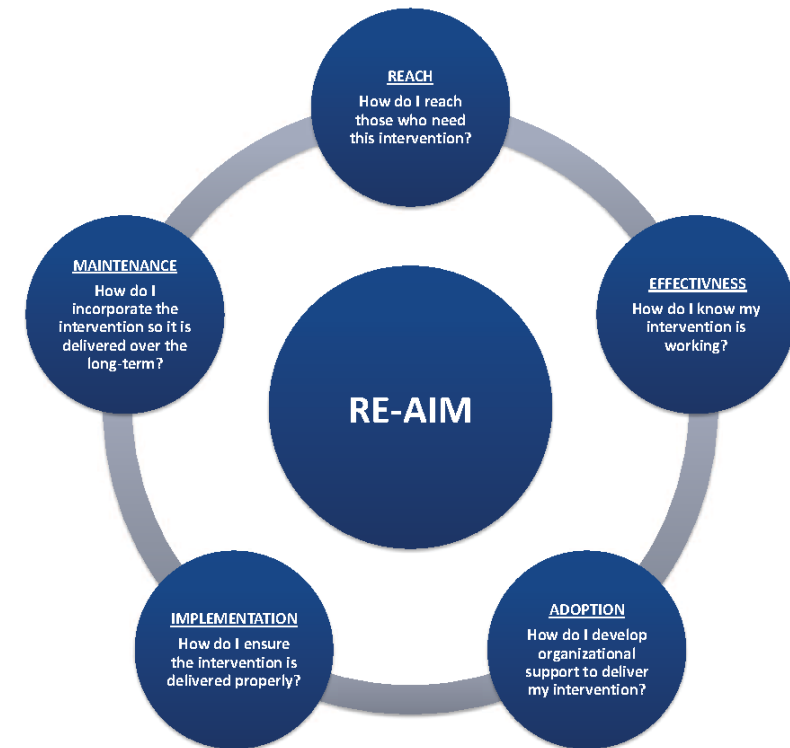
- degree to which scale-up was achieved as intended

# When is the process evaluated?

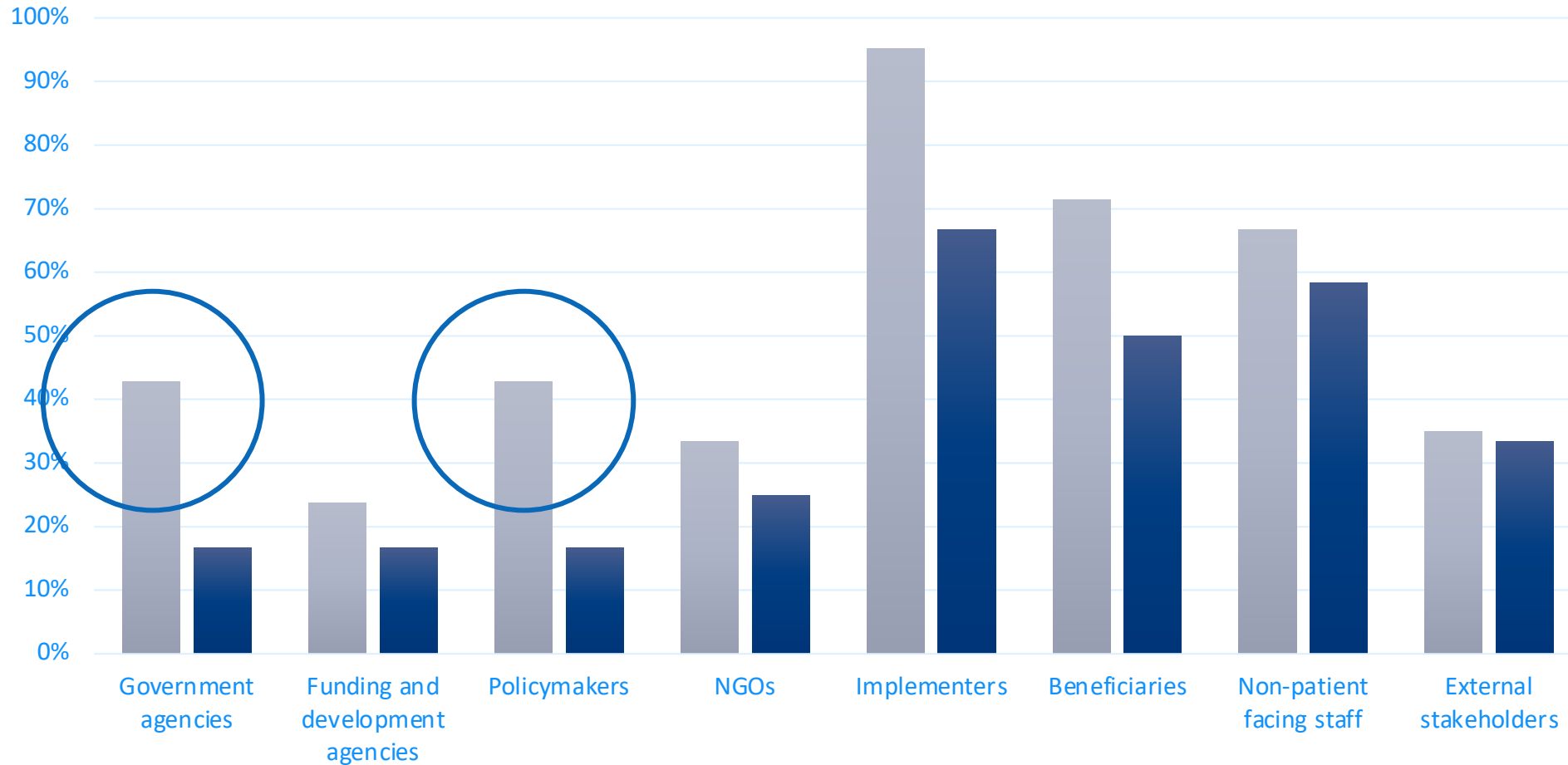


# Methodological underpinnings

- Many **different** implementation science frameworks were used
  - E.g., RE-AIM / CFIR
  - Often **adapted or combined**
- Scale-up framework (n = 2; Expandnet, four steps to scaling up [Barker et al. 2016])



# Stakeholders



# Limitations

---

- Scaling-up the implementation of evidence into practice is a process that may take place **outside of the academic environment**
- **ambiguity** in terms of the concepts (integration, comprehensiveness)
- PE quickly leans towards qualitative stakeholder engagement while **quantitative data can (or should) also support the evaluation of process.**



# Conclusions

---

- There is **considerable heterogeneity** in the current practice of conducting process evaluations alongside (or following) the scale-up of complex health interventions
- Ideally, a process evaluation is a **recurrent continuous process** alongside the scale-up project to inform real-world adaptations to the scale-up strategies when applicable.
- Important information on the process of scale-up may be obtained from **down and upstream stakeholders** indirectly impacted by the scale-up process but not commonly included in the evaluation.



# Thank you

---

**Lekha Rathod (UMCU; NL)**



**UMCU (NL)**

Daniel Boateng (KNUST, GH)

Kerstin Klipstein-Grobusch (WITS, SA)

**ITM\* & UA# (BE)**

Monika Martens\*#

Josefien van Olmen#

Grace Marie Ku\*