

# Acceptability and Feasibility of Motivational Interviewing using mhealth tool among Patients with Depression: Building Evidence to Address the Dual Burden of Mental Health Conditions and Non-Communicable Diseases



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# Outline

□ Overview and findings of Community-based mHealth Motivational Interviewing Tool for Depression (COMMIT-D)

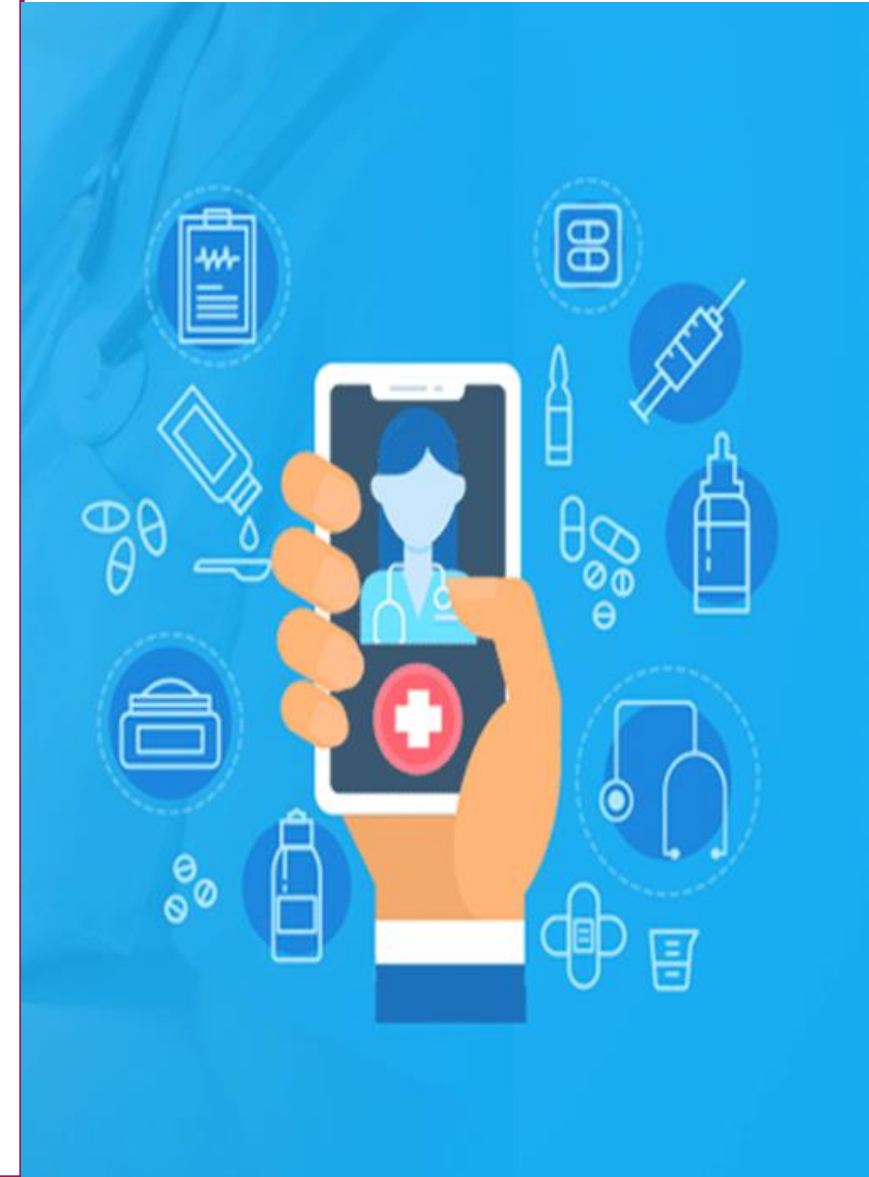
□ Translation of the findings to inform the implementation strategies to Address the Dual Burden of NCD and Mental health

□ Brief Snapshot of the Implementation Research



## Rationale

- ✓ Lack of effective intervention to improve adherence to chronic diseases and mental health conditions, for example, depression
- ✓ Motivational Interviewing (MI) has the potential to improve treatment adherence
- ✓ mHealth tools can assist community health workers to maintain MI skills
- ✓ To start with, we piloted an mHealth-based MI intervention for CHWs to improve depression treatment adherence.
- ✓ Our overarching goal is to inform the implementation strategy to address the dual burden of mental health conditions and non-communicable diseases.





# AIM



To assess the acceptability and feasibility of COMMIT-D among patients, CHWs, and their supervisors to inform implementation strategy



*NOTE: COMMIT D acts as a decision making tool to support CHW in delivering MI.*

# Who are CHWs?

- ✓ Community Health Workers (CHWs) are the trusted local member of the community who are trained and regularly supported and monitored by their supervisors, for example community health nurses.
- ✓ They work full-time and get monthly salary for their service/work.
- ✓ They have attained minimum education, for example, in Dolakha case, they have completed grade 10 education





# Pilot Methodology

- We used mixed method approach.
- Methods: Acceptability survey, focus group discussions and in-depth interviews with 27 community health workers (CHWs), four community health nurses (CHNs) who are CHWs supervisor, and 54 patients with depression in Dolakha.



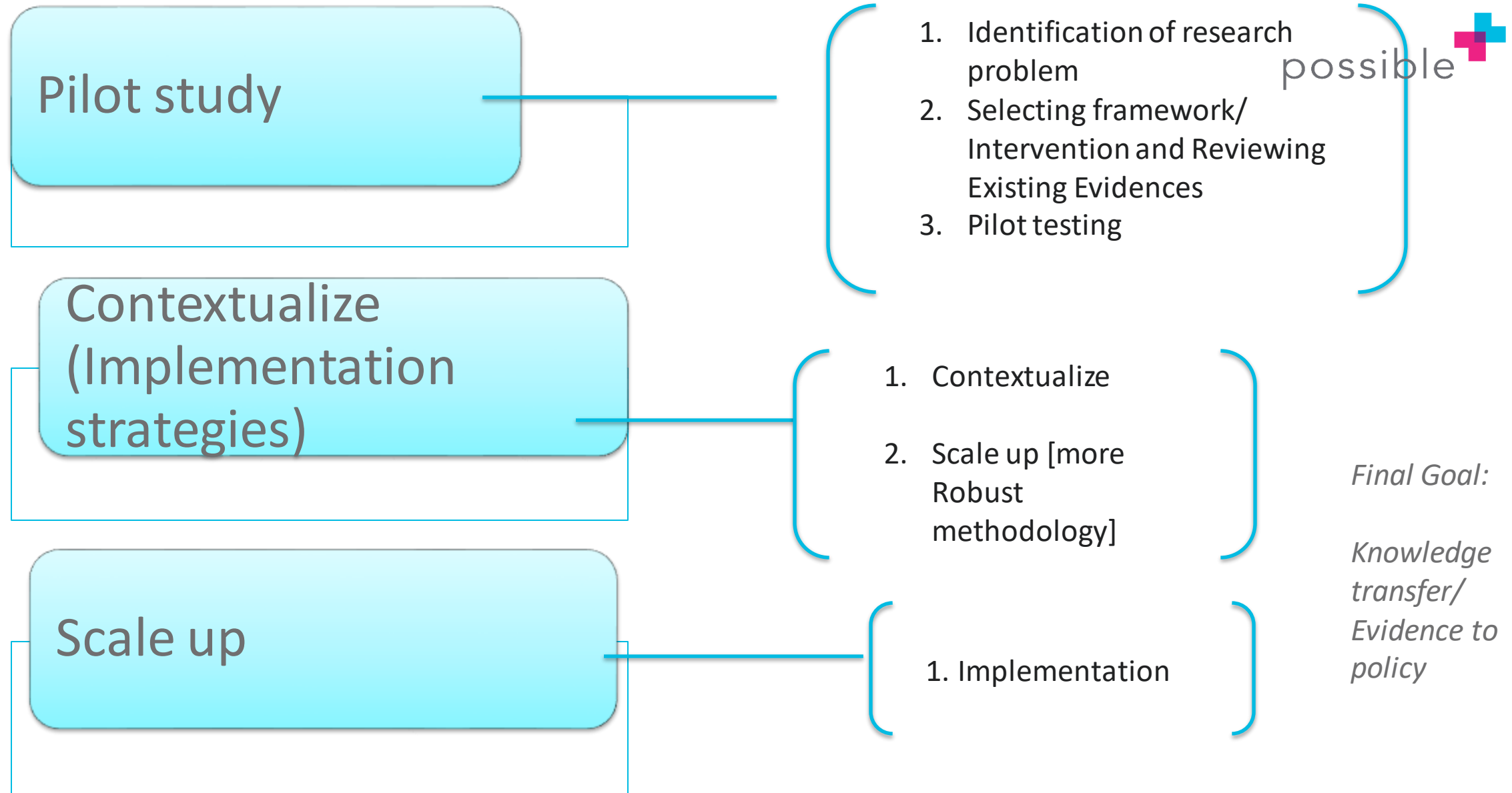
**Study timeline:  
2020- 2022**

Steps: CHWs delivered intervention (MI) using mhealth (COMMIT –D) and received supportive supervision by their supervisor (CHNs)

# Findings

- ❑ Results revealed high acceptance and perceived benefits of COMMIT-D among CHWs, with over 94% reporting its usefulness in communication and promoting medication adherence.
- ❑ All CHWs embraced MI for supporting behavior change among non-adherent patients.
- ❑ It enabled them to access decision-support and receive ongoing feedback on audio recordings.
- ❑ Patient medical adherence reached 90% at each CHW contact.





**Informing the implementation strategy to Address the Dual Burden of NCD and Mental health**



# **Behavioral Community-based Combined Intervention for Mental Health and Non- communicable Disease (BECOME)**

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**Brief Snapshot**

# Study Rationale

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# Study Aims

AIM 1: Assess the effectiveness of BECOME on depression, anxiety, and two NCDs via a stepped-wedge cluster randomized trial

AIM 2: Assess implementation outcomes of BECOME using the RE-AIM framework at the patient, provider, and health system levels.

AIM 3: Conduct a comprehensive costing analysis to provide strategic inputs to support long-term scale up of BECOME.





# Study methodology

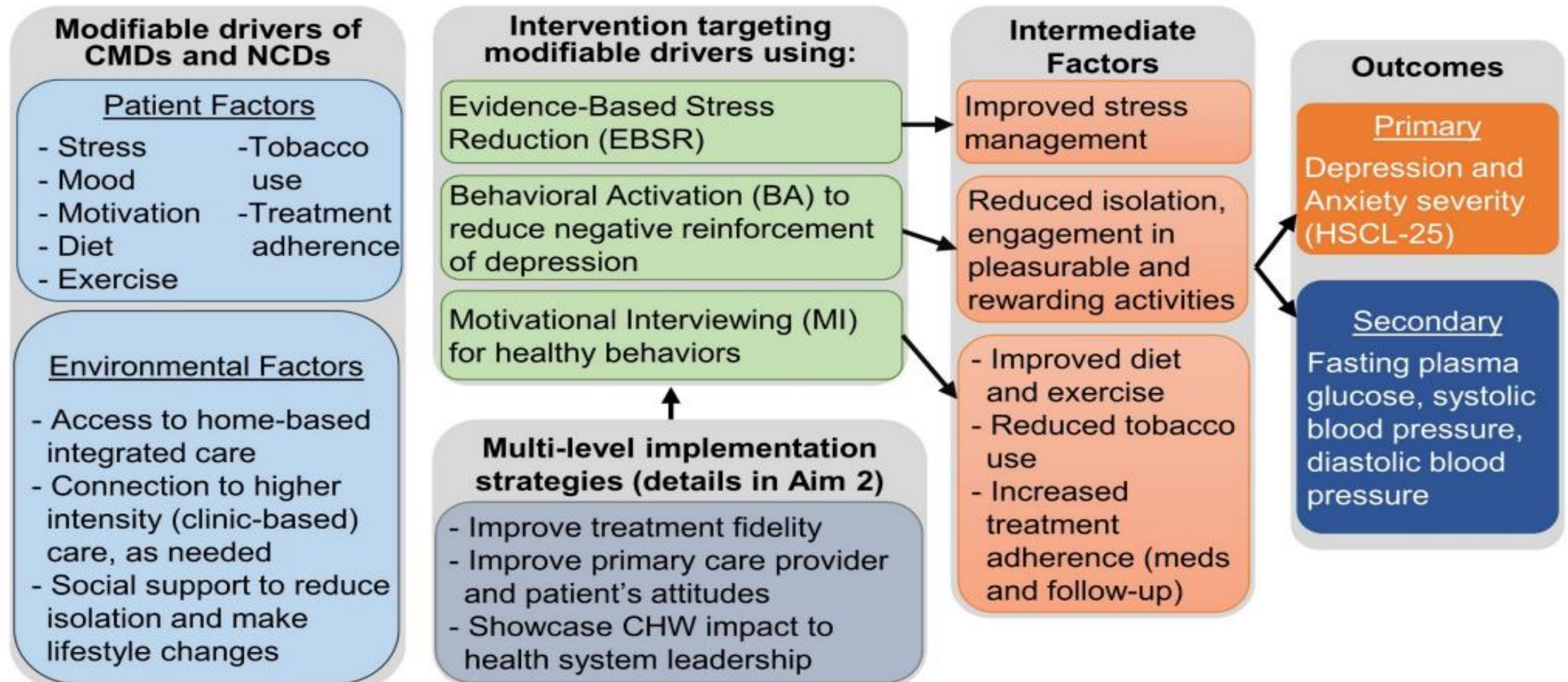
- ❑ Type II hybrid implementation research- as both effectiveness (Aim 1) and implementation (Aim 2) will be assessed
- ❑ Stepped-wedge randomized controlled trial (SWCRT) design
- ❑ Randomization- at the cluster (ward) level, stratified by municipality (Bardibas and Chandragiri)
- ❑ Study sites: Bardibas and Chandragiri



# Intervention

Timeline	BECOME component	Intervention target
<i>Weeks: 1 and 2</i>	Deep breathing and body scan meditation	Anxiety and stress management
<i>Weeks: 3 and 4</i>	Behavioral Activation	Depression
<i>Weeks: 5-8</i>	Motivational Interviewing	Behavioral targets (if multiple potential targets are present, CHW and patient will agree on a priority list and work together for four weeks)

# Conceptual Model



**Fig 1.** Conceptual model to improve common mental disorders (CMDs) and non-communicable diseases (NCDs) by evidence-based stress reduction, behavioral activation, and motivational interviewing, based on Social Cognitive Theory and multi-level implementation strategies.



# Stepped-Wedge Implementation schedule

Sequence	Cluster Num	Months										Legend
		1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	
1	1-4	Control Phase	Intervention Phase	Follow-up Phase	Follow-up Phase	Follow-up Phase	Follow-up Phase					
2	5-8	Control Phase	Control Phase	Intervention Phase	Follow-up Phase	Follow-up Phase	Follow-up Phase	Follow-up Phase				
3	9-12	Control Phase	Control Phase	Control Phase	Intervention Phase	Follow-up Phase	Follow-up Phase	Follow-up Phase	Follow-up Phase			
4	13-16	Control Phase	Control Phase	Control Phase	Control Phase	Intervention Phase	Follow-up Phase	Follow-up Phase	Follow-up Phase	Follow-up Phase		
5	17-20	Control Phase	Control Phase	Control Phase	Control Phase	Control Phase	Intervention Phase	Follow-up Phase	Follow-up Phase	Follow-up Phase	Follow-up Phase	
Periods:		1	2	3	4	5	6	7	8	9	10	

## Implementation strategies

- **Strategy #1: mHealth App to Increase Intervention Fidelity (CHW Level)**
- **Strategy #2: CHWs Deliver Training to Change PCPs' and Patients' Attitudes about Behavioral Interventions (Interpersonal Level for CHWs)**
- **Strategy #3: Interdisciplinary Case Conference to Highlight CHWs' Contribution (Health System Level)**

## To conclude

- ✓ Dedication, Perseverance, and Commitment: Key to navigating implementation research challenges.
- ✓ Adaptability and Collaboration: Vital for success, flexible approaches and teamwork.
- ✓ Continuous Learning: Essential for real-world impact, adapt and evolve strategies..





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# More details

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