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Co-creation and intervention adaptation for implementation in LMICs

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Agenda

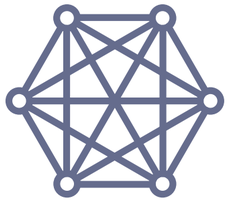
1. Presentation: Connect dots
2. EVO+ and Motivator
3. Culture adaptations and co-creation
4. Process of cultural adaptation
5. TDF activity
6. Co- creation activities

EVO+ COLOMBIA

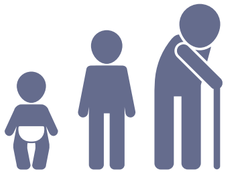
https://www.youtube.com/watch?v=Kn_hQJ6Yk-Y

MOTIVATOR PROGRAM

Culture (Barrera et al, 2013)



Complex and multidimensional construct.



Totality of a group's knowledge, transmitted from elders to children, which includes observable entities and cognitive entities.

A cultural adaptation should incorporate observable aspects into treatment media and activities; and cognitive entities into intervention content.

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Cultural adaptations

Universal approach
Original interventions could be applicable without alterations.

(Falicov, 2009)

The systematic modification of an evidence-based intervention should consider language, culture, context.

(Bernal & Domenech, 2009)

Culture-specific approach
Emphasizes culturally grounded content.

(Falicov, 2009)

Co-creation

It implies developing a process for understanding, developing and supporting mutual learning between multiple participants in collective decision-making.

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People affected by projects should have a voice throughout the overall process.

Researchers are responsible for creating inclusive activities that boost participation of the community.

The process will only succeed if an inclusive and democratic solution is achieved.

Developing a process of collaborative design includes answering some questions…

Who needs to take part in the design process?

How should participants be supported?

What kind of methodologies and tools would you use to include them?

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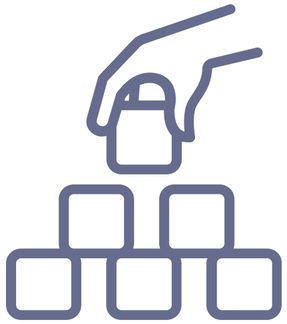
Process of cultural adaptations of EBIs

(Barrera and Castro, 2009)

Information gathering

- Purpose: determine whether the adaptation is justified, and which intervention components might be modified.
- It is important to understand if subgroups can differ in the theoretical mechanisms (Self-efficacy, risk perception, etc.) that explain health outcomes.
- Culturally specific mechanisms suggest the need for unique intervention components that differ from the original intervention.

Structural barriers



Structural barriers such as lack of health services, difficulties in accessing the services could be overcome with low intensity interventions.

VS

Individual barriers

Individual barriers such as language and cultural barriers could be overcome considering cultural aspects in the intervention development/adaptation.

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Cultural aspects of Latino cultures

(Bernal & Saez-Santiago, 2006)

Personalismo (personal contact).

Marianismo (central role of women in families).

Familismo (familism)– the familiar system contributes to the development and maintenance of health-promoting and health-damaging behaviours

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GROENLANDIA
EEUU
BRASIL

Colombian context

- Geography
- Language
- Educational level
- Food insecurity
- Accesibility

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Activities

- Literature search is focused on identified studies that show subcultural group differences.
- Studies to determine how well the original intervention would fit the needs and preferences of subcultural groups.

- ☑ Systematic reviews: nutrition and physical activity
- ☑ Focus groups

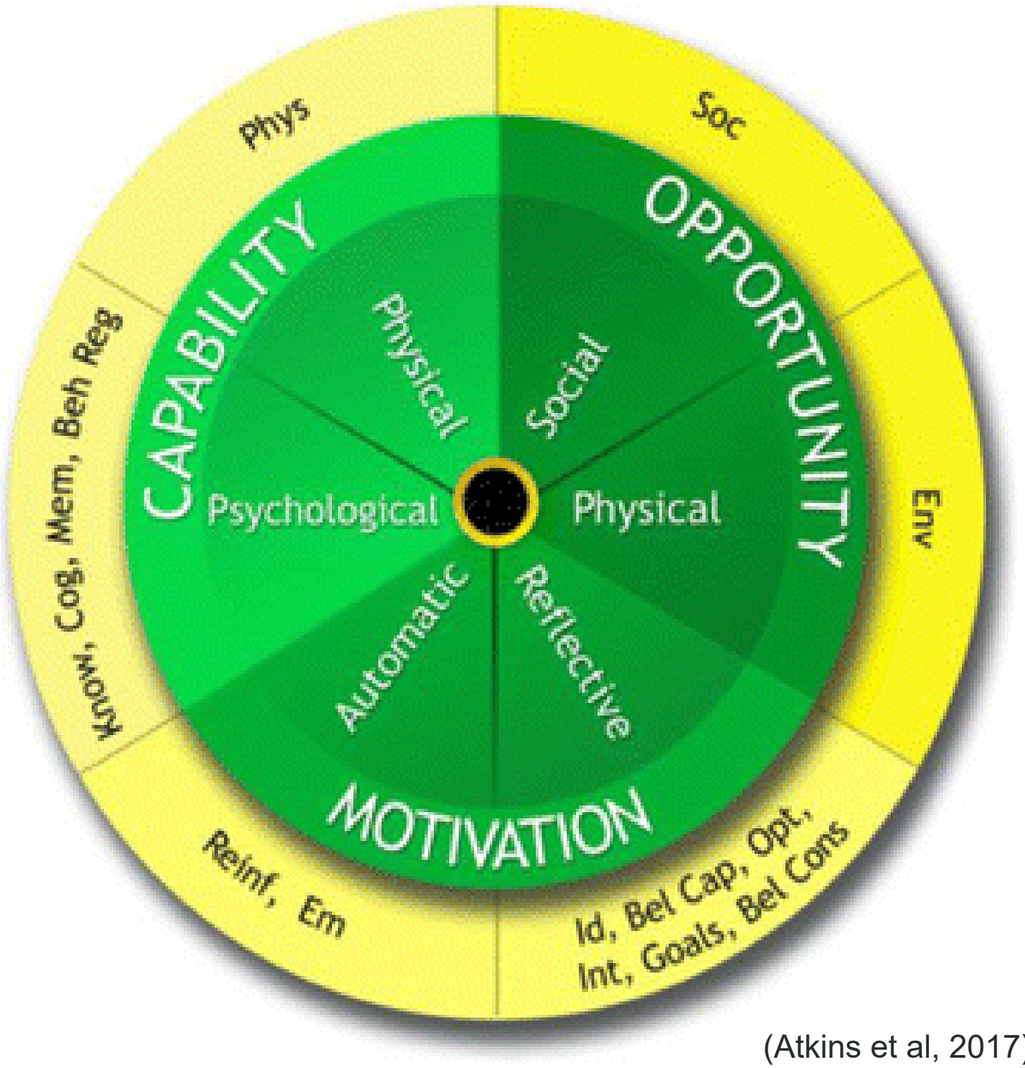
This is Antioquia

Information gathering

Sources of behaviour

TDF Domains

Soc - Social influences
Env - Environmental Context and Resources
Id - Social/Professional Role and Identity
Bel Cap - Beliefs about Capabilities
Opt - Optimism
Int - Intentions
Goals - Goals
Bel Cons - Beliefs about Consequences
Reinf - Reinforcement
Em - Emotion
Know - Knowledge
Cog - Cognitive and interpersonal skills
Mem - Memory, Attention and Decision Processes
Beh Reg - Behavioural Regulation
Phys - Physical skills



(Atkins et al, 2017)

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Preliminary adaptation design

- Information is integrated to inform preliminary modification of the original intervention.
- Core components are not altered unless there is convincing evidence from the stage 1.
- Adaptations require language translations or reading-level adjustments. Literal translations of idioms might not be possible, and non-equivalent translations have a profound impact.
- Focus groups or advisory panels should review the preliminary versions of the adaptation to identify problematic features.
- This stage also includes usability testing to identify and address issues related with technological components of the intervention. (Think-aloud methods could be useful)

What is adapted in a cultural adaptation

(Kreuter et al, 2003)

Peripheral strategies	Linguistic strategies	Constituent-involving strategies	Sociocultural strategies	Evidential strategies
Observable properties of intervention materials such as colour, images, fonts, pictures of group members and titles that convey relevance to the group.	Alter language used in the intervention materials to make them comprehensible.	Utilize the cultural knowledge and experience of members of a cultural group.	Cultural values, beliefs and behaviours are recognized, reinforced and built upon.	Use subcultural epidemiological data and experiences from individuals from similar background to increase the perceived relevance of the information.

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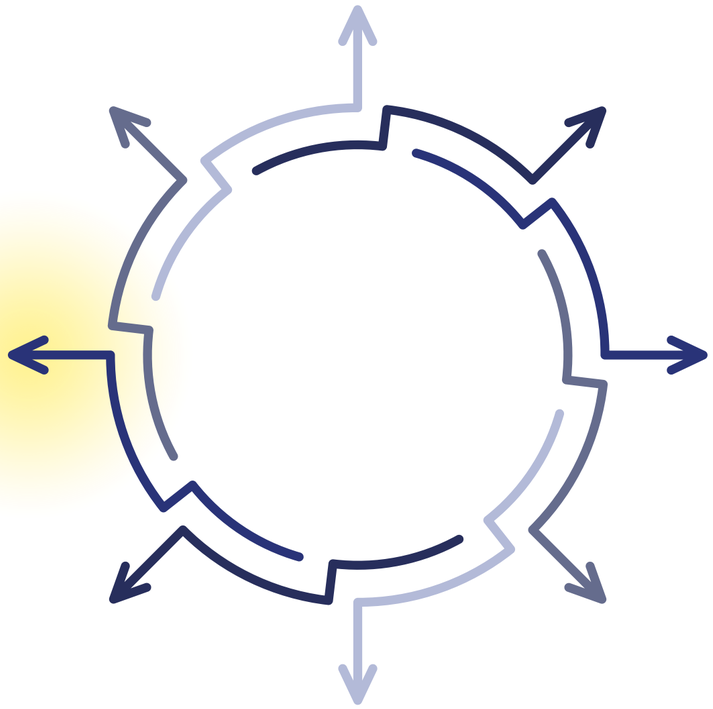
Ecological validity model

(Bernal et al, 1995)

Language

Translation, differences in subgroups.



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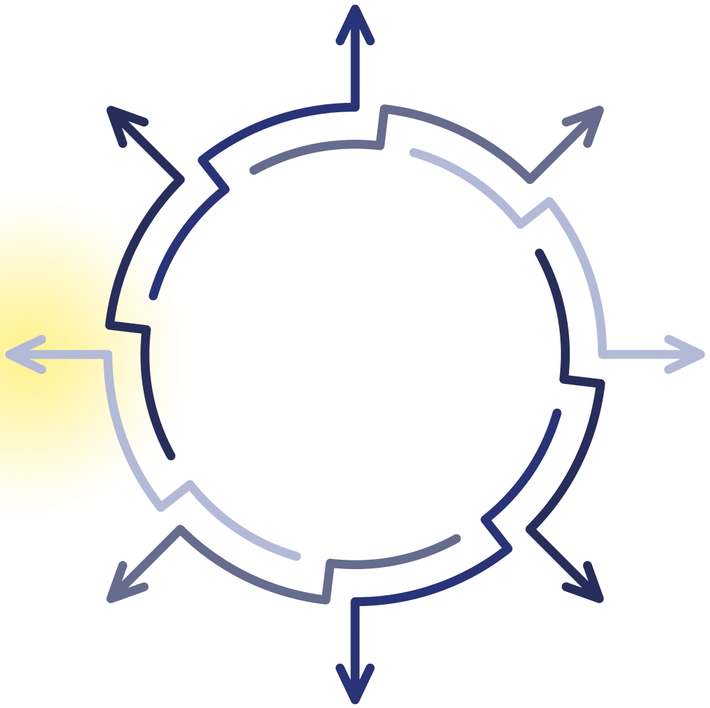
Role

Roles



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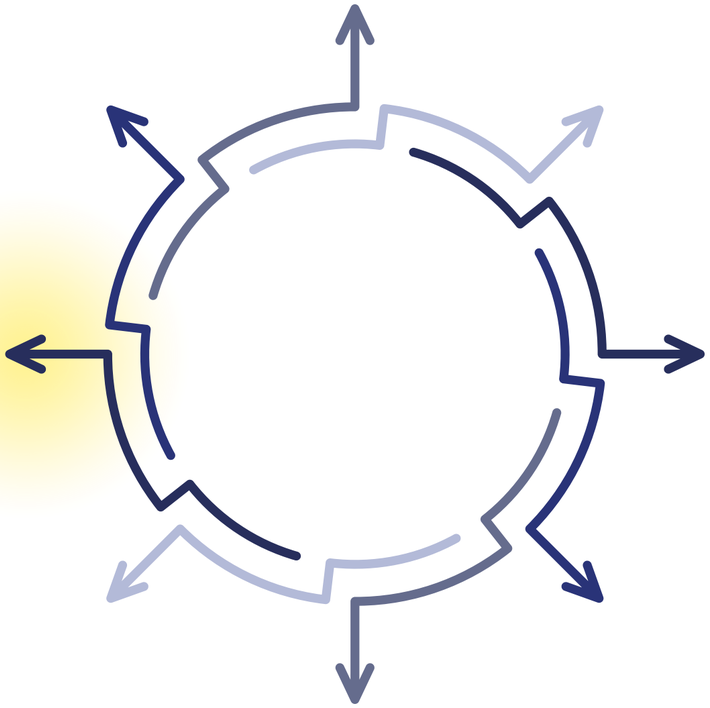
Metaphor

Symbols, expressions.



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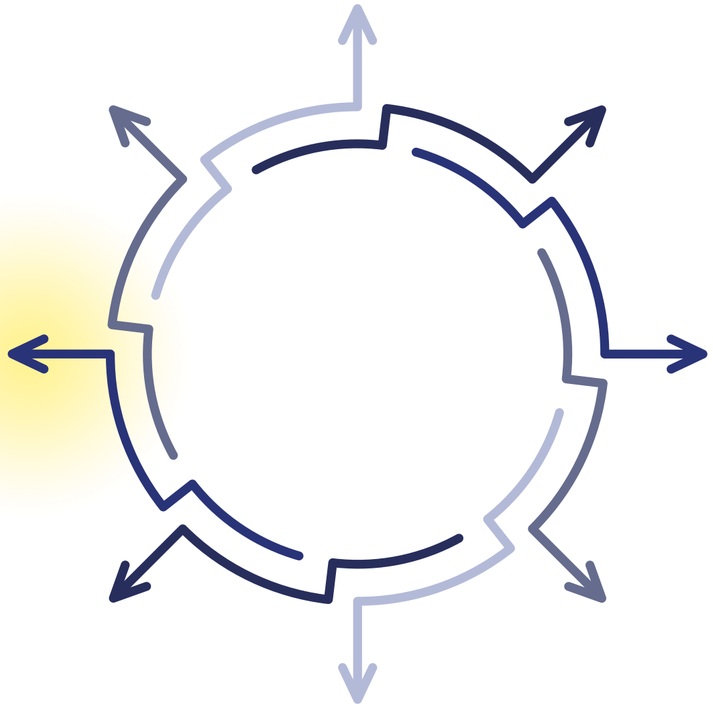
Content

Cultural knowledge about values, customs and traditions.



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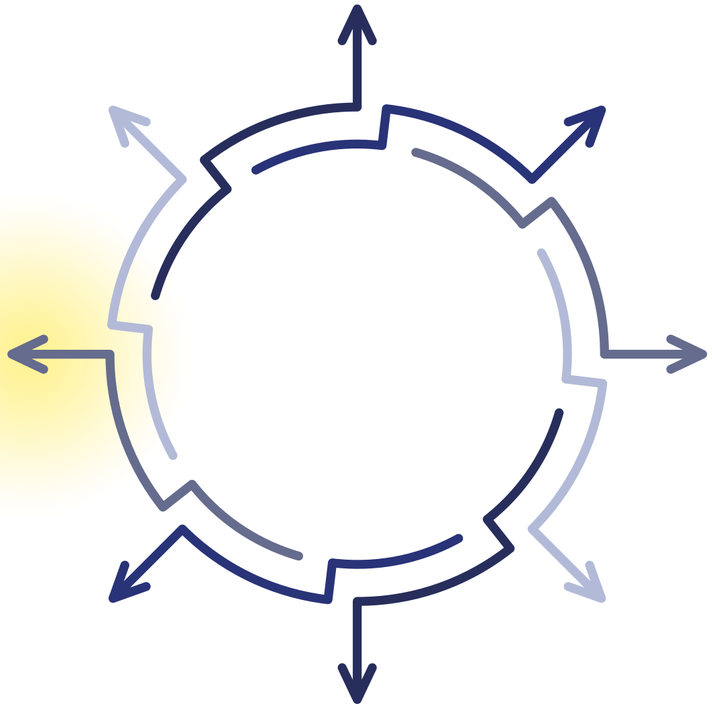
Concepts

Theoretical model to be used in treatment.



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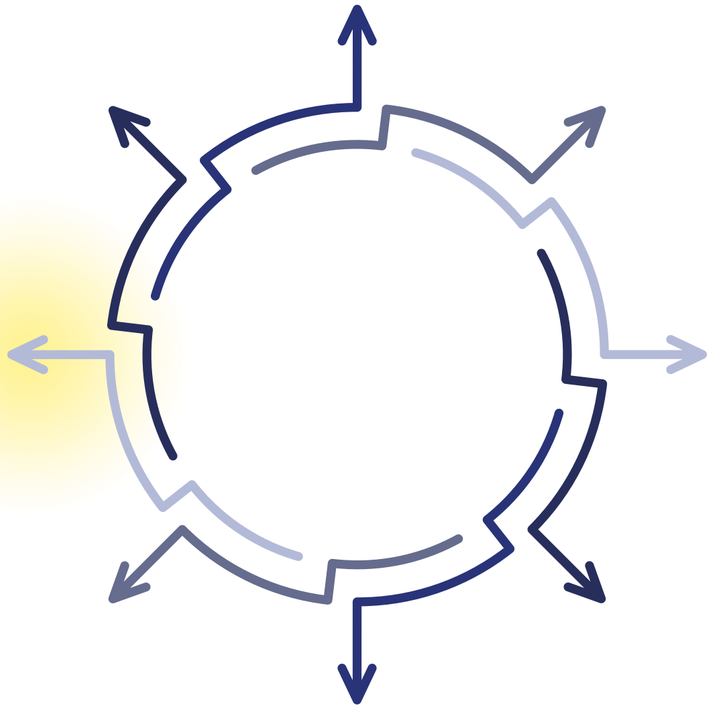
Goals

Agreements



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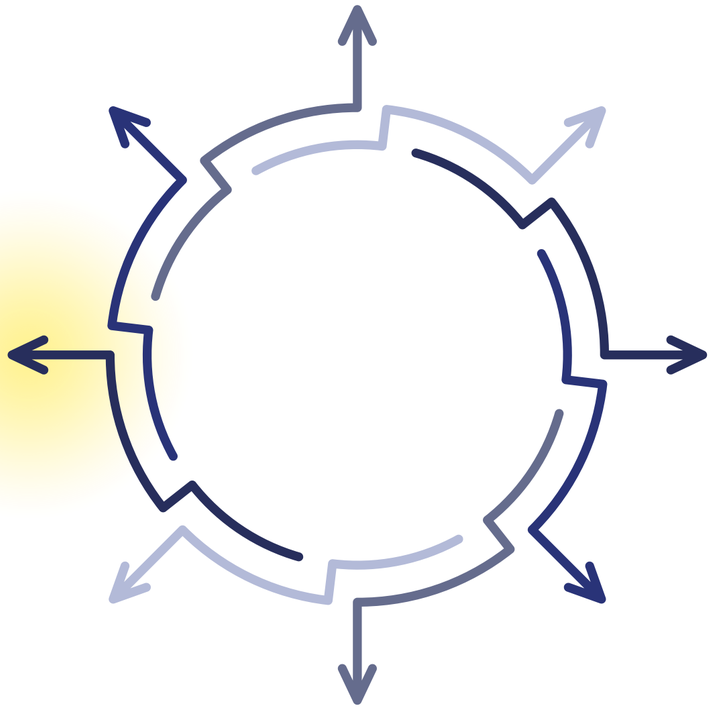
Methods

Procedures to follow the achievement of the treatment goals.



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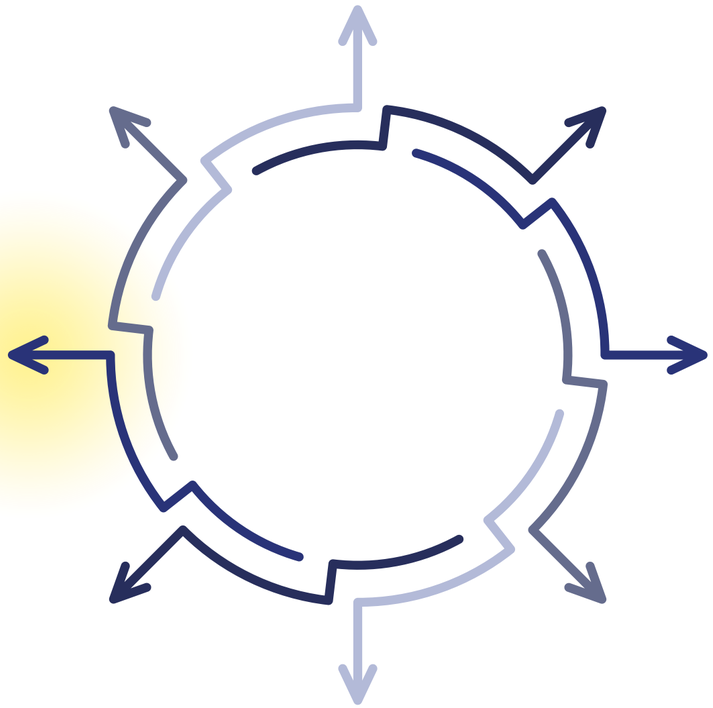
Context

Broader socio economic and political contexts.



Cultural adaptation considerations (Spanhel et al, 2021)

Preliminary adaptation design

Content	Methods	Procedures
1. Illustrated characters.	1. Structure and length of the intervention.	1. Methods for obtaining information.
2. Illustrated activities.	2. Functionality and simplicity of the intervention.	2. Persons involved in tool development.
3. Illustrated environment/burdens.	3. Design and aesthetics of the tool.	3. Theoretical framework of tool and intervention
4. Illustrated values/traditions.	4. Amount and style of guidance provided by the tool.	
5. Language translation.		
6. Language simplification.		
7. Visualization of language.		
8. Difference in concepts of health.		
9. Goals of treatment.		
10. Methods of treatment.		

How to co-create

1 Initiation

- Sharing the information among all the participants.
- Clarify the premises of the collaborative process. (confidentiality, deadlines, etc.)
- Thinking about a strategy for the collaborative process .

2 Preparation

- Aims and assignments must be clearly defined.

3 Realization

Use of a methodology to reach the basic goals:

- Understanding the challenge.
- Ideation of solutions.
- Organization of solutions.
- Selecting criteria to find the solution.
- Presenting and testing the solution.

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Activity:

Reverse brainstorming

- Identify a design challenge
- Think: "How can I make it worse?"
- Brainstorm to figure out all possible reverse solutions
- Flip the reverse solutions to create real design solutions
- Evaluate and decide if a real solution can be formed

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Activity:

Crazy 8

- Divide your sheet in 8 equal blocks
- Name each block after each of the identified challenges
- Write down quick ideas of possible solutions: anything goes!
- Help us presenting and explaining your ideas

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Co-Creation in EVO

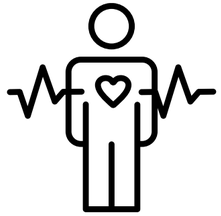
Evo+ Team

Translation of the materials.

Health care professionals

Review the contents and assess their relevance.

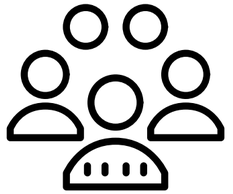
Make suggestions for new content.



Patients

What do they want to know?

Assessing the relevance and feasibility of the recommendations.



Excecutive committee

Analyze the results of the focus groups and these activities.

Preliminary adaptation testing

- After drafting a preliminary pilot version, testing is recommended
- Feedback for staff members who implemented the pilot intervention can be particularly valuable.
- During this phase, measures that will be used in the efficacy trial can be piloted. This is the opportunity to evaluate the quality of measure translations and the clarity of instructions, items and response scales.

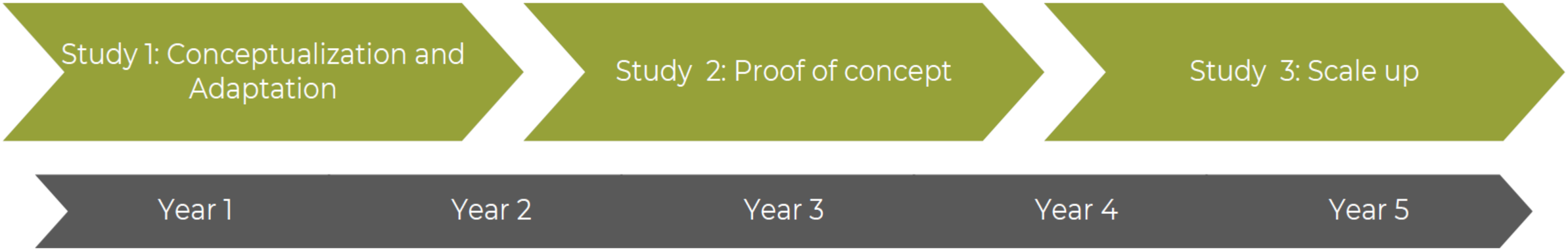
Adaptation refinement

- Feedback from the pilot trial is used to make changes to the preliminary adaptation.
- Decisions made at this stage require informed judgements from leadership teams and could include investigators and staff, a community advisory panel and subcultural group members.

Cultural adaptation trial

- Empirical trial of the cultural adaptation produced in the prior stages. Often is done in a two-armed study in which the cultural adaptation is compared with a control condition.
- Finer-grained analyses are included to evaluate the strengths and weaknesses of the adaptation.
- This could include moderator analyses that examine interactions between intervention conditions and participants background characteristics such as education and health literacy.

EVO Timeline



The debate of fidelity: core vs peripheral adaptations

(Chu & Leino, 2017)

- Fidelity to treatment protocols should be preserved in evidence-based interventions to ensure that potential users are privy to EBI components as originally validated.
- The adaptation of core components might result in a novel intervention that could be ineffective.
- Cultural adaptation does not modify core active treatment components, instead it provides add-ons to make treatments more palatable and relevant to some groups.

Cultural Treatment Adaptation Framework

(CTAF – Chu & Leino, 2017)

Always report...

What specific components were adapted

How the specific components should be changed

Why the adaptation is necessary

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