



Prototype Designs

Welcome to Prototype Designs!

In this phase, insight becomes action. Here, the objective is to develop and prototype potential interventions to change the target behaviour(s) or micro-behaviour(s) — by addressing the prioritised barriers and leveraging the enablers identified in the previous phase, *Explore & Diagnose*.

Grounded in evidence and behavioural theory, these prototypes are brought to life through creative design and co-creation, then refined through iterative feedback. This process allows for identifying the most promising solutions for piloting and real-world testing.

Why Prototype Designs?

It's easy to fall back on familiar solutions, especially those that have worked before in the past, or in other settings. While this approach can reduce uncertainty, it can also limit creativity and opportunities to design more effective, locally relevant, or cost-efficient interventions. That's why it's important to deliberately explore new possibilities wherever possible.

The *Prototype Designs* phase focuses on generating and testing practical responses towards identified behavioural challenges. This stage encourages the development of a wide range of potential interventions rooted in behavioural science. The most promising ideas are then selected for prototyping and tested with real users. This ensures that solutions are both innovative and tailored to the specific barriers uncovered during research.

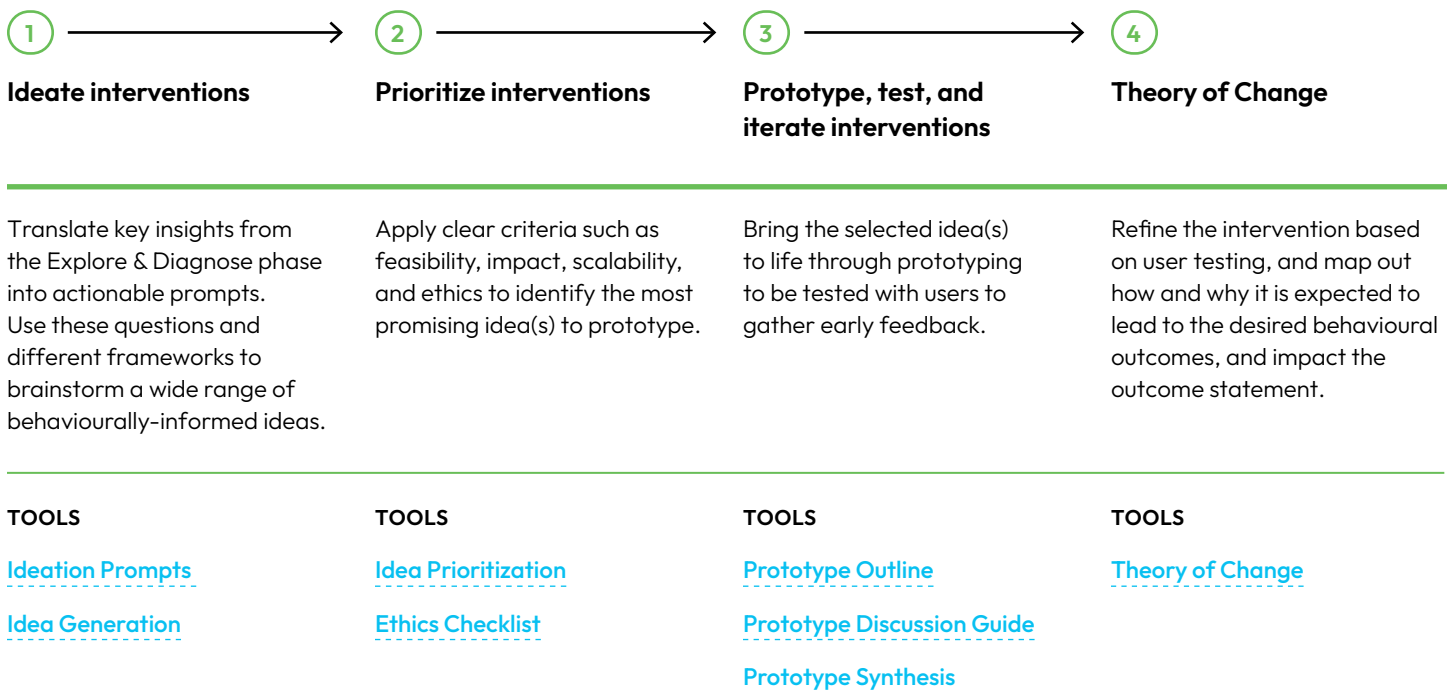
How can we Prototype Designs?

In this third phase of the *DEPTHs* methodology, there are four steps to follow through the behavioural intervention design process.

Each step includes specific tools, guidance on why these tools matter, and how to use them. A **case study on increasing childhood vaccination uptake in Lebanon** will exemplify how the tools can be applied in practice.

Before starting to *Prototype Designs*, make sure to complete all the steps of the *Define* and *Explore & Diagnose* phases.

Summary of the Explore & Diagnose phase



Common pitfalls

There are common traps that can derail behaviourally-informed work. Throughout the *Prototype Designs* phase, it's worth keeping these possible issues in mind:

- **Relying on familiar approaches instead of true prototyping.** In behavioural science, it is easy to default to well-known interventions like reminders, generic social norm messages, or communication campaigns built on KAP (knowledge, attitudes, practices) surveys. While these approaches can generate useful insights or raise visibility, they might not address the deeper behavioural drivers uncovered during research. Effective prototypes must be rooted in real barriers and enablers, such as caregiver routines, health system realities, or social norms, and move beyond messaging toward meaningful behaviour change.
- **Treating ideation as a blank canvas.** While creativity is essential, ideation without structured brainstorming can drift into impractical or misaligned ideas. Interventions are more likely to succeed when they are anchored in behavioural evidence and respond to specific, diagnosed barriers. For example, designing a digital app may appear innovative, but if internet access is limited or device ownership is low, the idea won't be effective. Similarly, proposing group education sessions with caregivers may miss the mark if norms discourage public discussion of decisions regarding children.
- **Finding the balance.** The key is to strike a balance: ground interventions in behavioural evidence and local insight, while staying open to creative, context-specific solutions. Structure doesn't stifle innovation, it focuses it. Similarly, adaptation doesn't mean discarding proven tools — it means making them fit the realities of the people to be supported.
- **Skipping small-scale testing.** Rushing into the field without pausing for early feedback or iterating the input of those involved can result in design decisions that are difficult to revisit later. Prototyping helps to surface confusion, friction, or unintended effects before investing further in the process. Testing early, often, and when possible, inexpensively, helps to improve ideas while they're still flexible.
- **Treating equity as a simple checklist.** Even well-intentioned interventions can cause harm if they are not designed and tested with care. Behaviourally informed ideas often interact with people's emotions, identities, and their experiences, and this comes with responsibility. Applying equity as a lens throughout the ideation process means continuously asking: Who might be left out? Who might feel judged or uncomfortable? Could this intervention unintentionally reinforce stigma, or burden vulnerable groups? Equity is central to ensuring that the solutions being developed are fair, inclusive, and truly beneficial to the communities they aim to serve.

CASE STUDY:

Increasing childhood vaccination in Lebanon

In Lebanon, rising poverty levels and the influx of over a million refugees created significant strain on the country's immunization system. Despite the launch of an accelerated immunization programme aimed at expanding access to free vaccines through community outreach, uptake remained low in several districts — particularly among refugee and low-income populations. In response, a multidisciplinary team from Nudge Lebanon, UNICEF, and the Ministry of Public Health (MoPH) came together to better understand the behavioural and contextual factors contributing to low return rates for childhood vaccination.

As part of the *Define* phase, the team used available programme data to map vaccination coverage across regions and identified districts with the lowest uptake. They focused on vulnerable populations, including informal tented settlements and under-resourced communities, and worked with local partners to understand the broader system surrounding childhood immunization. Through stakeholder mapping and root cause exercises, they identified gaps — not only in access, but also caregiver follow-through and clinic readiness.

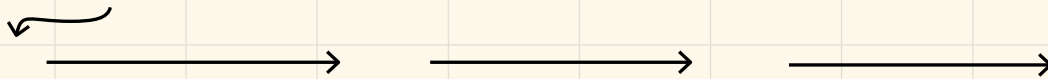
In the *Explore & Diagnose* phase, the team conducted in-depth fieldwork using behavioural science tools. Through interviews with caregivers, healthcare providers, and outreach workers — along with the observation of household visits — they mapped the caregiver journey and uncovered critical behavioural drop-off points. Caregivers were not necessarily opposed to vaccination, but daily survival needs often made returning to

the clinic difficult. Barriers included forgetting appointments, cognitive overload, and unclear instructions. These insights helped the team pinpoint where behaviour was breaking down.

Having identified the key behavioural barriers preventing caregivers from returning on time for their child's next vaccination appointment, the team generated structured "how might we" questions and brainstormed a range of creative and behaviourally informed solutions. After applying prioritization and ethical criteria, one idea stood out: a simple paper-based appointment card designed to remind caregivers of their child's next visit in a clear, tangible way.

The intervention was developed as a low-fidelity prototype and tested through informal walkthroughs with caregivers in local clinics. Feedback was gathered using a structured guide, revealing what elements worked and what needed improvement. Based on this input, the team refined the design before selecting it for implementation and evaluation.

***Note:** *While this is a real project that closely followed a very similar process to DEPTHS, there were a few tools from the toolkit that the project team did not apply during implementation. In those cases, we've gone back and retrospectively applied the tools using real project data to illustrate how they might have looked if they had been used at the time.*



STEP 1:

Ideate and co-create interventions

In this step:

This step bridges insights uncovered in the Explore & Diagnose phase with the development of concrete intervention ideas, using two main tools.

The [Ideation Prompts](#) worksheet helps to formulate “how might we” questions that draw on evidence gathered from both fieldwork and desk research. These serve as prompts to translate key findings into actionable opportunities, helping to channel creative thinking toward practical, testable intervention ideas aligned with users’ lived experiences.

Associated Tools:

- [Ideation Prompts](#)
- [Idea Generation](#)

The [Idea Generation](#) worksheet supports creative and strategic thinking by helping to generate innovative, and meaningful ideas. This tool introduces brainstorming exercises, along with guidance to select the exercises best suited to the specific context.

Why it matters:

This step helps to avoid jumping to solutions too quickly. Instead, combining behavioural insights with lived experience and creative exploration increases the chances

of generating interventions that are innovative, feasible, acceptable, and effective in driving real-world change.

How to do it:

1. Turn behavioural insights into idea prompts through “how might we” questions

Use the [Idea Prompts](#) worksheet to translate key findings from the first two phases into actionable, opportunity-focused “how might we” questions that can spark creative, locally relevant solutions:

A	B	C	D
Population of interest Whose behaviour are we trying to change?	Micro-behaviour to change What micro-behaviour from the Behavioural Map must change?	Barriers / Enablers What are the barriers and/or enablers addressed to achieve a behaviour change?	Additional Information What are some quotes and data that could be helpful to recall?

a. Start by revisiting key insights from the Define and Explore & Diagnose phases, to better recall the nuances of the context at hand. In particular:

- **The desired outcomes and leverage points** ([Project Canvas](#) and [System Map](#))
- **Past interventions covered by the desk research:** Any relevant efforts or programmes identified through the initial desk research, which may offer lessons or starting points for intervention design.
- **Actors, behaviours, and micro-behaviours:** The specific people we aim to support and the behaviours we want to shift ([Behavioural Profiles](#)¹ and [Behavioural Map and Diagnosis](#))
- **Known opportunities:** Drop-off points, behavioural barriers, and enabling factors identified during the [Behavioural Map and Diagnosis](#) and prioritized using the [Feasibility–Impact Matrix](#).

- **Data points and quotes:** Quotes reveal how people think, feel, and talk about an issue. For example, a caregiver might say, “*I was told to keep taking the TB medicine, but it makes me dizzy and I can’t work when I use it.*” This highlights barriers linked to side effects and livelihood pressures that surveys may miss. Data, meanwhile, validate and quantify these patterns. For instance, clinic records showing frequent treatment interruptions confirm the challenge described in interviews.

b. Using the [Idea Prompts](#) worksheet, write down the key inputs needed to formulate the questions. These include four key components:

- **Population of interest:** Start by identifying the group or individual whose behaviour the intervention aims to influence, using outputs from previous phases. Populations can be defined by role (e.g. caregivers, healthcare workers, teachers), life stage (e.g. new parents, adolescents), or context (e.g. displaced populations, rural residents). Relevant demographic factors such as age, gender, or socio-economic status may also be included.
- **Micro-behaviour to change:** Identify the specific micro-behaviour the population of interest is expected to adopt or shift (as identified in the Behavioural Map and Diagnosis). For example, if the broader behaviour change goal is caregivers completing their children’s full routine immunization

1 If the Behavioural Profile was not completed, this can be drawn from the Project Canvas from the Define phase

schedules, a target micro-behaviour could be returning for a second vaccine dose. Other examples of micro-behaviours include:

- If the broader behaviour change goal is exclusive breastfeeding for the first six months, the micro-behaviour could be initiating breastfeeding within the first hour after birth.
- If the broader behaviour change goal is ensuring all children are enrolled in school on time, the micro-behaviour could be completing school registration paperwork.

- **Barriers and Enablers:** List the key factors that help or hinder the micro-behaviour of interest, drawing from the Behavioural Map and Diagnosis and the prioritized barriers identified in the Feasibility-Impact Matrix. These barriers or enablers, aligned with the COM-B model, should relate to capability (e.g. capability: lack of knowledge or skills), motivation (e.g. beliefs and values), and opportunity (e.g. access to services or lack of social support). Refer to the Explore & Diagnose phase for more information about how to use COM-B to diagnose barriers and enablers.
- **Additional information:** Use quotes, data, or contextual details from desk research or the Behavioural Map and Diagnosis to ground this step in real experiences. These details can inspire ideas for the “how might we” prompt and keep the process connected to what people have actually said, done, or felt, instead of relying on assumptions.

c. Next, take these key components and turn them into well-structured “how might we” questions. To generate these questions, the following structure is recommended:

How might we + **C** barrier addressed/enabler leveraged + for **A** population of interest + so that **B** micro-behaviour will change

How might we + (barrier addressed or enabler leveraged) + for (population of interest) + so that (micro-behaviour will change)

This structure is only a guide. The wording can be adapted, as long as the essential elements are included. Examples of “how might we” questions across themes are:

- How might we reduce the difficulties of caregivers in remote areas reaching the clinic, so that they complete their child’s vaccination schedule?
- How might we increase the perceived value of school attendance for adolescent girls in pastoralist communities, so that they attend school regularly?
- How might we strengthen trust in reporting systems for women living in informal settlements, so that they report incidents of abuse when they occur?
- How might we simplify the birth registration process for first-time parents, so that they register their child within the first month?
- How might we reduce fear of judgment from peers for adolescent boys, so that they are more willing to seek mental health support?

It’s also important to remember that there is no single “correct” version of a “how might we” question. In fact, it’s useful to generate several options (at least four) to explore different angles. For example:

- One version might address a barrier (e.g. reducing fear)
- Another could focus on an enabler (e.g. strengthening peer support)
- Some might centre on the primary user (e.g. caregivers), while others target key influencers (e.g. health workers)

2. Generate intervention ideas

Generating strong intervention ideas isn't about finding a single "right" answer, it's a creative and iterative process without a one-size-fits-all approach. The [Idea Generation](#) worksheet provides a set of structured, manageable activities to guide this process.

Whenever possible, it is strongly recommended to hold in-person brainstorming sessions with community members, internal stakeholders, or project team members. These

sessions can foster a richer discussion, stronger rapport, and more dynamic collaboration. When in-person engagement is not feasible, virtual workshops can be conducted using collaborative tools like Miro or Mural to simulate an interactive environment. If planning and facilitating remote workshops, it may be helpful to engage expert facilitators who specialize in virtual idea generation.

2.1. In-person brainstorming sessions with the community

Start by hosting brainstorming sessions to generate early intervention ideas. This step ensures that diverse perspectives shape the solutions from the outset, especially those most affected by the behavioural challenge. It's recommended to sequence brainstorming in two stages:

- Stage 1: Internal team session.** Begin with the core project team to review behavioural insights, define the behavioural challenge, and generate ideas. Use tools like the "how might we" worksheet and revisit the Behavioural Map and Diagnosis to anchor brainstorming in evidence.
- Stage 2: Co-creation with communities and stakeholders.** After framing the challenge and exploring early ideas, expand the process to include community members, frontline workers, or other key stakeholders. Sessions can be held separately or in mixed groups, depending on the context, and should be designed to make all participants feel comfortable contributing. Practical strategies to encourage participation include:
 - Starting simple.** Use low-risk icebreakers, such as stickers on a picture to show feelings or a quick sketch of a daily routine. These tasks warm up the group and reduce fear of being "wrong."

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Idea Generation 1A: Brainstorming session

Use this worksheet to guide a brainstorming session with your team or a co-creation session with community members and people with lived experience. Focus on surfacing small behaviours, challenges, and practical ideas through hands-on, visual, and open-ended activities.

<p>Preparation <i>Steps to complete in preparation for the co-creation session.</i></p> <ul style="list-style-type: none"> Brainstorming: Invite a few colleagues to join. Diversity is good, we want different perspectives. Co-creation: Invite 4-8 people from the community Plan for 60-90 minutes Choose a comfortable and inspiring space 	<p>How Might We ... <i>Pull the HMWs developed in the previous activity. During the session, do a different activity for each HMW.</i></p> <div style="border: 1px dashed gray; height: 150px; margin-top: 5px;"></div>	<p>Brainstorming activity <i>Use interactive brainstorming techniques to get participants thinking about solutions.</i></p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 50%; padding: 5px;"> <p>Fix-it Cards</p> <p>Hand out cards that say: "It would be easier if..." and let people finish the sentence for the prompt.</p> </td> <td style="width: 50%; padding: 5px;"> <p>Draw the idea</p> <p>Ask people to draw what could make it easier, clearer, or more welcoming. No art skills needed!</p> </td> </tr> <tr> <td style="padding: 5px;"> <p>Yes, and...</p> <p>Start with one idea, then go around and add to it with "Yes, and..." to build it out.</p> </td> <td style="padding: 5px;"> <p>Act it out</p> <p>Have participants act out what currently happens, then "replay" with a small change.</p> </td> </tr> <tr> <td style="padding: 5px;"> <p>Remix and match</p> <p>Show flyers, posters, or tools used in the past and ask: "What would you change or combine to make this better?"</p> </td> <td style="padding: 5px;"> <p>Brick-by-Brick</p> <p>Start with the question: "What's one small thing that could help?" Write each response on a sticky note and stack them like building blocks.</p> </td> </tr> </table>	<p>Fix-it Cards</p> <p>Hand out cards that say: "It would be easier if..." and let people finish the sentence for the prompt.</p>	<p>Draw the idea</p> <p>Ask people to draw what could make it easier, clearer, or more welcoming. No art skills needed!</p>	<p>Yes, and...</p> <p>Start with one idea, then go around and add to it with "Yes, and..." to build it out.</p>	<p>Act it out</p> <p>Have participants act out what currently happens, then "replay" with a small change.</p>	<p>Remix and match</p> <p>Show flyers, posters, or tools used in the past and ask: "What would you change or combine to make this better?"</p>	<p>Brick-by-Brick</p> <p>Start with the question: "What's one small thing that could help?" Write each response on a sticky note and stack them like building blocks.</p>
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Brainstorming tips
Keep these in mind

- Set a timer: 15-20 min per HMW prompt.
- Bring real examples, props, visual prompts, or stories.
- Use sticky notes and markers. Write one idea per sticky note.
- Don't force ideas, let people reflect and warm up.
- Encourage quantity over quality, don't judge ideas too early. Go for wild, refine later!
- Capture ideas with drawings or direct quotes.
- Build on each other's ideas: use "yes, and..." Treat all input as valuable, even if it's rough or contradictory

- **Using local language and cultural formats.** Conduct discussions in the language participants are most comfortable with, and lean on familiar modes of expression (role play, storytelling, songs) to make participation natural.
- **Setting ground rules clearly and visually.** Co-create rules (e.g., “one person speaks at a time,” “all ideas are valid”) and keep them visible to reinforce safety and respect.
- **Actively managing power dynamics.** Design activities that create space for quieter or less powerful voices. For example, begin with a small group or pair discussions before moving into plenary, or rotate individuals presenting ideas so youth or marginalized voices can take the lead. Where appropriate, consider holding separate sessions so participants can speak more openly without pressure from others.
- **Offering multiple ways to contribute.** Provide materials like cards, sticky notes, or objects so participants can write, draw, or place ideas instead of speaking out loud — giving options for those less comfortable speaking in groups.
- **Modelling openness.** Facilitators can share a story or admit not knowing an answer to signal that vulnerability is welcome and honesty is safe.

Co-creation works best when people feel equal, respected, and safe to share their ideas. The role of the facilitator is not to provide answers, but to create the conditions where all participants can collaborate, build on one another’s perspectives, and imagine new possibilities.

To facilitate a co-creation, follow the guidance below:

- a. Choose three to four concrete “how might we” questions from the Ideation Prompts worksheet to guide the session.
 - Write each “how might we” question clearly on a separate poster or flipchart sheet. Display these around the room, leaving space for idea generation.

- Give participants a stack of sticky notes and markers.
- b. Encourage curiosity, active listening, and collaboration so participants feel free to contribute without judgment. Introduce simple rules like “yes, and…” thinking, where participants build on each other’s ideas, rather than dismissing them. Remind the group that no idea is too small or too far-fetched — many of the strongest interventions emerge from combining the familiar with the unexpected.
- c. Bring key research insights and aids that can help to spark ideas for interventions and guide the discussion. Visuals like behavioural maps or profiles can be useful as they often reveal where support is most needed, while quotes and field observations can inspire creative solutions based on real challenges and moments.
- d. Begin facilitating the idea generation session by focusing on one “how might we” question at a time. Invite participants to share ideas verbally or write them down individually — anything that could help to address the prompt. Capture one idea per sticky note, whether contributed aloud or written directly by participants.
- e. Rotate through prompts. After about 10–15 minutes of brainstorming for the first prompt, rotate to the next “how might we” question and repeat the process. Continue until participants have had a chance to contribute intervention ideas under each prompt.
- f. To help participants generate ideas more easily — especially those who may feel unsure where to begin — facilitators can introduce the following activities, designed to unlock creativity and fresh thinking around the “how might we” questions. These can be rotated across prompts, or set up as stations around the room for participants to explore.

TABLE 2. BRAINSTORMING ACTIVITIES

ACTIVITY	DESCRIPTION	USEFUL FOR	INSTRUCTIONS
Fix-it Cards	Participants complete the sentence “The behaviour would be easier if...” to identify simple, practical changes that could remove barriers or make a behaviour more doable. This activity helps to surface low-effort, high-impact ideas rooted in participants’ real experiences.	Breaking down barriers into actionable solutions, especially for those less familiar with formal brainstorming.	<ol style="list-style-type: none"> 1. Distribute cards or sticky notes. 2. Ask participants to finish the sentence: “The behaviour would be easier if...” 3. Share and group similar suggestions.
Draw the Idea	Participants sketch simple visuals to communicate their ideas. No art skills needed.	Engaging participants who think better visually, or have lower literacy levels.	<ol style="list-style-type: none"> 1. Hand out paper or sticky notes. 2. Ask: “What could help make this easier?” 3. Invite quick sketches. 4. Ask them to describe their idea in their own words.
Yes, and...	Participants build on ideas collaboratively, with everyone encouraged to add.	Generating energy and group ownership, or expanding initial thoughts into richer concepts.	<ol style="list-style-type: none"> 1. Start with one idea. 2. Each person adds with “Yes, and...” 3. Build a chain of suggestions. 4. Capture the evolving idea.
Act it Out	Participants role-play what happens now, and then what could happen with a small change.	Testing realism and emotional response, or engaging kinesthetic learners.	<ol style="list-style-type: none"> 1. Choose a real-life scenario. 2. Role-play the current experience. 3. Re-play it with a simple improvement. 4. Reflect as a group.
Remix and Match	Participants revise real-world examples of past materials.	Stimulating redesign thinking, especially for caregivers or workers familiar with local materials.	<ol style="list-style-type: none"> 1. Show posters, flyers, or tools. 2. Ask: “What would you change or combine?” 3. Encourage tweaks or mashups. 4. Sketch or describe the new version.
Brick-by-Brick	Participants contribute small ideas that build into a bigger solution.	Helping groups that struggle with big-picture thinking, along with promoting inclusiveness.	<ol style="list-style-type: none"> 1. Ask: “What’s one small thing that could help?” 2. Write one idea per sticky note. 3. Stack or arrange them visually. 4. Review and build a concept.

g. Each “how might we” poster will now have a cluster of sticky notes beneath it, creating a visual, participatory pool of early intervention concepts. Document the outputs in a spreadsheet or document. For every idea, note:

- What the idea is
- Which “how might we” question the idea responds to
- What behavioural barrier, enabler, or insight it links to, or barrier the idea addresses
- The community’s perceived value of the idea

- Any supporting quotes or observations that illustrate why the idea matters

For example, if an idea is “send SMS reminders,” this could be supported by a participant’s quote, such as “I often forget appointments unless someone reminds me the day before.” Or, if the idea is “move registration to the marketplace,” this could connect to an observation that mothers consistently mentioned passing through the market every day, while rarely going to the clinic. Capturing this context preserves the reasoning behind ideas, making it easier to spot patterns or clusters when refining them later.

2.2. Optional brainstorming activity to refine ideas: [Design Provocation](#)

As an optional extension of the co-creation session, the **Design Provocations** technique helps strengthen ideas by encouraging teams to rethink how an intervention could work or be experienced. It is especially useful when early ideas feel too obvious or incomplete.

Design provocations use “what if” questions to revisit existing ideas with fresh eyes. The goal isn’t to replace earlier concepts, but to deepen, adapt, or transform them into stronger, more innovative, and context-appropriate solutions.

- Start by reviewing the table created at the end of the co-creation session, which links each idea to its original “how might we” question.
- Then, choose provocation prompts and apply them to each idea to see how it might evolve. Table 3 provides a list of provocation prompts, alongside concrete examples to show how ideas can evolve into more relevant designs.

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(Optional) Idea Generation 1B: Advanced brainstorming session

Use this worksheet if your team is comfortable with design thinking—it includes more advanced prompts to push your brainstorming further.

Advanced brainstorming prompts
Use these design provocations to push your thinking further. They're meant to refine, reframe, or enhance existing ideas by challenging assumptions, encouraging new perspectives, and helping the team explore overlooked possibilities.

<p>Change the tone</p> <p>How would the idea feel if it were delivered in a more playful, celebratory, urgent, or calming way?</p>	<p>Reconfigure the idea</p> <p>What if we changed how the intervention is delivered? Could we simplify it, remove a step, or adjust the sequence?</p>
<p>Change the constraints</p> <p>What would we do if we had no budget, no technology, or had to scale fast? How could we adapt the idea to work anyway?</p>	<p>Change perspective</p> <p>How might this intervention feel from the point of view of a caregiver, adolescent, or health worker? What would they notice, need, or question?</p>
<p>Change the senses</p> <p>How could we use touch, sound, color, or movement to make the idea more engaging and memorable?</p>	<p>Change the setting</p> <p>What if the idea had to work in a totally different place, like a crowded shared space, a home, or on the move? What would need to shift?</p>

TABLE 3. DESIGN PROVOCATION PROMPTS

PROVOCATION	PROMPT	USEFUL FOR	EXAMPLE: ORIGINAL IDEA	EXAMPLE: REDESIGNED IDEA
Change the tone	What if the idea were more playful, celebratory, urgent, or reassuring?	Making the idea more emotionally resonant or better aligned with audience values	A plain reminder card with vaccine appointment date	A cheerful “Vaccine Hero” card with celebratory language and a sticker for the child
Reconfigure the idea	What if we delivered the intervention differently? Could we change the order, remove a step, or simplify it?	Simplifying the delivery or reducing logistical barriers	Text reminder sent two days before appointment	A physical reminder given at the last appointment, attached to the child’s health booklet for ongoing visibility
Change the constraints	What if we had no money, no tech, or had to scale quickly? How would we adapt?	Adapting ideas to low-resource or rapidly scaling environments	A digital appointment reminder system	Health workers use community radio announcements to remind caregivers of upcoming vaccine days
Change perspective	What if a caregiver experienced this intervention? What would we need to consider? What about an adolescent? A health care worker?	Ensuring ideas are user-centred and account for varying needs and experiences	A group education session on vaccine schedules	Peer mothers share their own stories about vaccination journeys in small, informal conversations
Change the senses	What if we engaged touch, sound, colour, or movement to make the idea more memorable?	Making ideas more engaging and accessible, especially for children or low-literacy populations	A printed immunization leaflet handed out at the clinic	A colourful, illustrated wall poster with movable vaccine dose markers placed in waiting areas

(Optional) Idea Generation 2: Localization of past evidence

Use this worksheet to refine existing ideas.

<p>How Might We ... <i>Pull in the HMWs developed earlier and use them to guide the search for past interventions or existing evidence that might help answer these questions.</i></p> <p>.....</p> <p>.....</p>	<p>Look and adapt past evidence and interventions</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%; padding: 5px;"> Intervention <i>Gather relevant examples from the desk research of Explore and Diagnose and additional sources.</i> </th> <th style="width: 33%; padding: 5px;"> Literature review <i>What and whose behaviour was the intervention trying to shift? What were the barriers and the intervention's mechanisms? What were the results?</i> </th> <th style="width: 33%; padding: 5px;"> Adaptation <i>How could this intervention be adapted to the project? What assumptions or blind spots might it carry?</i> </th> </tr> </thead> <tbody> <tr><td style="height: 30px;"></td><td></td><td></td></tr> <tr><td style="height: 30px;"></td><td></td><td></td></tr> <tr><td style="height: 30px;"></td><td></td><td></td></tr> <tr><td style="height: 30px;"></td><td></td><td></td></tr> <tr><td style="height: 30px;"></td><td></td><td></td></tr> </tbody> </table>	Intervention <i>Gather relevant examples from the desk research of Explore and Diagnose and additional sources.</i>	Literature review <i>What and whose behaviour was the intervention trying to shift? What were the barriers and the intervention's mechanisms? What were the results?</i>	Adaptation <i>How could this intervention be adapted to the project? What assumptions or blind spots might it carry?</i>															
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2.3. Optional idea generation activity: Localization of past evidence

Strong ideas don't always need to start from scratch. In many cases, similar behavioural challenges have been tackled elsewhere, and these existing programmes, studies, or interventions can offer inspiration. This activity reviews evidence to see whether proven approaches can be adapted to the current challenge. This might include:

- Interventions documented in research studies or evaluations
- Programmes implemented in similar regions or populations
- Case studies from global evidence platforms or organizational archives
- Insights shared by implementing partners or technical advisors

The goal is not to copy, but to identify core behavioural strategies that worked in other settings, then adapt them for the current local context. Consider: What made the intervention effective elsewhere? What would need to change for it to work here? This is especially useful under time or resource constraints, or when building on past successes.

- a. Begin by revisiting the “how might we” questions and search for interventions and past evidence that could help answer them.
- b. Use findings from the initial desk research conducted in the Explore & Diagnose phase to identify past interventions related to the problem and the behavioural barriers. Review this evidence, and consider:
 - What and whose behaviour was the intervention trying to shift?
 - What were the barriers and the intervention’s mechanisms?
 - What were the results?
- c. Reflect on localization and adaptation by asking:
 - How could this intervention be adapted to the project?
 - What assumptions or blind spots might it carry?

While leveraging and using past evidence is an efficient and effective approach, it is also important to explore new ideas.

2.4. Apply a behavioural science framework to refine intervention ideas: EAST framework

This step helps ensure intervention ideas are both creative and practical. Applying the EAST framework is a required step in the DEPTHS process, as it allows ideas to be assessed and refined using principles of behavioural science. To balance creativity with rigour, it is recommended to complete at least two brainstorming exercises before applying EAST.

While several behavioural science frameworks exist—such as [MINDSPACE](#) or the [Behaviour Change Wheel](#)—this field guide uses the EAST framework for its practicality and wide adoption.

DEPTHS TOOLKIT

Idea Generation 3: Applying behavioural insights to ideas

Use this worksheet to add behavioural insights features using the EAST model (Easy, Attractive, Social, Timely) to the ideas generated in the previous activities to make them better.

Idea builds	Make it EASY <small>Can any small barriers be removed or reduced? Can the desired action be made the default? Can language or steps be simplified to reduce mental effort? Can this be linked to a local tradition or custom? Can steps be broken into smaller actions?</small>	Make it ATTRACTIVE <small>How can attention be captured with visuals, color or urgency? Can a sense of pride or identity be triggered? Can a small, intangible gift be offered? Can it be made more interactive or hands-on? Can future regret be used to motivate present action?</small>	Make it SOCIAL <small>Can we show that others are already doing this? Can someone respected endorse or demonstrate the behavior? Can people see how they compare with peers? Can people publicly demonstrate or endorse the behaviour so that it encourages others to do the same?</small>	Make it TIMELY <small>Can benefits be made more immediate or visible? Can action be prompted when people are most receptive? Can people be prompted to plan when and how to act? Can new routines or transitions be leveraged? Can deadlines or time windows be emphasized?</small>

BEHAVIOURAL DESIGN SPOTLIGHT: The EAST Framework



About the Framework

The EAST framework was developed by the Behavioural Insights Team (BIT)—also known as the “Nudge Unit”—as a practical, accessible way to apply behavioural science in public policy and program design. It synthesizes decades of behavioural economics and cognitive psychology research into four core principles: Easy, Attractive, Social, and Timely. Each principle corresponds to a well-documented behavioural barrier or opportunity, helping designers craft interventions that are both human-centred and evidence-informed. EAST is flexible and especially useful during ideation, prototyping, or when turning insights into strategies.

The Four Principles, Explained

EASY

Barrier addressed: People often avoid tasks that feel complicated, time-consuming, or mentally taxing.

Behavioural insight: Humans are cognitive misers: our brains default to the easiest available option.

What to do:

- Simplify steps, reduce complexity, and eliminate unnecessary choices
- Use plain language and intuitive visuals
- Pre-fill forms or automate processes when possible
- Make the desired behaviour the default

Example: In cash transfer programs, shifting from paper vouchers to mobile money made it significantly easier for families to access support, eliminating long travel times, reducing paperwork, and allowing funds to be received and used with just a few clicks. A randomized experiment in Niger found that households receiving mobile transfers had higher dietary diversity and children consumed more meals per day, benefits largely attributed to time saved from traveling and waiting, as well as enhanced decision-making power for women.²

ATTRACTIVE

Barrier addressed: Competing stimuli and low motivation make it hard to capture attention.

Behavioural insight: People are more likely to engage with environments that stand out or feel rewarding.

What to do:

- Use colour, imagery, and visual cues to make options stand out
- Frame messages in ways that resonate emotionally or convey personal benefit
- Introduce small incentives or commitments that spark action

Example: In handwashing campaigns, painting bright footprints on the ground that lead children from the latrine to the handwashing station turned the behaviour into a game-like experience. The colourful visual cues caught children's attention and made handwashing feel fun and rewarding, increasing consistent use³.

SOCIAL

Barrier addressed: People are influenced by what others around them do or believe.

Behavioural insight: Social norms, peer behaviour, and group identity strongly shape decisions.

What to do:

- Make positive behaviours visible and relatable
- Highlight stories from peers or trusted community members
- Use group pledges, social accountability, or peer reminders

Example: In girls' education programs in India, showing parents stories and posters of local female role models who had successfully completed school shifted perceptions about the value of girls' education. Parents were more likely to see supporting their daughters' schooling as both common and celebrated within their own community⁴.

2 Aker, J.C., Boumrijel, R., McClelland, A. and Tierney, N., 2014. Zap it to me: The short-term impacts of a mobile cash transfer program. Discussion Paper No. 268. Paris: Agence Française de Développement (AFD). Available at: <https://www.calipnetwork.org/wp-content/uploads/2020/01/zap-26aug2014-1.pdf> [Accessed 2 September 2025].

3 Dreibelbis, R., Kroeger, A., Hossain, K., Venkatesh, M. and Ram, P.K., 2016. Behavior Change without Behavior Change Communication: Nudging Handwashing among Primary School Students in Bangladesh. *International Journal of Environmental Research and Public Health*, 13(1), p.129

4 Beaman, L., Duflo, E., Pande, R. and Topalova, P., 2012. Female leadership raises aspirations and educational attainment for girls: A policy experiment in India. *Science*, 335(6068), pp.582–586.

TIMELY

Barrier addressed: Even with good intentions, people often delay or forget to act.

Behavioural insight: Timing influences readiness and follow-through.

What to do:

- Time interventions around key decision moments or life events
- Send reminders close to the moment of action
- Use planning tools to prompt commitment (e.g., calendars, SMS reminders)

Example: In Sudan, integrating birth registration services directly within health centres made it easy for parents to register their newborns at the time of delivery. By aligning the service with the moment parents were already completing health paperwork, registration became immediate and convenient. As a result, more than 170,500 newborns were registered in remote localities in a single year.⁵

Why EAST Works

EAST works because it aligns with how people actually make decisions, which is often emotional, habitual, and context-driven, rather than rational or linear. Many behavioural interventions fail because they assume knowledge or awareness automatically leads to action. EAST helps to counter this by designing for the realities of human behaviour, using small nudges to steer choices without coercion.

It's not a checklist, but a lens. Not every intervention will need all four principles, but applying at least one often makes an idea stronger.

5 UNICEF, 2016. Annual Results Report 2016: Health. New York: UNICEF. Available at: https://www.unicef.org/media/49126/file/2016arr_health.pdf [Accessed 2 September 2025].

- Review the spreadsheet or table where ideas from the brainstorming session were documented.
- Transfer selected ideas. If there are many, select the most promising ideas and list them (one per row) in the EAST worksheet.
- Use the EAST prompts as creative triggers to explore how each behavioural principle might improve the idea. For example:
 - **Easy:** Can steps be simplified or linked to familiar routines?
 - **Attractive:** Could visuals, rewards, or emotional appeals help?
 - **Social:** Is there a way to show that others are doing it too?
 - **Timely:** Are we catching people at the right moment?
- In each EAST column of the worksheet (Make it Easy, Make it Attractive, Make it Social, and Make it Timely) write down refinements, enhancements, or creative twists based on the prompts.
- Where possible, combine principles and levers: strong ideas often touch more than one. Table 5 presents further guidance on how to apply the EAST framework to improve ideas.

TABLE 4. PROMPTS FOR IDEA GENERATION FOLLOWING THE EAST FRAMEWORK

CATEGORY	BEHAVIOURAL MECHANISM	PROMPT	ORIGINAL IDEA	NEW IDEA EXAMPLE
EASY	Friction costs	Can any small barriers (e.g., travel time, forms, wait) be removed or reduced?	Hold weekly vaccination days at health clinics.	Offer mobile vaccination clinics near marketplaces to reduce travel time and increase convenience for caregivers.
	Defaults	Can the desired action be made the default?	Ask parents during health visits if they want to opt into vaccine reminders.	Automatically enrol children in routine immunization reminders upon birth registration, unless parents opt out.
	Cognitive load reduction	Can language or steps be simplified to reduce mental effort?	Provide a printed list of upcoming vaccine dates.	Use illustrated vaccine cards with icons instead of text for caregivers with low literacy.
	Cultural alignment	Can this be linked to a local tradition or custom?	Plan vaccination events during school holidays.	Schedule vaccination drives during local festivals where families already gather, aligning with community rhythms.
	Chunking information	Can steps be broken into smaller actions?	Distribute a pamphlet with all vaccine information.	Give caregivers a one-step instruction card for 'what to do before' and 'what to expect after' a vaccine visit.
ATTRACTIVE	Salience	How can attention be captured with visuals, colour or urgency?	Send standard text message reminders about appointments.	Design bright, eye-catching appointment slips for mothers with a visual countdown to the next vaccine date.
	Emotional rewards	Can a sense of pride or identity be triggered?	Give verbal thanks to caregivers after a vaccination.	Offer caregivers a 'Health Hero' badge for completing all childhood vaccines, reinforcing parental pride.
	Reciprocity	Can a small, intangible gift be offered?	Say "thank you" after each vaccine appointment.	After each vaccine visit, provide a sticker or thank-you card recognizing caregivers' commitment to child health.
	Experiential engagement	Can it be made more interactive or hands-on?	Place posters about vaccines in the waiting area.	Set up a vaccination play corner for children to reduce fear and make the experience engaging.
	Anticipated regret	Can future regret be used to motivate present action?	Inform caregivers of the vaccine's importance.	Use messages like "You may regret missing today's vaccine—protect your child now" to evoke anticipated emotion.

Table continues on following page.

TABLE 4 [CONTINUED]. PROMPTS FOR IDEA GENERATION FOLLOWING THE EAST FRAMEWORK

CATEGORY	BEHAVIOURAL MECHANISM	PROMPT	ORIGINAL IDEA	NEW IDEA EXAMPLE
SOCIAL	Social norms	Can we show that others are already doing this?	Encourage parents to vaccinate through announcements.	Share data that “85% of mothers in your community have vaccinated their children this year.”
	Messenger effect	Can someone respected endorse or demonstrate the behaviour?	Ask parents to encourage each other to vaccinate.	Have respected religious or community leaders vaccinate their children publicly and share the moment.
	Peer comparison	Can people see how they compare with peers?	Remind parents about routine immunization schedules.	Send caregivers a card noting how many other families in their neighbourhood have completed vaccines.
	Social proof	Can people publicly demonstrate or endorse the behaviour so that it encourages others to do the same?	Congratulate parents quietly after vaccination.	Give colourful bracelets every time a caregiver vaccinates their child so they can signal their participation to others.
TIMELY	Present bias	Can benefits be made more immediate or visible?	Explain that vaccines prevent future illness.	Highlight the immediate relief of protection post-vaccine (e.g., “Your child is protected today, not just later”).
	Timing alignment	Can action be prompted when people are most receptive?	Send reminders a week before appointments.	Send SMS reminders in the early morning when caregivers typically plan their day.
	Planning prompts	Can people be prompted to plan when and how to act?	Give a paper with vaccine schedules.	Include a blank calendar space on vaccine cards for caregivers to write their own reminder date and time.
	Moments of change	Can new routines or transitions be leveraged?	Invite families to vaccinate at any time.	Bundle vaccine registration with school enrolment, when families are already thinking about child health.
	Time scarcity	Can deadlines or time windows be emphasized?	Share dates for vaccine availability.	Use urgent messages like “Only 3 days left for the free measles vaccine clinic in your area!”

3. Consolidate intervention ideas

- a. After brainstorming and refinement, compile ideas from the **EAST** worksheet into one list. Remove duplicates and set aside any that:

- Don't target the priority behaviour
- Fall outside the scope or objectives of the project
- Would require entirely new systems, or actors not included in the design process

For example: An idea like “Engaging agricultural extension workers to promote vaccination during home visits” may have merit, but it might fall outside the scope if the current intervention is focused on urban clinic settings, with no existing relationship to the agriculture sector.

- b. Next, merge ideas that are similar or complementary. Some may share the same behavioural mechanism, delivery channel, or target group and can be strengthened when brought together. For example:

- **Idea 1:** Send reminder messages signed by a health worker
- **Idea 2:** Inform caregivers that a vaccine has already been reserved for them
- **Merged idea:** Send reminder messages signed by a health worker, informing caregivers that a vaccine has been reserved in their name.

- c. The final output of this step should be a curated list of distinct, behavioural science informed, grounded ideas that:

- Address the prioritized behaviour
- Fit the local context
- Apply behavioural insights
- Are feasible within project scope

This consolidated list will become the foundation for prioritization and prototyping in the next step.

Consider the following tips when generating ideas:

- **Keep “just good enough” versions of ideas.** While they may be easy to ignore, some of the best solutions evolve from rough sketches. Instead of filtering these ideas out too early, capture them in a “maybe” pile — a separate column or sheet to revisit them later. When refined, they often address gaps others missed.
- **Map ideas to the micro-behaviour timeline.** After brainstorming, take the top 10–15 ideas and map each one to the behavioural timeline (e.g., **before**, **during**, or **after** the target action). This helps to check whether your solutions are too clustered around one moment (e.g., reminders before the appointment) and identifies neglected stages where ideas are still needed.
- **Run a quick “would this be useful to me?” test.** For each intervention idea, ask someone from the target population — or role-play as them — and answer: “Would this actually help me do the behaviour?” This gut-check helps to surface ideas that sound good on paper, but don't feel helpful in practice. If the answer is “not really,” refine or rethink.

CASE STUDY:

Increasing childhood vaccination uptake in Lebanon

These Ideation Prompts and Idea Generation worksheets were not developed by the original project team. They are recreated examples based on real project data and context.

In Lebanon, the project team set out to increase childhood vaccination uptake among refugee caregivers served by the Ministry of Public Health's AIA programme. Drawing on insights from the Explore & Diagnose phase, the team first synthesized key findings into a structured "how might we" worksheet. This helped to distill complex research into focused prompts, by specifying the target micro-behaviour and identifying barriers. One of the most important prompts to emerge was: "How might we reduce forgetfulness and lack of planning for refugee caregivers so that they return to the health centre on time for their child's next scheduled vaccine?"

This question served as the foundation for a number of intervention ideas generated through co-creation and team ideation. Some initial concepts included:

- A simple paper appointment card that health workers would hand to caregivers after the child's first vaccine.
- A version of that card redesigned to include a space for caregivers to write down the return date, to reinforce commitment and memory.
- A reminder message signed by a known health worker, sent a few days before the next appointment.
- A visual calendar sticker caregivers could use at home to track the date.
- A verbal commitment moment, where caregivers would state aloud when they planned to return.

D E PROTOTYPE DESIGNS TH S
DEPTHS TOOLKIT

Ideation Prompts

Complete part 1 of this worksheet by using the outputs from Define and Explore and Diagnose phase. Then, in the bottom part, formulate "How might we" questions.

<p style="text-align: center; font-weight: bold; font-size: 0.8em;">A</p> <p style="font-size: 0.7em;">Population of interest</p> <p style="font-size: 0.7em;">Caregivers of young children living in low-income and refugee communities in Lebanon, particularly in areas served by the AIA programme.</p>	<p style="text-align: center; font-weight: bold; font-size: 0.8em;">B</p> <p style="font-size: 0.7em;">Micro-behaviour to change</p> <p style="font-size: 0.7em;">Returning to the health center on time for their child's next scheduled routine vaccination, after the first dose has been administered.</p>	<p style="text-align: center; font-weight: bold; font-size: 0.8em;">C</p> <p style="font-size: 0.7em;">Barriers / Enablers</p> <ol style="list-style-type: none"> 1. Forgetfulness 2. Low planning habits 3. Limited urgency. 4. Competing priorities 	<p style="text-align: center; font-weight: bold; font-size: 0.8em;">D</p> <p style="font-size: 0.7em;">Additional Information</p> <p style="font-size: 0.7em;">Caregiver: "I have to take care of a lot of things. It is hard for me to remember when the next vaccine is"</p> <p style="font-size: 0.7em;">Administrative data: Drastic rise in the cases of mumps in 2015 validated by a district-based cluster survey conducted in 2016</p>
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How might we + C barrier addressed/enabler leveraged + for A population of interest + so that B micro-behaviour will change

1. How might we support better planning habits for caregivers in Lebanon so that they are more likely to remember and attend their child's follow-up vaccination appointments on time?
2. How might we create a stronger sense of urgency and importance for caregivers in underserved communities so that they prioritize returning to the clinic for their child's next routine vaccine dose?
3. How might we help caregivers in Lebanon overcome competing daily priorities so that they can successfully follow through with their child's scheduled vaccination visit after the first dose?
4. How might we reduce forgetfulness for caregivers in low-income and refugee communities so that they return to the health center on time for their child's next scheduled routine vaccination after the first dose?

How Might We ...

Pull the HMWs developed in the previous activity. During the session, do a different activity for each HMW.

How might we reduce forgetfulness for caregivers in low-income and refugee communities so that they return to the health center on time for their child's next scheduled routine vaccination after the first dose?

Brainstorming activity

Use interactive brainstorming techniques to get participants thinking about solutions.

<p style="font-weight: bold; margin: 0;">Fix-it Cards</p> <p style="margin: 0;">It would be easier if I caregivers had a card to remember the date of the next vaccine visit</p> <p style="margin: 0;">Idea: Give caregivers a small appointment card with their next vaccine visit date.</p>	<p style="font-weight: bold; margin: 0;">Draw the idea</p> <p style="margin: 0;">Participant draws a megaphone near a mosque with a time and date written next to it.</p> <p style="margin: 0;">Idea: Coordinate with community mosques to announce upcoming vaccination days during Friday prayers.</p>
<p style="font-weight: bold; margin: 0;">Yes, and...</p> <p style="margin: 0;">Starts with: "The nurse could remind us." → "Yes, and she could call us the day before." → "Yes, and we could get an SMS, too."</p> <p style="margin: 0;">Idea: Set up a clinic-based SMS where caregivers receive a message a day before their child's next appointment.</p>	<p style="font-weight: bold; margin: 0;">Act it out</p> <p style="margin: 0;">Participants role-play a mom forgetting the date, then replay the scenario with her talking to another mom at a shop who reminds her.</p> <p style="margin: 0;">Idea: Local mothers trained to remind and encourage peers about their child's next dose.</p>
<p style="font-weight: bold; margin: 0;">Remix and match</p> <p style="margin: 0;">Participant reviews a school flyer and suggests: "This is clear. What if we had one for immunization, with space to write the next date?"</p> <p style="margin: 0;">Idea: A flyer with vaccine schedule info and a space for HCWs to write the child's next appointment by hand.</p>	<p style="font-weight: bold; margin: 0;">Brick-by-Brick</p> <p style="margin: 0;">Caregivers say: "I lose paper slips." → "I always have my phone." → "My neighbor reminds me." → "I'd check a message."</p> <p style="margin: 0;">Idea: Develop a WhatsApp reminder group led by the clinic nurse.</p>

These early-stage ideas were generated using tools such as Fix-it Cards, Act It Out, and Brick-by-Brick, enabling the team to collaboratively explore small yet impactful design changes. The appointment card — later refined and tested — emerged as the most promising solution.

To strengthen these ideas, the team also reviewed past evidence showing the effectiveness of SMS reminders and physical cards in boosting vaccine uptake. This encouraged a focus on low-tech solutions that were affordable, feasible, and aligned with caregivers' preferences and context.

Advanced brainstorming prompts

Use these design provocations to push your thinking further. They're meant to refine, reframe, or enhance existing ideas by challenging assumptions, encouraging new perspectives, and helping the team explore overlooked possibilities.

Change the tone

Original idea: Give caregivers a small appointment card with their next vaccine visit date.

Redesigned idea: Create a playful, celebratory commitment card designed like a child's "health hero" certificate, with a colorful sticker space and cheerful language ("You've taken a big step today! Next stop: a healthier tomorrow") to reinforce positive emotions and parental pride.

Change the constraints

Original idea: Develop a WhatsApp reminder group led by the clinic nurse.

Redesigned idea: If no internet or tech is available, assign a "vaccine buddy" system, where caregivers are paired and asked to remind each other. This low-cost, tech-free method leverages social connection instead of digital tools.

Change the senses

Original idea: Coordinate with community mosques to announce vaccination days.

Redesigned idea: Add sound and movement to the reminder: a local youth group could use mobile loudspeakers playing a catchy jingle or chant reminding families of vaccine day. This uses rhythm, familiarity, and repetition to enhance salience.

Reconfigure the idea

Original idea: Set up a clinic-based SMS or phone reminder system for upcoming vaccination appointments.

Redesigned idea: Instead of waiting until the week of the appointment, send two messages: one immediately after the visit ("Thanks for coming! Next dose is on...") and a second reminder one day before the scheduled date. This reframes it as ongoing support, not just a last-minute nudge.

Change perspective

Original idea: Create a take-home flyer with vaccine schedule info and space to write the next appointment.

Redesigned idea: From the health worker's perspective, flyers add to their paperwork load and may be forgotten. Instead, simplify it into a stamp-sized sticker that can be affixed to the child's health booklet—something health workers already use and caregivers carry.

Change the setting

Original idea: Set up a community vaccine ambassador network of local mothers.

Redesigned idea: What if the setting is a crowded marketplace where caregivers run errands? Vaccine ambassadors could wear branded aprons or sashes and offer quick reminders or information cards in passing, without formal sessions or house visits.

How Might We ...

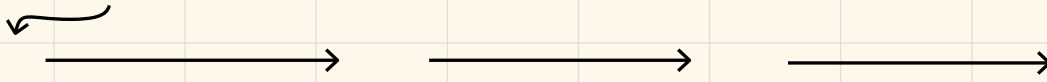
Pull in the HMWs developed earlier and use them to guide the search for past interventions or existing evidence that might help answer these questions.

How might we reduce forgetfulness for caregivers in low-income and refugee communities so that they return to the health center on time for their child's next scheduled routine vaccination after the first dose?

Look and adapt past evidence and interventions

Intervention	Literature review	Adaptation
Postcard reminder to increase influenza vaccination among older adults in the U.S. (Chen et al., 2020)	Targeted older adults (65+) to improve uptake of seasonal influenza vaccines. Barriers addressed included forgetfulness, low salience of vaccination, and lack of prompts. Mechanism: mailed reminders with simple text and a motivational message. Result: modest but statistically significant increase in vaccination rates (-2.9 pp increase).	Could inspire the use of a physical, visual reminder like a paper appointment card in Lebanon. Also, elderly in the U.S. may differ in motivation and literacy levels compared to caregivers in Lebanon. Adaptation must consider literacy and trust in official-looking materials.
Modified postal reminder card to improve measles vaccine uptake (Hawe et al., 1991, Australia)	Targeted parents of children due for MMR vaccination. Barrier: low uptake due to forgetfulness or lack of clear guidance. Mechanism: personalized, color-printed card mailed to households with the child's name and due date. Result: increased vaccine uptake significantly (75% vs. 63% in control).	Reinforces the idea of using a personalized, tangible card to reinforce action. Adaptation in Lebanon must consider caregivers who may have lower literacy or mobility. Instead, cards could be handed out in-person at the clinic.
SMS reminders (Domek et al., 2019, Guatemala)	One-way text reminders were sent before infant immunization appointments. They targeted forgetfulness and improved timely attendance significantly in a rural population.	SMS reminders can be effective but it depends on the capacity and resource constraints of the MoH.
Reminder systems to improve immunization rates in children: A systematic review (Williams et al., 2015, BMJ Open)	Barriers: Forgetfulness, competing priorities, lack of planning cues. Mechanism: Reminder messages. Result: Most reminder systems increased immunization rates, regardless of delivery mode; greatest effect seen when reminders were personalized or multi-modal.	Validates the importance of reminders across formats, including low-cost paper cards. In the case of Lebanon, it might be helpful to know that all reminders could work, but it is important to localize and understand resource and capacity constraints.

The team then applied design provocations and the EAST framework to improve the idea: it was made easier to use by simplifying the language and including visual icons; more attractive through colour and layout; socially reinforced by encouraging caregivers to show it to others; and timed to coincide with critical decision points (e.g. shortly after the initial vaccine).



STEP 2:

Prioritize interventions

In this step:

This step introduces a set of criteria to identify the most promising intervention ideas. Although it's common to recognize the importance of factors such as cost-effectiveness, scalability, and equity, these can be difficult to address during brainstorming sessions. This step provides a structured moment to reflect and make informed decisions. By the end, teams should have a shortlist of 1–3 intervention ideas ready for prototyping and user testing.

Associated tools:

- [Idea Prioritization](#)
- [Ethics Checklist](#)

Why it matters:

Teams often gravitate toward ideas that feel exciting or familiar, even when they are not feasible or aligned to real barriers. Transparent prioritization criteria encourage balanced assessment and prevent investing in costly, hard-to-scale, or misaligned ideas.

Ethics should be a key part of prioritization. At this stage, the focus is on equity and inclusion in design choices to assess whether intervention ideas risk reinforcing stigma, limiting choice, or excluding vulnerable groups. This kind of “design ethics” check ensures that solutions do no harm and actively promote fairness, dignity, and inclusion.

When the process shifts from prioritization to testing ideas in real life, research ethics are introduced to add a further layer. This includes IRB approval, informed consent, safeguarding, and privacy protections — later addressed in detail in the following **Test Hypothesis** chapter.

In this phase, the focus is on prioritizing ideas that are ethically sound in their intent and potential effects; in the next chapter of the DEPTHS process, we ensure that testing those ideas is conducted ethically and responsibly.

How to do it:

1. Prioritize ideas using key criteria

The [Idea Prioritization](#) worksheet walks teams through evaluating each idea against a core set of practical criteria. This includes:

DEPTHS TODDLER

Idea Prioritization Idea name: _____ Total points: ___ / 30

For each intervention, assess it on a scale of 1 (very difficult) through 5 (very easy). Higher scores move on to prototyping.

Criteria	1	2	3	4	5	Why?
Desirability	Intervention and change it encourages are not desired by the community of focus				Intervention and change it encourages are desired by the community of focus	
Ease of behaviour change	Difficult to act on action change				Easy/immediate to act on action change	
Impact of behaviour change	Low impact on desired outcome				High impact on desired outcome	
Measurability	Hard to measure effectiveness				Accurately measure effectiveness	
Cost	Expensive to deploy				Relatively inexpensive	
Scalability	Hard to scale and sustain in time				Existing systems and capacity to scale if proven effective	

- **Desirability:** Will the idea be accepted and valued by the community?
- **Ease of behaviour change:** Is the idea likely to effectively influence the target behaviour?
- **Impact of behaviour change:** Will a change in this behaviour significantly affect the desired outcome?
- **Measurability:** Can the impact of the idea be measured reliably?
Are there credible ways to track effectiveness?
- **Cost:** How resource-intensive is the idea to implement?
- **Scalability:** If successful, can the idea be expanded or adapted to other settings?

a. Create a copy of the **Idea Prioritization** worksheet for each intervention idea from the final list. Write down the name of the idea at the top of the worksheet and assess it across each of the six prioritization criteria listed on the left-hand side. Each criterion should be scored on a scale from 1 (very low) to 5 (very high). The higher the idea's total score, the more suitable the idea is for further development. Table 5 outlines prompts, considerations, and guidance for scoring each criterion, using the reminder appointment card as the example intervention.

TABLE 5: CONSIDERATIONS FOR CRITERIA SCORING

CRITERIA	PROMPT	GUIDE	EXAMPLE
Desirability	Does this idea align with what the community values? Would they want this intervention?	Score higher if the idea feels relevant, respectful, and acceptable to the people affected.	The sticker is likely to be perceived as supportive and relevant. It is non-intrusive, easy to understand, and can be personalized to local preferences.
Ease of behaviour change	How easy will it be for the target population to adopt the intended behaviour?	Score higher if the idea reduces friction, feels simple to act on, or fits into existing routines.	It reduces the chance of forgetting by reinforcing an already intended behaviour. It fits easily into the caregiver's routine and environment.
Impact of behaviour change	If the behaviour changes, will it meaningfully influence the desired outcome?	Score higher for ideas that directly affect key health, social, or behavioural outcomes.	Timely attendance at scheduled appointments directly supports full immunization, improving health outcomes.
Measurability	Can we reliably measure whether this idea is working?	Score higher if the idea includes clear outputs, observable behaviours, or simple metrics.	Impact can be tracked by comparing clinic attendance records for caregivers who receive the sticker versus those who do not.
Cost	Is the idea relatively affordable to implement?	Score higher if it uses existing systems, requires minimal resources, or can be adapted cost-effectively.	The intervention is relatively low-cost and simple to implement using existing staff and systems.
Scalability	Could this idea be expanded to other people, settings, or regions if successful?	Score higher if it is modular, adaptable, or builds on systems that already exist.	The design is adaptable and can be scaled across different locations with minor contextual adjustments such as local language or imagery.

- b. Assign a score to each idea and briefly note the rationale in the “Why?” column to document decisions and support team alignment.
- c. Calculate the total score out of 30 by adding the points across each row. These totals provide a quick snapshot for internal comparison and discussion, helping the team to identify the most promising ideas. However, the scores are not final decisions or endorsements. Before sharing externally (e.g., with the Ministry of Health), ensure prioritized ideas are fully developed and contextually appropriate.
- d. After the discussion, select 1–3 ideas to move forward into the next sub-step: ethics assessment.

2. Ensure the idea is ethical and inclusive

Use the [Ethics Checklist](#) worksheet to assess each prioritized idea against key ethical considerations:

- a. Start with one of the prioritized intervention ideas from the previous step.
- b. Review each prioritized idea and assess whether it meets the ethical standard. For each criterion, indicate one of the following:
 - **Yes:** The idea clearly meets the ethical standard.
 - **Yes, with potential risks to keep in mind:** The idea generally meets the standard, but carries some ethical considerations that should be monitored or addressed.
 - **No:** The idea does not meet the ethical standard, and may need to be revised or reconsidered.

The table below provides guiding questions and prompts to help assess each criterion thoughtfully and consistently.

TABLE 6. ETHICS CRITERIA, PROMPT QUESTIONS AND FURTHER GUIDANCE

CRITERIA	PROMPT	GUIDANCE
Equity and Inclusion	Could this idea worsen existing inequalities or exclude certain groups?	Review whether the idea is equally accessible to people across different income levels, ethnicities, education levels, and abilities. For example, a smartphone-based intervention may exclude caregivers without digital access.
Gender and Power Dynamics	Does this idea reinforce gender stereotypes or imbalances in decision-making?	Consider whether the idea assumes who makes health decisions in the household. For example, targeting only mothers for child health may reinforce norms that exclude fathers or other caregivers.
Intersectionality	Has the idea considered how overlapping identities may shape barriers or experiences?	Reflect on how people may face compounded disadvantages (e.g. young, rural, low-income mothers). If an idea overlooks these intersecting realities, it may unintentionally ignore or marginalize key populations.
Respect for Autonomy and Consent	Does the idea allow people to make informed, voluntary decisions?	Ensure the intervention is not overly coercive or manipulative. For example, social pressure messages should not shame or pressure people into action. Information should be accurate and consent should be respected.
Protection of the Most Vulnerable	Could this idea unintentionally cause harm or increase vulnerability?	Ask whether the idea may put certain individuals at risk. For example, overburdening already stretched community workers, or exposing caregivers to stigma. Ideas should do no harm and ideally reduce vulnerability.
Transparency and Trustworthiness	Is it clear who is behind the intervention and what its purpose is?	People should understand why they are receiving a message or being asked to act. For instance, a reminder message should clearly state that it is from the Ministry of Health or another trusted source, not an anonymous sender.

Note: This ethics checklist is not drawn from a single source. It was developed for this toolkit by synthesizing key principles from UNICEF equity and safeguarding standards, WHO “Do No Harm” guidance, and global HCD practice. The aim is to provide a practical, design-focused ethics lens to help teams assess intervention ideas fairly and inclusively.

- c. Discuss and document reflections. Note where the intervention feels strong, and where it may need adjustment. Capture any actions needed to improve the idea's ethical integrity in the column "Risks and adjustments needed" of the worksheet.
- d. If the intervention raises ethical risks or red flags, this is the moment to rethink its design. Revisions might involve changing the language, delivery method, framing, or format to ensure the idea remains inclusive, safe, and respectful. If multiple concerns arise and cannot be addressed through adaptation, consider either:
 - Reviewing the full list of ideas to choose another alternative, or
 - Seeking advice from an ethics review board before proceeding.⁶
- f. Repeat this process for each prioritized intervention idea.

Keep the following tip in mind when prioritizing ideas:

- **Consider whether this idea can be tested both simply and soon.** Prioritize ideas that are small enough to prototype, but meaningful enough to learn from. If it's too complex to test quickly, consider whether it can be broken into smaller parts.

⁶ For more information, consult UNICEF's internal ethical review policy

CASE STUDY:

Increasing childhood vaccination uptake in Lebanon

This Idea Prioritization worksheet and Ethics Checklist were not developed by the original project team. They are recreated examples based on real project data and context.

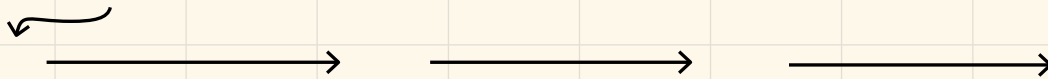
After generating and refining a diverse set of intervention ideas, the team used six criteria: desirability, ease of behaviour change, impact, measurability, cost, and scalability. These criteria helped the team to assess not only how well an idea aligned with the community's needs and preferences, but also whether it could drive meaningful change in a feasible, sustainable way.

Among the shortlisted ideas, one stood out: providing caregivers with a simple appointment card at the clinic with a reminder message of their child's next vaccination. The team rated this intervention highly on **ease** (past evidence on similar interventions showed an effective behaviour change), **cost** (it could be layered onto existing health systems), and **scalability** (it had potential to expand across regions with minimal adaptation). It was also seen as relevant and respectful since caregivers were already used to receiving information this way, and qualitative research suggested they valued simple, visual cues to remember key appointments.

Before finalizing the decision, the team applied an ethical lens, considering equity, inclusion, gender dynamics, and protection of vulnerable groups. While the intervention generally met ethical standards, the team noted a few potential risks: some caregivers might not read, leading to exclusion, and female caregivers might lack decision-making authority. As a result, small but important adjustments were made, such as designing appointment cards with visual cues to support low-literacy caregivers and considering messaging that could be discreet yet encouraging.

With the ethical review complete and behavioural promise confirmed, the team selected the appointment card to move into the next phase: prototyping and testing with caregivers.

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STEP 3:

Prototype, test, and iterate interventions

In this step:

Selected ideas are brought to life by developing prototypes and by testing them with users to gather feedback and inform further refinement.

Why it matters:

Behavioural interventions do not always perform the same way in different settings. Even well-researched ideas may be ineffective or inappropriate when applied in a new context. Prototyping provides the opportunity to explore how an intervention performs, before committing significant time and resources to broader implementation. It also entails hearing the perspectives of decision-makers and those involved in implementing and delivering the intervention.

Importantly, prototyping and testing offer an early opportunity to identify challenges and unintended consequences, such as confusion, resistance, or potential harm. For example, a well-meaning reminder system might unintentionally expose private health information if messages are visible to others. Gathering feedback at this stage helps to refine core features and ensure the intervention is both effective and respectful before moving to implementation.

Associated tools:

- [Prototype Outline](#)
- [Prototype Discussion Guide](#)
- [Prototype Synthesis](#)

How to do it:

Use the [Prototype Outline](#) worksheet to further develop the selected intervention and define what form the prototype will take.

1. Describe the idea clearly

- a. Start with writing a short headline and one-sentence description that explains what the intervention is and what it aims to achieve, without jargon. This helps to ensure the idea is easily understood by all stakeholders.
- b. Next, define the expected reach. Specify the geographical scope (e.g., local, regional, national), including relevant locations or administrative areas. Clarify whether it targets urban, peri-urban, or rural settings, and note any unique constraints or opportunities. Estimate the number of people the intervention will reach, both directly and indirectly.

2. Formulate the intervention hypothesis

The intervention hypothesis ensures that the prototype is informed by behavioural science and focused on solving the right problem.

- a. Begin by reviewing the key outputs from the **Explore & Diagnose** phase, especially the Behavioural Map and Diagnosis and the intervention ideas from Step 1 of this phase. The first task is to clearly define the target micro-behaviour that the intervention seeks to influence. Specify the intended behaviour and what success looks like.

For example: “Increase timely completion of routine childhood vaccinations among under-vaccinated children in areas targeted by Lebanon’s Accelerated Immunization Activities (AIA) programme.”

Revisit the prioritized barriers to ensure refined ideas remain anchored to the most critical ones. Reframe them briefly through COM-B to confirm alignment with behavioural domains (capability; opportunity; motivation). This restatement strengthens the intervention hypothesis by linking ideas to behavioural evidence.

- b. Reflect on how the prototype is expected to shift behaviour, identifying the specific behavioural mechanisms being activated. What exactly about the prototype is expected to work, and why? Consider the following questions:
 - What behavioural levers does this idea pull?
 - Does this idea simplify a complex decision — making it **easy**?
 - Does this idea create social visibility or support — making it **social**?
 - Does this idea capture attention or motivate action — making it **attractive**?
 - Does this idea meet the right moment — making it **timely**?

This step is preparation for the Theory of Change. It helps to move beyond describing the prototype to articulating why it is expected to work.

- c. Take a moment to consider why this idea might work well in this setting. Does this idea build on familiar routines, trusted relationships, or existing habits in the community? This quick check-in helps to ensure that the idea is not only smart on paper but makes sense in people's real lives.

3. Materialize the idea

Once the idea is clearly defined, the next step is to make it tangible:

- a. A prototype is a low-cost, preliminary version of an intervention that users and stakeholders can see, hold, act out, or experience. A prototype could take many forms depending on the nature of the intervention. Table 7 outlines a non-comprehensive set of prototype types, each useful for exploring different dimensions of the intervention. Choose a format that lets people experience the idea and generate useful feedback.

For example, the appointment card was tested as a paper mock-up: a simple, non-functional version used to check layout, wording, and user reactions before full production.

(Continues on next page)

TABLE 7. TYPES OF PROTOTYPES

TYPE OF PROTOTYPE	DESCRIPTION	EXAMPLE	USEFUL FOR
Storyboards	A series of illustrated panels or sketches that show a user moving through a scenario or using a product or service.	Illustrating a caregiver’s journey to a health centre after receiving a vaccination reminder.	Visualizing user journeys, identifying gaps in service experience.
Role-playing	Acting out a scenario to understand how a user might interact with a product or service.	Simulating how a health worker might deliver a new message during a household visit.	Testing emotional reactions, tone, and flow of interpersonal experiences.
Paper Mock-ups	Hand-drawn or printed paper versions of interfaces, forms, or layouts.	Designing a prototype of a new registration form for caregivers at clinics.	Testing layout preferences, wording clarity, and ease of use.
Physical Models	Tangible models made from simple materials like cardboard or clay to simulate a physical product.	Creating a model of a new waiting area layout to test navigation and comfort.	Testing navigation, user behaviour in physical spaces, and believability.
Experience Prototypes	Simulating how a person might experience the intervention in a real or semi-real environment.	Setting up a mock clinic experience to test signage and service flow.	Testing emotional engagement, environment design, and implementation details.
Concept Videos	A short video that explains how an idea works and what problem it addresses.	Demonstrating how a community referral network would support vaccine follow-ups.	Communicating complex ideas clearly and gathering feedback across stakeholders.
Service Blueprints	A map of the service delivery process, highlighting key touchpoints, roles, and backstage systems.	Visualizing the coordination between outreach teams and PHC staff in delivering services.	Understanding system-level interactions and identifying operational gaps.
SMS or Message Scripts	Draft versions of reminder messages, invitations, or follow-ups delivered via SMS, WhatsApp, or paper.	Testing tone and clarity of vaccine reminder messages with different caregiver groups.	Refining message content and timing; testing comprehension and response.

- b. Prototypes can vary in level of fidelity (i.e., how closely they resemble the final version). The following table outlines levels of fidelity for different interventions.

TABLE 8. FIDELITY LEVELS OF A PROTOTYPE

PROTOTYPE FIDELITY	DESCRIPTION	EXAMPLES
Low-fidelity	A rough, conceptual representation of the idea. Drafts are hand-drawn, mocked up with basic tools, or role-played. Useful for testing broad appeal, clarity, or basic usability before investing effort.	<p>Programming: A flowchart drawn on flipchart paper with sticky notes to show how a new referral pathway might work, tested with a small group of CHWs.</p> <p>Digital: A series of phone screenshots mocked up in PowerPoint or Figma showing draft SMS or WhatsApp reminder messages (not functional yet).</p> <p>Training: A draft script of a respectful counselling session read aloud by facilitators, with peers role-playing caregivers to give feedback on tone.</p> <p>In-person tool: Hand-sketched illustrations for a flipchart or counselling aid, with placeholders (“picture of caregiver here”) to test resonance before commissioning real graphics.</p>
Medium-fidelity	A more polished version that includes real content, visuals, or partial functionality. Drafts still carry “work in progress” elements but are realistic enough for users to interact with.	<p>Programming: A small trial of the referral pathway in one clinic, using photocopied draft registers to test how cases are tracked across services.</p> <p>Digital: An interactive demo of a WhatsApp chatbot with a simple decision tree, tested with 10 caregivers to see if the conversation flow makes sense.</p> <p>Training: A half-day pilot of a draft training module with frontline workers, using slide templates and draft job aids to test content relevance and pacing.</p> <p>In-person tool: A laminated draft flipchart or card-sorting activity tested with a small group of caregivers, including draft visuals and language, but not the final design.</p>
High-fidelity	A nearly final version that closely mirrors the intervention as it would be implemented. Drafts are complete in form and function, though still piloted on a smaller scale before scale-up.	<p>Programming: A fully integrated referral system piloted across several districts, with finalized registers, official protocols, and supervisory tools.</p> <p>Digital: A functioning SMS reminder system linked to live clinic scheduling, piloted with real caregivers receiving and responding to messages.</p> <p>Training: The full finalized training package delivered to health workers with printed materials, digital slides, and trained facilitators, evaluated across multiple sessions.</p> <p>In-person tool: A finalized counselling flipchart or facilitation kit with professional graphics, tested in community meetings by trained staff, with structured observation of use.</p>

4. Plan the prototyping process

- a. In the **Prototype Outline** worksheet, begin by identifying and deciding with whom the idea should be tested and fill in the corresponding section.

A strong prototype gathers input from the people who matter most to the intervention's use, delivery, and long-term success. These typically fall into three key groups:

- **End-users** (e.g., caregivers, community members): Can it work in their daily lives?
- **Deliverers** (e.g., health staff, teachers): Is it practical and acceptable for them to implement?
- **Decision-makers and long-term implementers** (e.g., programme managers, policy leads): Does it align with systems and priorities for scale?

Not all groups need to be engaged at once. Early testing should prioritize end-users, who can help assess whether the idea is clear, useful, and desirable in daily life. Based on what is learned, the idea may evolve — through small changes in design, format, or delivery- to better meet people's needs. As the concept is refined, deliverers can test feasibility in service settings, while decision-makers can weigh in on system alignment and scale-up potential. For example, when testing a vaccine appointment commitment card:

- Ask end-users, such as caregivers, if it helps them to remember and feel more confident about upcoming visits
- Ask deliverers, such as nurses, if it's easy to explain and distribute during appointments
- Share early results with implementers such as immunization managers to discuss how it might be integrated into routine systems.

Test prototypes with people of different genders, ages, socioeconomic backgrounds, and languages to reflect population diversity and capture how these factors shape experience and use.

- b. Next, define the geography and reach of the proposed intervention. Use the “Where must we prototype?” section of the **Prototype Outline** worksheet to identify a suitable testing location.

Choose a prototyping location that reflects real-world conditions while allowing for manageable testing and iteration. Look for a site that is:

- **Relevant to the behavioural challenge:** A location where the target behaviour occurs often and key barriers have been observed.
- **Similar to the final implementation context:** This ensures that the insights gathered during testing will apply more broadly to implementation of the intervention.
- **Logistically feasible:** Accessible to the project team, with support from local partners and existing infrastructure.

For example, if the intervention involves testing a commitment card for caregivers to confirm and remember their child's next vaccine appointment, a suitable prototyping location might be a peri-urban clinic in the priority area. Such clinics already handle high volumes of immunization visits and face challenges with caregiver follow-through, making them appropriate for observing the target behaviour. Engaging both caregivers and health workers in this setting generates relevant insights, regular feedback, and practical opportunities for iteration.

5. Determine how success will be measured

Before testing begins, define a clear and simple learning plan to assess whether the prototype is as intended. Use the “How will we know if it’s working?” section of the **Prototype Outline** worksheet to document both indicators and evidence: what success looks like, and how that success will be observed.

- a. Start by identifying 2–3 observable indicators that reflect the prototype’s intended effect on the target micro-behaviour. Avoid vague language such as “users liked it” or “participants were confused by the message.” Instead, define specific, measurable signals that show whether the prototype is prompting the desired action.

Example: If testing a commitment card for vaccine appointments, avoid vague success criteria like “caregivers understood the reminder card.” Instead, consider the following:

- “80% of caregivers correctly stated the appointment date without being prompted”

- “3 out of 4 caregivers signed the card and placed it in their personal bag or health booklet before leaving”
- “75% of caregivers report being able to explain the card’s purpose in under one minute, without confusion”

Whenever possible, compare prototype performance to baseline practice to clarify what is changing and whether those changes are meaningful.

- b. The next step is to gather feedback on whether the success indicators are being met. Use a mix of verbal, nonverbal, social, and behavioural cues to assess how the prototype is performing in real-world conditions. Where possible, prioritize direct observation over self-report. Early testing isn’t about proving impact but about spotting patterns and making quick adjustments before scaling. Use Table 9 below to guide what to look for, when to collect it, and how to document it:

TABLE 9. WAYS TO GATHER FEEDBACK DURING TESTING

EVIDENCE TYPE	WHAT TO LOOK FOR	WHEN TO COLLECT	HOW TO CAPTURE IT
Verbal feedback	What participants say about the prototype — what makes sense, what’s confusing, what’s useful or not	Immediately after use (e.g. post-interaction or exit interviews)	Use short feedback forms, informal interviews, or audio recordings. Prompt with open-ended questions like “What did you think of this?” or “Was anything unclear?”
Nonverbal reactions	Body language, hesitation, excitement, frustration — signals that may not be spoken	During interaction with the prototype	Use observation checklists or field notes to track facial expressions, pauses, tone, or fidgeting. These cues often reveal emotional responses more clearly than words.
Social cues	How group dynamics affect use — copying others, seeking validation, deferring to authority	During group or public testing situations	Assign an observer to note if participants look to peers before acting, mimic others, or ask “What are others doing?” Use team reflections or debrief sheets to record social influence patterns.
Object interactions	How people physically engage with the prototype — do they use it, discard it, ask for help?	During and immediately after prototype use	Use tally sheets or photo logs to track use patterns: Is the object handled confidently? Is it returned, reused, or thrown away? Are instructions followed?

Using the caregiver commitment card as an example, the team can assess indicators across all four evidence types:

- **Verbal feedback** – Ask caregivers: “What does the card remind you to do?”; “Was anything on the card unclear?”. If many cannot explain its purpose or misinterpret it, this signals a gap in clarity or usefulness.
- **Nonverbal reactions** – Watch for: Signs of confusion (e.g., furrowed brows, hesitation to accept or sign) and confidence (e.g., nodding, smiling, quick understanding). If caregivers seem unsure, require repeated explanations, or show visible discomfort, the design may need adjustment.

- **Social cues** – In settings with multiple caregivers, note if caregivers watch others before signing or ask peers “What did you do with yours?”. This may suggest the card’s use isn’t intuitive or that peer behaviour influences uptake.
- **Object interactions** – Observe whether caregivers: sign the card, keep it, or discard it after receiving; ask where to store it or return it to staff; or refer back to it during the visit or later appointments. These cues help to reveal whether the card is perceived as valuable or just another handout.

Document all observations (comments, expressions, peer behaviours, object use) in the “How will we know if it’s working?” section of the Prototype Outline worksheet. This clarifies what the team will track to assess whether the prototype is effective or needs refinement before rollout.

6. Conduct user testing and iterate on the prototype

The next step is to test with real users in real settings.

- a. Start by defining the user testing methods. Field testing can take many forms depending on the intervention, the prototype’s fidelity, learning goals, and available resources. It can range from informal conversations with a few users to structured sessions with partners. A range of helpful resources exist to support this phase, such as the IDEO Org Design Kit, which provides guidance on rapid prototyping and field testing.

Using the caregiver commitment card as an example, testing could begin with informal walkthroughs, where caregivers are shown the card immediately after booking their appointment. The facilitator might ask simple, open-ended questions such as: “Would this be helpful to

you?” or “What would you do with this card after leaving the clinic?” The goal is to understand first impressions and emotional reactions.

The team might then use observation (i.e. discreetly watching whether caregivers keep the card, refer to it, or ask clinic staff about it). If there are different versions of the card (e.g., one featuring a photo of the child, another with the clinic logo), parallel testing, known as A/B testing, could be used to compare preferences and engagement.

TABLE 10. USER TESTING METHODS

USER TESTING METHOD	WHAT IT IS	WHEN TO USE IT	WHAT IT HELPS TO LEARN
Informal walkthroughs	One-on-one conversations with users, showing or explaining the prototype, and asking follow-up questions.	Early stages, when testing low-fi prototypes and getting quick gut reactions.	First impressions, clarity, and emotional response.
Role plays or simulations	Acting out how the intervention would be used in context, often with implementers or end-users.	When testing interpersonal or service-based interventions (e.g. counselling, group activities).	Feasibility, flow, user experience, and delivery challenges.
Parallel testing (A/B testing)	Presenting multiple versions of a prototype to compare reactions side-by-side.	When choosing between different formats or message framings.	Preferences, usability, and comparative appeal.
Small group discussions	Guided feedback from a few users after trying or reviewing the prototype.	When deeper insights are needed into perceptions, or social norms.	Acceptability, contextual fit, improvement ideas.
Observation-only testing	Watching users interact with the prototype without prompting or guiding them.	When the prototype can be physically used, read, or navigated by the user, or to test usability in context and observe unbiased reactions.	Natural engagement, confusion, hesitation, or errors.
Lightweight pilots	Testing a simplified version of the intervention in a real-world setting over a few days or weeks.	When a high-fi prototype needs feedback in situ.	Actual use patterns, sustained engagement, and unintended effects.
Implementer dry runs	Implementers or frontline workers rehearse delivering the intervention in a mock or low-stakes setting (e.g. practice counselling session or community talk).	When testing how easy the intervention is to deliver and whether instructions or tools are clear.	Practical delivery issues, time burden, and clarity of guidance.

- b. Develop tools to guide testing sessions (e.g. discussion guides, observation plans, or dry run checklists) tailored to method, depth of engagement, and prototype fidelity.

For walkthroughs, group discussions, or pilots, a structured discussion guide helps facilitators stay focused while encouraging open feedback. The [Prototype Discussion Guide](#) worksheet provides a useful starting point, with prompts such as:

- **Introducing the purpose of the test and setting expectations:** Welcome participants, explain the session, emphasize feedback is valued and confidential, and seek consent.

- **Identifying points of confusion, resistance, or friction:** Revisit previously identified behavioural barriers and confirm whether they still feel relevant. Surface any new challenges that may have emerged.
- **Walking users through the prototype and gathering reactions (e.g., usefulness, clarity, fit):** Walk through each prototype, gather initial reactions, and explore clarity, usefulness, concerns, and suggestions for improvement.
- **Surfacing ideas for improvement or refinement:** Prompt participants to reflect on which ideas are most and least useful, and what could be changed to improve them.

This worksheet does not need to be used in its entirety or exactly as-is. Instead, adapt it by selecting the most relevant questions for the prototype method and learning goals.

For observational methods, such as watching users interact with a prototype or conducting implementer dry runs, the same core questions can be translated into simple note-taking templates or observation checklists. These help to systematically capture key behaviours and reactions, even when participants aren't speaking directly.

- c.** To ensure ethical and effective testing, consider the following when rolling out the user testing:
- Obtain informed consent from all participants using a simple informed consent form or verbal script (depending on context and literacy levels) to formalize this process.
 - Avoid putting people in situations where they may feel judged, embarrassed, or coerced. To reduce this risk, keep these suggestions in mind:
 - Avoid testing in group settings if the prototype involves sensitive topics or personal experiences
 - Maintain a sense of neutrality in facilitation, by avoiding praising or correcting participant behaviour
 - Design neutral scripts and tools that don't imply a "right" or "wrong" response
 - Let participants interact freely, without pressure to perform a certain way
 - Avoid recording names or identifiable information, unless absolutely necessary
 - Ensure that the prototype is safe and appropriate for the context.
 - Debrief as a team immediately after testing to capture fresh insights.

- d.** After each round of user testing, synthesise what was learned. Use the [Prototyping Synthesis](#) worksheet to document the main takeaways.

Start with raw notes or observation logs from the test session(s). Review what people did, said, or showed through body language. Next, reflect on the overall direction of the intervention and respond to the following questions:

- What shows the idea aligns with its original purpose? Reflect on whether users understood the idea in the way it was intended. This helps to assess if the prototype is delivering on the behavioural hypothesis.
- What suggests the idea could lead to the intended behaviour change? Look for signals in what users say about ease, usefulness, or the likelihood of follow-through.
- What indicates the idea is addressing a specific barrier? Capture any evidence that the idea is helping to overcome the identified COM-B barrier: making something clearer, easier, more motivating, or more accessible.

At this stage, answers are tentative. Rapid testing can show whether an idea is promising or problematic, but only rigorous evaluation can confirm impact

- e. Next, fill out the key changes that emerged from prototyping:
- **Keep:** Elements that worked well and should remain unchanged
 - **Improve:** Elements that caused confusion, hesitation, or friction
 - **Drop:** Elements that didn't land, were misunderstood, or introduced risks
 - **Add:** Missing elements or ideas that could strengthen the intervention
- f. Next, iterate on the prototype to refine it. Iteration is the step where the prototype is improved based on what was learned during testing. This could mean rewording messages, changing visuals, adjusting how it's introduced, or tweaking delivery materials or scripts. In some cases, it may also mean dropping an idea altogether if it doesn't perform well, or creates confusion, discomfort, or ethical concerns.
- g. Once the revised version is ready, return to the field for another round of testing. There is no universal number of testing rounds that applies to all prototypes. However, at least two rounds of user testing are usually recommended, as outlined below:
- Initial testing of the early prototype to assess usability, relevance, and initial reactions.
 - Follow-up testing after revisions to confirm whether changes improved performance and resolved earlier issues.

Additional rounds may be required depending on three criteria:

- **Confidence in performance:** If users still struggle to understand, accept, or use the prototype as intended, continue testing until feedback is consistently positive.
- **Complexity of the prototype:** The more complex the prototype, the more testing cycles are likely needed.
- **Range of use cases:** If the prototype will be used across multiple contexts or audience segments, test with representatives from each group.

- h. Document each version, the changes made, and their impact. This informs future adaptation or scale-up. Each round can be small (5–10 users per segment), as long as sessions are focused and well-facilitated. Continue testing until repeated sessions stop generating insights.

Consider the following tips when prototyping and user testing ideas:

- **Have a “Prototype teammate” to observe what may be missed.** Even the best facilitators miss things in the moment. Assign a team member as a silent observer during testing sessions. Their only job is to take notes on non-verbal cues (e.g., hesitation, confusion, surprise) and moments when users deviate from expectations. This adds valuable perspective during synthesis, especially on usability and friction points.
- **Label each prototype version with a unique code.** Avoid confusion when iterating. Use a versioning system (e.g., “CHW job aid v2.1 – photo icon layout”) on every prototype. Include the version and the key change it contains. This makes it easy to track what was tested, how it performed, and what changed in the next round.
- **Always test how it's introduced, not just the tool itself.** A prototype's success often hinges on how it's explained, handed over, or framed by implementers. During testing, observe not only how users react to the tool, but also how it's introduced. If frontline workers are unsure how to explain it, the tool may never land. Treat the handover moment as part of the prototype, and test it just as rigorously.
- **Validate the quieter voices.** Outspoken participants often dominate group testing. To ensure everyone is heard, include a “silent feedback” moment—for example, ask participants to mark parts of a paper prototype they like or dislike using stickers or symbols, before discussion starts.

CASE STUDY

Increasing childhood vaccination uptake in Lebanon

The Prototype Outline, Prototype Discussion Guide, and Prototype Synthesis were not developed by the original project team. They are recreated examples based on real project data and context.

After shortlisting intervention ideas using prioritization and ethical criteria, the research team in Lebanon moved into the prototype phase. The idea selected for development was a paper-based appointment card, a simple tool designed to help caregivers remember their child's next vaccination date and return on time.

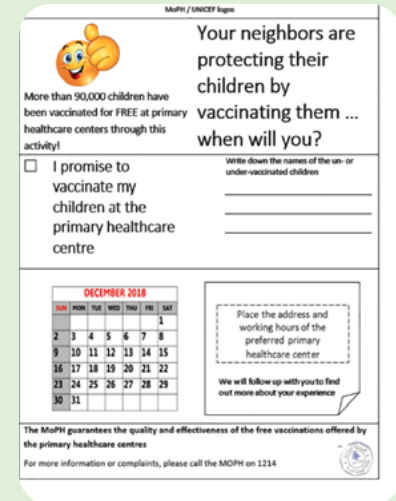
Developing the prototype

To begin, the team created a prototype outline. The intervention aimed to address specific barriers identified among caregivers in the AIA programme, particularly forgetfulness, cognitive overload, and a lack of clear guidance on when to return for the next dose.

The prototype outline clarified the intended behaviour (caregivers returning on time for the next vaccination), the expected mechanisms (enhancing memory and planning, creating a physical cue), and the motivation for its likely success (it was simple, tangible, and could fit naturally into existing caregiver routines). The prototype's

reach was defined as health centres serving Syrian and Lebanese families across low-resource settings.

The team then developed a low-fidelity version of the appointment card (see on the right). This minimalist design was intentional, as it was easy to reproduce, inexpensive, and allowed the team to test core elements before investing in a more polished version.



DEPTHS TOOLKIT

PROTOTYPE DESIGNS

Fill out this worksheet for each idea we will prototype with the community.

Idea name and description:

Visual planning aid: A simple appointment card is given to caregivers after their child's vaccination, followed by personalized SMS reminders before the next scheduled visit to prompt timely return.

Idea reach.

This intervention targets caregivers living in Syrian refugee settlements and surrounding communities in Lebanon served by the Ministry of Public Health (MoPH) through the AIA program. Initial testing will take place in selected primary health centers (PHCs) within those areas.

Make it real.

A low-fidelity version of the physical appointment card. A small, colorful, wallet-sized card that shows the date of the next visit, the child's name, and clinic information. Will also prepare sample SMS messages to be read aloud or displayed, mimicking the reminder caregivers would receive via mobile phone a few days before the appointment.

Intervention hypothesis

What key barriers do we believe this idea solves for?

- **Capability:** Caregivers may forget the date or lose track due to competing demands.
- **Opportunity:** There may be no consistent system prompting return visits or cues to plan ahead.
- **Motivation:** Without reminders, the perceived urgency or importance of a second or third dose may fade, especially when immediate symptoms aren't present.

What mechanisms will the idea use to address the barriers?

- **Memory and planning prompts:** The card offers a tangible reminder; the SMS message acts as a timely nudge.
- **Cognitive ease:** Dates and steps are made clearer and visually marked.
- **Commitment cue:** Receiving a card and SMS encourages follow-through.
- **Social reinforcement:** Messages reference the health center and are framed as caring prompts from health workers.

What is the specific behaviour we want to see change? What does success look like?

What is the specific behaviour we want to see change? Caregivers return to the health center on time for their child's next scheduled routine vaccination, after the first dose has been administered.

What does success look like? An increase in the proportion of caregivers returning for the next vaccine dose within the recommended time frame (e.g., within 28 days for multi-dose schedules).

Why might this work for the community?

This idea builds on existing routines at PHCs and taps into caregivers' desire to do the right thing for their child's health. It leverages low-cost, familiar tools (i.e., paper cards and SMS) which are trusted and commonly used. Additionally, it aligns with local preferences for clear guidance and friendly follow-up from health workers.

Prototype planning

Who do we need to speak with to test the idea?

- **Use it:** Caregivers (primarily mothers) bringing children for their first vaccine dose at PHCs.
- **Administer it:** Health workers (nurses or registration staff) who explain and distribute the card, and MoPH staff coordinating SMS reminders.
- **Sustain it:** MoPH immunization program managers and NGO partners supporting the AIA program, who can maintain systems for reminder messaging and card printing.

Where must we prototype?

- Clinic settings, especially during routine immunization days.
- Waiting areas, where the card can be introduced before leaving.
- Home environments (indirectly), where the SMS will be received and potentially prompt discussions with family members or planning.

How will we know if it's working?

- **Verbal reactions:** Do caregivers express understanding and appreciation of the card/reminder?
- **Nonverbal cues:** Do caregivers keep the card, smile, or nod while receiving it?
- **Social signals:** Are caregivers discussing it with others in the clinic or family at home (self-reported)?
- **Behavioural follow-through:** Do caregivers return on or near the scheduled date? Do they mention receiving the reminder?

User testing the prototype

To ensure the card was usable and acceptable, the team conducted informal walkthroughs with caregivers in simulated clinic settings. Using a structured guide, they captured first impressions, emotional responses, and concerns.

Caregivers rated the prototype (green = works, yellow = might work, red = won't work) and explained why. Conversations explored what they liked, what confused them, who the card would help, and how it could be improved.

PROTOTYPE DESIGNS TH S DEPTHS TOOLKIT

Prototype Discussion Guide Template

Use this guide and these questions as a starting point for prototype user testing sessions, such as individual or group discussions.

Introduction

Hello and thank you so much for taking the time to speak with us today. We're a research team working with the Ministry of Public Health and UNICEF to improve child vaccination services in your community. Today, we're sharing a few ideas to get your feedback. We want to learn from you—what works, what doesn't, and how it could be better. There are no right or wrong answers. Your opinion really matters, and everything you share will be kept private. We may take notes or photos of the materials (not of you) to help our team remember the feedback. Please feel free to say no to anything you're uncomfortable with. To start, could you tell us your name and something about your child or your last visit to the health center?

Test ideas

(Show the physical prototype of the appointment card and walk the caregiver through it.)

Now, let's look at this card. Imagine you just received it after your child's vaccination appointment. It tells you when to come back next time.

Please rate this idea:

- Red = this will not work
- Yellow = this might work
- Green = this will work

Questions to explore:

- Why did you vote that way?
- What do you like about this idea?
- What would be difficult or confusing about using this?
- Who do you think would benefit the most from this? Who might be left out?
- How would you use this card at home? Would you remember it?
- What might make this card more helpful? (e.g., color, reminders, stickers, photos, etc.)
- Is there something else your community does to remember vaccine dates?
- What should we keep in mind if we try this idea in your community?
- If this card were used in your community next month, what change would you expect to see?

Prioritize features

- If you had to keep one key feature of the intervention, which one would it be? Why did you select this feature?
- If you had to remove a feature, which one would it be? Why?

Barriers

We heard earlier that people sometimes forget their vaccine date or don't receive reminders. Does that feel true for you? Are there other reasons it's hard to come back for vaccines?

Conclusion

Thanks again for sharing your thoughts. Your feedback is helping us improve this idea before anything is finalized or scaled. We'll use what we've learned today to make this better and test it with more people. Any final questions or thoughts?

Key feedback and iterations

Feedback was largely positive. Caregivers valued having the date written down and said it created a sense of “appointment obligation,” making the visit feel more official.

At the same time, the testing revealed specific opportunities for refinement:

- **Keep:** handwritten date, health centre stamp/logo, simple layout, verbal explanation from staff
- **Improve:** card durability (lamination/sleeves), standardize icons for low-literacy users
- **Drop:** overly clinical or generic designs that felt impersonal and easy to ignore
- **Add:** stickers or child symbols to differentiate siblings' cards and engage children

This feedback was documented using the **Prototyping Synthesis** worksheet and directly informed improvements to the card.

These changes helped increase the card's relevance, usability, and resonance with both caregivers and health workers, building a stronger foundation for testing at scale.

Prototype Synthesis

After prototyping, use this worksheet to synthesise feedback received. Use one sheet per idea.

Idea name: _____

What shows whether the idea aligns with its original purpose?

Caregivers understood that the card indicated when to return to the clinic and saw it as a reminder tool. Many referred to it as "the paper that tells me when to come back," showing alignment with its intended use as a commitment and cue for follow-up.

What suggests the idea could lead to the behaviour change we're aiming for?

Several caregivers said they would "keep it in a safe place" or "stick it to the fridge" and mentioned they liked having something official to remind them. Some explicitly said it would help them remember the date without needing to ask again, suggesting improved follow-through.

What shows the idea is addressing a specific barrier?

The card directly addressed memory barriers (psychological capability) by offering a visible cue, and motivation barriers by formalizing the next visit as an appointment. The health worker stamp and handwritten date made it feel more legitimate and harder to ignore.

Key changes that emerged from prototyping

Keep

- Handwritten date: Felt personal and authoritative.
- Health center stamp or logo: Increased legitimacy and trust.
- Simple format: Easy to read and carry.
- Verbal explanation from health worker: Strengthened clarity and perceived importance.

Improve

- Card durability: Thin paper risked being damaged; some suggested laminated versions or plastic sleeves.
- Visual icons: Where used, visuals were helpful but inconsistent; standardizing could boost clarity for lower-literacy users.

Drop

- Overly clinical design: A few versions looked too generic or formal and failed to catch attention – especially when visuals were missing

Add

- Sticker or symbol for child: Some caregivers suggested adding a sticker with the child's name or a symbol to help siblings tell cards apart.



STEP 4:

Theory of Change

In this step:

As the process moves from prototype to evaluating a pilot, it is essential to clarify the logic behind the intervention. How is the intervention expected to shift behaviour, and contribute to the broader outcome articulated during the Define phase? This requires a practical and evidence-informed Theory of Change (ToC), which includes the following:

- actors involved
- needs and barriers identified
- proposed activities
- how these factors are expected to produce changes in behaviour and outcomes

The Theory of Change serves two core functions:

- **Internal clarity:** Ensuring alignment within the team on how the intervention works and what success looks like
- **External alignment:** Helping funders, partners, and decision-makers quickly grasp the rationale and pathway to impact

Associated tools:

- [Theory of Change](#)

Why it matters:

A ToC is a practical tool that helps teams to clearly map out **how** an intervention is expected to create change — inking activities to targeted behaviours and intended outcomes. Done well, the ToC tells us the mechanisms behind change. A strong ToC communicates:

- The specific behaviour being shifted
- Why this intervention will work in this context —the mechanisms it activates, such as trust, self-efficacy, or social influence
- What assumptions are being made and where the risks are

A ToC helps to move beyond a checklist of activities — serving a purpose beyond donor reporting. Instead of simply linking inputs to outputs, it lays out the logic of change: what needs to shift, in what order, under what conditions, and through which underlying psychological or behavioural mechanisms. This helps avoid “mechanical” design that skips over real drivers of behaviour.

Example of a weak or “mechanical” ToC: If we train community health workers, then immunization rates will increase. This skips over the “how.” It does not specify which behaviours need to change (e.g., caregivers overcoming hesitancy, CHWs consistently conducting follow-ups), nor does it identify the mechanisms that training is meant to activate (e.g., building trust, shifting norms, improving self-efficacy). Without this detail, the causal pathway is incomplete and risks overlooking the real bottlenecks to behaviour change.

Example of a stronger behavioural ToC: If we equip CHWs with empathetic listening techniques and tools to address caregivers’ fears about side effects (activity), then caregivers will feel more understood and confident in their decision (mechanism: building trust and self-efficacy). With regular, trusted follow-up through community visits (activity), caregivers will also perceive vaccination as a community norm (mechanism: social influence). Together, these shifts increase the likelihood that caregivers return for all doses (behaviour), leading to higher completion of immunization schedules (outcome).

Many interventions succeed only if prerequisites are in place (e.g., trust built first, reliable resources, social approval). A good ToC makes these dependencies explicit so the logic reflects how change is likely to happen in practice.

The ToC is a living document that can be revisited and adapted over time. It provides the foundation for monitoring and evaluation in later phases, and helps spot gaps, risks, or ethical concerns before they emerge. It creates a shared map of how change is expected to happen, making assumptions explicit and clarifying pathways for the team and partners.

How to do it:

Each of the following sub-sections corresponds to a component of the [Theory of Change](#) worksheet, which helps to formalize the core logic of the intervention and prepares it for piloting or evaluation.

1. Identify the actor

- a. Start with the first column on the [Theory of Change](#) worksheet by identifying the key actors — the individuals, groups, or institutions whose involvement will determine whether the intervention succeeds. This includes:
 - **End-users:** Those who will directly experience the intervention (e.g., caregivers, adolescents, community members)
 - **Deliverers:** Those responsible for carrying out the intervention on the ground (e.g., health workers, outreach staff, educators)
 - **Implementers or decision-makers:** Those who influence, approve, or sustain the intervention over time (e.g., programme managers, local leaders, government officials)
- b. For each actor, go beyond listing names or roles, asking “What does this actor need to do differently for the intervention to succeed?” For example:
 - End-users, such as caregivers, may need to act on follow-up reminders and attend scheduled visits
 - Deliverers, such as health workers, may need to introduce new tools or adopt a different counselling approach
 - Implementers, such as programme managers, may need to allocate time, staff, or political will to support the intervention at scale
- c. Note any actors who may block or slow progress. Consider:
 - Are there individuals with veto power who are not yet supportive?
 - Do any actors have conflicting priorities or incentives?

2. Define needs and key barriers

Next, use the second column of the worksheet to capture the behavioural barriers that the intervention is designed to address. This section should draw from the behavioural mapping and diagnosis completed during the **Explore & Diagnose** phase.

The [Prototype Outline](#) also contains a summary of those barriers — updated prior to testing — and can serve as a primary starting point. Revisit the needs and barriers documented, refining the barriers based on what was learned during prototype and testing. Have any become more or less important based on user feedback? Did any new barriers emerge during testing?

Record these key barriers in the second column of the worksheet. Focus only on the barriers that this intervention is directly trying to address, rather than the full set identified during earlier research. To structure the barriers in this section, apply the COM-B framework:

- **Capability:** e.g. gaps in knowledge, limited confidence, or unclear information
- **Opportunity:** e.g. time constraints, geographic access, social influence, or service availability
- **Motivation:** e.g. underlying beliefs, emotions, priorities, or habits

3. Clarify resources and implementation conditions

List the resources and conditions needed for the intervention to succeed in the third column of the worksheet. These may include:

- **Human resources:** e.g., trained health workers, peer mobilizers, supervisors
- **Materials and tools:** e.g., commitment cards, mobile phones, printed job
- **Delivery requirements:** e.g., airtime or data subsidies, transport for outreach staff
- **Enabling factors:** e.g., political support, integration with existing programs, community trust in frontline workers, or heightened public urgency due to a recent outbreak

Be sure to flag any critical dependencies or risks. For example:

- “This approach only works if mobile data is subsidized.”
- “In order to use CHW time, Ministry approval is required.”
- “Community gatekeepers must approve the intervention.”

While some of these elements may have been noted and discussed earlier, this is the moment to consolidate them in one place. Capturing them clearly ensures that everyone understands the conditions needed for success, along with highlighting what may need to be secured before moving toward scale or evaluation.

4. Outline the intervention activities

In the fourth column of the worksheet, describe the specific actions your team will implement to address the priority barriers identified. They form the operational core of your intervention and set the stage for both implementation and evaluation. Each activity should be:

- Directly linked to a behavioural barrier
- Explicitly tied to a mechanism of change (e.g., reminders, planning prompts, trusted messengers, simplification, incentives). For example:
 - If caregivers forget appointments (capability barrier), the activity might be sending SMS reminders tied to clinic dates (mechanism: salience + memory aid).
 - If CHWs feel unsure how to address hesitancy (motivation + capability barriers), the activity might be interactive training with role-play and tailored job aids (mechanism: self-efficacy + trusted messenger).
 - If clinic flow is overwhelming (opportunity barrier), the activity could be restructuring the waiting area to allow for quieter one-on-one discussions (mechanism: reducing friction + enabling supportive environment).

This section should explain not only what will be done, but why it's expected to influence behaviour, grounding each activity in both practical logic and behavioural insight. Use this checklist to pressure-test your activities:

- Is each activity clearly tied to a specific barrier?
- Do we understand the behavioural mechanism it activates?
- Is it feasible with current resources and systems?
- Is there any evidence (local or global) that it could work?
- Is it acceptable to those delivering and receiving it?

5. Psychological/Behavioural Mechanisms

The fifth column is the core of the Theory of Change in a behavioural science project. It explains *why* the intervention is expected to work, by identifying the underlying psychological or behavioural mechanisms that act as levers of change. These mechanisms connect the designed activities to the expected shifts in behaviour, making the causal pathway both clear and testable. Without this step, the Theory of Change risks becoming a standard input-output chain, rather than a behavioural science tool.

Each activity should be tied to one or more mechanisms of change, such as:

- **Self-efficacy:** increasing people's confidence that they can perform the behaviour
- **Social norms:** signalling that others in their community value or practice the behaviour

- **Habit formation:** reinforcing small, repeatable actions until they become automatic
- **Trust:** strengthening belief in the credibility and intentions of the messenger or system
- **Reduced cognitive load:** making the desired behaviour easier by simplifying choices or reducing mental effort
- **Salience:** drawing attention to the behaviour at the right moment, making it difficult to ignore

For example:

- SMS reminders work because they reduce cognitive load (people don't have to remember the date themselves) and increase salience (the message arrives close to the appointment).
- Interactive CHW training strengthens trust (caregivers perceive health workers as credible) and builds self-efficacy (CHWs feel confident responding to hesitancy).
- Restructuring clinic flow reduces friction (opportunity barrier) and creates supportive one-on-one interactions, which foster trust and social support.

These mechanisms also provide a clear basis for testing during piloting and later evaluation, making it possible to assess whether they were activated as intended; if not, the design can be refined.

6. Define the outputs

In the sixth column of the worksheet, list the immediate, observable results of the intervention activities. These are not behaviour changes but the short-term signals that show whether the intervention is being delivered and used as intended, providing early clues that it may be on the right track. Outputs show that the foundational elements of the intervention (e.g., tools, messages, and training) are reaching the right people in the right way.

Where the previous column (Psychological/Behavioural Mechanisms) explained why an activity is expected to work, this column captures what can be directly observed or counted to confirm the activity is happening as designed. Good outputs meet the following criteria:

- **Observable:** they can be seen or tracked directly
- **Quantifiable:** they can be counted or recorded reliably with basic metrics
- **Logically linked:** they are the direct result of an intervention activity

Examples include caregivers receiving and holding reminder cards, health workers using new scripts during counselling sessions, or volunteers distributing planning tools during home visits. These outputs build on the early indicators of success documented in the [Prototype Outline](#), but are now positioned as part of the overall change pathway.

Outputs are generally measured through tools such as observation checklists, distribution logs, training attendance sheets, or implementer self-reports to document who received what, when, and how consistently. For example, observation can confirm whether a caregiver keeps a reminder card; checklists can track how many home visits included the new tool.

It's important to avoid inventing mechanisms or assuming that change has occurred. Outputs should reflect what was actually observed during user testing or documented in past research — not what is hoped to occur. Keep the focus on immediate, concrete signals that the intervention is reaching people as intended.

Note the difference between outputs and behavioural outcomes, as detailed below :

- **Outputs** are the direct and immediate results of the intervention activities. They indicate what was delivered, to whom, and how. Outputs are observable and measurable right away — they don't require interpretation, or assume a change in behaviour, belief, or attitude.
- **Intermediate outcomes** reflect early behavioural shifts or cognitive changes that occur after exposure to the intervention. These often indicate that the intervention is beginning to influence motivation, ability, or opportunity, but they are not guaranteed just because an activity has occurred.

To clarify the distinction between the two, Table 11 below compares common intervention activities with examples of correct outputs, and incorrect statements often mistaken for outputs.

Remember: outputs answer the question, "Did this happen as a direct result of the activity, and can we see or count it right away?" In contrast, intermediate outcomes reflect early behavioural or cognitive changes that may occur after exposure to the intervention.

TABLE 11. STRONG VS. WEAK OUTPUT STATEMENTS

INTERVENTION	WEAK OUTPUTS	WHY IT'S WEAK	STRONG OUTPUT
Visual reminder card	Caregivers understood the importance of follow-up.	This is an intermediate outcome, not an immediate product of the intervention.	Caregivers leave the clinic with a tangible, visible reminder of their child's next vaccine date.
SMS reminder	SMS messages were well received by caregivers.	This is a subjective reaction that doesn't confirm the message was sent or interacted with.	Caregivers receive SMS reminders 24 hours before a scheduled visit.
Community dialogue session	Participants felt more confident discussing vaccines.	This describes a psychological shift — an intermediate outcome — not an observable result.	Community members attend a dialogue session facilitated by trained peer educators.
Job aid for health workers	Health workers provided better counselling.	This assumes an improved performance without direct observation or measurement.	Health workers use the new job aid during counselling sessions.

7. Identify intermediate outcomes

Intermediate outcomes are the short-term shifts, often cognitive or emotional, that occur after the intervention is delivered, but before the target behaviour changes. They signal whether the intervention is working and influencing the necessary levers for change, such as attention, intention, motivation, planning, or social norms. To make these outcomes practical and measurable, use observable proxies rather than generic terms. Instead of saying “motivation improved,” describe what that looks like. For example:

- Caregivers bring their commitment card to the next visit (proxy for planning and follow-through).
- Participants initiate conversations about the topic with peers (proxy for increased comfort or perceived importance).
- Adolescents correctly recall the vaccination schedule after an interactive group session (proxy for improved attention and memory).

Table 12 compares common intervention activities with examples of correct intermediate outcomes, and incorrect statements often mistaken for them. Use this table to ensure that intermediate outcomes are realistic, measurable, and grounded in what can actually be observed or assessed.

TABLE 12 USEFUL VS. LESS USEFUL INTERMEDIATE OUTCOME STATEMENTS

INTERVENTION	WEAK INTERMEDIATE OUTCOMES	WHY IT'S WEAK	USEFUL INTERMEDIATE OUTCOMES
Commitment card	Caregivers receive the card.	This is an output, not a change in perception or behaviour.	Caregivers bring the card back to the next appointment (proxy for planning).
Peer group session	Participants feel more empowered.	Vague, subjective, and difficult to measure.	Participants initiate discussion about the topic with peers (proxy for confidence).
Health worker training	Providers are trained in new scripts.	This is an output, not a change in perception or behaviour.	Providers begin using new phrases when counselling (proxy for uptake of new behavior).
Reminder SMS	Caregivers are motivated to attend.	“Motivated” is abstract and unmeasurable.	Caregivers report planning transport or arranging childcare (proxy for intention and planning).

8. Write down the primary behavioural outcome

In the seventh column of the Theory of Change worksheet, record the specific behaviour the intervention ultimately aims to change. This is the specific, measurable behaviour identified during the **Define** and **Explore & Diagnose** phases. For example, this could entail:

- Attending a scheduled vaccine appointment
- Completing the full vaccine schedule
- Bringing a child to a health facility on time

The primary behavioural outcome should logically follow from the intermediate outcomes, and reflect the most critical action the intervention is designed to influence.

9. Map the intended impact

The final column outlines the broader impact the intervention seeks to achieve. This should align with the high-level Outcome Statement from the Define stage.

The impact should build directly on the previous sub-step: the primary behavioural outcome. For example, if more caregivers bring their children for scheduled vaccinations, immunization coverage improves — especially in high-risk districts. This leads to fewer missed or delayed vaccines and reduces the likelihood of outbreaks like measles or mumps, protecting both individual children and the wider population.

In this case, the behavioural outcome is increased caregiver follow-through on scheduled childhood vaccinations. This supports the broader goal of increasing the timely completion of routine childhood vaccinations among un- or under-vaccinated children in areas targeted by Lebanon’s Accelerated Immunization Activities (AIA) programme. By clearly tracing the pathway from intervention to action to long-term impact, this step confirms the logic, relevance, and potential impact of the behavioural interventions.

Consider the following tips when developing a Theory of Change:

- **Use “so that…” chains to articulate links and tighten logic.** For example: We are giving CHWs counselling job aids so that they feel more confident responding to vaccine hesitancy, so that they address caregiver concerns more consistently, so that more caregivers complete the schedule. This exposes missing steps or leaps in logic.
- **Assign a “risk rating” to each ToC assumption.** After drafting the ToC, create a quick matrix where each causal link or dependency is assigned a confidence level:
 - Green→ High = Based on strong local evidence or consistent user testing
 - Yellow→ Medium = Based on global precedent, but untested locally
 - Red→ Low = Based on team hunch or optimistic assumption

This highlights risks and guides which elements to test first in pilots or monitor most closely during rollout.

CASE STUDY

Increasing childhood vaccination uptake in Lebanon

This Theory of Change was not developed by the original project team. It's a recreated example based on real project data and context.

The team built a clear Theory of Change to ensure internal alignment and clarity on what and how the intervention was trying to achieve.

The actors included caregivers (mostly Syrian and Lebanese mothers), frontline health workers delivering the cards, and the Ministry of Public Health and AIA programme teams supporting the rollout.

The barriers identified in previous steps were mapped in the ToC: many caregivers forgot return dates, felt overwhelmed by daily demands, or lacked reminders. Resource constraints (i.e., low smartphone penetration, limited digital infrastructure, overstretched clinics) meant a low-tech, low-cost solution was needed.

The activity itself was simple: after the first vaccine dose, health workers issued an appointment card with the next visit date. The card included visual symbols and health centre stamps to reinforce importance. The aim was not just to inform, but to nudge caregivers by embedding reminders into daily life.

The outputs of this activity were small but powerful: caregivers left the clinic with a visible commitment device that simplified remembering the next visit. Over time, this intervention had clear intermediate outcomes: higher intention to return, increased mental recall of the date, and in some cases, even a visible display of the card in the home, serving as a continuous cue.

Ultimately, this led to the primary behavioural outcome the study aimed for: caregivers returned on time for their child's next vaccine visit. At scale, the intervention contributed to the broader impact of improving childhood immunization coverage and preventing vaccine-preventable diseases in high-risk communities.

- **Reduced cognitive load:** the card externalized memory, so caregivers didn't need to rely on recall alone.
- **Salience:** a visible, tangible reminder kept the date top of mind.
- **Commitment cue:** the child's name and official health worker stamp signalled obligation and formality.
- **Social norm signal:** possessing a stamped card reinforced the sense that "responsible parents" follow the schedule.

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PROTOTYPE DESIGNS
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DEPTHS TOOLKIT

Theory of Change

Fill out this worksheet for each intervention that will continue to piloting / experiment design.

Intervention: Appointment reminder card

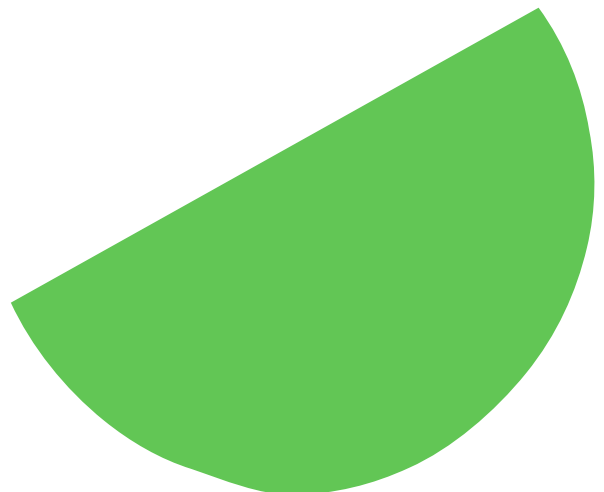
Actors <small>Stakeholders that are key for the intervention to succeed</small>	Needs <small>Key barriers to action that must be addressed</small>	Resources <small>Culture, context, capacity, funding, required</small>	Activities <small>What is done or provided to address the barrier and lead to change?</small>	Psychological/ Behavioural Mechanisms. <small>What underlying behavioural or psychological levers does this activity trigger?</small>	Outputs <small>Mechanisms of change as a direct result of activities, including the targeted action(s)</small>	Intermediate outcomes <small>Effect of the intervention in intermediary mechanisms that could lead to the behaviour change</small>	Primary behavioural outcome <small>Effect of the intervention in the changing the target behaviour</small>	Impact <small>How is the intervention impacting in the outcome statement formulated in the Define phase</small>
<ul style="list-style-type: none"> • Caregivers (primarily Syrian and Lebanese mothers in low-resource settings) • Health workers and immunization staff (distributing and explaining the appointment card) • Primary healthcare centers (integrating the tool into existing AIA workflows) • MoPH and implementing partners (oversight, scale-up potential) 	<ul style="list-style-type: none"> • Forgetting the vaccination schedule after the first dose • Low planning ability or limited access to mobile reminders • Cognitive overload and competing daily priorities • Perception that follow-up vaccines are less urgent • Lack of tangible or authoritative reminders 	<ul style="list-style-type: none"> • Existing caregiver visits for first-dose vaccinations • Trained health workers and facility staff • Paper and printing supplies • Cultural acceptability of paper-based tools • Low smartphone access among target population • AIA program infrastructure already delivering vaccines 	<ul style="list-style-type: none"> • Health worker gives a paper appointment card after the child receives the first vaccine dose • The card includes the child's name, date of next vaccine visit, health center name/stamp, and a visual cue • Verbal explanation of its importance by the health worker • In some arms of the study: visual enhancements and stickers to increase salience 	<ul style="list-style-type: none"> • Reduced cognitive load: The card simplifies recall by externalizing the next vaccine date. • Salience: A visible, tangible card keeps the appointment top of mind. • Commitment cue: Writing down the child's name and date creates a sense of obligation. • Authority effect: The health worker's stamp or signature signals official importance, increasing compliance. • Social norm cue: Caregivers may view possession of the stamped card as what "responsible parents" do, reinforcing a norm. 	<ul style="list-style-type: none"> • Caregivers leave the clinic with a tangible, visible reminder of their child's next vaccine date • Increased mental availability and salience of the return date • Improved planning through a specific commitment cue • Greater perception of formal obligation (due to health worker stamp and appointment framing) 	<ul style="list-style-type: none"> • Increased caregiver intention to return for the next vaccine • Enhanced memory and personal accountability • Card placed in visible area at home as a cue • Higher perceived social expectation or responsibility 	<ul style="list-style-type: none"> • Caregivers return on time for their child's next scheduled routine vaccination 	<ul style="list-style-type: none"> • Improved completion of full childhood immunization schedules, reducing drop-off rates after initial doses • Supports Lebanon's MoPH goal to increase routine vaccine coverage and prevent outbreaks

Final checklist for *Prototype Designs*

- “How might we” questions
- Intervention ideas, applying the EAST framework
- Prioritized ideas using criteria and ethics considerations
- Prototype Outline worksheet
- Prototyping Synthesis worksheet after completing user testing
- Theory of Change

Optional:

- Design provocations
- Localized evidence findings on *previous interventions*



Learn more

This field guide is designed to teams with practical tools, frameworks, and methodologies to apply behavioural science to a range of real-world challenges. As behavioural science draws from multiple disciplines — including human-centred design, experimental economics, and systems thinking — we've curated a selection of approaches that reflect this diversity. The following section offers additional resources to explore specific topics introduced in the guide, along with the option to continue a self-paced learning journey.

“I want to explore different design methods for ideation and prototyping.”

101 Design Methods by Illinois Institute of Technology's Institute of Design's professor, Vijay Kumar, offers a structured toolkit for innovation, helping teams move from research insights to actionable ideas through clearly defined steps. It's especially helpful if group ideation is facilitated and needs a clear structure. For hands-on prototyping advice, IDEO's Design Kit offers tools like “Determine what to prototype”, which helps clarify what to test, at what level of fidelity, and with whom.

“I want to explore more creativity and brainstorming activities.”

The IDEOU Brainstorming Toolkit offers practical exercises to spark ideas, encourage participation, and stretch group thinking. For a more structured approach to creative disruption, Edward de Bono's Lateral Thinking methods provide tools to challenge assumptions and generate unconventional solutions. To sharpen idea generation, the Interaction Design Foundation's guide to “How Might We” questions explains how to frame prompts that are focused, open-ended, and generative.

“I want to learn more about participatory design and community voice.”

Equity-Centred Community Design by the Creative Reaction Lab offers a practical, justice-oriented lens for working with marginalized groups. Their Field Guide includes methods to reflect on power dynamics and co-create responsibly. The HCD for Health website is another great resource for those working in global health,

offering tools and case studies that show how human-centred design can be embedded in field projects.

“I want to strengthen the behavioural foundations behind the interventions.”

The Behavioural Drivers Model (BDM) and MINDSPACE offer practical ways to apply behavioural frameworks beyond EAST. While the first framework (BDM) is helpful to ideate interventions specifically aimed at improving immunization, the latter is a general framework that could be helpful to generate any type of idea.

“I want to better understand the role of ethics in prototyping and testing with users.”

The Belmont Report remains a foundational resource for ethical principles in research with human subjects, focusing on respect, beneficence, and justice. For teams working within institutions, the CITI Programme offers accessible training modules on research ethics, informed consent, and working with vulnerable populations. For a shorter, applied overview of research ethics principles in practice, St. George's University offers a digestible summary of key topics. Finally, the Behavioural Science for Good Hub is a helpful framework to reflect whether the behavioural interventions that will be implemented are ethical.

“I want to deepen my understanding of Theory of Change and impact pathways.”

The SBC Guidance website provides clear guidance on how to articulate a Theory of Change that links behaviour, evidence, and outcomes. It includes helpful prompts to connect your intervention to larger health or development goals.

Resources

1. And Academy. Guide to Ideation in Design Thinking (With Techniques). Accessed July 2025. <<https://www.andacademy.com/blog/guide-to-ideation-in-design-thinking>>.
2. Arouanda. The Essential Ideation Techniques for Design Thinking. Accessed July 2025. <<https://arouanda.medium.com/the-essential-ideation-techniques-for-design-thinking>>.
3. Behavioural Insights Team. EAST: Four Simple Ways to Apply Behavioural Insights. London: BIT, 2014. <<https://www.bi.team/publications/east-four-simple-ways-to-apply-behavioural-insights/>>.
4. Behavioural Insights Team. MINDSPACE: Influencing Behaviour through Public Policy. London: BIT, 2010. <<https://www.bi.team/publications/mindspace/>>.
5. Bioethics Center. "CITI Training." Accessed July 2025. <<https://bioethicscenter.net/citi-training/>>.
6. Cambridge University Press. "Nudge FORGOOD." Behavioural Public Policy. Accessed July 2025. <<https://www.cambridge.org/core/journals/behavioural-public-policy/article/abs/nudge-forgood/O6BC9E9032521954E8325798390A998A>>.
7. CITI Program. "About Us." Accessed July 2025. <<https://about.citiprogram.org/>>.
8. CRx Lab. Field Guide to Equity-Centered Community Design. Accessed July 2025. <<https://crxlab.org/shop/p/field-guide-equity-centered-community-design>>.
9. de Bono Group. "Lateral Thinking – Core Programs." Accessed July 2025. <<https://www.debonogroup.com/services/core-programs/lateral-thinking/>>.
10. Demand Hub. behavioural Integration for Impact (BII) Evaluation Guide. Accessed July 2025. <<https://demandhub.org/bii-evaluation-guide/>>.
11. Design Kit. "Determine What to Prototype." IDEO.org. Accessed July 2025. <<https://www.designkit.org/methods/determine-what-to-prototype.html>>.
12. Design Kit. The Human-Centered Design Toolkit. IDEO.org. Accessed July 2025. <<https://www.designkit.org/resources/1.html>>.
13. HCDEXchange. HCD4Health. Accessed July 2025. <<https://www.hcd4health.org/>>.
14. Human Behaviour-Change Project. Theory and Technique Tool. Accessed July 2025. <<https://theoryandtechniquetool.humanbehaviourchange.org/>>.
15. IDEO. Design Kit: Methods. Accessed July 2025. <<https://www.designkit.org/methods>>.
16. IDEO U. "10 Idea Generation Activities for Better Ideas." Accessed July 2025. <<https://www.ideo.com/blogs/inspiration/10-idea-generation-activities-for-better-ideas>>.
17. IDEO U. "Brainstorming Resources." Accessed July 2025. <<https://www.ideo.com/pages/brainstorming-resources>>.
18. Innovation for Poverty Action. Guiding Your Program to Build a Theory of Change. Accessed July 2025. <<https://www.poverty-action.org/sites/default/files/Guiding-Your-Program-to-Build-a-Theory-of-Change.pdf>>.
19. Interaction Design Foundation. "How Might We." Accessed July 2025. <<https://www.interaction-design.org/literature/topics/how-might-we>>.
20. Interaction Design Foundation. "Prioritisation Frameworks." Accessed July 2025. <<https://www.interaction-design.org/literature/topics/prioritization>>.
21. International Design Foundation. "What Is Ideation?" Accessed July 2025. <<https://www.interaction-design.org/literature/topics/ideation>>.
22. Makelt.Tools. "Makelt." Accessed July 2025. <<https://www.makeit.tools/>>.
23. SBCC Implementation Kit. "Selecting Results." Accessed July 2025. <<https://www.sbcguidance.org/create/selecting-results>>.

24. St. George's University of London. "Principles of Research Ethics." Accessed July 2025. <<https://www.citystgeorges.ac.uk/research/support/integrity-and-ethics/ethics/principles>>.
25. Sullivan, Claire M., and Donna Spiegelman. "Implementation Science: A Cross-Disciplinary Perspective." *Implementation Science* 6, no. 42 (2011). <<https://implementationscience.biomedcentral.com/articles/10.1186/1748-5908-6-42>>.
26. Tudor, Grant, and Benjamin Hickler. *Demand for Health Services Field Guide: A Human-Centred Approach*. Accessed July 2025.
27. UNICEF. *Co-Creation Playbook for Community Solutions to Child Marriage and FGM*. Accessed July 2025. <<https://www.unicef.org/documents/co-creation-playbook-for-community-solutions>>.
28. UNICEF. *HCD for Health Guide*. Accessed July 2025.
29. UNICEF. *The Behavioural Drivers Model*. Amman: UNICEF MENA, 2020. <https://www.unicef.org/mena/media/5586/file/The_Behavioural_Drivers_Model_0.pdf>.
30. UNICEF. *UNICEF Publications – Latin America and the Caribbean*. Accessed July 2025. <<https://www.unicef.org/lac/en/publications>>.
31. UNICEF ROSA. *Social and Behaviour Change (SBC) Programme Guidance*. Kathmandu: UNICEF ROSA, 2021. <<https://www.unicef.org/rosa/media/10356/file>>.
32. UNICEF. *Results Framework and Theory of Change*. Accessed July 2025. <<https://www.unicef.org/rosa/documents/results-framework-and-theory-change>>.
33. U.S. Department of Health & Human Services. *The Belmont Report*. Washington, DC: Office for Human Research Protections, 1979. <<https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/index.html>>.
34. Vijay Kumar. *101 Design Methods: A Structured Approach for Driving Innovation in Your Organization*. Hoboken, NJ: Wiley, 2013. <<http://www.101designmethods.com/>>.