

BETA

Demand for Health Services Workbook

*A Human-Centered Field Guide
for Investigating and Responding
to Challenges*

unicef | for every child

Save Money
Make low-cost adjustments to programmes before scaling the solution.

Find New Solutions
Integrate thinking from fields beyond public health that bring systems thinking and experimentation to build innovative, scalable solutions.

Close the Empathy Gap

Collaborate directly, or “co-design,” with the people we are trying to serve.

Save Time

Conduct swift, low-cost field research and test solutions before investing in larger-scale implementation.

Reduce Inequities

Identify the most important challenges facing the most disadvantaged.

How is this different?

This workbook is a companion piece to the full Demand for Health Services Field Guide. For each question, this workbook provides a distilled set of instructions and corresponding tools (look for the tool icon ). But before you start, know that this process is going to ask you to do a number of things differently:

Leave Your Desk Behind

Regardless of formal training, you are capable of leaving your desk and going into the field to observe and investigate challenges. Go to where the problem is, interview health-care workers and observe caregivers.

Recruit Diverse Roles

Ideally, each team member holds a different role so your team has diverse and complementary perspectives. Consider team members' breadth of experiences, not just titles and functions.

Work in a Team of 3-5

While input from many parties is important, it can lead to a slow process. There are moments—like brainstorming—where you will invite additional participants to join. But start with a core team of three to five members that will participate in the entire process.

Remember Everyone is Creative

This process plays off everyone's creativity, not just those who hold "design" positions. Everyone is familiar with the challenges and therefore capable of thinking about causes and designing solutions.

Share a Story

Facts are important, but stories make facts memorable. Share your stories from the field. Whom did you meet? What did you see? How did you see it in a new way?

Experiment and Experiment Again

Since this process occurs in short sprints, it encourages experimental trials that may not always work out. That is okay—instead of agonizing over the perfect solution, try many possibilities and learn just as much from what does not work as from what does.

Think in Weeks, Not Months

Work fast and be nimble. This entire process may be completed in a short amount of time. It should never drag on for months. Trust your intuition, you know what you're doing.

Make It

Mock-ups, sketches and role play give users a physical representation to experience and react to. Even a rough approximation of your idea will create clarity for you as the creator and allow for realistic feedback from users.

Jump in and Post-It

This workbook encourages sticky note use, because they allow you to write down many possibilities instead of forcing you to commit to "the perfect" answer, lend themselves to collaboration (everyone can contribute ideas), and force you to distill your thoughts (one per square). Tack pages from this workbook on a wall in your dedicated team space, or recreate flows where you work.

Process Overview

The human-centred approach combines a research methodology that focuses on the needs of people, a design methodology that allows for innovative solutions, and an implementation strategy that uses a wide systems view. When applying human-centred approaches to demand-related challenges, we consider five big questions:

1

What is our objective?

We start with the user—the child we are trying to reach, the caregiver we are trying to help and health workers. From there we define the intended programme outcome as a measurable goal and focus on the biggest obstacles we will set out to address and further research.

2

What do we think we know?

This phase is about downloading the local knowledge that already exists and determining what we still do not know. What might we be assuming? What might we suppose we know more about than we really do? What ‘best practices’ can we question?

3

What stands in our way?

What prevents users from using services? What do they do now and what do we want them to do? To find out, we conduct user research. The result is a set of specific challenges to solve.

4

How could we respond?

Given what we know about users, how can we shape their environments and influence their behaviours to achieve our objective? This is a creative and collaborative process: generating ideas and testing them out.

5

How could we improve?

Good ideas are not only innovative, but also effective. This last phase is about continuous inquiry—measuring how the ideas respond to the challenges identified during user research and making adjustments to improve their efficacy.



Process Overview

1 What is our objective?

Problem Definition: We start with the user — the child we are trying to reach, the caregiver we are trying to help and health workers. From there we define the intended programme outcome as a measurable goal and focus on the biggest obstacles we will set out to address and further research.



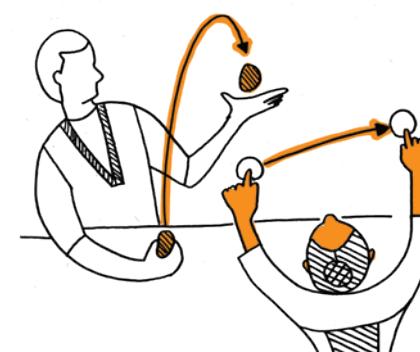
1a: Prioritize a User-Group

Clearly delineate exactly which community we are concerned with.



1b: Define the Improved State

Specify the change in immunization outcomes that the team is capable of influencing.



1c: Describe the Biggest Obstacle

💡 Common Obstacles

Explain how the user-group is or is not engaging with services. Think of all possible causes for the problem, not only the obvious ones.



Final Output: 💡 **Objective statement.** Document the final objective statement to reference throughout the process. It is written as the desire for the prioritized user-group to change from an existing state to an improved state by addressing the biggest obstacle.

Process Overview

2 What do we think we know?

Critical Reflection: This phase is about downloading the local knowledge that already exists and determining what we still do not know. What might we be assuming? What might we suppose we know more about than we really do? What ‘best practices’ can we question?



2a: Assemble Existing Knowledge

Gather available information about the challenge, past efforts, and the individual or community in question.



2b: Recognise Assumptions

-Assumption Catalogue

To help avoid bias, document the possible assumptions that you and your team might carry with you.



2c: Compose Learning Goals

-Journey to Immunization

-Learning Goals

Clarify what you hope to get out of the research. These learning goals will help you to decide the research methods to use during Question 3.



Final Output: Field Notes Map. Place your main learning goals on a wall or board in a shared space. Document the possible assumptions that you and your team might carry with you next to each learning goal. Continue to reference throughout user research (Question 3).

Process Overview

3 What stands in our way?

User Research: What prevents users from using services? What do they do now and what do we want them to do? To find out, we conduct user research. The result is a set of specific challenges to solve.



3a: Explore the User's Environment

Research Methods: Observations, Interviews, and Discussion Guide

Record Field Research

Choose which activities, including observations and interviews, should be used for research. Collect information in the field.



3b: Interpret Collected Stories

Share User Stories

Identify Important Information in Stories

Diagnose the Underlying Causes

Share information from the field. Identify patterns, surprises and commonalities.



3c: Propose Opportunities for Design

Persona Profile

Relationship Map

Translate diagnoses of the root causes of the challenge into creative prompts for design, or re-design.



Final Output: **Creative prompts.** This phase concludes with "How might we" statements that respond to the challenges witnessed in the field and are focused enough to inspire specific concepts, but broad enough to not dictate a solution.

Process Overview

4 How could we respond?

Experimental Solutions: Given what we know about users, how can we shape their environments and influence their behaviours to achieve our objective? This is a creative and collaborative process: generating ideas and testing them out.



4a: Conceptualise Solutions

💡 Brainstorm Concepts

📦 Assess Concepts

With an extended team, quickly generate many possible solutions. By the end, we will identify the most promising solutions.



4b: Design Quick Examples

💡 Design Solutions

Make ideas concrete through initial outlines, models or rough sketches of ways to implement promising concepts.



4c: Prototype Designs with Users

💡 Prototype Principles

💡 Prototype Planning

💡 Prototype Evaluation

Take draft ideas into the field to test with, and get feedback from, users.



Final Output: Tested Solutions. At the end of this phase, you have designs that respond to initial user research and have been tested with the user in their environment. Initial prototypes have been evaluated and necessary adjustments have been made.

Process Overview

5 How could we improve?

Continuous Learning: Good ideas are not only innovative, but also effective. This last phase is about continuous inquiry — measuring how the ideas respond to the challenges identified during user research and making adjustments to improve their efficacy.



5a: Plan for Iteration

Adaptation Plan

Devise an Adaptation Plan for each draft initiative. Define the key evaluative questions, possible risks, measurable criteria and corresponding indicators to track progress over time.



5b: Evaluate Effectiveness

Assess each revised idea in the field using the Adaptation Plan as a guide. Evaluate the accuracy of diagnoses and determine what we still know little about.



5c: Improve Initiatives

Implement adaptive changes that respond to findings.



Final Output: Revised Adaptation Plan and Proven Solutions If the idea is working, the final output is a revised Adaptation Plan and proven ideas that can be scaled. If the idea is not working, step back into the conceptualising and design exercises from Question 4, then re-deploy.

1 What is our objective?

Field Guide pages 30-41

1a: Prioritize a User-Group

Clearly delineate exactly which community we are concerned with.

1b: Define the Improved State

Specify the change in immunization outcomes that the team is capable of influencing.

1c: Describe the Biggest Obstacle(s)

Common Obstacles

Explain how the user-group is or is not engaging with services.

Final Output:

Objective Formula

Formulate and document the final objective statement to reference throughout the process.



Tool #1 Common Obstacles

- Identify the programme challenge in your area, which can be categorized as issues of Use, Follow-through or Timeliness. For example, caregivers may be initially using services (Use), but only irregularly coming for scheduled visits (Timeliness). Or they may be coming for their child's full course (Follow-through), but coming weeks or months late (Timeliness). Or, of course, they may simply not be using services at all (Use).
- Ask why this challenge may be happening, and check all of the Common Obstacles (or add your own) that may be contributing. Competing priorities, demands for attention, conflicting beliefs, habitual behaviours, and social pressures are examples of common obstacles that can hinder the desired programme outcome.
- Circle the biggest obstacle. This will be a working assumption that we will question and return to as we uncover more information in user research.

Hassle Factors

Seemingly minor inconveniences can deter people from acting on their intentions, such as getting to the point of service.

Negative Experiences

Bad experiences from the past outweigh the neutral or good.

Apprehension About Health Worker

Uncertainty about capacity, knowledge of health workers, or compassion shown by health workers.

Apprehension About System

Uncertainty about the Health System, Government or body perceived to be giving the vaccine.

Social Norms

Vaccination is not a social norm or common practice.

Choice

People value what they choose themselves. For example, choosing a reward over receiving an award, even when the rewards are actually equivalent.

Attention Scarcity

People focus on the most pressing challenge 'now', which may not be vaccination given competing needs.

Recent News

The easier to recall, the more personal the story, the more Influential.

Fears about Vaccines

Action can be scarier than inaction. When given an option between inaction and action, people tend to default to the status quo.

Supply Insecurity

Vaccination is unsafe, unpredictable, unavailable or available in limited supply as a result of regional insecurity.

Complexity

When caregivers are unclear about next steps and next vaccines, taking action is difficult.

No Feedback

Health workers lack the input or authority to improve or change services.

Bias Towards Optimism

People overestimate the likelihood of positive events occurring and underestimate the likelihood of negative events occurring (contracting a disease).

Ignoring the Contrary

People tend to seek out and act on information that conforms to their pre-existing beliefs.

Tool #2

Objective Formula

Our Objective is for U (user-group) to change from E (existing state) to I (improved state) by addressing O (biggest obstacle).

The tool on this page helps to separate each element of the objective formula. Below are examples:

Our objective is for **U** children of recently arrived migrant families in the capitol to change from **E** 50 percent DTP1 coverage to **I** 80 percent DTP1 coverage by addressing **O** caregiver perceptions about the accessibility of services

Our objective is for **U** children of nomadic pastoralists in the North to change from **E** 35 per cent completion of the childhood vaccination schedule to **I** 80 percent completion of the schedule by addressing **O** the obstacles and opportunity costs of accessing services at fixed sites by families on the move

Our objective is for **U** children of ethnic minority background in a poor peri-urban neighborhood to change from **E** 30 percent loss to follow up ("drop out") to **I** less than 10 percent loss to follow up by addressing **O** negative experiences at the point of service that keep parents from returning to the clinic

Our Objective is for

U User-group (1a)

to change from

E Existing State (1b)

to

I Improved State (1b)

by addressing

O Biggest Obstacle(s)* (1c)

*This biggest obstacle(s) are working assumptions that we will question during "What do we think we know?" and return to during user research.

2 What do we think we know?

Field Guide pages 42-55

2a: Assemble Existing Knowledge

Gather available information about the challenge, past efforts, and the individual or community in question.

2b: Recognise Assumptions

-Assumption Catalogue

To help avoid bias, document the possible assumptions that you and your team might carry with you.

2c: Compose Learning Goals

-Journey to Immunization & Learning Goals

Clarify what you hope to get out of the research. These goals will help determine the research methods.

Final Output:

-Field Notes Map

Place your main learning goals on a wall or board in a shared space.

2b Tool #3

Assumption Catalogue

Document existing assumptions about the challenge, past efforts, and the user-group in question. Use the assumption examples below and the “Common Obstacles” identified in Tool #1 as a starting point. Do we really know for certain that this is what stands in our way?

Assuming that correcting misinformation with accurate information will change minds; in fact, corrective messaging carries the risk of unintended consequences.

Assuming making it easier to access vaccinations will increase coverage. Similarly, assuming increases in access will adequately explain high coverage.

Assuming the decision to vaccinate is given full consideration — made after thoughtfully weighing costs and benefits.

Assuming that resistance based on religious or other belief-related terms is the only barrier, ignoring rational reasons such as previous experiences.

Assuming strong intentions are necessary for action-taking.

Assuming that incorrect knowledge, such as misconceptions about vaccines and diseases, is the reason for not engaging with services.

Existing Assumption #1

Place Sticky Note Here

Existing Assumption #2

Place Sticky Note Here

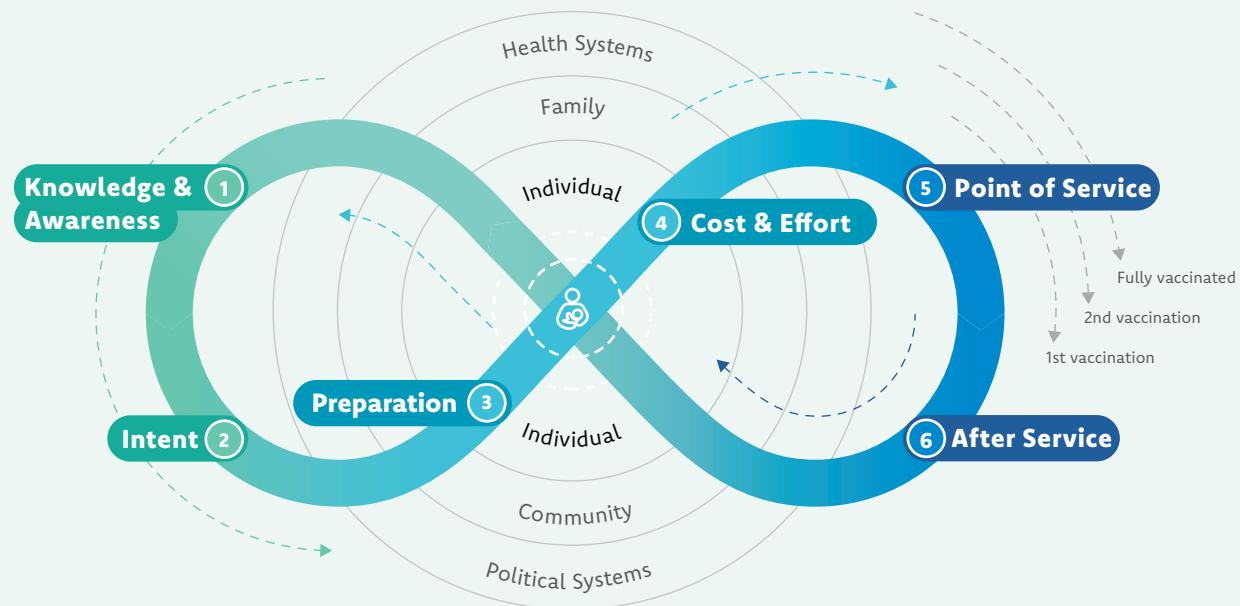
Existing Assumption #3

Place Sticky Note Here

Journey to Immunization

Using the Journey to Immunization model on this page, think about what areas need the most attention, and what we can learn at each stage.

Reference the Assumption Catalogue to further investigate the questions that need to be answered. While the model follows a caregiver journey to immunization, consider the journey of the health-care provider as well, since both work in equal parts toward the goal of immunization. What must they know and prepare? What cost and efforts must they make to be present both physically and mentally?



Knowledge and Awareness

Awareness of vaccination, of disease, of service (when/where) and how to get it.

Intent

Overcoming the gap between intention and behaviour. Caregivers readiness to vaccinate is determined by three things: their attitude towards the specific behaviour, their subjective norms and their perceived behavioural control.

Preparation

Preparing for vaccination including consideration of the disease/vaccination/service, planning the logistics of accessing services, finding transportation, arranging child care and mitigating opportunity costs.

Cost and Effort

Cost is not only financial – there is effort to find the time and make the required trade-offs to travel to the point of service. Opportunity, transport, lost income, uncertainty of service, and social and security costs are all part of this step.

Point of Service

All aspects of the vaccination experience, including client satisfaction, interpersonal communication with health workers, missed opportunities and health center experience. It is also important to remember the health workers's experience, and how that effects their ongoing perceptions and performance.

After Service

Short-term factors include immediate feedback, understanding the next steps and getting home from the clinic.

Long-term factors include side effects, cues to action, reminders, reinforcement and vaccination as a social norm.

Surrounding Mental and Social Models

Surrounding every stage are socio-ecological levers that help us understand what rationalization and logic cannot. Consider interwoven levels of influence on each step: subjective/social norms, trust, confidence, social values, community-level political structures, gender dynamic within families, policy within health systems, and community outreach mechanisms/channels.



Learning Goals

The gap between the change we are supporting in the community (our objective statement) and what we know and think we know from past research (our assumptions) leaves us with what we still need to figure out. These questions that need additional research become our learning goals.

Knowledge and Awareness learning goal example:

Are rumors or misconceptions affecting follow-up?

Cost and Effort learning goal example:

Despite valuing vaccinations, why are caregivers deferring visits?

Intent learning goal example:

Why are wealthier mothers less likely to use services than mothers at lower income levels?

Point of Service learning goal example:

What about the follow-up appointment is making mothers feel anxious?

Learning Goal #1

Place Sticky Note Here

Learning Goal #2

Place Sticky Note Here

Learning Goal #3

Place Sticky Note Here

Learning Goal #4

Place Sticky Note Here

Learning Goal #5

Place Sticky Note Here

Field Notes Map

During research, each step will yield distinct outputs—your “Field Notes.” The Field Notes Map is designed to give you a place to capture them.

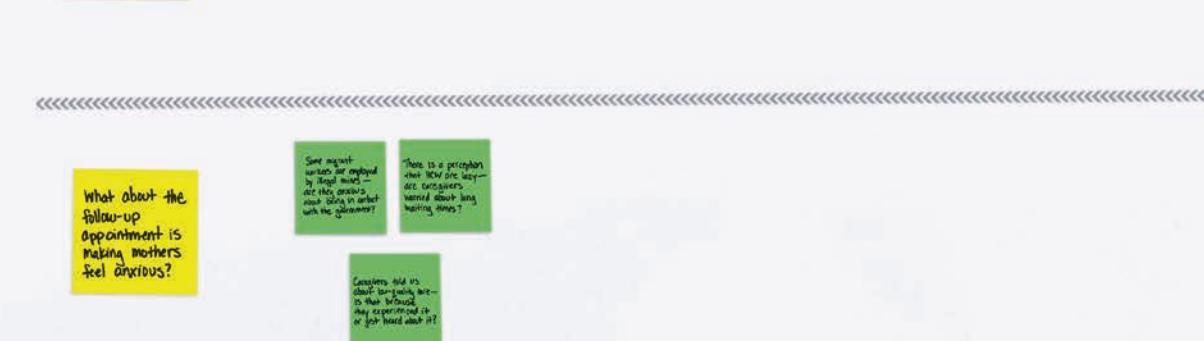
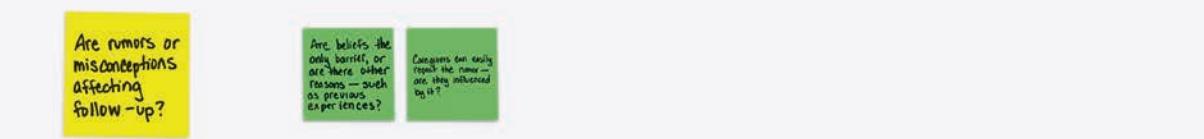
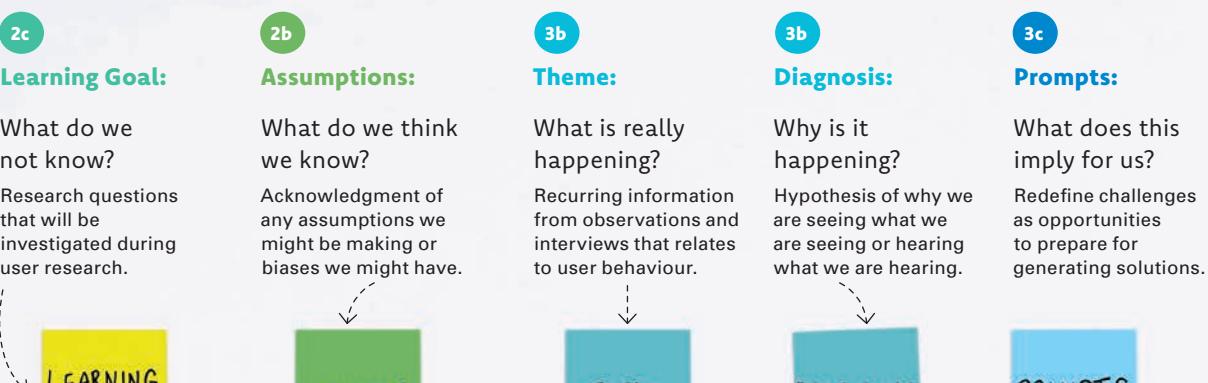
Set aside a part of your workspace—space behind your computer screen, an open wall, or the back of a used poster—to track your team’s progress and findings in a shared space. The matrix to the right demonstrates how this might look using tape and sticky notes.

Each row represents a distinct Learning Goal paired with any Assumptions we must prove or disprove. At the end of the user research process, you will have a final ‘wall’ of completed Field Notes that synthesize your findings. During Question 4, we will use these Field Notes to generate solutions to the challenges that they describe.



Field Notes Icon

This icon indicates where you should pause and add your final stick notes to the designated Field Notes area.



3a: Explore The User's Environment

Research Methods

Choose which activities, including both observations (what we see) and interviews (what others say), to use.

Observe Users

Observe intended users within the environments that shape their day-to-day lives and behaviours.

Interview Users

Build a  Discussion Guide to allow intended users to speak about specific events and experiences.

Record Field Research

After each day of field research, quickly synthesize and record the information you've gathered.

Tool #7

Research Methods: Observations

Collect information from the field about what may be impeding or facilitating immunization outcomes among your user-group(s). Plan observations for multiple environments and balance passive observation with experiencing users' lives directly. Try to refrain from judgement based on your own experience. The point of this research is to understand the experience of the user.

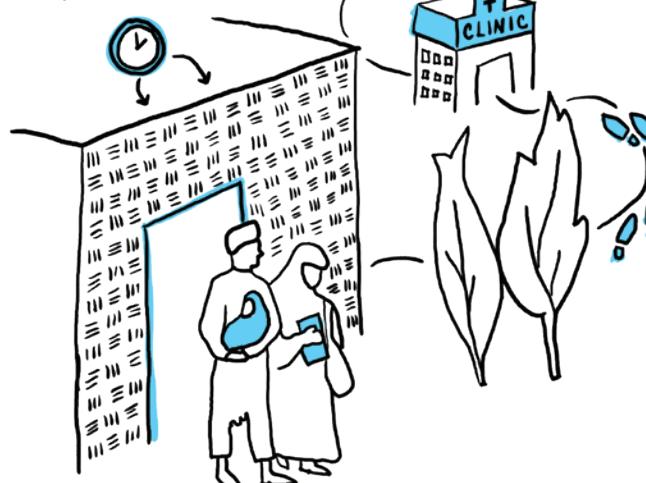


Peer-to-peer Observation

Involving users directly in observation, such as by equipping health-care workers with daily journal forms to document what they observe and find important throughout the day.

Home Visits

Developing deeper relationships with a select user or group of users through an immersive experience, such as a full day at their home.



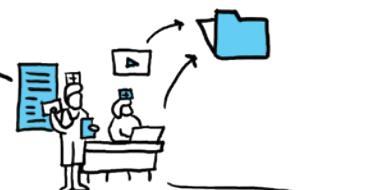
Non-participant Observation

Removing oneself from direct observation and instead using less intrusive mechanisms to gather material, such as by setting up a camera (like a GoPro) in a clinic waiting room.



Artifact Collection

Examining information from materials, such as investigating home-based records or clinic education materials.



First-hand Experience

Experience an event as the user yourself. Move through a clinic experience as though you are a patient. Work alongside a mother or health-care worker for a day. Accompany a caregiver on a clinic visit.



Research Methods: Interviews

Interviewing should almost always be part of the research plan. Interviews collect what people—caregivers, health-care workers, community leaders, families, communities—think and feel, in their own words. Whenever possible, conduct interviews in the home of the family, or a location where health services are offered.

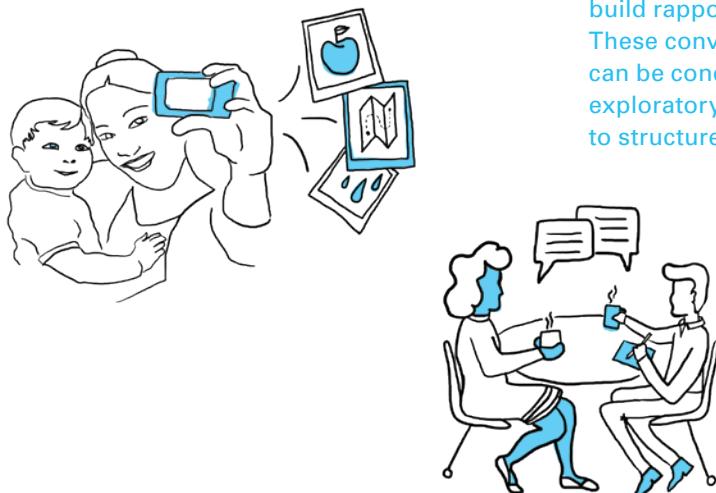


Photo Documentation

This method allows users to self-select what they find important. Give them a basic camera and loose instructions (example: take pictures of what makes her think of 'health') to gain an intimate perspective—and draw out more stories.



Informal interviews

This style of interview is helpful to familiarize oneself with the environment and build rapport with users. These conversations can be conducted as an exploratory prerequisite to structured interviews.



Structured interviews

These are scheduled and deliberate conversations. Use the Discussion Guide (Tool #9) to ensure you are probing the most important topics consistently in each interview so you have points of comparison.

Show and Tell

User-guided tours allow users to show their environment and share their experiences within them. For example, a health-care worker might walk you through a clinic. Combining a guided tour with informal interviews can prompt users to share stories when cued by their context.



Card Sorting

This method can be used as an activity within an interview. It provides a hands-on way to engage users and allow them to share their perspective through non-verbal means. By using simple pictures or illustrations on index cards, users can sort processes they experience or desire (a sequence of events) or rank preferences (their priorities for the week).*

For more on card sorting methods, see *The Field Guide to Human-Centred Design* by Ideo.org.



3a Tool #9

Research Methods: Discussion Guide

Having a good conversation with a stranger is not always easy. You have to help the person feel comfortable and build trust while collecting relevant information. To manage this delicate balance, prepare a discussion guide to serve as an outline for your conversation—a checklist to ensure you have covered everything.

Introduce Yourself

Explain what you are doing, and reassure that you are not here to judge the person.

Try an Activity

Activities are a great warm-up, so if they are part of your plan, put them towards the beginning: Can you show me how you...? Send me three pictures of when you feel (x)... Sort these cards in order of importance to (x)... Think aloud as you perform (x) process or task

Concentrate on the Interest Areas

Explore your challenge or any interesting theme you picked up on during the conversation in more depth.

Start Specific

Begin with questions your participants are comfortable answering: Tell me a bit about yourself. Where do you live? Where are you from? What do you do?

1

2

3

Go Broad

Ask more profound questions about hopes, fears and objectives: Tell me about a time when... What are the best/worst parts about...? Can you help me understand more about...? Take me through a typical day... Where do you get your information on...? What work-arounds have you found for...?

Express Gratitude!

Always thank the interviewee for his or her contribution.



Record Field Research

After each day of field research, quickly synthesize and record the information you have gathered—what you observed people seeing, doing and saying. This serves two key purposes: it ensures that important details are not forgotten and helps guide what you are looking for during additional research.

Describe setting

5 Observations:

What are people doing in this situation? How are people doing this? Why might they be doing it this way?

4 Moments that stood out:

3 Things that were new or surprising:

2 Things that felt familiar:

1 Way we could help our user through a digital health solution:

3b: Interpret Collected Stories

 Share User Stories

Share information from the field to help everyone internalize what you observed. Use creative presentation methods that help close the empathy gap.

 Identify Important Information in Stories

Analyse key findings to hypothesize why this is happening. Call-out patterns, surprises, and commonalities. Cluster common themes and choose the most important.

 Diagnose the Underlying Causes

Ask yourself why this is happening, drawing from research and educated guesses. Articulate final diagnosis succinctly to make sense of what was gathered in the field.

 Tool #11**Share User Stories**

Using notes from Tool #10 along with material gathered from the field, transcribe what you have seen and heard in the field to your team members. Sharing stories allows you to bring the context of the user with you throughout the rest of the process, ensuring you are designing a solution that is addressed to them. Rely as much on ‘sensory’ sharing as possible—use visuals of the location or person. Sample share back activities include:

Presentation: Set up a slideshow to share photographs and quotes from the field. Remember to keep it based on observations and stories, without including your opinions (yet).

Gallery Walk: Place large printed photographs taken in the field around a room. Each picture should communicate something notable you / your team observed.

Storyboards: Draw simple storyboards to walk your team through a story, a setting, or a process you observed. Look at the event through a user’s perspective.

Video or Audio Share: Did you capture any audio or video in the field? Maybe you set up a camera (example: GoPro) to capture daily movement through an environment. Sharing these assets can help to transport team members to the field.

 Quote

What was the most memorable thing they said?

 Portrait / Images

Attach Photographs Here

 Environment

What you noticed about their home, community, or work place.

 Connections and Relations

People and organizations they are connected to.

 Objects

Physical and digital objects they use.

3b Tool #12

Identify Important Information in Stories

Isolate the most important pieces of information from Tool #11 (Share User Stories) and cluster into themes. These themes will be further investigated with Tool #13 (Diagnose the Underlying Causes). Consider sharing user stories and identifying important information during the same team work session.

Add final themes to your Field Notes Map next to the learning goal and assumption(s) they respond to.



Independent Analysis

After (or during) 'Share User Stories,' individual team members should note important information—one thought per sticky note—according to the *Criteria for Important Information* below.

Group Analysis & Generation

Share sticky notes from the *Independent Analysis* in small groups. Use each other's sticky notes to generate additional notes about what seemed important (refrain from criticizing what others share).

Cluster Themes

Group the sticky notes by common theme on a wall—what collectively stood out to the group?

Criteria for Important Information

Surprise:

Does the information cause you to raise an eyebrow?



Familiar:

Have you seen this before in other contexts?



Patterns:

Are there recurrences you spot across stories and observations?



Diagnose the Underlying Causes

For each theme isolated by you/your team, create hypotheses by responding to each of the following:

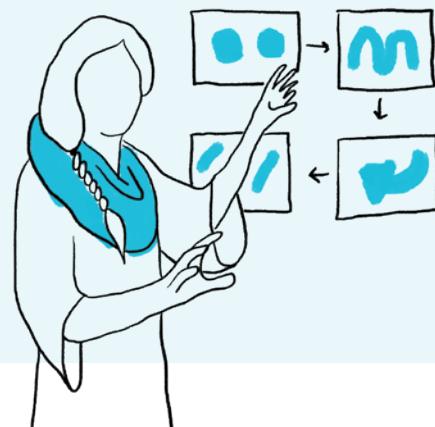
i Write 3+ Hypotheses

Ask yourself why this is happening. On sticky notes, write various “whys” that help to explain / make sense of the theme.



ii Debate Hypotheses

Can we prove ourselves wrong? What might we have overlooked? What might we have neglected to inquire more about? What might we have misinterpreted?



iii Refine Hypotheses

Revisit hypotheses to delete, modify, or rewrite to reflect any new information that has emerged during the debate. Articulate a ‘final’ diagnosis for each theme.

Add final diagnoses to your Field Notes Map in line with the theme(s) it refers to.



3c: Propose Opportunities for Design

 Persona Profiles

Identify all users and describe them in more detail, including the service recipient and service provider.

 Relationship Map

To help analyse and make sense of the diagnoses, map the relationships between your personas, their needs, and the people responsible.

 Creative Prompts

For each diagnosis, articulate multiple "How might we?" questions that will prompt teams to think about creative solutions.

Final Output:

Completed Field Notes Map

Place your main learning goals on a wall or board in a shared space.

 Tool #14 Persona Profiles

Personas are fictional characters that are used to understand the needs, values, aspirations, abilities, limitations, and character traits of different users. They will help your team consider designs and plans from a point of view that is not their own. Create a persona profile for each user in your system — in addition to your prioritized user-group, represent your caregiver's interactions with people such as community leaders, other mothers, and health-care workers.

Background

What important life experiences or events have contributed to this person's current situation? What social determinants of health influence his/her current situation?

Role/Responsibilities

Describe what their job is, or what role they play in the community.

Influencers

Think about single behaviours that result from external pressures (rather than regular habits). Who are the influential stakeholders in their life?

1

3

2

4

Environment

What is the geography and conditions where they live?

Time

What does a typical day look like? How do they divide their time? What do they spend time worrying about or celebrating?

morning

mid-day

afternoon

evening

Needs

What frustrations do they have? What limitations do they encounter? Write as a quote—how would they say this?

**What they do now**

(current behaviour)

What they should do

(ideal state)

Relationship Map

Two main insights emerge from mapping the relationships—or system. First, we can identify what emerges from the interconnected relationships. For example, looking at the responsibilities of a volunteer in isolation may seem overwhelming. Considering the social influence they receive from the local leader may change this view. We can never understand these traits without seeing the societal, technological, and economic ecosystem in which they operate.

The second thing we look for is opportunities for incremental change. Remembering our “Small is Big” principle, we can look for small changes that can lead to significant improvement instead of, or in partnership with, designing a new solution.

During this exercise, we will organise the different pieces of the system and show how they connect to and communicate with one another.

i List Everything

Identify all the users and institutions that are in some way connected to the issue you identified. Start with your final personas, and include additional roles that relate to your challenge.

ii Draw Connections

Draw lines between all the users and institutions that are formally or informally connected in some way. Use two different colors: one for social relationships and one for service relationships.

iii Mark Barriers + Positive Influences

Note where barriers that impede our goals and influences that support our goals exist. What technologies or tools exist at these intersections? What makes it harder for users to get what they need? What points of leverage make it easier?

International

International NGOs / Global governing bodies

National

National ministries / NGO headquarters

Regional

Regional governments / Health facilities / NGO offices

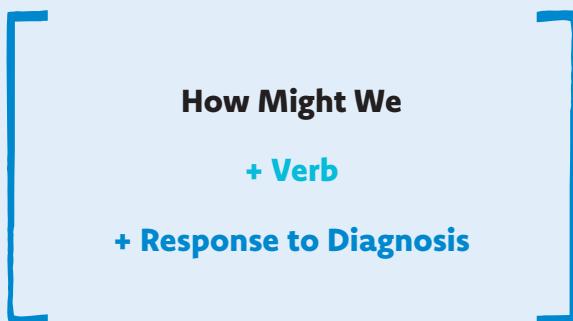
Local

Child or Individual / Religious leader / Health centre / Front-line health worker / Community leader / Marginalized group / School / Community volunteer / Service provider

Creative Prompts

Prompts, or “How might we” statements, respond to the challenges witnessed in the field and are focused enough to inspire specific concepts, but broad enough to not dictate a solution. They inspire and guide your team to generate a lot of solutions.

To ‘check’ if your prompt is sufficiently open-ended, ask yourself: can I immediately think of more than a single solution to the problem? This makes sure it is not too general to be difficult to comprehend, and not too prescriptive. Follow this formula to form multiple creative prompts for each final diagnosis:



Prompt Examples:

How might we **sensitize** health-care workers to the tough challenges facing poorer patients so that they demonstrate empathy?

How might we **give** mothers reasons to act today rather than wait to return to the clinic?

How might we **reveal** to parents the actual volume of community members accessing vaccinations, demonstrating a widespread social behaviour?



Add final prompts to your Field Notes Map next to the diagnosis they respond to.

Diagnosis
Place Sticky Note Here

How Might We	[Verb]	[Response to Insight]
---------------------	---------------	------------------------------

How Might We	[Verb]	[Response to Insight]
---------------------	---------------	------------------------------

How Might We	[Verb]	[Response to Insight]
---------------------	---------------	------------------------------

Example: Completed Field Notes

For each learning goal identified during Tool #6, you will have a row that shows the themes found during research, the diagnosis for why you are seeing this theme, and multiple creative prompts that lead into the solution phase.

LEARNING GOAL	ASSUMPTIONS	THEME	DIAGNOSIS	PROMPTS
Despite valuing vaccinations, why are caregivers deferring visits?	Caregivers are self-reporting a positive intention—is this only a courtesy? In the past relatives/friends used supporting immunization as a positive influence. Access to other seniors—Is this still happening?	Caregivers express the benefits in abstract terms and the tasks in specific and concrete terms. Mothers with under-immunized children. Cannot remember when and where the next appointment occurs.	In the face of more concrete and everyday issues, caregivers defer clinic visits to the future.	HMW make abstract benefits more immediate and concrete? HMW give mothers a compelling reason to act today? HMW lower the time and effort needed to visit a clinic?
Are rumors or misconceptions affecting follow-up?	Are beliefs the only barrier, or are there other reasons—such as previous experiences? Caregivers can easily repeat the rumor—does this influence them?	Caregivers frequently repeat a similar rumor—that a new vaccination program is “causing illness among infants.”	Even if caregivers say it is unlikely to be true, the rumor is causing them to reconsider vaccination.	HMW make the dual ability of positive information more salient than the rumor? HMW reframe vaccination to feel like the safe choice? HMW give facts more social currency?
What about the follow-up appointment is making mothers feel anxious?	Some migrant workers are employed by illegal mines—do they anxious about being in contact with the government? Caregivers tell us about low-quality care—is that because they experienced it or just heard about it?	There is a perception that health care providers are lazy—do caregivers worry about long waiting times? Caregivers can recite a plan for follow-up, along with their fears about how they will be treated. People bring along caregivers, except when it is expected of them, poor working conditions deter patients.	The ‘know-do’ gap among demoralized HCPs is widened by poor working conditions.	HMW decrease specific task inefficiencies that overly burden HCPs? HMW provide positive affirmations to reinforce high-quality care when it is performed? HMW alert mothers to times when clinics are less busy?

4a: Conceptualise Solutions

Brainstorm and Assess Concepts

With an extended team, quickly generate many possible solutions for each creative prompt. Identify 2-3 promising solutions per prompt.

4b: Design Quick Examples

Design Solutions

Make ideas concrete through initial outlines, models or rough sketches of ways to implement promising concepts.

4c: Prototype Designs with Users

Prototype Principles, Planning, and Evaluation

Take draft ideas into the field to test with, and get feedback from, users.

Final Output:

Tested Solutions

At the end of this phase, you have designs that respond to initial user research and have been tested with the user in their environment.

Tool #17

Brainstorm Concepts

Generate a large quantity of possible solutions to each of the prompts drawn from your Field Notes. To start, schedule an uninterrupted period of time and invite additional participants.

Rules of Brainstorming:

- Build off each others' ideas—do not be afraid to suggest alternatives or additions
- Aim for quantity over quality
- Turn off phones! Concentrate on the ideas for short, intense spurts
- Draw what you can—a picture is worth 1,000 words
- Go for ideal, wild ideas!
- Do not eliminate or critique ideas (save for the next step: Assess Concepts)

The process of generating a large volume of ideas (brainstorming) happens best in groups, with team members building off of one another.



Share User Stories and Scenarios

A great idea is driven by the collective expertise and knowledge available in the room. Immerse the room in the field research by sharing back user stories, photographs and quotes.

Diverge

When brainstorming solutions, always begin by going for quantity—large volumes of ideas that generate as much brainstormed material as possible, no matter the quality.

Converge

With a large volume of ideas on the table, coalesce around recurring themes—what “categories” of ideas are surfacing among us? You can also use voting dots (3 stickers each) to let participants select the concepts they find most compelling.

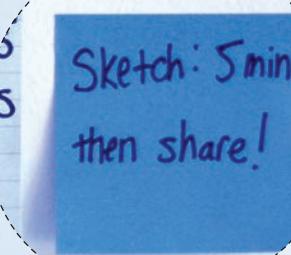
Hosting a Brainstorm

Facilitating a productive brainstorm can be challenging—too often, brainstorms become undisciplined conversations. To get the most out of a brainstorm, clearly communicate and enforce the rules (e.g. time).

Divide the available time between each prompt, usually five minutes of generating ideas followed by five minutes of sharing ideas. Sometimes this is repeated for the same prompt so participants can improve upon each other's ideas.

Include evidence from the field — photographs and quotes — to make the problem more tangible

Separate prompts and brainstorm ideas around each separately

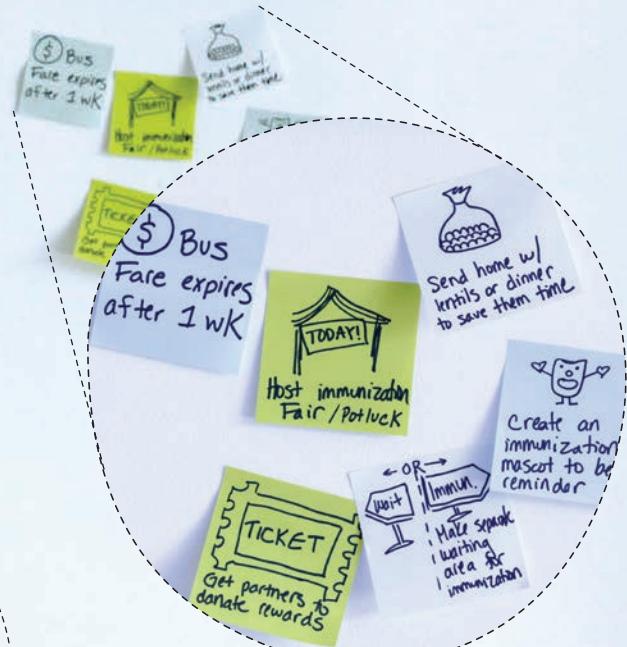
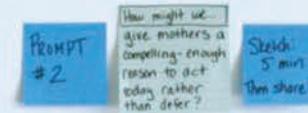


Alternate activities between individual sketching, partner collaborating, and group sharing

Materials matter: have plenty of stick notes, notepads, and pens



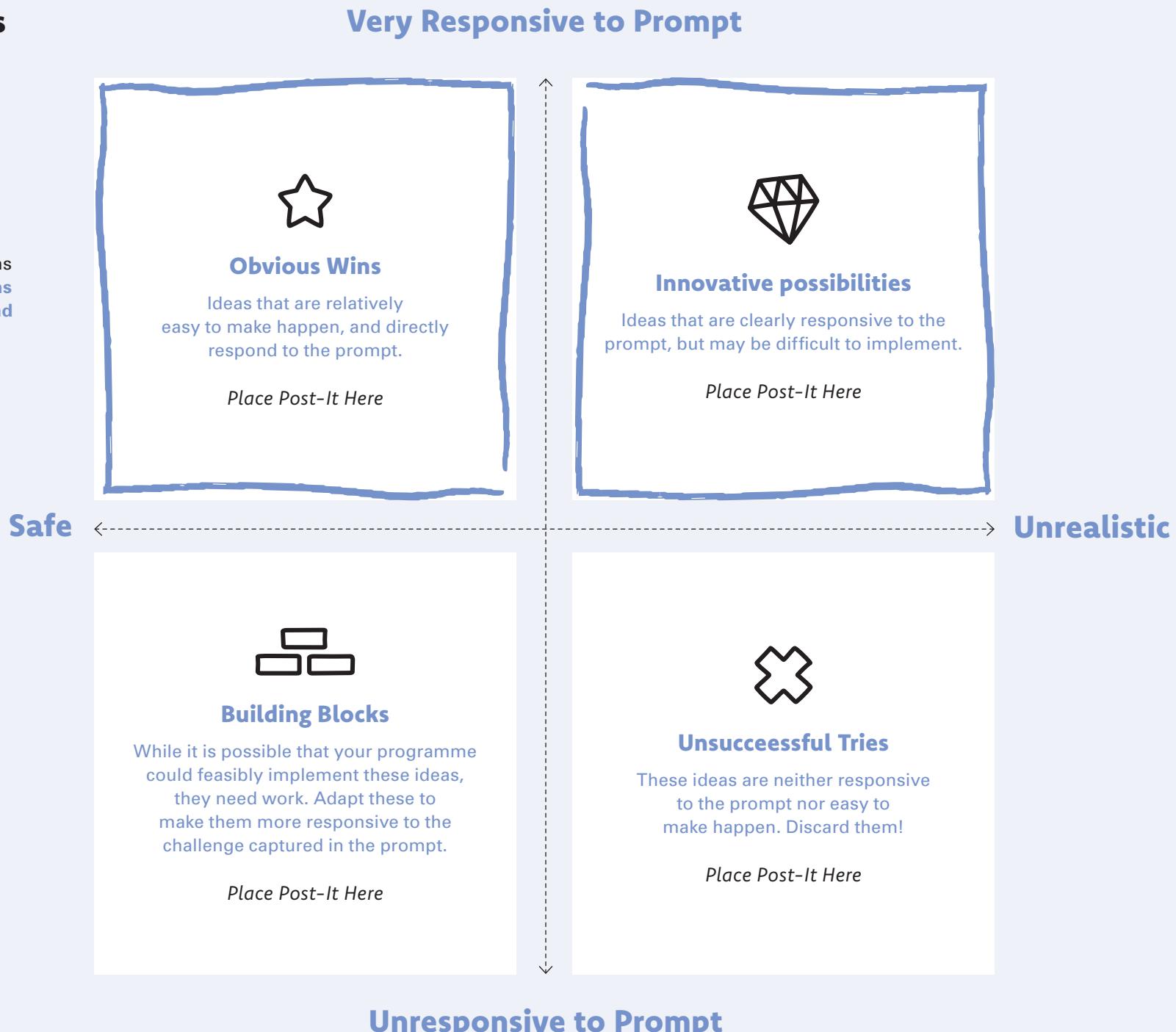
Place a few “wild” example ideas to encourage creative thinking



Assess Concepts

After brainstorming, use this chart to organise ideas for each prompt you used. You will need to create multiple charts—one for each prompt.

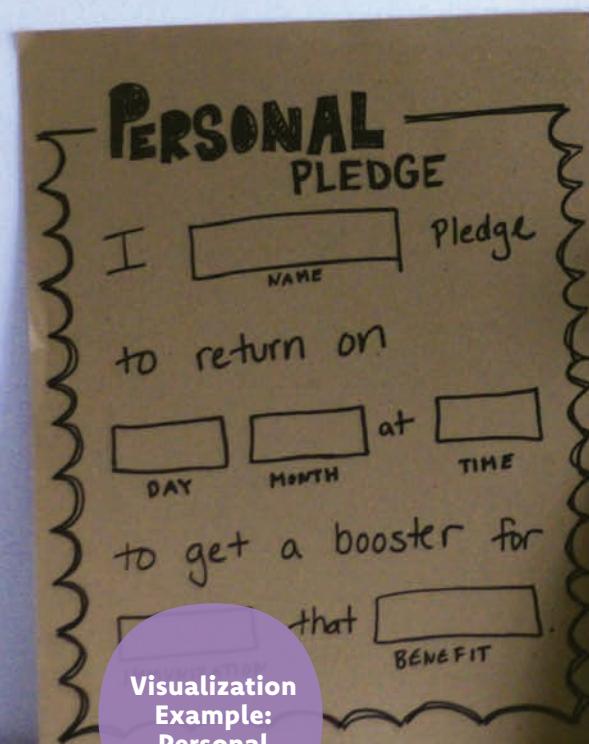
Place a sticky note (containing one idea each) into the quadrant that seems appropriate. **Select 2-3 ideas from the 'Obvious Wins' and 'Innovative Possibilities' that are interesting and show promise.**



4b Tool #20

Design Solutions

The process of design forces us to think in concrete terms about how an idea would work. For each of the candidate ideas that made it through your Assess Concepts step, make the idea real by visualizing, building a model or storyboarding a sequence. Explore many different ideas without feeling committed to any single one too early on.



Visualizations

Visualizing an idea involves putting pen to paper. What does an idea look like? How does it work? Visualizing is the most direct way to move from an abstract to a concrete idea. Ideas that would likely be two-dimensional in reality—from a sticker to a poster—are best visualized.



Models

Physical models of an idea go beyond two-dimensional visualizations, offering a way to understand certain ideas more concretely. Ideas that would likely be three-dimensional once produced—from a micro-incentive to a reminder bracelet—are best to design with models.

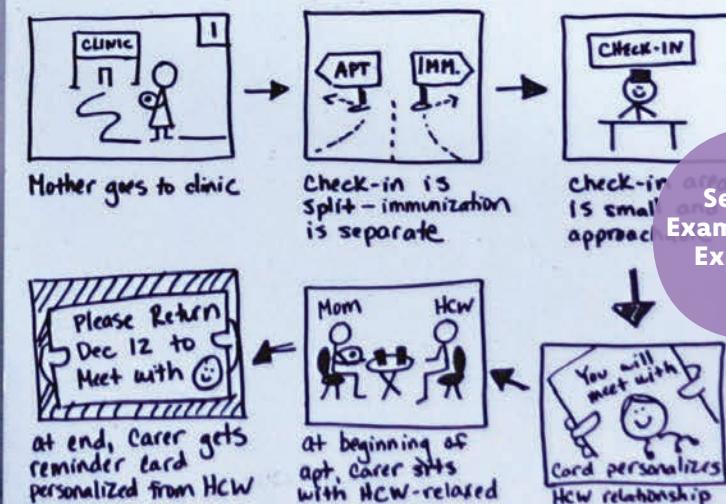


Sequences

Some ideas will not require ‘making’ anything, but instead require changing an experience. These ideas still deserve to be designed. Tools like storyboard can help to elucidate how a new experience might unfold, sequence by sequence.



Clinic EXPERIENCE : BUILD HCW RELATIONSHIP



Sequence Example: Clinic Experience

4c Tool #21

Prototype Principles

Prototyping is the exercise of testing the simple designs from Tool #20 with real users. This method allows users to experience and react to simulated solutions within their environment (the home, the clinic, the community).

The purpose is not to rigorously measure performance (that comes later). Instead, we are interested in determining elements of an idea that are working well and elements that require rethinking. This step precedes full-scale implementation to optimize ideas prior to investing resources in their roll-out.

The fundamental method for prototyping is allowing users to experience and react to potential solutions. Prototyping activities should get as close to a real scenario as possible. However, prototyping should also be rapid, allowing us to learn and improve our ideas quickly.

By the end of this phase, your team will have a final set of ideas that have been tested, reassessed, and redesigned.

The principles on this page serve to guide your in-field efforts:



Establish Learning Goals

What do we want to learn from putting this idea out into the field? Answer separately for each design in Tool #22.



Enable Real Use Cases

How can we quickly create the idea in context with real users? Consider the following when forming a mini-pilot:

- Choose a location where you have buy-in and support.
- Ensure that the desired user-group participates.
- Find Health-care workers or partners that will help administer the prototype. Conduct a short training.
- Create a simple tracking system to measure outcomes.



Iterate As You Go

What could we adjust prior to the next prototyping activity? This is especially valuable when certain elements are distracting from the core idea.



Filter Feedback

Look back at the “Record Field Research” worksheet — you will take notes on similar observations and narratives. When recording feedback, place more weight on actions and less weight on reactions to rough or low-fidelity designs.



Invite User Co-creation

Find opportunities to directly involve users in developing an idea. For example, when a user asks a question, ask how they would solve it before providing your own answer or suggestion.



Tool #22

Prototype Planning

For each solution you are taking into the field, use this worksheet to develop a prototype plan in preparation for gathering in-field feedback.

Demonstrate the Idea

How will you demonstrate the idea?

Examples include: paper sketch, cardboard sign, SMS text(s), radio spot script, etc.

Learning Goal #1

Place Post-It Here

Learning Goal #2

Place Post-It Here

Where

Select the precise location(s) where you will introduce the prototype, such as a group of clinics. Remember that the more an idea is prototyped in context, the better.

Place Post-It Here

When

Decide upon precise times, such as when a prototyping activity begins and when interviews will be conducted. Include the duration—hours or days—for the activity.

Place Post-It Here

With Whom

Confirm that you are engaging the intended user-group as defined in your Objective. Remember that selecting a variety of people—both non-vaccinators and vaccinators—can generate more helpful feedback.

Place Post-It Here

Prototype Evaluation

Use these three dimensions that focus on an idea's potential to evaluate the simulated solution's future success. For each idea, use this page to evaluate the idea post-prototyping.

Biggest strengths

Observed weaknesses

Do the user responsibilities seem realistic?

Is this idea desirable?

- Is this idea currently designed to ask as little of users as possible?
- Does the idea easily fit into people's lives?
- Is the idea actually appealing to users?
- Is the idea understood and correctly used?
- Is it inviting or complicated?



Not yet?
Return to
the design
phase and
refine.



All yes?
Move on!

Is this idea feasible?

- Is the technology required of the idea easily available?
- Is the technology easily sustained over time?
- Can your programme actually make it happen?
- How long will the idea take to move beyond a prototype?



Not yet?
Return to
the design
phase and
refine.



All yes?
Move on!

Is this idea viable?

- What can be projected about possible costs?
- Is the idea honouring the programme's budget?
- Might the idea actually save the programme money?
- How near-term versus long-term are potential savings?



Not yet?
Return to
the design
phase and
refine.



All yes?
Move on!

What do we still need to know?

5a: Plan for Iteration

Adaptation Plan

Define the key evaluative questions and corresponding methods to measure them.

5b: Evaluate Effectiveness

Assess each revised idea in the field using the Adaptation Plan as a guide. Evaluate the accuracy of diagnoses and determine what we still know little about.

5c: Improve Initiatives

Implement adaptive changes that respond to findings as you scale the improved idea. If the idea is not working, step back into creative conceptualising, then redeploy.

Final Output:

Revised Adaptation Plan & Proven Ideas.

If the idea is working, the final output is a revised Adaptation Plan and proven ideas that can be scaled.

5a Tool #24

Adaptation Plan

For each idea, use the worksheet on the following page to develop an Adaptation Plan. Adjust the plan throughout implementation. Add additional rows as needed for additional implementation questions.



Define Implementation Questions

Define what you want to learn about and improve from phase to phase during iterative implementation.

Question Examples:

- ? Does the SMS reminder programme make it easier for caregivers to follow through on their intentions to vaccinate?

- ? Are more messages better than fewer?

- ? How important is timing?



Decide Indicators

Based on your questions, determine what you need to measure.

Indicator Examples:

- + percent change in clinic visits
- + percent increase in on-time visits



Determine Means of Verification

Determine which methods to use for tracking the indicators and improving the idea (not for definitively evaluating its impact).

Method Examples:

- » Use clinics' administrative data (aggregate change in visits)
- » Enrol a sample of caregivers into the SMS reminder programme and track this controlled set
- » Conduct individual interviews with caregivers after experiencing the SMS reminder programme



Articulate Justification

Document why each indicator and its associated means of verification were selected.

Justification Examples:

- » The two indicators address two related issues (forgetfulness leading to non-access or late-access)
- » Administration data from clinics is a more suitable means of verification given short time frame and limited budget



External Variables

Recognise external variables that may jeopardize an idea or interfere with indicators.

Sample External Variables:

- ! Caregivers may not have reliable access to the same mobile phone—it could be shared.
- ! Caregivers may not consistently pay for mobile phone service.
- ! Caregivers may not have regular access to Internet.
- ! Clinics may not regularly stock all vaccines.

Adaptation Plan

Remember the Objective

Locate the Objective from Tool #2 for reference—this is what our continuous learning should support.

External Variables !

Recognise external variables that may jeopardize an idea or interfere with indicators.

i

Implementation Question

What you want to learn about and improve from phase to phase

?

ii

Indicator

What you need to measure

%

iii

Means of Verification

Methods for tracking the indicators and improving the idea



iv

Justification

Why each indicator was selected



i

Implementation Question

?

ii

Indicator

%

iii

Means of Verification



iv

Justification



?

%



?

%

