The HCDExchange is a Knowledge Hub driving locally-led human-centered design for public health (HCD+Public Health) in Africa and Asia.
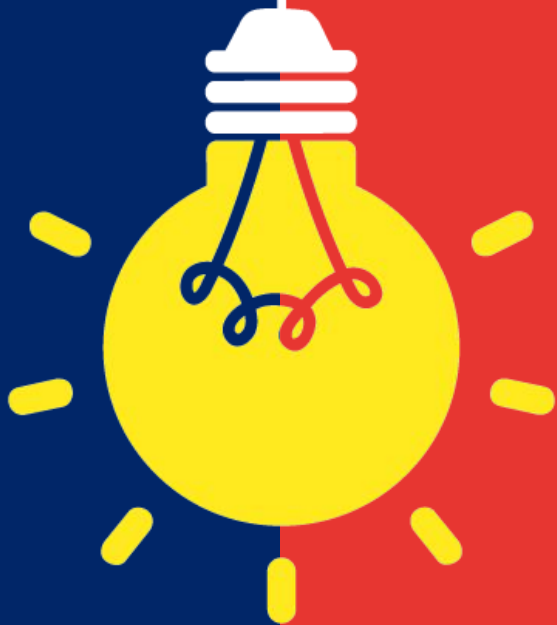
The Power of Insights

Meet Today's Speakers

Sue Wairimu

Associate Product Manager
PATH Living Labs

Stella Wanjiru

Design and Innovation
Specialist PATH Living Labs

Florence Aketch

County Chief Nursing Officer
Kisumu County

29 May 2024

Living Labs

Turning Insights Into Powerful Solutions

Living Labs

With a multidisciplinary team of product engineers, health systems design professionals, material designers, behavioral scientists, clinicians, quantitative modelers, and market access specialists, the Living Labs uses a mixed-methods approach to create sustainable, impactful health solutions across several health areas and program teams. We do this by:

- Prioritizing listening and empowering users
- Using our in-country design experts who understand the local health care system
- Rapid ideation, prototyping, and iterative testing

Our established protocols and broad network of users help raise acceptability and feasibility of solution design, lower risks and overall investment costs, and accelerate implementation research.

By the numbers

52 Active and completed projects

3000+ Users engaged

32 Staff

24 Unique donors

15 Countries of operation (and growing!)

**12** Health or functional areas

Project spotlights

- Measles-rubella microarray patches: thermostability, human factors
- COVID-19 intranasal vaccine stakeholder and user evaluation
- Shigella vaccine value proposition
- Design a COVID-19 multi-dose pouch packaging prototype
- Digital solutions to support COVID-19 rapid diagnostic tests
- Develop handwashing station prototype for COVID-19 response
- Improve pre-eclampsia/eclampsia diagnostics
- Evaluate usability and acceptance of Ellavi uterine balloon tamponade

Learn more at www.path.org/livinglabs

PATH

Amplifying the impact of Living Labs' assets…
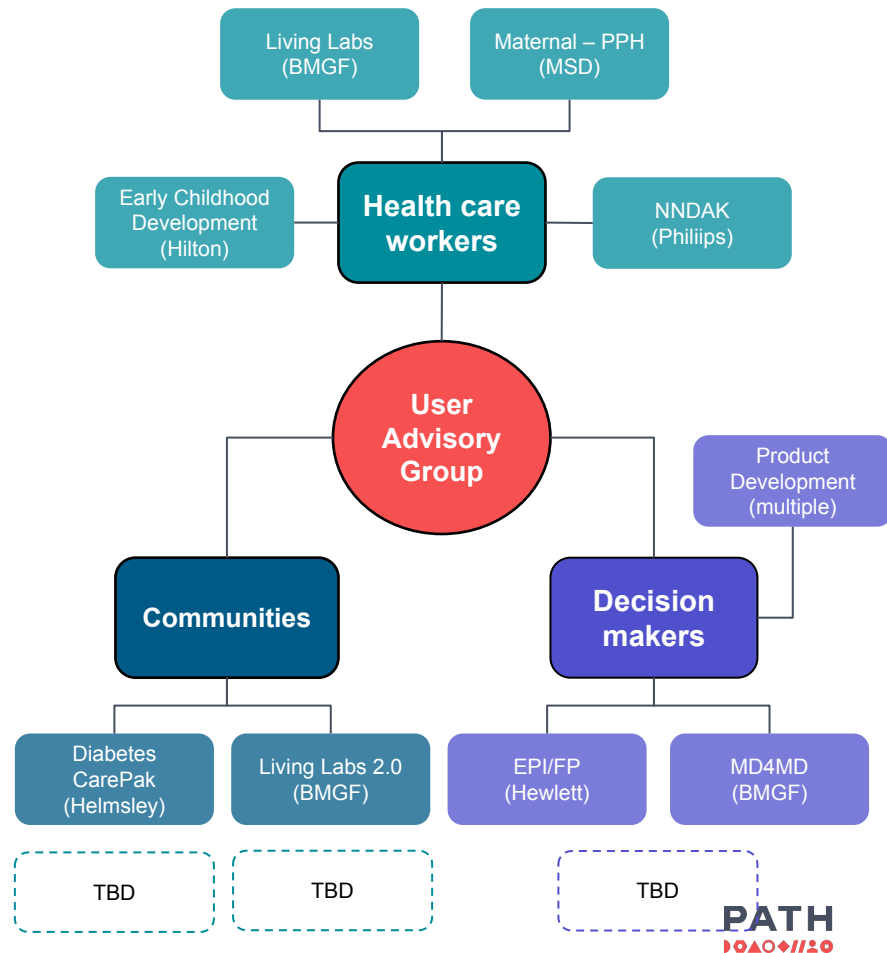
…through our approach

Our rapid and iterative approach - "sprints" - has been repeatedly deployed across a wide range of health areas and challenges, enabling **the team to operate with greater velocity to generate insights and co-create solutions** within and beyond the immunization space.
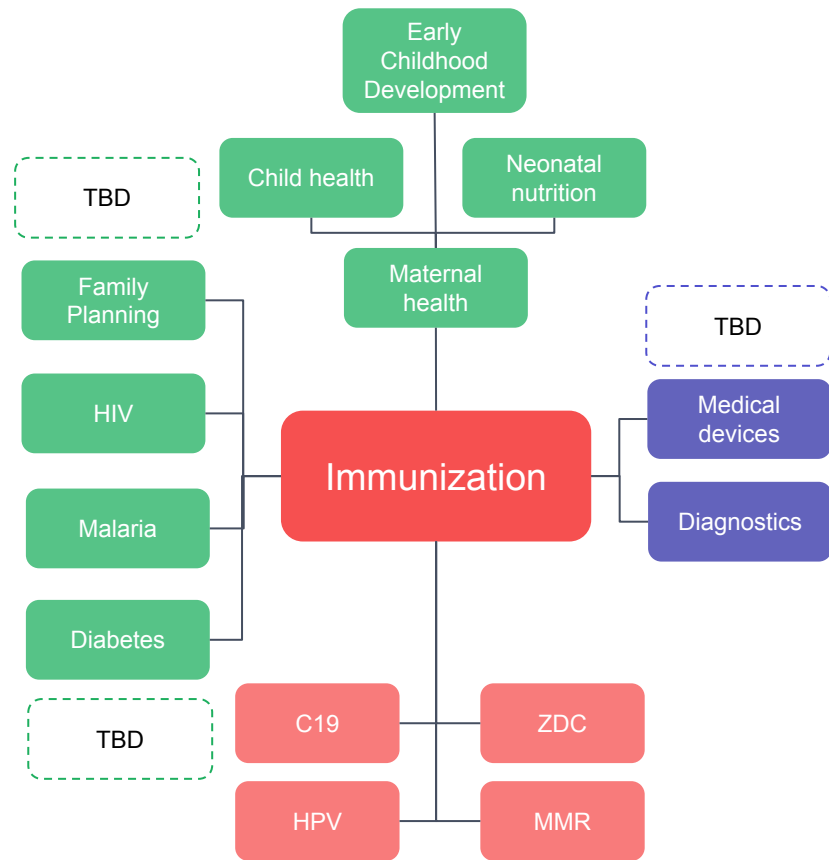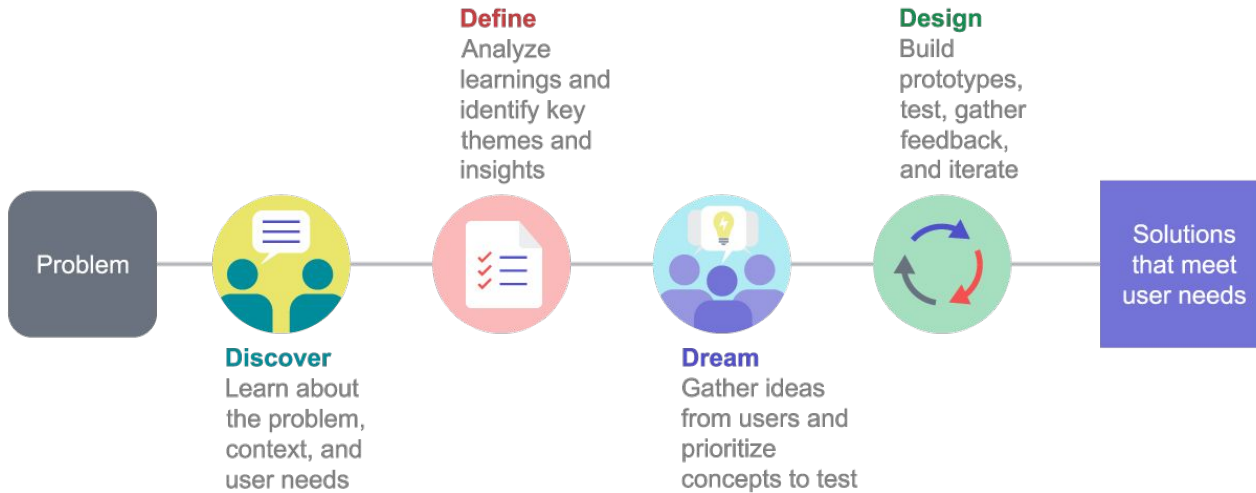
Amplifying the impact of Living Labs' assets…

…through our user network

Assets, like the User Advisory Group, now have further scale and reach, **magnifying the impact of the foundation's initial investment** four years ago.

Our '4D' approach to human-centered design

Define
Analyze learnings and identify key themes and insights

Design
Build prototypes, test, gather feedback, and iterate

Problem

Discover
Learn about the problem, context, and user needs

Dream
Gather ideas from users and prioritize concepts to test

Solutions that meet user needs

Human-centered design (HCD) is a creative problem–solving approach involving developing a deep understanding of the people we are designing for.

PATH

Meet our Super User, Florence

- What has been a high moment for you since you started working with the PATH living Labs Team?

- What core thing have you learnt through the duration you have been collaborating with the LL team?

- What impact have you seen in your work?

Florence presenting on a panel during the HCD for Health Exhibition held with NVIP at Radisson Blu, Nairobi.

Define

In the Define phase, data collected during the Discover phase is analyzed to identify key themes and insights.

PATH's Define phase

Improving Motivation and Performance of Frontline Immunization Health Care Workers

After health care worker (HCW) interviews in different facilities in 10 counties across Kenya and some districts in Zambia, the PATH team reviewed the collected data and developed a catalog of demotivating factors and a playbook of solutions cocreated with workers using Human centered design and practices.

This tool provides other actors an opportunity to learn from the knowledge we have gained and provides over 100 co-created solutions.

Living Labs **Insights Explorer**

Improving **Motivation** and **Performance** of Frontline Immunization Health Care Workers

What is the Insights Explorer tool?

The factors that impact the motivation and performance of frontline workers differ from facility to facility. The Insights Explorer tool presents a **catalog of demotivating factors** found through Living Labs engagement with workers, and a **playbook of solutions** co-created with workers using human-centered design (HCD) practices and exercises.

Who should use the Insights Explorer tool?

Stakeholders across routine immunization (RI) systems can find useful insights from the tool. RI system managers at national, subnational, and facility levels can look in the catalog of demotivating factors to find challenges relevant to their context. Then they can explore solutions to improve motivation and performance that are perceived by frontline workers as desirable and feasible, as well as solutions that have already been implemented in other facilities.

How do I learn more?

Living Labs is here to support you and can connect you to a design professional on the project to navigate whether a solution is relevant for your context and how it may be implemented and evaluated. Please submit inquiries using the online form below

I would like to learn more.

Motivated frontline immunization workers build strong relationships with the communities they serve, continually improve operating procedures, and better protect communities from vaccine preventable disease.
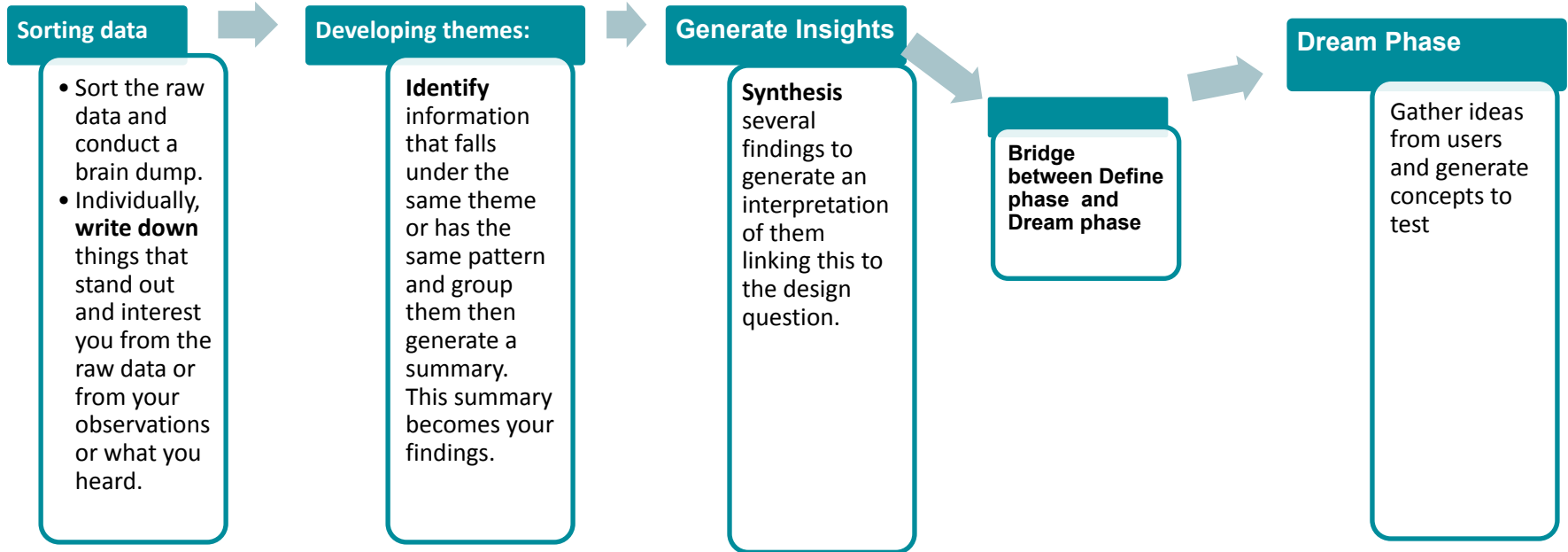
Living Labs Insights Explorer Tool

Q1: How do you effectively communicate insights to drive cocreation of solutions?

Q2: What are some of the common challenges you encounter in turning your insights into powerful and impactful solutions?

Activities during define phase

Sorting data

- Sort the raw data and conduct a brain dump.
- Individually, **write down** things that stand out and interest you from the raw data or from your observations or what you heard.

Developing themes:

Identify information that falls under the same theme or has the same pattern and group them then generate a summary. This summary becomes your findings.

Generate Insights

Synthesis several findings to generate an interpretation of them linking this to the design question.

Bridge between Define phase and Dream phase

Dream Phase

Gather ideas from users and generate concepts to test

An insight is a statement summarizing all data grouped under a certain theme. It helps articulate the findings in a clear yet concise form to make the theme more understandable.

A design question is a description of the problem area that your sprint will be focusing on.

a. *Point Of View (POV) Statements*

User + Need + Insight
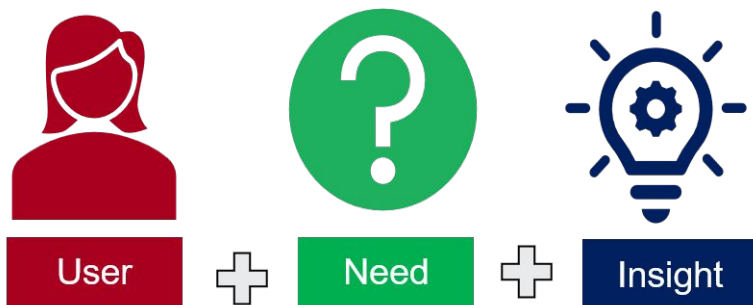
Format allows us to:

Remain as human centric as possible articulating user's perspective and emotional experience.

Point of View Statements follows the format*:*

"user (who) needs(what) because (why)."

Let's take a look at this POV statement:

"A young, bored and demoralized health care worker needs a way of breaking up his daily monotonous immunization routine ,that makes him lose interest in giving quality services."

b. *Design Principles*

Design Principles are clear instructive guardrails for what you'll actually consider during design that then inform the products.

Design principles are employed when you have an idea of the solution. These are quick memorable statements that make your iteration consistent.
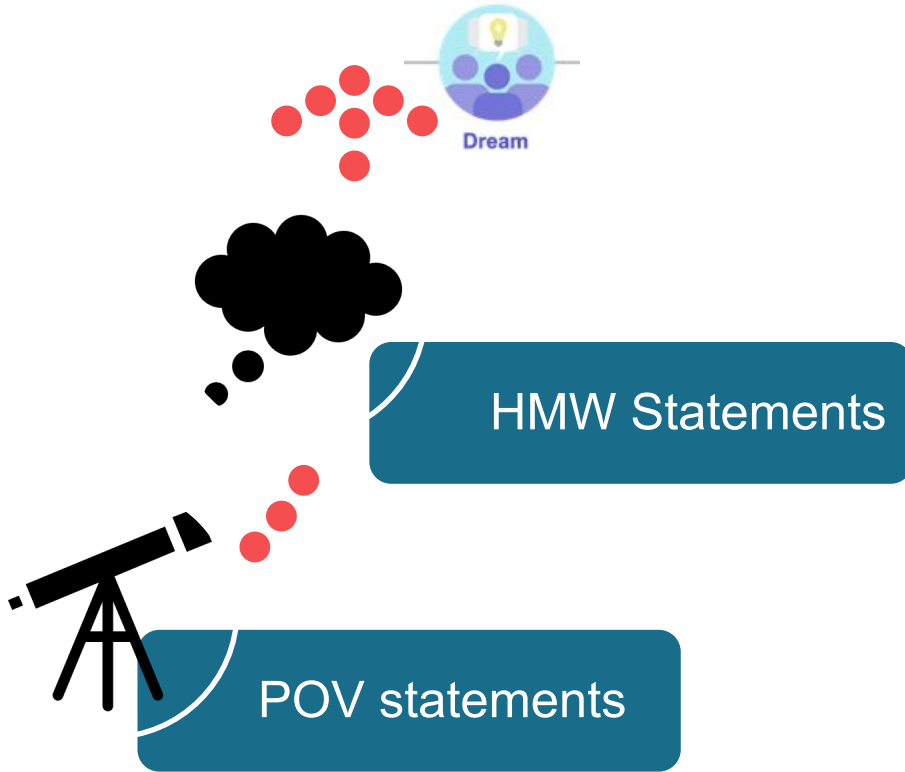
They describe the most important elements to your solutions and they should align with the themes you find during the define phase.

Design principles are inspired by:

Your users, insights and the goals of your project

PATH
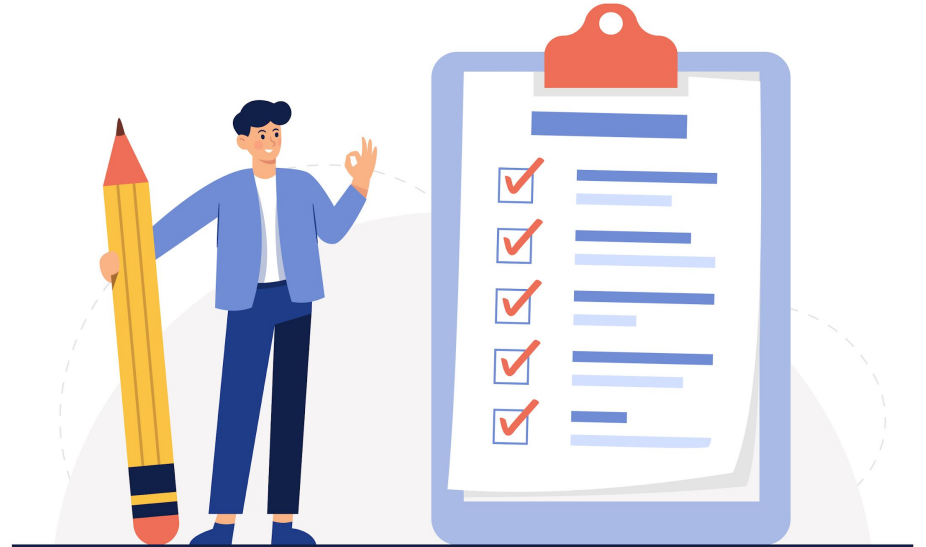
c. *How Might We (HMW) Statements*

Dream

HMW Statements

POV statements

How Might We Statements are questions that help frame the problem for ideation.

These statements are used in brainstorming solutions to ensure we are sticking to solving targeted problems, you can write as many as you can.

They are derived from the POV statements and should be broad enough to allow for creative ideas but confined within the insights identified from the POV

HMW Statements follows the format*:*

How Might We [intended experience] for [user] so that [desired goal/effect]

PATH

Our POV statement is:

"A young, bored and demoralized health care worker needs a way of breaking up his daily monotonous immunization routine, that makes him lose interest in giving quality services."

Now let's try develop some HMW questions from this Point of View (POV) Statement

PATH

How to make a good **How Might We….**

Feeling Stuck? Try some reframing techniques…

- Consider the good?
  - *HMW highlight the rewarding aspects of immunization to energize our HCWs?*
- Remove the bad.
  - *HMW eliminate the monotonous tasks from RI to keep our HCWs motivated?*
- Consider the opposite
  - *HMW transform RI into an engaging and dynamic process for our HCWs?*
- Question the assumption
  - *HMW ensure that repetitive tasks are not inherently boring for our HCWs?*
- Create an Analogy
  - *HMW make RI as exciting as a high energy team sport for our HCWs?*
- Change the perspective
  - HMW see the RI through the eyes of a patient to inspire our HCWs?
- Break it up
  - HMW divide the immunization tasks into smaller, varied activities to maintain our HCWs interest?

Adapted from Stanford d.school

PATH

Point of View (POV) Statement to How Might We (HMW) example

Our previous POV statement was:

"A young, bored and demoralized health care worker needs a way of breaking up his daily monotonous immunization routine, that makes him lose interest in giving quality services."

The HMW statements can be as follows:

"HMW we make it fun and exciting for young healthcare workers as they carry out routine immunization?"

"HMW make the monotonous immunization routine as exciting as hot air ballooning over the Mara for the health care workers?"

You can have more than one HMW statement, this can allow you to explore different perspectives.

PATH

Co-creating solutions to increase demand for HPV Vaccine

Challenge: HPV vaccine eligible girls and their caregivers, often have limited knowledge and resources on HPV and HPV vaccine against cervical cancer. This can lead to myths, misconceptions and consequently a decrease in vaccine coverage.

Our approach: We are testing prototypes that build on users own desire to learn, improve, and achieve increased uptake of the immunization services as well as looking at how we can apply these solutions to other health areas and geographies.

Insights

Understanding determinants of demand for HPV vaccine

After analysis of the collected data, some of the insights are:

1. Community members do not understand why only girls (and not boys) are being vaccinated. This has led to misconceptions that the HPV vaccine is meant to reduce their population by preventing the vaccinated girls from ever getting pregnant.

2. Community members know about cervical cancer but do not know its relation to HPV. Some might resist the vaccine because they do not have enough information on the HPV vaccination

3. Parents and guardians do not like it when their children come home vaccinated in school without their knowledge and consent. Therefore they warn them about getting the 2nd dose. They feel the need to be first informed on what their children get vaccinated against.
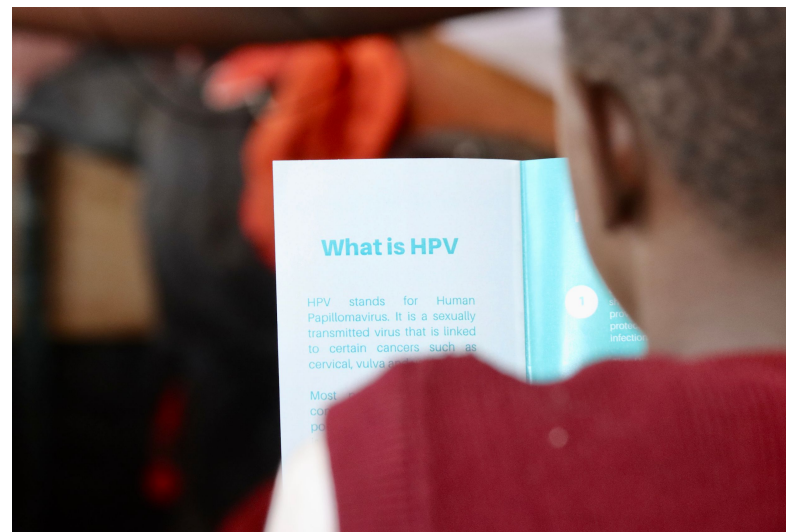
"We do not like it when our girls come home and tell us they have already been vaccinated yet we did not know anything about it. You may come home and find them sick with side effects."

- Caregiver

PATH

POV and HMW questions

Our POV statement is:

| User | All the community members and especially caregivers and their girls |

| Need | need to be fully sensitized on the benefits of the vaccine, the possible side effects and any other concerns such as why it is girls being vaccinated and the eligible age, |

| Insight | because they are the main enablers and/or inhibitors of uptake depending on the level of accurate information they have. |

Our HMW question is:

HMW ensure that CGs and their daughters are well informed about the HPV vaccine and its effectiveness against cervical cancer?
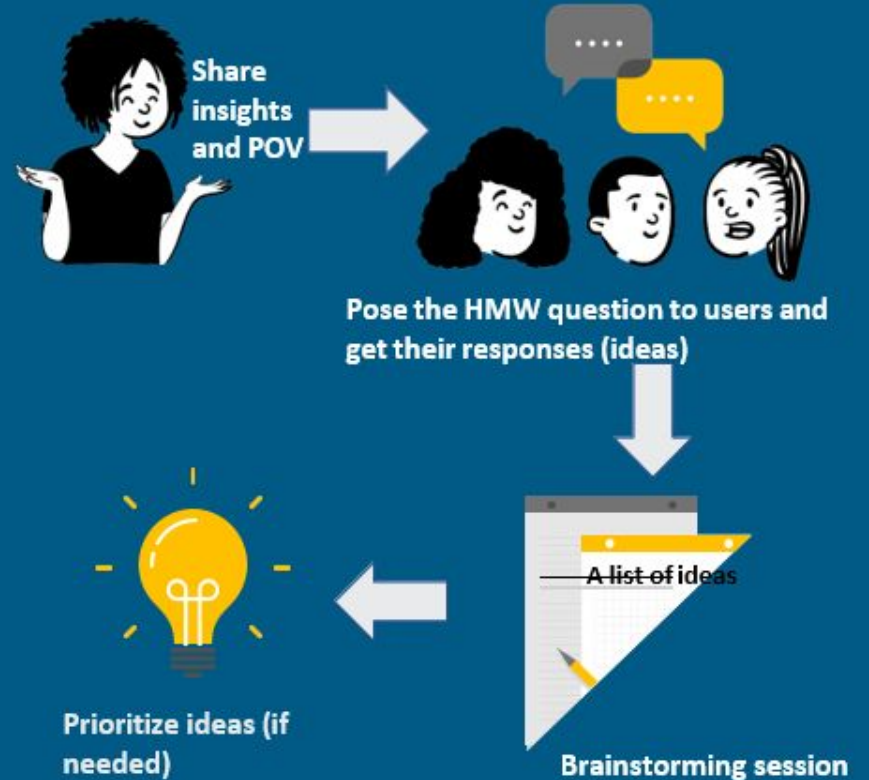
PATH

Dream

Gather ideas and input from users from the insights generated in the Define phase.

PATH

Activities during the Dream phase

There are two main activities in the dream phase.

1. **Insights validation workshop :**

2. **Cocreation session:**
   - **Brainstorming session:**
   - **Prioritization:**

Share insights and POV

Pose the HMW question to users and get their responses (ideas)

A list of ideas

Prioritize ideas (if needed)

Brainstorming session

Validation Workshop

Share POV and HMW: Introduce the design challenge by sharing the point-of-view statement and posing the "How might we" (HMW) question. *(The HMW can be altered depending on the outcome of the initial discussion.)*

- Insights and findings gathered from users should be validated by holding a workshop with key stakeholders.
- This will enrich the insights by ruling out wrongly captured information and getting validation of the insights identified.
- Participants should be diverse to include decision makers, technical experts, users, designers, etc.
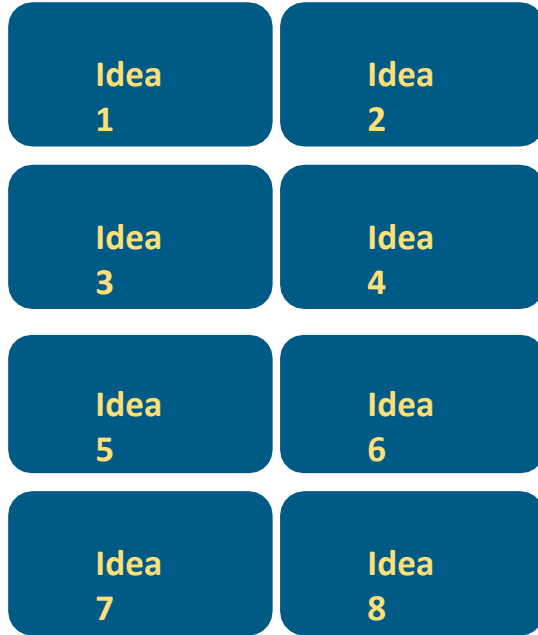
Document: Record ideas shared in response to the HMW

Brainstorm Session

The design team further engages the users in findings solutions/ideas (**dreaming**) for the HMW question(s).

Crazy eights(8s)

Idea 1	Idea 2
Idea 3	Idea 4
Idea 5	Idea 6
Idea 7	Idea 8

This tool is given to the users after discussing the description of the
challenge and posing the "How might we" question.

The crazy eights activity entails the users writing 8 ideas/solutions to the challenge described.

For each challenge, each user writes 8 solutions in 8 minutes. This results in a list of ideas that will be prioritized by the group of users.

This can be done by giving each user one piece of paper to divide into eight pieces or using a sticky note for each idea.

PATH

Examples of crazy eight's

HMW ensure that students are well informed about HPV vaccine and its effectiveness against cervical cancer?

| 1	2	3	4
Education of school girls in school health programs	Give wrist bands to girls who have been vaccinated	Daily sensitization at the MCH and OPD on HPV and cervical cancer	Add a contents page for the entire book and then use page numbers to navigate
5	6	7	8
Visit schools during parent meetings and give health talks	HCWs speaking about the vaccine in Church gatherings	Holding meaningful community dialogue and action days	Giving information to girls 10-14yrs on importance of completion of the doses

PATH

Sort and group similar ideas

Users discuss and group ideas generated during the crazy eight activity.

Depending on the prioritization needs, designers can ask users to further sort the ideas in an impact vs. effort matrix and then prioritize an idea/s in the high impact, low effort quadrant
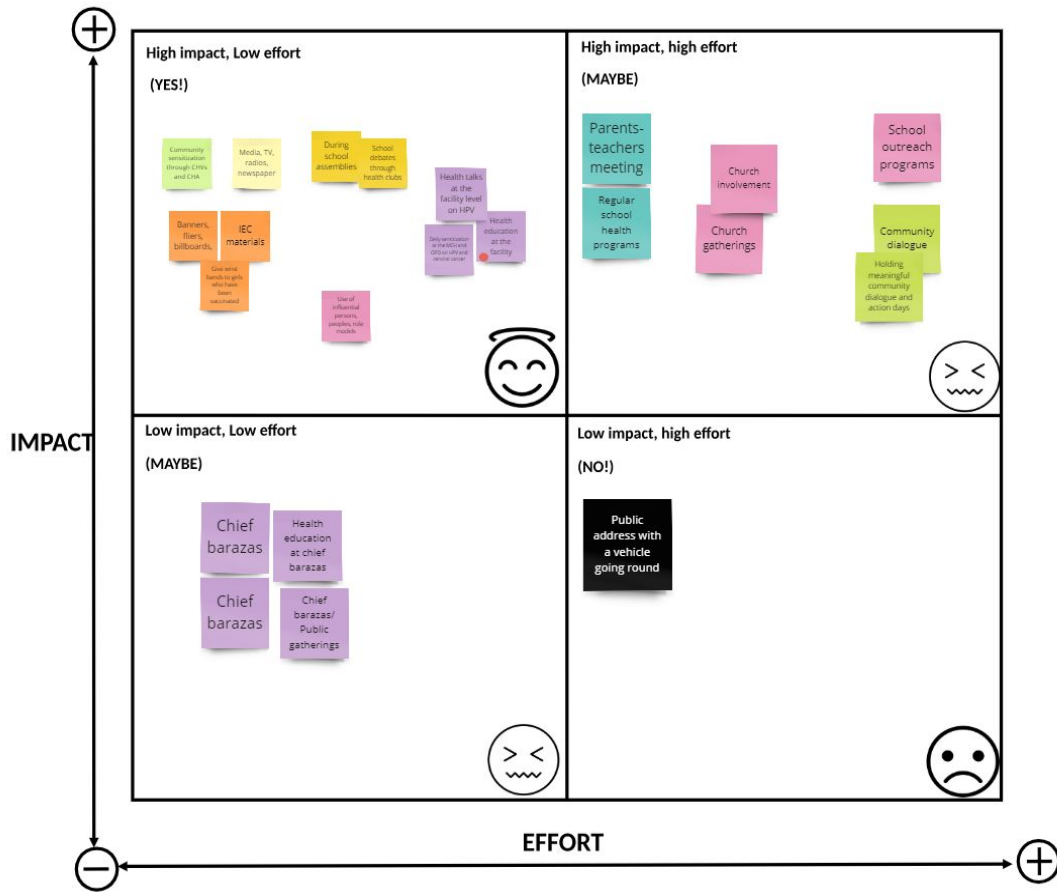
Prioritize an idea/ ideas

Dotmocracy- Dot voting

Idea 1

Vote Vote

Idea 2

Vote Vote Vote Vote Vote
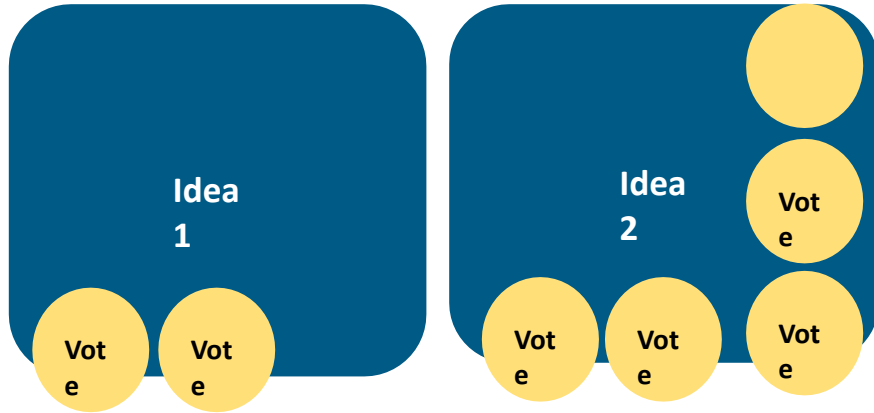
This is a tool used in voting for ideas for further prioritization Users get to vote for ideas by sticking or drawing dots on the idea they wish to select. All ideas are displayed for each user to choose. A user can have one or more opportunities to vote depending on prioritization needs.

Feel free to use any visual sign of voting apart from a dot vote

Populate a lean concept sheet

Lean concept sheet

This tool guides in fleshing out raw ideas into a format It that expounds the idea further. It includes a concept name, a short narration or sketch of what the concept/idea is, a list of unique characteristics of the concept, something that influenced creation of the idea and what is required to create a prototype of the concept/idea.

Here is an example of a lean concept sheet co created with users:

Concept name: Mulika HPV 2 in schools		
Description	**Features**	**Prototyping supplies**
Mulika HPV 2 aims at reaching every girl (10-14) years in schools for HPV , to educate them in a fun and interesting way about HPV vaccine	*Involvement of different stakeholders on reaching all the girls age 10-14 in schools through health education on HPV*	*IEC materials* *Flip charts* *HPV cards and registers*
	Inspiration	
	Low HPV 2 uptake in schools	

Designers create a detailed concept sheet

Detailed concept sheet

Through an internal co-creation process, lean concepts undergo additional scrutiny—aligning each with the unique needs of users.

Designers further expound on the concept through literature review, identifying potential barriers, and creating measurement plans and a piloting pathway.
At this stage the prototype is ready to pilot for testing.

HPV Vaccine Advocacy Through Art (HATA)

Design challenge

HCWs have limited time to give health education on HPV to students during school outreaches. This has resulted to students having less information and hesitating to take the vaccine. **HMW ensure that CGs and their daughters are well informed about the HPV vaccine and its effectiveness against cervical cancer?**

"Most of these girls are found in schools"
-Religious Leader, Kakamega County

Impact area

• Parents' buy in
• Transfer of knowledge
• Increase in vaccine demand

Potential barriers

• Aligning with the school calendar
• Insufficient preparation time

Measurement plans

• Competition activities will measure transfer of knowledge based on what the students perform or present
• Planning a vaccination outreach in the same school will measure the uptake after the deployment of the intervention, compared with schools that have not participated

Description

School competitions can be a useful way of raising awareness on certain issues that need the attention of teachers, parents, and students. This seeks to do the same with the HPV vaccine by sensitizing students and teachers first and then rolling out an art competition in a few schools within a sub-county to allow them to show their knowledge to others and their parents by performing it through song, poems, skits, spoken word, etc. Other forms may include essays and drawings or paintings.

Features

• Providing sensitization sessions in schools
• Advertising the competition in the schools with the topics also posted (e.g., cervical cancer eradication through vaccination)
• Both boys and girls should participate in the competition
• One week for the schools to prepare
• The essay competition will be done the same day in a separate room
• Drawings/paintings will be submitted a day before

Link to demand

• Disseminating information to students and teachers before the competition will increase awareness of the vaccine
• During the competition, invited parents and students will be sensitized on the vaccine

Prototyping supplies

• Certificates/awards
• Judges
• Posters and IEC materials

Evidence from literature

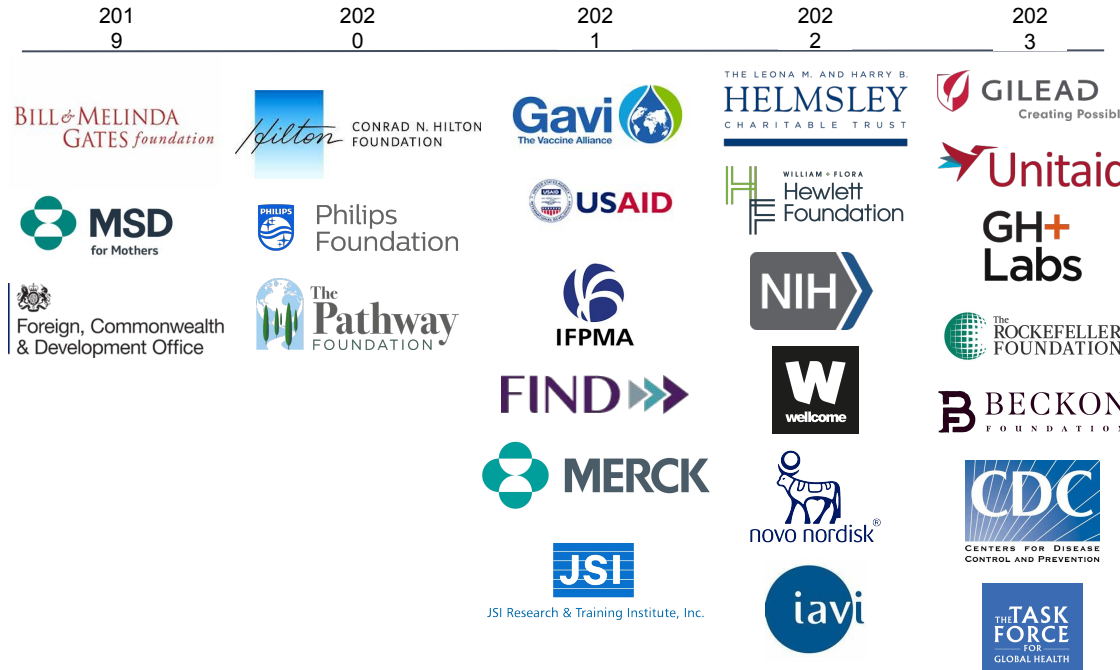*Affective Benefits From Academic Competitions,* by Mehmet A. Ozturk and Charles Debelak

PATH

Questions?

Reflecting on what you have learned today on turning insights to powerful solutions, what is one key takeaway that you have learned that you will apply to your projects/work?

Living Labs collaborators

Amplifying the initial BMGF investment, partners including global and family foundations, private sector entities, governments, and global social-sector leaders continue to leverage the platform.

2019	2020	2021	2022	2023

Bill & Melinda Gates foundation · Conrad N. Hilton Foundation · Gavi The Vaccine Alliance · The Leona M. and Harry B. Helmsley Charitable Trust · Gilead Creating Possible

MSD for Mothers · Philips Foundation · USAID · William & Flora Hewlett Foundation · Unitaid

Foreign, Commonwealth & Development Office · The Pathway Foundation · IFPMA · NIH · GH+ Labs

FIND · Wellcome · The Rockefeller Foundation

MERCK · Novo Nordisk · Beckon Foundation

JSI Research & Training Institute, Inc. · iavi · CDC Centers for Disease Control and Prevention

The Task Force for Global Health

"The Living Labs are great to partner with because their work is flowing into what we do in the government: identify problems with the staff at the health facilities and co-create solutions with them." — Dr. Jelita Chinyonga, Director, Performance Improvement, MOH, Zambia

*This timeline of donor engagement is not comprehensive; a full list of donors and collaborators s available upon request

PATH

Additional Resources

1. [Living Labs Insights Explorer](#)

2. [PATHOS – A Human Centred Design Toolkit](#)

3. [Living Labs Playbook](#)

4. [Lessons learned from co–creating solutions with users](#)

5. [State of primary health care across six African countries](#)

6. [Concept book: Increasing vaccine demand](#)

Credits:

Amazing and passionate team;

1. *Wilkister Mbula for masterminding the PATHOS Toolkit*

2. *Steve Osumba, Nelson Cheruiyot, Janet Muigai and Allela Cynthia, Faith Mbai for developing the HCD Tools and it's nuances*

3. *Living Labs team for their passion for inclusive innovation.*

PATH

For more information contact:

Visit our website:

http://www.path.org/livinglabs

Brian Taliesin
Global Director, Living Labs
btaliesin@path.org

Chris Obong'o
Lead Product Manager, Kenya
cobongo@path.org

Joseph Kayaya
Lead Product Manager, Zambia
jkayaya@path.org

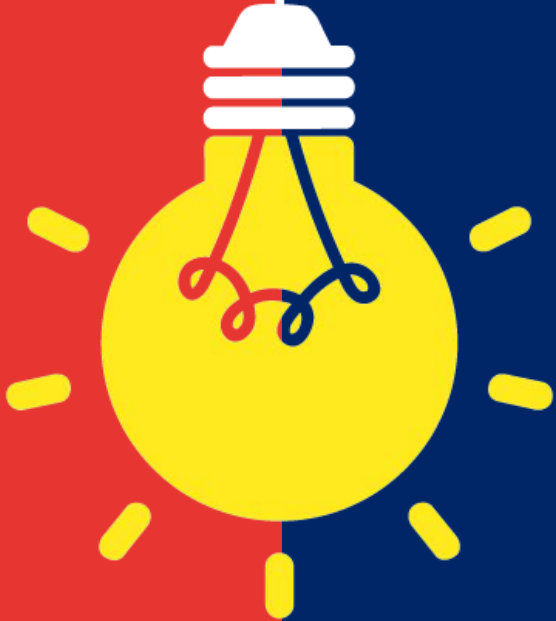**Cyprien Tendo-Bugondo**
Lead Product Manager, DRC
lcyprien@path.org

Learn how to partner with us:
https://www.path.org/resources/living-labs-playbook/

Announcements

- Join the **HCDExchange Community**
  - Check out the X-Change & Career Portal
- Fill in our **Community Survey**
- Join our **June Masterclass** for more HCD skills-building

Thank you

This work would not be possible without the support of JSI & the William & Flora Hewlett Foundation.

Get in touch: *Muthoni Wachira*
HCDExchange Director
muthoni@hcdexchange.org

The HCDExchange is part of JSI

@hcdexchange/   @HcdXchange   @hcdexchange   @hcdexchange6605