Investing in Learn-by-doing (LxD)

Insights from the immunization Zero-Dose Learning Agenda 2023-2025

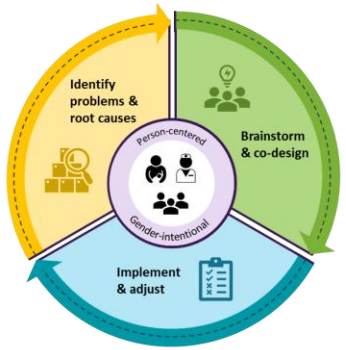
April 2026

Gates Foundation

Executive summary: Investing in Learn-by-doing (LxD)

Learn-by-doing (LxD):
Connecting HCD and continuous learning

- **LxD strengthens the design, implementation, and local ownership** of health interventions across **supply** and **demand** domains, resulting in more effective, equitable, and efficient services.



- By combining human-centered design (HCD) with continuous learning in structured, iterative ways, **LxD helps address complex, persistent health challenges and reach marginalized populations.**

Why LxD now:
Accelerating impact with constrained resources

LxD can improve impact with limited resources

- LxD approaches generate real-time evidence while programs are running, allowing teams to quickly adapt, course-correct, and avoid investing scarce funds in strategies that don't work.

LxD accelerates practical innovation

- In fast-changing and uncertain environments, human-centered continuous learning cycles help identify what is feasible, scalable, and context-appropriate—reducing the lag between insight and implementation.

LxD builds local capacity and ownership

- Embedding LxD strengthens frontline decision-making, problem-solving, and resilience—reducing reliance on external expertise and making improvements more sustainable.

LxD offers a unique opportunity to test a highly customizable approach at scale in contexts with diverse populations, complex challenges, and rapidly evolving conditions.

Zero-Dose Learning Agenda (ZDLA):
Applying LxD in high ZD settings

- ZDLA applied **LxD to immunization by co-designing interventions with health workers, technical partners, and families to identify and reach ZD children** in marginalized communities.

- **ZDLA findings show that LxD:**
  - **Builds problem diagnosis capacity,** including **identifying different or more actionable drivers of ZD,**
  - **Strengthens shared problem-solving** and decision-making,
  - **Increases local ownership, trust,** and **person-centered delivery**,
  - **Improves design** and **implementation quality,** including **service experience,**
  - **Advances equity**—especially related to gender,
  - **Builds learning capacity,** and
  - Results in **better vaccination outcomes for immunization interventions.**

About this Module

Audience

Individuals and organizations interested in investing in affordable, collaborative LxD approaches to address complex health challenges and reach marginalized groups.

Key Topics

- The **value of hybrid and bottom-up LxD approaches.**
- The **benefits of embedding LxD** within existing health system structures, functions, and workflows.
- **Common misconceptions** about scalability, cost, and added workload of LxD.
- **Frequently asked questions on integrating LxD** into health investments.

Learn-by-doing (LxD)

- Overview
- When is it a value-add?
- Myth busters
- Making LxD investments

LxD: Connecting HCD and continuous learning to address complex, persistent health challenges

What is LxD

- LxD combines **human-centered design (HCD) with continuous learning/adaptive management** in structured, iterative ways to address complex, persistent health challenges and reach marginalized populations.
- **Core LxD components include:**
  - **Identifying problems and root causes,**
  - **Brainstorming and co-designing interventions with end users,**
  - **Implementing and adjusting interventions** using **continuous learning processes.**

ZDLA tested **LxD approaches co-designed with health workers and families** to identify and reach ZD children in marginalized communities in 6 countries.

Photo acknowledgement: CHAI, Ethiopia

Photo acknowledgement: IHAT-TSU, India

Photo acknowledgement: Impetus, Pakistan

Photo acknowledgement: CHAI, Nigeria

Why do LxD

- Addressing persistent complex health challenges requires a **mix of traditional and innovative strategies** along with **locally tailored and collaboratively adapted solutions**. LxD offers a unique opportunity for a **highly customizable approach to be applied at scale,** especially in contexts with diverse populations and rapidly evolving conditions.

Photo acknowledgement: CHAI, Ethiopia

Photo acknowledgement: JSI, India

- **LxD approaches are particularly relevant and needed in today's resource-constrained environment as they:**
  - **Improve the design, implementation, and local ownership** of interventions—leading to more effective, equitable, and efficient health services.
  - **Generate real-time evidence** while programs are running allowing teams to quickly adapt, course-correct—**avoiding investing scarce funds in strategies that don't work.**
  - **Use human-centered, continuous learning cycles** to help identify what is feasible, scalable, and context-appropriate—**reducing the lag between insight and implementation**.
  - Strengthen frontline decision-making, problem-solving, and resilience—**reducing reliance on external expertise and making improvements more sustainable.**

How to do LxD

- **Embed LxD concepts at any stage of an intervention's life cycle,** from design to scale, to strengthen processes and products or tools and allow for **ongoing, local adaptation.**
- **Use LxD approaches at different levels of the health system** and across supply and demand domains.

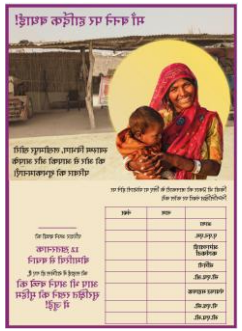


Photo acknowledgement: WJCF, India

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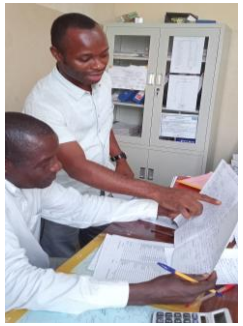


Photo acknowledgement: PATH, DRC

Photo acknowledgement: PATH, Kenya

Photo acknowledgement: CHAI, Nigeria

Please see the ZDLA case study on pages 25-26 for additional detail, and *Appendix 1* on page 29 for non-ZDLA immunization and family planning at-scale examples.

Top-down, standardized approaches: they have their place, but may not be flexible or responsive enough to meet local realities and accelerate health gains

Traditional health systems approach

	1. Identify problems	2. Design	3. Implement	Outcomes
	Based on **existing data sources** and program manager **expertise or priorities.**	Focused on **guidelines and/or program-determined priorities** identified by health officials or managers.	Go/no-go for scale-up is determined by **impact of intervention over a set period of time.**	**Populations who seek services through rigid interventions.**
Gender	Often limited in scope (e.g., by-sex differences on key indicators).	Typically left out from design considerations.	Monitoring largely focuses on by-sex outcomes, not gendered factors of implementation.	Potential improvements on by-sex outcomes, though underlying barriers and norms likely persist.
Example	National MCH program uses DHIS2 to identify persistently low antenatal (ANC) attendance in northern states as a priority problem.	WHO and federal guidelines are applied to design a standard ANC improvement package – including CHW training and job aids.	ANC package is implemented over 18 months, with an endline evaluation to determine whether to scale nationally.	ANC attendance increases near public facilities, but there is no impact on remote and rural communities facing access or other barriers.
Potential limitations	• Lacks root cause(s) for identified problems • Misses underserved or marginalized populations • Low responsiveness to emergent needs • Assumes gender is "taken care of" because focus is on women	• Low tailoring to local needs and contexts • Minimal ownership and buy-in of local health authorities, who are typically responsible for implementation • Gender, including considering unintended consequences, is not incorporated	• Higher risk for ineffective interventions, especially if root causes of problems persist • Few mechanisms for recourse if (when) implementation challenges arise • Gender reviewed by sex outcomes only, missing many underlying socio-cultural factors that could impact ANC	• Higher risk of inequitable outcomes, particularly among underserved or marginalized populations • Lower resiliency to external factors • Socio-cultural barriers and norms persist, impeding accelerated ANC progress, especially in remote or rural communities

LxD: Embedding HCD and continuous learning / adaptive management to support more flexible processes and effective, equitable, and efficient outcomes

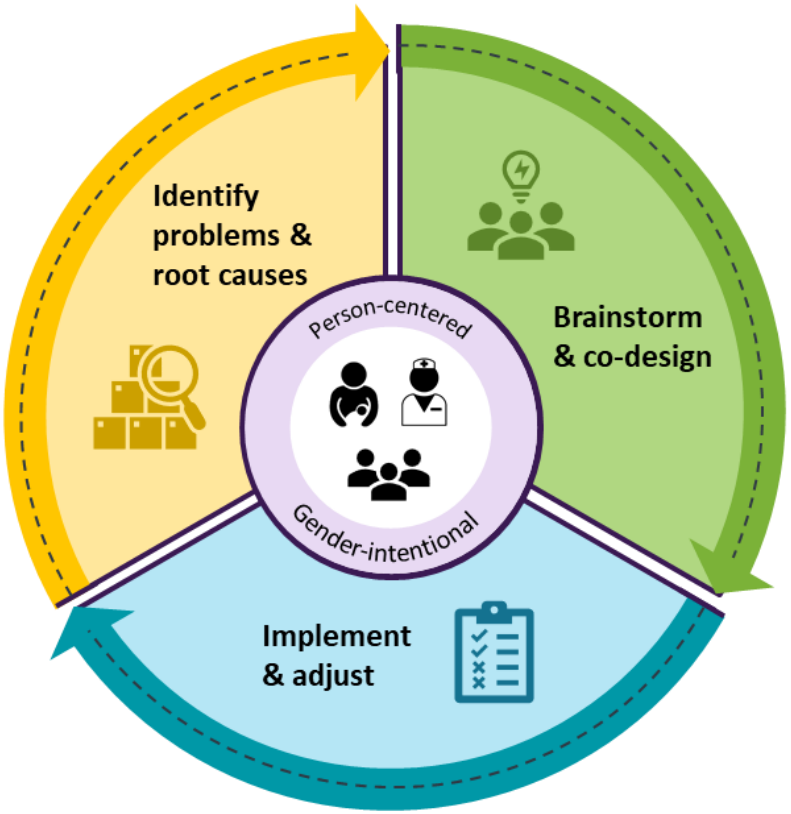
LxD approach

1. Identify problems & root causes

Through regular planning and prioritization processes that explore local data and elevate user and stakeholder perspectives

Gender

Gender barriers and underlying norms are examined



2. Brainstorm & co-design

Possible interventions, develop action plans, and further test and refine ideas with end users

Gender, including potential unintended consequences, are incorporated

3. Implement & adjust

Leveraging existing management or community groups to review interventions and make adaptations

Monitoring gendered factors throughout implementation

Processes and outcomes

That are more:

Flexible

Effective

Equitable

Efficient

See Appendices 2 and 3 for approaches, techniques, and tools linked to each component

How adding HCD and continuous learning / adaptive management results in LxD approaches

Traditional approach

1. Identify problems

Use **existing data sources** and program manager **expertise or priorities**

Gender often limited in scope (e.g., by-sex differences on key indicators)

2. Design

Focus on **guidelines and/or program priorities** identified by health officials or managers

Gender typically left out from design considerations

3. Implement

Work on **implementing well and according to plan**

By-sex outcomes are primary focus, not gendered factors

Outcomes

Impact mostly among populations already seeking services ("low hanging fruit"); underlying barriers likely remain and no ongoing adaptations

By-sex outcomes may improve, but gender barriers and norms may persist

How adding HCD and continuous learning / adaptive management results in LxD approaches

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+ HCD only	**1. Identify problems & root causes** **Include local data** and **elevate end user perspectives**; keep digging into root issues with end users **Gender barriers and underlying norms are examined**	**2. Brainstorm & co-design** **With end users, deliberate possible interventions**, develop action plans, and test and refine ideas **Gender,** including potential unintended consequences, **is considered**	3. Implement *Similar to traditional approach* **By-sex outcomes remain main focus,** but design may elevate some gender consideration	**Initial improvement seen due to intervention's collaborative design, but then plateaus from no ongoing adaptations** **By-sex outcomes and some gendered factors may improve**

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LxD = HCD + CL	**1. Identify problems & root causes** **Include local data** and **elevate end user perspectives**; keep digging into root issues with end users **Gender barriers and underlying norms are examined**	**2. Brainstorm & co-design** **With end users, deliberate possible interventions**, develop action plans, and test and refine ideas **Gender,** including potential unintended consequences, **is considered**	**3. Implement & adjust** Leverage existing management or community groups to **review interventions and make adaptations** **Monitor gendered factors throughout implementation**	**Ongoing improvement from codesign + continual adaptations; underlying barriers and norms addressed are addressed – leading to more effective, equitable, and efficient interventions** **Potential improvements** in both gender-related barriers and norms

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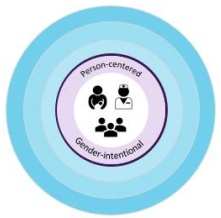
Design approaches: When to apply top-down, hybrid, or bottom-up

Many traditional interventions are designed "top-down" by global, national, or sub-national stakeholders, policymakers, and officials. Interventions developed using **LxD approaches are "bottom-up" or "hybrid,"** involving caregivers, local leaders, and health workers in the design process.

LxD is well-suited for complex, persistent problems; rapidly evolving conditions; tailoring interventions to underreached groups; and more deeply understanding and addressing root causes. LxD can be applied across health systems—it is not meant to replace traditional top-down approaches, but to supplement them.

Design approaches	Best for	Typical practices	Outcomes	
Top-down ↓	• **Interventions that require high standardization** (e.g., HMIS).	• Based on guidelines, standards, and best practices.	• **Reach majority of community members who seek services** (likely misses marginalized groups)	
Hybrid ↘↙	• **Adapting standard interventions or scaling interventions to better meet local needs.** Often useful when local ownership is low or to more deeply address root causes.	• Integrate **top-down processes with bottom-up adjustments** and continuous improvements OR incorporate **local adaptations** when scaling interventions derived from bottom-up approaches.	• **Reach some marginalized groups** • Improve ownership and quality	
Bottom-up ↑	• **Interventions targeted at specific groups or addressing persistent complex challenges.** Valuable when trust in government, science, or health services has eroded or with rapidly evolving conditions.	• **Co-develop and continually improve interventions with input from community end users and health workers** leveraging standard guidelines and best practices.	• **Reach majority of population, including most marginalized groups** • Improve ownership and quality	

Design approaches: Examples

Design approaches		Planning and management: Operational planning for a local health facility		Supply chain and logistics: Procuring and distributing immunization cold chain equipment (CCE)	
		Typical practices	Outcomes	Typical practices	Outcomes
Top-down ↓		• Use GIS maps and existing administrative data; present plans to community for awareness.	• Standardized community health services are delivered.	• Rely on national expertise and existing data.	• Distribution is complete, but equipment does not consistently reach the locations of greatest need; maintenance is irregular.
Hybrid ↘↙		• Incorporate community feedback in service planning; revise activities quarterly.	• Reach and quality of community health services improves.	• Include feedback from sub-national cold chain officers (CCO); adjust distribution schedule regularly.	• Higher proportion of facilities receive needed CCE; semi-annual maintenance.
Bottom-up ↑		• Involve community in major planning and design decisions; discuss revisions during routine community touchpoints.	• Near universal population coverage of health services; community satisfaction and ownership are high.	• Use routine meetings with CCOs to discuss and incorporate their perspectives in process revisions.	• CCE functions reliably across a greater number of facilities; CCOs proactively monitor CCE performance.

Without and with LxD: Routine health system workflows and touchpoints

Health system workflow/ touchpoint	Planning and review meetings	Supportive supervision	Facility/community touchpoints
Without LxD (traditional approaches)	• **Reporting on outcomes** and coverage gaps • Implement **standardized corrective actions**	• **Compliance-focused** supervision and checklists • **Surface challenges and barriers during review**	• **One-way information** sharing and mobilization
Opportunity for improvement	• Move beyond outcome tracking toward **root-cause analysis, joint problem solving, and adaptive process improvements**	• Reorient from compliance checks and task completion to **front-line capacity building and collaborative learning**	• **Strengthen two-way feedback,** improve trust, and surface challenges and barriers in real time
With LxD	• Diagnose **persistent challenges using root-cause analysis** • Bring in **end user and HCW/CHW* perspectives** • **Test and validate small, feasible adjustments** before scaling • Use **after-action reviews to identify needed adaptations** • Explicitly **assess equity and gender implications and unintended consequences**	• Approach supervision as **structured problem solving** • **Use frontline and community feedback** to refine delivery	• **Build trust and understanding of HCW/CHW experiences** using two-way dialogue • **Partner with local community leaders** to identify context-specific design adaptations

Photo acknowledgement: PATH, DRC

Photo acknowledgement: IHAT-TSU, India

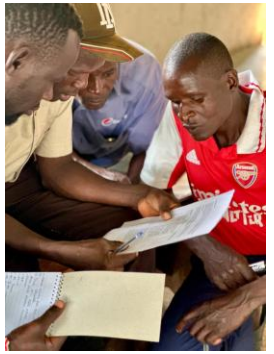


Photo acknowledgement: PATH, Kenya

Overall Benefits

- **Identify bottlenecks and community needs earlier and more accurately**
- **Use financial resources more effectively**
- **Improve implementation quality and service experience**
- **Build trust and frontline ownership**
- **Strengthen system resilience and adaptive capacity**

*Throughout this module "HCW" refers to professional health care workers and "CHW" refers to community health workers—volunteers with minimal training, paid and unpaid.

LxD: What is the added value based on ZDLA findings?

Implementation area	Problem diagnosis	Problem-solving	Adaptative implementation	Equity	Expertise
Without LxD (traditional approaches)	• **Explain performance gaps through routine monitoring** and reporting	• **Standardize "best practices"** for cheaper, easier scaling	• **Rely on annual planning cycles and implementation data** to identify challenges	• Address equity, including gender, by **focusing on inter-group coverage gaps**	• **Prioritize technical or program expertise** in designing and implementing interventions
With LxD approaches	• Use monitoring **data to identify *where* gaps exist** • **Work directly with end users and frontline HCWs** to understand ***why*** gaps persist and how to address them	• **Apply inclusive design and planning best practices** to develop more responsive, trusted, and durable interventions **within a given context**	• Incorporate **adaptive implementation processes to identify and respond** to delivery bottlenecks or challenges **in real time**	• Recognize **gender-related barriers for both women and men** • Design gender-responsive interventions by accounting for **social norms, power dynamics, and potential unintended consequences**	• **Use technical *and* lived expertise to co-design and implement** locally tailored interventions

Added value

LxD implementation quality improvements

- **Improved ability to identify deeper or different problems and respond to persistent service delivery or system gaps**
- **Stronger ownership and decision-making closer to the point of service delivery or system management**
- **Increased implementation quality and capacity to continuously improve delivery for system efficiency and effectiveness**
- **Stronger design for sustained equity outcomes, particularly related to gender**
- **Better fit-for-purpose interventions through the integration of local knowledge and experience**

Intended impact

Increased vaccination

LxD: What is the added value in weaker, medium, and stronger health system contexts?

Relative system context	Weaker health system	Medium health system	Stronger health system
Key challenges and needs	• Basic inputs are unreliable; frequent stock-outs; insufficient operational funds; fragmented coordination • Plans exist on paper but break down in execution • Communities experience cancelled services, long waits, and no follow-up—especially unreached groups • Little bandwidth for reflection; system rewards compliance over problem-solving	• Basic inputs mostly work, but major bottlenecks are experienced in areas undergoing rapid changes like urban communities • Services aren't always designed around community needs; long waits in high volume locations and weak follow-up with drop-outs and unreached groups • System has capacity to improve but no regular structures or processes to do so	• Basic inputs are available and plans are mostly executed • Services are reliable but may not reach marginalized groups • System has hit capacity for what it is able to achieve; innovation stalls because outcomes are "good enough"
What LxD can look like			
Brainstorm and co-design	**Apply to:** • Strengthen health staff's capacity to co-design management improvement processes that address local supply-side challenges • Engage health staff and community end users in co-designing service optimization and demand-focused interventions, including for unreached groups.	**Apply to:** • Strengthen health staff's incremental adjustment skills in improving management processes • Engage community end users in co-designing service optimization and demand-focused interventions that help address challenges with under-and unreached groups.	**Apply to:** • Build on high staff/community and system capacity to address ambitious, equity-focused, and transformational interventions, including gender-intentional approaches that address unintended consequences.
Continuous learning and problem solving	• Support stabilization of routine workflows and introduce intervention improvement processes; incorporate end-users' ongoing implementation insights whenever feasible.	• Build on routine workflows to support ongoing intervention improvements; incorporate end-users' ongoing implementation insights as a priority.	• Build onto more established workflows and structures to support ongoing intervention improvements and transformational re-designs, with end-users' ongoing implementation insights embedded.
Why LxD	• Top-down plans aren't working. Incorporating end users' felt needs and ongoing insights are as essential as "fixing" basic inputs. • LxD gives structure to problem-solving. Focuses scarce resources on do-able actions—reducing risk of investing in interventions that don't match reality.	• Helps identify which problems are worth solving (not just the most visible) and generates/adapts locally owned approaches that have higher odds of sticking.	• Uses higher system capacity to drive innovation and system transformation. • Supports re-imagining processes to address the most persistent challenges, with end users included.

LxD: Examples of added value from ZDLA

Weaker health system

Tshopo, DRC
28% Penta1[1]

Kano, Nigeria
58% Penta1[2]

Problem-solving

Expertise

Medium health system

Addis Ababa, Ethiopia
Woreda 14: 97% Penta1[3]

Turkana Central, Kenya
84% Penta1[4]

Adaptive implementation

Stronger health system

Karachi, Pakistan
88% Penta1[5]

Uttar Pradesh, India
91% Penta1[6]

Problem diagnosis

Context and key LxD themes

Activity examples from ZDLA

Services are inadequate and local solutions are key

Tshopo, DRC: Linking immunization services to private clinics

- Private clinics recorded births and called public facilities to schedule outreach
- Private clinics contributed operational financing

Kano, Nigeria: Intervention packages to improve service experience

- Strengthened capacity of all facility staff to provide better service experience
- Expanded number of fixed services days which also helped reduce wait times

Services reach most, but significant pockets of unreached persist

Peri-urban Woreda 14, Addis Ababa, Ethiopia: Local resource mobilization and launch of integrated outreach in a new woreda without a health facility

- Marginalized ZD groups — due to in-migration, temporary housing, and language barriers — co-designed sustainable integrated outreach interventions which were implemented in two locations
- Adaptive implementation improved reach and effectiveness and greatly reduced waiting times for services

Turkana Central, Kenya: New thinking on how integrated outreach can affordably reach remote communities

- Costs of delivery reduced by using motorcycles instead of cars, and a leaner, priority team who provided immunization, ANC, and nutrition
- Strengthened referral processes through community champions

Tailored solutions are needed for certain populations

Karachi, Pakistan: ZD families from some marginalized communities had lower trust in the public health system

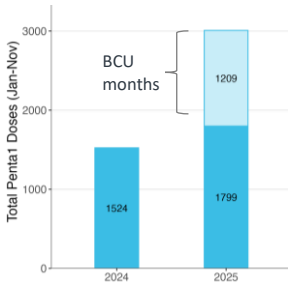
- While most families routinely access RI, some communities had lower trust in government health services due prior negative experiences
- Co-design resulted in working with trusted informal private sector providers or TBAs to refer families with ZD children to vaccination

Uttar Pradesh, India: ZD families' needs are highly specific and require individual tailoring

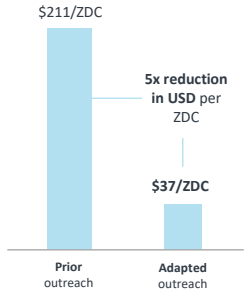
- Frontline workers were trained to identify root causes of ZD for each family and to design individual solutions

Results

- Strong confidence that the Tshopo intervention improved Penta1 uptake
- Moderate confidence that the Kano intervention improved Penta1 uptake



- Woreda 14 successfully mobilized resources to renovate/build outreach sites
- Turkana Central is in the process of accessing funding for outreaches



- Moderate confidence that the interventions prevented or reached ZD children
- Karachi intervention did not improve trust during the period assessed (ReD Associates survey; *note: survey was conducted mid-implementation, not at endline*)

Photo acknowledgement: Impetus, Pakistan

[1]ECV 2023; [2]DHS 2024; [3]CHAI June 2024 Household Survey; [4]Kenya DHIS2 (Sept 2025); [5]TPVICS R2 (2022); [6]NFHS 5 (2019-2021)

ZDLA lessons learned: Insights and implications from applying LxD to strengthen the design and implementation of immunization interventions in high-ZD settings

Summary of lessons learned

Root causes take time to emerge

- **Multiple learning cycles are sometimes needed** to identify deeper and more actionable root causes.
- **Addressing one root cause often uncovers additional, interconnected barriers.**
- **Positive reinforcement and a trusted environment are needed** to discuss and surface sensitive topics and their underlying causes.

Same problems, but not the same solutions

- **Context matters**—the same problem can require different local solutions.
- **People may respond differently based on their constraints**—even within the same community.
- **Understanding which actions might yield the best results requires direct engagement** with different user groups.

Improving old ideas is sometimes the solution

- **Co-creation often leads to the collaborative refinement of existing interventions or workflows**—rather than creating entirely new ones.
- **Context-specific adaptations make interventions more acceptable and appealing to end users**, including ZD families.

Gender is not an add-on, It is central

- **Gender norms cut across many underlying barriers,** shaping multiple drivers of ZD.
- **Most men were not resistant to vaccination**; rather, norms about caregiving or competing priorities left them uninvolved.
- **Addressing gender-related barriers often involves operating within social norms *and* working to shift them** in communities and health systems.

Examples of LxD from ZDLA

Free paracetamol and private clinic integration
Tshopo, DRC

Targeted drivers

- **Concerns about common side effects**, like fever and pain, due to medication costs and low health system support.

Intervention focus

- **Free provision of paracetamol** after vaccination and CHW follow-up with households.

LxD in action

After the initial cycles, the team learned that **addressing side effects alone was not enough to improve vaccination uptake**.

ZD caregivers also needed more convenient services, **so vaccination was integrated into local private clinics.**

Photo acknowledgement: PATH, DRC

Health worker capacity building on problem solving
Rural Uttar Pradesh, India

Targeted drivers

- Vaccination barriers varied by ZD household and **HCWs lacked support or training around proactive intervention tailoring.**

Intervention focus

- **Problem-solving capacity and skill development** (e.g., root cause analyses) for community health workers

LxD in action

The team used **routine meetings with broader health teams to develop targeted action plans for each family.**

Examples included using **WhatsApp with migratory families** and working with **community influencers to address family concerns about vaccination.**

Photo acknowledgement: IHAT-TSU, India

Improving referral and outreach in rural areas
Turkana, Kenya

Targeted drivers

- **High access barriers for both ZD households and HCWs** and outreach modalities were too costly.

Intervention focus

- **Improve existing referral linkages and cost-efficiency of village-based outreach services.**

LxD in action

The team worked with HCWs to **improve existing planning and implementation to be more responsive** to both community *and* HCW needs.

These adaptations led to both **cheaper *and* more effective service provision.**

Photo acknowledgement: PATH, Kenya

Community Connect for AEFI response
Afar, Ethiopia

Targeted driver

- **Concerns about common side effects**, due to household disruptions for both parents—particularly mothers.

Intervention focus

- **Monthly support groups on side effect management,** facilitated by community members and providers.

LxD in action

Respecting sociocultural norms, mothers and fathers met in their own support groups led by gender-matched facilitators.

Parallel messaging by religious leaders **reframed childcare as part of a father's family responsibility.**

Photo acknowledgements: CHAI, Ethiopia

Learn-by-doing (LxD)

- Overview
- When is it a value-add?
- Myth busters
- Making LxD investments

LxD: Myth busters

"LxD is too expensive and time-consuming."

LxD adds minimal costs when integrated in current routine workflows.

- Apply basic LxD tools and methods that **leverage routine health system structures and workflows.**
- LxD involves marginal upfront costs, but it helps **identify ineffective approaches early**—enabling **faster course-correction and ultimately saving resources.**

Photo acknowledgement: IHAT-TSU, India

- One size doesn't fit all, so you can **be thoughtful about when, where, and why you use traditional approaches, LxD approaches, or a blend of both.**

"What is the big deal with HCD? Isn't it just about doing community engagement better?"

HCD prioritizes all users, not just community representatives.

- **HCD involves all types of end users** —from caregivers and other workers in the health system to community leaders.
- HCD improves **design and implementation from multiple user perspectives**, not just from selected representative viewpoints.

Photo acknowledgement: JSI, India

"LxD works for small highly supported projects, but can it work at scale?"

Yes, especially when it is embedded from the start.

- When designing for scale, **incorporate LxD as an institutionalized capacity-building approach.**
- **Use spread as the mechanism for scale,** starting with a few champion health facilities and nearby facilities within a district learning from champion sites.

Photo acknowledgement: PATH, Kenya

- This LxD Module includes examples of how these *approaches can work at scale.*

"Why add in adaptive management in places where even basic management and planning don't work well?"

Adaptive management helps improve implementation in all contexts.

- Adaptive management approaches resonate in weak system contexts because frontline staff **already have an agile mindset** to deal with unpredictable resources.
- It also helps **address real-time challenges that hinder implementation** and often can't be mitigated by rigidly following often under-resourced plans.

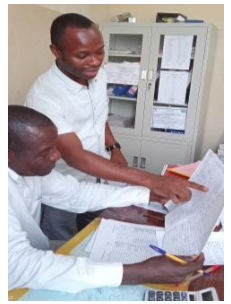


Photo acknowledgement: PATH, DRC

LxD: Myth Busters (continued)

"Building trust with marginalized groups takes too much time and effort."

Investing in building trust can increase program uptake and impact.

- While repeated, rapport-building efforts—drawing on local languages, culturally aligned HCWs, and trusted community actors—do take time and effort, **they result in increased participation, engagement, and local data accuracy.**

Photo acknowledgement: PATH, DRC

"This adds too much to already over-burdened workloads. Do health workers have the time for LxD?"

Integrate LxD from the start so it doesn't add burden.

- Integrate LxD into **meetings and workflows that already exist** and **write learning and adaptation into core HCW job functions.**

Photo acknowledgement: CHAI, Ethiopia

"A focused gender approach takes too many resources."

It doesn't have to — embed gender in existing processes.

- **A gender focus can be embedded into existing HCW touchpoints** to help uncover and address **underlying social norms and power relations**, as well as unintended consequences.

Photo acknowledgement: Impetus, Pakistan

"We need to just do the basics better—LxD is not relevant to core programming."

LxD can be a booster pack to advance core programming.

- A mix of strategies, including LxD, **builds a health system that is resilient and able to meet the persistent and complex needs of rapidly changing** urban and rural environments.
- **LxD can also be embedded to advance scale and replication.**

Photo acknowledgement: CHAI, Nigeria

Learn-by-doing (LxD)

- Overview
- When is it a value-add?
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- Making LxD investments

Investing in LxD: FAQs

I'm interested in incorporating LxD into my organization's strategy and investments. **Where do I start?**

- **LxD approaches can be used to strengthen any investment at any stage**—from ideation to scale and replication.
- This LxD Module includes overview resources detailing **how LxD-like approaches have been implemented** to help get you started. *See Appendix 1.*

What LxD capabilities should I look for in potential grantees / implementing partners?

General LxD Capabilities

- **A mix of LxD, HCD, cQI and adaptive management expertise and/or openness** to develop and integrate these capacities if not already present
- **Ability to pragmatically build local capacity to integrate HCD and adaptive learning into routine system workflows in** ways that a local health system can absorb
- **Experience working in the selected geographies** with local staff who have relevant language and cultural fluency
- **Track record of flexibility during implementation—**not only at the design stage **[critical]**
- **Experience working thoughtfully with government counterparts (not in parallel) to integrate** LxD, HCD, and/or cQI or adaptive management into health system structures, functions, and workflows—including experience in supporting health staff to spread promising practices within a district

HCD Capabilities:

- **Experience using HCD to co-create health-related interventions and process improvements in low-resource settings** (not only designing products or tools)
- **Strong facilitation skills, a person-centered ethos, and gender-intentional perspectives,** including awareness of unintended consequences
- **Experience extending HCD beyond design and testing through full implementation**, preferably with MoH collaboration

Continuous Learning Capabilities (which could focus on cQI and/or on adaptive management):

- **Experience supporting continuous learning at some level of scale** (e.g., district-wide, majority of facilities, etc.)
- **A clear approach to embedding continuous learning processes** within health system structures, functions, and workflows

Investing in LxD: FAQs (continued)

How can I build local capacity for LxD, especially if I am in a country or regional office—including building capacity to scale?

Consider investing more in local institutes or embedded units that may already have some or most of the skills you need to reduce repeat "start-up" costs, limit reliance on external technical assistance, and protect continuity amid frequent government turnover. If it is difficult to find in-country expertise, look to regional hubs. For example:

- Kathmandu University Behavioral Science Center
- Africa Behavioral Science Network Inc.
- What others? Please share!

Scale through spread across districts, where champion health facilities and their communities support nearby health facilities to adopt LxD approaches, building peer networks through WhatsApp/similar channels and review meetings.

Advocate with government and partners for an enabling environment that prioritizes learning and adaptation including flexible funding, supportive governance, and incentives for course correction rather than rigid plan adherence.

How can LxD support different areas within a program such as immunization, MNCH, FP, etc.?

Service Delivery:

- **Embed LxD into existing health system workflows (e.g., review meetings, microplanning)** to identify and resolve bottlenecks in service delivery, which can support building capacities for locally-led improvement practices or platforms above and beyond more time-bound investments or projects.
- **Apply LxD co-design techniques into annual planning processes for developing or adapting interventions,** which can strengthen responsiveness to both emergent and more entrenched challenges facing vulnerable populations.
- **Incorporate LxD approaches to strengthen service delivery along its continuum**, with a lens toward improving how HCWs engage with communities *and* how health systems support HCWs in providing person-centered care.

System strengthening:

- **Incorporate HCD and adaptive management processes into system areas needing the most improvement (e.g., data, supply chain, training, financial accountability, etc.),** regularly bringing in perspectives from multiple user groups and using structured adaptive management to support more effective processes. *See Appendix 3 for tools.*
- **Apply LxD techniques and practices to strengthen adaptative management within MOHs**, which can support stronger (and more sustainable) health system adaptative capacities
- **For immunization: Utilize Gavi's adaptive management and learning** focus to **request TA with expertise in LxD** (both HCD and continuous learning or one aspect) to support strengthening particular health system components.

Performance Management:

- **Adopt LxD practices into performance management routines (e.g., review meetings)**, using structured approaches like after-action reviews (AARs) to shift system foci and behaviors toward proactive problem-solving (e.g., 'what happened, and what can we adapt?') *versus* largely focusing on quantitative metrics alone
- **Integrate experiential learning within existing touchpoints (e.g., supportive supervision, staff meetings)**, through tools like scenario-based reflections and peer-based problem-solving exercises that can be directly applied to implementation challenges faced by frontline teams
- Use existing data, or light-touch monitoring indicators, to **track whether real-time management or service delivery changes are leading to improvements** (or not)

ZDLA case study: Embedding LxD to improve a health program in Kano, Nigeria

Targeted problem

Zero-dose prevalence remains high in target areas in Kano State—in part due to manual, inefficient data systems that limit real-time identification and response.

Without LxD (original approach)

Intervention design

- Datharm and the Kano State Primary Health Care Management Board developed a **digital tool to support tracking vaccination and follow-up for pregnant women and newborns.**

What was working well

- The digital tool was being used by community volunteers and **had supported the identification and line-listing of just over 11,000 children and 4,000 women.**

What was challenging

- The workflow was **time-consuming, feedback on issues was ad-hoc, decisions were made by developers or supervisors in isolation**, and **learning rarely spread beyond a handful of people**

Photo acknowledgement: Datharm, Nigeria

ZDLA case study: Embedding LxD to improve a health program in Kano, Nigeria

Photo acknowledgement: Datharm, Nigeria

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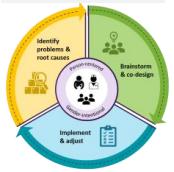


How Datharm used lean elements of LxD to iteratively improve intervention design and implementation

With LxD (adapted approach)

1. Identify problems & root causes

Applied HCD methods to better reflect end-user priorities and lived realities:

- Transitioned from episodic consultation to an **embedded partnership model.**
- **Used staff shadowing, empathy mapping, and HCD workshops to surface unarticulated needs** and translate them into system adaptations.

2. Brainstorm & co-design

Engaged stakeholders to revise approach:

- **Traditional leaders emphasized the need for periodic data feedback** to strengthen local advocacy.
- **Advisory group called for more visual, user-friendly summaries** for community leadership meetings.

3. Implement & adjust

Created accountability for adaptation and transformed learning from abstract concepts into a visible, actionable, and transparent system:

- **Established an advisory group** with monthly review sessions and bi-weekly community volunteer check-ins to institutionalize feedback and decision-making.
- **Improved dashboard visualizations** for facilities in-charge.
- **Introduced a change log to track changes and improvements** and a learning log to capture contextual and behavioral insights.
- **Shifted from a one-time diagnostic exercise to an embedded, continuous "pulse check"** to monitor how external drivers, such as parallel health campaigns and service disruptions, responded and evolved

4. Gender Integration

Co-designed low-literacy interfaces to improve usability with and for female volunteer Community Resource Groups (CRGs).

Value add and outcomes

The adapted tool and processes **improved community worker and health manager capacities to find, describe, and follow-up on ZD cases and with pregnant women** in real-time through:

- **Ease-of-use scores showing increased efficiency** in identification and follow-up processes.
- Change logs highlighting **which ongoing adaptations to institutionalize.**
- Generation of local insights **enabling targeted follow-up with over 7,800 children and 3,000 women** between May and December 2025.

See Datharm's LxD toolkit to learn more:
https://datharm.org/learn-by-doing-lite-toolkit/technology/

What made Datharm's LxD approach 'leaner' than the original in-depth ZDLA approach?

A focus on existing workflow and platforms

Identifying problems & root causes

- Datharm: Streamlined FGDs/KIIs, and used existing health facility, community volunteer, and community networks to map referral and reconciliation ecosystem **(1 month)**
- Original ZDLA: Typically conducted extensive FGDs/KIIs and often surveys **(5-8 months)**

Brainstorming & co-design

- Datharm: Largely used existing facility, community volunteer, and community touchpoints to incorporate HCD processes, jointly determining tool features and processes to redesign; pretested prototype in 2-3 communities with live data entry by CRGs **(3 months)**
- Original ZDLA: Often conducted a series of standalone HCD workshops **(4-6 months)**

Implementing & adjusting

- (Similar approaches taken): Introduced continuous improvement processes into bi-weekly end-user and monthly advisory group meetings, used change logs, etc.

Acknowledgements

We are grateful to the caregivers, families, frontline healthcare workers, community members, EPI program staff, government officials, and full range of individuals and organizations that support LxD throughout the world.

Your dedication to person-centered programming and continuous improvement is central to LxD's value and impact.

A special thanks to Zero-Dose Learning Agenda (ZDLA) country partners, contributing organizations, and consultants.

LxD implementation teams

DRC: PATH Living Labs
Ethiopia: CHAI
India: IHAT/UP-TSU, JSI India, WJCF/CHAI
Kenya: PATH Living Labs
Nigeria: CHAI, Datharm
Pakistan: Impetus

Contributing organizations

Appendices

LxD-like approaches

	Demonstrated impact at scale		Showed promise at scale
Initiative	**RED-QI: Improving routine immunization delivery systems**	**Adolescents 360 (A360): Reimagining modern contraception**	**Supply chain logistics maintenance: Optimization in immunization**
Approach	• Integrated continuous **quality improvement** (QI) tools with the WHO **Reaching Every District** (RED) approach. • Emphasized engaging local government, health workers, and non-health stakeholders in planning, problem-solving, and continuous learning. • Focused on sustainability and adaptation to local context.	• Combined **human-centered design and adaptive implementation** to increase uptake of modern contraception following the standard three phases of LxD. • Integrated an "optimization phase" to support scale and sustainability outcomes.	• Applied HCD to diagnose root causes of cold chain equipment (CCE) maintenance challenges and co-design solutions with technicians, supply chain staff, and service delivery staff across all levels of the health system. • Used HCD to shift from traditional capacity-building towards addressing systemic barriers, enabling evidence-driven decision-making and greater government ownership of CCE management and maintenance.
Reach	• Ethiopia: Over **2,700 health facilities** across **103 woredas/districts,** with majority in lower-capacity, pastoralist areas. • Uganda: **25 districts** and approximately **650 health facilities.**	• Ethiopia, Nigeria, Kenya, and Tanzania: Reached **~1.8M girls in 11,677+ implementation sites**. • Ethiopia: Drove a 5.1 pp increase in mCPR in intervention sites.	• Implemented approach in 21 Ethiopia Pharmaceutical Supply Service national and regional hubs. • Oriented 400+ staff on updated continuous monitoring tools. • Connected 100+ technical staff in a peer-to-peer learning network.
Impact	• **Increased stakeholder buy-in**: Approach was regarded by implementers, including regional and district immunization officers and facility-level health workers, as valuable, effective, inexpensive, compatible with existing systems, and sustainable. • **Improved operational efficiency**: Realized improvements in micro-plan completion, defaulter tracking, session completion, and data quality, as well as problem-solving and identification of underserved communities. • **Strengthened local partnerships:** Engagement with local leaders and civil authorities boosted resource mobilization, ownership, and accountability. Application of QI practices, skills gained, and whole-site engagement also supported sustainability outcomes. • **Improved health outcomes:** Improvements in serologic protection against tetanus increased from 60–94% at baseline to 79–99% at endline.	• **Increased relevance:** Aligned "health risk" messaging with user aspirations (e.g., financial security in Ethiopia, vocational skills in Nigeria). • **Increased community buy-in:** Drove higher uptake of long-acting methods (48% LARC usage in Tanzania) in high-stigma environments by implementing HCD insights. • **Improved gender integration:** Continuous data monitoring informed a mid-implementation pivot to re-invest in male engagement strategies contributing to 1.4x greater uptake. • **Optimized interventions**: Identified ways to scale pilots utilizing a dedicated "optimization phase."	• **Clarified root causes:** Revealed that CCE maintenance challenges were driven less by technical skill gaps and more by systemic friction points (e.g., bureaucratic delays, misaligned workflows, limited data visibility). This understanding led to co-designed solutions including improved forecasting tools, updated maintenance protocols, clarified job roles, human resources restructuring, and a peer-to-peer troubleshooting network. • **Improved data-driven decision-making**: Strengthened maintenance tracking and temperature monitoring systems supporting earlier identification of recurring equipment issues and remote pre-diagnosis of failures, ultimately reducing downtime and repeat travel costs. • **Strengthened accountability and financing:** Introduced routine maintenance cost tracking and integrated temperature performance data into immunization review meetings, enabling dedicated government co-financing of CCE maintenance and greater joint accountability between supply chain and service delivery teams.
Duration (and cost if known)	• **2011 – 2021** • ~US $29M over 10 years	• **2016 – ongoing** • ~US $45M over 13 years	• **October 2024 – December 2025**
Where to learn more	• JSI, 2022. Reaching Every District using Quality Improvement (RED-QI)	• A360 Learning Hub	• JSI. Small Fixes, Big Impact: Transforming Cold Chain Systems. • JSI, 2026. Co-Designers of Health: Reimagining the Cold Chain Maintenance System through Government Ownership. • Prosser et al, 2024. Cold chain maintenance done differently: results from an HCD study in Niger, Kenya, and Tanzania.

Appendix 2

LxD principles, details, and examples from ZDLA

LxD principle	Additional detail	ZDLA's main focus
Understanding the problem		
1. Be problem-oriented	Build on solutions and promising practices from similar contexts and past on-site experiences. Adapt practices from other locations or craft a new idea. But the problem relates to that particular location, not generically to several districts/equivalents.	
2. Break complex challenges into smaller, more doable actions	The approach focuses on what is doable at based on breaking more complex challenges into smaller actions, or teams with other levels to address larger challenges together (e.g., a health facility with community representatives and its district jointly addressing a common challenge)	
3. Find and address root causes as a team	The approach finds and addresses ZD drivers as a team, with local communities involved in determining the drivers and interventions to test; any adjustment or changes are made by collective, not individual, decisions, and are based on agreed-upon markers of progress	
Designing & implementing interventions		
4. Use human-centered design	The approach incorporates human-centered design (HCD) techniques/tools/methods throughout, of which communities are a key piece (not only linking with health professionals).	
5. Implement in the workflow	The approach connects to how a program and its processes normally function "in the workflow" (e.g., is not a project intervention requiring new touchpoints and/or major "heavy" ongoing external support that is unsustainable); the speed of rapid learning or iterative interventions will vary, but must adhere to being embedded in programmatic structures & functions—exploring new or better ways to utilize programmatic touchpoints; any data tracking/measures that intend to be mainstreamed must fit within this principle.	
6. Reduce gender gaps and barriers	The approach reduces gender gaps/barriers or increases the evidence base around gender gaps/barriers (is at minimum gender intentional); considers unintentional consequences & mitigation approaches.	
Continuous local learning and adaptation		
7. Promote continuous review processes	The approach promotes a continuous review process where information is regularly updated by the users (e.g., health staff, communities, etc.), and where any promising approach is collectively decided to be mainstreamed, and any not-so-promising approach is re-strategized and tested or dropped; if you are thinking of scaling an LxD approach, it is this continuous review process that should be at the heart of the scaling model (along with the technical intervention you are addressing and processes to uncover emergent drivers).	
8. Encourage real-time review and feedback	The approach encourages real time review & feedback—where and when health workers and communities/stakeholders need it.	
9. Strengthen local autonomy	The approach strengthens local autonomy for ongoing adaptation to plans, practices, and processes (and policies at highest levels)	

LxD in action: Examples from ZDLA

Root causes: Caregivers co-creation workshop in Karachi, Pakistan

Photo acknowledgements: Impetus, Pakistan

Root causes: Team-based analysis in Tshopo, DRC

Photo acknowledgements: PATH, DRC

Gender: Father user group in Kano, Nigeria

Photo acknowledgements: CHAI, Nigeria

HCD: Co-creation workshop in Bihar, India

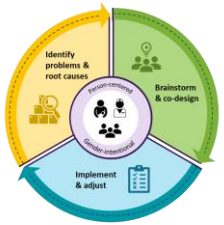
Photo acknowledgements: WJCF, India

Continuous review: Block health team collective problem solving in Uttar Pradesh, India

Photo acknowledgements: IHAT-TSU, India

Continuous review: User Advisory Group meeting in Afar, Ethiopia

Photo acknowledgements: CHAI, Ethiopia



LxD elements and recommended skills, tools, and technical assistance (TA) (1/3)

High-level LxD steps and example LxD workflow

Specifics will vary depending on context, existing capacity or expertise, and system culture

1. Identify problems & root causes

1. Identify problems: Analyze existing data (e.g., microplanning/situation analysis) and engage with end users and marginalized groups (e.g., KIIs/FGDs) to identify problems or barriers

2. Understand "why": Use root-cause analysis (RCA), HCD, and gender-intentional tools to surface actionable root causes

2. Brainstorm & co-design

1. Brainstorm interventions: Use existing forums (e.g., microplanning, quarterly reviews) to generate and co-design intervention concepts with community users and leaders using HCD co-creation tools

2. Prioritize: Collaboratively prioritize interventions with high feasibility and potential impact (e.g., prioritization matrix, dotmocracy)

3. Refine and co-develop an action plan: Work with end users to finalize intervention(s), define key indicators, and embed the plan into existing review cycles

3. Implement & adjust

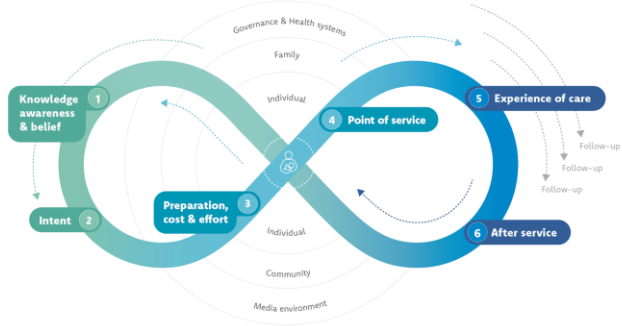
1. Implement and collect feedback: Draw on existing feedback mechanisms and or user engagements (e.g., exit interviews, user advisory groups) to get user and implementer feedback

2. Revie w and refine: Integrate continuous learning processes (e.g., change logs) into routine community, facility, or district review meetings to regularly assess progress—identifying what is working, what is not, and what needs to be adapted

Example tools

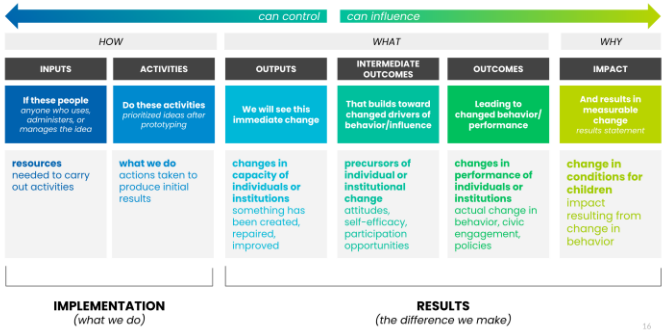
Journey Mapping

To identify priority facilitators and barriers along the service delivery pathway, reflecting the lived experience of clients and providers at each stage of care.



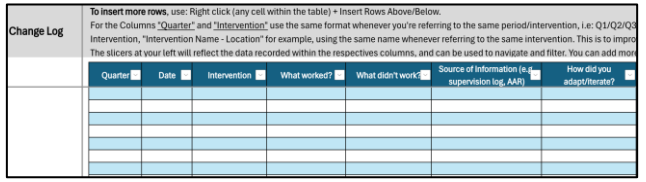
Theory of Change (ToC)

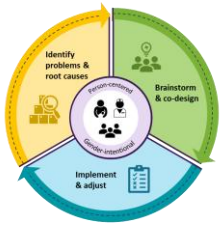
To articulate how and why interventions are expected to lead to change, co-developed with end users and grounded in identified root causes, to guide action plans and resource prioritization.



Change Logs

To track what was implemented, what worked and what didn't from user and implementer perspectives, and what was adapted – supporting a continuous cycle of learning embedded in routine management processes.

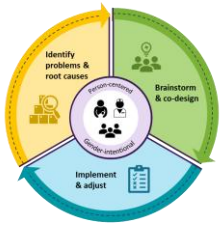




LxD elements and recommended skills, tools, and technical assistance (TA) (2/3)

Key LxD processes, example tools, tips, and TA considerations

High-level LxD steps		Key LxD processes and example tools	Tips and TA considerations
1. Identify problems & root causes	**Identify problems** Analyze existing data (e.g., microplanning/situation analysis) and engage with end users and marginalized groups (e.g., KIIs/FGDs) to identify problems or barriers	1. **Microplanning and situational analysis** to identify key problems: AFRO RED Guide (pg 79); 2. **Persona characterization** to identify key user perspectives: UNICEF HCD 4 Health – Persona Guide 3. **KII/FGDs** to gather user perspectives: UNICEF HCD 4 Health – Rapid Inquiry Guide 4. **Journey mapping** to understand barriers in context: UNICEF – Journey to Health and Immunization; HCD for WASH – "Day in the life" exercise; Revised 20251225_CHAI Ethiopia_ Lean LxD_Version2.pptx | Powered by Box 5. **Empathy mapping:** PATH Living Labs – PATHOS Toolkit (pg 14)	**Tips**: • Ideally, use annual microplanning as an opportunity to conduct a situation analysis • Use both secondary data and collect primary data through 5-10 KIIs and FGDs to reflect relevant end user perspectives **TA considerations**: • Strategic support for embedding LxD into annual and/or quarterly planning workflows • Facilitation expertise in RCA, HCD co-design processes • Facilitation with identifying gender barriers and social norms
	Understand "why" Use root-cause analysis (RCA), HCD, and gender-intentional tools to surface actionable root causes	1. **Root-cause analysis** to identify actionable points for intervention: • *Fishbone analysis:* AFRO RED Guide (pg 84) • *5 Whys:* PATH Rapid Testing Protocol Toolkit; UNICEF HCD 4 Health – Synthesis Guide 2. **Gender analysis** identify and understand how gender barriers and norms intersect with key causes: Jhepigo Gender Analysis Toolkit	
2. Brainstorm & co-design	**Brainstorm interventions** Use existing forums (e.g., microplanning, quarterly reviews) to generate and co-design intervention concepts with community users and leaders using HCD co-creation tools	1. **Idea generation** using HCD co-creation tools: UNICEF HCD 4 Health – Idea Generation Guide; PATH Living Labs – PATHOS Toolkit (pgs. 36-47) 2. **Rapid prototyping** to develop MVPs and test feasibility: UNICEF HCD 4 Health – Rapid Prototyping Guide	**Tips**: • Annual microplanning is the best time to co-design any new intervention, though updates can occur during quarterly reviews. • Solutions should be realistic & affordable within existing systems • Involving end users will likely improve ownership and gender intentionality. **TA considerations**: • Support for embedding and facilitating HCD co-creation processes into existing planning forums; • Facilitation of prioritization and action planning with end users • Application of gender intentionality tools
	Prioritize Collaboratively prioritize interventions with high feasibility and potential impact (e.g., prioritization matrix, dotmocracy)	1. **Prioritization Matrix** to identify feasible and impactful interventions: PATH Rapid Testing Protocol Toolkit (pg 19); Institute for Healthcare Improvement – 5 Whys: Finding the Root Cause (pg 21) 2. **Dotmocracy** for shared prioritization: PATH Living Labs – PATHOS Toolkit (pg 44)	
	Refine and co-develop an action plan Work with end users to finalize intervention(s), define key indicators, and embed the plan into existing review cycles	1. **Refine intervention prototypes:** *Theory of change:* UNICEF HCD 4 Health – Theory of Change Guide; *Concept sheets*: PATH Living Labs – PATHOS Toolkit (pg 48-55) 2. **Indicator selection:** AFRO RED Guide (pg 108); PATH Rapid Testing Protocol Toolkit (pg 13); Institute for Healthcare Improvement – Model for Improvement: Establishing Measures 3. **Develop an action plan and embed into routine review cycles**: AFRO RED Guide (pg 108);	
3. Implement & adjust	**Implement and collect feedback** Draw on existing feedback mechanisms and or user engagements (e.g., exit interviews, user advisory groups) to get user and implementer feedback	1. **Light touch monitoring** to track indicators: PATH Rapid Testing Protocol Toolkit (pg 13) 2. **Identify user and implementer feedback**: *FGDs/KIIs*, *Exit interviews*, *User Advisory Groups*, *Field notes*, *Pause and Reflect memos*	**Tips**: • Implementation is typically led by health workers and stakeholders – LxD adds end-user participation and ownership in both delivery and monitoring • Engaging user groups in routine meetings can be challenging (e.g., competing priorities, marginalized by system) but is important – HCWs play a key role in enabling this • Use simple, lightweight tools to track learning and adaptations without adding significant burden **TA considerations**: • Support for integrating participatory continuous improvement cycles into existing review meetings • Mainstreaming use of HCD skills and tools in an ongoing manner
	Review and refine Integrate continuous learning processes (e.g., change logs) into routine community, facility, or district review meetings to regularly assess progress—identifying what is working, what is not, and what needs to be adapted	1. **Change logs**: see slide 26 CHAI/Ethiopia Learn-by-doing Guide and slide 9 of Datharm/Nigeria Learn-by-doing Lite Toolkit 2. **Revisit intervention theory and root causes**: *Revisit Theory of Change, RCA tools* 3. **HCD tools to design adaptations**: *Revisit HCD co-design tools (e.g., journey mapping, "How might we")*	
Lean LxD	**Implementation guides and tools for leaner models of LxD,** based on ZDLA implementation insights	• **CHAI (Ethiopia):** Learn-by-doing Guide • **Datharm (Nigeria):** Learn-by-doing Lite Toolkit	



LxD elements and recommended skills, tools, and technical assistance (TA) (3/3)

Lessons, insights, and tools from USAID's Learning Lab focusing on adaptive management

At the start of ZDLA in 2023, we consulted with USAID's Learning Lab and expressly built on lessons from their collaborative learning and adaptation work. Most of their materials remain available on number of websites, including The Policy Practice, with links below.

Please note that, if listed in these documents, USAID-specific links no longer work.

- Overview of adaptive management: Discussion Note Adaptive Management USAID.pdf
- Introduction to a course in adaptive management, with interactive scenarios: Introduction to Collaborating, Learning and Adapting (CLA) in the Program Cycle | Global Partnership for Effective Development Co-operation
- A set of curated tools and resources for adaptive management: CLA Tool Kit Landing | USAID Learning Lab