Job Aid Smart App

for Community Health Workers

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Problem space

Importance of problem space

- Paper-based job aids have limitations.
- Community health worker (CHW) training is expensive.

How it addresses the problem

- Helps walk through decision trees and calculations.
- Animated images and videos can better explain procedures.
- Could help reduce training costs.

Who will care about the solution

- CHWs, trainers, ministries of health, NGOs.

Who the solution will affect

- Patients!

Human centered design challenges

- Will trainers and CHWs be comfortable using the application?
- Will non-programmers be able to easily use the job aid app builder?
- When is it really an improvement on paper-based job aids?
  - Focus on rare and/or complicated procedures
- Will it be affordable and feasible to integrate into current health systems?

Related work

What projects relate to this one

- Human resource management is a major challenge in global public health.
- Many NGOs are evaluating training costs and alternatives to existing systems.
- Few smart phone projects have been scaled up beyond the pilot stage—challenging in demonstrating the value of this intervention.

What makes this project novel/interesting

- Relatively easy to scale up… with funding.
- Smart phones are “mini computers”—could be used for other important things like disease surveillance and immunization registries.

Fieldwork so far

Interviewed 3 PATH staff about community health worker training

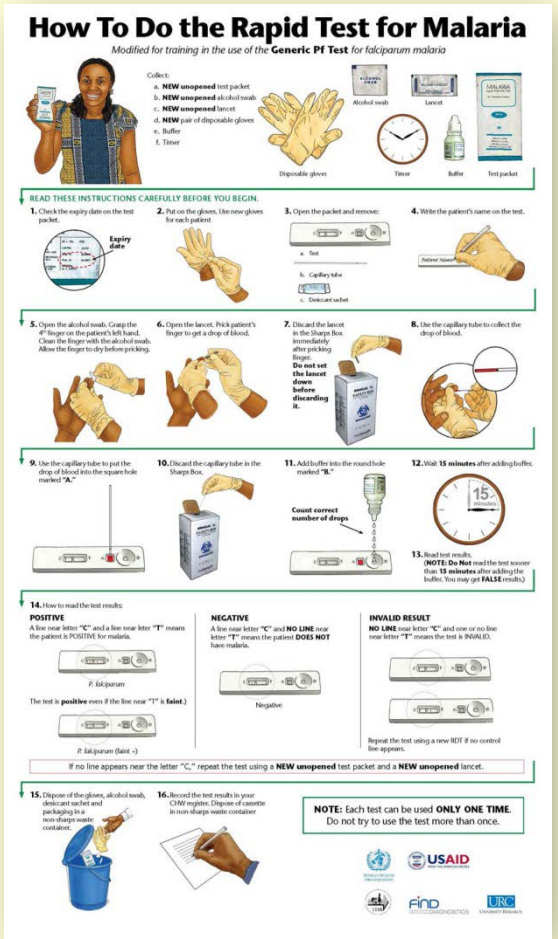
- Training is expensive.
- Average amount of CHW training is 3 months.
- CHWs have 8th grade reading level or lower.

How job aids are typically used in training and work settings

- Job aids can be symbols of status and specialized knowledge.

Pros/cons of paper vs. smart app job aids

- Charging smart phone batteries may be an issue.
- Image zooming and animation has benefits.
- Users will need to have the full outline of all the steps.
- Some simple scenarios don't warrant a smart phone job aid.



Biggest takeaway—best use case may be for *training*

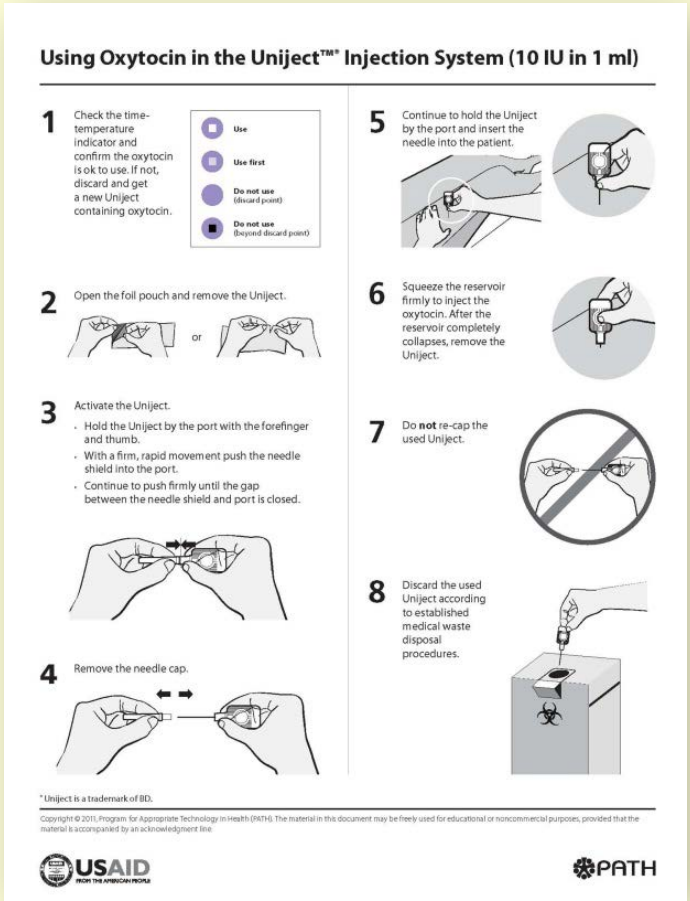
- Likely more cost-effective to provide smart phones for trainers vs. for all CHWs.
- Trainers could use smart phone + projector and travel to communities.

Upcoming fieldwork and basic scenario

Simple job aid app prototype testing

- Test with everyday users and CHWs.
- Compare it to paper-based job aids.
- Get user input on general concept: pro's, con's, and content.

Upcoming fieldwork and basic scenario



Using Oxytocin in the Uniject™* Injection System (10 IU in 1 ml)

1 Check the time-temperature indicator and confirm the oxytocin is ok to use. If not, discard and get a new Uniject containing oxytocin.

Use
Use first
Do not use (discard point)
Do not use (beyond discard point)

2 Open the foil pouch and remove the Uniject.

or

3 Activate the Uniject.
- Hold the Uniject by the port with the forefinger and thumb.
- With a firm, rapid movement push the needle shield into the port.
- Continue to push firmly until the gap between the needle shield and port is closed.

4 Remove the needle cap.

5 Continue to hold the Uniject by the port and insert the needle into the patient.

6 Squeeze the reservoir firmly to inject the oxytocin. After the reservoir completely collapses, remove the Uniject.

7 Do **not** re-cap the used Uniject.

8 Discard the used Uniject according to established medical waste disposal procedures.

*Uniject is a trademark of BD.

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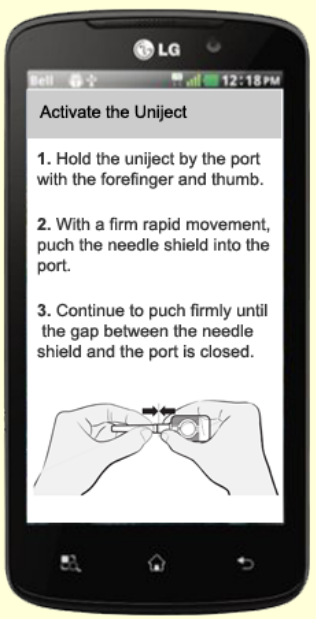
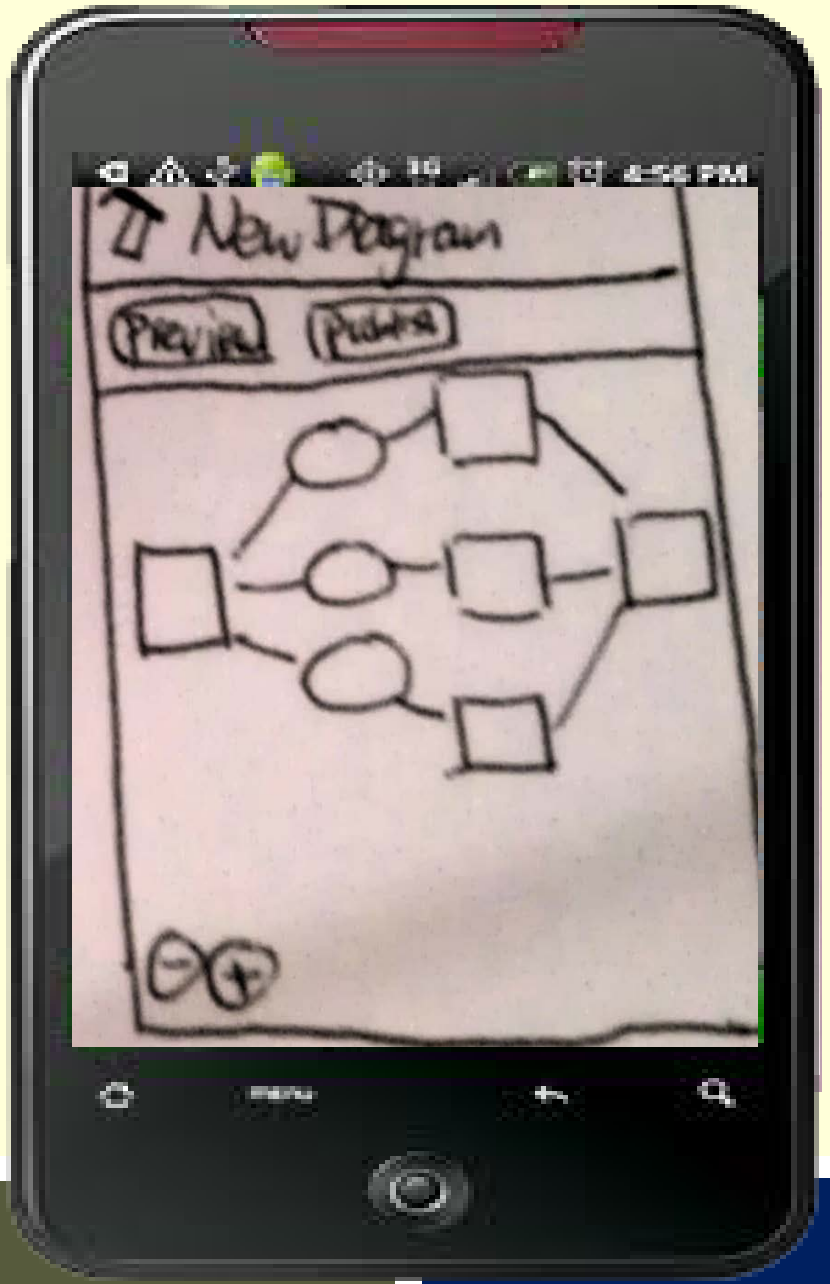
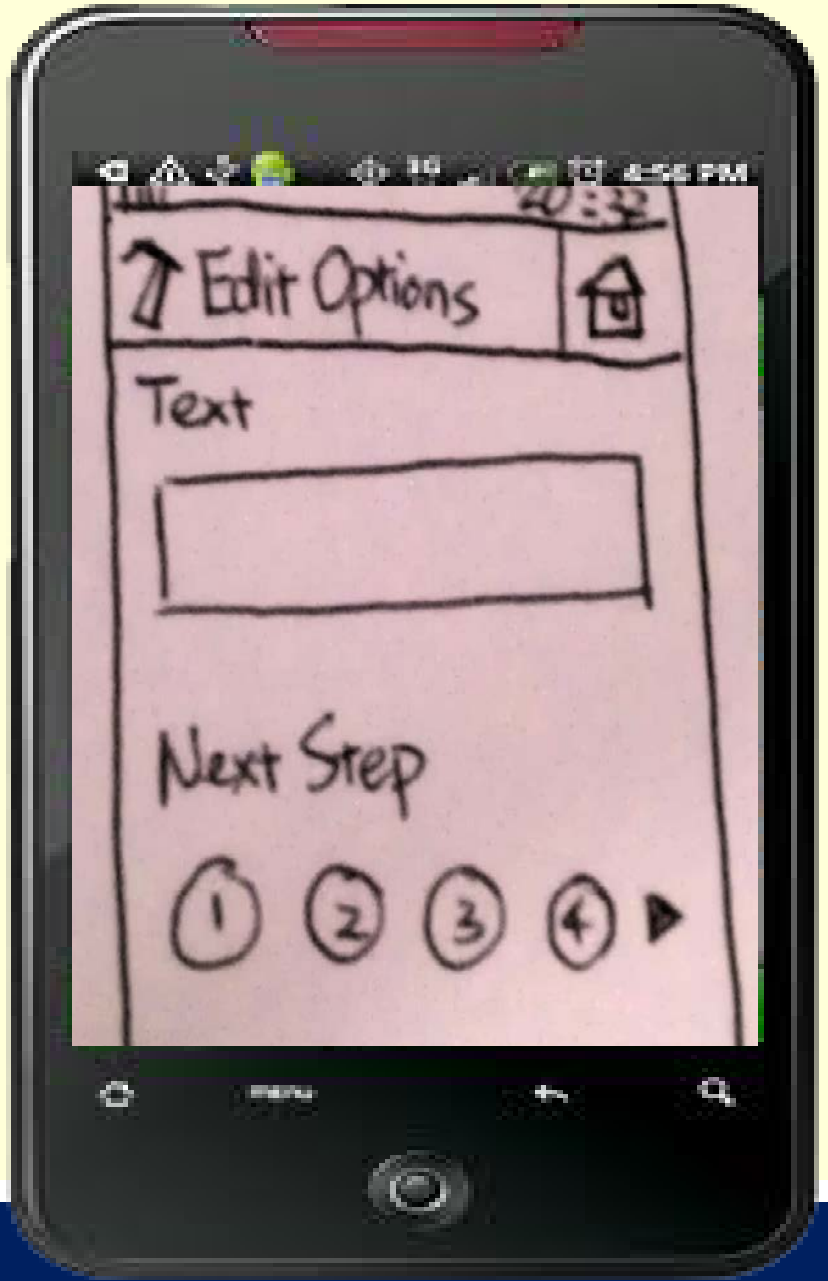
PATH



Job aid app builder





Next steps

What medium we'll use for the prototype

- Paper job aids
- Simple job aid app prototype on Android—built with ODK
- App Builder: paper prototype or html web prototype

How we'll iterate on the prototype and UI

- Paper prototype → Interview → Wireframe in digital format → User test → Revise wireframe → Updates in ODK

Who we'll ask to provide feedback on the prototype and UI

- General users who are unfamiliar with the job aid.
- Seattle-based community health workers, ideally from non-US countries (through Global to Local).
- Global to Local project director (interview and possible prototype testing).

Thanks!

Questions?