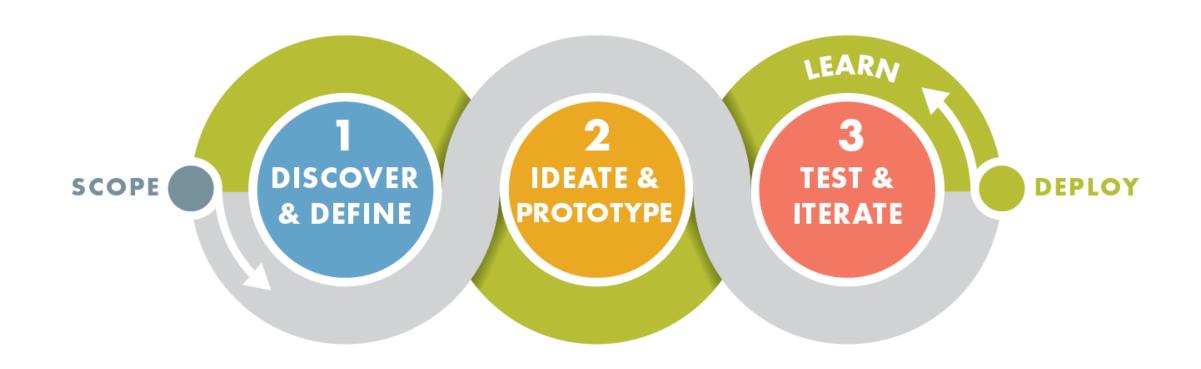


Human-Centered Design Process









NC Interventions

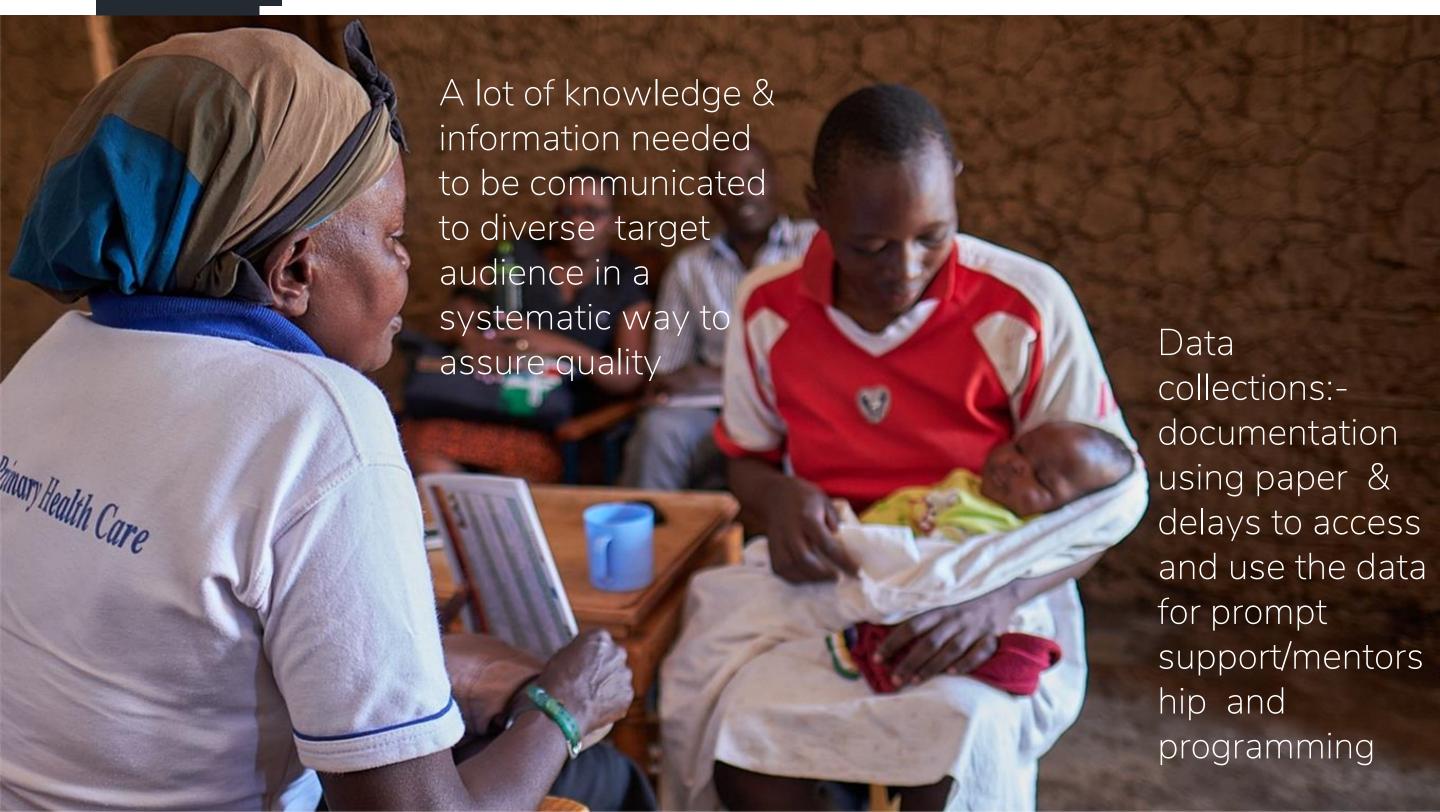
Are many and tailored to the CHV skill level:

- a. Observe the child-caregiver relationship and provide targeted support to empower the caregivers with appropriate knowledge and skills to engage with the children
- b. Appropriate mental health care support for the caregivers
- c. Support age-targeted monitoring of milestones:-guided by the ones in the MNCH clinic booklet
- d. Refer children with suspected delayed milestones, caregivers with caregiver-child interaction challenges, mental health





Pain Points





Opportunities

Well-defined intervention:Programmed and fitted within the
MoH system

The CHVs and Managers have smartphones and Tablets and tech savviness





Nurturing care workflow



1 Household Visits: Nurturing care integrated into routine household visit workflows

In the existing visit forms, include questions and counseling on responsive caregiving, proper nutrition, safety and security, playing & playing materials.





Nurturing care Referral
Suspected delayed milestones

are referred to the clinic, caregiver-child interaction

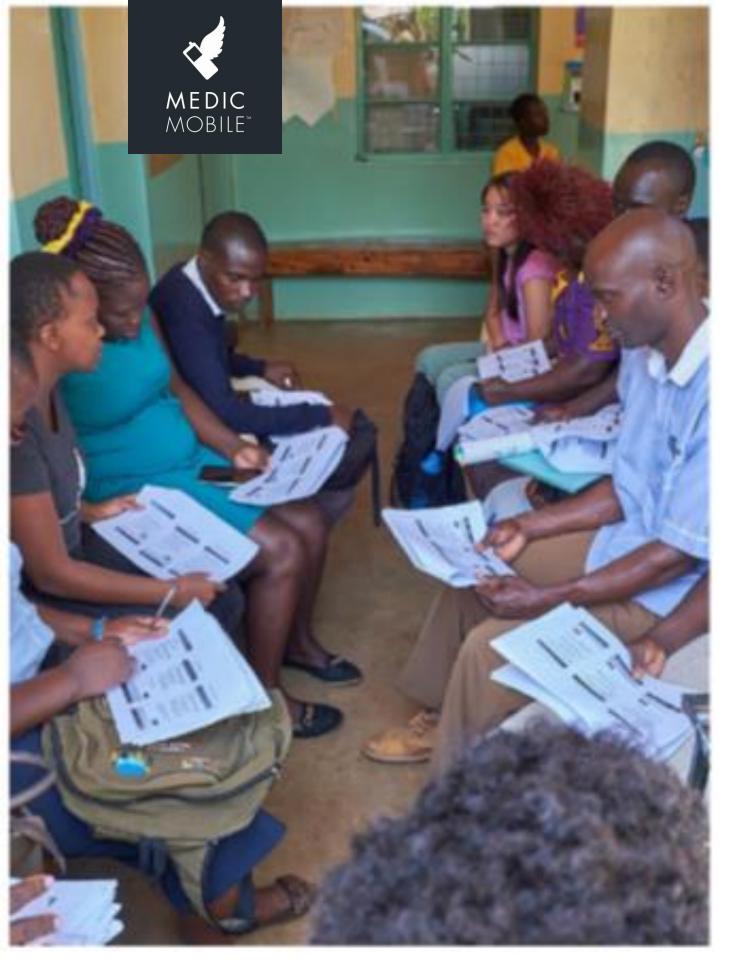




Reports are send to Sub county & County MoH focal persons

3 Nurturing care Referral Follow-Up

The CHV returns to the household in 3 days to check in on the referral



Prototype

Paper Mockups:- Lo-fi

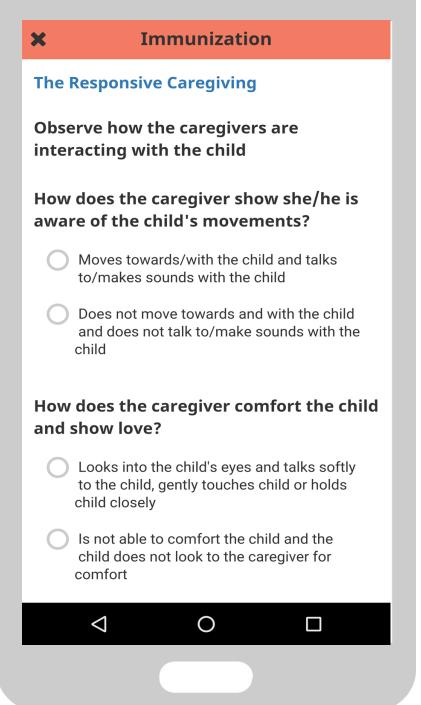
Quality of Content & Flow of Information Interpretation Understanding, Language

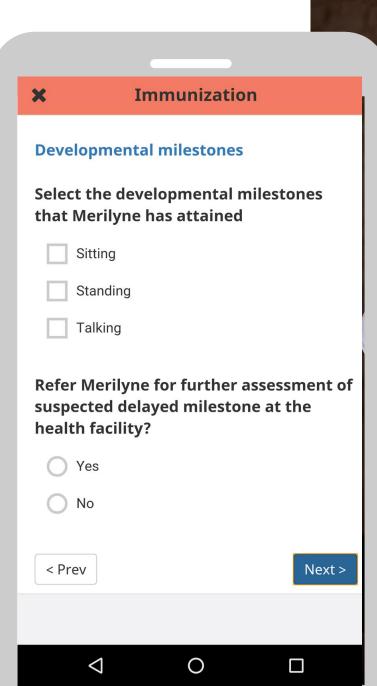
Usability during home visits:Shadowed the CHVs as they used the mock-ups to deliver the NC intervention



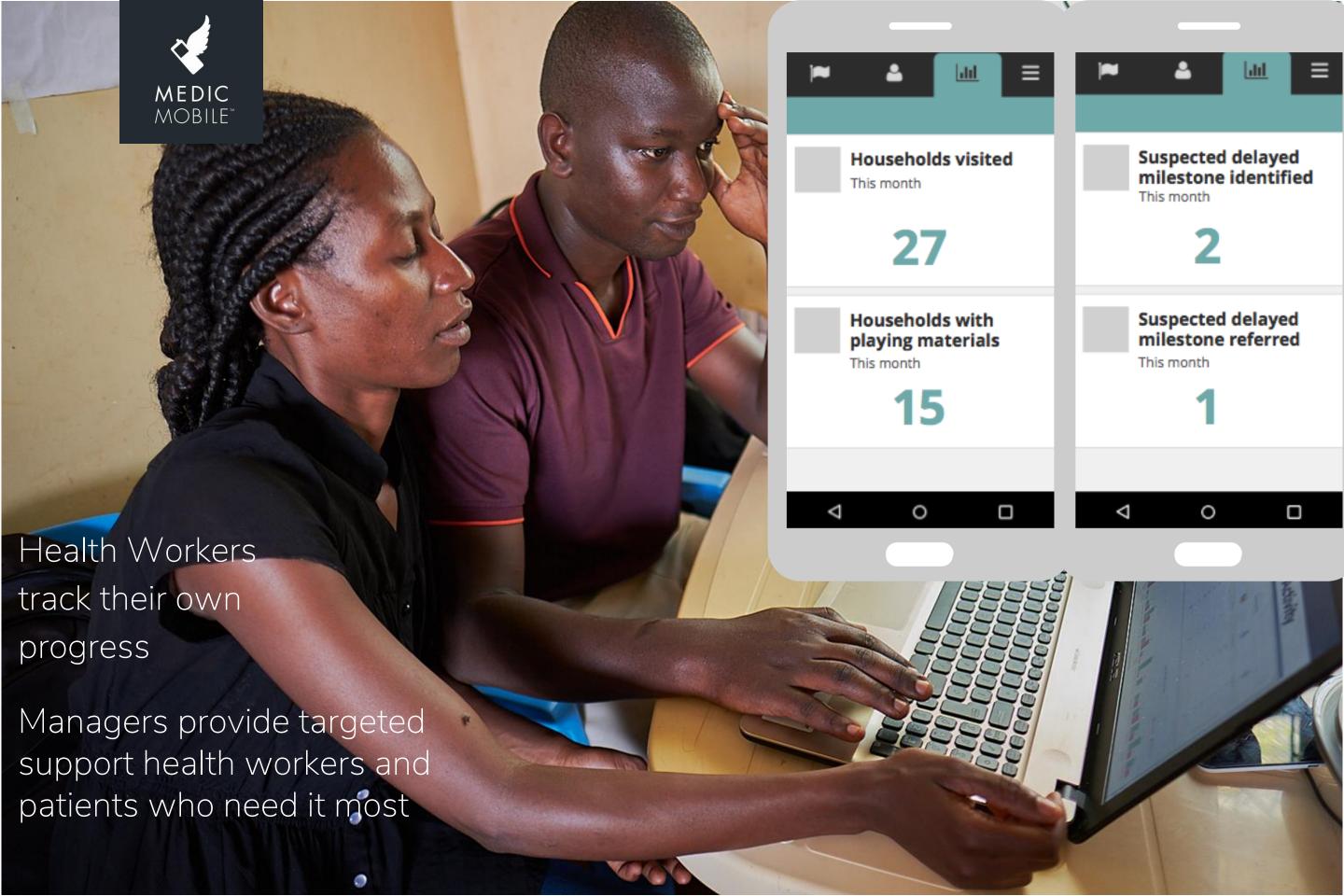
NC messaging are offered during an immunization follow up

visit











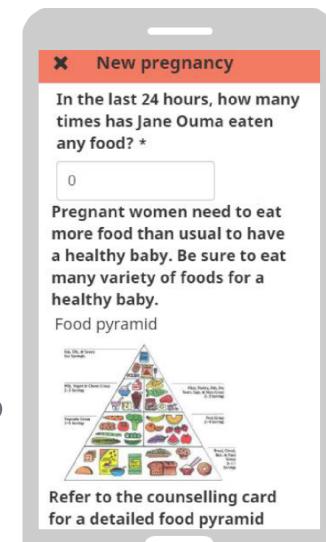
Perceptions of the mNurturing Care application

CHVs perceived that the application empowered them with the information they need, is easy to use and navigate and the tasks created remind them to follow up on their client,

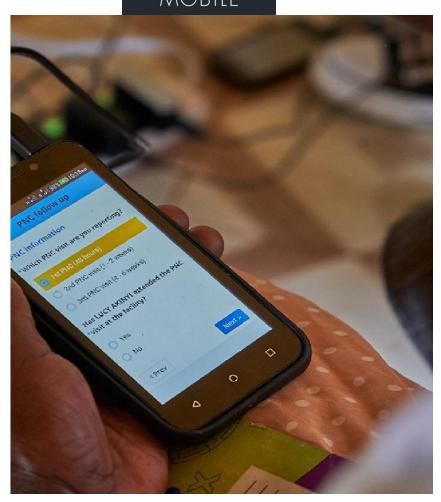
"I learnt so much about pregnancy and infant care. Mothers should avoid stress as that can have effects on their unborn babies." (CHV, FGD, Mukuru)

"For me, this phone eases the part of nutrition, where we use cards and pictures so if you show these to the caregiver or household head, they see it as real and normal and find it easy to follow." (CHV, FGD, Gem)

"Mine was a baby girl, so I went checking on the child who was just seated while her junior was already walking and could also not see well. So I advised her on how to handle the baby and take her through exercises, also referred her to the hospital and she calls me often to say the baby is beginning to walk so I still follow up and the baby is improving." (CHV, FGD, Gem)



Perceptions of the mNurturing Care application



MEDIC

The application provided information on WASH, immunization, nutrition, and antenatal care in a systematic manner, which has helped CHVs counsel caregivers

"It reminds us all that I am to do and tells me to appreciate the client. The app also has a very good flow and is easy to understand." (CHV, FGD Mukuru)

"The app has been amazing for CHVs because of the well flow of the questions.....they are now able to do all their tasks under one application. It has saved on time." (CHA, KII Alego-Usonga)

The application reduces the need to carry multiple registers and tools, since so much information is contained in it

"The work has been made easier as the many books that exhausted our minds are now replaced." (CHV, FGD, Rarieda)

"...The mNurturingCare App... reduced the time spent and the back and forth that was previously experienced when CHVs were using books." (CHA, KII, Alego-Usonga)



Perceptions of the mNurturing Care application

Caregivers seem to be more likely to take CHVs seriously when CHVs use the application

"Previously, we have hard copies, the books, so when you visit, some could be resistant questioning what we write on every visit and where we take them but these days with the phones, when we counsel, and show them the cards, they feel confident and appreciate the act." (CHV, FGD, Alego-Usonga)

CHVs felt that migrating service delivery and reporting workflows to a phone-based platform allowed them to be more discreet during home visits—as opposed to carrying bulky books and registers

"The application ensures security of client details as you cannot lose them when stored in the phone." (CHV, FGD, Mathare)

"... it is not the first time the CHVs have to use phones and an application to conduct their work. For the few who had challenges, we had to take time and explain to them and they got well conversant with it." (CHA, KII, Nairobi)



Perception on the quality of service delivery

The application requires CHVs to collect "real data," as opposed to the possibility of "faking" data with paper-based tools in the past

"But with the phone, the questions do flow, so that you cannot leave the household without asking some very important questions, like on nutrition." (CHV, FGD, Alego-Usonga)

CHVs were observed to take 12–24 minutes to complete an mNurturingCare workflow, which is considerably longer than the typical duration of home visits using paper-based tools—thereby suggesting that the application facilitates a conversation with the client

- Observed CHVs used effective interpersonal skills such as praising caregivers and making eye contact with them
- CHVs asked questions to caregivers and paused to receive responses
 CHVs suggested the incorporation of audio content to provide guidance on areas of emphasis

"I wish audio version was incorporated, so that when demonstrating responsive or child stimulation, you only click and the audio plays." (CHA, FGD, Gem)



Take Home

There was general consensus that the mNurturing Care application was well integrated into routine community-based service delivery and its associated structures

"The app has helped a lot, the flow and content has helped CHVs a lot and I feel it should be rolled out in other CUs, other counties or even the whole of Africa." (CHA, KII, Rarieda)

A community-based mobile application for nurturing care is most likely to be successful when government and donors simultaneously support existing CHV networks, and supportive structures through which continuous management and technical support is provided. Provision of stipends or support for incomegenerating activities is important.

Data on responsive caregiving and developmental delays needs to feed into national and subnational databases and inform decision-making