

cStock: Making lifesaving health commodities available at the last mile in Kenya

cStock in Kenya

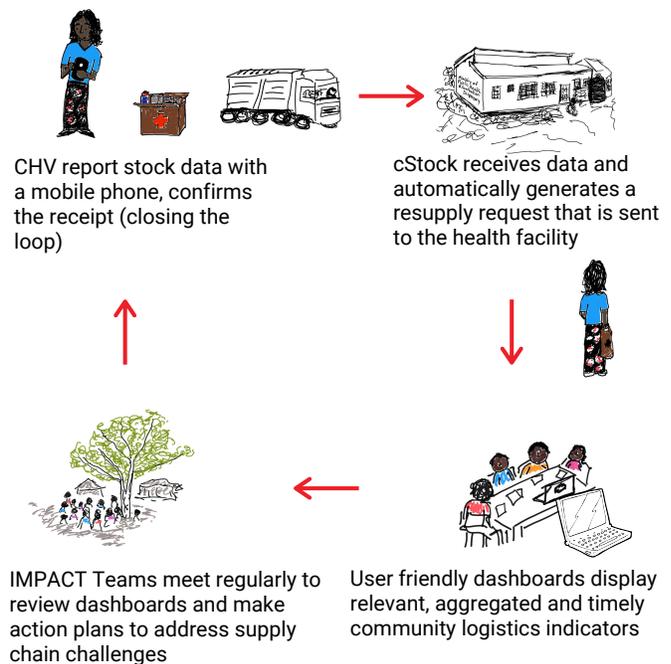
Kenya's vision is for communities to have zero tolerance for preventable childhood deaths. Community based programs have been proven to save lives and reduce health system costs by treating sick children close to home. Stockouts of medicines and supplies continue to hinder community health volunteers' (CHVs) ability to deliver services. inSupply Health is implementing the cStock approach to support Kenya's expanding community health program to improve the supply chain for CHVs and last mile communities.

inSupply Health successfully piloted cStock in two sub-counties in Siaya county after which, we undertook an intensive Human Centered Design (HCD) process to enable cStock to be scalable across all 47 counties. We redesigned the approach to take into account the barriers and needs of nomadic, hard to reach and low literacy CHVs and communities. The HCD redesign process focused on enhancing feasibility, acceptability, effectiveness and sustainability of the cStock approach.



What is the cStock Approach

The cStock approach is a supply chain strengthening approach for community health supply chain.



cStock approach uses a combination of three components:

Mobile technology to provide logistic data and improve communication

User-friendly dashboards to enhance end to end visibility. Standardize resupply processes. Promote accountability and transparency. Support performance management

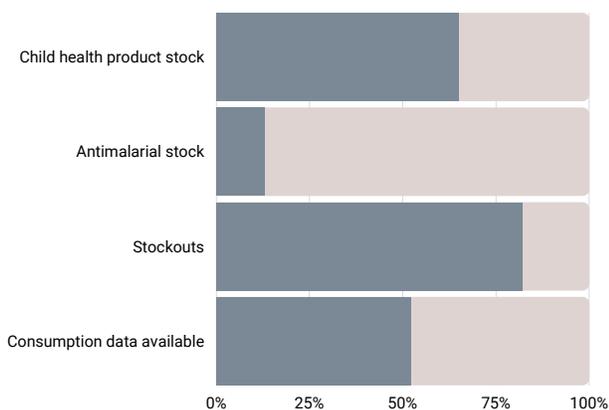
IMPACT Teams to strengthen data use, coordination, and collaboration in local problem solving to supply chain challenges



The cStock Journey in Kenya Baseline assessment (2017)

Before implementation of cStock in Siaya County:

- Only 65% of CHVs had 3 critical child health products on the survey day with 13% having all four antimalarial presentations.
- 82% of the CHVs had experienced a stock out in the last 30 days with ACT 3x6 (70%) being the most affected.
- Consumption data was only available for 52% of CHVs.
- Tools and methods used for requesting and calculating resupply were not standardized across the county



Design, Implementation and Results (2018)

- The project in conjunction with Kenya's MOH designed new CH supply chain records, reports and processes (none existed for CHVs), which informed the workflows for routine reporting, resupply and emergency reporting in DHIS2
- The design process helped to define roles and responsibilities and establish IMPACT Teams to ensure CHVs could execute supply chain tasks and were supported in their roles

- 94% of the CHVs found it easy to use the cStock platform and have incorporated the cStock tools in their routine practices
- 51% of the CHAs rely on the supply values on the cStock dashboard to resupply the CHVs

Why the cStock Approach is Different?

1) cStock is flexible and available in DHIS2. cStock is built upon DHIS2 which is key in the scalability and sustainability of cStock across multiple programs, as over 200 countries use DHIS2 as their National Health Information System. Users can interact with the system using whatever technology is available to them: feature phones, smartphones, tablets or computers.

2) cStock links stock reporting to immediate decision making and to resupply. With cStock, stock data reported by users triggers messages to their supervisors to ask them to take actions to resupply or address emergency orders.

3) IMPACT Teams create a culture of data use, problem solving, and action planning. For a mHealth tool to make an impact, staff must use and value data, and take appropriate actions. IMPACT Teams provide a structured approach for using data and create a culture of joint problem solving with CHVs.



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HCD, key lessons and contextualization

The HCD process enabled users to participate in co-creating cStock adaptations to address barriers faced by marginalized communities including nomadic lifestyles and low literacy. Using prototypes several aspect of the approach were redesigned.

1) Supply chain concept and dashboard designs

- Visualizing the calculated resupply values for ease of the process
- Role Delegation for mentorship and gradual capacity building for the CHV

2) Connectivity and limited power sources

- Enabling data submission either using the app or USSD, backed by a redesigned manual record and reporting tool

3) Literacy and low mobile phone usage

- Simple reporting and resupply process with step by step Standard Operating Procedures
- Incorporating visuals for each commodity in the app
- Audio voice overs in the app for inclusion of all literacy levels



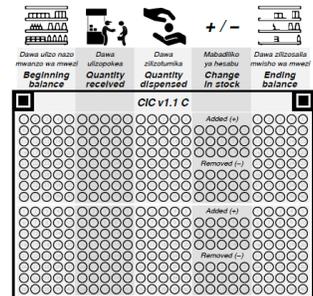
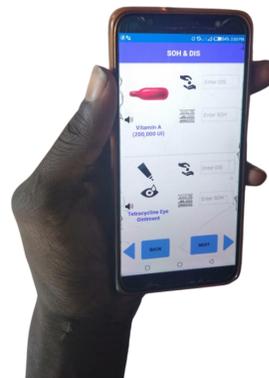
Scale up plan (2020)

Building on the initial success of the pilot, cStock has been scaled up to the whole of Siaya County and rolled out in 4 counties in Northern Kenya: Turkana, Samburu, Mandera and Wajir. To date, 241 CHAs and 3527 CHVs have been trained on the cStock approach. inSupply Health is working with Kenya's MOH to ensure cStock can be scaled across the country to facilitate end to end visibility of the supply chain.

Continued Innovation

cStock continues to provide timely logistics data to facilitate resupply, to provide visibility into community level stocks, and to promote program decision making. Ultimately the goal is to ensure availability of essential commodities at the last mile.

The inSupply team continues to explore how to evolve cStock to best meet the needs of CHVs and communities at the last mile. To that end, inSupply has partnered with Health-E-Net to integrate the PaperEMR technology into cStock. PaperEMR enables users to take a picture of a paper form, and the data is automatically digitized, helping to overcome literacy barriers and reducing the time burden of data entry. The partnership is being piloted in Turkana County.



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