dimagi

CommCare

CommCare at Scale: The South African NDOH - WBPHCOT Program

Supporting the South African government in rolling out a comprehensive mHealth program at national scale

health
Department:
Health
REPUBLIC OF SOUTH AFRICA

CDC
Centers for Disease Control and Prevention

THE AURUM INSTITUTE

Program Overview

Under South Africa's Ward-based Primary Healthcare Outreach Team (WBPHCOT) program, community health workers provide a wide variety of invaluable services to underserved communities across the country's 52 districts. The country has experimented with community health worker programs since the 1940s, and this program is one of the region's strongest with nearly 60,000 workers. To further strengthen WBPHCOT, there has been a recent push to centralize, digitize, and arm this powerful workforce with tools to meet their needs.

The WBPHCOT teams provide crucial support in a number of areas, including nutrition, sexual and reproductive health, primary care for children, and social services and grants. South Africa's twin epidemics, TB and HIV, mean that a great deal of emphasis is placed on testing, adherence support, and linkage to care for very vulnerable populations. To support these pillars, CHWs manage many of their clients' needs one-on-one for years.

The WBPHCOT program, impressive in scope and scale, faced challenges with their data. The old approach saw them dealing with poor quality data, decentralized data, and a variety of inefficient legacy systems that lacked a way to make timely, data-driven decisions. In late 2018, Dimagi began supporting South Africa's National Department of Health (NDoH) to develop and implement a comprehensive suite of mHealth tools built on the CommCare platform.

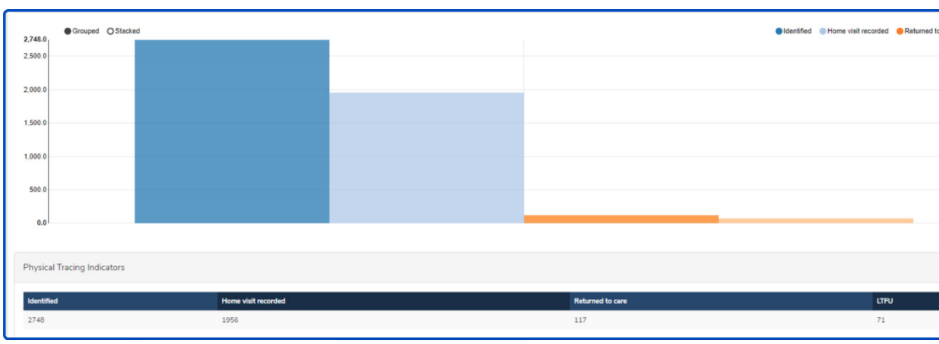
The WBPHCOT CommCare applications have been deployed in five districts across South Africa, with more than 6,500 CHWs. These FLWs have registered more than 150,000 households and are providing ongoing service to nearly 500,000 clients.

Intervention Structure

In partnership with local implementing organizations and the NDoH, Dimagi deployed a system to encompass the WBPHCOT workflow end-to-end, including:

- *CHW application for protocol adherence, service linkage, and data collection*
- *OTL (Supervisor) application for team management and monthly reporting*
- *Facility application to manage physical tracing and return to care for high-risk clients*
- *Secure web platform for program coordination and data access*
- *'Help Desk' mobile app and web interface for on-demand tech support*

NDoH Report

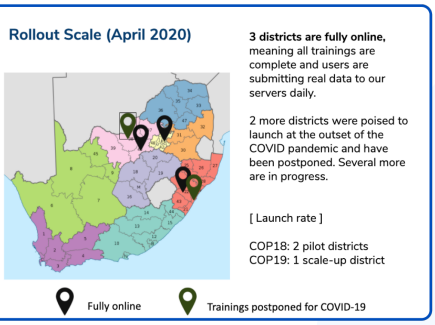


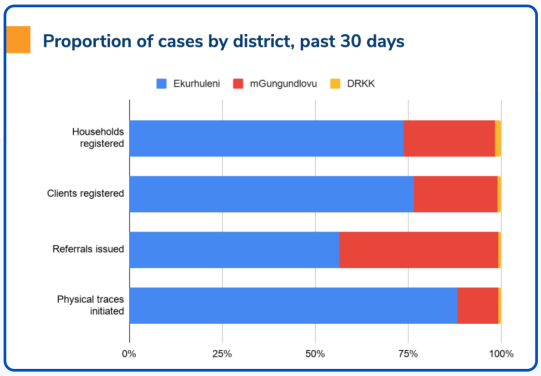
Key Workflows

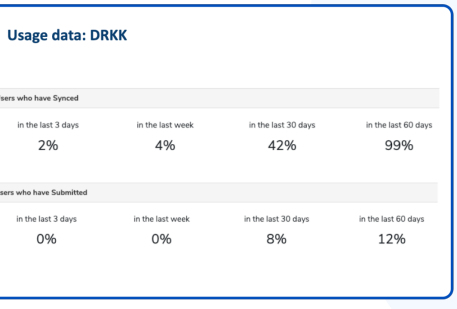
The WBPHCOT system covers five major workflows:

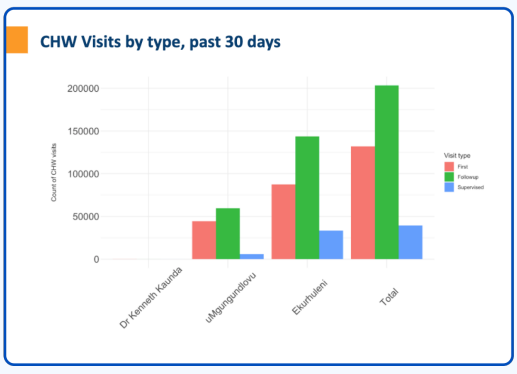
1. Household and client registration
2. Client screening for HIV, TB, child health, COVID-19, and a variety of other areas
3. Targeted follow-up for key conditions
4. Referral linkage to health facilities
5. Physical tracing for high-risk clients and defaulters

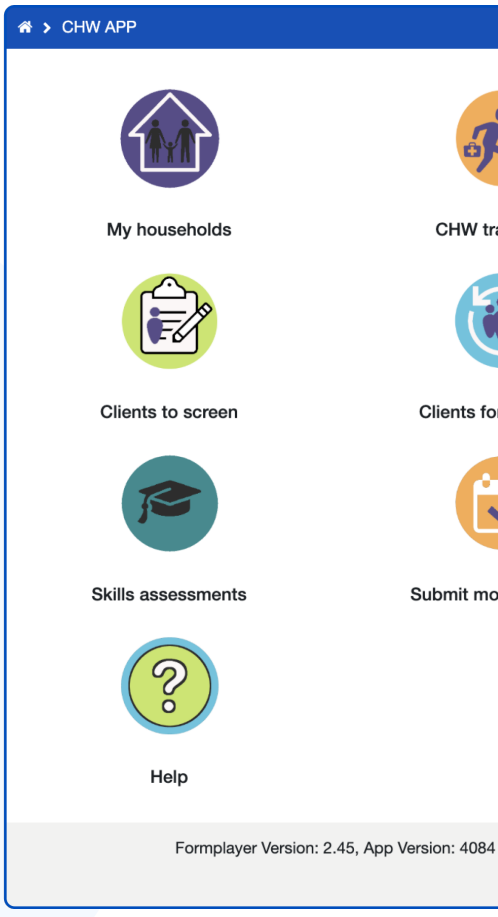
CHWs and supervisors exchange data in real time, and built-in application logic provides dynamic alerts and reactive protocol support. Early users have praised the applications' ease of use and intuitive nature, which we credit to our close relationship with WBPHCOT coordinators and their strong leadership during the development process.









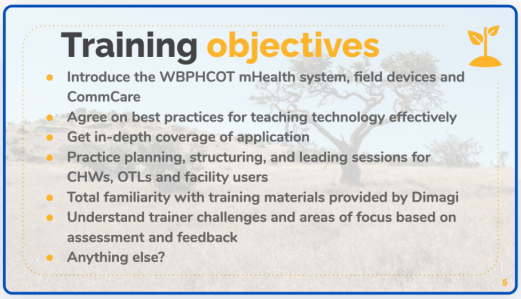


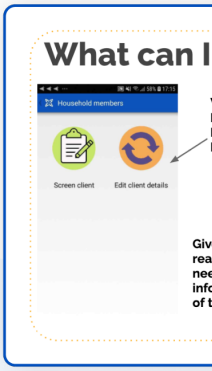
Accompanying Services

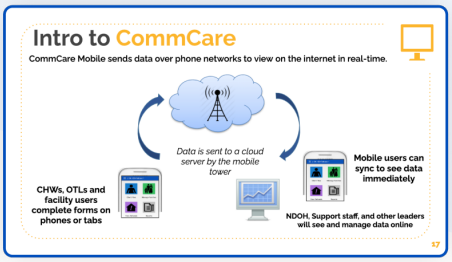
In addition to application design, building, and support, the Dimagi team supported a number of complementary aspects of the larger mHealth program.

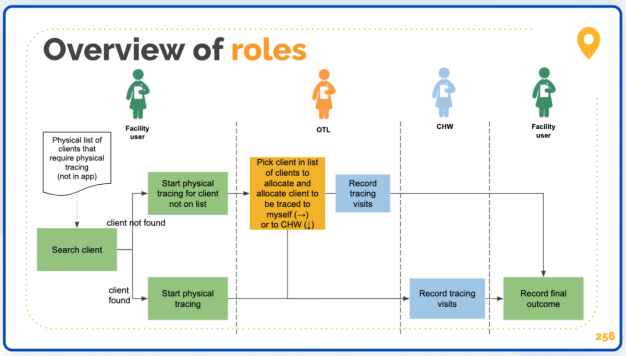
Training program design and materials development

Dimagi worked closely with head implementing partners to design a streamlined training program and certify a central cadre of Master Trainers. We developed a comprehensive set of digital manuals, printed content, videos, and web content for national circulation and continue to manage updates and distribution to these materials.









Helpdesk and implementation support

Modeled on the ICDS-CAS support desk we developed that supports 600,000 mobile workers in India, we implemented a multi-tier tech support network built on CommCare tools to provide quick resolution of hardware, software, and connectivity issues for all users of the system.

A network of Dimagi-trained and supported mHealth Coordinators directly supports users in the field and fills requests for data from stakeholders and Government actors. In addition, the Dimagi team regularly monitors usage data and disseminates key findings to identify issues and encourage user success.

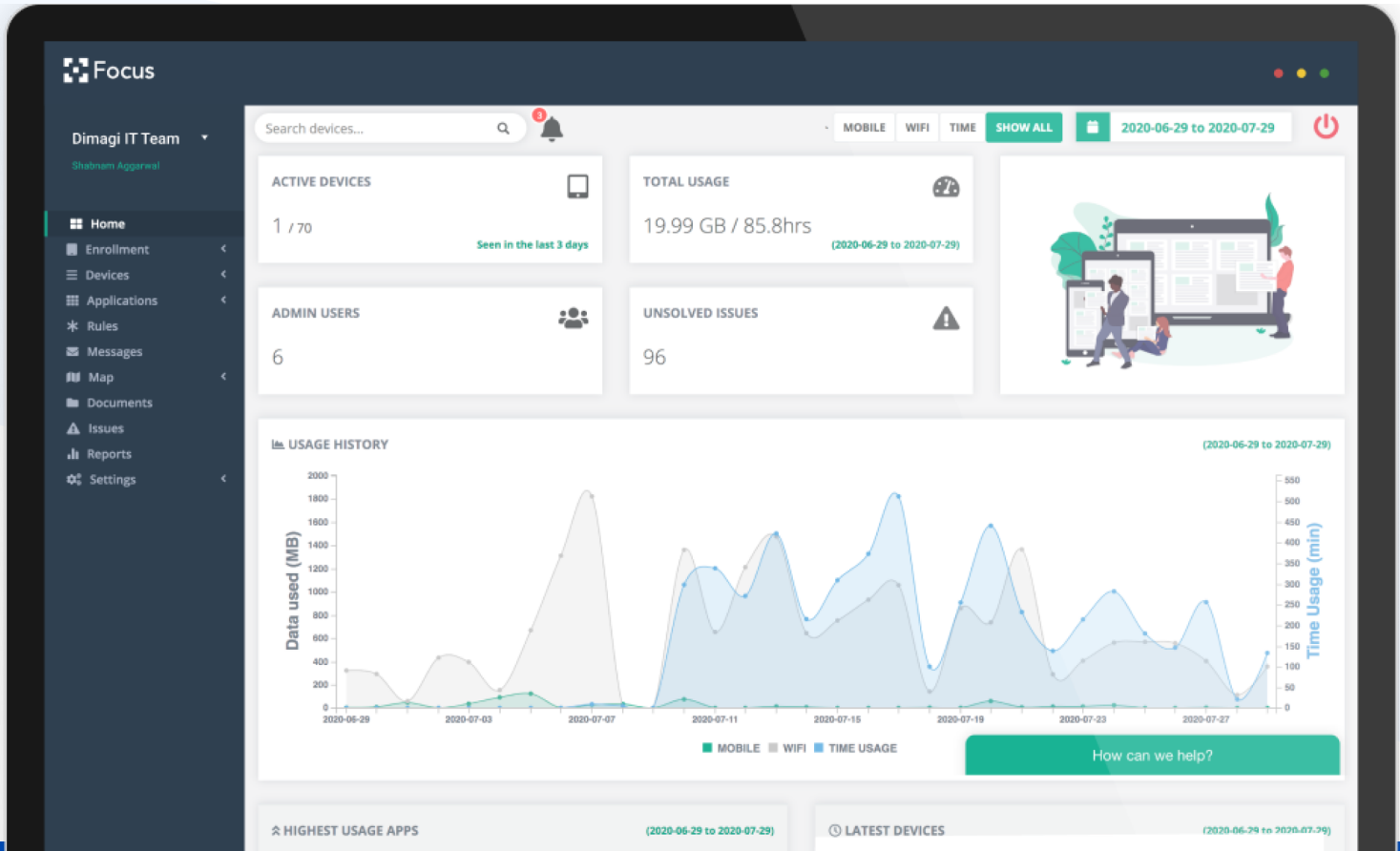
Government engagement

From the outset, our management team worked side-by-side with other partners on liaising with key national and provincial administrators to present national-scale strategy and act as key participants in various technical working group meetings and funder interactions. Dimagi served as a technical and programmatic resource to discuss and gather requirements, present demos, and guide strategy for rollout and implementation plans. We continue to work closely with implementing partners and government actors on aspects of system expansion, sustainability, strategic scaling, and targeted data use, all with an eye towards building capacity for local ownership of the program.

Support for device selection, procurement, and management

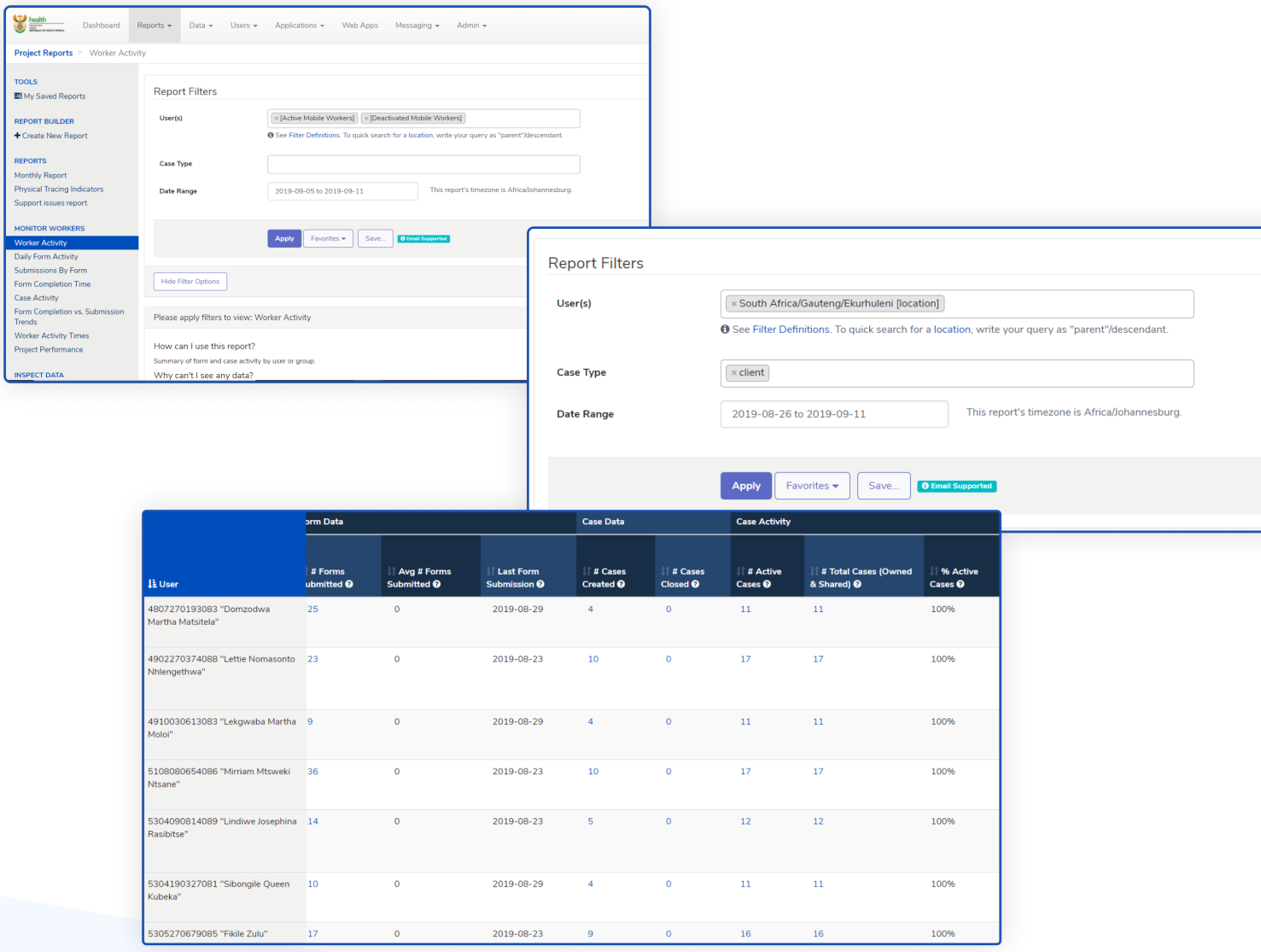
Dimagi provided comprehensive device testing services and supported the program to choose the best mobile phone for the job by providing direct support and technical inputs to the RFP to choose a device vendor. We also designed a device configuration and worked closely with the hardware vendor and telco service provider to ensure that installation of the CommCare application on the devices was done correctly and that the devices were in line with the technical and quality requirements for the project.

Once phones are in the field, mobile device monitoring and management is a key concern for large programs. Beyond CommCare, Dimagi also offers a fully customizable MDM solution called Focus that can be deployed for asset management and usage tracking and assists partners to leverage these insights for greater success on the ground.



Support for reporting and data use at scale

Dimagi tech and services staff regularly collaborate with government actors and implementing partners to tailor data exports, design and build reports, and build capacity for strategic data use. Our team is supporting the program with customized solutions for secure end-to-end data flow and tailored access and display at all levels, including support for integration with existing tools.



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4902270374088 "Lettie Nomasonto Nhlengethwa"	23	0	2019-08-23	10	0	17	17	100%
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5108080654086 "Mirriam Mtsweki Ntsane"	36	0	2019-08-23	10	0	17	17	100%
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Path to Scale

Through 2020 and beyond, Dimagi aims to continue to support the NDoH and a wide network of implementing partners to continue scaling the WBPHCOT system. The scale-up is currently set to cover all 27 PEPFAR districts, totalling 38,000 users, at the rate of 2-3 districts per month.