### dimagi

# CommCare for Campaigns

AMP - Campaign Digitalization

May 10-11, 2023

# About Dimagi & CommCare

# dimagi

Since 2002, Dimagi has built and scaled sustainable, high-impact digital solutions that amplify Frontline Workers and Programs.



Maker of **CommCare** 



#### Expert Services Team

1 Million

Frontline Workers Supported to date 130+

Countries with Users



Leading Social Enterprise



### Dimagi's Partners

Dimagi's clients are driving projects that are changing the world and helping those in need. Dimagi specializes in working with nonprofits, ministries and governmental institutions, development banks, international non-governmental organizations, educational institutions, and social businesses.



### **CommCare Key Features**



#### Works offline

Seamless workflows for end users without internet connectivity



#### **Multilingual** Local language application translations and data capture

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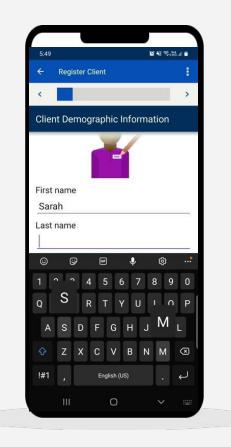
#### **Open Source**

Open source platform with free training tools and a community of CommCare users



#### Multimedia

Images, audio, and videos support low-literacy users with application navigation



### CommCare Evidence Base



#### **Increased Visits**

Research found improved client behaviors among clients of FLWs using CommCare, including a 73% increase in ANC Visits (<u>source</u>)

#### **Less Training Time**



A cardiovascular diseases training for CHWs that took 12 hours with paper took 3 hours with CommCare (<u>source</u>)

#### **Reduced Mortality**



Over 10 years, scaling CommCare in Uttar Pradesh averted 149,468 neonatal deaths - or a 5.3% total reduction of neonatal deaths (source)

#### **Cost Effective**

A 20 Com cost

A 2017 study found that CommCare is more cost-effective than cholera and typhoid vaccines (<u>source</u>)

### CommCare for National Scale Programs

Over the past 20 years, CommCare has been utilized in many countries across the world to support **Community Health Programs** including those in:

#### Mozambique

CommCare is used to improve APE (CHW) motivation, strengthen their skills to provide high quality of care, and provide a range of stakeholders with the data they need to make informed decisions. The CommCare solution serves as a job-aid for all APE activities and as a resource for stakeholders.

#### Madagascar

CHWs utilize CommCare as a service delivery support tool for Reproductive, Maternal, Newborn and Child Health workflows.

#### **South Africa**

CHWs use the CommCare applications to provide crucial support in registering households, client screening including those for HIV, TB, COVID-19. The application also provides services for child health, targeted follow-ups, referrals, and tracing for high-risk clients.

#### Ethiopia

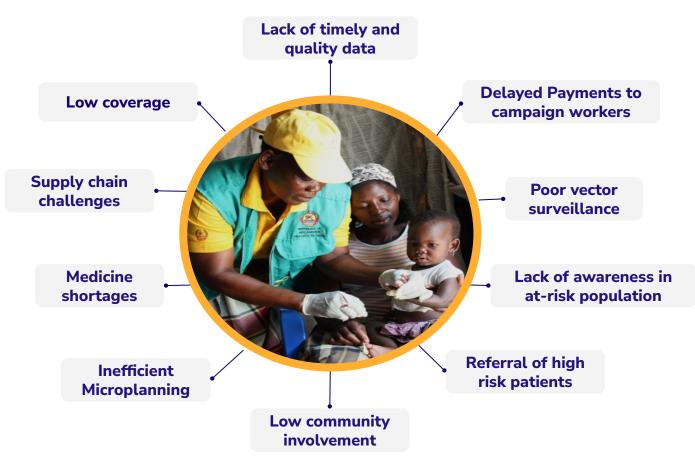
In Ethiopia, the government hosts CommCare to assist in the management of health extension programs through the collection and use of demographic data, health services delivery information, and service utilization. The tool is scaling nationally and is designed as a job aid to improve quality of care, support longitudinal client tracking & referrals, & as a data reporting tool.

#### **Burkina Faso**

CommCare is being used as the digital backbone to the Ministry of Health's Community Health Worker program. The MoH is leading development of the application which supports neonatal, maternal and child health.

# The Challenge

### Challenges in Campaign





A lot of these challenges can be addressed by a cost effective and scalable digital solution

### The Solution

The Integrated Campaign Solution is a comprehensive and adaptable set of digital tools designed to support every level of a health campaign



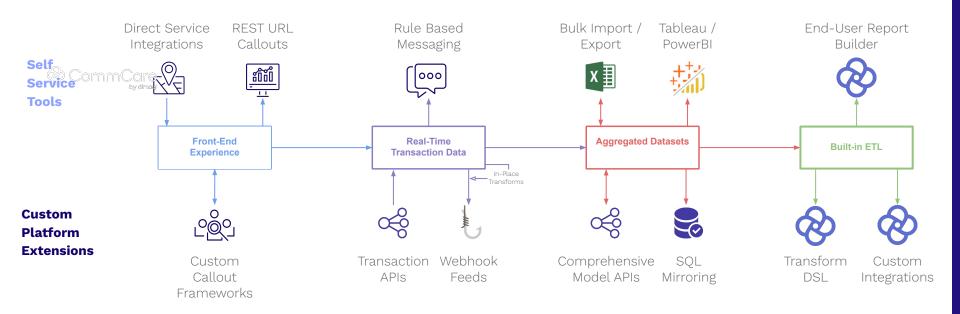
### **Key Features**

- geo-location enabled target **enumeration**;
- **supply chain** management;
- campaign **worker management** with registration, payment and attendance tracking;
- self paced **digital training**;
- **service delivery** at community and facility levels;
- **community engagement** through SMS and chatbots;
- advance **reporting** and analytics
- **integrations** with national health systems such as DHIS2.



### Built for Interoperability at Every Level

CommCare's design anticipates multiple points of <u>interoperability</u> across entire health systems. Dimagi brings our experience to help <u>guide</u> efforts for better interoperability with partners.



### Top-Tier Security & Privacy Standards

Dimagi upholds the highest security and privacy <u>standards</u>, while continually advocating for higher <u>standards</u> in our Global Development industry.



Certified SOC-2 compliant with full audited Type 2 report available



Penetration testing and vulnerability scans by third parties to ensure continued security



Data encryption using AES-255 from mobile device to server



Roles based access, 2FA, Session and Inactivity Timeouts, Single-Sign On (SSO)

**GDPR Data Processing Agreements** 



Data hosted in AWS East, in an ISO 27001 and FedRamp certified environment



Implementing organization owns data



Tenancy allows for data segregation; Capabilities to recognize specially protected information



Security review clearance by the State Public Health Departments in Colorado, New York, New Jersey, Alaska



HIPAA Compliance &



# **Case Studies**

### Combating Malaria with Indoor Residual Spray



Location 14 Sub-Saharan African Countries



Sector Infectious Diseases, Maternal & Child Health



Partner(s)

USAID - President's Malaria Initiative, Abt Associates

Equip indoor residual spray (IRS) operators across Africa with digital tools to quickly report spray progress during malaria season.

- Capabilities include SMS, daily email reports, integrated data visualization
- Scaled to more than 1,000 CommCare users in 14 sub-Saharan African Countries

#### 11 Million +

**1,000 +** 

Households Report Spraying

### cStock- Supply Chains for Community Case Management



Location Malawi



Sector Supply Chain Management



Partner(s): JSI, The Global Fund, BMGF, World Vision, Malawi MoH

### Bring healthcare services closer to clients in order to treat children under five in a timely manner.

- Automatically calculates the resupply needs for an individual CHW based on their reported stock levels and system-calculated consumption
- Reduces the travel burden on clients who live far from health facilities, helping to double product availability and reduce stockout rates and lead times for resupply
- MoHP introduced the Improving Supply Chains for Community Case Management of Pneumonia and Other Common Diseases of Childhood project (SC4CCM)

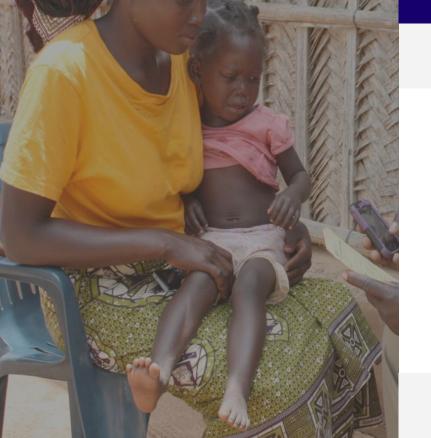
#### 3,900+



Users

Avg Reporting Rates

### iCCM for Improving Child Health





Location Mozambique





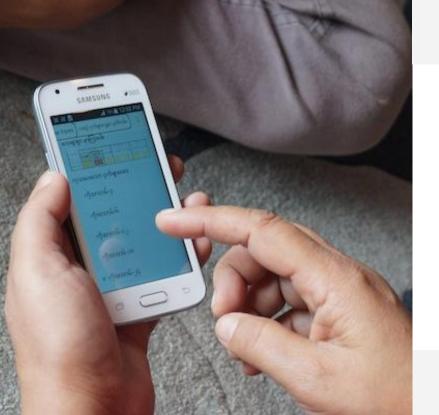
Partner(s) Malaria Consortium

### Improve healthcare services and expand coverage using Integrated Community Case Management (iCCM).

- Application strengthens communication between community health workers (CHWs) and health facility supervisors
- upSCALE has the potential to expand into other areas of the health system, with the goal of improved diagnosis, treatment, and monitoring of disease
- Data visualisation in real time at the district, provincial, and national levels of Mozambique's health system



### CDC Foundation – Malaria Zero 2020 Mass Drug Administration Campaign









Partner(s) CDC Foundation

### Supporting treatment and prevention of Malaria in local communities. Ley functionalities include:

- Tracking households and it's members
- Assistance in delivering anti-malarial medications
- Determining medication doses for each patient
- Record of health services provided
- End of day report
- Help Desk

### **Neglected Tropical** Disease (NTD) Campaigns





Location Multiple



Partner(s) Various

#### Sampling of NTD programs using CommCare

- Schistosomiasis: Support campaign workers with a schistosomiasis reporting tool for laboratory testing (Guinea, American Friends of Guinea)
- **Dengue Fever**: Developed technology to support with clinical trials (Thailand & Philippines, US Department of Defense)
- **Mycetoma control**: Record diagnoses and flag referrals (Sudan, Johns Hopkins School of Public Health)

# Users & Sample Workflows

### Users



#### Front Line Workers

Campaign operators or volunteers who deliver services



#### **Team Leader**

Supervisor Applications for team management, microplanning and monthly reporting



#### Facility / Stock Admins

To manage stock supply or facility based workflows



Decisionmakers

Data analytics supported with PowerBI and SQL, enabling national, provincial, and district stakeholders to make decisions.



Mobile app and web interface for on-demand tech support

### **Application Modules**







Patient Case Management Household Enumeration & Target identification **3** Facility Management & Stock Monitoring

**4** ITN Distribution

5 IPTp, SMC, PMC follow-up

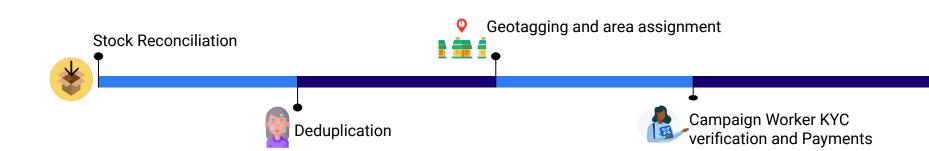
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**6** Reports & Dashboard

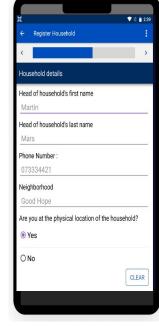
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/ Digital Training



### **Enumeration & Target Identification**

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which	will allo	i household w you to de	liver car	e to the c	ommur	nity
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very si	imilar to	the paper r them to dec	egisters	normally	used, I	but
	ncluded		aue ii ui	ey uu ui i		Main
Does t registe		of househo	old cons	ent to bei	ng	
<ul><li>Ye</li></ul>						
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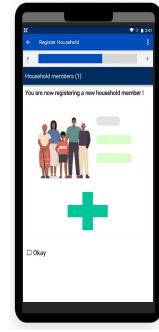


Collect Consent

Head of household Details



Location of Household



Register Individuals

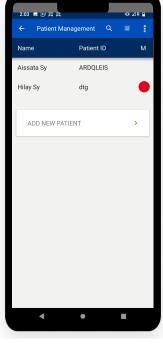
	ehold	
<	FINISH	3:
Summary		
Household sum	mary:	
Head of household	: Martin Mars	
Address : 123, Lon	n road	
Phone number : 07		
ist of Household	Members	
Name	Gender	Age
Gemini Mars	male	21
Lucile Mars	female	34
Elias Mars	male	2

Household Summary

### Integrated Community Case Management







status



2:03 🖬 🗐 🗙 💥	⊙⊿r û
← Patient Mana	agement
Test Details	Malaria Assessment
rest betans	Form
Initiate Referral	Patient Clinical Outcome
٩	•

Referral of critical cases

< ∧	Aalaria Asse	ssment	Form	1
<				>
Date of	Assessm	ent *		
	Nov	07	2021	
	Dec	08	2022	
	Jan	09	2023	
Date car	nnot be in th	e future.		
	•	•		
1	Valida	atio	ns to	)

reduce data

cleanup workload

3:14 スス

3:14 📼 🍂 🎉		• • 2	R 🖬 🗌
← Malaria Assessn	nent Form		1
<			>
Malaria Severity			
Does the patient sho following signs and s			
Symptoms	Yes	No	
Prostration *	0	۲	
Impaired consciousness *	0	0	
Respiratory distress *	۲	0	
Pulmonary oedema *	0	0	
Multiple convulsions	0	0	
Circulatory collapse (blood pressure < 90/60 mmHg) *	0	0	
Abnormal bleeding *	0	0	
Jaundice *	0	0	
Haemoglobinuria *	0	0	
The patient may ha	ave severe	Malaria	
• •			

Clean UX to allow faster data entry

### Facility Set-Up & Stock Monitoring (Admin)

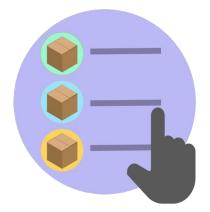
#### Edit Facility Information



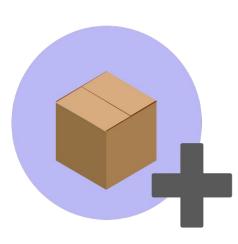
Administrators can update facility information such as primary/secondary points of contact and location Facility Assessment



Administers can conduct periodic assessments of the facility's preparedness according to WHO standards Manage Tracked Items



Administrators can select what items will be tracked at each facility Record Baseline Stock



Administrators can set the baseline stock at the facility at the time of transition to app-based tracking

### Stock Tracking (all users)

#### Stock on Hand



CHWs can record how much stock is on hand at their facility

#### Stock Received



CHWs can record how much stock has been received at their facility

CHWs can record how much stock has been distributed from their facility to another facility

Stock Distributed

#### View Stock Status



CHWs can view the most recent amounts recorded for Stock on Hand, Stock Received, and Stock Distributed

### Stock Tracking (all users)

#### **Report Urgent Need**



Report Oversupply

CHWs can report when they are low in stock, how much stock they need urgently, and how soon they need it

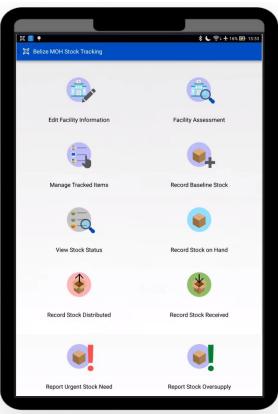
CHWs can report when they have too much stock and how much stock they have above what is needed (Additional Module) View Urgent Stock Requests

"View only" Module

CHWs can view the most recent amounts recorded for Stock on Hand, Stock Received, and Stock Distributed

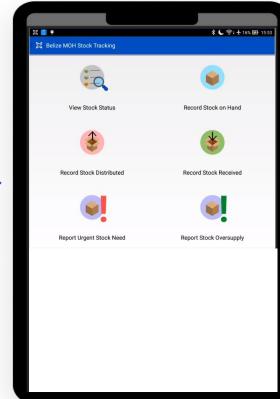
### Sharing Cases

#### **Admin User View**



# Data is shared between administrators and non-administrators

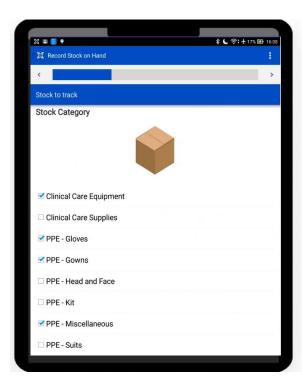
#### All Users (Non-Admin) View



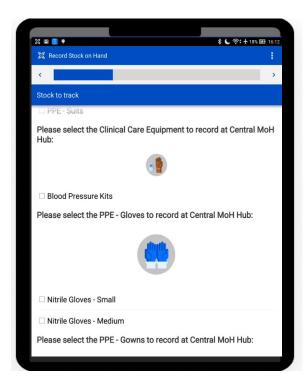
### Record/Report Forms



#### 1. Select Stock Category



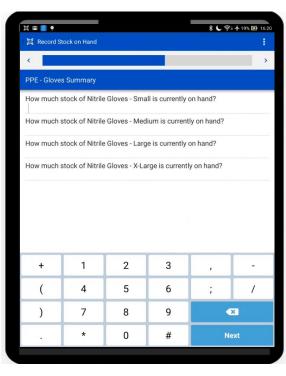
#### 2. Select Stock Items to Update



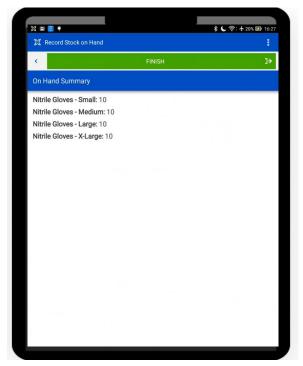
### Record/Report Forms (cont'd)



#### 3. Enter Updated Stock Data



#### 4. View Summary of Data Entry



### View/Manage Forms



#### View items entered as urgently needed

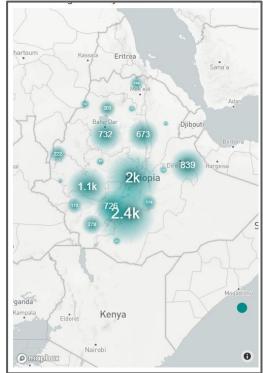
← View Uro				
← View Urg	ent Stock Request	S		
Facility	Stock	Date	How Urgent Is the Request?	Amou Neede
Central MoH Hub	Gowns - Surgical	Jan 25, 2021	Need within 7 days	25
Central MoH Hub	Blood Pressure Kits	Jan 25, 2021	Need within 3 days	33
Central MoH Hub	Blood Pressure Kits	Jan 25, 2021	Need within 7 days	50
Central MoH Hub	Blood Pressure Kits	Feb 11, 2021	Immediate	2000
Central MoH Hub	Aprons	Feb 08, 2021	Immediate	200
Central MoH Hub	Blood Pressure Kits	Feb 12, 2021	Immediate	600
Central Region Distribution Point	Blood Pressure Kits	Feb 11, 2021	Immediate	2000
Central Region Distribution Point	Blood Pressure Kits	Feb 08, 2021	Immediate	10
Central Region Distribution Point	Emesis Basin	Feb 08, 2021	Need within 3 days	
Central Region	Blood			

#### View last amount entered for Stock on Hand, Stock Distributed, and Stock Received

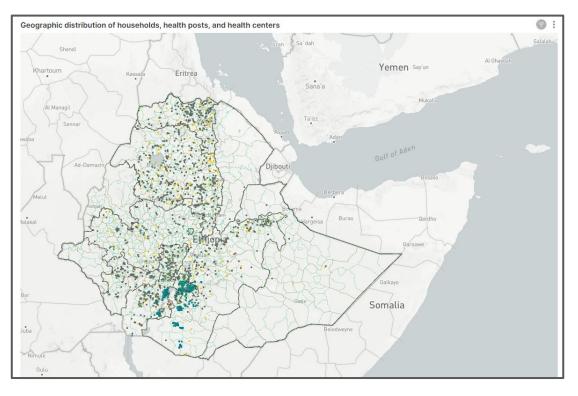
← View Stock Status			
<			>
PPE - Gloves Summary			
Nitrile Gloves - Sn	nall		
	Amount	Date	
Most Recent On Hand:			
Most Recent Distributed:			
Most Recent Received:	100	2021-01-14	
Nitrile Gloves - Me	edium		
	Amount	Date	
Most Recent On Hand:			
Most Recent Distributed:			
Most Recent Received:	100	2021-01-14	
Nitrile Gloves - La	rge		
	Amount	Date	
Most Recent On Hand:	1500	2021-02-17	
Most Recent Distributed:			
Most Recent Received:			
Nitrile Gloves - X-	Large		
	Amount	Date	

# Data & Dashboard

### Superset Dashboard



Detailed **population estimates** by age, gender or households for MDA campaigns



Catchment layers for **microplanning** 

### Stock Report

facility name		× [Show All]			×		
facility id		× [Show All]			×		
facility district		× [Show All]			×		
		Apply Favorites - Save					
Hide Filter Optio	ons A Export	to Excel					
Stock Report (	Facility filter)						
Facility District	facility name	stock name	date last undated	date of stock input	number of new stock received	remaining stock	Mobile Worker Last Undating Case
Facility District	facility name	stock name	date last updated	date of stock input	number of new stock received	remaining stock	Mobile Worker Last Updating Case
Boromo	CHC Bree	Quinine	2022-05-24	date of stock input	number of new stock received	remaining stock	fa.mvp.2
	CHC Bree demo 2	Quinine Amodiaquine		date of stock input			
Boromo	CHC Bree	Quinine	2022-05-24	date of stock input	number of new stock received	remaining stock	fa.mvp.2
Boromo	CHC Bree demo 2	Quinine Amodiaquine	2022-05-24 2022-03-15				fa.mvp.2 fa.mvp.2
Boromo Boromo Boromo	CHC Bree demo 2 demo 2	Quinine Amodiaquine RDTs	2022-05-24 2022-03-15 2022-03-15	2022-06-10	100	80	fa.mvp.2 fa.mvp.2 fa.mvp.2
Boromo Boromo Boromo	CHC Bree demo 2 demo 2 demo 2	Quinine Amodiaquine RDTs ITNs	2022-05-24 2022-03-15 2022-03-15 2022-03-15	2022-06-10	100	80	fa.mvp.2 fa.mvp.2 fa.mvp.2 fa.mvp.2 fa.mvp.2
Boromo Boromo Boromo Boromo Boromo	CHC Bree demo 2 demo 2 demo 2 demo 2 demo facility	Quinine Amodiaquine RDTs ITNs ITNs	2022-05-24 2022-03-15 2022-03-15 2022-03-15 2022-03-15	2022-06-10 2022-06-15	100	80 20	fa.mvp.2 fa.mvp.2 fa.mvp.2 fa.mvp.2 fa.mvp.2 fa.mvp.2
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### Summary Report

Report Filters								
Closed	X [Show All]		×					
User	× [Show All]		×					
	Apply Favorites - Save	3						
Hide Filter Options	Hide Filter Options							
Epidemiological Report								
suspected cases	received tests	confirmed cases	severe cases	deceased	treatment initiated			
149	92	58	43	4	32			
Showing 1 to 1 of 1 entries 25 p	per page V				<pre>     Previous 1 Next &gt; </pre>			

### **ITN distribution Report**

		xcel			
CS > Househol	.d > ITN Distribut	ion			
Name of HH	Auto HH id	Enrolled for ITN Campaign	HH Location	ITN Eligibility	ITN Distributed
abiswas	899815				
ADE	315363		6.4291536 3.4995441 31.0 25.33		
ADEYEMI	761764		6.429298 3.499552 28.69 23.09	1	
BAJWA	134678		14.230306083160608 62.57812500000001 0.0 0.0		
BEDI	774982				
BEDI	403492		36.26199220445664 35.15625000000001 0.0 0.0		
BIBEK	242022		30.7354269 76.7100153 299.29 16.38		
BINTAN 2	271341		72.48189144841274 71.01562500000001 0.0 0.0		
crall					
crater	937934				
DIENE	571676	yes	14.6678169 -17.4310869 54.2 11.56	3	
DIMAGI	878465		33.985805 -118.2541117 0.0 3.9	2	1
drillz	919532				
DUTTA	979519				
FAITH	538582	yes	28.5620833 77.198035 0.0 3.9	2	1

### Campaign Worker Training Report

Worker Role	× Campaign Op	erator × Team Leader		×	
Worker Inactive	× [Show All]			×	
	Apply Favo	rites 🕶 Save			
Hide Filter Options	t to Excel				
ICS > Worker > Trainings att	ended				
Name Age Gender	Role	Number of trainings attended	Participation in bed net distribution training	Participation in spraying techniques training	Worker registered on
Al Zawahari 14	Campaign Operator				2022-09- 01T12:47:21.701000Z
Bolu Adeyemi 31 male	Campaign Operator	3	1	0	2023-02- 17T08:22:55.406000Z
cobir tyu 29	Campaign Operator		1	0	2022-09- 01T17:28:58.542000Z
Ela Ly 29 female	Campaign Operator	6	1	0	2022-10- 25T10:11:45.133000Z
Harry Winson 15 male	Campaign Operator	5	1	0	2023-02- 14T09:39:46.612000Z
lara d 0	Campaign Operator				2022-09- 01T16:22:19.838000Z
Leo Parker 0 male	Campaign Operator	0			2022-09- 05T10:04:17.0010007

# **Thank You**

# dimagi

solutions-partnerships@dimagi.com

