# CommCare for Research



Universities and organizations conducting field-based research face unique challenges with study design, data collection, monitoring, and programmatic implementation. Research teams have to address coordination and integration of multiple paper-based tools, field deployment organizations, training of local staff and a variety of country-specific logistical considerations. The team is often only on-site for a short amount of time, and then may need to manage long term initiatives remotely. Since 2002, researchers have been using Dimagi's open source mobile technologies to bring efficiency, visibility, and scalability to their studies through the use of CommCare. CommCare, is easily configurable to most research studies.

<u>About Dimagi</u>: Dimagi, Inc., a certified B corporation founded in 2002, has significant experience in designing and implementing mobile solutions for research studies using CommCare, the most evidence-based platform for mobile intervention. As a fast-growing leader in mobile technology, Dimagi has extensive relevant experience in implementing open-source mobile systems, conducting field work in over 40 countries, and providing the support of data scientists and study design experts to our partners and clients.



### Data Integrity

A core tenet of research, data integrity is often challenging due to remote teams, complex workflows that often have several data entry points completed by different research personnel, and delays in data reporting and aggregation.

- E-signature allows for integrated informed consent within the electronic platform
- Integrated **validation conditions** assist in data entry to simplify filling out complex forms, and can be reinforced with hints and reminders
- **Real-time submission of data** directly from data collectors' phones or devices enables managers and supervisors to access up-to-date records
- Reliable GPS capture improves data integrity and validation



## CommCare for Research

## **Research Features**

Due to rigorous standards and precise processes, research often necessitates distinct features in data input and collection, and in overall system functionality.

- Datasets can be **de-identified** for analysis
- User permissions are highly customizable. Administrators, data collectors and other research team members can be configured to have different access permissions and views.
- **Randomization mechanisms** built into forms can improve workflow from participant identification through qualification and group assignment
- Supervisory **validation workflows** enable remote, real-time data monitoring of data collectors
- Data dashboards improve data monitoring and can include project-specific indicators
- Capability of **longitudinal management** of specific participant classifications assists in complex workflows



### Core Functionalities

CommCare is comprised of turkey features that provide adaptability and flexibility in different research environments and places.

- **Multi-language functionality** allows for easy translation of form contents to fit local language customization needs
- **Cloud hosting** of data allows for deployment on the ground with no physical set-up necessary
- Forms within CommCare that comprise survey instruments are easily configurable, allowing for quick adjustments that can be updated and rolled out to all data collectors remotely
- **Platform approach** in the use of CommCare facilitates scaling up of research studies and rolling out to multiple sites, regardless of geography
- Integration of **SMS functionality** enables real-time communication across research teams



## **Data Security**

Data collection often entails the exchange of information from study participants to research staff in the field, and the exchange of data between research personnel. These exchanges introduce challenges in maintaining data security.

- Encryption of information on mobile devices ensures safety of data as it is collected in the field
- Various levels of access and **user privileges** can be set to restrict access to the forms, reports, and submitted data
- Data sets can be downloaded in various formats, and de-identified to meet needs of many study designs



### **Project Implementation Support**

Introducing a new system requires comprehensive training and support as the project is implemented.

• Qualified team with experience in supporting more than 300 projects worldwide



• Practical experience in application design, training, post-deployment support

