

**Mobile Data Collection Manual**

for data managers

**Global Early Adolescent Study**

**Phase 2 – Longitudinal**

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**KINSHASA**

Contents

[Introduction 3](#_Toc483235502)

[1. Your role in the GEAS as a data manager 4](#_Toc483235503)

[2. Setting up tablets for fieldwork 5](#_Toc483235504)

[a. Installing apps 5](#_Toc483235505)

[b. Tablet security 5](#_Toc483235506)

[c. SurveyCTO settings – DC access 6](#_Toc483235507)

[3. Training Data Collectors 7](#_Toc483235508)

[4. Communicating with Data Collectors 8](#_Toc483235509)

[a. Weekly check-ins 8](#_Toc483235510)

[b. Emergency back-up 8](#_Toc483235511)

[c. Maintaining progress worksheets 9](#_Toc483235512)

[5. Monitoring Data Quality 9](#_Toc483235513)

[a. Statwing 9](#_Toc483235514)

[b. SurveyCTO Sync 10](#_Toc483235515)

[c. What to look for 10](#_Toc483235516)

[Consent/assent 10](#_Toc483235517)

[Completion 10](#_Toc483235518)

[Dates 11](#_Toc483235519)

[Distress 11](#_Toc483235520)

[.do files 11](#_Toc483235521)

[6. Intervening 11](#_Toc483235522)

[d. Spot checks 11](#_Toc483235523)

[e. Call-backs and resurvey 12](#_Toc483235524)

# Introduction

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uch of what you will find in this manual was covered at the data manager training in October, 2015 and practiced during the pilot study. To revisit what was learned at this training, you may visit the project on [Basecamp](https://basecamp.com/2703861/projects/6604027/messages/50078596) or watch the recordings on [Vimeo](https://vimeo.com/album/3644748) (password: G3@5).

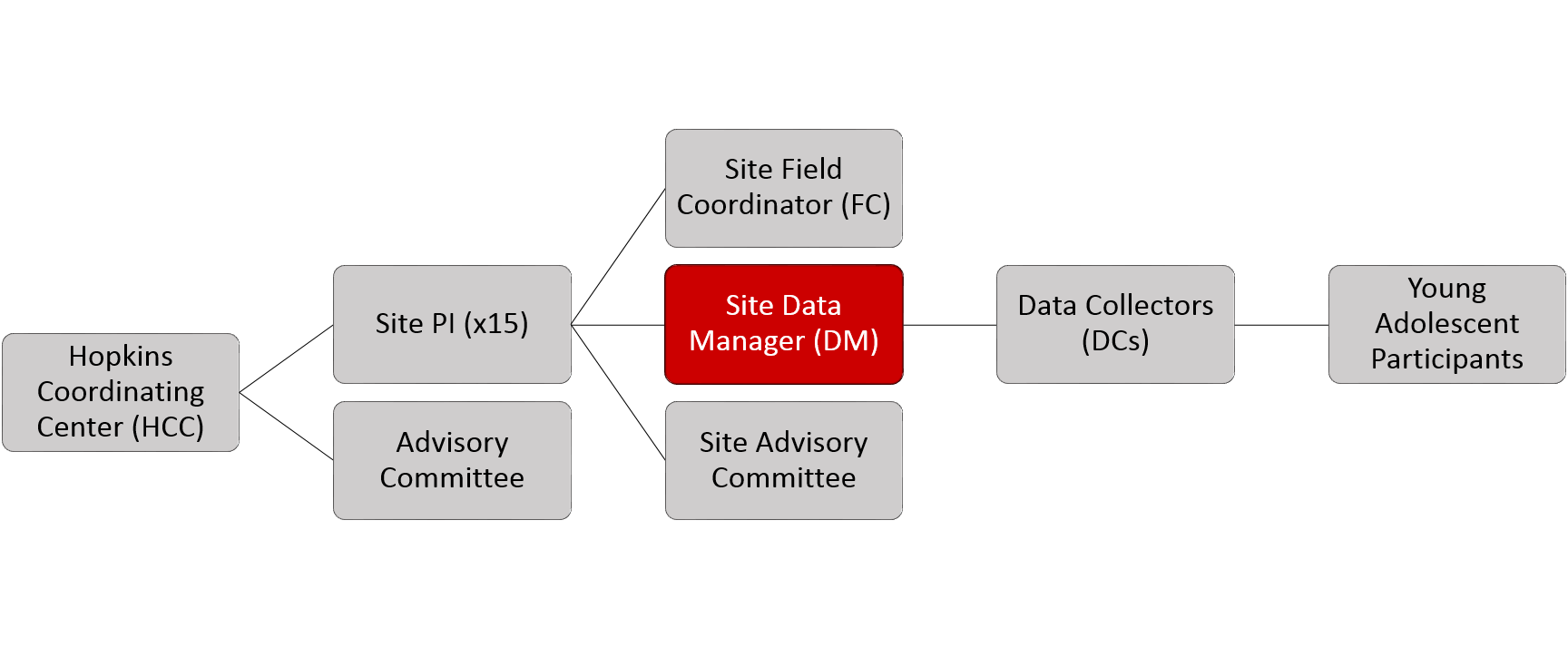
The purpose of this manual is to summarize key aspects of the site data manager’s role, and to provide some tips for ensuring data quality.

Please contact Mark ([memerso1@jhu.edu](mailto:memerso1@jhu.edu)) with any questions or suggestions.

The GEAS Hopkins Coordinating Center

# Your role in the GEAS as a data manager

As site data manager, you oversee the people on the front line of the GEAS (data collectors) and are responsible for ensuring that data collection goes smoothly, and that the necessary data is collected and is of good quality.



**We expect that as a data manager you will:**

1. Attend and actively participate in all training, leading sessions as necessary
2. Adhere to research ethics and standards
3. Communicate with your site DCs on a weekly basis
4. Maintain weekly progress worksheets for each DC
5. Analyze data once per week to check quality
6. Make adjustments with DCs and the data collection process as necessary to improve data quality

Additionally, communication with your site-PI, site-FC, and the HCC are crucial. Your primary contact at Hopkins is Mark; please copy him on relevant emails.

# Setting up tablets for fieldwork

## Installing apps

One aspect of preparing for fieldwork is setting up each tablet with the necessary apps. There are two:

1. To download **SurveyCTO Collect**, connect to Wi-Fi, open the browser on the tablet, go to

<http://geas1.surveycto.com/collect>

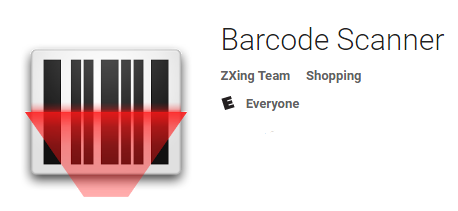
and click “Download Android app.”

*NB: the SurveyCTO Collect app in the Google Play Store is NOT the one we are using. You must download it from the website above.*

2. Next, download **Avira Antivirus Security**, found in the Google Play Store. To access the Google Play Store, you will need to use a Google account. You may create one for your site, or use the GEAS Google account:

username: globalearlyad

password: F8y3Dn&a

Avira can be used to scan for viruses AND as an **app locker** to prevent kids from using other apps while taking the survey. To set this up, simple choose “App Lock” from the list of available services and follow the instructions and choose a passcode. I suggest locking all apps, even SurveyCTO, so that only a person with the passcode can open them.

3. Download and install an app called **“Barcode Scanner”** made by **ZXing** (this is the only barcode scanning app that will work with SurveyCTO Collect). When asked to enter the participant ID, the SurveyCTO Collect app will open Barcode Scanner and allow the data collector to scan the QR code on the participant’s ID card, greatly reducing human error.

## Tablet security

There are a number of ways to secure a tablet.

Avira’s app locker will keep data in apps relatively safe. You might experiment with locking the home screen, too, however for sites using self-interview this could be problematic.

The next thing to do is to **encrypt the tablet**. This is done under *Encrypt tablet*. Follow the instructions on the tablet. This can take up to an hour and the tablet must be plugged in.

## SurveyCTO settings – DC access

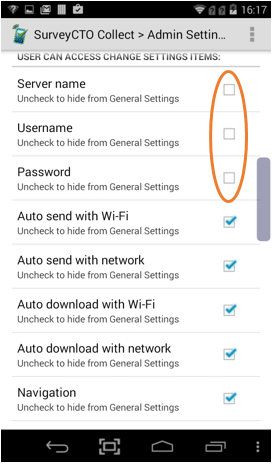
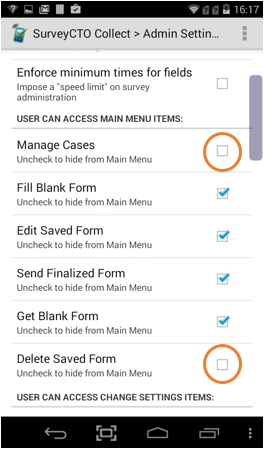
You have the ability to limit DC access to certain functions on the SurveyCTO Collect app.

To limit settings, tap the three dots in the upper right-hand side of the screen and select *Admin Settings*.

Please “hide” (uncheck) the following functions/buttons:

* Manage Cases
* Delete Saved Form
* Server name
* Username
* Password
* Name this form

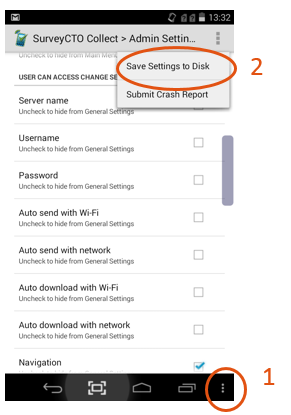
You may choose to hide other settings, as well, for simplicity.



**Please set an admin password known only to the DM and other managing staff. This will prevent data collectors from changing your settings.**

There is also a way to copy settings from one device to others, so that you do not have to do this on multiple tablets. Here are instructions from SurveyCTO:

Once you have the settings just the way you want them on one device, you may want to copy those settings to other devices so that you don't have to manually enter all of the settings on every device. You can do this by following these steps:

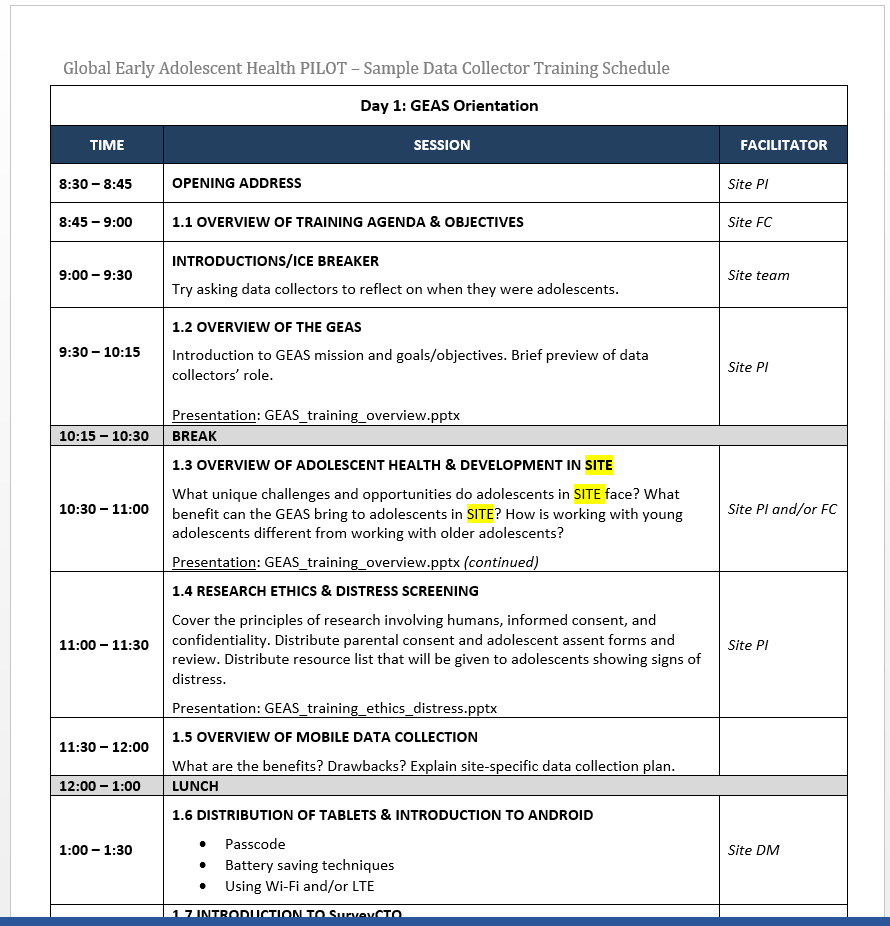
1. Save your desired settings to a file. Press your device's Menu button from the main Collect menu and choose Admin Settings. Enter your admin password (if any), then click your device's menu button again and select Save Settings to Disk. This will save all of your current settings to the /SurveyCTO/settings/collect.settings file on your device's SD card.
2. Copy that collect.settings file to your computer or to another location. (How you access the SD card and copy its files will depend on the device.)
3. Once you have installed SurveyCTO Collect onto another device and run it at least once, locate the /SurveyCTO directory on its SD card.
4. Copy the collect.settings file into the device's existing /SurveyCTO directory.
5. Run SurveyCTO Collect on the device and confirm that it has loaded all of your settings; when it finds the collect.settings file at start-up, Collect will show a small message to indicate that it has restored saved settings. If your settings are not restored when you run Collect, use your device's Task Manager to end the SurveyCTO Collect app, then run it again (or, alternatively, restart your device).

You can repeat this process to copy the same configuration to all of your devices. That way, you can ensure that they are all configured in exactly the same way.

# Training Data Collectors

A sample data collector training schedule has been provided. We recommend a **minimum four-day training** that includes one day for hands-on practice with adolescent volunteers. You may adjust the schedule to better fit with your needs and plans.

Here is the document to look for and modify [**GEAS\_sample\_DC\_training\_schedule\_11Dec15.docx**]:



# Communicating with Data Collectors

While your site-FC may coordinate data collection sessions, it is the data manager’s role to monitor data quality and investigate the source of any problems. These issues should be discussed with the team, and a plan for rectifying the situation collaboratively decided upon. The HCC must also be informed of any difficulties in data collection.

## Weekly check-ins

We ask that you be in contact with your site DCs at least once per week. The preferred method of contact is by **phone**. You may also use email and/or text messaging, but by phone or in person is preferred.

## Emergency back-up

If a DC ever feels unsafe in the field, we ask that they stop the interview, get to a safe place, and call you (the DM) or the site-FC to report the incident. We don’t anticipate any problems, but should one occur, securing our staff’s safety and peace of mind is our top priority.

If a DC has a technical problem with the survey, the tablet, or the Collect app while collecting data that they cannot solve, they are instructed to save the data, pause (offer the participant a break for the restroom or a snack), and call you. Please take note of when data collection sessions will occur, and while you do not need to be present, please be available by phone.

## Maintaining progress worksheets

We ask that all data collectors maintain a progress worksheet and submit it to you on a **weekly basis**. This is mainly so that DCs get into the habit of documentation, and also so that you can use this information to check it against what data you see on the server. If a DC reports conducting 10 surveys one week, but there are only 9 on the server, you will know that one is missing and can look for it. Furthermore, this information may offer clues to understanding problems with the data (such as repeated non-response).

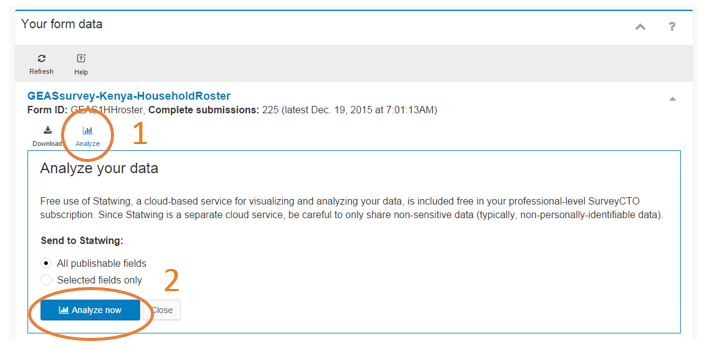
The HCC has created two progress worksheets for the pilot, modeled after those used by PMA2020. One is for DCs (to be submitted to you weekly) and one is for DMs. You should have one DM worksheet for each DC, and update it weekly based on their own worksheet and your communication with them.

# Monitoring Data Quality

It is important to monitor data regularly. There are two main ways to do this, and we recommend both. The first, **Statwing**, is a program you can use right in your browser. The other, **SurveyCTO Sync**, is a piece of software you need to download to your computer. Sync will create Stata .do files which you can run to create Stata files with variable and value labels. You can then clean the data and analyze it in Stata or transfer it to another statistical software package. To use these, you will need to go to our SurveyCTO website and log in with your DM username and password. The website is:

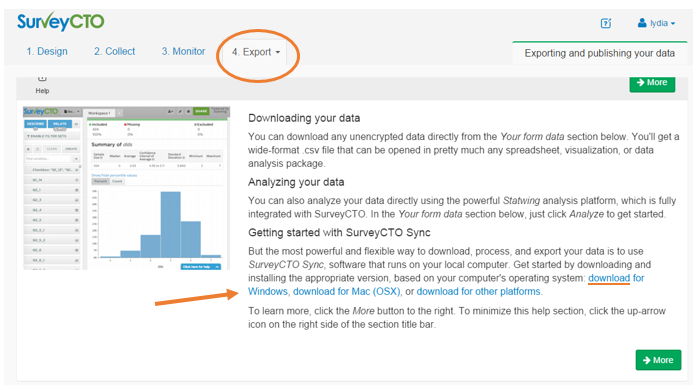
<http://geas1.surveycto.com>

## Statwing

SurveyCTO integrates with Statwing, a cloud-based data analysis platform. Statwing can be useful for quick checks. To use Statwing, all you need to do is navigate to tab #4 (*Export*), click the *Analyze* button under the form you are interested in, and then *Analyze now*.

Statwing offers video tutorials to help you get started.

## SurveyCTO Sync

However, the most flexible and powerful way to analyze data is by downloading it and using Stata. This can be accomplished using SurveyCTO Sync (AKA, “the client”). You will need to download the Sync software to your computer.

The SurveyCTO website offers a great deal of instruction on how to use Sync. Click the *More* buttons to learn… more!

We will use Sync to get files that we will clean and analyze using Stata.

To download the data and .do file, click on the “server” button for data source, fill in the server name, username, and password. Next, click on “local csv” for data destination and fill in the address to “export to.” Click on the first “GO!” button, select the form(s) you wish to download by checking the box(es). Then click on the box for “show export options after download,” and click the second “GO!” button. This will download the data. Then, click the box, “Generate Stata templates,” and click on the dataset for which you wish to create the .do file. Fill in the directory where you want to store the csv and .do file and click, “OK.”

## What to look for

### Consent/assent

One thing to keep in mind is that we need to track consent. That is, it is important to know not only about those who did agree to take the survey, but those who did not, or, whose parents did not. When a DC begins a new survey on the SurveyCTO Collect app, one of the first questions is about consent. Did the parent/guardian consent? Did the adolescent assent? If data collectors encounter a potential participant who did NOT get parental consent, or, who does not assent to take the survey him-/herself, a new survey should be created (“Fill Blank Form”) and the correct answers submitted (in this case, “No” to consent/assent). At that point, the survey is complete and should be finalized and sent. These potential participants do not count toward the 120 youth that must be recruited at each site, but should be tracked. This will be especially important in Phase 2.

### Completion

For every survey that has been consented to, there are two possible outcomes: **completed** and **partially completed**. A **completed** survey is one in which each question was asked and answered, even if the answer was “refuse to answer.” A **partially completed** survey is one in which the participant said they no longer wished to continue the survey, and thus the DC was forced to finalize the survey by manually selecting, “refuse to answer” for each unanswered question.

The DC should note which of these two best describe the situation at the end of the survey, and you should look for patterns in both. For example, if a DC has many **partially completed** surveys, you might speak with him/her about why participants wish to quit the survey early and brainstorm ways to help participants finish. On the other hand, if a DC has many “refuse to answer” items in **completed** surveys, you may speak with him/her about why participants are choosing not to answer and make appropriate changes, if possible.

### Dates

Sometimes, when tablets are improperly shutdown or when the battery is removed, the tablet may reset the date and the date will be incorrect. It is important for DCs to ensure that the date on the tablet is correct before beginning a survey, otherwise calculations (such as age) might be wrong. Check to see that the date of the survey is reasonably correct. If you notice errors, remind DCs to pay attention to this.

### Distress

It is especially important to monitor distress variables and the data collector comments and evaluations at the end of the survey to see is respondents are feeling stressed by the survey, and to see what problems, if any, your data collectors are encountering.

### .do files

The .do files created by SurveyCTO Sync are basic. We here at Hopkins are working on adding additional analysis and cleaning. You may want to try some, too.

# 6. Intervening

## Spot checks

A great way to check the quality of data is to watch it being collected. Block out some time to visit your DCs in the field and “shadow” them as they collect data. Are they properly consenting parents and adolescents? Do they build rapport effectively? Do they provide adequate breaks? How do they answer questions? How do they handle participant distress? If you are using CASI/ACASI, do the participants seem to understand the questions, or do they appear to struggle?

Take notes, and impart constructive feedback to DCs in a timely manner.

Spot checks should be done early in the data collection process, toward the middle, and again near the end.

## Call-backs and resurvey

Occasionally, researchers check data quality by going back to a participant who already completed the survey and administering another short survey (with questions similar to the actual survey) to see if they report the same information or not. When you are interested in doing this, contact Mark to discuss setting up a shorter survey to administer. This will be a common practice in Phase 2. For now, you may use it when you notice suspicious data.

**The Global Early Adolescent Study**

Johns Hopkins Bloomberg School of Public Health

Version May 22, 2017

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