

Supplementary Material 1. Ola During Children's Hospital

Figure S1. Distribution of cumulative vaccine doses administered in Ola During Children Hospital as captured within all four data sources, Western Urban, Sierra Leone

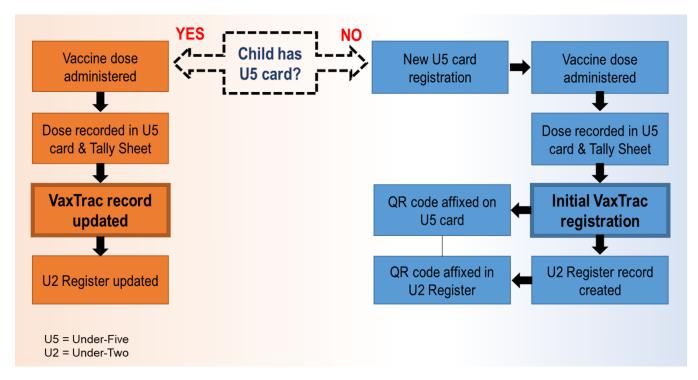


Figure S2. Illustration of workflow at Ola During Children's Hospital showing integration of VaxTrac electronic registry into routine immunization, Western Urban, Sierra Leone

Supplementary Material 2. Data Collection Instrument

Date (DD/MM/YY): _____Start Time (HH:MM) _____End Time (HH:MM) _____

SECTION 1. HEALTH FACILITY CHARACTERISTICS

- - d. Maternal Child Health Post (MCHP)

6. Catchment population estimate	Est year
7. Under-5 population estimate	Est year
8. Under-1 population estimate	Est year
9. Total HCWs at facility	[write 99 if unknown]
10. Total HCWs in EPI	[write 99 if unknown]
11. Total HCWs trained on VaxTrac	[write 99 if unknown]
12. Total HCWs using VaxTrac*	[write 99 if unknown]

*Referring to any health workers in the facility using VaxTrac for purposes such as registration, updating record, identifying defaulters, and summarizing data

SECTION 2. USER CHARACTERISTICS

13. Sex

- a. Female
- b. Male
- **14. Age** (years) _____

15. Cadre

- a. Community Health Officer (CHO)
- b. Registered Nurse (RN)
- c. State Enrolled Community Health Nurse (SECHN)
- d. Maternal Child Health Aide (MCH Aide)

16. Duration in EPI service (YY/MM) ____ / ____ / ____

17. VaxTrac training completion (DD/MM/YY) ____ / ___ / ___ / ___ / ____ /

18. Prior to the VaxTrac training, have you used a tablet or smart phone?

- a. Yes; [number of years ____]
- b. No (skip to Q20)

19. Besides the VaxTrac training, have you had other formal training on tablet or smart phone use?

- a. Yes; [number of trainings ____]
- b. No

SECTION 3. VAXTRAC TRAINING AND USER EXPERIENCE

- 20. During the training, how would you describe your experience in learning how to use VaxTrac?
- 21. What aspects of the training did you find most useful for your current use of VaxTrac, and what are the reasons?
- 22. What aspects of the training should be improved, and how?

- 23. Following the training, how would you describe your actual experience using VaxTrac in this health facility?
- 24. Over the last three months, what were the main challenges you have encountered while using VaxTrac? [Probes: How do they impact EPI in this facility? How are they addressed, and by whom?]

25. How are these challenges addressed?

[Probes: what have you personally done to address them? Who else have helped you address them, and what have they done to help? How have these challenges impacted your EPI work?]

26. In the last 3 months, has the tablet's battery always lasted a full session?

- a. Yes
- b. No

27. In the last 3 months, have you had any issues charging the tablet's battery when it was low?

- a. Yes
- b. No
- **28.** Please describe challenges you have encountered with charging the tablet and power supply. [Probes: How have they impacted your EPI work? How are they addressed, and by whom?]

29. In the last 3 months, have you consistently had Internet connectivity without any disruptions?

- a. Yes (skip to Q32)
- b. No

30. In the last 3 months, how many days have you gone without Internet connectivity? _____

31. Do you know who to contact to address Internet connectivity issues?

- a. Yes (verified: ___yes / ___no)
- b. No

32. Please describe the process and frequency of submitting/transmitting your facility's VaxTrac data.

[Probes: What are the main challenges? How are these challenges addressed, and by whom? How has it impacted your EPI work?]

SECTION 4. BIOMETRICS AND QR CODES

33. Is a finger-print device available in this facility for VaxTrac use?

- a. Yes (verified: ___yes / ___no)
- b. No [skip to Q37]

34. How functional is the finger-print device in this facility?

- a. Not at all functional
- b. Somewhat functional [works sometimes but has issues]
- c. Fully functional [works every time without any issue]

35. In the last 3 months, how often did you use the finger-print device?

- a. Never
- b. Sometimes
- c. Always

36. Please describe your overall experience with using the finger-print device.

[Probes: What are the main challenges? How do they impact your EPI work? What are your recommendations?]

37. Are sufficient QR barcodes presently available for VaxTrac use in this facility?

- a. Yes (verified: ___yes / ___no)
- b. No

38. In the past three months, have you experienced any stock-outs of QR barcodes?

- a. Yes
- b. No

39. In the last 3 months, how often did you use the QR barcodes?

- a. Never
- b. Sometimes
- c. Always
- 40. When you register a child for the <u>first time</u>, how often do you affix the QR barcode on the Under-5 Card and scan it?
 - a. Never
 - b. Sometimes
 - c. Always

41. For what reason(s) would do you decide NOT to affix and scan a QR barcode?

42. Please describe your overall experience using QR barcodes.

[Probes: What are the main challenges and how do they impact your EPI work]

SECTION 5. UTILIZATION OF VAXTRAC DATA

43. Please describe how VaxTrac data are being used overall in this facility, if applicable.

44. Are you able to identify children who are due for scheduled vaccination using VaxTrac?

- a. Yes (verified: ___yes / ___no)
- b. No

45. Are you able to identify children who have missed their scheduled vaccination using VaxTrac?

- a. Yes (verified: ___yes / ___no)
- b. No

46. In the past three months, which of the following have you accomplished using VaxTrac, if any?

[multiple selection]

- a. Identified child(ren) due for 1 or more scheduled vaccination
- b. Identified child(ren) who defaulted for 1 or more scheduled vaccination
- c. Directly contacted caregivers with children who are due or have defaulted [___visit ___phone call ___SMS]
- d. Provided Community Health Worker (CHW) with list of children who are due or have defaulted
- e. None
- 47. Do you have CHWs who are linked to this health facility catchment area?
 - a. Yes [#____]
 - **b.** No (skip to Q49)

48. Please describe how CHWs <u>currently</u> support EPI activities in this catchment area.

[Probes: What is their role in defaulter tracing, if any? How can CHWs role in defaulter tracing and vaccine uptake/demand be enhanced using VaxTrac?]

SECTION 6. CAREGIVER ACCEPTABILITY OF VAXTRAC

49. When the finger-print device is functional: In the past three months, how often have caregivers accepted to be finger-printed for VAXTRAC use?

- a. Always
- b. Sometimes
- c. Never

50. For caregivers who refused to be finger-printed, what were the reasons they cited?

[Probes: What did you do to mitigate their concerns? How did they react?]

SECTION 7. COMPARISON BETWEEN PAPER REGISTERS AND VAXTRAC SUMMARY DATA FOR CUMULATIVE VACCINE DOSES ADMINISTERED

Month abstracted: _____, 2017

	Tally	Under-two	HF2	VaxTrac
	Sheet	Register	Summary Form	EIR
BCG				
(birth)				
Penta-1				
(6 weeks)				
Penta-2				
(10 weeks)				
Penta-3				
(14 weeks)				
MCV-1				
(9 months)				
MCV-2				
(15 months)				



VaxTrac User Guide



MINISTRY OF HEALTH AND SANITATION THE REPUBLIC OF SIERRA LEONE CHILD HEALTH PROGRAM / EPI

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TABLE OF CONTENTS	
INTRODUCTION	
EXECUTIVE SUMMARY	2
CHAPTER 1: INTRODUCTION TO TABLETS	
BASIC TABLET FUNCTIONS HOW TO LOGIN TO VAXTRAC/HOW TO USE YOUR KEYBOARD NAVIGATING VAXTRAC SAFETY TIPS/INCREASING BATTERY LIFE	4 7 9 11
CHAPTER 2: WORKFLOW WALKTHROUGH	
REGISTER A NEW PATIENT SEARCH FOR AN EXISTING PATIENT QR CODE DEMOGRAPHIC FINGERPRINT ELIGIBLE DOSES UPDATE PATIENT RECORDS	13 19 20 21 22 24 29
CHAPTER 3: REPORTING, CALLBACKS, STATISTICS, AND SENDING DATA TO DHMT	THE
VACCINE REPORTING STATISTICS MODULE CALLBACKS PREPARE FOR AN UPCOMING VACCINATION SESSION IDENTIFY CHILDREN WHO HAVE MISSED DOSES SENDING DATA TO THE DHMT (SYNCHRONIZATION)	31 32 33 34 35 37
VAXTRAC CONTACT AND IN-COUNTRY SUPPORT	
FREQUENTLY ASKED QUESTIONS	38



117 Wilkinson Rd Freetown Sierra Leone

Dear Esteemed Colleagues,

eHealth Africa's mission is to build stronger health systems through the design & implementation of data-driven solutions that respond to local needs and provide underserved communities with tools to lead healthier lives. eHealth Africa was founded in 2009 to provide Africa's health infrastructure with customized technology solutions for data-driven patient & public health services. Today, we're partnering with VaxTrac, the Sierra Leone Ministry of Health and Africell, to launch a new clinic based immunization registry system to improve the quality and timeliness of national immunization data and we hope that you'll join us in this initiative.

eHA currently plays a critical role in the fight for polio eradication in partnership with the Nigerian Emergency Operations Center, manages country-wide Ebola recovery projects for the US Centers for Disease Control and Prevention (CDC) in the Ebola-affected African countries, and boasts one of the largest Geographic Information Systems (GIS) team in West Africa.

We develop mobile and desktop-based technology solutions that are used to manage patient information, track system-level data, and analyze programmatic outcomes for large-scale public health interventions across West Africa. We work with partners and donors to bring logistical and technical support to help bridge the access gap in the world's most vulnerable populations. We conceive and implement programs that help reshape health delivery systems in Nigeria, from delivery of vaccines and essential medicines, to on-the-ground data collection that can drive system-level decision making.

We work with our partners to solve big problems. We believe in the power of smart technology and diligent execution to make a transformational difference in health systems, and we know that when we do high-quality work, we have the opportunity to change lives in the communities we impact.

We do what we do because we believe that every community deserves access to tools that enable them to lead healthier lives.

Sincerely,

Evelyn Castle

Evelyn Castle

CHAPTER 1: INTRODUCTION TO TABLETS AND VAXTRAC



BASIC TABLET FUNCTIONS

GET TO KNOW YOUR TABLET



the home list of apps you've recently used

last screen you were working on

screen



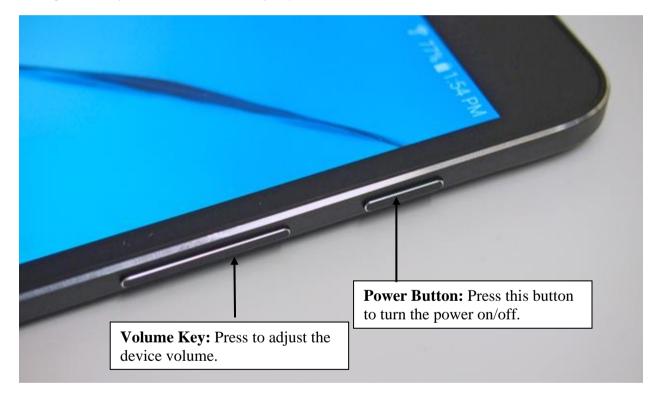
Tablet Stand: Turn your tablet's cover into a stand by folding it into a triangle.

The bottom of your tablet has a couple of important ports.

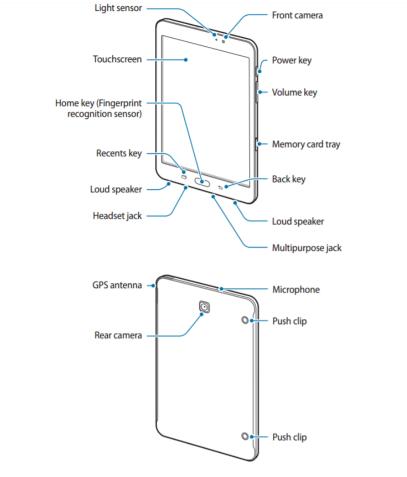


Micro USB: This is where you plug in the charger and the fingerprint scanner. You cannot charge your tablet and use the fingerprint scanner at the same time.

The right side of your tablet also has many important features.



DEVICE LAYOUT:



HOW TO LOGIN

In the application drawer, search for the VaxTrac application. It is a symbol of an orange syringe with the word "VaxTrac" on it. When you find it, tap the picture of the application.



Once the application opens, it will bring you to the login screen, where you will type in your clinic's username and password.

HOW TO USE YOUR KEYBOARD

Your keyboard will pop up on the touch screen when you begin to fill out a form, such as when you log into the VaxTrac system or when you need to write a patient's name when registering him or her for the first time. For instance, here is an example of your worker login. Once this screen pops up, simply tap the box that says "Worker."

MINISTRY OF HEALTH AND SANITATION THE REPUBLIC OF SIERRA LEONE CHILD HEALTH PROGRAM / EPI SUPPORTED IN PARTNERSHIP BY VAXTRC	〒 27% 📴 11:34 AM
Worker Password	
SIGN IN	

The keyboard will pop up automatically so that you can enter your name in the "Worker" box. To move from one box to another, for instance, to move from the "Worker" box to the "Password" box, it is fastest to tap the "Next" button on the keyboard. Tap "Next" and you will be able to fill in your password.

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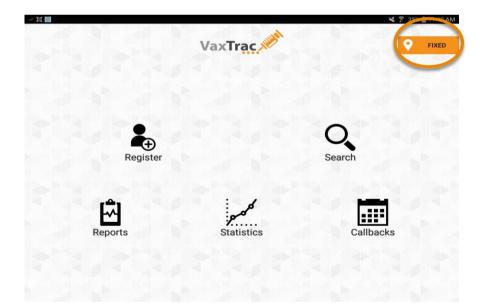
Once you complete your password, the "Next" button will say "Go." Tap "Go" to login. Remember: Use only YOUR health center's login on YOUR health center's unit. If you use your login on another health center's tablet, it will download your clinic's data instead of the current clinic's data.

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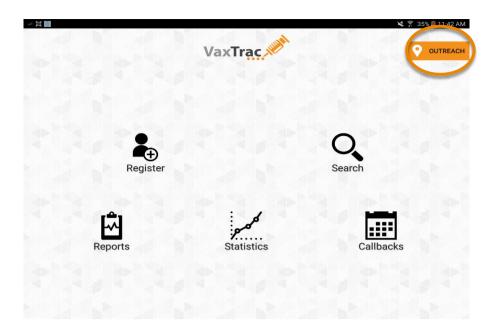
NAVIGATING VAXTRAC

When you open the VaxTrac app and login (see previous page for login details), the VaxTrac home screen will appear:

If you are conducting a vaccination session at a fixed site, the fixed homescreen will look like this and all vaccines given will be tagged as "fixed":



The VaxTrac home screen will be the same for both "fixed" and "outreach" sessions. You can click on the orange tab on the right-hand corner to change between "outreach" and "fixed". If you are conducting a vaccination session at an outreach site, the outreach homescreen will look like this and all vaccines given will be tagged as "outreach":



The VT home screen contains the major functions of the VaxTrac system. From here, you can register a new patient by tapping "Register", search for an existing patient by tapping "Search", view your digital reports by clicking "Reports", view registration and visit totals in "Statistics", and pull up a list of children that need to be called in for appointments by tapping "Callbacks".

CARING FOR YOUR TABLET

SAFETY TIPS





Avoid direct exposure to sunlight or excessive heat for long periods

Keep tablet away from water, sand, dust, food, and beverages

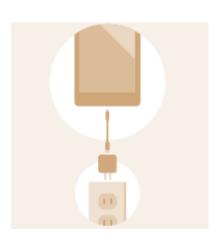


Do not place heavy and/or sharp objects on the screen



Use the tablet's carrying case at all times

INCREASING BATTERY LIFE



Charge the battery fully after letting it power to zero. A turned off tablet will charge faster than when turned on.

Keep the tablet in a cool environment.

Set your screen brightness to the dimmest that you are comfortable with.

When not using Wi-Fi, disable the Wi-Fi adapter.

Turn off GPS location accuracy if stationary or indoors.

Only use this tablet for VaxTrac applications.

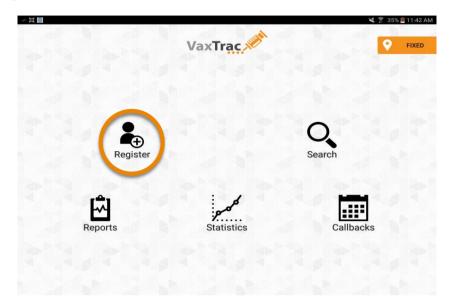
Unplug the fingerprint scanner if not in use.

CHAPTER 2: WORKFLOW WALKTHROUGH



REGISTER A NEW PATIENT

When you need to register a new patient in the VaxTrac system, go to the VaxTrac home screen and tap on the "Register" icon (circled below):



You will be prompted to complete a series of forms. The first set of forms asks for demographic information about the patient as well as the mother or caregiver. The demographic information includes their names, date of birth, sex of the patient, relation to the patient, and contact information.

To move through the forms, use your finger to swipe the touch screen from right to left.

See forms below:

To enter the patient's name, tap the box that asks for the name. A keyboard should appear. Use the keyboard to type out the patient's name. To dismiss the keyboard, press the "Back" button. Then select the sex of the infant. Swipe from right to left to move through the form.

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< 🐹 registration		1 - E
×		>
Child Information		
What is the child's name? Fatou Ceesay		
Fatou Ceesay		
1 - 2 @ 3 #	4 / 5 % 6 ^ 7 & 8 * 9 (0) Del
<u>1</u> <u>2</u> <u>3</u> <u>#</u>	<u>4 / 5 % 6 ^ 7 & 8 * 9 (</u>	O) Del
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a s	d <u>f</u> g h <u>j</u> k	
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Sylli Sylli Sylli	Liginit(03)	

Drag your finger up or down over the month, then date, then year to select the patient's date of birth. Also indicate the gender of the child. Then swipe from right to left to move through the form.

🕅 registration			
 • • • • • • • • • • • • • • • • • • •			
Child Information			
When was the child born?			
	Sep	24	2014
	Oct	25	2015
	Nov	26	2016
What is the gender of the child?			
⊖ Male			
Female			

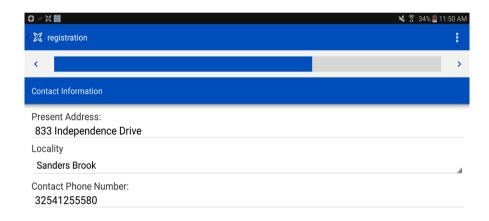
On the next screen, indicate whether the mother of the child is present.

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🤇 🐹 registra	tion												•
<													>
Is the Mot	ner accom	panying	the Chil	d?									
Yes													
\bigcirc No													
	✓ X ■ < X registrat	ion								X §	34% ี 11:49 AM		
	<										>		
	Mother Infor	mation											
	What is the Mariama		the Mother	?									
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If the mother is not present, enter the information for the parent/guardian who is accompanying the child.

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	>
Guardian Information	
Which guardian is accompanying the child?	
○ Female Relative	
O Other Female	
Father	
O Male Relative	
○ Other Male	
What is the name of the Guardian? Ebrima	

Then enter in the address, locality, and contact information associated with the patient.



Next, you will allocate a unique set of QR codes for the child. Take your sheet of QR codes and count out TWO QR codes **from the same row**. Each row of two QR codes has the same code; as such, each of these QR codes will be able to identify the patient during subsequent visits. One QR code goes on the patient's vaccine card and the other QR code goes on the health facility's registry. If a

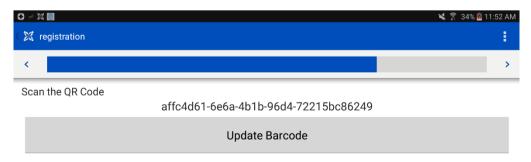
QR code is lost, you can assign the patient a new QR code and both will bring up that patient's records.



You will then be prompted to scan the QR code so that the system will be able to use the QR code to bring up the patient's records when they come back to the clinic for future vaccination sessions. There are more detailed instructions on how to scan the QR code in the "Search for an Existing Patient" section below.

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् 🎗 registration	÷
<	>
Scan the QR Code	
Get Barcode	

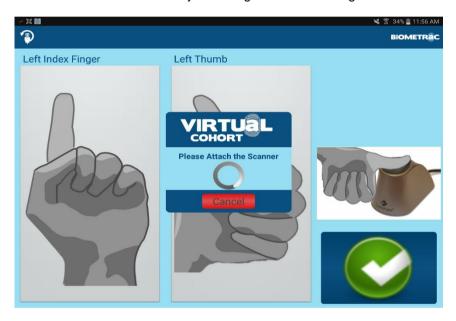
After successfully scanning the bar code, the unique code of the QR code should appear.



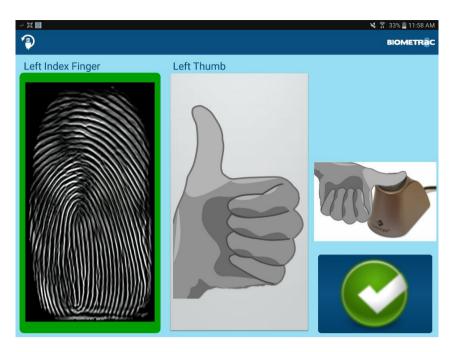
You will then be prompted on whether or not you want to scan the finger-print of the accompanying parent/guardian. If you choose not to scan fingerprints check the box 'Yes', then you can swipe to the next screen which will bring you to the child's vaccine card.



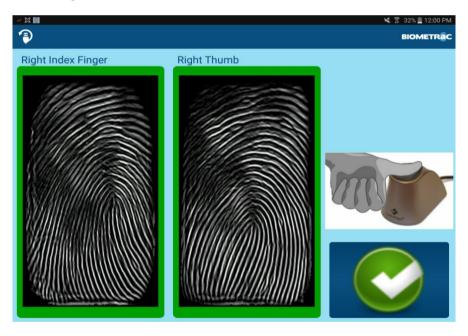
If you choose to scan the fingerprints of the accompanying parent/guardian, make sure that the fingers of the parent or accompanying guardians are clean. We scan the fingerprints of the accompanying parent/guardian because their fingerprints are easier to detect than the child's. You will be asked to connect the scanner and start by scanning the left index finger and thumb first.



You will know if you have successfully scanned the left thumb and index finer when a copy of the scan will appear on the left side of your screen with a green outline around it.



Once you have successfully scanned both the left index finger and thumb, press the green check button and you will be prompted to scan the right index finger and thumb. Once both the right index finger and thumb have been successfully scanned, both copies of the scans will appear on the left side of the screen with green outlines around them.



There are more detailed instructions on how to scan fingerprints in the "Search for an Existing Patient" section below.

Once you finish with the fingerprint scanning, the VaxTrac system will search for existing matches. If this is a new patient that is not already in the system, choose 'Skip search and register' and the child's vaccine card will appear. You can see which doses the child is eligible for, add missing historical doses to the child's records, and view the completed vaccine card. For more information on the vaccine card see "Eligible Doses" section below.

SEARCH FOR AN EXISTING PATIENT RECORD

To find the records of an existing patient, press the "Search" icon on the home screen by tapping it.



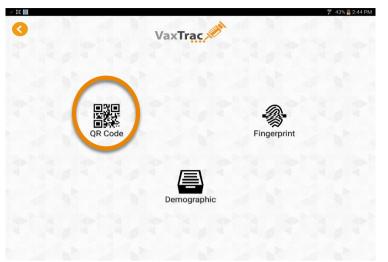
Tapping the "Search" icon will bring up a new screen containing the three ways to search for a patient's records:

- 1. Scanning the QR code
- 2. Searching for demographic information
- 3. Searching by fingerprints of the accompanying parent/guardian

✓ X				🗊 43% 🖹 2:44 PM
3		VaxTrac.		
	QR Code		Fingerprint	
		Demographic		

Now we will review each of these methods for finding records of existing patients.

1. QR CODE



As you register new children with VaxTrac, you will add a **QR code** to each vaccine card and another QR code to the facility's registry. Children who come in for vaccinations that are already registered with VaxTrac will be assigned a QR code that can be added to their vaccine card.

A **QR code**, which stands for Quick Response code, is a machine-readable code consisting of an array of black and white squares that store information. In our case, the QR code has a random unique code that is linked to the child's vaccination record.

As you are using VaxTrac to either **register a new patient** or **find the records of an existing patient**, VaxTrac will have a "QR Code" icon. Click the "QR code" icon.

Image: Second secon

After tapping the QR code icon, the following screen will appear:

Tap the « Get Barcode » button



Make sure the QR code fits within the square that appears on the screen and that the patient's QR code is the only QR code that shows up on the screen. Once it is aligned as shown below, the tablet will "beep" and go to the next screen, which is how you know the QR code has been recorded.

If a QR code is lost, you can assign the patient a new QR code. In this case, both QR codes would pull up the patient's record.

2. DEMOGRAPHIC INFORMATION

If a patient does not have a vaccine card and/or a QR code, you can do a text search to pull up the patient's electronic records. From the search screen, select "Demographic."

× x 🖬		VaxTrac,		
	回訳回 国際社 QR Code		Fingerprint	
		Demographic		

From there, you can search for a child by sex and date of birth.

· + X 🔲					♀ 👫 389	6 🛢 3:13 PM
ि 💱 Demographic						÷.
×						>
Child Information						
Sex of the Child						
○ Male						
Female						
Child's Date of Birth						
	Sep	24	2015			
	Oct	25	2016			
	Nov	26	2017			

Enter as much information as you have. The date of birth will search 30 days before and after the date entered. The tablet will pull up a list of patients that match that criteria. From there, select the correct patient from the list. If the patient's name is not included on the list, re-register the patient with VaxTrac.

200	Selec	t the Child from the	e List	🔋 36% 📕 3:17 F
hild's Name		Female 2016-10-25		
Child's Name	Child's Date of Birth	Guardian Type	Guardian Name	Locality
felicity	2016-10-01	Mother	Hershey	George Brook (Dworzack)
Theresa	2016-10-17	Mother	Chelsea	
Polly	2016-10-21	Mother	Theresa	Leicester Road
Vivian	2016-10-07	Mother	Jane	

Select the appropriate child from the list to open the child's record. You will be asked to verify the guardian's fingerprints (left and right thumbs) or add a new guardian.

3. Fingerprint Search

If you choose to search for a patient by scanning the fingerprints of the accompanying parent/guardian, then simply click on the Fingerprint icon on the Search screen.

× ×	Va	xTrac.	
	回咒回 [医死子 回子在 QR Code	Fir	gerprint
		Demographic	

You will then be prompted to enter in the same demographic information as the demographic search module. Entering in the demographic information of the patient helps to narrow down the list of potential fingerprint matches and speed up the process.

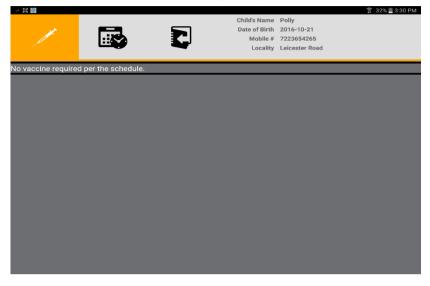
~ X 🔤					🛛 🔋 42% 🗎 2:5	7 PM
🖓 biometric search						1
×						>
Child Information						
What is the gender of the child?						
Male						
○ Female						
When was the Child Born?						
	Sep	24	2015			
	Oct	25	2016			
	Nov	26	2017			

Once you have entered in the child's demographic information, you will be prompted to scan the fingerprints (thumb and index finger of both hands). Once you have successfully scanned the fingerprints of the accompanying parent/guardian, the system will automatically present you with a table of potential matches.

Guardian Name	Guardian Type	Child's Name	Child's Sex	Child's Date of Birth
Hillary	Mother	Sonny	Male	2016-10-05

ELIGIBLE DOSES

After you locate or register the child, a screen will appear that has a digital vaccine card. The digital vaccine card is interactive. It contains three tabs. The tab that you will see first upon entering the child's record shows which vaccines the child is eligible for that day. If the child **is not** eligible for any vaccines that day, the card will read, "no vaccine required per the schedule."



However, if the child **is** eligible for any vaccines that day, the screen will be displayed as followed (with eligible vaccines being highlighted in orange):



After you have administered an eligible vaccine to a child, you will simply click on the vaccine that was given and that vaccine will change colors from orange to green.

 × N Art 				Date of Birth Mobile #	Fatou Ceesay 2015-10-25 32541255580 Sanders Brook	🔌 🌹 32% <u>ä</u> 12:03	8 PM
OPV	birth	6W Oct 25	10W Nov 22	14W Dec 20			
Penta	6W	10W Nov 22	14W Dec 20				
PCV	6W	10W Nov 22	14W Dec 20				

The second tab (middle tab) is the historical doses tab. Use the historical doses tab to enter information about a child's vaccine history. For instance, if the child is eight months old but it is the first time that the child has been registered with VaxTrac, then you can use the historical doses tab to enter all the vaccines that the child received during his or her first eight months.

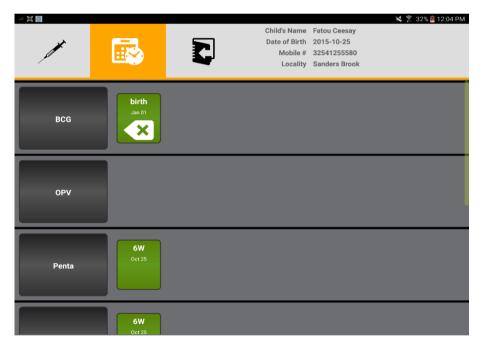
Below is the historical doses vaccine card:



If the child received BCG during his or her first month of life, but the child is now eight months old, simply tap on the "BCG" tab and enter the date that the child received the BCG dose.

- H					Date of Mo	Birth bile #	201 325	u Ceesay 5-10-25 41255580 ders Brook	
BCG	²⁰¹⁶ Fri, Jan 1	< S 3	м	Jai ⊤ 5	nuary 20 W	016 ⊤ 7	F 1 8	> S 2 9	
		10 17 24 31	11 18 25	12 19 26	13 20 27	14 21 28	15 22 29	16 23 30 OK	
	6W Oct 25								
	6W Oct 25								

If the date that the child received BCG was within the time frame designated by the Child Health Division, then the dose will say that it is "valid."



If you then want to enter information about when the child received OPV, but it was not during the time frame designated by the Child Health Division, then the dose will say that it is "invalid."

			Date of	▼ № 2 10:11 AM Name Subecha of Birth 2015-10-10 obile # 2025356982
BCG	Birth Oct 13			
Pentavalent	Invalid! 6H: 0ct 14			
		\triangleleft	0 [

Do not change the information on the vaccine card based on if the card says that the dose is "valid" or "invalid." Make sure that the information entered on the digital vaccine card (VaxTrac) is the same as the information on the child's paper vaccine card.

After you have recorded all of the child's doses that he or she received today, as well as all of the doses that he or she received in the past (historical doses), then the third tab will display the child's full vaccine card.

- 22 - J	Child's Name Fatou Ceesay Date of Birth 2015-10-25 Mobile # 32541255580 Locality Sanders Brook
Penta	10W 14W Nov 22 Dec 20
PCV	10W 14W Nov 22 Dec 20
Rota	6W 10W 14W Nov 22 Dec 20
Measles	9M 15M Apr 26
YF	9M
	SAVE AND EXIT

The digital vaccine card will show you which vaccines the patient has already received, which vaccines they are due for during that appointment, and which vaccines they will be due for in the future.

Each color tells you information about when the child is due for each antigen:

Orange = eligible doses Blue = sometime in the future Green = valid dose Black = a booster shot that wasn't given Light gray = next dose Yellow = it was given out of series and is invalid

For instance, if the patient is due for BCG and the Oral Polio Vaccine, both of those boxes will be orange on the vaccine card. Once you have entered all of the child's information on the digital vaccine card and reviewed it to make sure it is correct, scroll to the bottom of the vaccine card and tap "save and exit."



Next, you will be shown a screen that will allow you to modify the patient information, add a new guardian, modify guardian information, or add a new QR code. If you need to do any of those action items, select the appropriate option and follow the instructions on the screen.

EDIT PATIENT INFORMATION			
EDIT GUARDIAN INFORMATION	and the second s	EDIT PATIENT INFORMATION	
ADD QR CODE	* +2	ADD NEW GUARDIAN	
		EDIT GUARDIAN INFORMATION	
EXIT		ADD QR CODE	
		EXIT	

If you have completed the record, tap the "exit" button.

UPDATE PATIENT RECORDS:

Sometimes you'll need to update an existing patient's records. The system will allow you to do this. From the home screen, tap either the register or search icons.



Once you finish either registering a new patient or searching for an existing patient record, a new menu will appear.



From there, you will be given four options:

- 1. Modify the child's information
- 2. Add a new guardian
- 3. Modify the guardian's information
- 4. Add a new QR code

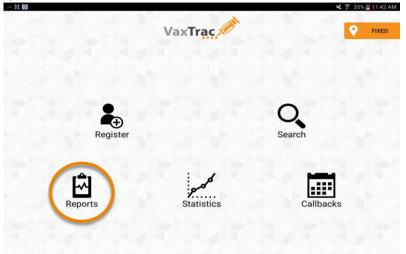
Choose the applicable option by tapping its box. Once you do, follow the instructions on the screen to modify the patient's information.

CHAPTER 3: REPORTING, CALLBACK, STATISTICS, AND SENDING DATA TO DHMT



VACCINE REPORTING

At the end of the month when you are filling out your paperwork, you can use the "Reports" tool to see all of the vaccine doses given to patients that were recorded on your tablet. To pull up the tabulated report, tap the "Reports" icon on the VaxTrac home screen.



Once you tap the "Reports" icon, a table will appear that displays the number of patients per session (fixed and outreach) and age group (0-11 months and 12-59 months) that received each vaccine (BCG; PCV 1, 2, 3; Penta 1, 2, 3; Rota 1, 2, 3; OPV 0, 1, 2, 3; Measles; YF and MSD/MR). You will be able to use these numbers to complete your monthly reports.

<i>≁</i> x ■	Du		10551	î字 27% 📕 3:51 PM
		oorts - VAXTRAC TEST	USERT	
	Period	2016 Oct 25		
	Weekly			\$
	Monthly	xed	outre	each
		12 - 59m	0 - 11m	12 - 59m
BCG - 1				
OPV - 0				
OPV - 1				
OPV - 2				
OPV - 3				
Penta - 1				
Penta - 2				
Penta - 3				
PCV - 1	0	1	1	0

First, select the period (daily, weekly, monthly) you want to see, and then select the date you want to see.

The report will then appear on the page.

≁ X ■				🛜 27% 🗖 3:51 PM
(Rep	orts - VAXTRAC TE	ST USER1	
	Period	Year	Month	_
	Monthly	2016	10	
				~
		fixed	outi	reach
	0 - 11m	12 - 59m	0 - 11m	12 - 59m
BCG - 1				
OPV - 0				
OPV - 1				
0PV - 2				
OPV - 3				
Penta - 1				
Penta - 2				
Penta - 3				
PCV - 1	0	1	1	0

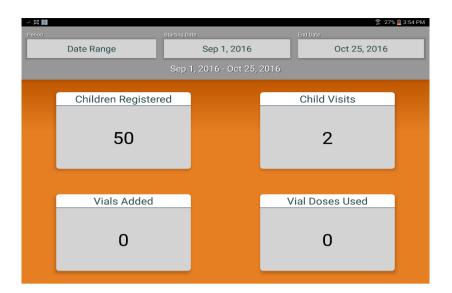
You can use this information to see how many doses have been given in your clinic by month.

STATISTICS MODULE

The Statistics module on the home screen will allow you to see the total number of children registered and the total number of follow up visits for the selected time period.

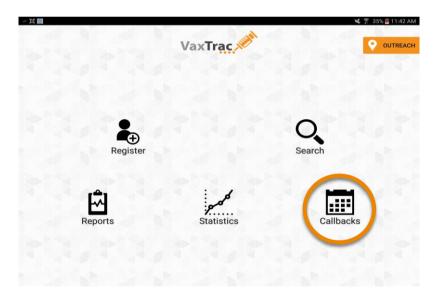
	VaxTr <u>ac</u>	× * 35	% 칇 11:42 AM
Register		Search	
ports	Statistics	Callbacks	

Similar to the reports feature, you can choose to see statistics on a daily, weekly, or monthly basis and set the date range.



CALL PATIENTS THAT ARE DUE FOR IMMUNIZATIONS

When you need to call patients to come in who are due for vaccines, you can use the "Callbacks" tool to find patient contact information. The "Callbacks" tool can be used to see which children are late for their vaccines and falling behind. To use the "Callbacks" tool, tap the "Callbacks" icon on the VaxTrac home screen:



From there, you can search by locality and/or by date to see which children are eligible for vaccines for upcoming vaccination sessions.

× X 🔲		穿 27% 🗟 3:57 PM
0	Select a Callback List:	
	<u></u>	
Overdue	NO	
Locality	All localities	1000
Loounty		
Starting Date	2016-10-01	
Number of Days	120	
Number of Days		
	SEARCH	

Using the Callback List to prepare for an upcoming vaccination session

First choose if you want to view the children that have missed an appointment (overdue) or those due for an upcoming appointment.

If you want to see a list of children due for an upcoming appointment, make sure "NO" is selected after "Overdue."

Next choose the appropriate locality or localities that have an upcoming vaccination session.

Lastly, choose the starting day of the vaccination session and the number of days that the vaccination session will last.

Tap "SEARCH" and the tablet will show you a list of children due for the upcoming vaccination session. The list will include the child's name, date of birth, sex, date of next visit, guardian's mobile number and the name of the locality.

3			Callbacks			' 27% 👰 3:57 PM
ild's Name Name t	Date of Birth	t₄ Sex t₄	Next Visit [†]	Mobile #	Locality [†] +	Guardian Na
Jacob	2016-09-07	Male	2016-10-19	411425659855		Stella
Derek	2016-09-17	Male	2016-10-29	32352147558		Fiona
Holly	2016-09-18	Female	2016-10-30	1223887445559		Wilma
Aaron	2015-07-09	Male	2016-11-08	22162465454		Tammy
felicity	2016-10-01	Female	2016-11-12	7123588	George Brook (Dworzack)	Hershey
Aimee	2016-08-18	Female	2016-11-15	0868561523		Ophelia
Riley	2016-07-17	Male	2016-11-16	58657962429		Judith
Conan	2015-06-20	Male	2016-11-16	085058936339	Albert Academy	Yolanda
Kelley	2016-02-19	Female	2016-11-16	665459824248		Susana
Dylan	2015-05-15	Male	2016-11-16	884545523526	Brookfields - Congo Market	Janet, Leon
Kourtney	2016-06-14	Female	2016-11-16	9756621246		Cecily

If the list is long you can sort the list of names by tapping any of the categories at the top (i.e.) to sort by locality, tap "Locality."

If you want to use the callback list to prepare doses for an outreach session, you can see which doses each child is due for by tapping on the child's name. It will bring you to the child's digital vaccine card, where you will be able to see upcoming doses.

× × •	Name _{Conan}	Next Visit 2016-11-16	Mobile # 085058936339	
	birth	6W 10W	14W	9M 15M
BCG	birth Oct 19			
OPV	birth	6W 10W Nov 22	14W Dec 20	
Penta		6W 10W Oct 19 Nov 16	14W Dec 14	
PCV		6W 10W Nov 22	14W Dec 20	
Rota		6W 10W	14W	

Using the Callback List to search for children who have missed a dose

If you would like to find the children who have missed a recent vaccination session or dose, make sure it says "YES" after "overdue."

Choose the locality or localities of interest.

Tap "SEARCH."

3		Select a	a Callback List:		
	Ove	rdue YES			
	Loc	cality All localities			
			SEAR	эн	

The next screen will show a list of children who have missed doses. Like the other Callback List feature, it will tell you the child's name, date of birth, sex, expected visit, mobile number and locality. You can sort by any of these categories by tapping the word in the heading.

					Overdue			[0-2	27% 菌 4:05 PM
ild's Name									
				1211	1.1	1997 B			
Name	Ť4	Date of Birth	Ť4	Sex	[†] 4 Expected visit [†] 4	Mobile #	Locality	t ₄	Guardian Na

SENDING DATA TO DHMT

The patient data that you gather will automatically sync with the network when there is signal. All data will be sent to the same CommCare HQ organization server. From there, the data will be sent to the district level, where it will then be aggregated and sent to the national level.

If your tablet is not syncing with the network, eHealth Africa technicians will notify you and fix the problem.

VAXTRAC CONTACT AND IN-COUNTRY SUPPORT

You will have a CUG line to call the following numbers directly from the tablet for free to report issues. The first point of contact should be DHMT staff (#1-3), then EPI/Child Health Program staff (#4-7), and then finally eHA staff if neither of the previous two groups can help resolve or trouble-shoot issues (#8-10).

No.	Title	Affiliation	Name	Phone Number
1	District Operations Officer 2	MoHS - DHMT	Andrew Massaquoi	99605425
2	District Cold Chain Officer	MoHS - DHMT	Shegbe Momoh	88159694
3	District Data Entry	MoHS - DHMT	Alusine Sesay	77267135
4	District Health Sister DHMT	MoHS - DHMT	Sister Amie Nunie	77643208
5	District Operations Officer 1	MoHS - DHMT	Samuel Tommy	99605423
6	Child Health M&E Officer 3	MoHS - EPI	Gibrilla B. Timbo	77884808
7	Child Health M&E Officer 1	MoHS - EPI	Mustapha Alpha	76876064
8	Child Health M&E Officer 2	MoHS - EPI	Suliaman Bangura	77954347
9	Child Health Public Health Sister	MoHS - EPI	Sister Aminata Koroma	77588714
10	Project Manager	eHA	Bryan Gastonguay	99891117
11	IT Support	eHA	Bashiru Kuyateh	99061656
12	Project Supervisor	eHA	Musa Komeh	99901026

The DHMT/Child Health Program can then contact eHA to report issues.

Frequently Asked Questions

"I am unable to sign in with my username and password"

- Check the username and password are spelled correctly
- No capital letters and no spaces in the username or password
- *Try deleting your password and retyping, the first login can fail if the tablet has just been turned on.*
- If your login fails 3 times you will see a prompt to grant access to CommCare. Click the button labeled 'Grant Access' and enter your username and password.
- If you are still unable to login to VaxTrac, open the CommCare application directly from the apps list and type in the same username and password as for VaxTrac. Now you can switch back to the VaxTrac app and you will have access to the home screen.

"The keyboard has popped up, how do I hide it?"



The keyboard can be hidden by pressing the back button, which is next to the home button. Sometimes the keyboard has an action button such as Sign In, Go, or Next and these will cause the keyboard to close.

"The fingerprint scanner is not working."

- *Make sure the usb adapter is plugged into the tablet and the fingerprint scanner is plugged into the end of the adapter.*
- When you are ready to scan the fingerprints make sure you have clicked on the picture of the proper finger.
- The scanner should light up the color blue if it is active. If the scanner does not light up blue you can press the disconnect icon in the top left corner, then you can disconnect the adapter from the tablet and reconnect the cable.
- If the scanner is still unresponsive, restart the tablet.
- Clean the glass scanner surface of dirt and the adult's finger regularly

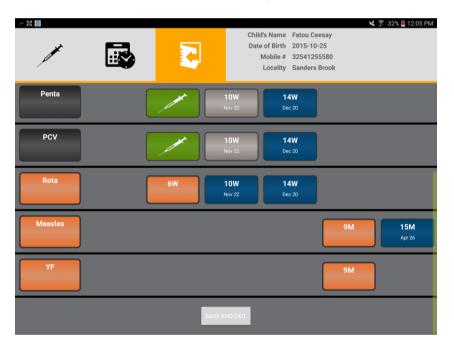
"What is the correct direction of the fingerprint scanner?"

The front of the scanner has the Lumidigm logo on it. The back of the scanner is where the cable is attached. The front should be facing the adult as they place their finger on it.

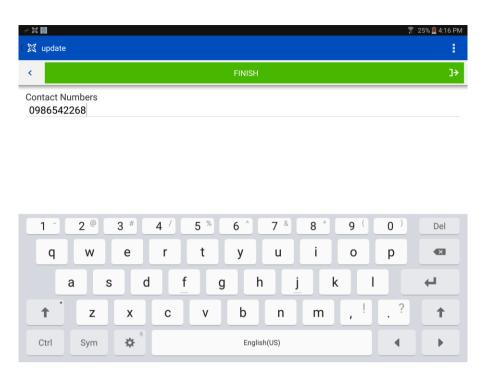


"I've gotten to the final screen how do I submit"

If you are on the vaccination card screen with the full child's schedule (the 3rd tab), check that the information is correct and scroll to the bottom where you will see a button to 'save and exit'. The record will now be saved automatically.



If you are on the screen with the large blue bar at the top, you will see a green button marked finished that you can click when you are done.

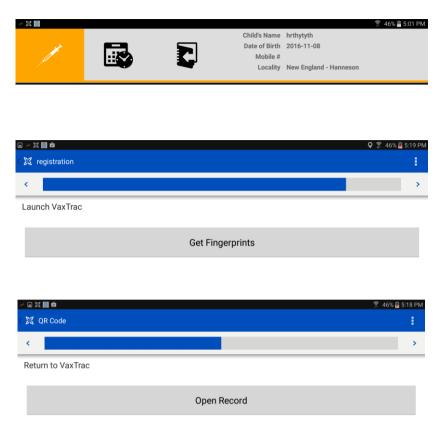


If you have not completed the form or want to exit press the back button and you will be given the option to exit without saving. This will return you to the VaxTrac Home Screen.

× X 🔲				🗣 캵 43% 🎘 2:50 PM
🤇 💥 🛛 QR Code				
<				>
No matching patients were	found			
			_	
	Exit Forn	n?		
	>	STAY IN FORM		
	E <mark>o</mark>	EXIT WITHOUT SAVING		
		SAVE INCOMPLETE		

"On the vaccination screen it says the patient is not loaded"

If the tablet screen turns off and goes to sleep the current patient information may be lost. Clicking the back button will go back one screen, you may need to press the 'Get Fingerprints' button or open patient record to reload the patient information.



Try to finish and save what you are working on instead of stopping in the middle if possible.

"My battery is dying very quickly, how do I make it last longer?"

The easiest way to extend the battery life is to turn off the screen by pressing the power button when not in use and shutdown the tablet at the end of the day. You can also reduce the screen brightness to low by pulling down the notification bar from the top of the screen.

¥ X 🖬	5:26 PM Tue, November 8	۵	0 ~	🌹 47% 🕏 5:26 PM
	🤝 🕥 🜒 🕧	- * 0	X	
	Wi-Fi Location Sound Land EHN-Staff	Iscape Bluetooth Power saving	Airplane mode	
	₩ _A ●		Auto	
	Quick connect	Tap here to con	nect devices	
	VaxTrac Finished Update: 5 New Records		5:15 PM	
		**	STOP SERVICE	
	Logged Into Commcare Session Expires: Nov 09 5:15AM		10:15 AM	
	BiometracCore Service Started.		11/2/16	
	Transferring media files via USB Tap for other USB options.			
	NOTIFICATION SETTINGS	•		
	EHN	Staff		



If the cellular data connection if very poor you can turn the radio off until you are back in an area with a strong signal. The same is true for the GPS location, if you are indoors and not moving you can turn the GPS radio off. The tablet will charge faster when it is turned off completely or put into Airplane mode.

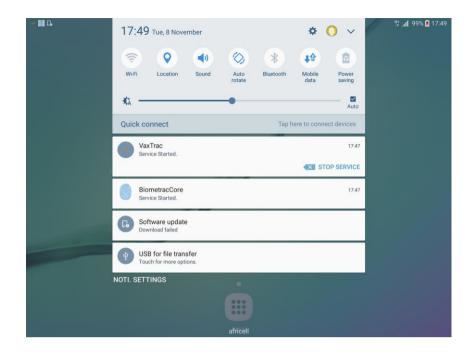
× 🖬 G	17:49 Tue, 8 November	\$.al 99% 🖬 17:49
	Image: Wi-Fi Location Sound	Auto Bluetooth Mobile	
	WI-FI Location Sound	Auto Bluetooth Mobile rotate data	
	Ka	•	Auto
	Quick connect	Tap here to co	onnect devices
	VaxTrac Service Started.		17:47
		×	STOP SERVICE
	BiometracCore Service Started.		17:47
100	Software update Download failed		
	USB for file transfer Touch for more options.		
	NOTI. SETTINGS	•	
		africell	

Unplugging the fingerprint scanner will also preserve the battery when it is not needed.

How do I know if my tablet is syncing/transmitting?

The tablet should sync and send data automatically when there is a data connection.

Check that mobile data is on and that airplane mode is off.



- END -



VaxTrac

641 S Street NW, 3rd Floor Washington, DC 20001 | www.vaxtrac.com

info@vaxtrac.com

Electronic Vaccine and Tracking System



VaxTrac Training Module

November 2016



VaxTrac

641 S Street NW, 3rd Floor Washington, DC 20001 www.vaxtrac.com

INTRODUCTION

VaxTrac is an NGO that designs, builds, implements and supports technology solutions for frontline health workers for improved vaccine delivery and services. We train frontline health workers to use a tabletbased vaccine registry system. The electronic vaccine registry system reduces the administrative burden for health workers by providing a user-friendly way to enter patient data, search for patient records and prepare for upcoming vaccination sessions and aggregate daily, weekly and monthly reports for the Ministry of Health.

VaxTrac has years of experience training health workers to use our tools. This training module was designed as a guide for facilitators who are training health workers how to use the VaxTrac system. The training module contains a checklist of how to prepare for an upcoming training session, a list of materials needed for the session and finally, a detailed description of the topics to be covered during the training session as well as interactive activities that will facilitate the learning process.

This training module was designed specifically for the Nepali context, though it can be adapted to meet the needs of other country programs. The VaxTrac team co-developed this training module with Amakomaya, the local implementation partner in Nepal. Amakomaya brings several years of experience designing and facilitating training sessions for health technology projects in rural Nepal. Their contextspecific expertise influenced the design of the training module. For instance, given the importance of government ownership in Nepal, Amakomaya suggested separating out a "formal program" from the "training program," which will allow government officials the space and opportunity to give their support to the project.

The training module was developed for the VaxTrac facilitator. The Facilitator should use the module as a guide both before the training is implemented as well as during the training. Key pieces of information are outlined in the training module, as well as activities. The module will help the facilitator lead a series of consistent training sessions.





BEFORE THE TRAINING CHECKLIST:

- **D** Work with CHD to ensure invitations are sent to ministry officials and health workers
- **O** Obtain list of participants
- **C**reate training groups (no more than 16 participants per training)
- □ Arrange hotels for training staff and health workers
- □ Arrange travel logistics for training staff
- □ Arrange per diem rates
- **D** Secure training space and meals for training
 - Breakfast (2)
 - Snacks (4)
 - Lunch (2)
 - o Dinner (2)
- Prepare training certificates
- Load test tablets with test data
- Update / load VaxTrac, CommCare software on training tablets and VaxTrac Units
- **D** Prepare inventory of VaxTrac Units
- **D** Prepare the training room:
 - Arrange tables in a half circle
 - Pass out training packets (1 per person) and test tablets (1 per small clinic group)
 - Set up computer and projector

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MATERIALS:

- **Training packet for each participant:**
 - Training itinerary
 - Practice vaccine cards (4 per 0 packet)
 - QR codes 0
 - 0 Breakfast, lunch and dinner vouchers – day 1 and day 2
 - User guide 0
 - Notebook 0
 - 0 Pen
- □ Sign in sheet (2)
- **D** Posters (15)
- Markers (10)
- Masking tape (2)
- VaxTrac units (1 per clinic)
- □ Steps for registration cards (1 set)
- Role-play scenarios (4)
- Camera (1)
- **C** Certificates (1 per participant)
- Projector (1)
- **C** Cord to connect the projector (1)
- **O** Computer / computer charger (1)
- **Training tablets (1 per group)**



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TRAINING DAY 1:

SECTION A: FORMAL PROGRAM

Time	Activity	Description	Materials
8:00- 8:30 AM	Breakfast	 Give training packets to participants, including meal vouchers. Ask them to sign in the sign-in sheet. 	 Training packet Sign in sheet
9:00- 9:15 AM	Introduction	 i. Objectives of workshop: Understand how to use the VaxTrac system Increasing technology literacy among health workers. Understand how to manage vaccine records on the tablet. ii. What is VaxTrac? 	 Poster paper Markers Tape VaxTrac unit
9:15- 9:40 AM	Key Speakers		

SECTION B: TRAINING PROGRAM

Time	Activity	Description	Materials
30 mins	Introduction of the participants	 Each participant will give their: Name Clinic name How long they have worked in this job What they like most about this job. Each participant will be given a 1 min each. 	
10 mins	Assigning Class Leader	 Trainer explains the responsibilities of a Class Leader. Setting rules of conduct. Overseeing whether the rules of conduct are being followed. Trainer will ask who would like to be the leader. Whoever is interested, they will be assigned as leader. If more than one is interested, there will be a fair vote from the participants. 	
20 mins	Rules of Conduct/Expectation of participants	The Class Leader will set the rule of conduct and also ask the participants and list the expectations from the workshop. Example rules: no cell phones, one person speaks at one time, etc.	 Poster paper Markers Tape
20 mins	Pre Training Survey	 The facilitator will distribute the survey and explain to the participants to raise questions if any clarification is needed. The trainer will explain that the objective of the pretest is to test their comfort level using mobile technology and the VaxTrac system 	 1 copy per participant of pre training survey
20 mins	Basic tablet functions	• The facilitators will do a live demonstration of how to use the tablet. Plug the tablet into the computer and	 1 VaxTrac unit per



VaxTrac i

10	Tea and cookies	 plug the computer into the projector so all health workers can see the screen. The basic skills to cover include: how to turn the tablet on/off, how to check the battery, how to launch VaxTrac app, how to login to VaxTrac, explaining the importance of not deleting the application Explain each skill one at a time. After demonstrating each skill, give time for CHWs to practice each skill. Co-facilitators should circle around the group to answer questions and to make sure every participant has practiced each skill. 	clinic group + facilitator VaxTrac unit
mins 60 mins	OCR: Registering Vaccine Vials	 Optical character recognition (OCR) is a feature on the VaxTrac software that allows health workers to attach vial information to the child's record by taking a photo of the vial information. In the clinic setting, OCR should be completed prior to the vaccination session so that all of the vials that will be used during the session will already be stored in the tablet. This will save time for the health worker and patient. The facilitator should demonstrate how to use OCR through a tablet projection. Show how to line camera up to the vial, take a picture and store the picture under the correct dose name. The system has trouble distinguishing between the number "6" and the letter "G," so make sure health workers understand that they will need to check OCR for accuracy and possibly edit the information once they capture the photo. After the explanation and demonstration, distribute 2-3 vaccine vials per small clinic group. Have each participant practice adding the vial information to their tablet. Co-facilitators should walk around to answer questions and to make sure each participant has a chance to practice later OCR target and to participant practice participant has a chance to practice later of the participant has a chance to practice later of the participant has a chance to practice later of the participant has a chance to practice participant practice participant practice participant participant	 Vaccine vials 1 VaxTrac unit per clinic group + facilitator VaxTrac unit
60 mins	Lunch	 practice. Introduce OCR topic via tablet projection Tell each participant to find their lunch voucher for day 1 inside their training packet 	Lunch vouchers
90 mins	Registration and Understanding Doses	 Have CHWs take 4 practice vaccine cards from training packet. The facilitator should do a live demonstration of how registration works through the tablet projection. Walk health workers through clicking the registration icon, completing demographic information, assigning and scanning a QR code, using the information available from the test case and corresponding vaccine card (if applicable) to complete the digital registration. Explain 	 4 practice registration cards Registration steps cards 1 VaxTrac unit per clinic group + facilitator



10 mins 60	Tea and cookies Search for child	 how to add historical doses card (doses given prior to registering the child on the tablet), how to add doses given that day, how to add the vial information to the child's record, and how to save the information. Walk through scenarios 1-4 as a group, using the cofacilitators to ensure that each participant completes at least one registration by him or herself. Go through 4 scenarios as a group while CHWs practice registering test cases in small groups Baby Sita was born less than 6 weeks ago (eligible for BCG.) Baby Ram. 14 weeks old. Has received no vaccinations yet. (Eligible for more than one vaccine but can be given only the first dose in the series.) Baby Ganesh. 14 weeks old. All eligible vaccines given. New registration in VaxTrac. To learn how to add historical doses.) Baby Krishna. 10 weeks old. First dose in the series given. DPT/PCV given at 4 weeks, instead of 6 weeks. Baby comes at 10 weeks to get 2nd dose of DPT. (When vaccinator wants to enter historical doses, it shows as invalid since it was given too early.) Activity: Once the health workers have registered all 4 test cases to the tablets, it is time to do an activity to make sure they remember all of the steps involved in a registration. Steps include: (1) click on the registration icon, (2) complete demographic information, (3) assign and scan a QR code, (4) add historical doses, (5) add today's doses, (6) attach vial information, (7) save and close. Each step will be written on a card. Pass one card out to seven participants. Have each of those seven participants read the card aloud and have them arrange themselves in the correct order in front of the group. 	VaxTrac unit
mins	records	tablet projection to go teach health workers how to search for a child's records if the child has already been registered in the VaxTrac system. Show how to find the search icon on the VaxTrac home screen. If the child arrives with their paper record with QR code attached, the health worker should search for the record using the QR code search function. If the child arrives without their paper record or without a QR code, the health worker should search for the child's record using the demographic search function.	 A practice registration cards 1 VaxTrac unit per clinic group + facilitator VaxTrac unit







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		 how to send data to DHO. They can also use the videos to teach new vaccinators how to use VaxTrac. Trainer will explain how to access the training videos on the tablet, using the tablet projection. The facilitator will show one video as an example of what to expect from the video. Health workers will then practice accessing the training videos on their own tablets, and there will be time allotted for them to watch 1-2 videos on their tablets. 	
5 mins	Wrap up	 Give instructions for tomorrow's training (8:00 AM breakfast, going through workflow, reporting, syncing data, call back lists and role playing) 	
	Dinner		• Dinner voucher

TRAINING DAY 2:

Time Activity	Description	Materials
8:00-8:30 Breakfast AM	Ask them to sign the sign in sheet.	 Sign in sheet
9:00 Vaccination onwards 60 mins Workflow Activity	 Pass around the sign-in sheet as this activity is being introduced. The facilitator should begin by explaining that we are going to do an activity to understand their current workflow before, during and after vaccination sessions. By workflow we mean the activities that health workers and guardians carry out during a normal vaccination session. We want to understand the current workflow in order to understand how VaxTrac can fit better into the existing workflow. The facilitator should explain that we are going to come up with some workflows together as a group. We have workflow cards with pictures on each one, representing a person, action or object that may or may not be involved in the vaccination workflow. Not all cards need to be used. If there is a person, object or action that is missing from the workflow, we have blank cards that health workers can use to draw in the missing step. The facilitator should ask, "what do you do before a vaccination session begins?" The facilitator should ask the class leader or a volunteer to come up to start. Ask that person to choose a workflow card (or more than one workflow card) that illustrates the first thing they do to prepare for an upcoming vaccination session. 	 Workflow cards Markers Poster paper Tape Camera



		or if someone has a step that comes before it. Once	
		 the first step is agreed upon, repeat this process, either with the same volunteer or incorporating many volunteers, until the group agrees upon a workflow for before the vaccination session. The co-facilitator should take a picture of the "before the vaccination session" workflow. The same process should be repeated for during the vaccination session and after the vaccination session. Take pictures of completed workflows. 	
30 mins	Reporting *Test Data	 The facilitator should do a live demonstration through the tablet projection of how to use the reporting feature. Show health workers how to find the reporting icon on the tablet, and how to choose daily, weekly or monthly reports and how to interpret the table. Daily reports will show all of the information that the health worker entered on the selected day. Weekly reports will show all of the information that the health worker entered on the selected week. Monthly reports will show all of the information that the health worker entered on the selected week. Monthly reports will show all of the information that the health worker entered on the selected month. The information is separated by age group and by type of vaccine. The intended use of the reports feature is for health workers to use it to help them tally up the number of doses given to children during certain time periods. After the explanation and live demonstration, the facilitator should have all of the health workers practice opening the reports feature and displaying daily, weekly and monthly reports. Prior to the training, test data will be entered into the tablet. The facilitator should lead an activity to make sure health workers can find specific pieces of information using the reports feature. The facilitator will ask the health workers each of the questions outlined below. The co-facilitators will circle around the room making sure that each health worker has been able to find the answer to the question. All of the tablets will contain the same test data, so all of the health workers should be finding the same answers. The questions are as follows: How many doses of Rubella were given to children below 14 months in the past vaccination session? How many doses of pentavalent-1 were given in the last vaccination session? 	 1 VaxTrac unit per clinic group + facilitator VaxTrac unit





30 mins	Sending reports to DHO Tea and Cookies	 The facilitator should explain how to send reports to DHO through the tablet. Use the tablet projection to show how health workers can check the network connection of the tablet and that the information is sending to DHO – it will say, "data is syncing." Explain that the reports are sent automatically to the DHO when the tablet is near a phone network. They will need to plan with their colleagues where there is good phone network coverage near the clinic so that after each vaccination week, they can go to that location and send the information to DHO. Activity: The facilitator will distribute poster paper and markers to each small clinic group. They will use the paper to brainstorm and/or map where there is network connectivity near their clinic. They will outline a plan to send the reports to the DHO after each vaccination week. The co-facilitators will go around and answer any questions that the health workers have during this activity. They will ensure that each small clinic group comes up with a plan. The co-facilitators will take a picture of each small clinic group's plan so we can refer back to it later. 	 Poster paper Markers Camera
30 mins	Callback List *Test Data	 The facilitator should do a live demonstration using the tablet projection of how to find the callback list feature on the tablet. Explain that the callback list feature is the primary tool that health workers can use to plan for upcoming vaccination sessions, especially outreach sessions. They can use it to determine how many vials of each vaccine they will need to prepare, who is scheduled to come, and they can also use it to obtain the guardian's contact information to remind them to come to the session. They can also use the callback list feature to find a list of children who have missed doses, using the defaulter list feature. Health workers should all practice accessing the callback list feature on their tablets. Co-facilitators should walk around to make sure all health workers have been able to access the feature. Next, the facilitator will tell the health workers to find all of the children eligible for a vaccine during the next vaccination schedule (specific date will be given, depending on when the training takes place) who live in Ward 7. Co-facilitators will make sure that all health workers have been able to identify the children. Once they have found the children due for a vaccine in the upcoming vaccination session, the facilitator will ask them to determine which doses they will need 	 1 VaxTrac unit per clinic group + facilitator VaxTrac unit



	 to prepare for the session, based on the information they can collect from the callback list feature. Co- facilitators will make sure health workers are able to identify how many doses of each antigen they will need to prepare for the vaccine session in Ward 7. Next, the facilitator will tell the health workers to find all of the children that missed the previous vaccination session (specific dates will be given, depending on when the training takes place) from Ward 3. Co-facilitators will make sure that all health workers have been able to identify which children missed their last dose. 	
Lunch		Lunch
Drama	 The facilitator will welcome all participants back from lunch and will explain that we will do a role-play activity to put into practice everything that we have learned. The facilitator will sort participants into 4 groups. Each group will have a different practice scenario. Instruct them to work together for 10 minutes to act out the scenario that has been given to their group. After spending 10 minutes with their groups, the facilitator will instruct everyone to come back together. Each group will spend 5 minutes presenting their scenario to the rest of the participants. Following each presentation, there will be 5 minutes of reflection. Reflection questions include: What happened in the scenario? What can be improved? Questions/ comments? Scenarios: A basic new registration (1 month old baby, BCG only). Search by demographic information (the child comes without a card) The child is new to the VaxTrac system and has a vaccine history, so BCG needs to be added to her record (historical doses). How to prepare for an outreach session in Ward 7 next month (specific date will be given, depending on the date of the training). 	 Role-play scenarios
Post training survey	• The facilitator will distribute the survey and explain to the participants to raise questions if any clarification is needed.	 Post- training survey (1
	Drama Post training	they can collect from the callback list feature. Co-facilitators will make sure health workers are able to identify how many doses of each antigen they will need to prepare for the vaccine session in Ward 7. Next, the facilitator will tell the health workers to find all of the children that missed the previous vaccination session (specific dates will be given, depending on when the training takes place) from Ward 3. Co-facilitators will make sure that all health workers have been able to identify which children missed their last dose. Lunch • Drama • The facilitator will welcome all participants back from lunch and will explain that we will do a role-play activity to put into practice everything that we have learned. The facilitator will sort participants into 4 groups. Each group will have a different practice scenario. Instruct them to work together for 10 minutes to act out the scenario that has been given to their group. • After spending 10 minutes with their groups, the facilitator will instruct everyone to come back together. Each group will spend 5 minutes of reflection. Reflection questions include: What can be improved? Questions/ comments? Scenarios: A basic new registration (1 month old baby, BCG only). Search by demographic information (the child ones without a card) The child is new to the VaxTrac system and has a vaccine history, so BCG needs to be added to her record (historical doses). How to prepare for an outreach session in Ward 7 next month (specific date will be given, depending on the date of the training).



40 mins	Closing	 The facilitator will lead the group in answering the following questions: 1. What did you like about the training? 2. What did you dislike about the training? Give out certificates Take a group picture 	CameraCertificates
	Dinner		Dinner vouchers