USAID
FROM THE AMERICAN PEOPLE

ADAPTIVE MANAGEMENT
USING DIGITAL TECHNOLOGIES TO HELP HEALTH PROGRAMS ADAPT

TYPES OF ADAPTATIONS

1. **Tactical or single loop adaptation:** Tactical adaptation describes correction of ongoing programs in response to monitoring data. It does not include deeper changes in how the underlying problem that the program aims to target is defined or the program design. Tactical adaptation is often fast and relies on rapid data.

2. **Strategic or double loop adaptation:** Strategic adaptation refers to more in-depth course direction in response to learning from different data sources and feedback. It happens when underlying assumptions about the program and/or its design are changed resulting in fundamental changes in the program. Strategic adaptation often needs time, careful reflection and usually relies on different data sources.

3. **Institutional adaptation:** Institutional adaptation describes when organizations make formal adjustments to protocols to support a program's implementation and/or to improve its overall ability to deliver on its development objective. Adjustments represent a departure from organizational standard practice and/or norms, and are usually aimed at removing institutional barriers to program success.

Four key factors

1. **Authority:** Is the action within the **role and responsibility** of the stakeholder?

2. **Incentives:** Is the stakeholder **incentivized** to take action?

3. **Capacity:** Does the action require the **skills and knowledge** that the stakeholder has?

4. **Resources:** Does the action need **resources** for the stakeholder to take action?

Each of these factors has to be designed into the activity if the technology or data will lead to adaptive management.

Adaptive Management Through Digital Tools

2018 Global Digital Health Forum
December 10, 2018

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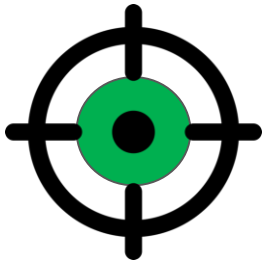
The ACCELERATE Project

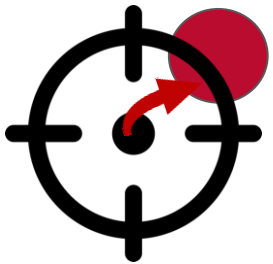
Guidance to help USAID Missions maximize investments and achieve results in maternal and child survival

What problem was ACCELERATE created to solve?

USAID challenge

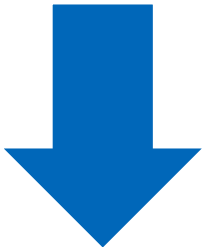


Output Targets being **MET**



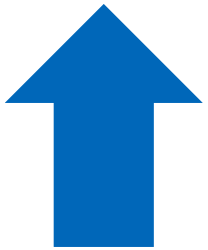
Impact goals often **MISSED**

Mission conflicts



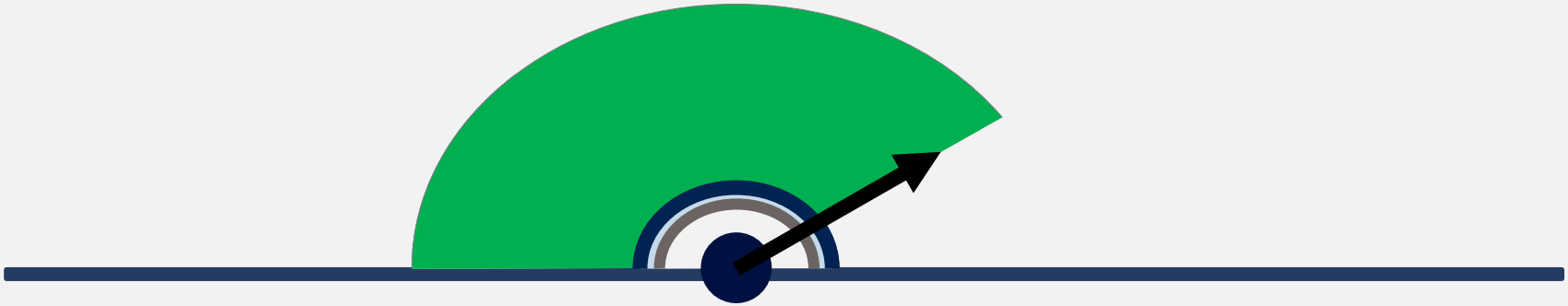
Reduced or uncertain funding

Increased pressure to demonstrate impact

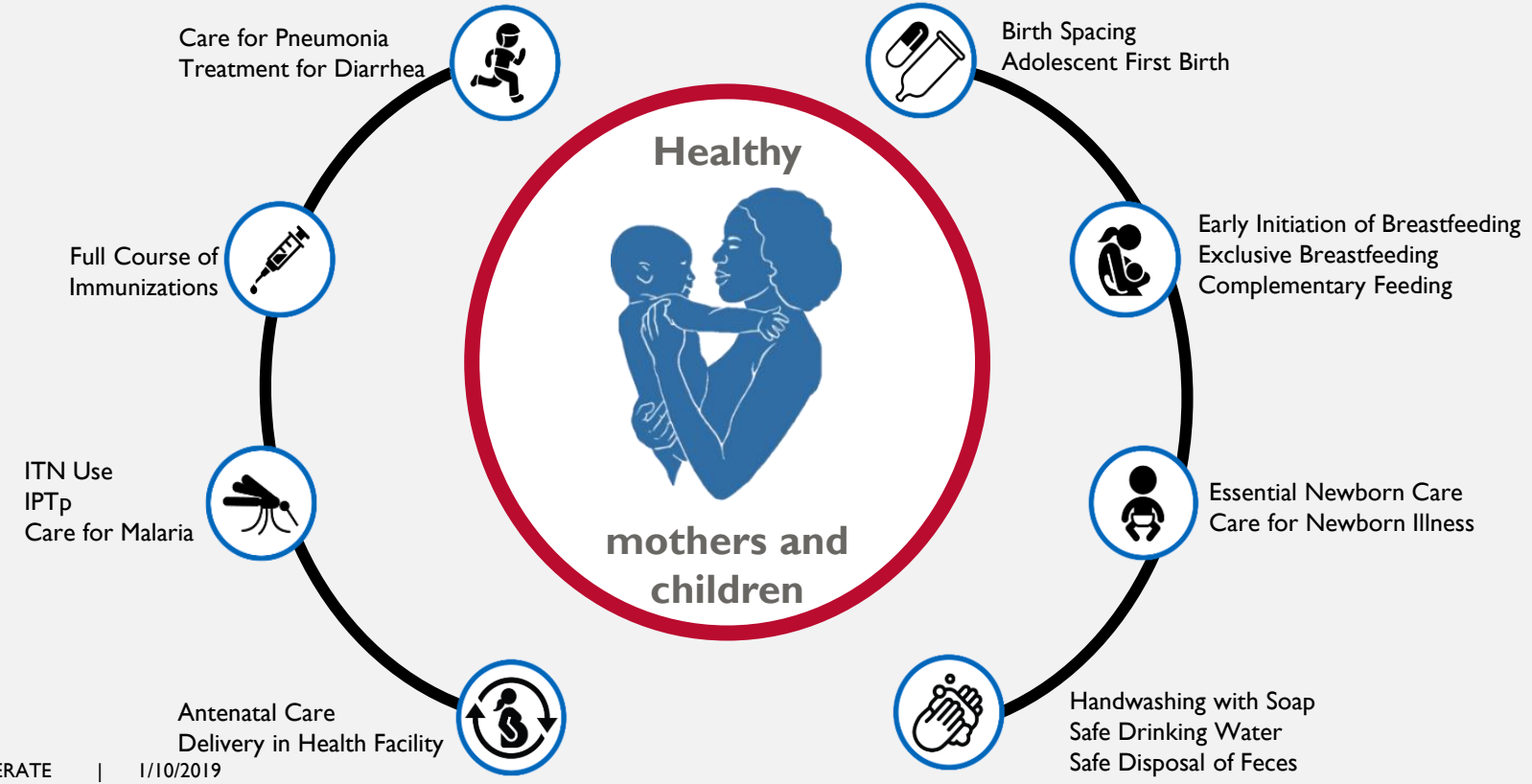


We can move the needle faster

by providing a **behavioral lens** that focuses program efforts on changing behavioral outcomes to improve health results and save lives



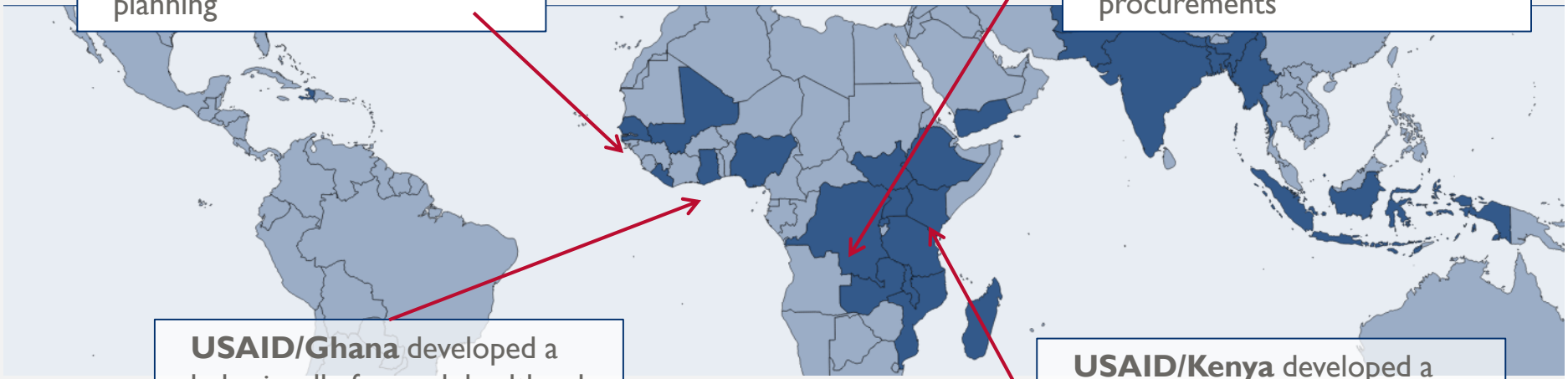
Targeting behaviors works because they are the element closest to outcomes that we can change



ACCELERATE works

USAID/Senegal assessed past project outcomes to better **manage** current activities and **guide** future activity work planning

USAID/Democratic Republic of the Congo developed a Behavioral Framework to **identify strategies** for new procurements



USAID/Ghana developed a behaviorally-focused health sub-strategy to **contribute to the CDCS and guide future programming**

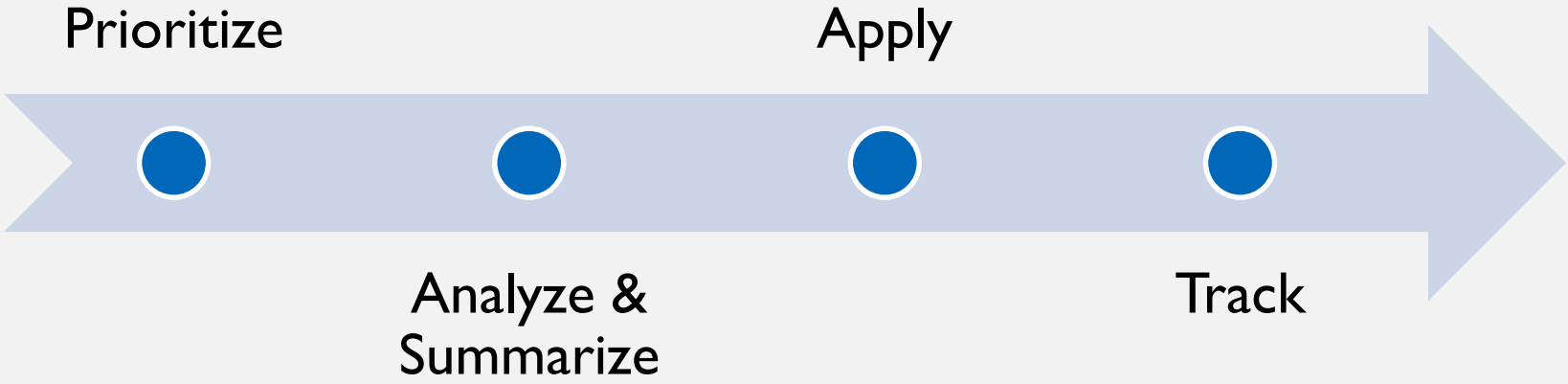
USAID/Kenya developed a Behavioral Framework to **manage and coordinate** health activities

Think | BIG Website

Goals

1. Easy to use tools to create behavior change approaches
2. Document and share decisions and outcomes
3. Direct and distance technical assistance

Think | BIG Approach



THINK | BIG

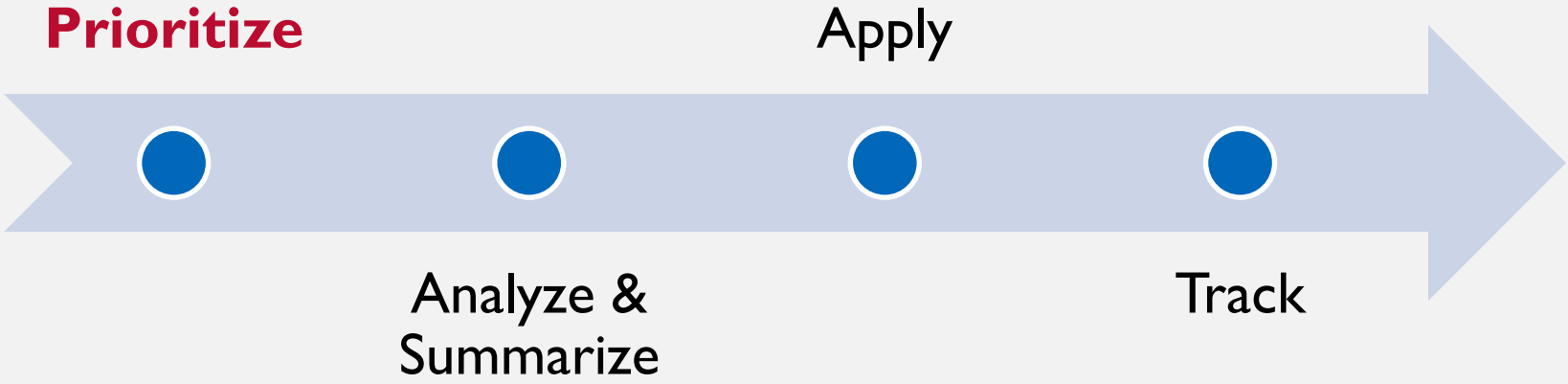
Behavioral Integration Guidance

Align your USAID health programming using behavioral outcomes to maximize investments and accelerate impact on maternal and child survival

LEARN MORE LOG IN

Please provide feedback on this page.

Think | BIG Approach

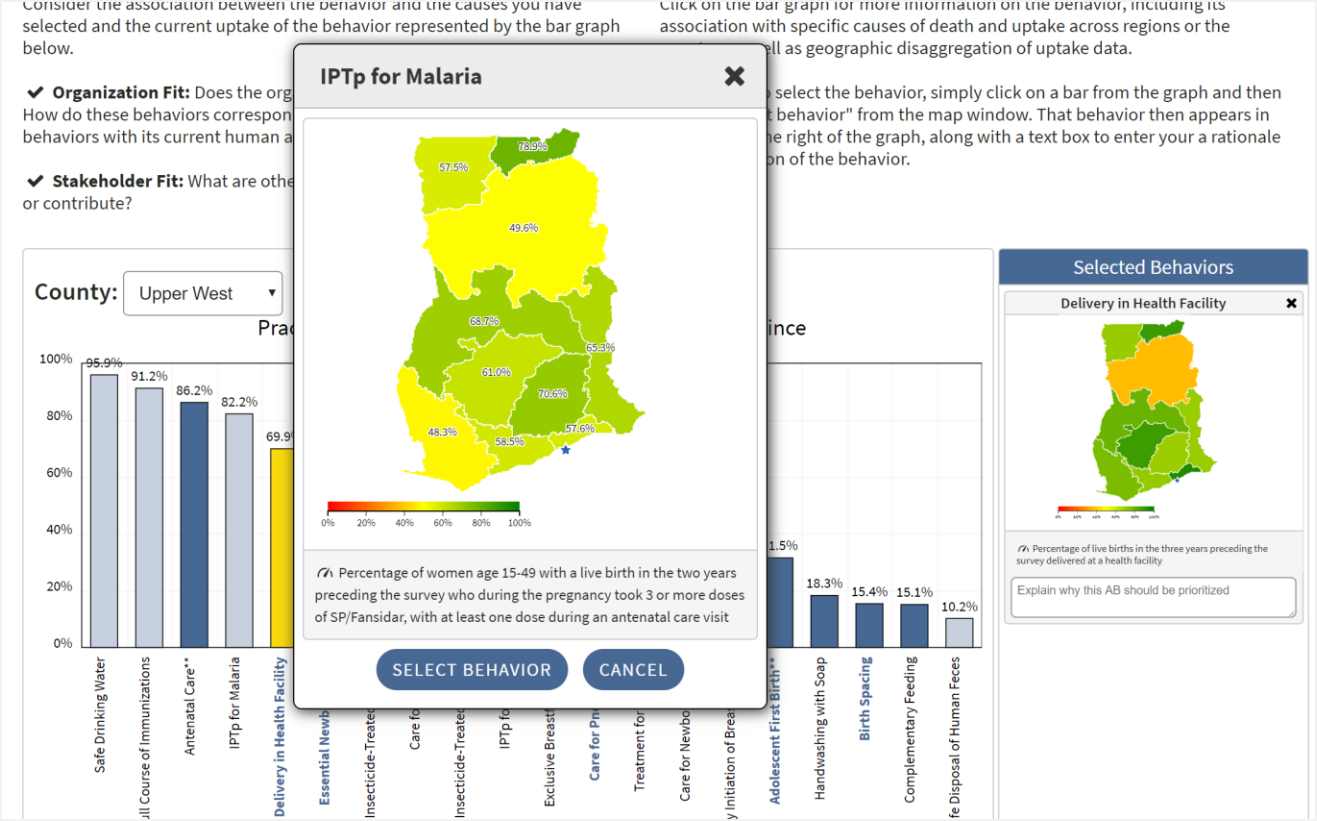


Prioritize

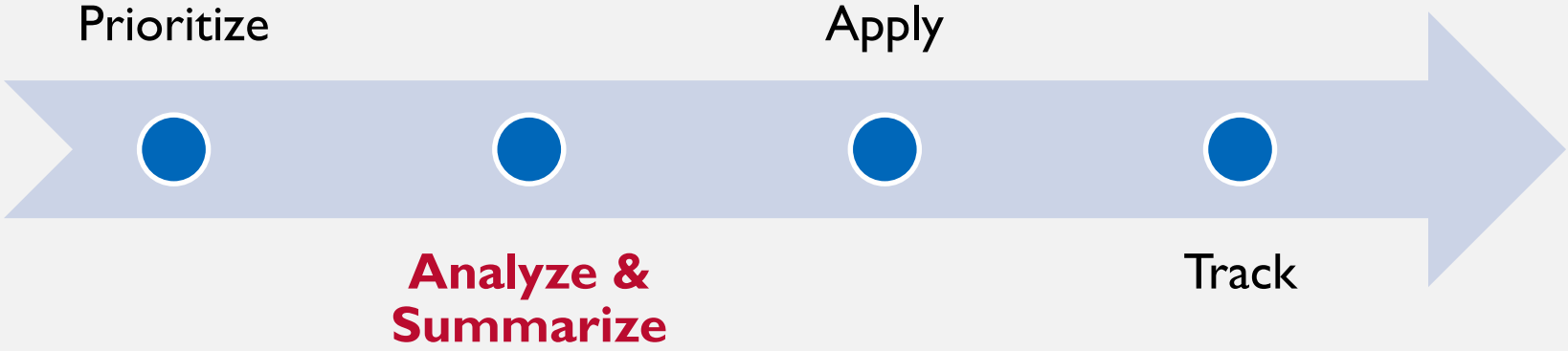
Major causes of mortality for target populations

Prioritize

Current status of different behaviors by country or region



Think | BIG Approach



What's Different about THINK | BIG's Analysis?

Think | BIG's analysis provides a deeper understanding of your priority behaviors so that you can effectively encourage their adoption by primary actors

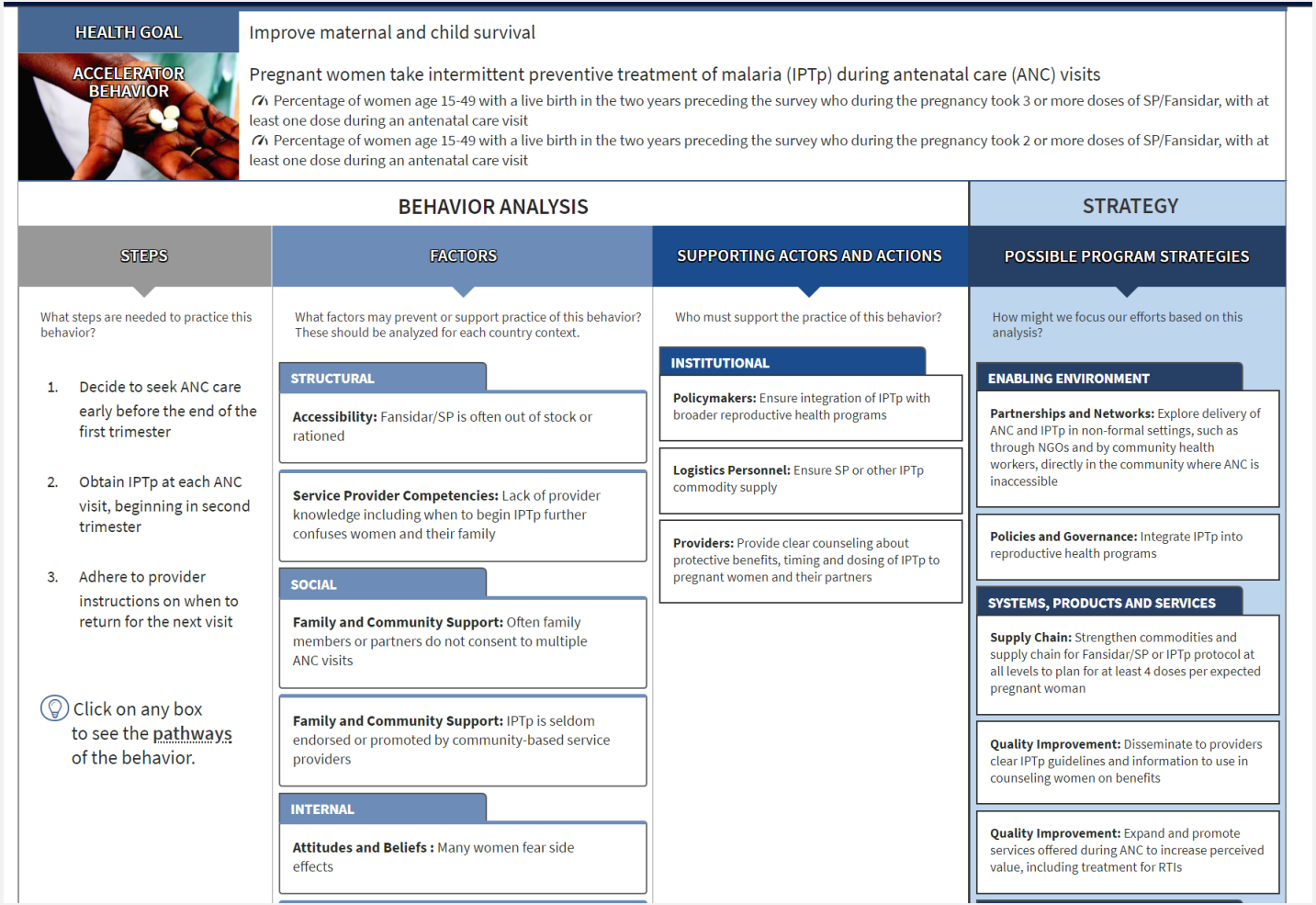
What is a Behavior Profile?

Think | BIG's tool to help you systematically analyze a behavior, ensuring all elements have been thought through and pathways to change have been identified

Photo Credit: USAID

Analyze

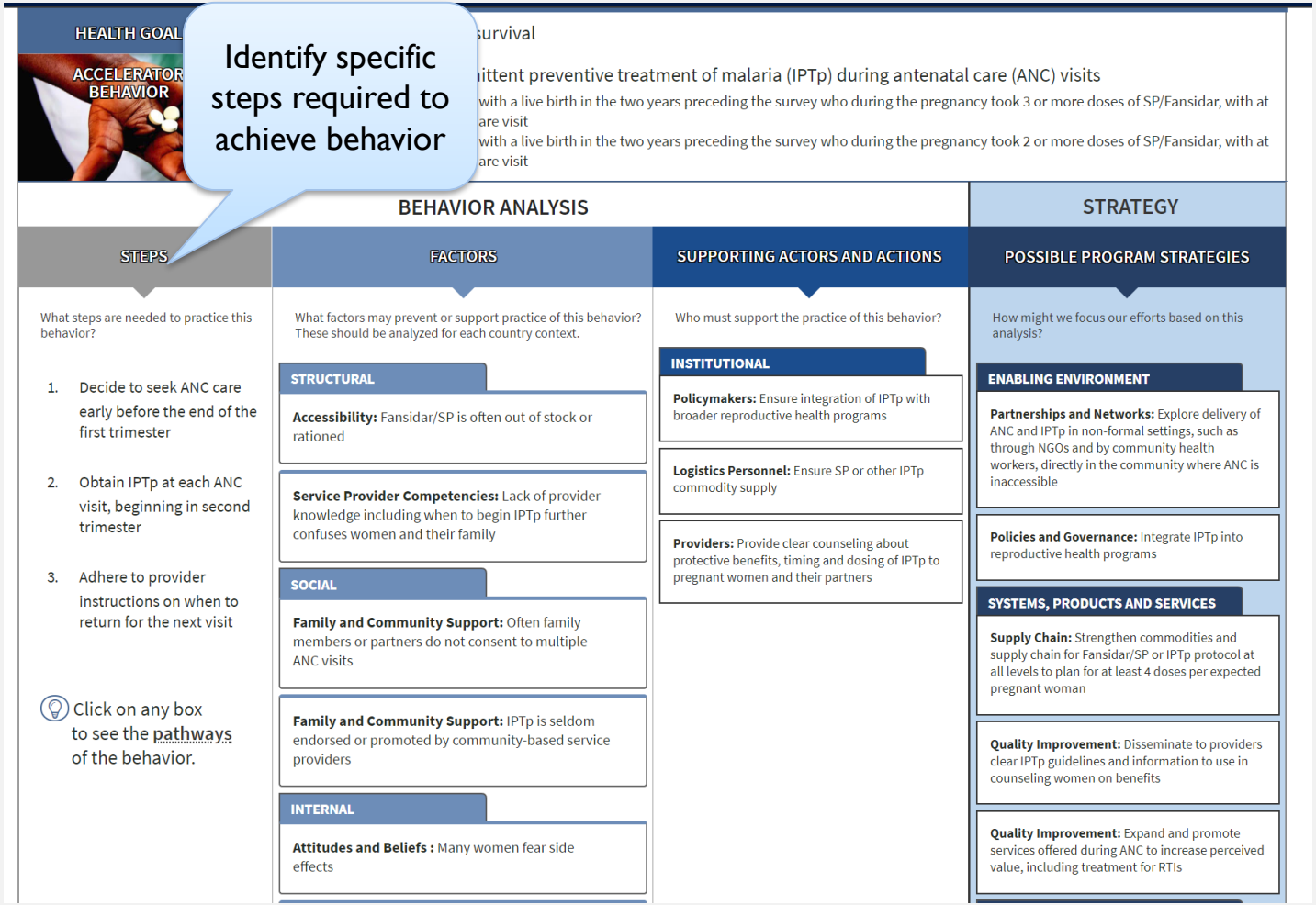
Behavior Profiles analyze required elements for a patient or caregiver to achieve the behavior



Analyze

STEPS:

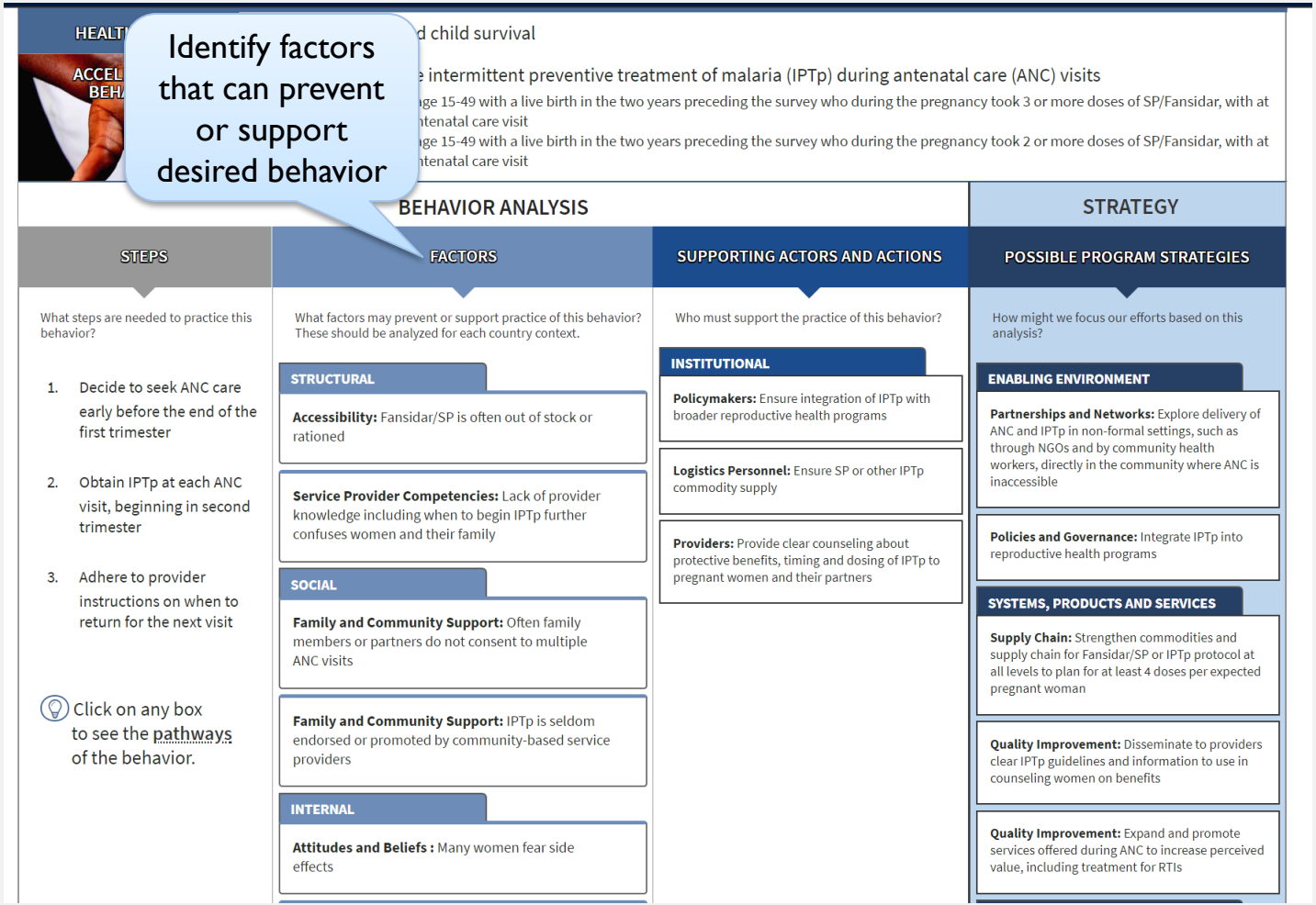
What steps are needed to practice this behavior?



Analyze

FACTORS:

What factors may prevent or support practice of this behavior?



Analyze

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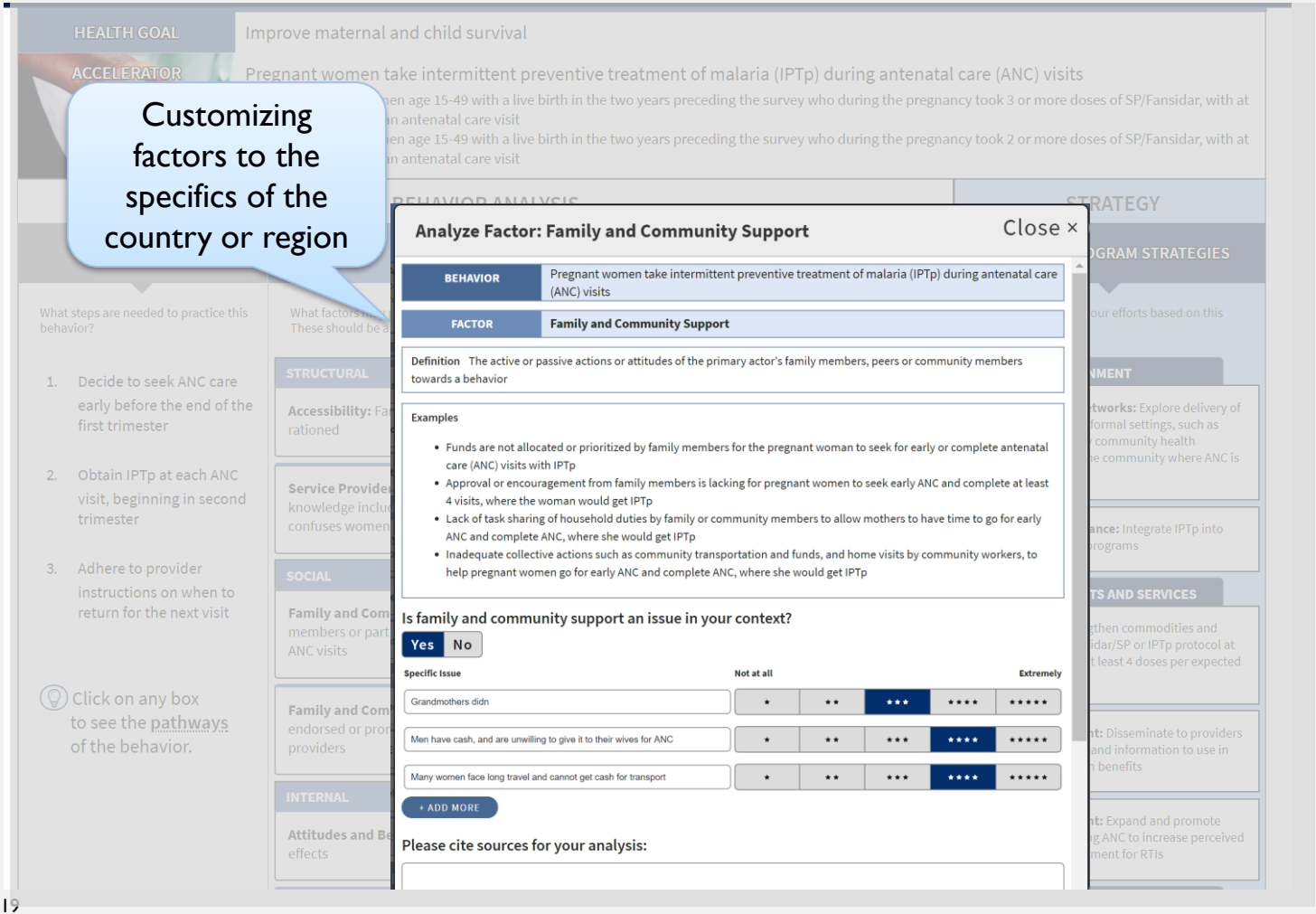

Analyze

FACTORS:

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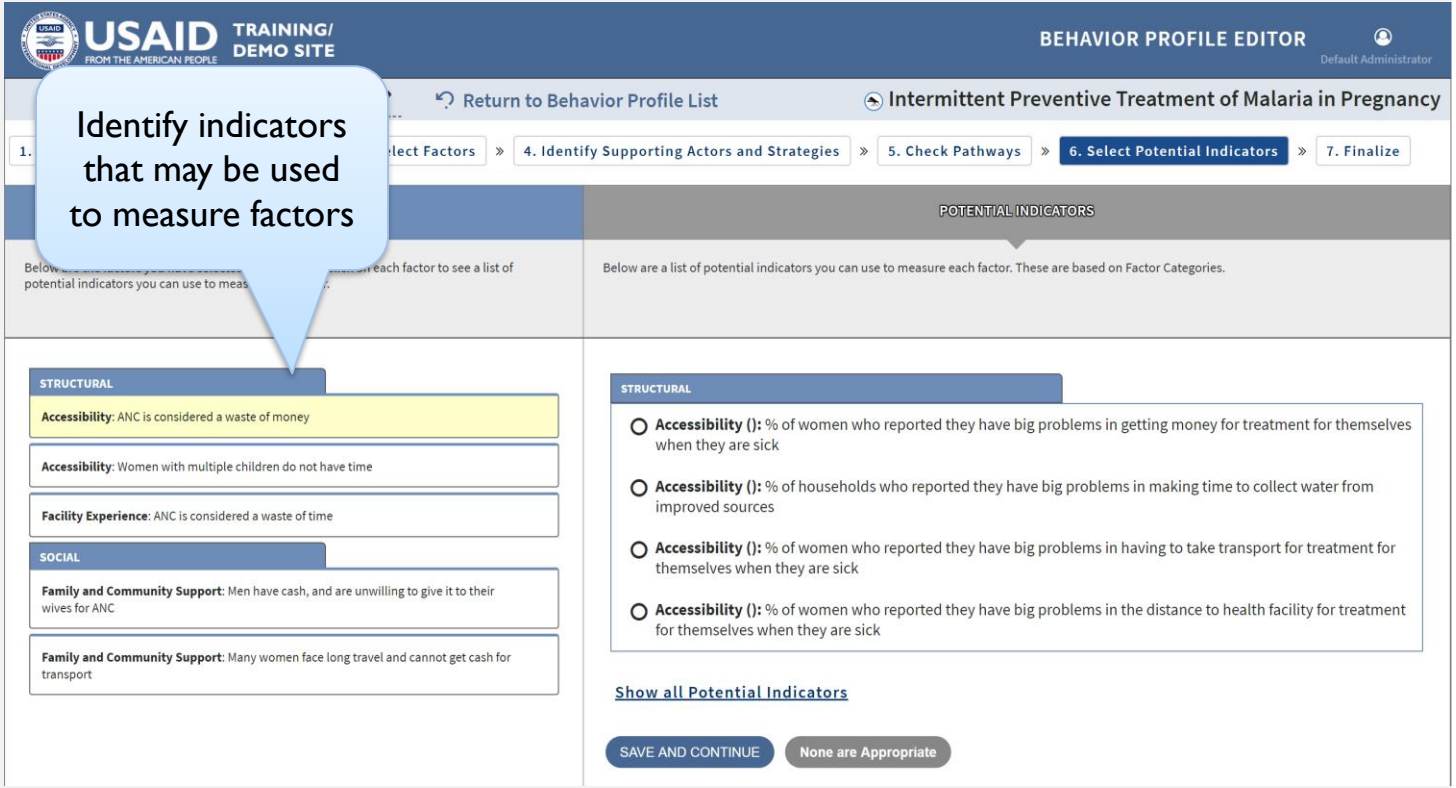
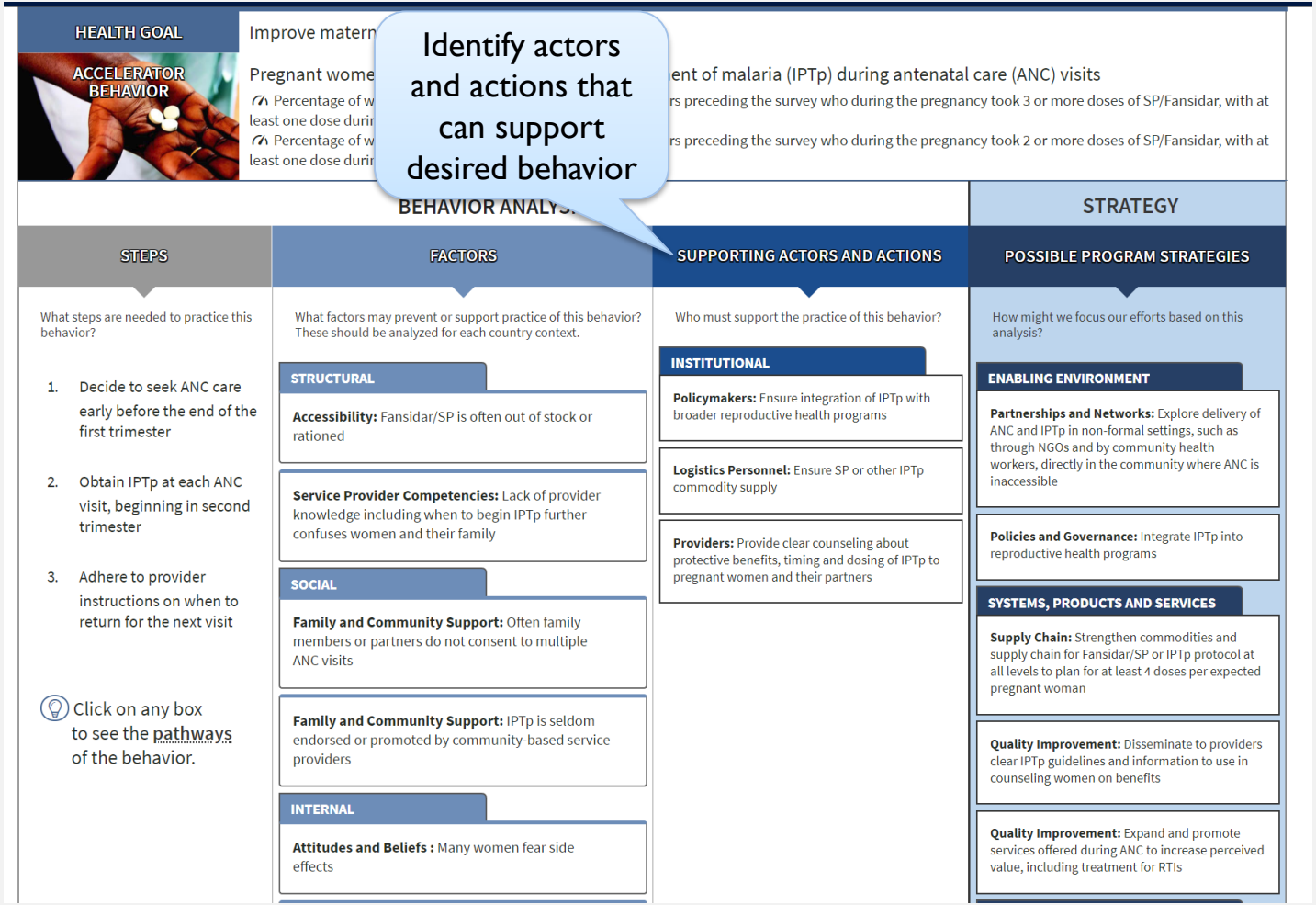


Analyze

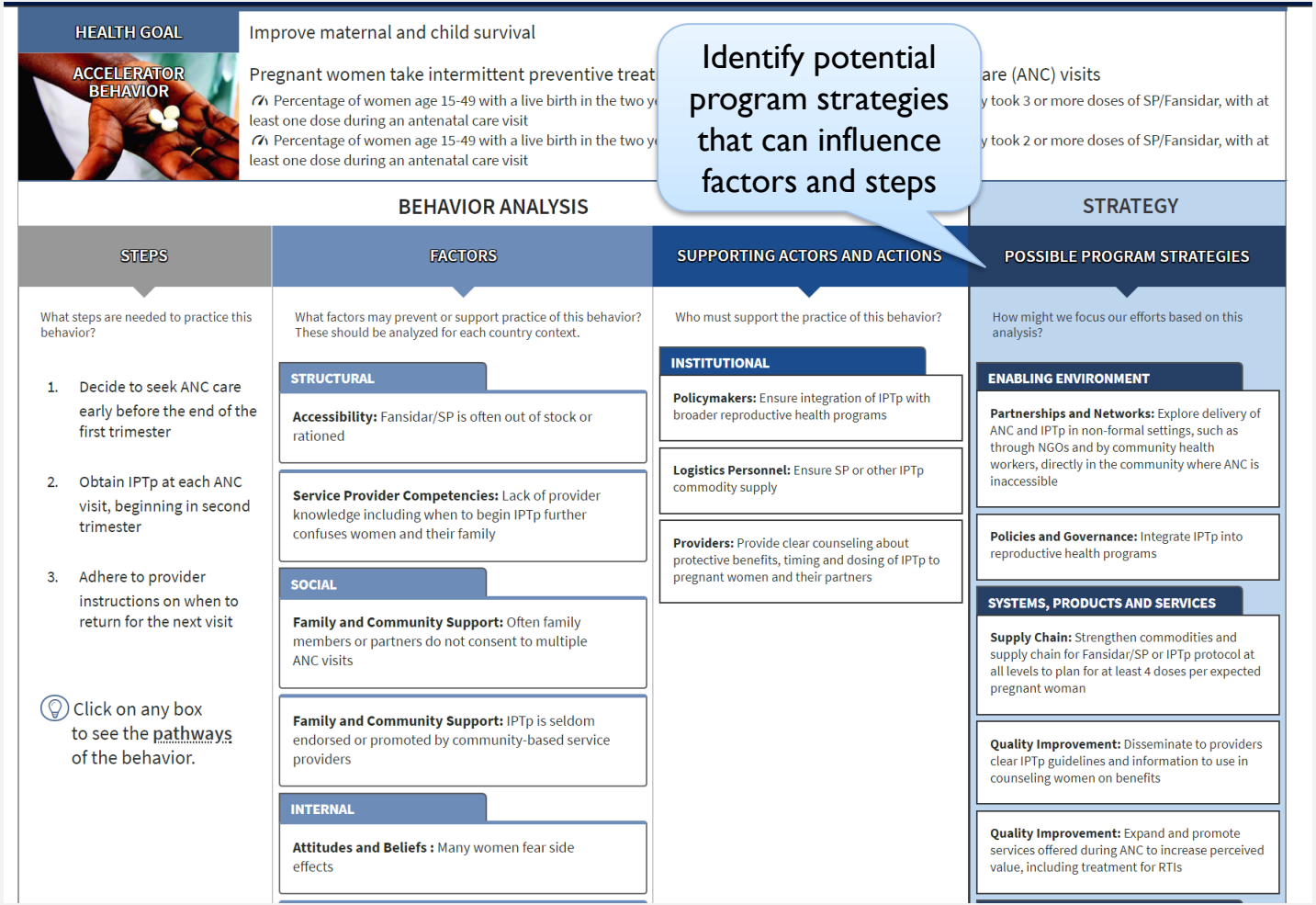
SUPPORTING ACTORS AND ACTIONS: Who must support the practice of this behavior?



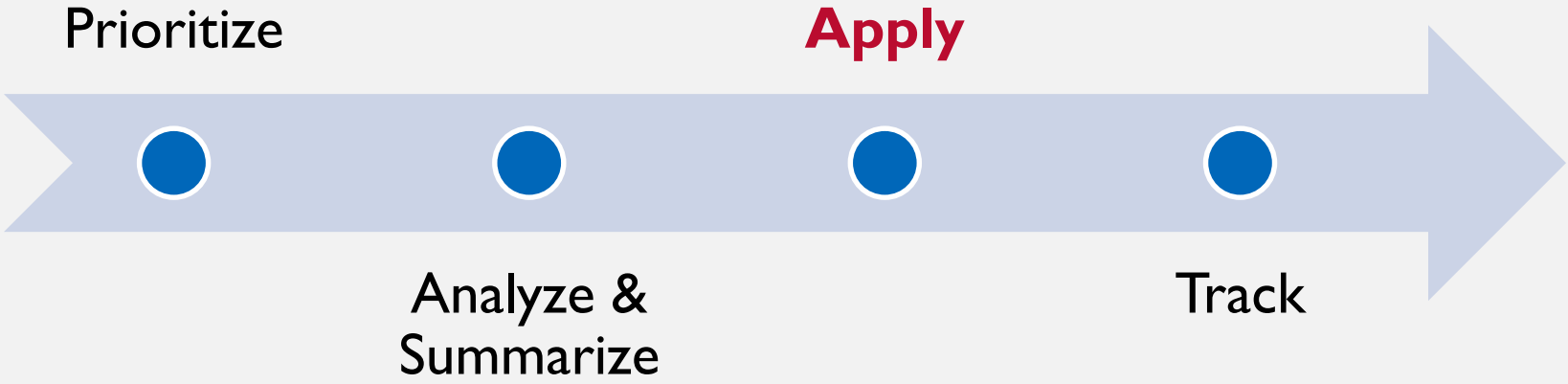
Analyze

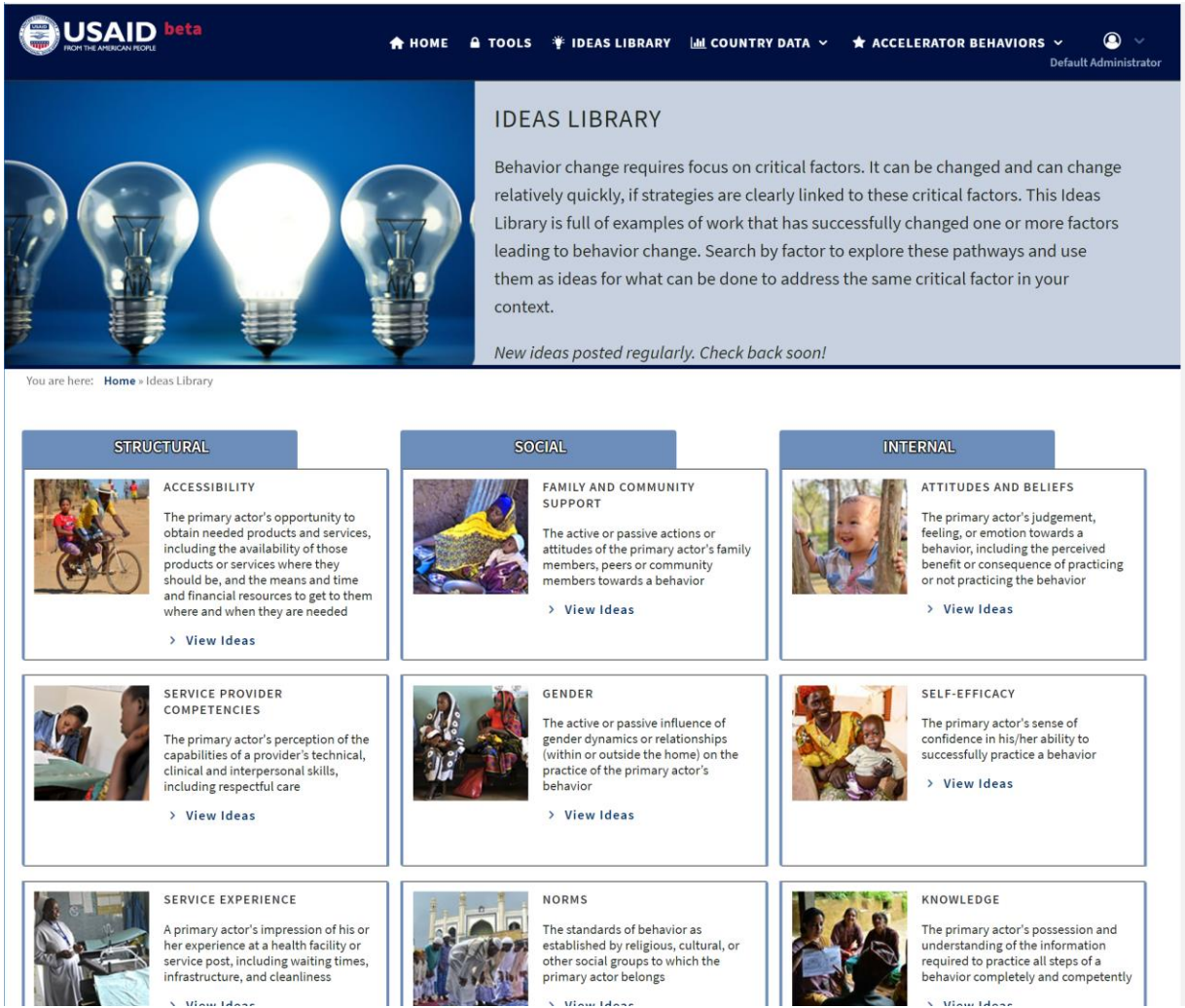
POSSIBLE PROGRAM STRATEGIES:

How might we focus our efforts based on this analysis?



Think | BIG Approach

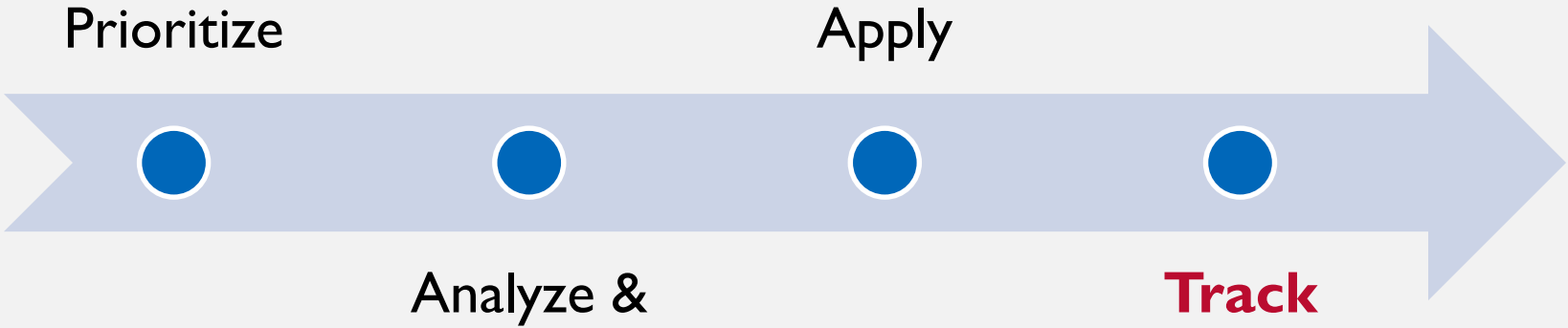




Apply

- Sample language for common programs
- Checklists
- Ideas library
- Standard indicators

Think | BIG Approach



Track

Priority Behaviors Dashboard

Delivery in Health Facility

Pregnant women deliver in a health facility with an equipped, qualified provider

67% decrease in uptake over 6 years
Last Update by Designer Account on 11/27/2017

Target:

25 %

Target Year:

2020

SAVE TARGET

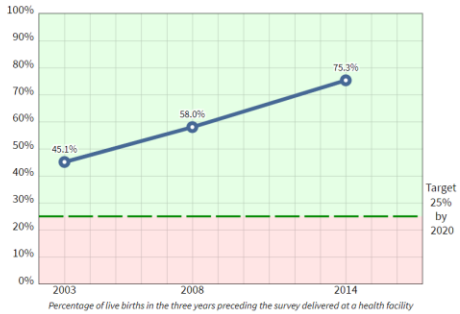
Percentage of live births in the three years preceding the survey delivered at a health facility

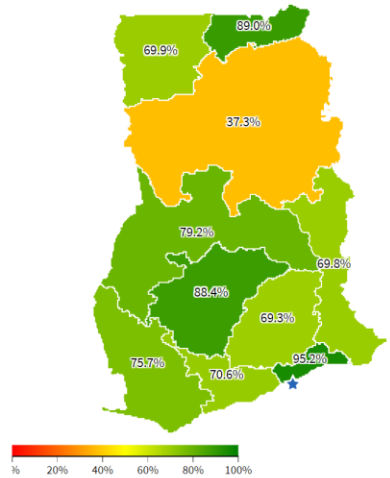
The DHS Program Indicator Data API, The Demographic and Health Surveys (DHS) Program

DOWNLOAD PIRS

Hide Subnational & Trend data

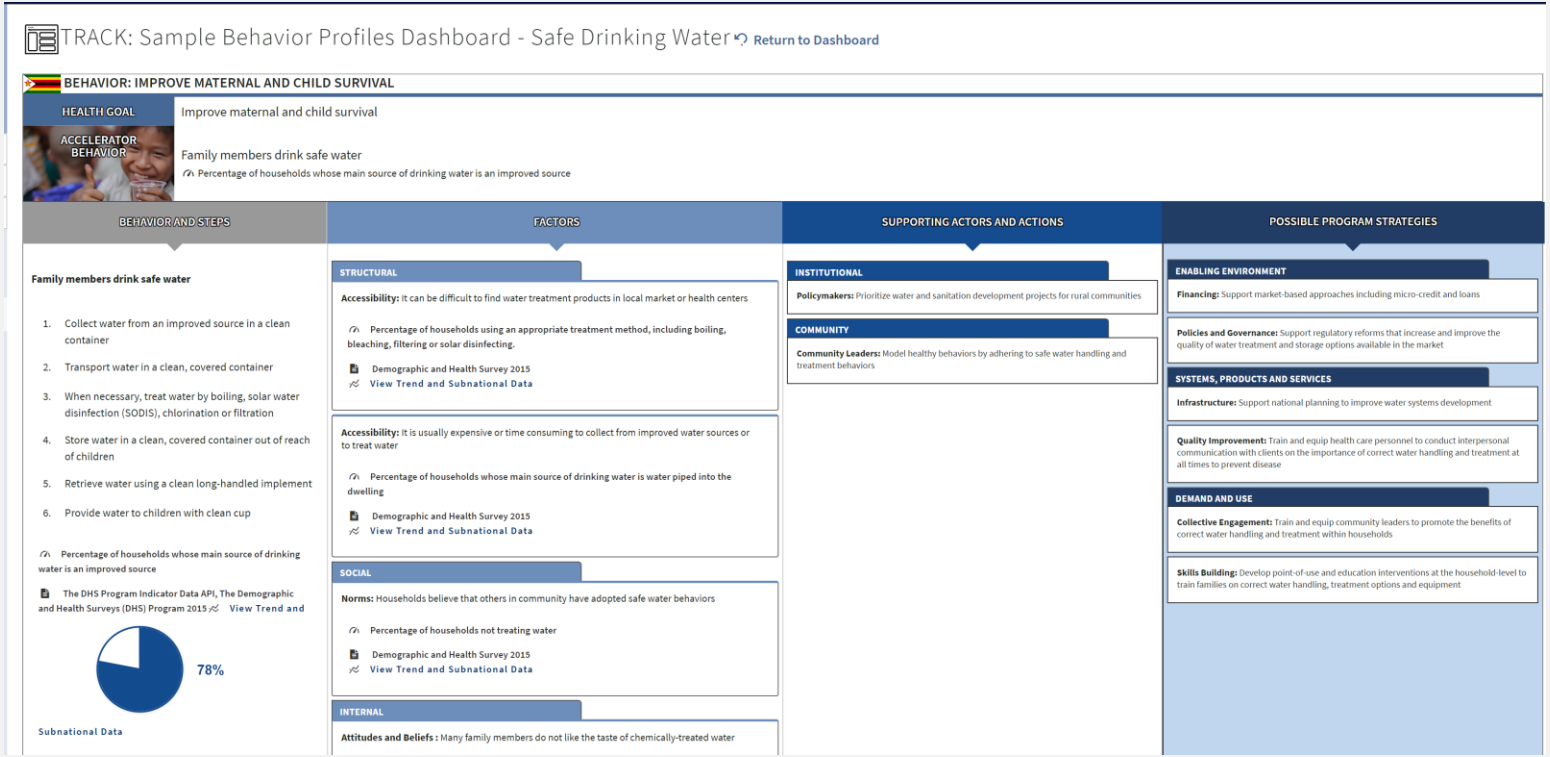
Numerator: Number of live births to women aged 15-49 years in the 3 years prior to the survey attended during delivery by skilled health personnel (doctor, nurse, midwife or auxiliary midwife) Denominator: Total number of live births to women aged 15-49 years occurring in three years prior to the survey.





Track

Behavior Profile Dashboard



Types of Adaptation

- Reorientation for design and evaluation
  - Behavior/beneficiary focused
  - Cross cutting (break through silos)
- Tools facilitate change in thinking
  - "Codify" new process
  - Output is a plan of action
- Identify indicators when identifying changes needed
  - Operational data to measure impact

USAID ACCELERATE |

Challenges

- Behavior change factors CAN be measured
  - How to collect/access data?
  - Open data is old, &/or not nuanced enough
  - "closed data" (i.e. M&E data) is not available

Data Needs

- Adaptive management needs granular, timely, **operational data**
- Data exists, but is
  - On paper registers
  - In mHealth apps
  - In EMRs
  - Not easy to access/pull

For more information

Visit the ACCELERATE website at
https://acceleratorbehaviors.usaid.gov

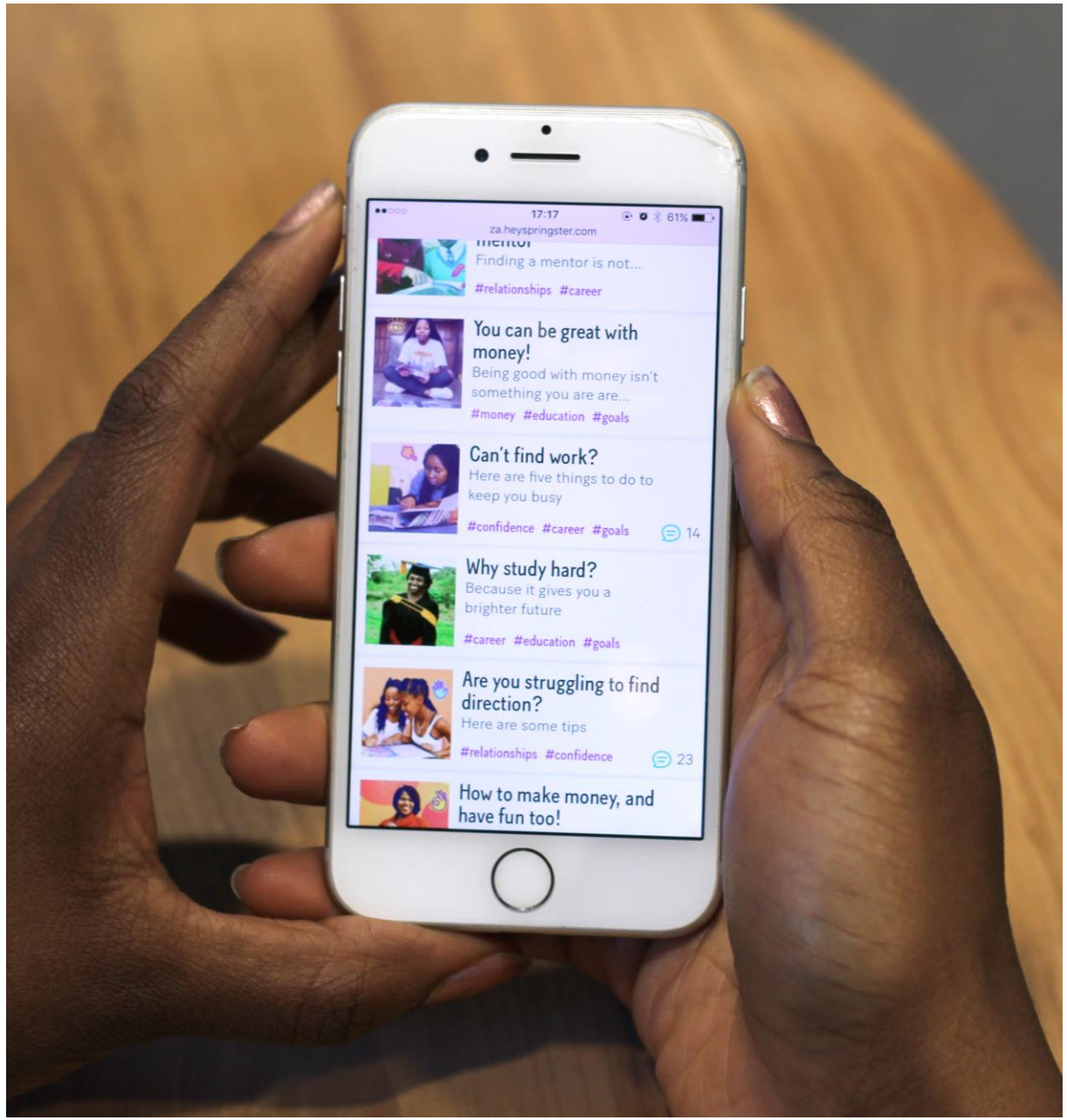
Contact us at
https://acceleratorbehaviors.org/contact

Let’s Talk About SRHR

Amy Green
Digital Monitoring Manager
Girl Effect

We build youth brands and mobile platforms to empower girls to change their lives

Springster digitally connects marginalised and vulnerable girls around the world, and puts essential, tailored information directly into their hands

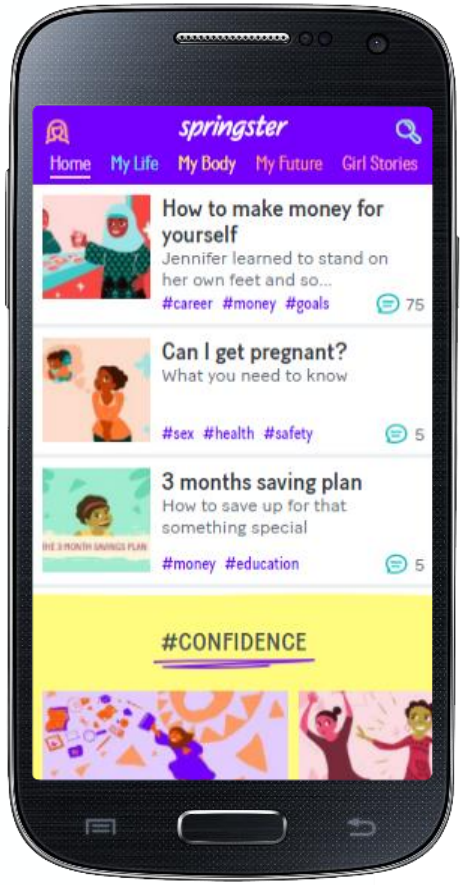


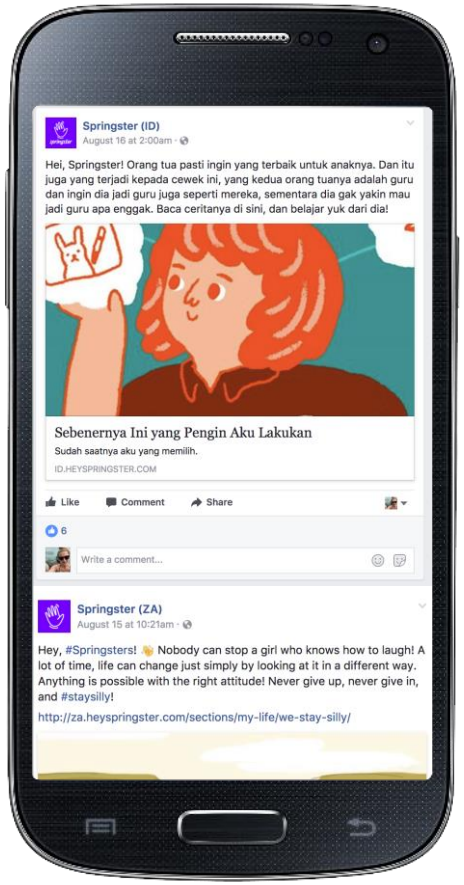
Springster goes wherever our target girls are online

A community-centric website with comment capabilities

Optimised for low bandwidth environment

Accessible free-of-charge through Free Basics





Global and country-specific Springster Facebook Pages

Reaching and acquiring new Springsters who have some mobile access

We've increasingly seen that there are some questions that are too private or taboo for girls to discuss openly online, even using a pseudonym

SOCIAL STIGMA

COMPLEX PEER RELATIONSHIPS

INCORRECT INFORMATION

Is a chatbot a channel where girls can get accurate advice on sensitive topics?

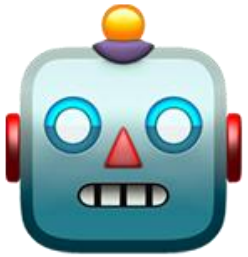
Is a chatbot globally relevant to girls we want to reach?

Big Sis

by

m.me/bigsisbyspringster

The best way to answer our questions is to just create the bot and adapt & optimise it over time



Our process to date

INITIAL DEVELOPMENT

Concept development

Co-creation workshops with girls from the target audience

Platform research and selection

PHASE 1

Dev Sprint

Create the bot

Publish

Test, learn & optimise

Reflect

Analyse detailed findings & consider future

PHASE 2

Dev Sprint

Make larger changes

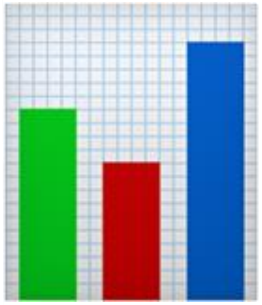
Publish

Test, learn & optimise

Reflect

Analyse detailed findings & consider future

We needed a functional, engaging bot that was a success in its own right, to generate the data to answer our overarching questions



We mapped out a measurement framework for our monitoring, so that we could track priority metrics and quickly respond to trends if necessary

	A	B	C	D
1	**Outcome (GE Question Bank/New)**	**Indicator (new)**	**Backend metric or measurement question**	**Tool**
24	Priority technical measures (not linked to particular outcome)	Total number of unique users	Number of unique users	Backend metric
25		Total number of sessions with chatbot	Number of sessions	Backend metric
26		Total users in our core demographic	Users providing their age, education, and answering other demographic questions	Backend metric
27		Conversion rate (also about tracking referral routes)	TBC once analytics platform confirmed. Potentially: #/% of conversions from promotions, #/% of	Backend metric

But there were also some hugely important emergent findings

USER CONVERSATIONS WITH THE CHATBOT

"I am typing!! Do you keep writing the same line over again?"

"Please lets talk later"

"Just go"

"I'm gonna sleep"

"Listen to me □ am not interested again"

"f*** off I hate big sis I will banned you b****"

With girls using and engaging with the bot, we can start to answer our bigger questions about the concept itself

How did with gather this data?

IN-FLOW QUESTIONS

Isolated questions asked during the flow of the conversation with Big Sis

“Do you have anyone else you can talk to about this?”

SURVEYS

Return users invited to complete a survey a number of days after their initial interaction with Big Sis

“Did you feel comfortable or uncomfortable sharing with Big Sis?”

QUIZZES

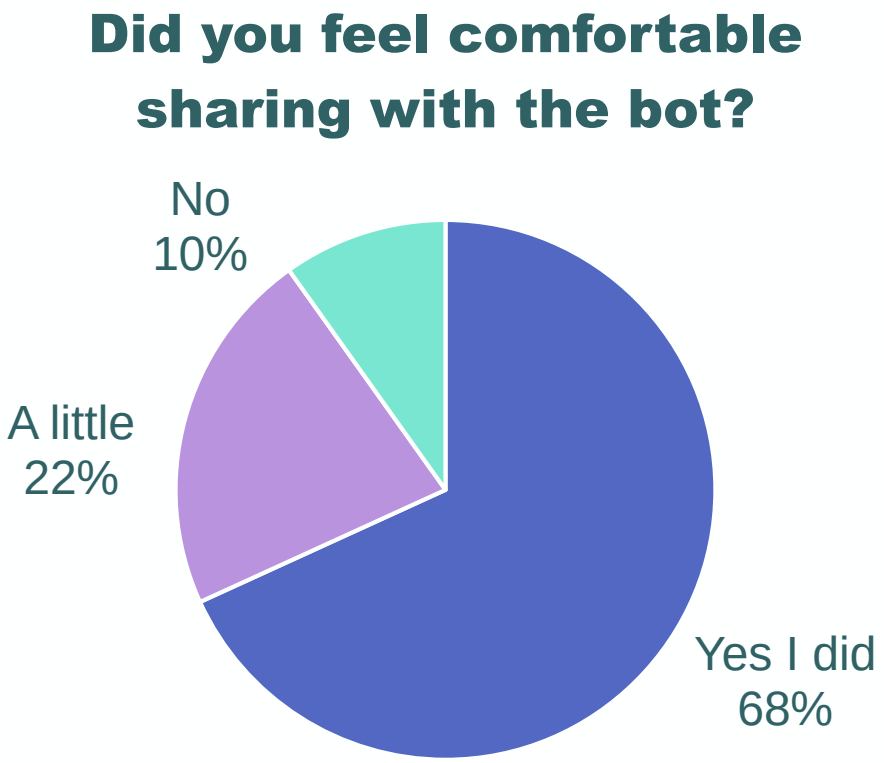
Users asked if they want to take a quiz before and after hearing Big Sis’ advice

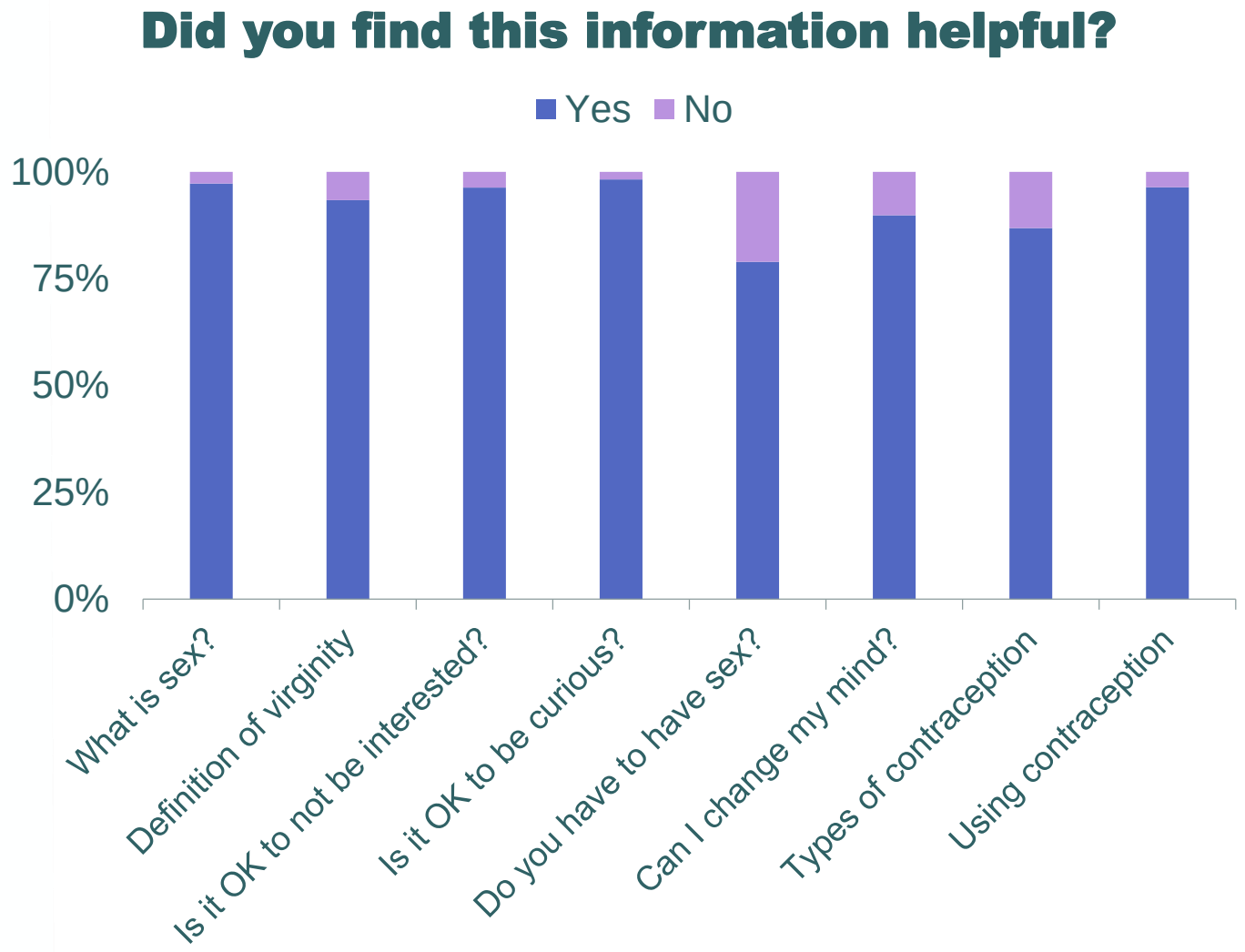
“True or False: sex happens *only* when a penis enters the vagina”

This was a massive learning area for us!

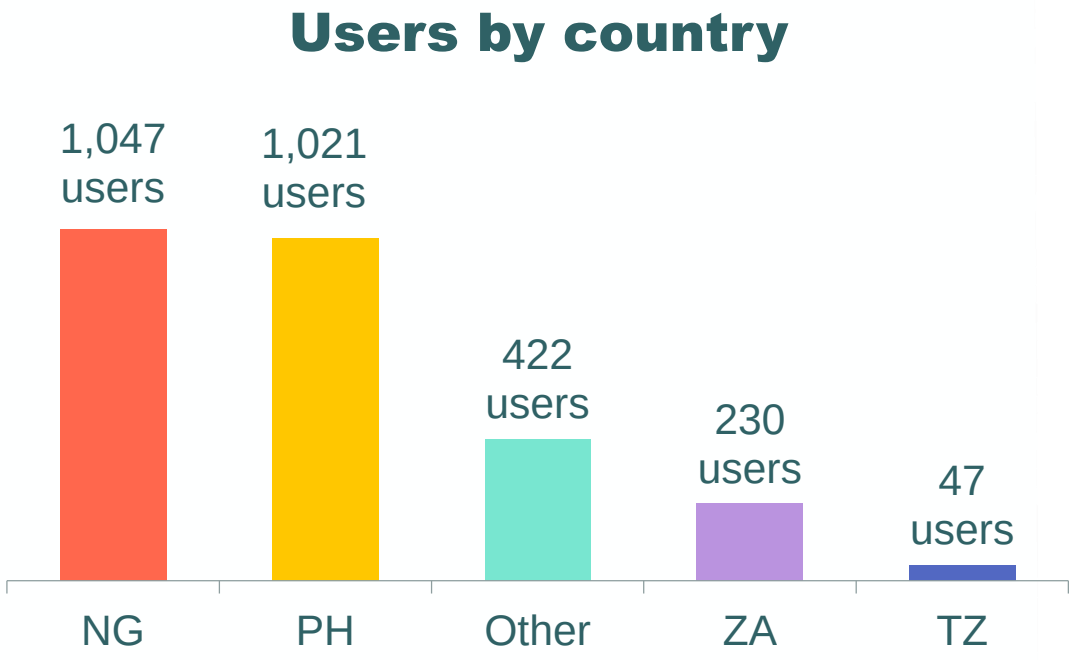
IN-FLOW QUESTIONS	SURVEYS	QUIZZES
✓	⚠	✓

Is a chatbot a channel where girls can get accurate advice on sensitive topics?





Is a chatbot globally relevant to girls we want to reach?



Message set completion by country

Message Set	NG	ZA	PH
What is sex?	88%	81%	77%
Definition of virginity	84%	72%	73%
Is it OK to not be interested?	80%	77%	65%
Is it OK to be curious?	78%	74%	74%
Do you have to have sex?	81%	78%	62%
Can I change my mind?	86%	89%	75%
Types of contraception	90%	90%	84%
Using contraception	85%	82%	70%

What next for Big Sis?

CONTINUE

Pursuing the chatbot platform as a means of delivering accurate, sensitive information to girls at scale

Developing the bot using an agile methodology, with ongoing tactical optimisation and periodic broader reflections and updates

START

Creating a localised, tailored version of the bot for a specific geography, reflecting both tech availability, platform popularity and content relevance in the chosen market

Considering further ways we can gamify the data collection process to be less extractive and more engaging for girls

STOP

Relying on survey data to inform product development and measure outcomes for digital interventions!

THANK YOU!

Email me:
amy.green@girleffect.org

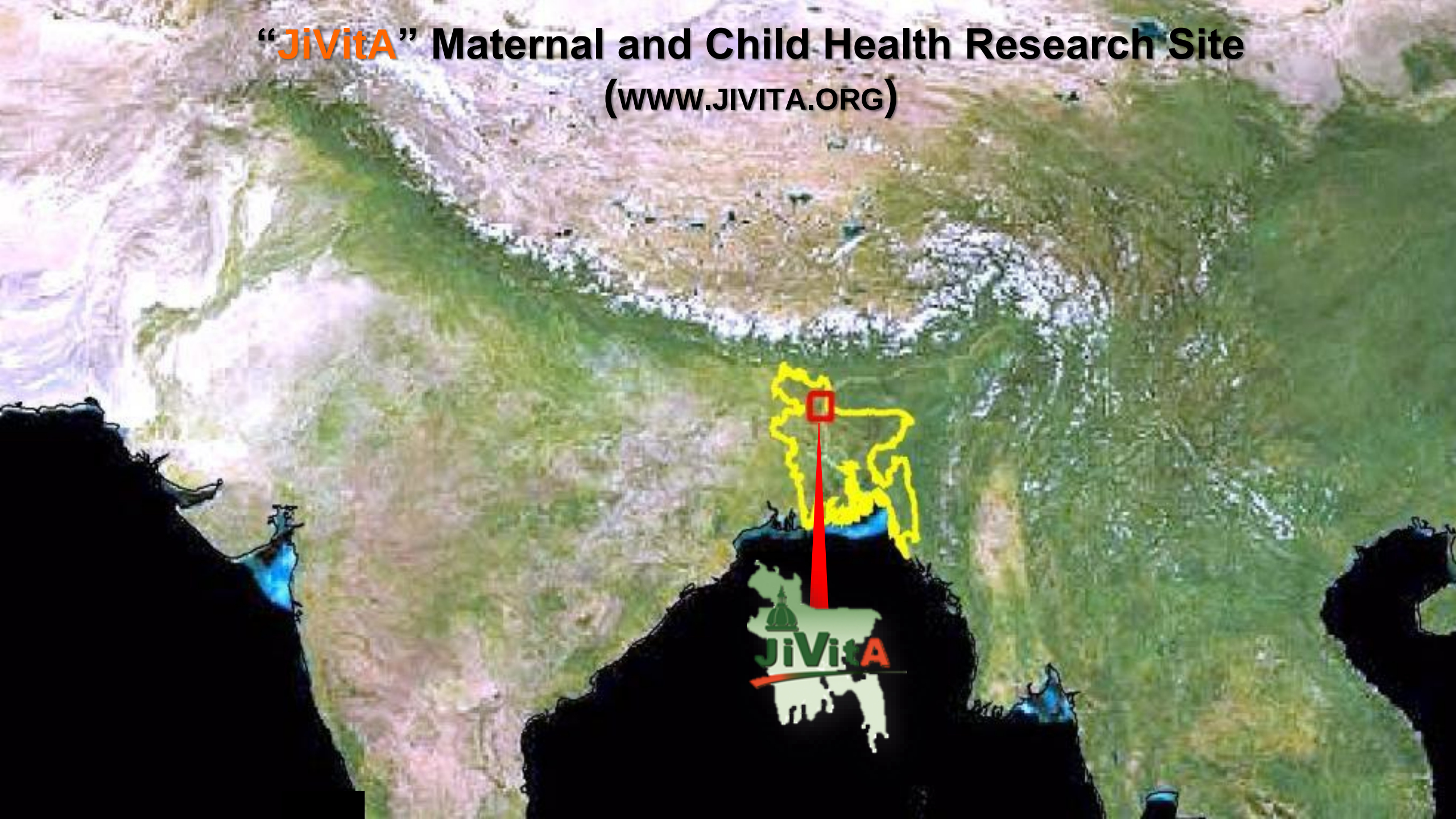
Targeted, Adaptive Monitoring of mCARE-II

Kelsey Alland

11 December 2018

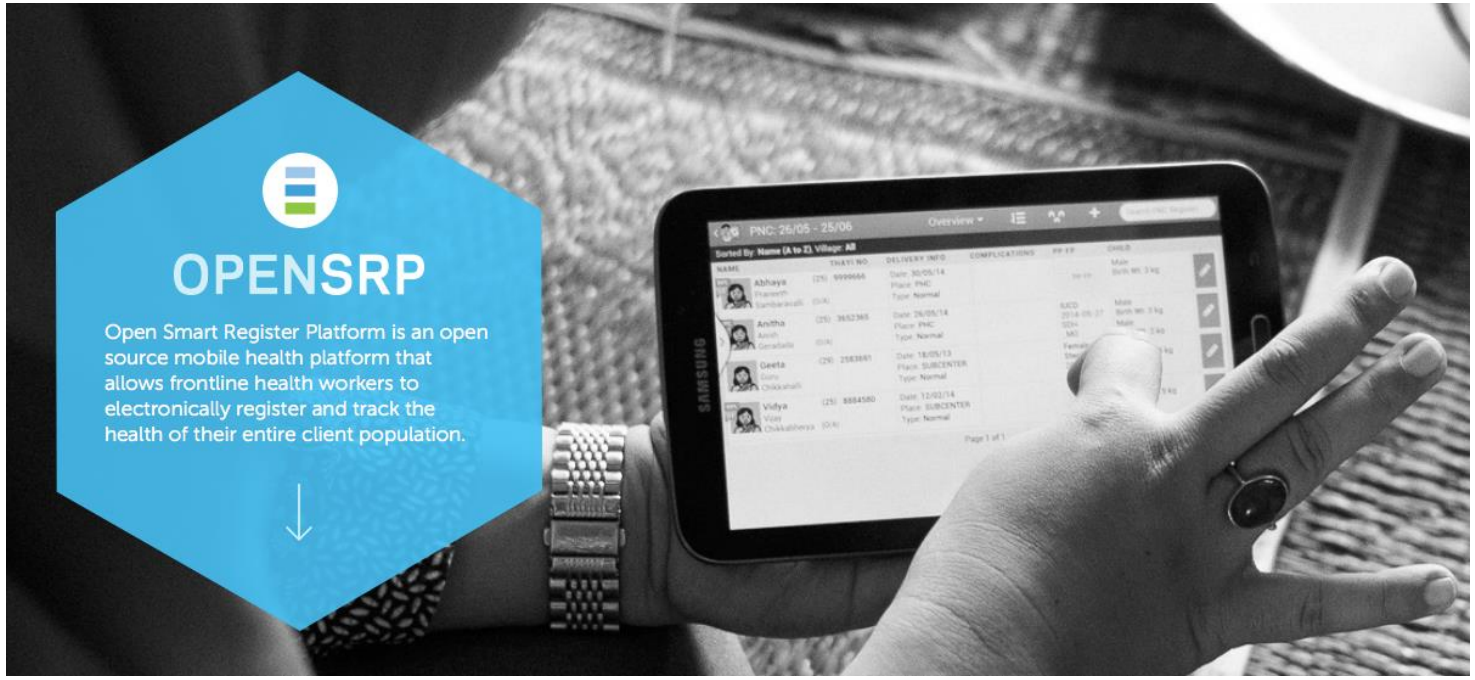
Global Digital Health Forum

"JiVitA" Maternal and Child Health Research Site
(WWW.JIVITA.ORG)

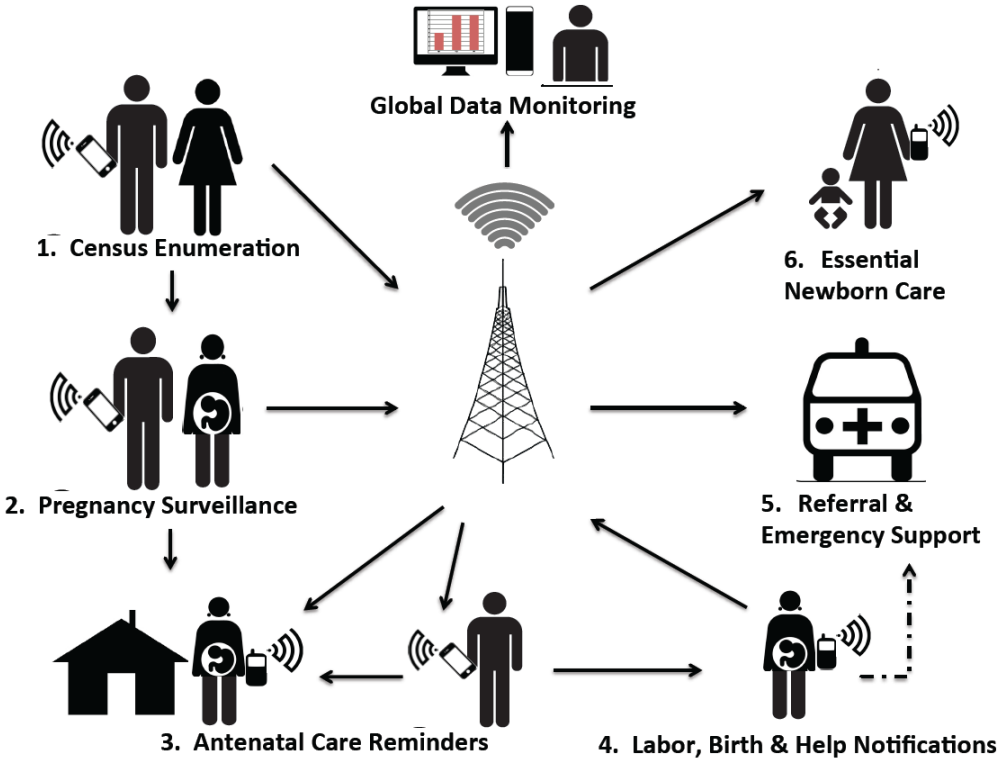


What is mCARE-II?

- Set of Digital Health Interventions on the OpenSRP Platform
- RCT evaluating mCARE-II when delivered by the Gov health workforce



SmartRegister.org



The mCARE-II Randomized Trial using OpenSRP

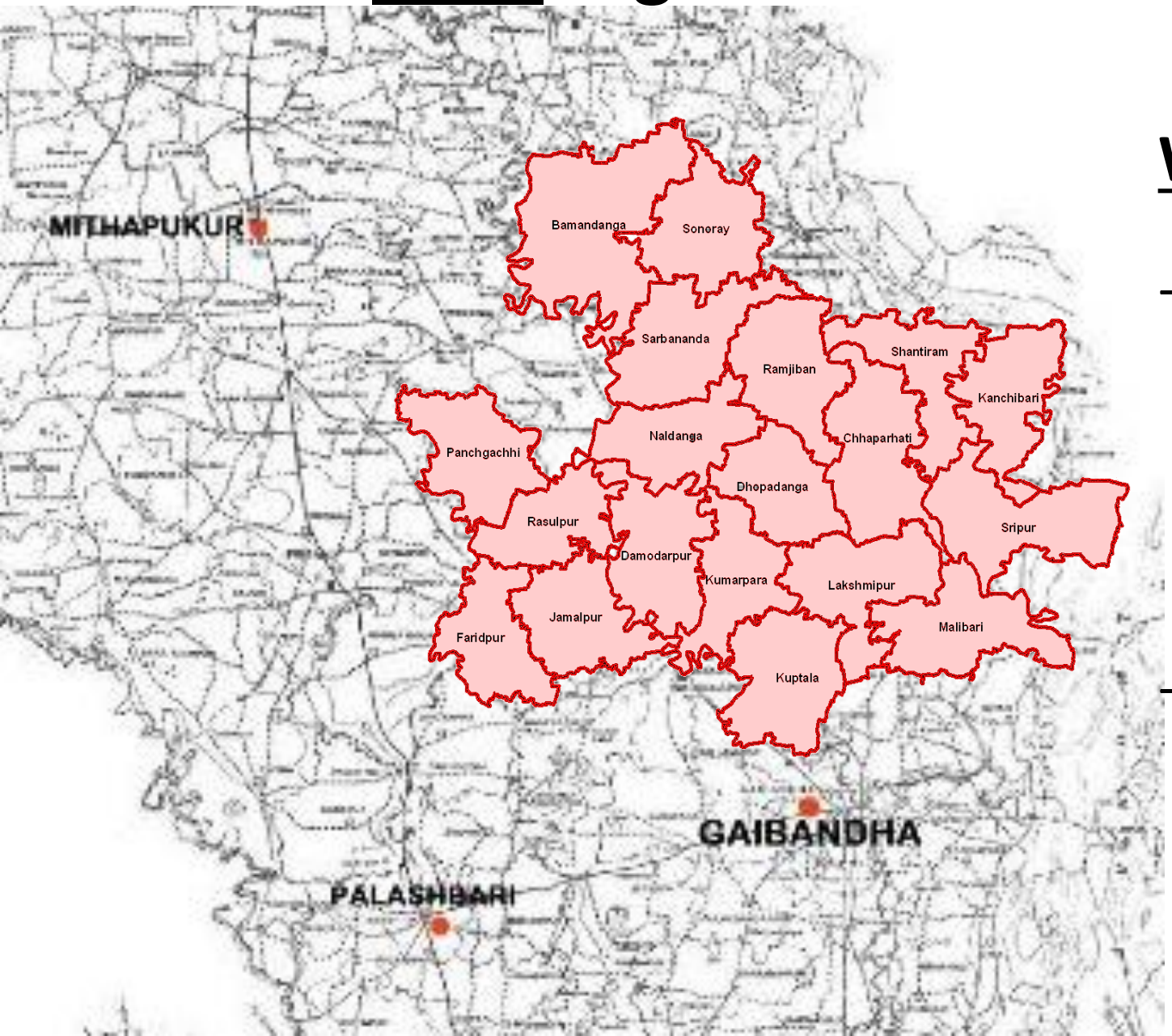
- Household Surveillance and Enumeration
- Census and Eligible Couple Enumeration
- Pregnancy Surveillance
- Antenatal Care Reminder Visit scheduling for CHWs
- Postnatal Care Reminder Visit scheduling for CHWs
- Essential Newborn Care Reminder
- Risk Factor Assessment
- Prioritization of Clients
- SMS Reminders for care to Clients
- Birth Notification from Clients / Families

Large Scale of Field Operations

Field Work:

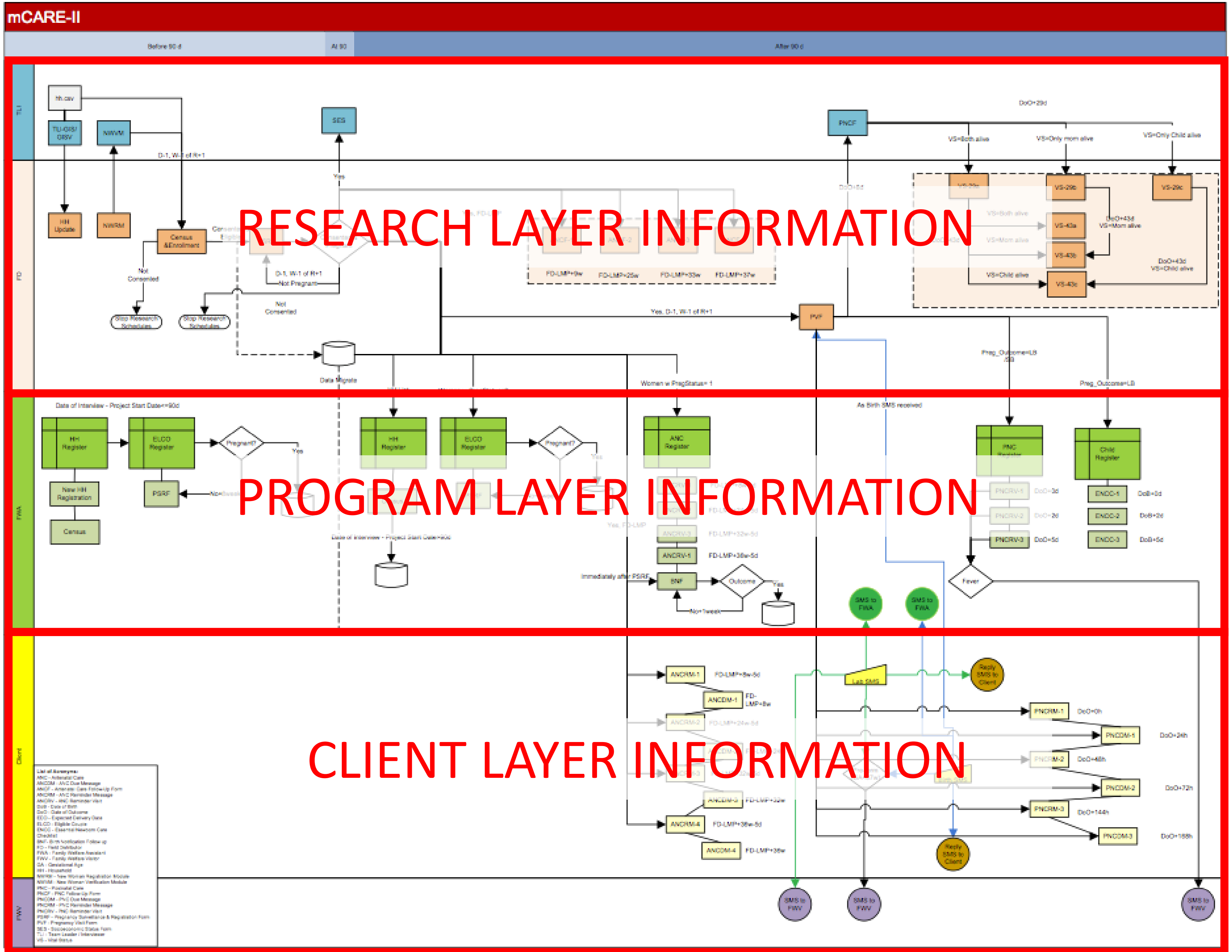
- **Household Surveillance**
  - ~650,000 people
  - ~566 village clusters
- **Census & Pregnancy Surveillance**
  - ~138,000 women of repro. age
- **Enrollment and Follow-Up**
  - 22,300 Pregnancies
  - 18,000 Newborns

~700 Digital Health Users in mCARE-II



Workforce:

- **GoB Community Health Workers**
  - 100 CHWs (FWAs)
  - 50 FWAs Randomized to mCARE-II
  - 18 Frontline Supervisors (FPIs)
- **JiVitA Research Workers**
  - 566 Frontline Research Workers
  - 66 Field Interviewers


mCARE-II
RESEARCH LAYER INFORMATION
PROGRAM LAYER INFORMATION
CLIENT LAYER INFORMATION
SES
PNCF
PVF
Census &Enrollment
HH Register
ELCO Register
ANC Register
PNC Register
Child Register
PSRF
Census
BNF
ANCRM-1
ANCDM-1
ANCRM-4
ANCDM-4
PNCRM-1
PNCDM-1
PNCRM-3
PNCDM-3

The Research Layer

Worker Graduation Rounds

FD Graduation Round

Test number: One

Suppose one day you were moving in your sector for mCARE-II interviev
HH ID 1001. Then you started interview for mCARE-II.

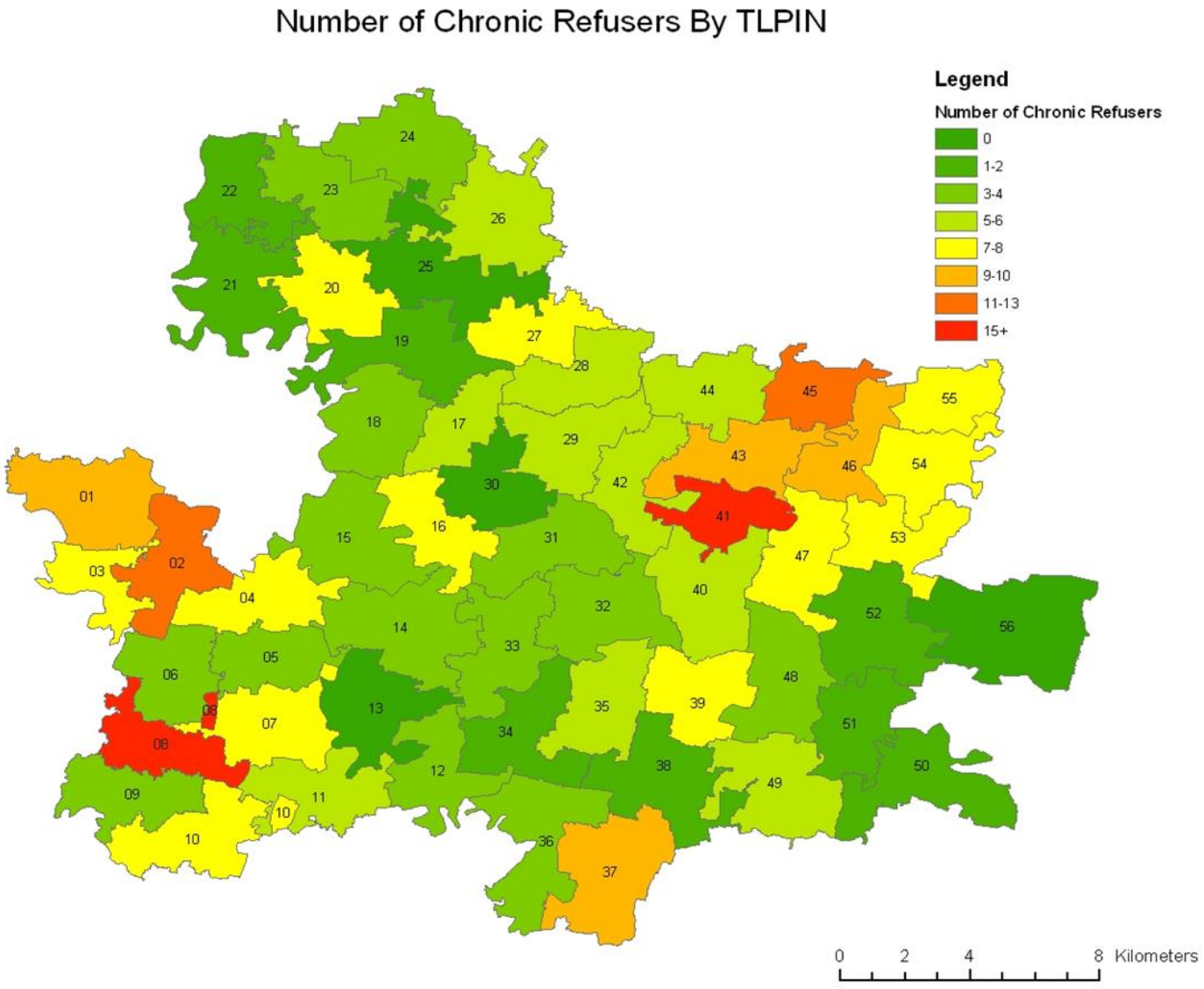
You first started HH Update Form. The household is situated in unit 2
Mauza -Kishamot, Naldanga Union of Sadullahpur sub-district. There is a
door of this household and JiVitA HH is also written in red colour on th
Karim Mia, who lives here with 8 members including him. You saved the

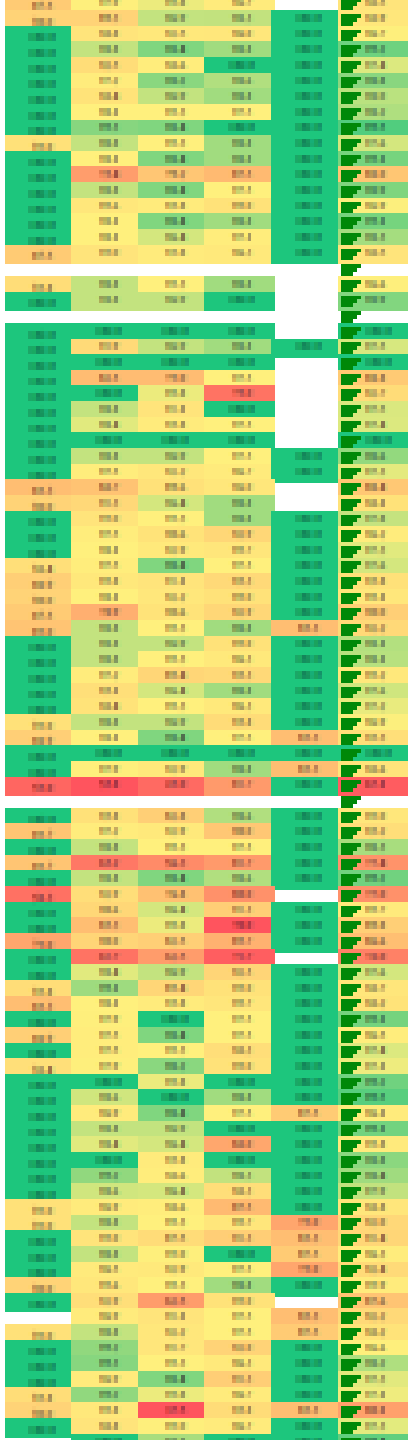
You again entered into the schedule folder and found a schedule of a n
same HH; the name of her is Shamima with age 24 and her husban
greetings with the woman, you read the consent paper to her. Afte
consented and you started the interview. The woman has regular me
permanent family planning method. Her husband pulls rickshaw in Dhaka but comes home for a week every month. Her husband didn't adopt any permanent family planning method too. When you requested the woman to bring her national ID card and birth registration card, she searched the card for a long time and then she brought a

Training Score 1: % Agreement

HH Number	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010
Woman's Name	SHAMIMA	JOSNA AKTER	AKLIMA	ASHRAFUN NESA	JEBUN NESA	MARZINA	JOBAIDA	HASINA BEGUM	JARINA	MORIOM
Husband's Name	ZIHAD	SHAHAB UDDIN	SHAMSUR RH	KUTUB UDDIN	ABUL HASHEM	NUR HOSSEN	SHAJAHAN	LUTFAR RAHMAN	ABDUR ROUF	ROUF
Age	24	28	18	44	26	30	21	34	16	38
Date of Interview	Auto fill	Auto fill	Auto fill	Auto fill	Auto fill	Auto fill	Auto fill	Auto fill	Auto fill	Auto fill
Census Visit Status	Met	Met	Met	Met	Met	Met	Met	Met	Met	Met
mCARE Surveillance Consent Status	Consented	Consented	Consented	Consented	Consented	Consented	Consented	Consented	Consented	Consented
Take a picture of the woman's signature on the Consent for Surveillance	Image of signature	Image of signature	Image of signature	Image of signature	Image of signature	Image of signature	Image of signature	Image of signature	Image of signature	Image of signature
Are you currently menopausal or sterilized?	No	No	No	No	No	No	No	No	No	Yes
Are you currently living with your husband?	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Is the husband alive?	-	-	-	-	-	Don't Know	-	-	-	-
Is the husband sterilized?	No	No	No	No	No	Don't Know	No	Don't know	No	No
Which identification card does the woman have?	National ID	Birth Certificate	Birth certificate	National ID	National ID	-	Birth Certificate	National ID	Birth Certificate	-
Enter Woman's National ID Number	453956085614 37251	-	-	852491012435 6	865465904326 7	-	-	3624659430 267	-	-
Enter Woman's Birth Registration ID	-	513489543567 89215	678014567245 61964	-	-	-	5341450674 5261925	-	2340451745 2319848	-
Picture of ID	Image of ID	Image of ID	Image of ID	Image of ID	Image of ID	-	Image of ID	Image of ID	Image of ID	-
Does your household own a mobile phone?	yes	Yes	Yes	Yes	Yes	-	No	Yes	Yes	-
Who carries the phone for majority part of the day?	Woman herself	Husband	Woman herself	Woman herself	Husband	-	-	Children	Husband	-
Is the phone in working condition right now?	Working	Working	Working	Working	Not working	-	-	Working	Working	-
What is the available balance on your phone as of today?	51-100 Tk	Don't Know	51-100 Tk	101-200 Tk	Don't Know	-	-	Don't know	0-50 Tk Tk	-
Can you read an SMS?	Yes	No	Yes	Yes	No	-	No	Yes	Yes	-
Can you send an SMS?	No	No	No	Yes	No	-	No	No	YEs	-
What is your average monthly expense for mobile phone calls and messages?	51-100 Tk	151-200 Tk	51-100 Tk	151-200 Tk	201-300 Tk	-	0-50 Tk	51-100 Tk	Don't know	-

Visualizations





The Intervention Layer

Government-Led Accountability

Upazila (# of FWAs)	Union	FWA's name	Supervisor	Without Target Period	With Target Period
				# of days practiced - # of data sent	# of days practiced - #of HH data sent
Sadar (7)	Kuptola	Shahanaz Parvin	Md. Kamrul Hasan	12 – 40	6 – 57
		Ferdousi – 1		3 – 35	4 – 28
		Shirina Akter		6 – 19	5 – 24
	Malibari	Shahzadi Sultana	Md. Golam Rahman	4 – 11	4 – 18
		S M Sudha Rani Mandal		3 – 8	4 – 31
	Laxmipur	Nazmunnahar	Md. Abu Sufian Miah	19 – 37	0 – 0
		Anju Monoara		31 – 77	8 – 48
Sadullapur (15)	Naldanga	Jorina Begum	Md. Mahmud Sharif	12 – 49	8 – 114
		Nasima Begum		12 – 26	8 – 68
		Shantona		7 – 13	9 – 100
	Jamalpur	Aklima Begum	Md. Moshiur Rahman	6 – 24	6 – 47
		Nasrin Akter		8 – 14	3 – 49
		Rokeya Begum		5 – 15	6 – 52
	Kamar Para	Prativa Rani	Vobesh Chandra Sarker	17 – 66	6 – 77
		Rana Rani Sarker		18 – 43	9 – 93
		Sumitra Rani		26 – 73	9 – 64
	Damodarpur	Jinnatunnahar Khanam	Anwar Hossain	6 – 25	7 – 74
	Faridpur	Aktara Begum	Gopal Chandra Sarker	13 – 34	6 – 64
		Morsheda Begum		5 – 14	9 – 20
		Ferdousi Begum		9 – 19	9 – 78
	Rasulpur	Khandoker Hosne Ara	Md. Moshiur Rahman	8 – 29	1 – 2
		Anjumna Ara Begum		9 – 29	7 – 138
Sundarganj (24)	Kanchibari	Fatema Khatun	Hedayet Hossain	15 – 63	4 – 46
		Hasina Akter		5 – 11	6 – 35
		Rasheda Begum		12 – 31	1 – 3
		Parvin Begum		17 – 40	6 – 40
	Bamandanga	Monoara Begum	Mozahidul Islam	25 – 76	6 – 82

Government-Led Accountability

Monitoring Report on Practice with Open-SRP application of FWAs
21st January, 2016
mPower Social Enterprises Ltd.

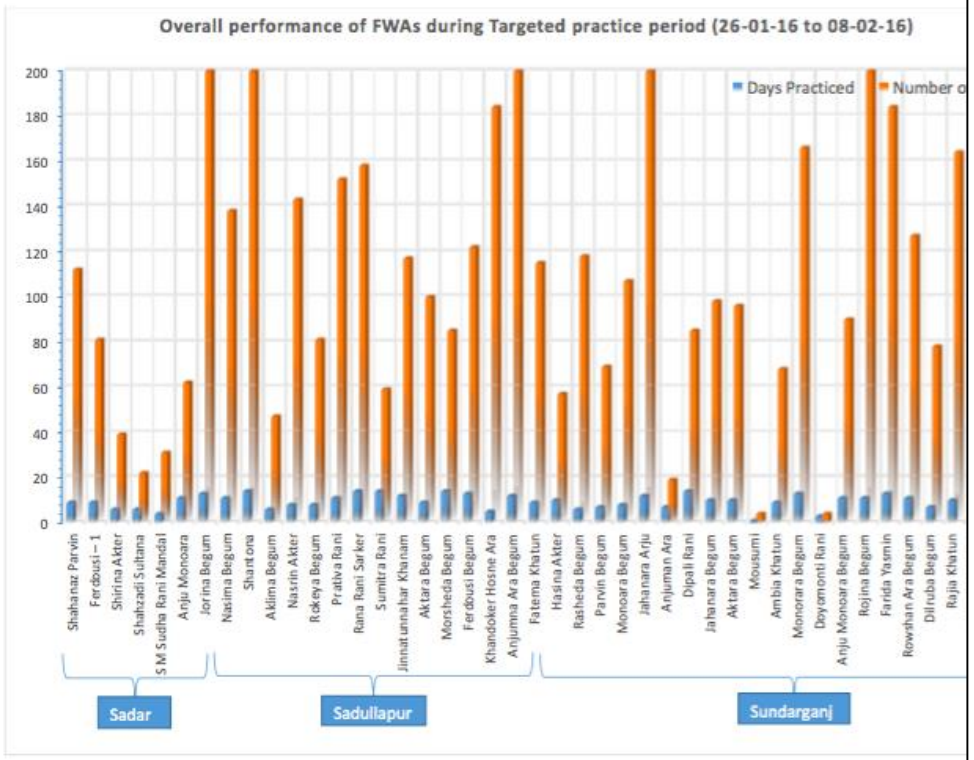
This report focuses on the practice status o
from 8th January to 20th January, 2016. The t
which lies in the 2nd and 3rd week of the mo
generated comma-separated values (CSV) f

New Activities in the field:

- The Field Coordinator of the project st
  them with MUAC tape and teach them

Practice time Analysis:

Practice Status
No Practice
1 - 2 days
3 - 4 days
5 - 6 days
7 – 8 days
More than 8 days



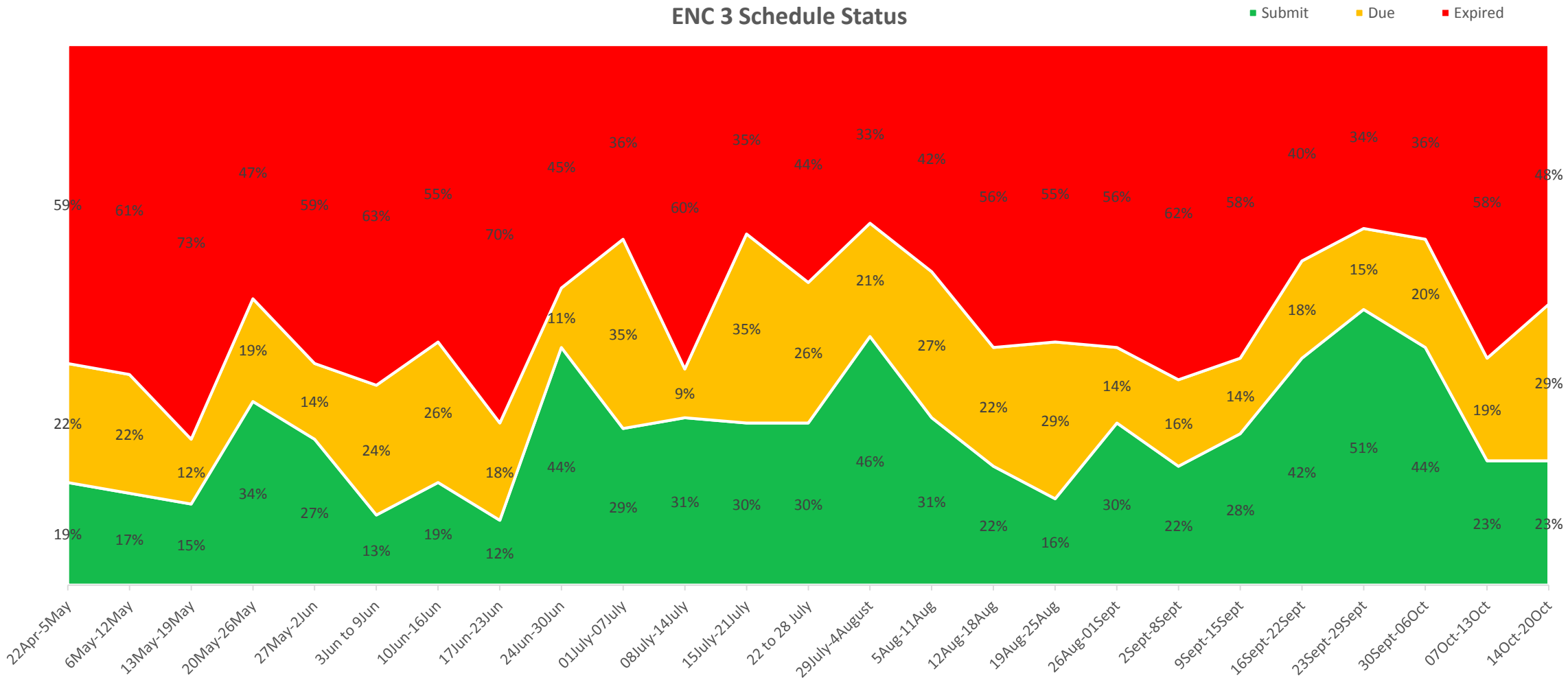
Prepared by:

ANNEX: FWAs' total number of sent data from 26th January to 08th February, 2016 are as follows:

Upazila (# of FWAs)	Union	FWA's name	Supervisor	26-01-16 to 03-02-16 (9 Days)		04-02-16 to 08-02-16 (5 Days)		26-01-16 to 08-02-16 (14 days)	
				# of days	# of data	# of days	# of data	# of days	# of data
Sadar (6)	Kuptola	Shahanaz Parvin	Md. Kamrul Hasan	6	57	3	55	9	112
		Ferdousi – 1		4	28	5	53	9	81
		Shirina Akter		5	24	1	15	6	39
	Malibari	Shahzadi Sultana	Md. Golam Rahman	4	18	2	4	6	22
		S M Sudha Rani Mandal		4	31	0	0	4	31
	Laxmipur	Anju Monoara	Md. Abu Sufian Miah	8	48	3	14	11	62
Sadullapur (15)	Naldanga	Jorina Begum	Md. Mahmud Sharif	8	114	5	104	13	218
		Nasima Begum		8	68	3	70	11	138
		Shantona		9	100	5	108	14	208
	Jamalpur	Aklima Begum	Md. Moshiur Rahman	6	47	0	0	6	47
		Nasrin Akter		3	49	5	94	8	143
		Rokeya Begum		6	52	2	29	8	81
	Kamar Para	Prativa Rani	Vobesh Chandra Sarker	6	77	5	75	11	152
		Rana Rani Sarker		9	93	5	65	14	158
		Sumitra Rani		9	64	5	53	14	59
	Damodarpur	Jinnatunnahar Khanam	Anwar Hossain	7	74	5	43	12	117
	Faridpur	Aktara Begum	Gopal Chandra Sarker	6	64	3	36	9	100
		Morsheda Begum		9	20	5	65	14	85
		Ferdousi Begum		9	78	4	44	13	122
	Rasulpur	Khandoker Hosne Ara	Md. Moshiur Rahman	1	2	4	182	5	184
		Anjumna Ara Begum		7	138	5	172	12	310
Sundarganj (24)	Kanchibari	Fatema Khatun	Hedayet Hossain	4	46	5	69	9	115
		Hasina Akter		6	35	4	22	10	57
		Rasheda Begum		1	3	5	115	6	118
		Parvin Begum		6	40	1	29	7	69
	Bamandanga	Monoara Begum	Mozahidul Islam	6	82	2	25	8	107
		Jahanara Arju		8	335	4	113	12	448
		Anjuman Ara		7	19	0	0	7	19
	Sarbonanda	Dipali Rani	Md. Rajib Chowdhury	9	50	5	35	14	85

Prepared by: mPower

ENC 3 Visit Status
(07th October'18-20th October'18)



Strategic Phase-In of Dashboards for Decisions