

CARE COMMUNITY HUB Process Documentation Findings *Round 2*

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BACKGROUND

Process Documentation Objectives

This document presents findings from Round Two of the Process Documentation (PD) conducted from **July to August 2015**, in conjunction with monitoring data and an overview of CCH program implementation.

1. Assess **how well the CCH activities adhered to the original design of the project during implementation** (fidelity) including the level of activities delivered and participation (dose delivered and received/reach), the level of satisfaction among participants, and quality of program management.
2. **Examine the proposed change pathways in the theory of change** to document the emergence of preconditions, intermediate and direct outcomes, explore the underlying drivers of change, and assess the integrity of the project design, focusing on both CHNs and supervisors.
3. **Examine the role of the context** - including the health system - on the effect of the CCH pilot.
4. Provide data during the course of implementation **to facilitate real-time, or close to real-time, feedback to program staff** thus facilitating a continuous learning process and program adaptation.

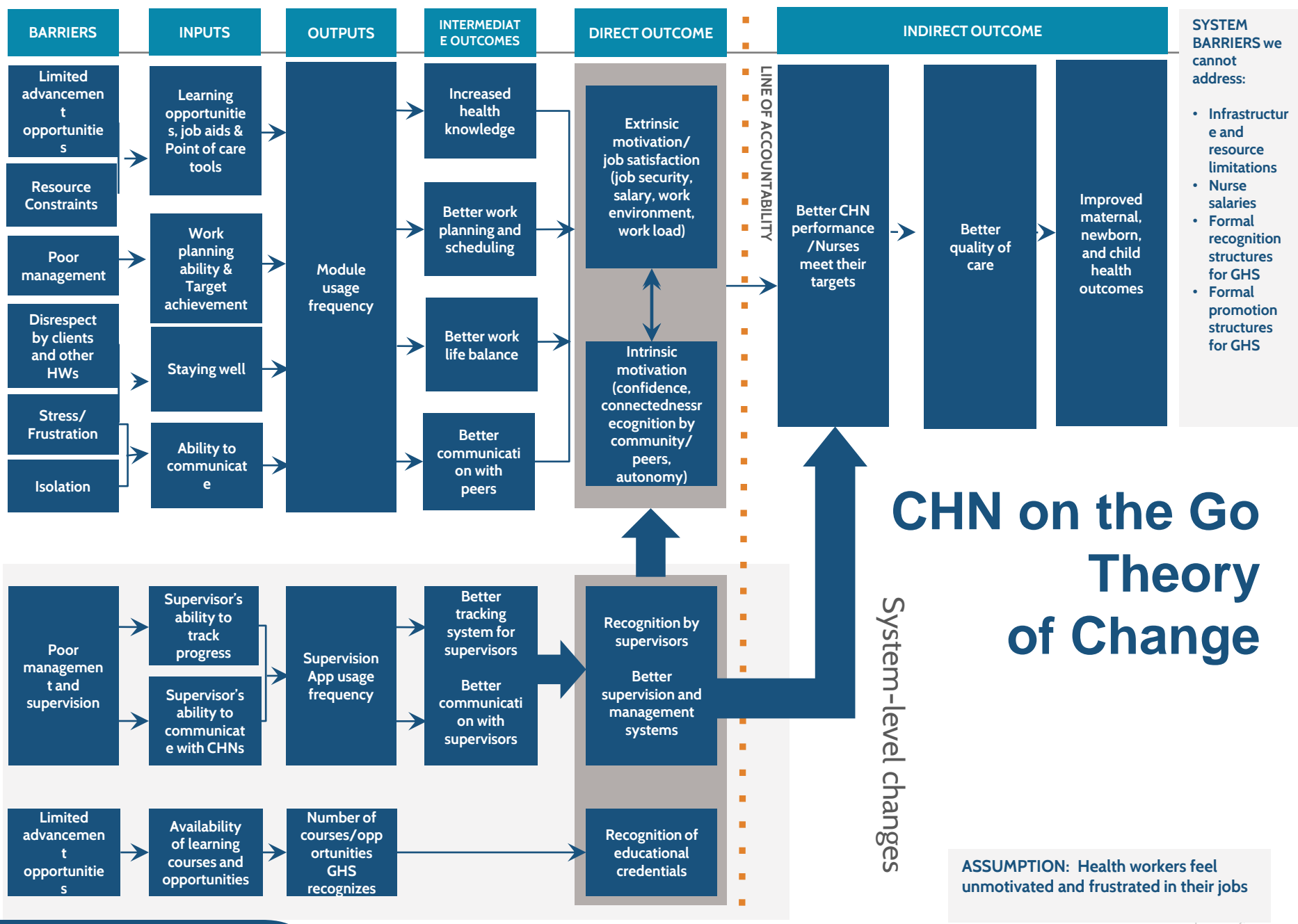
Key Questions: What are we trying to learn?

1. How are the CHN ON THE GO mobile application and system level interventions being applied?

- To what extent were they implemented as planned?
- What were some of the barriers and supportive factors that affected implementation?

2. Are the expected results at the individual level (CHN, supervisor), and system level (district, region) emerging as foreseen in the pathways in the TOC?

- What factors and processes are driving changes in health worker knowledge, perceptions, motivation, and behavior at this stage of project implementation?
- What is the extent of CHN exposure to the modules and perceptions of their experience?
- What is the level of CHNs overall satisfaction with the CHN ON THE GO app?
- What is the perceived link between exposure to the modules and changes in CHN learning/knowledge, work scheduling and environment, relationship with supervisors, connectedness, confidence, and external recognition as identified by pathways in the TOC?
- What are the systemic changes in learning and supervisory systems which are associated with introduction of the modules?



Hypotheses & Change Pathways

At the individual level



CHNs will be able to make use of learning opportunities such as e-courses through the learning center, leading to **an increase in clinical knowledge** and thus improve their ability to perform their job. This has implications for intrinsic motivation (greater education, confidence in their abilities) and extrinsic motivation (recognition by community and supervisors).



CHNs will be able to use the event calendar module enabling them to **document, plan and review their work schedule, coordinate with their peers and supervisors, and perform their job better meeting pre-established targets**. This has implications for intrinsic motivation (a more manageable workload/improved work environment) and extrinsic motivation (recognition by supervisors).



Access to the “staying well” module will provide CHNs with useful information that will help **improve their work/life balance and general well being**. This has implications for intrinsic motivation (better work environment).



CHNs will be able to access necessary clinical information in the point of care module. The module will provide CHNs with **an improved decision support system** and thus improve their ability to perform their job. Other job aids and resources will also be made available. This has implications for intrinsic motivation (greater knowledge, confidence in their abilities) and extrinsic motivation (recognition by community).



CHNs will document all their achievements with regard to clinical targets met in the achievement calendar. This will assist in **better communication with their supervisors** who will access this information through the supervisory app either through the computer (at facilities) or app.



Through WhatsApp groups set up within the districts, CHNs will also be able to better **communicate, coordinate and share ideas** with their colleagues and supervisors. This has implications for intrinsic motivation (better work environment and connectedness).

Hypotheses & Change Pathways

At the system level



Use of the supervisory app will give supervisors the ability to **monitor** CHN workloads, schedule, and achievements resulting in a **better supervision tracking and management system** –and increased CHN-supervisor communication and mentoring in the long run.



Increase in the number and type of courses offered and their acceptance by GHS as meeting educational qualifications of CHNs results in an **increase in educational credentials** of CHNs, and **greater recognition** by supervisors and the health system.

What we learned from Round 1

- ✓ Conducted in November 2014
- ✓ Nurses' favorite modules were



- ✓ WhatsApp widely used



- ✓ Overall decrease in CHN workload
- ✓ Gaps around link between CHN on the Go app and supervisors

The first round of CCH process documentation was conducted in **November 2014**. Overall, both CHNs and supervisors across all districts were excited to use the CHN on the Go app; however, they faced technical issues with the phone, network, and battery.

Most popular: Among CHNs, the most popular modules in the app were the Learning Center, Planner, and the Point of Care. CHNs also widely used WhatsApp.

Workload: The app enabled CHNs to plan and share their daily itineraries, to communicate with other CHNs and supervisors, and increased their clinical knowledge. CHNs felt that the app decreased their workload.

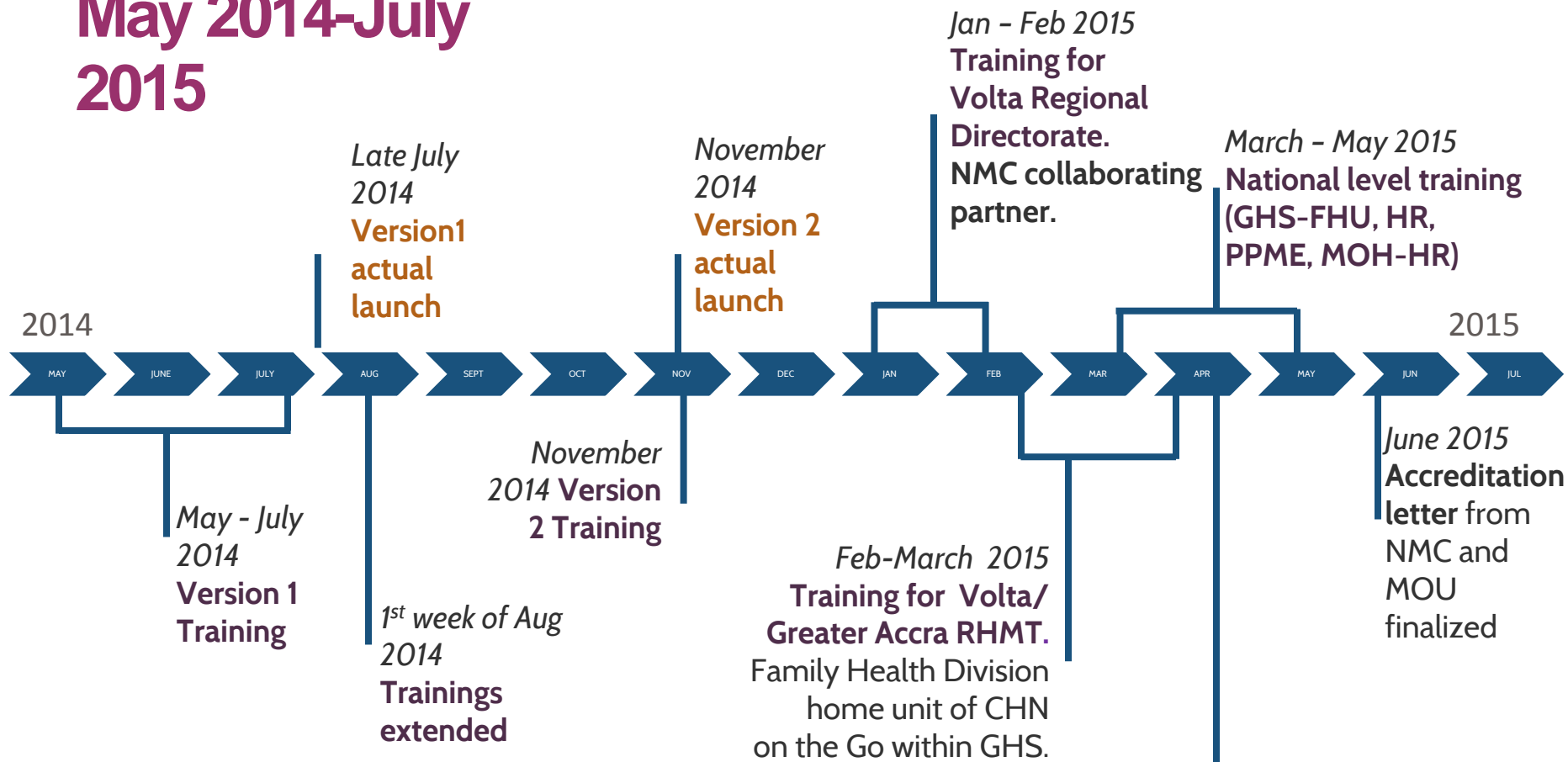
Connecting nurses and supervisors: CHNs felt that it also improved their relationship with other CHNs, supervisors, and clients; CHNs felt that they did not receive any recognition from supervisors for meeting their targets or performing their roles.

Supervisors liked the supervisor app in principle but not all were happy with its functioning.

Discussions related to motivation did not emerge from this round of Process Documentation; therefore, it was explored more in round two and further in round three.

METHODOLOGY

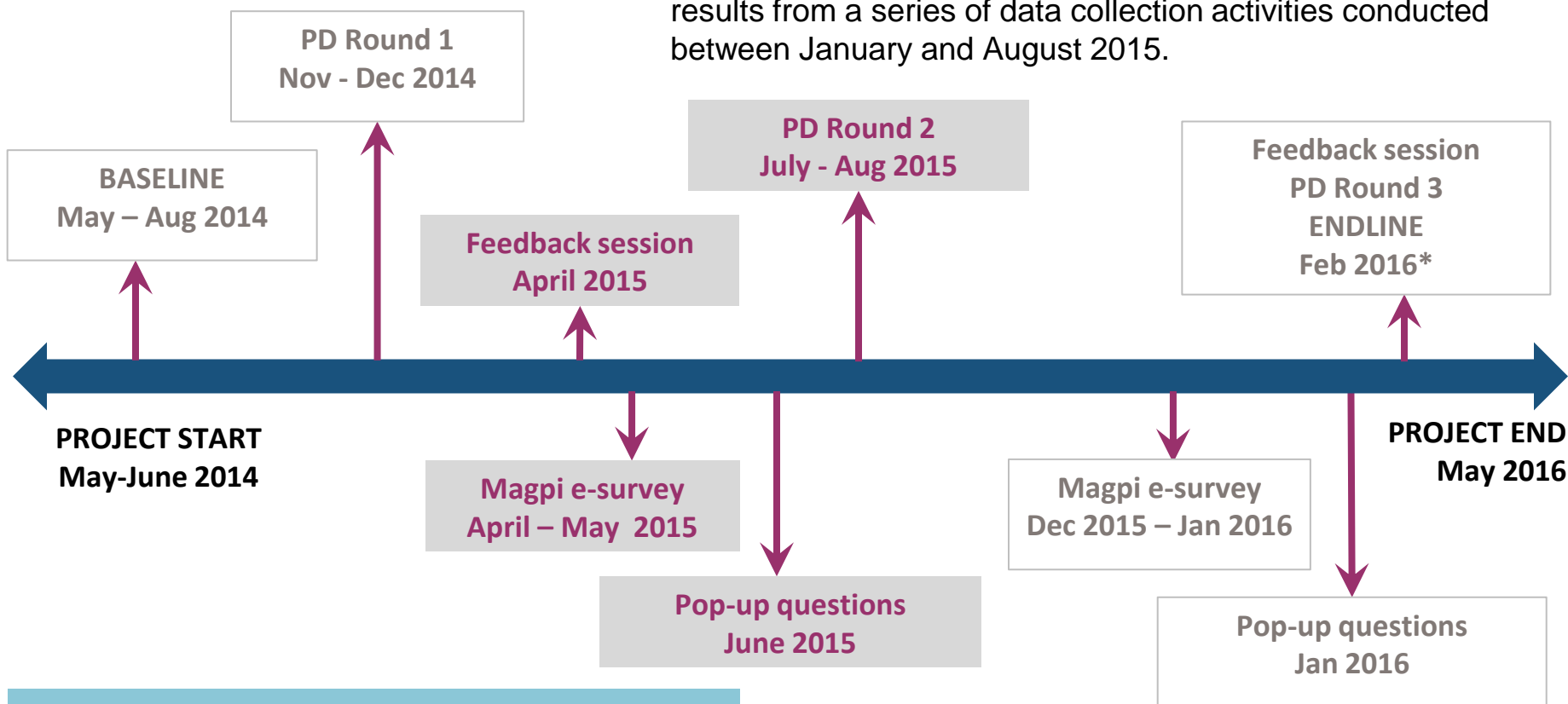
Project Timeline: May 2014-July 2015



ONGOING DISCUSSIONS WITH GHS, REGIONAL/DISTRICT DIRECTORS, OTHER STAKEHOLDERS

RME Timeline

The evaluation of the CCH project is an iterative learning process, with periodic data being subject to ongoing discussions that eventually feed into revising project design. The second round of process documentation triangulates results from a series of data collection activities conducted between January and August 2015.



Other data collection activities:

- Monthly field interviews
- Monthly usage monitoring dashboard

*Endline survey to be conducted after App refresher training in March 2016

Primary Data Collection

The primary data collection includes in-depth interviews and observation checklists by JSI and ILC Africa staff conducted from July to August 2015 (see table, right).

Other discussions during this time included interviews with the Volta Regional Director, and District Directors from Ningo Prampram, South Dayi, and South Tongu; Registrar of the Nursing and Midwifery Council, Asst. Director Training) GHS HR Department, and Director, GHS PPME; and ongoing discussions with the Grameen Foundation and Concern Worldwide Ghana staff.

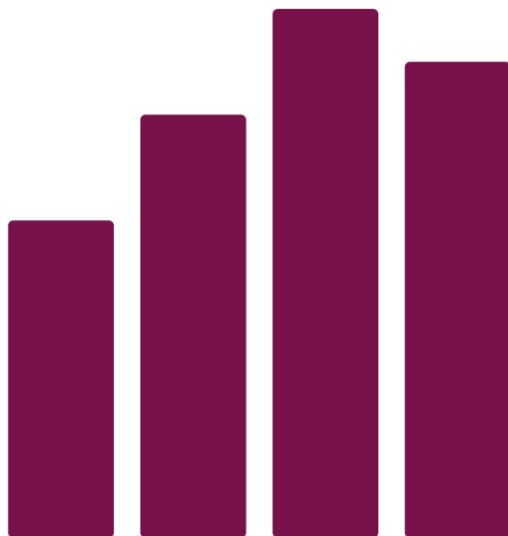
Nvivo was used to conduct a thematic analysis of key informant interviews as well as information gathered through other discussions.

How many interviews were conducted?

ILC and JSI staff, July-August 2015

Interview type	No.	District
CHN interview	16	All 5 districts (Ningo Prampram, Ada East, Ada West, South Dayi, South Tongu)
Supervisor interview	8	All 5 districts
Client interview	8	Ningo Prampram and South Tongu only
CHN observation of activities over half a day	6	Ningo Prampram, South Dayi, and South Tongu

Additional Data Sources



Other data sources include:

- **Usage data** on different modules provided by Grameen Foundation (January to July 2015)
- **Monthly progress reports** drafted by Concern Worldwide Ghana team (January to August 2015)
- **Magpi e-survey** on self-reported usage and operational indicators including technical issues (April to May 2015)
- **Feedback sessions** (focus group discussions conducted by Grameen Foundation) (April 2015)
- **Pop-up questions** – Very short questionnaire sent directly to nurses' phones for self response on satisfaction/motivation, popular modules (June to July 2015)

Graphs were used to summarize usage and Magpi e-survey data for each module as well as data from pop-up questions.

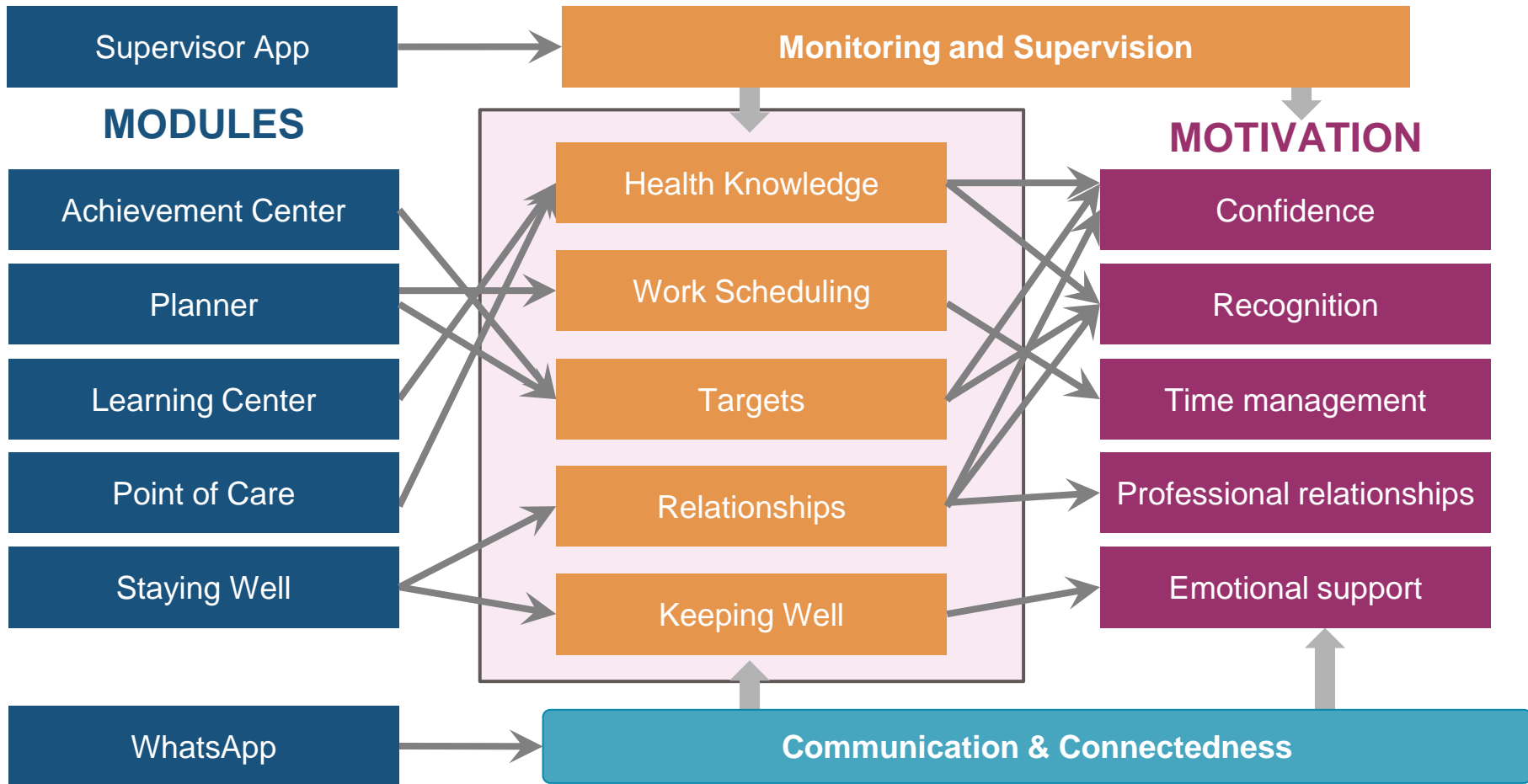
Information from feedback sessions and program implementation from monthly progress reports were synthesized to supplement the results.

**due to data quality issues, data from 2014 is not comparable to current usage trends*

RESULTS

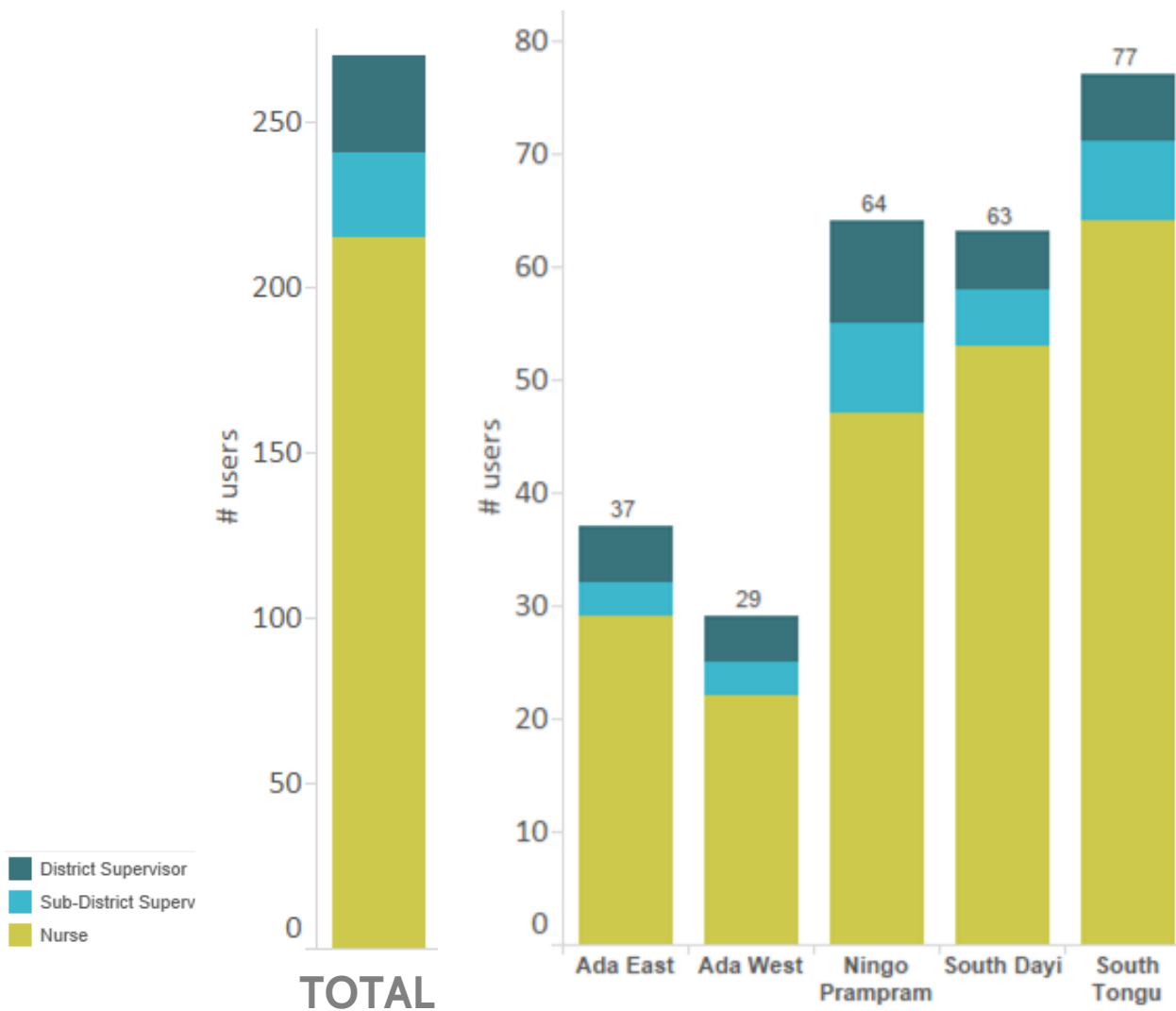
Pathways to Change

The results are summarized based on major themes that make up the intermediate and direct outcomes outlined in the Theory of Change. The diagram below illustrates that there is no clear pathway to motivation for each module in the CHN on the GO app, as each module contributes to multiple themes along the pathway. The contribution of each module will be summarized under each related theme.



CHN On the Go Users

There were a total of **215 CHNs** using the CHN on the Go app and **55 supervisors** using the Supervisor App between January and July 2015 across the five districts.

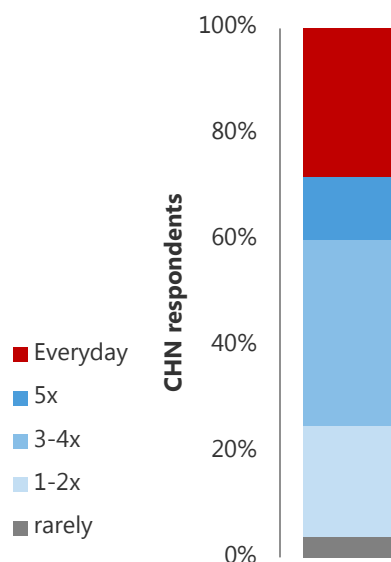


Frequency of CHN On the Go Usage

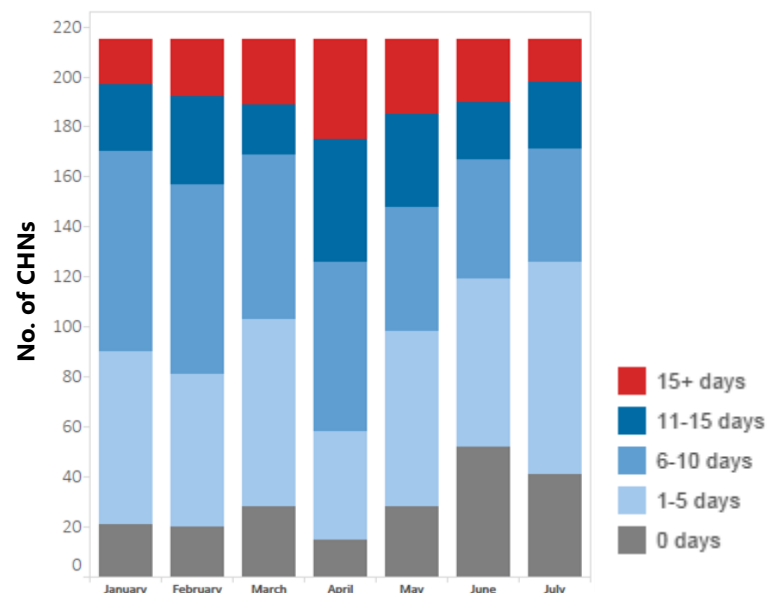
While recording of usage data needs to be rechecked, it is possible that social desirability bias may have influenced CHNs report of their usage of the app. This discrepancy is consistent across usage indicators for all modules presented in the rest of the results in this section

Results show a discrepancy between self-reported usage data from the Magpi e-survey and actual usage data, with CHNs self-reporting more frequent use of the application than indicated by the usage data. A majority of CHNs reported using the app either everyday (29%) or three to four times a week (35%); however, actual usage shows that on average, the majority of users use the app only 1-5 days per month.

Self Reported Frequency of Use (use/week)



Usage Monitoring (frequency per month)





Pathway

Health Knowledge

→ Confidence in
Providing Services

Health Knowledge



“The phone and the app [has been helpful to me and everybody, because the] planner helps to plan and acquire new knowledge. [It] has been very useful.”
- CHN, Ada East



The Learning Center and Point of Care modules are intended to help CHNs improve their knowledge of health issues.

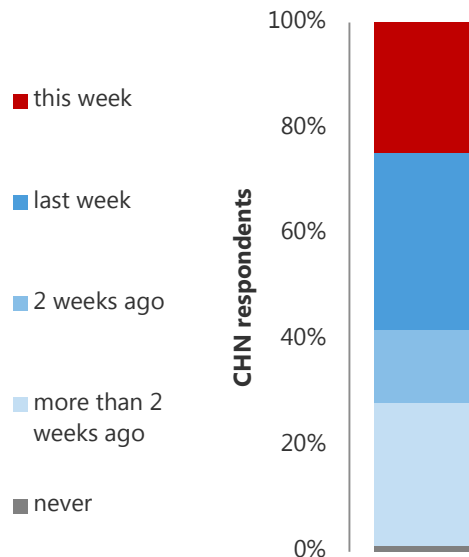
These modules were designed to update CHNs on information to update their knowledge of maternal, newborn and child health, and family planning issues to help them better perform their job. The Point of care module in particular serves as an aid for their interactions with clients.

WhatsApp was another medium through which CHNs Shared health information among colleagues. More specific detail on the use of WhatsApp is provided in the results section on Communication and Connectedness section.

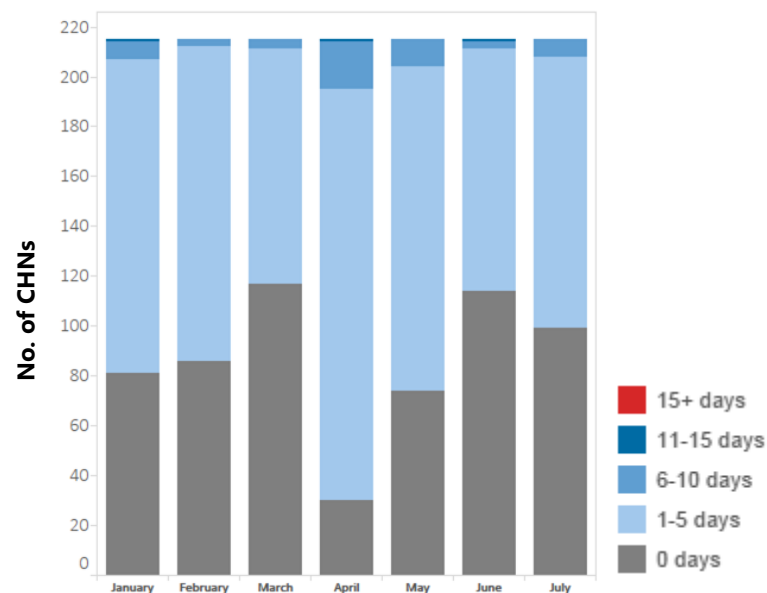
Frequency of Point of Care Usage

A discrepancy between the self-reported and actual usage of the Point of Care Module is also evident. With CHNs reporting more frequent use. Most CHNs reported using the module within the past week or two. However, only about 50% of CHNs actually used the Point of care module in each month between January and July of 2015. The month of highest usage was April which is likely due to updates made to the module and training conducted during that month.

**Self Reported
Frequency of Use
(use/week)**

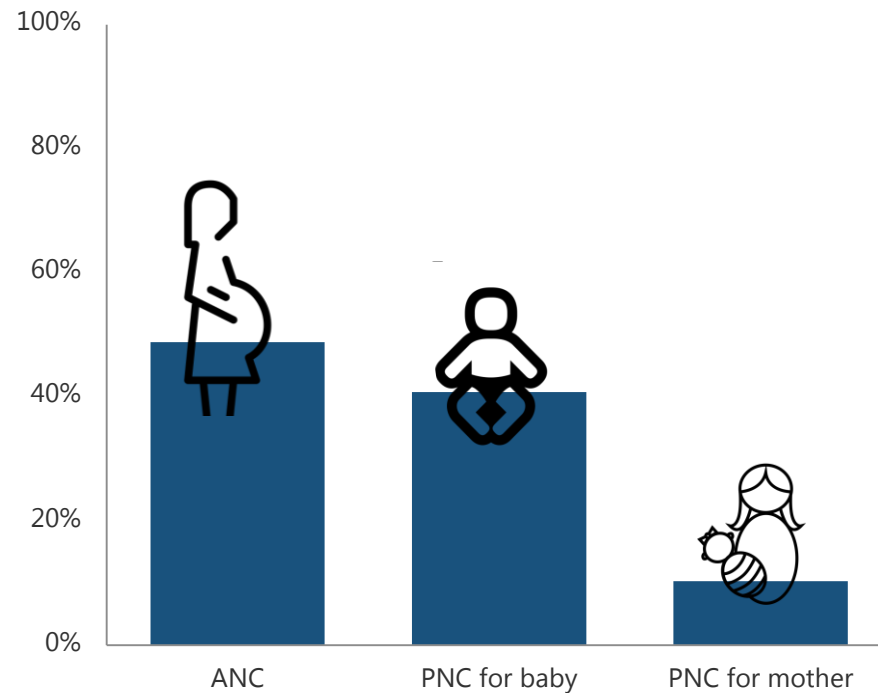


**Usage Monitoring
(frequency per month)**



Favorite Point of Care Tool

In the Magpi e-survey, CHNs reported that their most favorite section of the Point of Care module was the Antenatal Care (ANC) content, followed by Postnatal Care (PNC) for baby and PNC for mother.



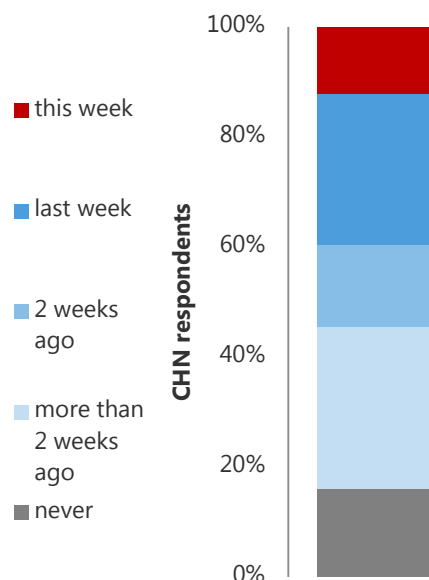
Frequency of Learning Center Usage

Sixteen percent of nurses reported never using the Learning Center module, far more than the case of the Point of Care module, but interestingly actual usage data indicates a higher percentage of nurses actually used the Learning Center module than the Point of Care. The majority of nurses used this module 1-5 days each month.

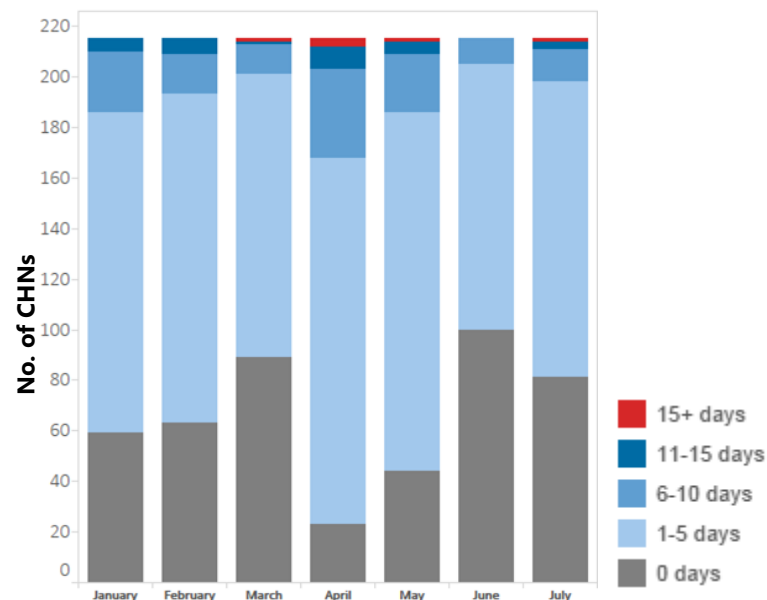
Some key statistics:

- **95%** installed all five FP courses
- **78%** installed all 7 MNCH courses
- In **8 of the 14** available courses, the average final exam score earns a pass
- The most popular course is **FP 101**, but the course with the most completions is Diarrheal Disease

Self Reported last time CHN read reference material



Usage Monitoring (frequency per month)



Reasons for using Learning Center & Point of Care

The Learning Center allowed the nurses to read new information and then test themselves on what they had learned. This process helped them determine the topics they needed to spend more time going through and where there were gaps in their knowledge.

Aside from taking courses in the Learning Center module to improve their health knowledge, **nurses often flipped through relevant parts of the Learning Center prior to meeting with clients in order to refresh themselves to be better able to deliver care.**

Point of Care also served as **a quick reference** for CHNs to use in front of their patients. They further show the module to the patients so that they have a better understanding of what the CHN is telling them when giving her diagnosis.



What the nurses are saying

“As I said earlier on the language barrier with the Point of Care that has the visuals, it helps those of them that can speak the local language to counsel the mothers with the visuals” -Supervisor, Ningo Prampram

Point of Care

“The pictures on it maybe you know at the Point of Care we use at the health center or you are attending to a client ANC at home and you are not finding something, maybe the kind of drug. Or she has come to check, she said I missed my menses this day then you calculate then check, if you are pregnant then you due to delivering this day, so pack your thing and come. Sometimes you don't know the thing but you check you are able to give the right information to the client.” -CHN, Ada

Learning Center

“Because of the Learning Center has courses that you can take test and after taking the test, you read through and then after you retake test and then find out whether you were able to read it well or you didn't read it well you just brushed through. So at least it helps me get knowledge about something I never knew about or I knew and I have forgotten about.” -CHN Ada

“The Learning Center too, you upgrade your knowledge on the courses there before you go to the field. So when you get to the field and then you meet maybe err....a baby, a postnatal baby, you know what to do for the baby with maybe infected chord or something you know what to do for the baby or what to tell the mother to do for the baby.” - CHN, Ningo Prampram

How CHNs are Accessing Information

CHN on the Go is changing the way CHNs access information to do their work. The app makes accessing information much easier in that CHNs no longer have to dig through books, protocols, etc. to find answers to their questions. They can perform a quick search and easily access what they need.

Because they don't have to carry books and flip charts with them, they are able to utilize the app to improve their health knowledge whenever they have a spare moment, no matter where they are.

The peer network created by the WhatsApp groups serve as an addition source of information where nurses can ask questions about something they have read in the app and have concepts and information clarified by their peers.

"Yes. It has helped me because most of the things I will say, after I've left school, I will say I've never taken a book to read like holding my hard copy to read. But with this I can go everywhere with it and in a car I could read. So it helps, it's helping me. Thus what I will say."

—CHN, South Dayi

"Like the group was formed to upgrade our knowledge on certain things ok. So when I heard of anything I wanted to share on it or maybe I want to know much about it then you tell me am sleeping oh and I also replied the person that off your phone. That's why me am not active there because when send something or you WhatsApp there then you will see another person also saying a different thing." - CHN Ada East/West

Point of
Care

Learning
Center



Long-Term Learning and Confidence in Providing Services

As the nurses have continued to utilize the app to increase their health knowledge, they are beginning to internalize the information, which possibly requires them to refer to their phone less often when providing care. This gain in knowledge helps them to become more confident in their ability to deliver clinical services to their clients.

“[With] the Point of Care, at least it helps you to render the best of care. I am not a midwife but I know how to render pregnancy care to my clients because of the app.”

– CHN, Ada East/West

Point of Care

“I have used the phone for some time now and now without the phone, there are some of the things that is on the phone that I can do without the phone. So with this I think when I am with my colleagues that do not have the phone, they will know that I have I’m on top of them”. - CHN, South Dayi

“It has influenced their work because they can easily **refer to the phone** and that has boost their clinical knowledge and gives them confidence.”

–Supervisor, Ada East/West

Interactions between CHNs and Clients

Based on the observation checklist during the PD data collection, CHNs were observed utilizing the app to educate their clients on the following topics: Nutrition, ANC, PNC, breastfeeding, Family Planning, Malaria Prevention and Immunization.

While the CHNs observed did not always use the app when providing services to their patients, they were observed utilizing it for the visual aids that helped them better explain health messaging topics.

During this time, clients were observed to be engaged with the phones.



What we saw observing CHNs & clients

On this slide and the next are insights from observing CHNs and clients.

These are not meant to be representative, but provide anecdotal evidence of how CHN On the Go is being used as part of client visits.

Next, the CHN pulled the CCH phone out of her pocket. Using the Point of Care module, the CHN talked to the woman about nutrition requirements for mothers. The CHN, knowing the woman is literate, asked the woman to read what was written on the phone page that she had previously opened. The woman smiled and read aloud the words on the page.

The CHN then opened to another page that showed pictures of foods that breastfeeding mothers should eat. The woman, smiling again, read aloud all that she saw on the phone's page. While reading, the woman nodded her head. The CHN then asked the woman if she saw any pictures of ice cream among the pictures of the food the woman should be eating. The woman laughed and shook her head, showing that she had not seen any pictures of ice cream.

The CHN then explained to the woman the importance of the food that she should be eating, especially since she is breastfeeding. The woman felt ashamed and said she would take what the CHN said seriously. The woman apologized to the CHN and thanked her for the advice.

-Observation of CHN and client during a home visit in Ningbo Prampram.

What we saw observing CHNs & clients

The CHN also told the women that they should breast feed consistently and often. The CHN continued talking to the women as she showed them more pictures on the CCH phone. The CHN also used her hands to make demonstrations as she spoke. The women looked keenly at the pictures and giggled in between seeing the pictures. One woman held the phone in her hands while the CHN talked to them about proper nutrition for their babies.

—Observation of CHN in Ningo Prampram

The CHN also talked to the woman about exercise while she showed pictures of exercises on the CCH phone. The CHN then advised the woman to get enough sleep. The woman said her child keeps her up at night, so the woman tries to sleep during the day when she is free. The CHN showed more pictures to the woman about keeping the baby clean and comfortable so that the baby can breastfeed well. The woman laughed and told the CHN that she understands. The CHN then closed the phone and put it in her pocket.

-Observation of CHN in Ningo Prampram

The CHN then showed the women a vaccination table on the CCH phone. The CHN explained the vaccinations and drugs that are to be given to children and advised the women to keep their vaccination books up to date. The CHN advised the women on the importance of vaccination for children.

After the CHN finished reading from the phone, the CHN continued talking while holding the phone for the women to see. The CHN would look at the phone for a few seconds before talking directly to the women.

-Observation of CHN in Ningo Prampram

CHN confidence on the rise

From using the CHN on the GO app, **there is an increased feeling of confidence on the part of both CHNs and clients.** CHNs feel empowered by the app and like having a resource at their fingertips. Because they can look up information from the app, they are more confident in what they tell their patients. Furthermore, the more they utilize the app, the more confident they are in their ability to deliver care.

I am now confident about the things I say to my clients I don't have doubt when I say it because I have learnt. I'm not thinking about going to check whether what I have in the book is the same as what I told them. I just tell them and I know am right because I have learnt it. The phone is also with me if find any difficulty, I just pick the phone and then check." –CHN, Ningo Prampram



"I have had enough experience because now when I am doing something I have confidence of doing something so I may say for then experience, I will not get it a day but continue use of the phone, I will get more experience." –CHN, South Dayi



Client Perspectives

Clients indicated being more confident in the information that was being provided to them because they know it is **coming from the app**. They also like having the visual aid of the phone which helps them to better understand that the CHNs are giving them during their interactions.

CHNs are **more confident** and clients are happier and **trust** the information they receive

"[She] is educating you, you will know that that is the right thing for you to do because she does it with evidence...**she made me know that it's good for me to do** what she is saying rather than she saying it without any proof."

- Client, South Tongu

"The [visit when] she used the phone was better because you get to understand more... **Her knowledge was better** [when she had the phone] because **she knew what she was doing.**"

-Client, Ningo Prampram

"An example is when she visited me in the house, I saw the images on the phone and she took time to explain what they mean and what I have to do when I see those signs. Before I didn't know some of these things but now I know. They will only ask you what is wrong with you and treat you, but **with the phone you will see for yourself the images and know what it means as they explain it to you.**

- Client, Ningo Prampram

Potential

The health knowledge component of the Point of Care Module has the potential to deploy learning materials such as workshops and standardized protocols to all health workers.

The Learning Center can also include more materials/topics as well as distance learning courses with the aim of providing nurse accreditation for the courses that they complete through the application.

The module has the potential to deploy learning materials such as workshops, distance learning courses, e-training instructions, and deploying content to students.



Pathway

Work Scheduling and
Time Management
→ Burden

Work Scheduling and Time Management



The Planner was designed to help CHNs set, manage, and achieve their plans and targets each month.

The module aims to help CHNs plan their activities through documentation, planning, and review of work schedules, as well as coordinating with peers and sharing with supervisors.



Frequency of Planner User

How nurses use the planner:

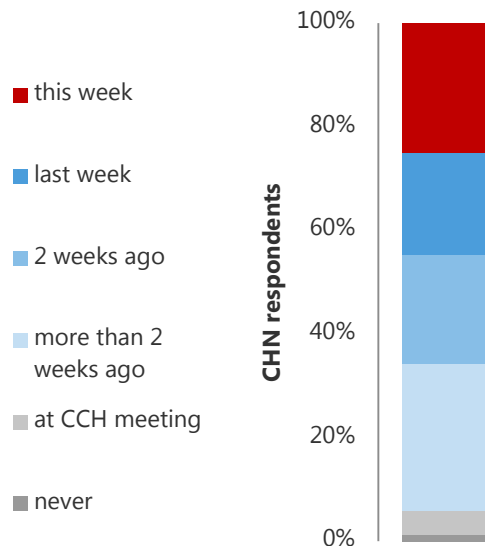
Nurses used the Planner often to see what they need to do

They check their itinerary often
(everyday, twice a week) and update their itinerary every month

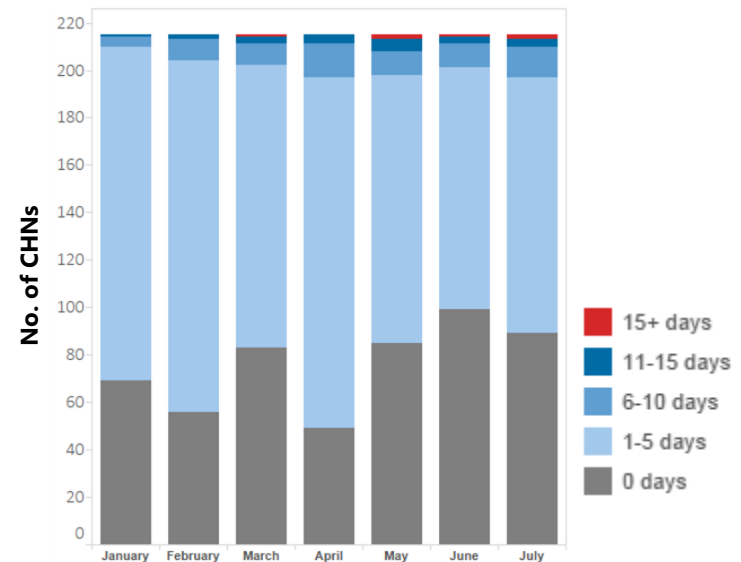
Planner usage, much like the other modules, was self reported by the CHNs as being used much more often than indicated by their usage data.

Lower frequency of usage for this module could be attributed to the fact that nurses indicated that they normally update their calendar at the beginning of each month meaning that they likely do not make many changes to it throughout the course of each month. No specific guidance was also provided regarding the optimal frequency of entering information in the Planner.

Self Reported last time CHN created an event in the planner



Usage Monitoring (frequency per month)



Reasons for use

The Planner has generally improved the CHN's ability to stay organized and plan out their tasks for each month.

CHNs indicated the benefits of having reminders for home visits and other activities. They liked that they could keep track of what they had accomplished and what they had left to complete in the rest of the month. Additionally, the CHNs knew that their supervisors could see their planners, which helped them stay on track and be accountable.



"And the **Planner tool reminds you**. It serves as an alarm for you to begin your work."

– CHN, Ningo Prampram



"Because at first when the phone wasn't there, sometimes you forget especially home visit like this, but since you brought the phone **you have your plan on the supervisor app and if you don't go she will ask you to go.**"

-CHN, Ningo Prampram



"**Because I set my targets, I know what I do at the end of the month** whether I have been able to achieve my targets, It helps me measure my work done."

- CHN, Ningo Prampram



How CHN On the Go impacts workload

In general, nurses and supervisors did not feel an increase in workload. Many indicated feeling that the Planning module helped them be more efficient with their work. Further, they indicated that it had cut down on the communication since the supervisors had access to the CHN's planner and therefore knew what activities they had planned. Some, however, indicated that the app increased their work due to the need to continually enter their activities throughout the month.

"There has been no increase in my workload."
–CHN, Ada East/West



"My workload err I will say it has only make the work easier because it has increased my workload because initially where I used to work at first, anytime am going for home visit as a new student I need to carry some books along so that in case am counseling a client or educating her I will refer. But with the phone, it very portable, it can even go through my pocket, and I think it has made my work easier."
–CHN, South Dayi

Planner

"When I set the targets, it reminds me. You will select for it to remind me daily, monthly or weekly"
– CHN, Ada East/West





Pathway

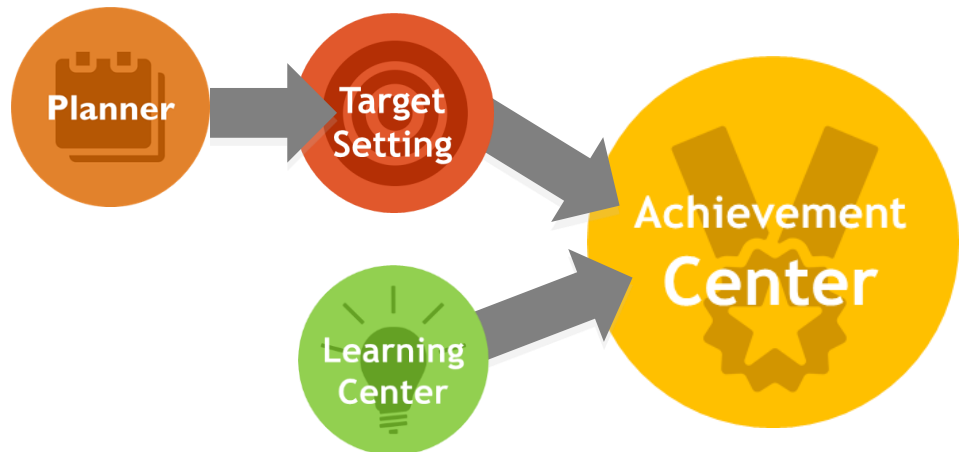
Achievements →

Recognition and

Respect

Target Setting

One of the key functions of the CHN on the Go app is to enable CHNs **to set targets and goals** on courses, coverage, and events and **to monitor their progress**. Nurses are able to set their targets and goals through the Planner and view their progress through the Achievement Center. The Achievement Center also draws information on course progress from the Learning Center.



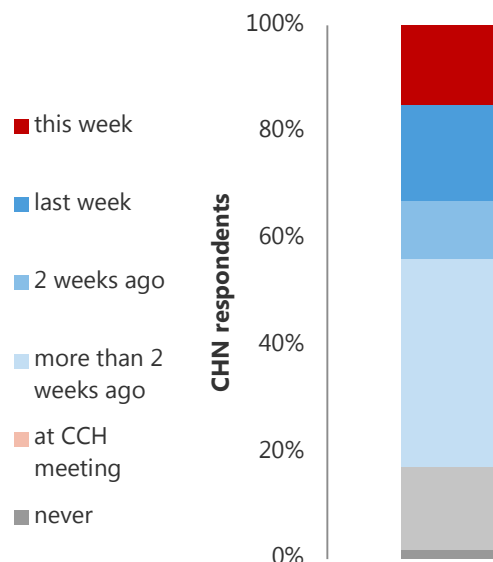
Target Setting Usage

Results from the e-survey also showed that CHNs reported **setting more coverage targets (48% of respondents) than event targets (40%).**

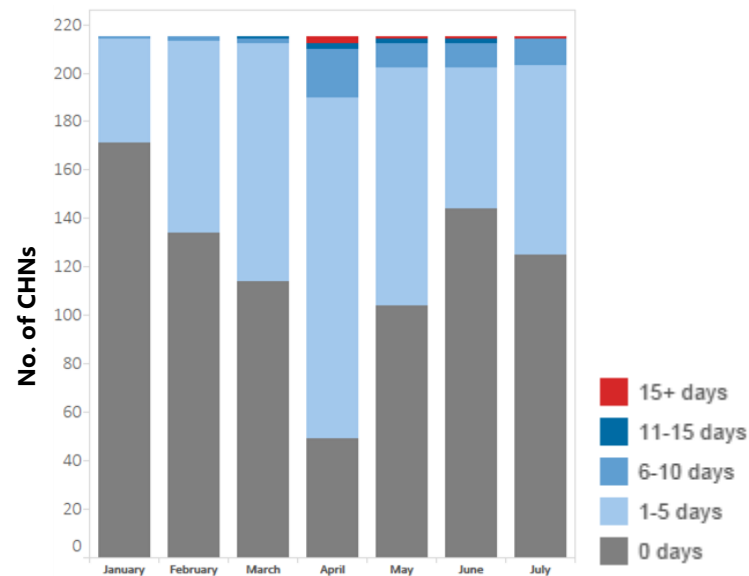
Usage data showed mixed results between self-reporting and actual usage. According to the usage data, on average, a majority of CHNs did not use the target setting function at all between January and July 2015. Self reported data show that 39% of CHNs reported that the last time they set targets in the Planner was more than two weeks prior to the e-survey interview. However, these two data sources are not easy to compare in a consistent manner.

Among those CHNs who did use this function, almost all set their targets only 1-5 days per month. A higher percentage of CHNs set their targets in April compared to other months.

Self Reported last time CHN set a target in the planner



Usage Monitoring (frequency per month)



Note: Frequency of target setting up to the CHN

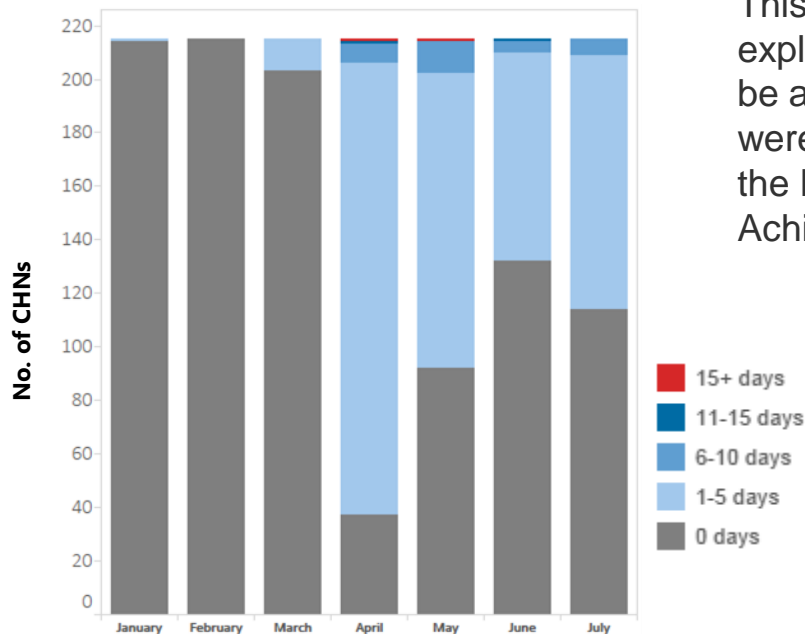
Frequency of Achievement Center Usage



During the interviews, CHNs indicated that they did not use the Achievement Center often. In South Dayi for example, some CHNs could not see their achievements and therefore stopped using the module.

Actual usage data show that almost all CHNs did not use the Achievement Center from January to March. A majority of CHNs were using the module in April; however, usage decreased in the succeeding months.

This low usage of the Achievement Center could be explained by the fact that it was the newest module to be added to the CHN on the Go app. In addition, there were initially issues with the target setting function of the Planner, and results failed to display in the Achievement Center.



Reasons for Setting Targets

Nurses like to use the target setting functionality, because it **helps them organize what they have to do and how they are performing.** They see it as a way for self-evaluation.

Supervisors reported using this information as viewed via the Supervisor App to keep track of nurses and to advise them on achieving their targets, just as it was intended.

Target Setting

“So, when you update it, it tells you that you have achieved this target. **It tells us what we have achieved and what we have not achieved.**” – CHN, Ada East/West



“The setting targets it also helps the nurse to know this is where I am heading to and will I be able to achieve it by this date. So you push the nurse and remind them that you are not performing and you should do this, do this.” – Supervisor, South Tongu



“I use the Target Setting module. **When I set the targets, it reminds me.** You will select for it to remind me daily, monthly or weekly. So, when you update it, it tells you that you have achieved this target. It tells us what we have achieved and what we have not achieved.” – CHN, Ada East/West



“**There has been a change because they are all trying to do their best, knowing that we are tracking their work.** And once you set targets/objectives then you will be questioned whether you have achieved it or not.” – Supervisor, Ada East/West



Recognition & Respect

The Planner's target setting function and the Achievement center have enabled work transparency between CHNs and their supervisors. A few nurses and supervisors talked about recognition, respect, and acknowledgement. Only one CHN mentioned no change in respect or recognition received from their peers, but the rest expressed more positive change between their clients, peers, and supervisors.

"If they are doing well I **praise them**, and if they are not doing well, I see that you are not even reading these things at all, you will have to share it with them."
–Supervisor, Ningbo Prampram



"Yes it has given us much **respect** because it creates communication and assurance between us and the clients." – CHN, Ada East/West



"[I can see] what they are supposed to do with their app or application on their phone...setting of target, reading of some of the Learning Center, and some of the courses and so far the Staying well. [I can see] whether they are reading through those materials or not. Some of them it's like when they read it appears on the Supervisor's app... So those who are lagging behind we try to **motivate** them and those who are doing well are **congratulated**."
- Supervisor, South Dayi



Potential of Target Setting

The target setting functionality of the CHN on the Go app has the potential to be **used as supervisory tool across all cadres of health workers**, including district supervisors tracking sub-district supervisees, regional tracking district, etc.

The regional and national levels of GHS have requested updating the supervisors' app for better monitoring based on targets set.





Pathway

Communication and
Connectedness →
Relationships

Communication & Connectedness

There is much better direct communication between supervisors and CHNs, and among CHNs



In the past, communication within the health system was limited to the head of the institutions who attended meetings. The CCH project tries to address this gap and to increase direct communication between supervisors and CHNs, and among CHNs mainly through WhatsApp. The use of WhatsApp was intended to facilitate communication and coordination between nurses, supervisors, and clients. Pre-set WhatsApp groups were created to facilitate these conversations.

WhatsApp Usage

91% use WhatsApp
to contact fellow CHNs
53% contact family and friends



In the Magpi e-survey, almost all of CHNs reported using WhatsApp to contact their fellow CHNs. Over half (53%) used it to contact family and friends, and a smaller percentage (30%) to contact supervisors.

Eighty percent of CHNs reported to be active members of the pre-set sub-district WhatsApp group; however, only 11% percent of CHNs reported that the last time they posted something in the WhatsApp group was a week within the Magpi e-survey interview and 26% had never posted on the groups.

Fifty percent reported last reading a message from the WhatsApp group a week within the survey.

Reasons for use

“The app has changed the **frequency of communication**. Like with WhatsApp, when we want to channel any information to the CHNs in this sub-district, you just use the WhatsApp. **Or even if you don’t want to call, you just use the app.**”

-CHN, Ada East/West



“The increase is especially about the communication aspect. You **communicate more** with your staff or the staff that are working under you as compared to the past.”

-Supervisor, South Tongu

CHNs reported using the app and phone because it facilitated communication via WhatsApp between CHNs and people they work with as well as family and friends. They reported that they could easily share information on events and workshops with colleagues.

They felt connected, because it’s easier to ask questions and to disseminate information via their CCH phones. The program enabled knowledge sharing, as colleagues could help provide guidance and solve cases.

A few CHNs expressed that they were not active members of the pre-set district and/or sub-district WhatsApp groups; however, most CHNs did find these groups useful. Some CHNs mentioned forming their own WhatsApp groups with family and friends and even colleagues.

For example, one nurse recounted having a group that included their “***in charge to it so when [they] get an issue or something or [share] anything [they] want to say, [they] discuss among [themselves] before [sending it to the district or sub-district groups].***”

Builds Relationships

The increased communication and connectedness through the CHN on the Go app and WhatsApp has **helped build relationships between CHNs and their colleagues.**

Increased transparency via WhatsApp built the relationship between CHNs and supervisors by enabling supervisors to monitor CHN work and to follow-up via calls or messages.

CHN relationship with their clients was improved, **with clients being happier and feeling confident about the service they are receiving.** They liked receiving more information via visual aids on the mobile devices as opposed to just listening to the CHN's counseling.

"It's good because it brings about **teamwork**; you know that whatever you are doing your supervisors are aware."
-Supervisor, Ada East/West



Potential

“It has helped my professional life because I **do not need to travel** all the way to my sub-district building to discuss about meetings or what we need to do.” –CHN, Ada East/West



WhatsApp has great potential as a communication and information sharing tool. With its photo-sharing functionality, CHNs can share pictures of cases with each other and use it for group diagnosis or take photos of their itineraries and schedules and share it via WhatsApp instead of entering the information in the Planner.

WhatsApp has also become a medium for learning, with nurses teaching each other through WhatsApp groups to figure out cases, share information, etc. The ease of communication through WhatsApp and the use of few credits makes nurses use it more than other modules.

Supervisors also use WhatsApp to send official communications – they take pictures of communiqués from national, regional and district level and send to the groups for quick dissemination. Previously, they had to wait for transport to be available for hand delivery.

“And then when you also need help like when you meet a client with a condition ..., you could just take a photo of whatever or whoever it is or whichever part of the body the thing is, you just put it on the district platform, the doctors come in or our superiors come in and then they helps on what to do.” –CHN, Ningo Prampram



Pathway

Keeping Well →

Emotional Support

Emotional & Social Support



One of the key goals of the CHN on the Go app is to improve emotional and social support through the use of the Staying Well module and WhatsApp.

The Staying Well module of the CHN on the Go app was designed to enable nurses to take charge of inspiring themselves and to help deal with the stresses of work life. It was also intended to build a sense of community through wellness.

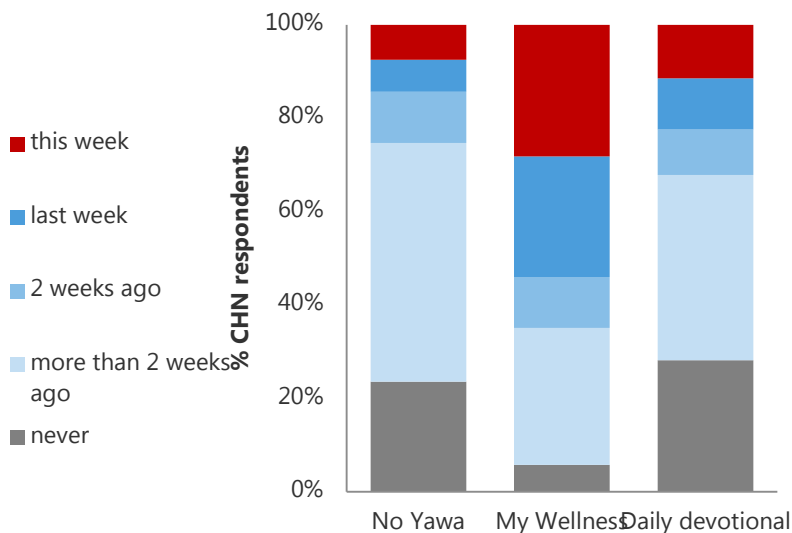


Frequency of Staying Well Usage

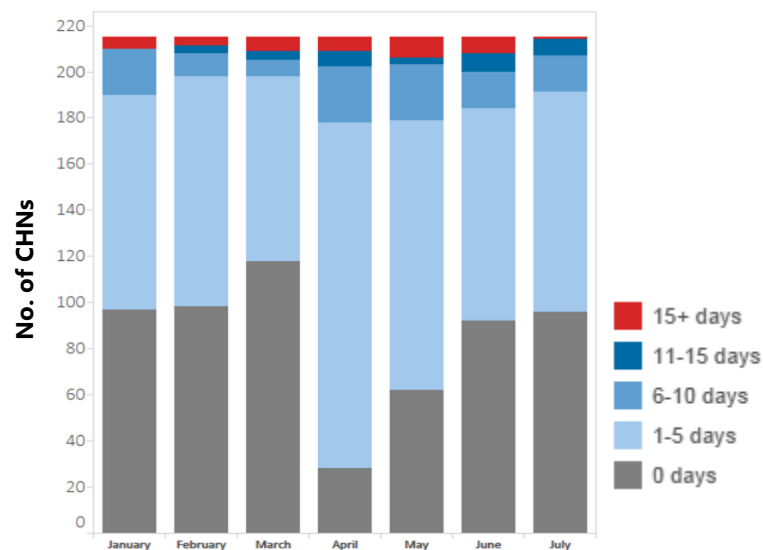
Usage data on the Staying Well module was mixed. A higher percentage of CHNs had viewed the My Wellness component of the Staying Well module compared to No Yawa or the Daily Devotional content. Only 6% of nurses reported never using My Wellness compared to 24% for No Yawa and 28% for Daily Devotional. Twenty eight percent of CHNs reported last viewing content in My Wellness within the week of the e-survey interview.

On average, across the three components, most nurses reported last viewing content more than two weeks prior to the interview (51% for No Yawa, 29% for My Wellness, and 40% for Daily Devotional). These results are not consistent with actual usage data, where at least 90 CHNs out of 215 did not access the Staying Well module at all between January to July despite an increase in usage in April and May, possibly when training was conducted.

Self Reported last time module was used



Usage Monitoring (frequency per month)



Reasons for Use

“Even if you are bored at the house and you read your WhatsApp, **there may be a post that says have a lovely day and at least it brings you up a little.**” –CHN, Ada East/West



PD interviews did not reveal much information on Staying Well because usage was quite low among respondents. Data from feedback sessions, however, showed **that CHNs used the CHN on the Go app and WhatsApp to release stress.**

Information from Feedback sessions conducted with CHNs showed that the Staying Well module also enabled some CHNs to release stress, with one CHN reporting that it reminded her to check her emotions and how to relate to her clients and supervisors. This helps keep healthy relationships. Daily devotionals helped them stay stress free and wellness plans helped them keep a healthy home.

WhatsApp on the other hand served as a medium for them to relate to people via a social media platform.

“They’ve been giving me some kind of exercises to be doing every morning about my life, how to improve upon my well-being. They’ve been giving me some topics to be reading to go according to it every morning before I come to work. Every morning I open it and what I see I go according to it.”

–CHN, South Tongu





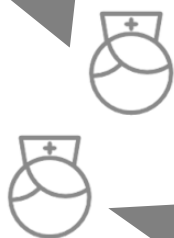
**Overall
Quality of
Life**

Quality of Work and Personal Life

The CHN on the Go app has impacted both the work and personal life of the CHNs. The app helps the CHNs be more effective and efficient in their work by helping them plan their tasks, measure the work that they have done, and serve as a resource that can be used to prepare for their interactions with clients.

In terms of the benefits the app provides to their personal life, the CHNs felt that the app helped reduced stress through the Staying Well module and allowed them to stay connected to their social networks of friends and family. Having such outlets helped to better motivate the CHNs in their work.

“For my personal use. Maybe let’s say especially when I am down, it has something there that.... It has some information there that when you are down....when you go to...It has a certain thing there, **stress free.**” -CHN, Ada



“It has changed my attitude of coming to work. Sometimes when I get bored at work with maybe my colleagues or clients, the Stay Well says take water and take deep breath. And the Learning Center **upgrades my knowledge.** Because [...] are a lot of things there which I don’t even know. I have not seen them before, I have not heard but through the Learning Center when a client asks me a question I **would be able to answer.** The Point of Care also helps me and my client because I know there are pictures I can show to my clients...this is how it is. Then I **can further schedule** with them—you have to come this week or that week.” –CHN, Ada



System Level
Supervisor App →
Performance
Monitoring

Supervisor App

The Supervisor App was designed to **enable supervisors to access the progress and activities of CHNs** and **use these information** to guide feedback and supervision.



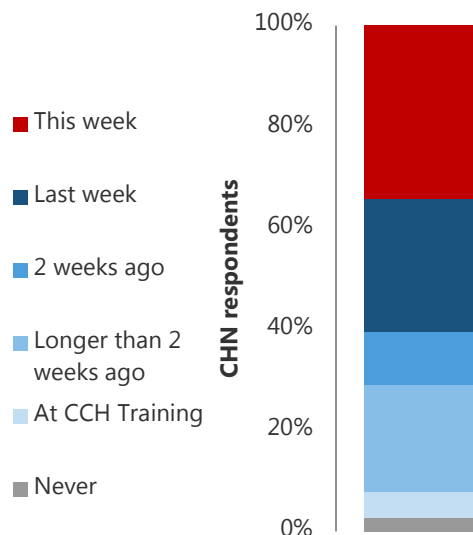
Frequency of Supervisor App usage

Self-reported usage of the supervisor app showed that most supervisors last used it within one week (34%) of the Magpi e-survey interview, followed by the week prior (26%). However, actual usage data showed that on average at least half of supervisors never used the app at all from January to July 2015, except for an increase in usage in April (possibly because of training conducted). For supervisors who did use the app, a majority only used it for 1-5 days per month.

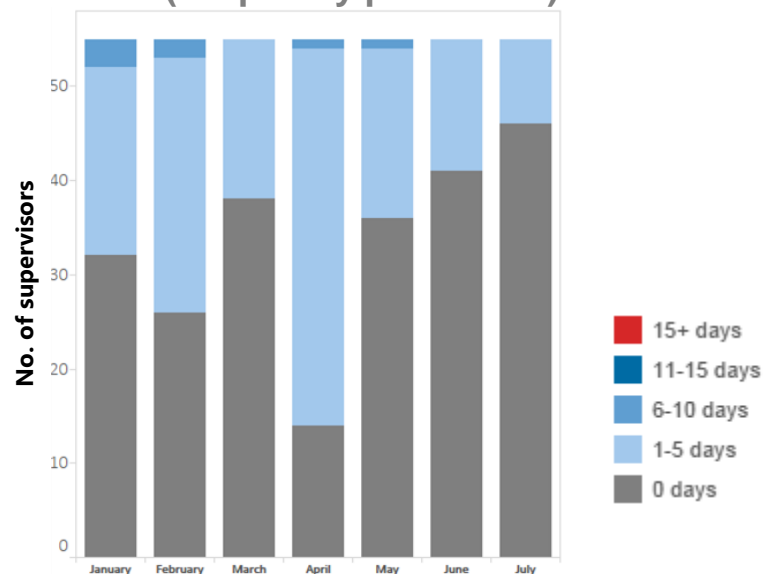
This low use of this app may be explained by some supervisors expressing concern during the interviews that they are not tech savvy. Network connectivity may also be a concern limiting its use.

The app seemed to be functioning properly, with 80% of the Magpi e-survey respondents reporting that the app displayed all nurses' targets.

Self Reported last time module was used



Usage Monitoring (frequency per month)



Reasons for Use

Key insight:
Limited use because
not all supervisors
are tech savvy

“Maybe in a week, once. [I use the Supervisor’s App] at least 45 minutes because I have to refresh before some of the new activity nurses are doing comes and then you see whatever you are looking for.”
– Supervisor, South Tongu

Supervisors reported liked the use of the app in their work **because it provided information to initiate follow up communication on nurses’ activities through WhatsApp.** It also enhanced their supervisory role, enabling them to view relevant information such as targets set by nurses to keep track of their targets and provide them feedback. Supervisors also liked being able to track CHN itineraries and photos of activities, viewing them as proof of completion.

Supervisors also used the CHN app to familiarize themselves with it and are interested in it. They felt assured that nurses have GHS Protocols and all the information required for their service delivery.



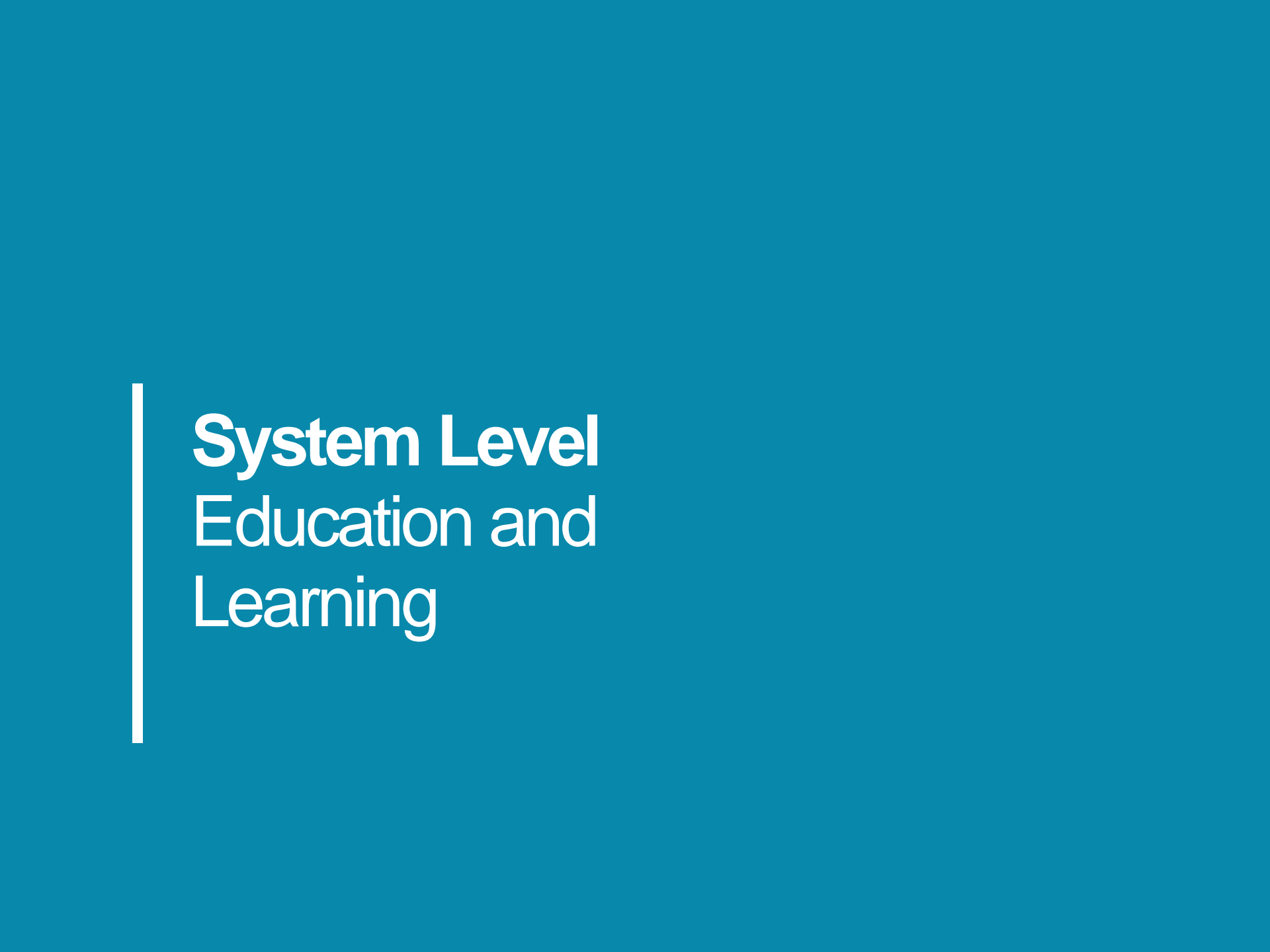
Potential

The supervisor app has the potential to be an effective tool for performance monitoring and can be used by supervisors at all levels of the district health system.

Next steps include discussions on the end use of the supervisor app. There is a need for supportive supervision in the system and the app helps provide this. Discussions surrounding the redesign of the supervisors' app are also necessary to better support target setting and tracking activities as they currently occur from regional through districts and sub-district levels to the CHNs.

“With the app you know really, you sit in the office even outside the district or outside the region and you can know what is happening. But, then of course the supportive one has to be communicated by the application to get to the people who need the support. .”

– Volta, Regional Director



System Level Education and Learning

Learning Center Courses: Current Situation and Potential

“And like I said it’s good. It’s good for them, just to keep them current. Other than that, how many of them do read? I started by saying most of us when we finish school, we put our books aside. .”

– Asst. Director (HR),
Ghana Health Service

Discussions with the Nursing and Midwifery Council have resulted in the use of Learning Center courses to obtain annual PIN certification as part of Continuous Professional Development, but there is a need to also include a practical component.

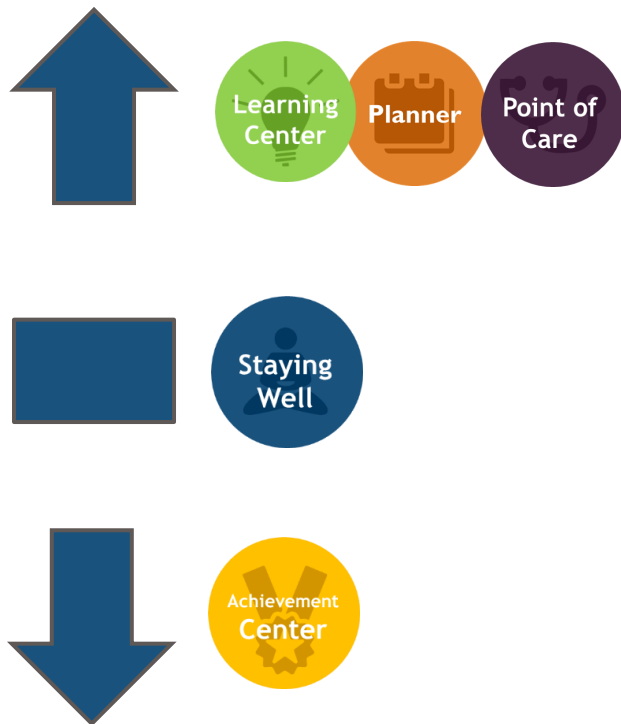
CHNs can now take a break from their work and go on study leave after a certain number of years but it becomes expensive for the GHS to finance this education and cover CHNs in districts when they are unavailable to work. As a result, CHNs are offered the opportunity to go on study leave after 5 years of working. Discussions are ongoing with UHAS and KNUST to find ways of incorporating Learning Center courses into their curriculum so that nurses can work as they take some of the courses through the app as part of distance learning.

“We acknowledge... we run workshops to update their knowledge so that they can renew their pins. But we cannot do that alone, so we accredit people, like organizations like Grameen and others..... But as a regulatory body, we have a challenge and we have told Grameen..... we also want to say that let every module that we put on the platform comes with its practical component. (Need to) let the practical components match the theoretical component that’s all.

-Registrar, Nursing & Midwifery Council

SUMMARY & NEXT STEPS

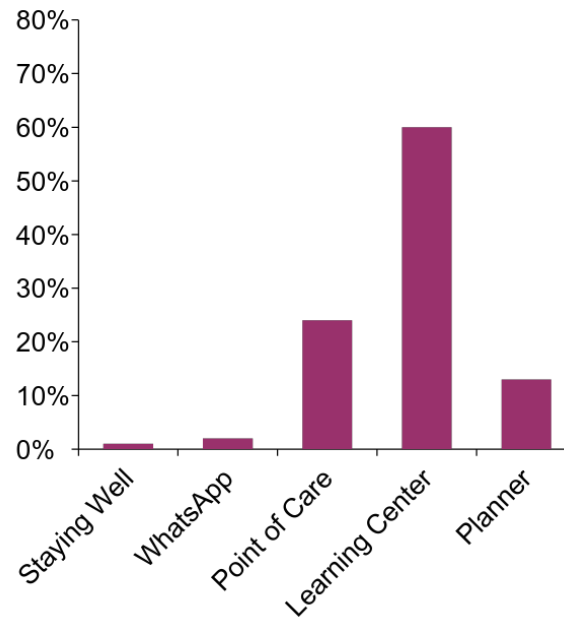
What we Learned from PD Round 2



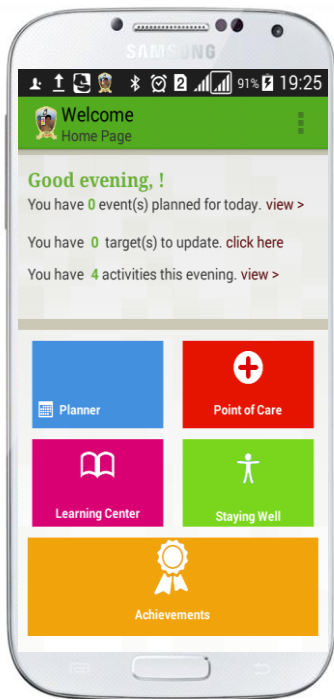
In summary, **the most popular modules among CHNs were the Learning Center, Planner, and the Point of Care.**

CHNs had mixed reviews of the Staying Well module, with some really liking it and others not using it at all. Most CHNs reported using the Achievement Center the least.

Results from the Pop-up survey showed that over half of CHNs (60%) reported that the Learning Center was the most useful module, followed by Point of Care (24%) and the Planner (13%).



Barriers CHNs Face when using CHN On the Go



CHNs had reported some problems with their phone that affected their use. There were problems with phones **freezing** and the **CHN on the Go app crashing**; however, new versions have been improved.

CHNs also pointed out that **batteries** run out quickly, and the Magpi e-survey showed that almost half (47%) of respondents said that their phones go off 1-2 days a week because of not charging. Other reported problems included **small screens** that make it difficult to see content and CHNs **not having enough credit** to use their phones.

Due to previously reported network issues, CHNs were asked about needing alternate SIM cards to maximize connectivity. Only 1 out of 4 respondents said they needed one. This need was highest in Ningo Prampram (40% of respondents).

Overall Impression of CHN On the Go

From the users:

- Almost all wanted to continue to use the app in future
- **79%** of CHN respondents said the app **improved personal lives very much** (pop-up survey)
- **88%** of CHN respondents said the app **improved work lives very much** (pop-up survey)

“It is very beneficial because it makes the **work easy**. And I also feel connected to friends, family, and colleagues.”
– CHN, South Dayi



“This intervention was sent at the right place, at the right time for the right people... Because of this phone, our district has become smaller... Because of the phone we are able to send information quickly. We are able to see conditions on the field, take photographs and send it.”
– District Director, Ningo Prampram



“The phone has helped me in general with my work...previously we were finding it difficult to **send information** to our in charges and our friends. But now with the phone, we are able to WhatsApp it. And with the Planner, it helps to remind us of what we have to do that day.” –CHN, Ningo Prampram



Issues to Consider Going Forward

There is a lot of interest in CCH and the app among CHNs, supervisors, and the GHS, and CHNs and supervisors said there were improvements to their work and personal lives.

However, usage data showed a different picture with inconsistencies between self-reported usage and actual usage. ***There is a need to recheck the data quality and accuracy of usage data. Also further thought is needed on whether standards for usage need to be revised ? Especially since specific norms for how much the app should be used are not specifically provided to the CHNs.***

A few CHNs for example reported that they only set their targets at the beginning of the month. There were also issues surrounding low use of the target setting function in the Planner and the Achievement Center. ***Does this mean that CHNs and supervisors need more training on the use of these modules?***

Using the Learning Center as a means for CHNs to obtain annual certification with the PIN, ***the program may need to add a practical component to the courses as directed by the Nursing and Midwifery Council.***

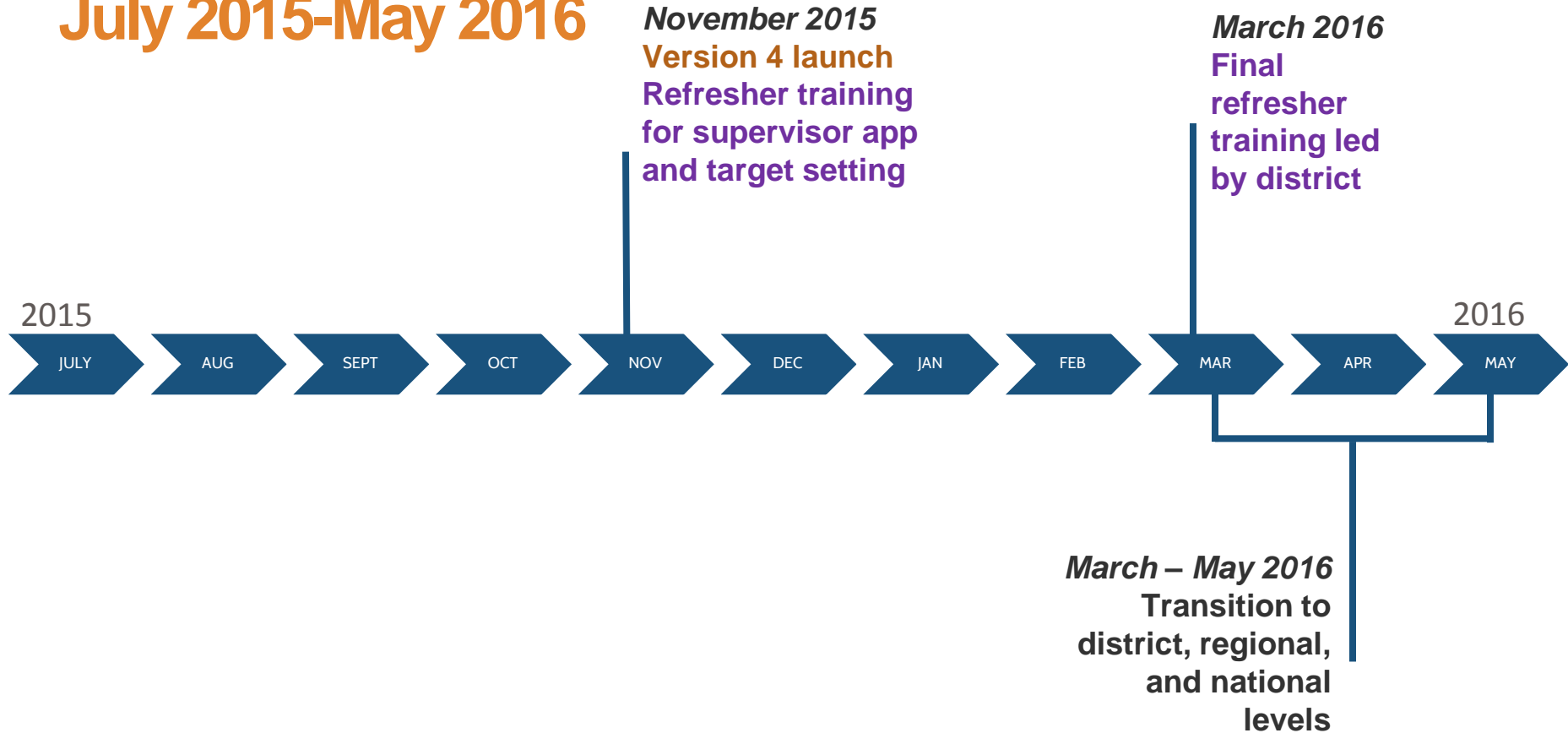
Gaps to Explore in Round 3

The findings from this round highlighted some gaps that can be explored further in the third round of PD.

- Clarity on how much the supervisors app is currently being used so that improvements can be made to enhance use
- To what extent has the app changed the nature of supervision?
- Modification of the CHN on the Go app – should it be aligned more to current monitoring and reporting systems and targets set at the district level?
- Ways in which the sub district can be engaged further to provide appropriate supervision?
- Understand any changes to the ways the app is influencing CHN behavior based on enhancements to be made to the app in the coming months?
- Understand the need and process of transition and sustainability of the app with regard to GHS

Next Steps

July 2015-May 2016



ONGOING DISCUSSIONS WITH GHS, REGIONAL/DISTRICT DIRECTORS, OTHER STAKEHOLDERS



For more information about the
Innovations for MNCH Initiative and
the CHN On the Go App, contact
innovationsformnch.org