

# ARISE-SI Final Report of Transitional Period: April-June 2012

# **Background:**

Under the coaching of Patrick Isingoma, and distance meta-coaching by Kevin Shannon, the Masaka District systems innovation efforts continued after the ARISE-SI Routine Immunization (RI) learning initiative ended its field work March 31, 2012 in 5 health units: Bukeeri (HC III), Kyannamukaaka (HC IV), Kiyumba, (HC IV), Butende (HC III), and MMC (HC II), as well as the DHT (District Health Team) of Masaka. The purpose of this threemonth transition from full-implementation to end of the project was to: a) solidify gains in process improvement and support sustainability efforts, b) gather three months more of immunization data in order to have a full 12 months of data, and c) monitor HU RI performance after the end of the intensive ARISE-SI efforts.

During the ARISE-SI initiative, the HUs and the DHT were led through two improvement cycles utilizing the TDI microsystems QI approach. During the final three-month transitional time reported herein, a third improvement cycle was implemented by each improvement team.

# **Methodology:**

During April – June 2012 a third PDSA was implemented by each improvement team and they were coached though their efforts by Patrick Isingoma through monthly visits and weekly calls. Coach (Patrick Isingoma) and meta-coach (Kevin Shannon) communicated weekly by Skype coaching sessions (unless Patrick was in Masaka); and there was periodic consultation with Wendy Abramson of JSI. (See addendum for PDSA#3 summaries.)

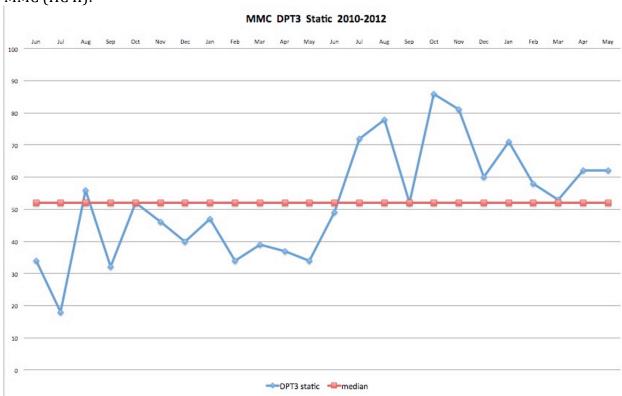
Immunization data were collected in early June to cover the last months of improvement efforts: February – May.

# **Quantitative RI Findings:**

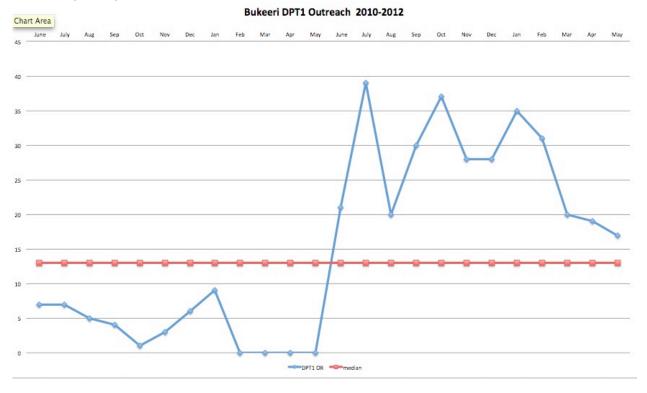
Initial findings from the ARISE SI learning initiative have been confirmed – the smaller HUs continue to be effective in their improvement in absolute numbers of children vacinated, and the larger HUs have yet to have statistically significant improvement. There are various reasons for this, which will be detailed below.

When the run charts for DPT immunization include a full 24 months: June 2010 – May 2012, there is significant improvement sustained during the final months for the three smaller HUs (HU II and HU IIIs), but significant improvement in RI quantitative data is not yet seen with the larger HUs (HU IVs)

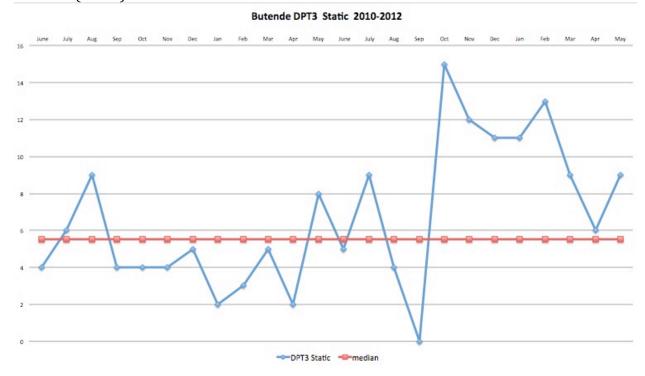
# MMC (HC II):



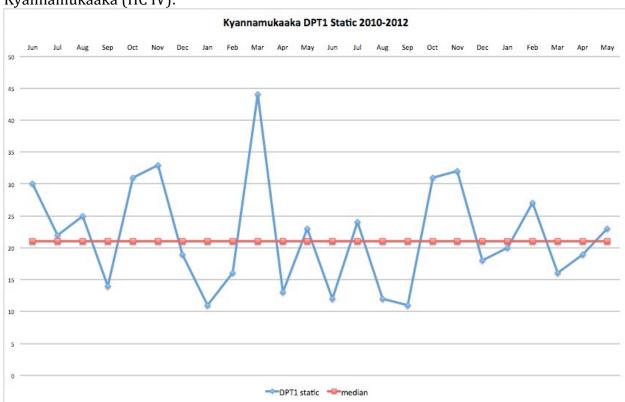
# Bukeeri (HC III):

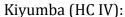


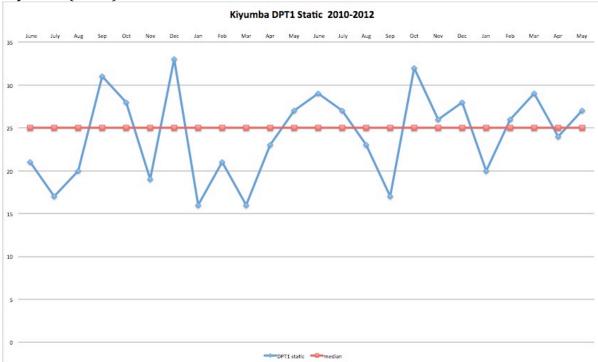
# Butende (HC III):











#### **Absolute RI Data:**

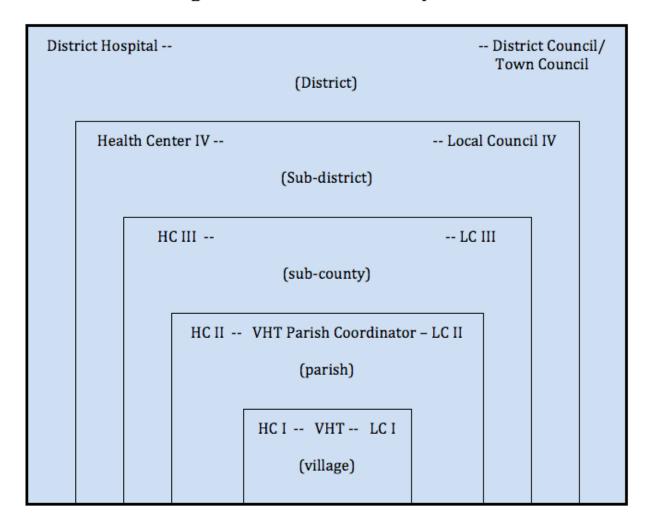
The trend that we encountered with the larger HUs (the HC IVs) was that at the outset, they tended to focus more on the work of their own staff and less on connection with the community, and they did not show improvement in the absolute number of RI antigens administered during the 11 months from July 2011 to May 2012). It was not until late in ARISE-SI work that changes involving the community were made. So improvements in RI antigen numbers did not improve in the larger HUs; we believe this is largely due to the fact that they did not engage the community in reaching the unreached. However, all 5 HUs and the DHT were successful in acquisition of QI skills and implementation of QI efforts during the course of the initiative, and by the end of ARISE-SI, significant engagement of the community was seen in all HUs – including the two large HUs. But these more qualitative measures of success were not the focus during these last three-months. So even though the subjective impression of the coach is that all HUs and the DHT continued to employ QI skills effectively and progressively have become more and more independent, and have continued to involve community members as integral members of the Health Unit Improvement Teams (HUITs) – we did not collect qualitative data to document it during April through June.

It is anticipated that as the HC IVs continue to be more active in efforts partnering with the community – specifically, those involving the Village Health Teams at static and outreach RI sessions – that their absolute RI numbers will increase.

Note. Late-arriving June data shows continued good small HC performance, and significant and promising improvement for both the HC IVs: on average RI at the static units in June was 49% greater than the historic median, continuing improvements seen in May in both units. (At Kiyumba, the median of the final 9 months was 27 and the past median was 22; arguably an improvement.) This supports the above statement regarding our expectation of large HU improvement over time.

# Reaching the Unreached and Autonomy of Parallel Administrative Leadership:

# **Ugandan Health & Political System**



The Ugandan health and political administrative structure has been intentionally created to work in parallel. Theoretically: at the village level, the Local Council I (LC I) serves in parallel with the HC I; at the parish level, the LC II serves in parallel with the HC II; at the sub-county level, then LC III serves in parallel with the HC III, and so on up to the LC V (district or town council). It is very important to understand that at present in Uganda, administrative autonomy extends down to the LC III level – at this level the LC has substantial control over how they expend their time and resources. Representatives from the LC IIIs will go to periodic parliament-like meetings at the district (LC V level), with little input or interference from the LC IVs. During the ARISE-SI initiative, we observed that the LC IIIs were the most effective in engaging the community and even (as a last resort) putting pressure on unreached families to have their children immunized. This was an important factor in the success of the HC IIIs in our project. *In any future similar efforts, it would be wise for the organizers to discover how far down the national administrative structure AUTONOMY is given to the local leaders, and ensure that significant effort is given down to that level to engage those parallel administrative leaders in RI efforts.* 

# The 7 A's of Opportunity for Change:

The ARISE model developed by JSI included 4 As: Acceptability, Accessibility, Affordability, and Availability. As the ARISE project unfolded, JSI mentioned another "A" during an ARISE-SI meeting, which had become apparent from early ARISE efforts: Affability. During the June 2011 ARISE-SI workshop in Masaka, ARISE-SI realized that another issue was at play: Awareness. And a few days later at the DHT improvement team meeting, ARISE-SI recognized a final "A" in the discussions: Accountability. That is, during participatory learning sessions, the 6th and 7th A's were discovered. Patrick Isingoma then adopted these 7A's in his coaching work, finding that they helped HUs to identify problems with their own local RI efforts, and helped to find potential changes to address those problems.

### **Coaching:**

There were two levels of coaching in ARISE-SI: direct coaching of the HUs and DHT by the National Program Manager (Patrick Isingoma), and "meta-coaching" of Patrick by TDI faculty, especially Kevin Shannon. Because Patrick was not expert in the TDI QI methods at the beginning of the initiative, meta coaching was required. In future application of this approach in Uganda, Patrick could serve as the meta coach for a new group of coaches. Onthe-job learning by coaches with support by an expert meta-coach is the most effective way to effectively teach this approach.

The coach learned via a variety of methods: 1) direct, in-person conferencing with TDI meta-coaches; 2) attendance of TDI coaching conference; 3) reading of TDI QI materials; 4) completion of the coach's own Person Improvement Project (PIP); and 5) distance support by teleconferencing during coaching efforts. The PIP is a small, personal improvement effort undertaken by the coach to change something in their personal routines for the better. Patrick chose to attempt to reduce his commuting time in the busy city of Kampala. Through the PIP, the coach appreciates the value of QI.

# **The ROLES and FUNCTIONS of a COACH** (3 general categories adapted from Schein)

- a) EXPERT
  - i) Teacher: Identify effective training strategies; Provide needed information
  - ii) Measurement Expert: Identify effective potential measures; Help develop data collection and display approaches
- b) DIAGNOSTICIAN
  - i) Objective Assessor: Provide individual and group formative feedback; Assess and track individual and group progress over time
  - ii) Strategic Thinker: Identify internal and external stakeholders needed to sustain effort; Strategically organize the QI program within the organization
- c) QI PROCESS COACH
  - i) QI Catalyst: Create interest in beginning QI process; Stimulate ongoing interest to sustain QI efforts
  - ii) Collaboration Builder / Facilitator/Manager: Help team to balance individual and group needs; Guide group process: group dynamics and logistics; Effective time management/meeting management, effective priority setting

After each trip the coach made alone to Masaka for the HUIT meetings, the meta-coach would Skype with him and ask him to reflect, and estimate the time he spent in each of Schein's roles. Looking back over the course of the year coaching the health units, we found that by the end, the coach spent less time in the "Expert" role. (Two of the HUITs had more than one new member during the last 2 meetings, so the coach had to do more Expert work.) It cannot be seen from the total percentage numbers on the graph below, but in 4/6 HUs, the percentage time the coach functioned as Expert decreased from the median the last two times this assessment was done – the very high percentage of time spent teaching the new people in the two unstable improvement teams during the last two Roles assessments masked this. This late decrease in time in the role of Expert shows that it required 8-9 months of improvement work before the HUs became demonstrably more self-sufficient in their improvement efforts.

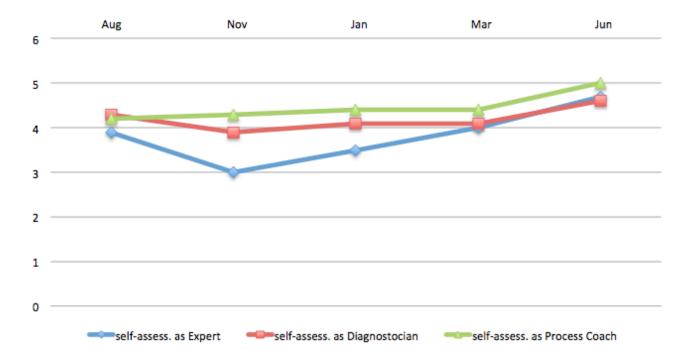
In the final meeting for 4/6 improvement teams, the coach was able to do no **Expert** work at all, but only make a few Diagnostician and Process Coach comments. In that final month, the coach did not lead any meetings; rather, the improvement teams went about running their own meetings, so not only was the percentage of his expert input less, but *his total input overall was much less as well.* It is important to note that the meta-coach did not suggest this step – rather, *the coach thought that it was possible at one year to let the HUITs function autonomously, and his instinct was proven true.* 

# Coaching Time in the 3 Roles



Also, after each of the trips the coach made to Masaka to be present at the HUIT's monthly meetings, the meta-coach would Skype with him and ask him to reflect on that last meeting with each health unit, and to estimate his level of competency in each of the Roles and the Functions of each role (see above). This self-assessment was interesting. As the coach was experienced in coaching other public health efforts, there was a relatively high baseline self-assessment to begin. But then with the second set of meetings in Masaka, as the HUITs got deeper into the improvement work, the coach realized that he had some deficits as an expert and diagnostician in QI. But by the end of the year of coaching, his self-assessment was high in all three roles.

# Coaching Self Assessment Over Time (1 minimum, 5 maximum)

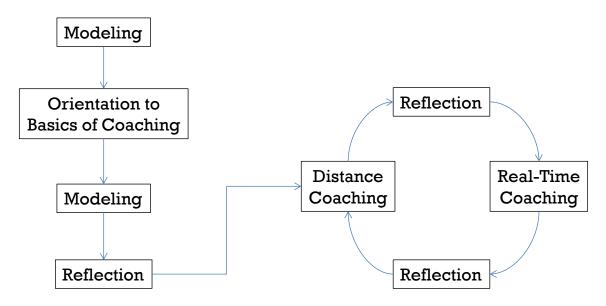


### **SEQUENTIAL STEPS IN COACHING THE COACH:**

- Modeling, then Orientation to Theoretical Basis of Coaching
- Modeling, then Reflection
- Distance Coaching, then Reflection
- Real-Time Coaching, then Reflection
- Distance Coaching, then Reflection
- · Real-Time Coaching, then Reflection
- ...

We began the coaching process with modeling of coaching, and then the coach traveled to TDI for formal QI coaching training. Then we modeled again for him in Uganda, and asked him to reflect on what he had learned and observed. It was at this point that we asked him to continue coaching the improvement teams on his own, with weekly Skype sessions (distance coaching), and well as periodic in-country experiences (real-time coaching).

(Note: the cycle below of: distance coaching—reflection—real-time coaching—reflection was modified during this last 3 months. During the last 3 months the metacoach did not travel to Uganda – so there was only distance coaching and reflection. Were this approach spread within Uganda, it would be possible to have the real-time coaching continue periodically – alternating with distance coaching – throughout the final 12 months of the coach's QI work in the HUs; however, the transition to distance coaching only by the meta-coach in the final three months was successful.)



March - June 2011

**July 2011 - February 2012** 

# **Sustainability:**

Once again, one of the primary purposes of this three-month extension of ARISE-SI efforts was to solidify the gains made and to support sustainability efforts going forward. At present it is clear that QI efforts will continue in Masaka, and this is due to a few factors:

- 1) The coach (Isingoma) created an agenda item called "the way forward" which was addressed at the end of each HUIT meeting. Each detail of the change effort agreed to during the meeting would be given as an "assignment" to a specific person. Early in the agenda of the next HUIT meeting, these people would be asked to report on what they had been assigned to do in the interim. This practice encouraged the HUIT to be specific in their deliberations, and then to expect they would each be accountable to the group for QI work.
- 2) A core of VHT members has been attending HUIT meetings at all units, and it has been agreed in June that the HUs will use a small portion of their Primary Health Care funds to support the travel of those VHT members to quarterly HUIT meetings going forward. This was agreed due to mutual interest in continuing OI work on the part of the HUITs and the district.
- 3) The district will send a representative (usually DHI, Med. Bukenya, who worked closely with Patrick Isingoma throughout ARISE-SI) to these quarterly HUIT meetings going forward to act as a coach and support for the ongoing efforts.

### **Final Conclusions:**

Throughout the entire first year of QI efforts, the interaction of **coach** and HU was very important. Over the course of time, the coach continued to gain in self-efficacy, as well as in competence (as judged by his meta-coach); and the essential nature of his efforts was recognized by the HUs. It was found during this final 3-month extension of ARISE-SI. that it required a full year (involving 3 improvement cycles for each improvement team) for the HUs to be essentially self-sufficient in their improvement efforts. If this approach were to be scaled up, other Ugandan coaches could be trained by an expert Ugandan meta-coach, such as Patrick Isingoma, and they could effect positive changes in HUs. But during ARISE-SI, this *success required enough time devoted to QI learning and to QI work in the HUs, a full year of coaching, and substantial focus on community partnerships.* 

Absolute RI data from the HUs improved in the small HUs (HC IIIs and HC II) but only a late trend toward improvement was seen in the HC IVs; though it is likely that as they began to focus on partnership with the community late in the project year, that quantitative as well as the already clearly-demonstrated qualitative improvement will be demonstrated over time. (Again, in the final two months, there was a clear increase in RI over the historic median for both large HUs; very promising for continued improvement.) This supports our initial supposition that reaching the unreached with substantial community partnership is key to sustained improvement in RI rates over 90%.

During the last three months, we observed **sustained**, unrelenting **QI efforts** on the part of all HUs and the DHT. The DHI was included at HUIT meetings most of the year, so at the end of the project, he was very interested in moving forward with QI efforts in the district. At the conclusion of ARISE-SI, Masaka District planned to carry on this approach to improvement of RI services; they planned to have ongoing quarterly HUIT meetings supported by a district-level coach.

### **ADDENDUM**

#### **DHT -- PDSA #3:**

#### Aim:

To increase the no. of health units with vaccine control book (UNEPI or Improvised) from 22 to 32 by June 30, 2012

# Changes:

- 1. Inventory of vaccine control books in the district
- 2. March DHMT (District Health Management Team) meeting for the DHO to advise the in-charges to purchase vaccine control book by June 30, 2012 if they do not have one

#### Measures:

- 1. No. of health units with inventory completed before March DHMT meeting
- 2. No. of in-charges advised by the DHO in March to purchase the vaccine control book
- 3. No. of units with vaccine control book by June 30, 2012

### Data Collection:

DCCO will collect total no. for each measure

### Data display:

1. Bar Chart:

X-axis: Month (Feb thru March)

Y-axis: Cumulative no. of units with vaccine control book inventory completed

- 2. Document the no. of in-charges for the DHO to advise in March
- 3. Bar chart:

X-axis: Months (March thru June)

Y-axis: Cumulative no. of units with vaccine control book

# **KYANNAMUKAAKA -- PDSA #3:**

#### Aim:

Reduce drop-out rate of DPT3 to Measles from baseline financial year 7/10-6/11 to financial year 7/11-6/12

### Changes:

- 1. Orienting 90% of VHT members of their RI (Routine Immunization) service area to the CHC. This will be done by Florence/Sylvia in monthly and quarterly meetings (monthly meetings are only for some RI service area parishes while the quarterly are for more distant parishes within their RI service area)
- 2. Procure new Immunization Register

#### Measures:

- 1. No. of VHT members who are new orientees, who are oriented between Feb and June
- 2. Register already purchased

### Data Collection and Display:

- 1. Tally Sheet: Date, names, village and parish. This will be done by Sylvia and Florence
- 2. Bar Chart:

X-axis: Feb thru June

Y-axis: Cumulative no. of VHTs from RI service area who are new oriented

#### **BUKEERI -- PDSA #3:**

#### Aim:

Increase Immunization coverage for DPT3 for under 1 yr. by June 2012.

# Changes discussed:

- VHTs to visit all homes by June 2012 (even those homes that have no children)
- VHTs checking CHCs (Child Health Card) when they visit the homes.

## Measures and Data collection tools:

- 1<sup>st</sup> change: they will rely on mothers reporting to the health unit whether they were visited by a VHT since January of 2012. This would be done during the health education time during o/r by asking the question- How many mothers were visited by VHT since January?
- If yes to question 1, then eligible for the second: Did the VHT check their CHCs?

## Instruments:

Change no 1-VHT and mother report; Change no.2-Mother report

Develop <u>tally sheets</u> at outreach: outreach village name, total no. of mothers at outreach that day, no. of mothers present that were visited by VHT since Jan, and no. of mothers that were visited whose CHCs were checked. <u>Wall flip chart</u> at static unit-include VHT name, total no. of households each VHT is responsible for, homes visited by each VHT per month (Jan -June)

# Data display tools:

Bar charts will be created to display the data for all the three measures.

1. VHT Report: X-axis: Quarters

Y-axis: Cumulative % of homesteads visited by VHT

2. Mother report: X-axis: Cumulative % of mothers visited by VHT

Y-axis: Months

3. X-axis: Cumulative % of mothers visited by VHT that had checked CHC

Y-axis: Months

#### **KIYUMBA -- PDSA #3:**

#### Aim

To increase immunization coverage for under 1's by July 2012

# Changes:

- In March call 4 Parish coordinators at the health unit to provide a training on review of CHC and Tally sheet prepared by health unit
- Every VHT to visit 100% of their homesteads to identify un/under immunized children in 3 months (April thru June)

### Measures:

- 1. The HUIT will also document that they had trained the 4 Parish Coordinators in March
- 2. Count the no. of homesteads visited by VHT per village per month from April through June 2012

### Data collection:

Parish/VHT coordinators Tally sheet presented at HUMC (Health Unit Management Committee) quarterly meetings in March and July (name of village, total homesteads per village, homesteads visited in April, May and June).

## Data display:

Bar charts will be created to display the data.

X-axis: Months

Y-axis: Cumulative no. of VHTs visiting 100% of homesteads during April-June

#### **BUTENDE -- PDSA #3:**

#### Aim:

Maintained the last aim (We aim to increase the percentage of children immunized DPT3 from 60% to 75% by October 2012.

## Changes:

- 1. Increase the no. of VHT/mobilizers homestead visits to 30 by the end of May 2012
- 2. Request Imam to request mothers to immunize children
- 3. Write to LC1 chairs (2) about supporting immunization
- 4. Provide exercise books and pen to mobilizers (8) by end of March

#### Measures:

Changes No. 2 and 3 are already done.

Change 1- No. of homesteads visited by VHT/mobilizer every month

Change 4- No. of mobilizers with exercise books and pens by March 31, 2012

### Data collection:

Tally sheet with name of VHT/mobilizer, village, homes visited (January to May)

# Data Display:

Bar chart: X axis: Months (January to May)

Y axis: Cumulative number of homesteads visited by VHT/mobilizer

#### **MMC -- PDSA #3:**

#### Aim:

Decease drop-out rate of DPT3 to Measles from March 2012 to June 2013

# Changes:

- 1. Re-orient VHTs/mobilizers to immunization schedule and reading CHC by June 2012 (29 VHTs and 3 mobilizers)
- 2. All VHTs/mobilizers to visit/re-visit all his/her homesteads checking CHCs to find children who have not completed routine immunization by June 2012

### Measures:

- 1. No. of VHTs/mobilizers oriented on immunization schedule and reading CHCs per month
- 2. No. of homes visited by VHTs/mobilizers per month

### Data Collection/Display:

## For measure 1:

- Tally sheet-with name of VHT/mobilizer, village, no. oriented each month (March thru June)
- Run chart-X axis: month (March to June)

Y axis- cumulative no. of new orientees (VHT/mobilizer)

### For measure 2:

- Tally sheet- with VHT/mobilizer, village, no. of homesteads visited, months (March to June), and then a "Total" column in the end
- Run chart- X axis: month (April thru June); Y axis: no. of homes visited by VHT/mobilizers