

## **A conversation with Nelson Coelho, April 15, 2016**

### **Participants**

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**Note:** These notes were compiled by GiveWell and give an overview of the major points made by Nelson Coelho.

### **Summary**

GiveWell spoke with Nelson Coelho of Concern Universal, the net distribution partner of the Against Malaria Foundation (AMF) in Malawi, to learn about Concern Universal's on-the-ground processes. Conversation topics included Concern Universal's procedures for pre-distribution registration surveys, distribution days, and post-distribution check-ups (PDCUs).

### **District-level health system and government in Malawi**

Districts are divided into health center catchment areas, each of which has one health center that employs some number of health surveillance assistants (HSAs). HSAs are health extension workers that serve as the link between the health center and the population. Each HSA is assigned to a specific geographical area and is involved in a variety of health-related activities.

District-level government includes a district commissioner and a hierarchy of traditional authorities, which is composed of leaders of the traditional authority, leaders of groups of villages, and village chiefs.

### **Pre-distribution registration survey**

Concern Universal conducts pre-distribution registration surveys in the four districts in Malawi it carries out net distributions in. These surveys are conducted in cooperation with traditional leaders and local health officials. The purpose of the surveys is to determine how many nets are needed for the upcoming net distribution. Ensuring that all beneficiaries have been identified can be difficult, particularly because Malawi does not have a national identification card system. However, Concern Universal is fairly confident that the registration process reaches all beneficiaries, given that:

- Each health center has information on the number of villages in its catchment area and the number of households per village.
- HSAs spend most of their time working in villages, and therefore have deep knowledge of the number of villages and number of households in each village.
- Traditional leaders oversee the distribution and help to ensure that all villages are targeted.

Concern Universal begins the registration survey process by collecting demographic data from district health offices, including:

- Number of households per district
- Number of households per catchment area
- Number of people per household

Concern Universal uses this data to identify any villages skipped during the registration.

### **Home visits**

HSAs then visit villages and meet with the village leader, who accompanies the HSA through the process of door-to-door registration. Because there are no detailed maps or geographical information system data for rural Malawi, HSAs rely on the knowledge of village leaders to locate all households in the village. The presence of the village leader also lends credibility to the HSAs and makes households more likely to cooperate.

HSAs introduce themselves to the head of household (or a representative thereof) and explain that they are there to assess the number of nets required in that household. After obtaining permission to enter the household, the HSA gathers the following information:

- Number of people over and under 5 years old in the household
- Name of head of household
- Number of sleeping spaces in the household
- Number of existing bed nets with a lifespan of at least another 18 months

The HSA determines the number of sleeping spaces by talking to household members and personally looking at sleeping spaces. The village head sometimes verifies whether the number of household members reported by the beneficiary is correct.

Sleeping spaces can be identified by mats laid on the floor (sometimes two people share one mat). It is often not obvious how many sleeping spaces are in a household, because many people put away their mats (and nets, if they have them) during the day due to limited indoor space. The number of sleeping spaces is important for assessing net allocations. If Concern Universal distributed nets based on the average of 1.8 people per sleeping space, it may not give enough nets in situations where, for example, a brother and sister sleep separately and each need their own net. Concern Universal also asks about sleeping spaces that are used less regularly, such as those of children who attend boarding schools but return home over weekend breaks.

If a household owns nets, the HSA inspects them to determine whether they are in viable condition. Viable nets must have the following:

- A label with an expiration date at least 18 months in the future
- Fewer than 10 holes smaller than 2 cm
- No holes larger than 10 cm

## **Registration verification**

### *Supervision of HSAs*

Concern Universal staff and district health officials supervise the HSAs to ensure that they are doing their jobs correctly.

### *105% data collection*

After the HSAs have collected data from all villages, spot-checkers independently collect the same data from 5% of households in each village. The spot-checkers are employed by the government and receive lunch allowances paid by Concern Universal during the time they are engaged in the exercise. This data is later compared to the HSA data to check for consistency.

The two sets of data are entered into a Microsoft Access database separately. Reconciliation of the data is done after data entry. The data is used to calculate the number of nets required in each village, health center catchment area, and district. A printed register including all information recorded during registration is created for each village.

### *Verification*

Concern Universal staff gather 4-5 villages in each catchment area at a central location, and use the registers to take roll call of the household names and the number of nets each household is registered to receive. People, households, or villages who claim to have been skipped during registration are added to the register if local leaders confirm these claims. Verification is conducted for all villages.

## **Reasons households or villages may be skipped during registration**

There have been several instances in which villages or households were skipped during registration, but Mr. Coelho is not aware of any cases of collusion between the population and the village leaders in order to get additional nets.

### *Lack of professionalism*

One reason for which households have been skipped during registration was a lack of professionalism on behalf of the HSA. In one village, the HSA told the village leader what information needed to be collected and asked him to complete registration himself. This resulted in the village leader's house not being registered.

### *Vacant areas*

Each health center catchment area requires a certain number of HSAs, but they are sometimes under-resourced, which results in "vacant areas" consisting of several villages that do not have HSAs assigned to them. Households or entire villages in these vacant areas are sometimes skipped during registration, for two main reasons:

1. HSAs may do a worse job in their vacant area, because they do not feel responsible for those communities.
2. The HSA may not have access to detailed information about the vacant area, e.g. the population or number of households. As an example, it can be difficult to know how many households are comprised by 10 structures, since there may be 2-3 structures per household.

### **Over-reporting the number of nets needed**

Concern Universal often does sensitization work with village leaders prior to the registration process. This encourages the leaders to feel responsible for their communities and recognize that over-reporting may lead to net shortages in other villages.

This sensitization seems to have had a large impact. In several cases, traditional leaders have noted during distributions that a household needs fewer nets than it is registered for, due to family members passing away or moving out.

### **Distribution day**

After information is collected and verified, Concern Universal creates a distribution planning document which:

- Assigns each village to a distribution site, with a goal of minimizing the distance that beneficiaries need to travel (most beneficiaries travel 4-5 miles to their distribution site). Each catchment area is divided into several distribution sites, and each site serves 2-12 villages, depending on the geographic location, number of nets to be distributed, etc.
- Allocates a number of nets to be delivered to each location.

Concern Universal staff then meet with traditional authorities and district health officials to explain the distribution plan and set a date for the distribution, avoiding days that conflict with other community events. Concern Universal communicates the date, time, and place of distributions verbally to village leaders, who relay the information verbally to village members.

On distribution day, Concern Universal staff bring bed nets to the distribution sites using Concern Universal's vehicles or vehicles rented for that purpose. Village members typically walk to the distribution site; some travel by bike or organize transit in a motor vehicle. At the site, village leaders and HSAs group the beneficiaries by village. A roll call is taken, and as household names are called, members approach to receive nets. Household heads sign or fingerprint two copies of the distribution register to confirm receipt of their nets. If the household head is not present, a representative may receive nets on his/her behalf, as long as that person is recognized by the village head as being part of the household. When distribution is complete, each village leader receives a copy of the distribution register for their village, and Concern Universal retains the other copy.

## **Mop-up distributions**

Frequently a whole village or a large part of a village will not show up at the distribution site on distribution day, most likely due to a funeral. There are also cases of individual households not showing up. For example, seasonal workers who have moved to a different area to work on harvesting or fishing may be unable to collect their nets.

Concern Universal staff assess which households and villages were registered to receive nets but did not show up to the distribution site and organize a "mop-up" distribution to reach these beneficiaries. The mop-up distribution follows a similar procedure to the main-phase distribution. Distribution sites set for the mop-up may or may not be the same sites used in the main-phase distribution.

## **Communicating distribution date and place**

The communication system between local leaders and village members is generally effective at getting village members to show up to the right place on the right day, and has improved over time. There have been a few cases in which beneficiaries have shown up to the wrong distribution site, though this has not happened recently. Mr. Coelho is not aware of instances in which beneficiaries have shown up on the wrong date. Distribution sites are usually well-known to village members because they are used for multiple gathering purposes.

Distributions plans are usually made on short notice and are usually flexible to accommodate for other activities that may be happening on the planned dates.

## **Post-distribution check-ups (PDCUs)**

### **Planning**

Concern Universal conducts PDCUs in 5% of households in each health center catchment area. The project manager uses information from the Microsoft Access database to arbitrarily select the villages to target and the number of households to visit in each village. Mr. Coelho reviews this data and makes minor adjustments. The project manager then selects which households to visit in each village and prints lists of these households to give to the enumerators (the contracted employees of Concern Universal who will perform the PDCUs).

The project manager tries to avoid selecting villages that are geographically close to each other or selecting the same villages for successive PDCUs, in part because this would yield a less accurate survey of the community and in part because it may be culturally insensitive to ask the same households to repeatedly be open to visitors.

After creating a PDCU plan, Concern Universal coordinates with the government Malaria Coordinator and Insecticide-Treated Net (ITN) Coordinator to ensure that the proposed PDCU dates do not conflict with other scheduled activities. PDCU dates are not

communicated to the village leaders or village members, to avoid foreknowledge of the PDCU influencing beneficiary behavior.

### **In the field**

On the date of a PDCU in a particular catchment area:

- The project manager or a health facility supervisor accompanies all enumerators working in that catchment area to the health center, where they meet with the HSAs responsible for the relevant areas.
- HSAs direct a health center supervisor (e.g. the malaria coordinator or ITN coordinator) and the enumerators to each village.
- Upon arrival in a village, the HSA responsible for the area introduces the enumerator who will be performing PDCUs in that village to the village chief, and explains the purpose of the visit. The HSA's introduction makes the village leader more likely to trust and cooperate with the enumerator.
- The supervisor and HSAs then leave to deliver the other enumerators to other villages.
- The village chief (or a representative he appoints) accompanies the enumerator to each household in the village that has been selected for a PDCU. This is helpful both because the village leader knows the location of each household, and because he introduces the enumerator to the head of household, which improves household cooperation.
- Before the survey begins, the household head, or any other household member present at the time of the visit, signs or fingerprints a form stating that they consent to have the PDCU team enter the household in their presence and assess the use and condition of nets. If the household head does not consent (which happens rarely), the enumerator informs their supervisor or the project manager, who selects an alternative household to be surveyed.
- Household heads are frequently away from home when the enumerator and village leader arrive, often because they are doing fieldwork far from their home. In these cases, the village leader may send someone to call the beneficiary back home. If the village leader does not know where the beneficiary is, the enumerator and village leader may have to wait several hours for the beneficiary to return. There are few cases in which people cannot be located.

### *PDCU process*

During the PDCU, the enumerator:

- Assesses the number of regularly-used sleeping spaces by talking to the beneficiary and looking at the space.
- Asks how many people live in the household, and how many of them have had blood-diagnosed malaria in the last month.

- Records the brand of the nets as "PermaNet," "Olyset," or "other." PermaNet and Olyset are the two brands distributed by AMF in Malawi; nets of other brands have been distributed by a different organization or by the NMCP.
- Records whether the net was distributed in an AMF-funded distribution. AMF-funded nets have a label with the AMF and Concern Universal logos and the date intended for distribution, which links the net to a specific net distribution exercise. This date sometimes differs from the true date of distribution by several months due to delays.
  - If the nets were funded by AMF, the enumerator asks how many nets were originally distributed, notes how many were found hung and not hung during the PDCU, and how many were worn out or not present.
  - The enumerator has access to the copy of the distribution register left with the village leader, and cross-checks the provided information.
- Assesses net condition by physically handling the net and unfolding it if it is not hung up. Nets are recorded as "very good," "okay," or "poor."
  - "Very good" nets have no more than 2 holes of less than 2 cm.
  - "Okay" nets have fewer than 10 holes of less than 2 cm.
  - "Poor" nets have more than 10 holes of less than 2 cm or one hole larger than 10 cm.
- Asks whether the people sleeping under each specific net are children under 5 years old, children 6-18 years old, pregnant women, or other adults.
- Assesses whether nets are being used, and used correctly. The assessment is conducted by observing the way the nets are hung or, in the cases where nets are taken down every morning, by asking the household member to demonstrate where and how the nets are hung. Because nets and sleeping mats are often put away during the day, it is often not obvious whether the nets are being used properly at night. However, if nets are used regularly, it is usually clear where they are hung, and a net that has been used will demonstrate wear and tear. If a net is neatly folded and in excellent condition, the enumerator can be fairly sure that it is not used, regardless of what the beneficiary claims.
  - Concern Universal has been employing the same 10-20 enumerators to do surveys every six months for the last few years. The enumerators are now experienced and capable of making good judgment calls regarding whether nets are used or not.

## **Standardization of procedures**

Procedures are generally the same across districts, but procedural improvements (e.g. 105% verification or new accountability measures) are often trialed in one area and expanded to all 4 districts if they are successful. Concern Universal plans to trial digital data collection during PDCUs, and aims to fully incorporate digital data collection into the 2018 mass net distribution campaign.

## **Other organizations distributing nets in Malawi**

### **National Malaria Control Program**

Mass net distribution campaigns are conducted by Malawi's National Malaria Control Program approximately every 3 years (most recently in 2010, 2012, and 2015-16) in 24 of the 28 districts in Malawi. Concern Universal runs distributions in the other 4 districts. Mr. Coelho is not aware of any other non-governmental organizations (NGOs) conducting mass net distribution campaigns in Malawi.

### **PMI**

The USAID President's Malaria Initiative funds routine net distributions primarily to pregnant women and those who recently gave birth, via antenatal clinics.

### **Other net distribution channels**

Concern Universal is not aware of other NGOs running smaller net distributions in the districts where it operates, but it would not necessarily know if this were the case.

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