Conversations with Ghana's National Malaria Control Program, August 16-18, 2016

Participants

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

Summary

GiveWell spoke with Ghana's National Malaria Control Program (NMCP) as part of its ongoing review of the Against Malaria Foundation (AMF). Conversation topics included NMCP activities, the 2016 net campaign, campaign approaches, and the long-term future of mass net distributions.

NMCP activities

Ghana's National Malaria Control Program (NMCP) is part of the Ghana Health Service (GHS). The NMCP carries out several different types of activities, including:

- 1. **Long-lasting insecticide-treated net (LLIN) distributions** Net distributions are the NMCP's primary vector control activity. It has procurement and supply chain units, and recently formed a research unit to help improve the effectiveness of its operations.
- 2. **Seasonal malaria chemoprevention (SMC)** As SMC activities are only appropriate in a Sahel desert climate, the NMCP implements them in Ghana's two Sahel regions: the Upper West and the Upper East.
- 3. **Indoor residual spraying (IRS)** Due to funding limitations, the NMCP only implements IRS activities in areas with arid climates. With significantly more funding, it would expand IRS into all regions, including forested areas.

4. **Insecticide resistance (IR) monitoring** – The NMCP has been conducting insecticide resistance research for two years in 20 sentinel sites across the country; two sites in each region. It is building a database to track insecticide susceptibility levels in the control. This will largely guide which vector control tool will be used in the various regions. Seven different insecticides are tested with WHO standard protocol for susceptibility tests.

2016 net campaign

What might have happened if the Against Malaria Foundation had not provided funding

In November or December 2015, the NMCP learned that the Against Malaria Foundation (AMF) would be providing funding for Ghana's 2016 net distribution. In the absence of this funding:

- 1. There might not have been any nets available for mass distribution in the Upper West Region this year, where the NMCP carries out both IRS and SMC activities. The NMCP believes nets should still be used in regions with IRS and SMC, but prioritizes distribution in regions without them.
- 2. There might not have been enough nets to cover the Greater Accra Region. As a result, the NMCP might have only pursued a targeted mass campaign in the region, and focused on slums and rural areas.
- 3. Continuous distribution of nets, which are carried out in health clinics and schools, might have faced net shortages due to continuous distribution nets being redirected to the mass campaign.

Normally, when coverage gaps arise, the NMCP is able to fill them by requesting support from funders such as the President's Malaria Initiative (PMI) or the United Kingdom's Department for International Development (DFID).

Working with AMF

The NMCP has been working with AMF for a relatively short period of time. Their working relationship has proceeded relatively smoothly thus far, especially since AMF has shown willingness to negotiate on some areas to conform with the country's specific scenario. The timeline of the distribution agreement (finalized in January 2016) did not cause problems for the NMCP.

During negotiations, AMF requested household tracing, which requires tracking the nets in order to ensure they reach their intended recipients. The Global Fund also recently made this requirement. This can be a fairly challenging task, but it is not unreasonable since different funders (AMF and the Global Fund) are requesting the same monitoring data. When different funders have different requirements and request different types of monitoring data, however, it can be overly burdensome.

Tracking net locations in future distributions

In future distributions, the NMCP would like to apply a batch number to the nets in each bale in order to more efficiently track whether they reached the intended destination (e.g. the NMCP would know that nets labeled "Batch #0210" were intended for a specific district; if the nets ended up somewhere else, something went wrong).

Campaign approaches

Mass distribution campaigns

2010 distribution

In Ghana's 2010 mass distribution, the NMCP employed a door-to-door and 'hang-up' approach, and nets were allocated based on the universal coverage but taking into consideration the number of sleeping spaces and already existing nets in a household. The NMCP prioritized pregnant women and children under five in the pilot phase in the Northern Region. It required proof of pregnancy, and, as children sometimes look younger than they are, proof of child age. These efforts were quite time-consuming.

2016 and future distributions

The GHS now aims to allocate one net per two individuals in a household, and will do so until it has adequate resources to further increase this ratio. It defines 'household' as "people who eat from the same pot" because the GHS was already using this definition in other health interventions. The 1:2 ratio is recommended by the World Health Organization (WHO) and is based on the work of Dr. Albert Kilian, who works with TropHealth and the Malaria Consortium.

The NMCP has observed that increasing levels of independence among family members is leading to more individualized sleeping arrangements. In households with fewer nets than beds, individuals sleeping separately are unlikely to adjust sleeping arrangements to ensure that they are covered by nets.

Ideally, the NMCP would like to reach saturation coverage levels in order to obtain population effects, such as net use by individuals who have low risk of contracting malaria, and net spillover to missed households.

Issues with campaigns in semi-urban areas

The Greater Accra Region contains urban areas (Accra), semi-urban areas (communities on the outskirts of Accra), and rural areas. The 2016 net distribution targeted all households in the Greater Accra Region (with the exception of residents in some gated communities and affluent areas of Accra). Generally, residents of semi-urban regions are less likely to use bed nets than residents of rural areas, but targeting all these areas is still important given the porousness of boundaries between rural and urban areas. Further research is needed on targeting health messages to semi-urban populations.

Continuous Distribution of Nets

This involves nets given for free at health facilities (antenatal clinics for pregnant women and child welfare clinics i.e. during vaccinations) and in schools.

Pregnant women receive a free net when they register their pregnancy at a health center; most women are aware, and take advantage, of this opportunity. Nets are given to children between 18 and 36 months who visit clinics for the measles. Two booster doses are used as an incentive to improve vaccination coverage.

Nets are also distributed to children in selected classes in primary schools in most regions of the country. In 2016, nets were distributed in six regions.

The long-term future of mass net distributions

The NMCP hopes that as more individuals recognize the value of nets, they might be willing to purchase them on their own. This is less likely to happen if they know they will receive them for free. DFID is funding a pilot project to study one potential solution: offering subsidized nets for purchase and phasing out the subsidy over time.

Currently, nets can be purchased for roughly \$6.25 in all district capitals, which are easily accessed by most individuals. This is through the private sector and not a part of the NMCP's strategy to distribute nets.

All GiveWell conversations are available at http://www.givewell.org/conversations