

A conversation with Diego Moroso, April 25, 2017

Participants

- Diego Moroso – Regional Project Director, ACCESS-SMC, Malaria Consortium
- Josh Rosenberg – Senior Research Analyst, GiveWell

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

Summary

GiveWell spoke with Mr. Moroso of Malaria Consortium's Achieving Catalytic Expansion of Seasonal Malaria Chemoprevention program (ACCESS-SMC) in order to obtain an update on its work. Conversation topics included a preliminary coverage evaluation from 2016 SMC distributions, evaluation methodology, and information sharing.

Drug resistance

The data available so far suggest there was very little resistance to the drugs used for SMC at baseline, i.e., prior to Malaria Consortium's intervention. The endline survey on resistance, beginning in December 2017, should establish whether three years of SMC has affected the prevalence of resistance.

Coverage evaluation

Recent findings

A few details on 2016 coverage results in particular countries include:

- **The Gambia** – Data collection is supposed to be fully digitized here: information about each child is obtained by scanning the barcode on the child's individual Record Card. However, a number of cards contained inconsistent data and the evaluation suggests that only around 50% of cards were kept by caregivers. The low retention rate was surprising and may indicate mistakes in the data collection process. ACCESS-SMC plans to investigate this issue.
- **Nigeria** – Management changes within the National Drug Authority led to delayed approval of waivers for SMC drugs. Consequently, a number of districts missed the first cycle, only receiving three in total.
- **Chad** – SMC distributions occurred in Chad for the first time in 2016 in large urban areas. Target populations in the capital N'Djamena were underestimated, resulting in drug stock-outs in the fourth cycle in some districts. This may have led to lower coverage figures. More accurate estimates should be available by mid-May, once the data has been cleaned.

Survey methodology

Initially, coverage surveys were conducted at the end of the fourth monthly cycle. Because of funding restrictions, and because it was a novel intervention, ACCESS-SMC wanted to see whether reasonably high levels of accurate recall and card retention could be achieved even after this (relatively long) follow-up period.

Some issues with recall were suspected, so the program looked into having a simpler, less thorough survey at the end of each cycle. However, finances would not have allowed this to be done in every country; some would have had one or two surveys, and some would have been unable to implement any, for a number of reasons.

An ideal, “gold standard” survey would be carried out one week after the end of each cycle, and the findings would be compared to similar samples from previous cycles.

Administrative data collection

Registers

The program has mostly been using paper registers to track children’s relevant details, such as their name, mother’s name, age, location, and number of SMC treatments received. However, there have been a number of difficulties:

- **Literacy** – Some community health workers have been unable to understand or properly enter the information in the registers, making their accuracy not very reliable.
- **Physical durability** – Some registers have deteriorated in the challenging climate.
- **Data analysis** – It is difficult to analyze millions of lines of paper registers, or even to spot-check them at a significant scale.

Digitization

As a test, ACCESS-SMC digitized the records of 1.4 million children in Mali at a cost of \$70,000. This found a good match between the routine data (from the registers) and the results of the coverage survey. The specific context in Mali (fixed points at a health facility) probably ensured better quality of documentation, but even so, a lot of the information was not useful or was improperly recorded.

Revised tally sheets

The program decided to replace registers with grids in the back of the SMC tally sheets, which will capture unique numeric identifiers as pre-printed in SMC child cards. The front of the sheet contains the usual information (such as how many doses a child has received), and the back contains this grid in which the child’s unique seven-figure code can be written. It is only entered when drug administration is confirmed; for instance, if the child vomits, a second dose is given, and only then the code is entered. This ensures the child will appear in the records regardless of where they received treatment.

Administrative versus survey data

Household coverage surveys tend not to be sustainable: they are difficult for governments to maintain, and generally rely on external funding. However, ACCESS-SMC does not yet have a good sense of how reliable the routine administrative data are – a problem that will hopefully be addressed by the new tally system and cycle-specific surveys.

This year the program will observe how closely administrative data and coverage surveys agree with each other. If they are close, it may be best not to continue with coverage surveys. If there are substantial differences, it will consider other options. One possibility is to rely primarily on routine data but occasionally carry out “gold standard” surveys in representative areas to confirm accuracy.

Information sharing

Data re-analysis

Sometimes it is informative to analyze data differently than initially planned. For instance, poor coverage figures in some countries may be due to some areas receiving only three cycles. The data could be re-analyzed including only areas that received all four cycles, producing estimates that may be easier to interpret, albeit with a higher margin of error.

ACCESS-SMC plans to fully explain all major decisions behind its analysis, including key assumptions.

Study plans

The program has records of the initially planned evaluation methodology, including sampling procedures that surveyors must adhere to. In some cases it may be justified to depart from those plans; for instance, evaluators considered excluding areas of Nigeria that only received three cycles in order to avoid underestimating the coverage, although they decided against this to maintain consistency with 2015 surveys.

The initial plans, and details of any changes, can be shared.

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