



## Summary update- GiveWell / Good Ventures funding for SMC

### Background

Malaria Consortium implemented SMC with UNITAID funding under the ACCESS-SMC project between 2015 and 2017 (three SMC rounds), with an original geographical scope encompassing 7 countries (Burkina Faso, Chad, Guinea, Mali, Niger, Nigeria and The Gambia). In 2017, the project focused on just three countries, Burkina Faso, Nigeria and Chad, where both Malaria Consortium and other stakeholders had more difficulties identifying alternative sources of funding (either domestic or international from sources such as the Global Fund, PMI or the World Bank) to transition out of ACCESS-SMC. The three above-mentioned countries make up, together with Mali and Niger, the bulk of the SMC eligible children in line with WHO guidelines, with Nigeria alone accounting for 11-13M eligible children (depending on the estimates), of which only approximately 1.7 were covered by ACCESS-SMC. In the whole Sahel region, over 12M children are still left out from SMC programs.

The original ACCESS-SMC grant was expected to end on August 31<sup>st</sup>, but Malaria Consortium secured a cost extension up to February 28, 2018, to complete the third season in the abovementioned countries, and carry out an endline molecular markers' survey in the seven ACCESS-SMC countries<sup>1</sup>, to track trends in parasite resistance to SMC drugs. UNITAID's support in 2017, however, left key funding gaps related to monitoring and evaluation costs, in particular coverage surveys and extra efforts/activities to improve monitoring in Chad and Nigeria, countries that show less positive results compared to other countries. These extra monitoring activities are intended to help perform a better analysis of the discrepancies around coverage surveys and administrative data, which in all countries have been significant.

SMC activities take place in yearly rounds (seasons) of four months during the peak of the rainy season, with four distribution / administration cycles within one round (roughly a cycle every 28 days / 1 month).

### GiveWell / Good Ventures funding allocations

Two dimensions of support were prioritized under the funding framework provided by Good Ventures through GiveWell recommendations on SMC:

- Operational support to SMC implementation, through expansion of Malaria Consortium involvement in areas previously covered by other donors but left unserved in 2017, or new areas not yet covered by any donors, and which would have not been supported otherwise. The extent of this new operational support was constrained by the timing of the funding confirmation with respect to the season [and capacity at the provider], which both affected the maximum amount of drugs that could be procured, produced, shipped and delivered in time for the 2017 season (approximately 1.6M blisters).
- Monitoring and evaluation support, specifically through the execution of multiple coverage surveys and enhanced in-process monitoring (including in ACCESS-SMC areas).

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<sup>1</sup> Burkina Faso, Chad, Guinea, Mali, Niger, Nigeria and the Gambia.

### a. Operational support

Three countries have been prioritized for this support:

#### Nigeria:

Since 2013, Nigeria was supported first by Bill & Melinda Gates Foundation and then through other one-off funding to implement SMC in six Local Government Areas (LGAs) in the States of Katsina and Jigawa. Through the funding provided by GiveWell / Good Ventures, Malaria Consortium reinstated support to these 6 LGAs that did not have any confirmed funding in 2017. In the meantime, Malaria Consortium has continued to support through ACCESS-SMC all the 37 LGAs in the two States of Zamfara and Sokoto. The combined effort aimed to provide SMC to approximately 2M children.

At the end of the round, the overall administrative coverage (children reached vs. children targeted as per consolidated monitoring data) in Malaria Consortium's area of operation reached an average of 94% over four, as per summary table below. Details are shown in Annex II.

| State                     | Cycle 1          |                  | Cycle 2      |                  | Cycle 3       |                  | Cycle 4      |                  | Average      | Av. Coverage     |              |
|---------------------------|------------------|------------------|--------------|------------------|---------------|------------------|--------------|------------------|--------------|------------------|--------------|
|                           | Targets          | N. reached       | Coverage     | N. reached       | Coverage      | N. reached       | Coverage     | N. reached       |              |                  | Coverage     |
| Sokoto                    | 961,993          | 926,192          | 96.3%        | 1,038,531        | 108.0%        | 943,217          | 98.0%        | 779,288          | 81.0%        | 921,807          | 95.8%        |
| Zamfara                   | 847,838          | 870,537          | 102.7%       | 849,243          | 100.2%        | 764,681          | 90.2%        | 756,656          | 89.2%        | 810,279          | 95.6%        |
| <b>Sub-total UNITAID</b>  | <b>1,809,831</b> | <b>1,796,729</b> | <b>99.3%</b> | <b>1,887,774</b> | <b>104.3%</b> | <b>1,707,898</b> | <b>94.4%</b> | <b>1,535,944</b> | <b>84.9%</b> | <b>1,732,086</b> | <b>95.7%</b> |
| Katsina                   | 225,734          | 196,274          | 86.9%        | 153,902          | 68.2%         | 177,807          | 78.8%        | 194,098          | 86.0%        | 180,520          | 80.0%        |
| Jigawa                    | 72,297           | 63,982           | 88.5%        | 67,168           | 92.9%         | 72,268           | 100.0%       | 73,349           | 101.5%       | 69,192           | 95.7%        |
| <b>Sub-total GiveWell</b> | <b>298,030</b>   | <b>260,256</b>   | <b>87.3%</b> | <b>221,070</b>   | <b>74.2%</b>  | <b>250,075</b>   | <b>83.9%</b> | <b>267,447</b>   | <b>89.7%</b> | <b>249,712</b>   | <b>83.8%</b> |
| <b>TOTALS</b>             | <b>2,107,861</b> | <b>2,056,985</b> | <b>97.6%</b> | <b>2,108,844</b> | <b>100.0%</b> | <b>1,957,973</b> | <b>92.9%</b> | <b>1,803,391</b> | <b>85.6%</b> | <b>1,981,798</b> | <b>94.0%</b> |

Support by GiveWell / Good Ventures came in the form of drugs (approximately 1.2M of dispersible SP+AQ blisters procured and being distributed in the GiveWell / Good Ventures target areas), logistics costs, operational support through training, incentives and formative supervision directed at community drug distributors (community health workers), as well as the health workers and officials who are meant to supervise them. Such funding also supported the standard monitoring framework (including distribution data collection and monitoring tools), as well as minimum dedicated MC staff for these non-ACCESS-SMC areas, and a proportion of key shared staff.

While overall administrative coverage seems positive, coverage surveys showed how significant improvements may be required in Sokoto State (and in Katsina). Summary of coverage surveys are presented below.

| State        | Cycle 1      |              | Cycle 2      |              | Cycle 3      |              | Cycle 4    |              |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|--------------|
|              | post-cycle   | post-round   | post-cycle   | post-round   | post-cycle   | post-round   | post-cycle | post-round   |
| Sokoto       | 49.4%        | 40.2%        | 57.6%        | 45.8%        | 47.4%        | 46.0%        | n/a        | 27.1%        |
| Zamfara      | 88.8%        | 87.9%        | 85.9%        | 85.5%        | 71.7%        | 80.6%        | n/a        | 72.8%        |
| Katsina      | 71.0%        | 81.0%        | 55.2%        | 56.5%        | 38.3%        | 42.5%        | n/a        | 49.3%        |
| Jigawa       | 85.6%        | 91.7%        | 62.9%        | 91.7%        | 56.2%        | 81.9%        | n/a        | 76.3%        |
| <b>Total</b> | <b>72.5%</b> | <b>72.6%</b> | <b>73.8%</b> | <b>70.7%</b> | <b>60.6%</b> | <b>66.7%</b> | <b>n/a</b> | <b>59.3%</b> |

Care should be taken in reading these figures at State level, especially in Katsina and Jigawa, where very small samples may result in extreme uncertainty. More generally, coverage surveys are not meant to provide a State-specific coverage, but rather a global one. However, results as the ones above, especially for large implementation areas as Sokoto and Zamfara, can provide useful hints and point to problems that then require further investigation. This, it is clear that there are significant issues in Sokoto, with coverage quite unsatisfactory overall.

There may be several reasons for this, from wrong populations' estimates, to population movements, to inclusion of children beyond the eligible age group (3-59) months. For instance, while we know that historically some children over five years of age were being treated during SMC campaigns (due to honest age misclassification by CHWs or willful treatment, maybe due to community pressure), the assumption was that mostly this would concern children slightly older (six or seven). The 5-7 age group was indeed included in surveys for the interviews, and in Nigeria, it is estimated that over 10% of children treated may be over five years of age. However, it looks plausible that children older than seven receive SMC, and anecdotal photographic evidence during surveys (below) show that children as old as 10 may be getting SMC in Sokoto. However, these children would not be included in the surveys.



As drugs were reported as administered in routine administrative reports, it is likely that a low estimated coverage in Sokoto may be due to a combination of factors.

As in previous years, coverage of the same child four times has been variable in Nigeria, with an overall 4-cycle coverage of 44.8%. This is an improvement compared to the same measure in 2016, but still quite unsatisfactory, and again with significant differences by State. Sokoto seems to have performed very poorly (just under 13%), while Zamfara relatively well (just under 60%), and the other two states with samples too small to provide reliable estimates.

| Percentage of children who received SMC 0, 1, 2, 3, or 4 times |              |              |              |              |              |
|--|--------------|--------------|--------------|--------------|--------------|
| State  | 0 cycles     | 1 cycle      | 2 cycles     | 3 cycles     | 4 cycles     |
| Jigawa   | 8.0%         | 1.3%         | 10.9%        | 4.1%         | 75.6%        |
| Katsina  | 14.0%        | 11.9%        | 37.1%        | 7.3%         | 29.7%        |
| Sokoto   | 28.2%        | 27.8%        | 15.2%        | 16.1%        | 12.8%        |
| Zamfara  | 3.0%         | 6.7%         | 15.3%        | 15.9%        | 59.1%        |
| <b>TOTAL</b>   | <b>11.1%</b> | <b>12.7%</b> | <b>16.7%</b> | <b>14.7%</b> | <b>44.8%</b> |

Because coverage surveys are not meant to provide representative coverage by lower administrative units such as LGAs, Malaria Consortium is considering shifting its process monitoring strategy from coverage surveys at the end of each cycle, to a leaner in-process monitoring that is more spread-out geographically, possibly through the use of lot quality assessment surveys (LQAS), to provide faster, actionable feedback during each cycle and before the following cycles. An end-of-round survey would still be included in order to verify global coverage at the end of the season and measure other variables more closely.

While the performance in Nigeria seems still far from satisfactory (with the exception of Zamfara), 2017 represented a gradual improvement from 2016, where coverage by cycle was 62.9% (C1), 60.3% (C2), 37.4% (C3) and 19.5% (C4). This seems to show that some of the programmatic and operational enhancements brought forward by Malaria Consortium have had some effect, and they will require further strengthening in 2018.

### Burkina Faso:

Burkina Faso is the third most populous country in terms of SMC eligibility behind Nigeria and Niger, with significant gaps in geographical coverage, but excellent performance where they managed to secure adequate funding. While large swathes of the country have managed to benefit from consistent funding for SMC, in other areas one-off funding has only provided intermittent coverage. Thanks to large amount of drugs left over from various partners' activities in 2016, Burkina Faso had drugs enough to cover approximately 360,000 extra children, but no operational costs to do so. Thus, Malaria Consortium through GiveWell / Good Ventures funding has supported three districts that had benefited from SMC in previous years, but which had no secured support for 2017, as well as five more new priority districts for SMC. The nature of this support was similar to the one in Nigeria, with the exception of drugs (already available): it included logistics and operational support, training, incentives and formative supervision support to the required monitoring activities. Dedicated and shared staff were also part of this support framework. Besides what are now known informally as "GiveWell areas", Malaria Consortium supported 31 more districts with ACCESS-SMC funding, two of which were co-funded by UNICEF for operational costs.

As in previous years, Burkina Faso SMC programmes were extremely successful, with high coverage both from administrative data, and certified through coverage surveys after each cycles. The details are shown in red in Annex II, but the tables below show a summary of the excellent results.

| Country      | Target    | 1st Cycle |          | 2st Cycle |          | 3st Cycle |          | 4th Cycle |          | AV        |          |
|--------------|-----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|
|              |           | Reached   | Coverage | Reached   | Coverage | Reached   | Coverage | Reached   | Coverage | Reached   | Coverage |
| Burkina Faso | 1,737,814 | 1,777,849 | 102.3%   | 1,790,949 | 103.1%   | 1,797,025 | 103.4%   | 1,842,303 | 106.0%   | 1,802,032 | 103.7%   |

Below are the summaries from coverage surveys (coverage by cycle, and 4-time coverage).

| Region          | Cycle 1      |              | Cycle 2      |              | Cycle 3      |              | Cycle 4    |              |
|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|--------------|
|                 | post-cycle   | post-round   | post-cycle   | post-round   | post-cycle   | post-round   | post-cycle | post-round   |
| Centre-Est      | 98.0%        | 93.6%        | 95.6%        | 94.1%        | 84.0%        | 89.1%        | n/a        | 89.5%        |
| Centre-Nord     | 84.2%        | 85.8%        | 98.3%        | 94.7%        | 98.0%        | 96.5%        | n/a        | 92.9%        |
| Centre-Ouest    | 93.9%        | 95.9%        | 98.0%        | 97.3%        | 97.8%        | 96.9%        | n/a        | 98.0%        |
| Centre-Sud      | 100.0%       | 90.8%        | 96.2%        | 93.9%        | 97.5%        | 93.9%        | n/a        | 94.7%        |
| Est             | 99.4%        | 98.8%        | 99.0%        | 98.5%        | 98.9%        | 96.7%        | n/a        | 98.2%        |
| Nord            | 87.5%        | 95.0%        | 96.0%        | 97.1%        | 98.1%        | 99.0%        | n/a        | 96.0%        |
| Plateau-Central | 96.2%        | 95.1%        | 88.0%        | 96.5%        | 96.4%        | 97.9%        | n/a        | 95.4%        |
| <b>TOTAL</b>    | <b>94.5%</b> | <b>93.8%</b> | <b>96.1%</b> | <b>96.0%</b> | <b>94.5%</b> | <b>95.1%</b> | <b>n/a</b> | <b>94.6%</b> |

| Percentage of children who received SMC 0, 1, 2, 3, or 4 times |             |             |             |             |              |
|--|-------------|-------------|-------------|-------------|--------------|
| Region   | 0 cycles    | 1 cycle     | 2 cycles    | 3 cycles    | 4 cycles     |
| Centre-Est   | 1.1%        | 1.6%        | 8.9%        | 6.4%        | 81.9%        |
| Centre-Nord  | 1.5%        | 1.3%        | 3.7%        | 13.0%       | 80.6%        |
| Centre-Ouest   | 0.0%        | 1.4%        | 1.4%        | 5.1%        | 92.2%        |
| Centre-Sud   | 3.7%        | 2.3%        | 0.8%        | 3.1%        | 90.0%        |
| Est  | 0.3%        | 0.9%        | 0.3%        | 3.3%        | 95.2%        |
| Nord   | 0.3%        | 0.3%        | 2.6%        | 5.9%        | 91.0%        |
| Plateau-Central  | 1.6%        | 0.0%        | 2.4%        | 4.0%        | 92.1%        |
| <b>TOTAL</b>   | <b>1.0%</b> | <b>1.2%</b> | <b>3.4%</b> | <b>6.0%</b> | <b>88.3%</b> |

It seems like the programme in Burkina Faso found a good programmatic, operational and technical balance that allows the country to maximize the use of resources for SMC by ensuring high coverage, which has been consistently the case since the start of SMC in 2015. For different reasons than in Nigeria, we also recommend that coverage surveys are no longer implemented after every cycle, and focus on a light, streamlined in-process monitoring framework to continue address few remaining issues (such as the still relatively high proportion of children over five years of age treated).

#### Guinea Bissau:

This was a new country for Malaria Consortium, and the choice was linked to discussions held in February 2017 between the MoH / NMCP representative and Malaria Consortium ACCESS-SMC team in Ouagadougou during a joint Malaria Consortium / WHO / WAHO consultation meeting on SMC (13-15 February 2017). The original plan was to support two regions for a total of 80,000 children, and approximately 400,000 dispersible SP+AQ blisters were directed to Guinea Bissau. However, eventually the MoH managed to secure funding for half of this target (one region) through the UNDP, and as a consequence the support in Guinea Bissau was limited to the region of Gabu in the East of the country, targeting approximately 40,000 children under 5. The drugs that were left over from the current order have expiration date beyond 2019, so they will be available for use for a new round in 2018.

The nature of this support was similar to that in Nigeria, including drugs procurement, logistics and operational support, training, incentives and formative supervision support to the required monitoring activities. Support was channeled through an Italian NGO (AIFO), which has operational presence at primary healthcare level in Gabu, with Malaria Consortium technical and programmatic support coming from both the ACCESS-SMC regional office in Kampala, the WACRO Office in Abuja, and the Burkina Faso Country Office (whose Country Director speaks fluent Portuguese).

Guinea Bissau used a slightly different timeline for SMC, normally starting in mid-August due to a distinctive seasonality (closer to that found in The Gambia and in Senegal). The country also used a different operational approach, whereby fewer mobile teams of health workers join CHWs in their localities to administer SMC and the move to the next areas, over the course of approximately three weeks. This is an interesting approach to guarantee quality of drug administration, and visits from both the Burkina Faso Country Director and the ACCESS-SMC Project Manager witnessed the quality of supervision: however, it is unlikely that such approach could work at scale of larger countries, due to the complexities over mobilizing health workers for long periods of time outside the normal activities of the health centre.

Results in Guinea Bissau were overall very good, with an average coverage of 88.7% (table below).

| Country       | Target | 1st Cycle |          | 2nd Cycle |          | 3rd Cycle |          | 4th Cycle |          | AV      |          |
|---------------|--------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|---------|----------|
|               |        | Reached   | Coverage | Reached   | Coverage | Reached   | Coverage | Reached   | Coverage | Reached | Coverage |
| Guinea Bissau | 43,784 | 38,887    | 88.8%    | 39,327    | 89.8%    | 38,533    | 88.0%    | 38,666    | 88.3%    | 38,853  | 88.74%   |

Due to the size of the country, and the expected transient nature of Malaria Consortium support there, it was decided not to include any coverage surveys in Guinea Bissau.

#### Chad:

Chad did not benefit strictly speaking from GiveWell / Good Ventures funding directed at specific areas. All the 14 districts, with an estimated target population of over 660,000 children, were supported mainly through ACCESS-SMC funding. The country was support in terms of extra staff (five field officers for which there was not available budget under ACCESS-SMC) and additional budget for supervision logistics. Learning on lessons and weaknesses from 2016 (especially in the city of N'djamena), the precise allocation of these extra people in the field, close to the action, allowed Malaria Consortium to improve drastically its coverage in Chad compared to 2016, especially in N'djamena. The details are available on Annex 2, but the tables below provide a summary of the 2017 results in Chad.

| Country | Target  | 1st Cycle |          | 2nd Cycle |          | 3rd Cycle |          | 4th Cycle |          | AV      |          |
|---------|---------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|---------|----------|
|         |         | Reached   | Coverage | Reached   | Coverage | Reached   | Coverage | Reached   | Coverage | Reached | Coverage |
| Chad    | 634,406 | 663,893   | 104.6%   | 668,547   | 105.4%   | 718,737   | 113.3%   | 699,400   | 110.2%   | 687,644 | 108.4%   |

Coverage surveys were carried out in Chad, though only after cycles 1 and 3, as well as a comprehensive one at the end of the round. Survey results show marked improvements compared to 2016, especially in three out of four health districts of N'Djamena.

| Region         | Cycle 1      |              | Cycle 2    |              | Cycle 3      |              | Cycle 4    |              |
|----------------|--------------|--------------|------------|--------------|--------------|--------------|------------|--------------|
|                | post-cycle   | post-round   | post-cycle | post-round   | post-cycle   | post-round   | post-cycle | post-round   |
| Chari Baguirmi | 91.4%        | 89.9%        | n/a        | 92.6%        | 95.1%        | 94.1%        | n/a        | 82.5%        |
| Hadjer Lamis   | 87.9%        | 96.7%        | n/a        | 96.7%        | 95.7%        | 93.5%        | n/a        | 74.3%        |
| Mayo Kebbi Est | 90.9%        | 97.1%        | n/a        | 98.8%        | 99.7%        | 91.5%        | n/a        | 70.6%        |
| N'Djamena      | 50.8%        | 81.1%        | n/a        | 76.4%        | 88.4%        | 81.0%        | n/a        | 83.9%        |
| <b>Total</b>   | <b>77.4%</b> | <b>89.4%</b> | <b>n/a</b> | <b>87.1%</b> | <b>93.6%</b> | <b>87.2%</b> | <b>n/a</b> | <b>79.9%</b> |

As a comparison, in 2016 coverage after cycle 1 was close to or under 50% for the subsequent cycles, mainly due to low coverage in N'Djamena. A marked improvement is visible also when considering 4-time coverage, which was estimated at under 15% in 2016.

| Percentage of children who received SMC 0, 1, 2, 3, or 4 times |             |             |             |              |              |
|--|-------------|-------------|-------------|--------------|--------------|
| Region   | 0 cycles    | 1 cycle     | 2 cycles    | 3 cycles     | 4 cycles     |
| Chari Baguirmi   | 2.2%        | 2.7%        | 6.3%        | 17.2%        | 71.6%        |
| Hadjer Lamis   | 7.2%        | 0.5%        | 2.5%        | 20.1%        | 69.6%        |
| Mayo Kebbi Est   | 0.5%        | 4.9%        | 3.6%        | 30.3%        | 60.7%        |
| N'Djamena  | 5.7%        | 7.6%        | 11.9%       | 14.6%        | 60.3%        |
| <b>TOTAL</b>   | <b>5.1%</b> | <b>4.1%</b> | <b>7.2%</b> | <b>17.9%</b> | <b>65.7%</b> |

This shows that operational solutions can be found to improve coverage also in the most difficult areas, which is encouraging in the perspective of improving coverage in the Sokoto State of Nigeria in 2018.

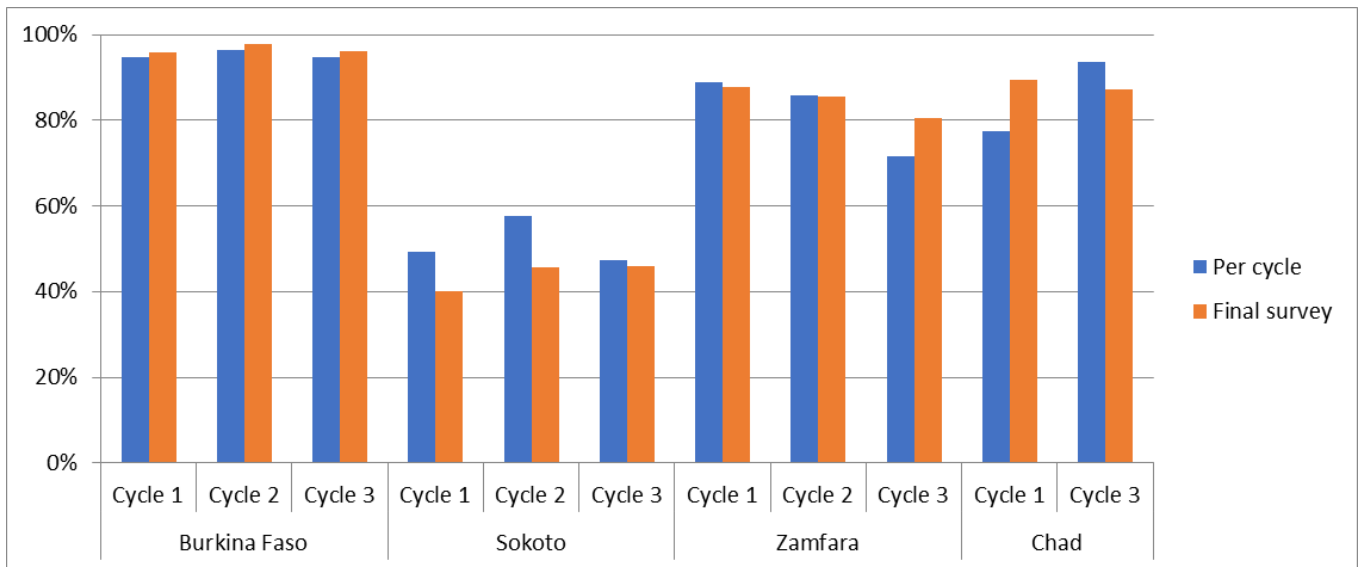
**b. M&E support**

Besides the full operational support in the countries above, gaps were identified in a number of M&E areas, due to a phasing out of support for established activities (such as coverage surveys) and/or because of quality assurance gaps identified during the 2015 and 2016 seasons. The following activities were thus supported through GiveWell / Good Ventures funding to complement ACCESS-SMC funding for SMC.

Coverage surveys:

After experiences in 2015 and 2016, when ACCESS-SMC carried out end-of-round surveys after the full four cycles in collaboration with LSHTM and local research firms or institutions, there was in certain countries (including Chad and Nigeria) uncertainty about the overall reliability of the results, as discrepancies between administrative data and surveys were quite considerable. As a consequence, Malaria Consortium planned for 2017 to carry out coverage surveys following each cycle, so that the results could be better used to triangulate coverage information with cycle-specific administrative and in-process monitoring data. GiveWell / Good Ventures funding supported four coverage surveys in Nigeria and Burkina Faso, and three surveys in Chad (after cycles 1, 3 and at the end of the round). As mentioned above, coverage surveys were not carried out in Guinea Bissau. All contracts with independent research institutions were signed in July. To finalize the independent evaluation framework started under ACCESS-SMC, LSHTM was also contracted in the role of independent technical advisory organization, supporting the revision of the evaluation protocols (whose amendments required a revised ethical approval), additional technical supervision of field surveyors, and the analysis and interpretation of results in collaboration with Malaria Consortium technical team.

Summary results by country are already shown above, and survey reports will be shared with GiveWell by July 31<sup>st</sup>. One of the key expectations around carrying out both end-of-cycle and end-of-round (with cycle-specific results) surveys was to provide some answers around concerns on the methodologies, specifically related to recall bias and how it may affect the reliability of surveys carried out at the end of the round (thus, over four months after the end of the first cycle). Preliminary results from the 2017 coverage survey show that there is broad agreement between end-of-cycle coverage results, and end-of-round, cycle-specific coverage results.



### Enhanced field monitoring activities and tools

A range of supportive initiatives to improve the SMC monitoring framework was identified and was partly supported through GiveWell / Good Ventures funding in 2017 to improve delivery (or its tracking and quality assurance) in ACCESS-SMC areas. These included:

*i. Field data quality / monitoring staff:*

Seven temporary staff were recruited in Chad and, 43 (one per LGA) Nigeria, in order to improve supervision and monitoring and make sure that administrative data received is reflective of the real distribution process in the field. In addition, in Nigeria, independent monitors piloted in-process monitoring during one cycle. As mentioned before, low coverage figures in Chad and Nigeria from coverage surveys cast doubts on the reliability of administrative data, so the idea was that by including hands-on supervisors / monitors to random-check distribution areas, we would be able to clear the air around potential misrepresentations of administrative coverage in the past two years.

Other efforts were also supported in terms of improving supervision by local officials and health workers and other categories of supervisors (such as teachers in Nigeria to supervise CHW teams), and through increased logistics support. However, the results are mixed. In Chad, improved supervision and increased spot-checks (as well as high-level advocacy) allowed even areas that had abysmal coverage in 2016 to improve dramatically, with N'Djamena in particular showing that, with adequate supervision and operational support, even difficult urban areas can achieve decent SMC coverage. The picture in Nigeria is less positive. The recruitment of teachers wasn't as straightforward as expected, and the management of staff that depended on another Ministry proved quite challenging. While the approach still holds potential, it will require more advocacy effort in order to ensure that MoH and MoE have a coordinated approach to the programme, possibly under the supervision of the local governors at LGA level. From the overall results, it appears that these supervision and monitoring enhancements worked better in Zamfara, and this probably depends also on one side on a more committed local government framework, and on the other hand to internal Malaria Consortium HR issues: in fact, Malaria Consortium leadership role in Sokoto was partially affected by the resignation or reassignment of key staff (logistics, finance, and State management): temporary staff and consultants called in into the middle of the SMC season only partially managed to guarantee continuous and adequate support in a difficult operation context. This contrasts starkly with the managerial stability in Zamfara, where a three-year experience team knowledgeable of both SMC and the local context managed the SMC activities well.

*ii. Enhance monitoring tools:*

New SMC child cards (which are normally distributed for multiple years) were printed in 2017, which included a unique identifier of 7 or 8 figures. These identifiers were reported into "improved" tally sheets, and collected at district/LGA levels in all target countries. The cost of reproducing these tools was not fully represented in the UNITAID budget, and not budget expansion was agreed. But as we considered these minor changes paramount for improved monitoring and child tracking, we decided to use some of the GiveWell / Good Ventures funding to support the reproduction of such tools.

Again, results were mixed, and only in Burkina Faso it appeared that CHWs/volunteers had enough literacy/numeracy to perform the task so that numbers were readable and, mostly, correct. As the difficulties in manual entry (writing) by CHWs became clear in Chad and Nigeria, the exercise was scrapped. In Burkina Faso, the data were entered by an independent data entry firm at the end of the round, and with approximately 1.2 million valid numbers, the results confirm that high 4-time coverage level shown in coverage surveys (>70% in the unique identifier exercise, considering that roughly 20% of the numbers entered were discarded due to mistakes or double-numbering).



However, this partial failure informed Malaria Consortium for 2018, and a new system will be put in place to track individual instances of SMC administration with tallies rather than unique identifiers, so that no writing requirement will be necessary. This will only be tested in Nigeria and Chad. This is because in Burkina Faso, after three years of coverage surveys (including one after every cycle in 2017) and an individual tracking system that showed overall good results, we expect that Burkina Faso will continue implementing SMC well, if provided with adequate resources.

#### Overhaul of Malaria Consortium SMC monitoring and data management framework:

Recognizing the limits of our previous data management and monitoring tools at central level, we decided to move to a more coherent SMC data management framework. In the last two years, with SMC being a new intervention at scale, Malaria Consortium has learnt by doing what are the basic tools and parameters to consider for adequate management of the massive amount of SMC data generated through a mass drug administration campaign to millions of children. While in the past two years all data were available, they were often spread across a number of formal and informal platforms, including country's HMIS, Malaria Consortium spreadsheets for SMC datasets, partners' data and an LSHTM repository.

In light of the renewed effort to better control and analyze SMC data, Malaria Consortium decided to contract Dharma for the establishment of a comprehensive platform for the storage, management and analyses of SMC data, including both administrative data and ad-hoc evaluation data such as those generated by coverage surveys. Unfortunately, from a technical standpoint, the platform didn't deliver as well as it should, with several glitches in both routine and coverage data entry, poor problem solving and unsatisfactory customer support, as well as insufficient and unhelpful visualization options. While eventually all data points were entered, their entry has not been timely, or their use not straightforward for swift decision-making and problem-solving. For this reason, Malaria Consortium decided not to renew the contract with Dharma, and to re-open this service provision for prospective bidders. On May 2018, Magpi (Datadyne) was selected as the new digital data collection (DDC) service provider for 2018.

## ANNEX I – FINANCIAL UPDATE

### SMC Report

Cost and Fee for the period May 2017 to February 2018

#### I. Country-based costs

| <b>Nigeria</b>   | <b>Budget</b>    | <b>Actuals</b>   | <b>Committed</b> | <b>% Budget Spent</b> |
|--|------------------|------------------|------------------|-----------------------|
| SMC activities (GiveWell Districts + ACCESS-SMC Support) | 1,020,262        | 515,456          | -                | 51%                   |
| Management costs   | 359,023          | 149,817          | -                | 42%                   |
| Coverage evaluation                                      | 164,675          | 137,845          | 26,830           | 100%                  |
| <b>Total Nigeria</b>                                     | <b>1,543,960</b> | <b>803,118</b>   | <b>26,830</b>    | <b>54%</b>            |
| <b>Burkina Faso</b>                                      |                  |                  |                  |                       |
| SMC activities (GiveWell Districts + ACCESS-SMC Support) | 775,157          | 841,856          | -                | 109%                  |
| Management costs   | 167,373          | 68,099           | -                | 41%                   |
| Coverage evaluation                                      | 81,397           | 59,464           | 21,933           | 100%                  |
| <b>Total Burkina Faso</b>                                | <b>1,023,927</b> | <b>969,419</b>   | <b>21,933</b>    | <b>97%</b>            |
| <b>Chad</b>  |                  |                  |                  |                       |
| SMC activities (GiveWell Districts + ACCESS-SMC Support) | 75,445           | 73,397           | -                | 97%                   |
| Management costs   | 35,720           | 48,880           | -                | 137%                  |
| Coverage evaluation                                      | 82,128           | 54,352           | -                | 66%                   |
| <b>Total Chad</b>  | <b>193,293</b>   | <b>176,629</b>   | <b>-</b>         | <b>91%</b>            |
| <b>Guinea Bissau</b>                                     |                  |                  |                  |                       |
| "GiveWell Districts"                                     | 339,077          | 272,853          | 66,224           | 100%                  |
| <b>Total Guinea Bissau</b>                               | <b>339,077</b>   | <b>272,853</b>   | <b>66,224</b>    | <b>100%</b>           |
| <b>Total country-based costs</b>                         | <b>3,100,257</b> | <b>2,222,019</b> | <b>114,986</b>   | <b>75%</b>            |

#### II. Above-country costs

|  |                  |                |                |            |
|--|------------------|----------------|----------------|------------|
| LSHTM TA Work on coverage surveys      | 328,231          | 205,710        | 122,521        | 100%       |
| Monitoring support in ACCESS-SMC areas | 138,668          | 75,437         |                | 54%        |
| Drugs procurement & delivery           | 563,093          | 536,550        |                | 95%        |
| Management and Coordination Costs      | 100,718          | 55,021         |                | 55%        |
| <b>Total above-country costs</b>       | <b>1,130,710</b> | <b>872,718</b> | <b>122,521</b> | <b>88%</b> |

|                  |                |                |               |             |
|------------------|----------------|----------------|---------------|-------------|
| <b>Overheads</b> | <b>413,590</b> | <b>409,474</b> | <b>23,751</b> | <b>105%</b> |
|------------------|----------------|----------------|---------------|-------------|

|                             |                  |                  |                |            |
|-----------------------------|------------------|------------------|----------------|------------|
| <b>Grand total estimate</b> | <b>4,644,556</b> | <b>3,504,211</b> | <b>261,258</b> | <b>81%</b> |
|-----------------------------|------------------|------------------|----------------|------------|

#### III. Income vs Spend

|                             |                  |
|-----------------------------|------------------|
| <b>2017 Funding</b>         | <b>5,000,000</b> |
| <b>Spent/Committed</b>      | <b>3,765,469</b> |
| <b>Grant budget balance</b> | <b>1,234,531</b> |

**ANNEX II – COVERAGE SUMMARIES**  
*(see Excel files)*