



Seasonal Malaria Chemoprevention in Nigeria

Coverage Summary Report 2015

Background: Seasonal Malaria Chemoprevention supported by the ACCESS-SMC project was introduced in 17 LGAs in Nigeria in 2015 (10 in Sokoto State and 7 in Zamfara state). In 2015, the first of four monthly cycles of SMC was carried out in early August, and the final cycle took place in late October/ early November. It is important the SMC programme is monitored to ensure the intervention is delivered effectively reaching the children that need it. WHO recommends that children should receive all four monthly cycles, and should adhere to the treatment dose each month, in order to maximise protection and minimise selection for drug resistance. As part of the monitoring of the SMC programme in Nigeria, a coverage survey was carried out in mid-November 2015 by ERIC with support from the London School of Hygiene & Tropical Medicine, to determine the proportion of children that received each monthly treatment, and to ask about adherence to the treatment doses, and reasons for missed treatments.

Key messages:

The reach of the SMC programme in Nigeria has been good, with 84 % of children having received an SMC card and at least one cycle of SMC. This compares with 83 % of eligible children who slept under an insecticide treated net the night before the survey at the end of the rainy season.

Retention of the SMC card was almost 75% among those issued with a card, which does facilitate evaluation of the programme, but leaves some uncertainty for those who without a card at the time of the survey or those children whose card may not have been complete.

Around 61% of eligible children received at least 3 cycles of SMC, 42% received all 4 cycles.

Coverage of the first cycle appears to be highest, with coverage at the final cycle in November having the lowest coverage.

It is important to ensure that children too old for the SMC programme do not receive SMC, the dose is designed for children under 5 years of age, older children receiving this dose will not be fully protected. Some treatment outside the recommended age range is inevitable, but it is important this is kept to a minimum.

Key indicators 2015:

| | |
|---|--------------|
| Number surveyed who were eligible for all 4 SMC cycles | 1112 |
| Slept under a bednet last night | 83.3% |
| Received an SMC card | 83.9% |
| <i>Confirmed by card if available, otherwise from caregiver recall:</i> | |
| Received at least one cycle | 77.3% |
| Received at least 3 cycles | 61.4% |
| Received all 4 cycles | 42.4% |
| Received no SMC | 18.0% |
| For those that had SMC at the last cycle, adherence to all 3 doses | 84.2% |
| Children 6-7yrs old who received SMC at least once | 61.3% |

Methods: Within each LGA implementing SMC in 2015 supported by the ACCESS-SMC project, between 3 and 5 settlements were selected with probability proportional to size (PPS sampling). Within each settlement, a random sample of approximately 20 children was then taken. The survey included eligible children (SMC is given to children aged at least 3 months, and who were less than 5 years old at the first cycle). The survey also included older children up to 7 years of age in order to determine how many of these older children were being treated. Call-backs were done if the caregiver was absent. The caregiver was asked about the number of SMC treatments the child received and in which months SMC was given, and the SMC record card was inspected to record the dates of treatments on the card. Data were collected using tablet PCs.

More details on Key indicators: 1380 children were included in the survey, 1112 of these were eligible to receive all 4 cycles of SMC in 2015 based on their age at the time of the first SMC cycle. Around 84% of eligible children received an SMC card. If an SMC card was received, approximately 75% of children retained the card for inspection. Based on the card (where available, and on recall of the number of blister packs received otherwise), 70% of eligible children received at least 3 cycles of SMC, and 48% received all 4 cycles. Recall was an important source of information in Nigeria, because the SMC card was often incomplete. Coverage of the individual cycles is difficult to estimate because this relies on documentation of dates on the card, which was not always done, so may lead to an underestimate. However, even allowing for these issues, it appears that coverage of the third and fourth cycles of SMC, was lower than the first 2 cycles, with coverage of the final cycle particularly low.

Reported adherence to the three day course of SMC was good, with 84% of those who had received SMC reporting that the full course was given.

Of 75 children aged between 6 and 7 years who should not receive SMC, 40 (53%) had received an SMC card. For 46 (61%) of these older children, caregivers reported that the child had received at least one SMC cycle, with about 49% reporting that the child had received at least 3 cycles.

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Table: Key indicators of SMC Coverage – Nigeria

| | | | | | | |
|---|---|----------|--------------------------------|-----------------------------------|----------|--------------------------------|
| Number children 3m–7 years included | 1380 | | | | | |
| Number eligible for all 4 SMC cycles [§] | 1112 | | | | | |
| | n/N | % | 95% Confidence Interval | | | |
| Slept under a bednet last night | 830/1104 | 83.3 | [78.7, 87.1] | | | |
| Received SMC card | 841/1082 | 83.9 | [78.8, 88.0] | | | |
| Retained card if card received | 607/839 | 74.5 | [65.9, 81.6] | | | |
| | Among all those eligible for SMC | | | Among only those with an SMC card | | |
| Received SMC cycle 1 | 392/1112 | 42.2 | [33.2, 51.8] | 392/841 | 51.3 | [40.8, 61.8] |
| Received SMC cycle 2 | 423/1112 | 43.2 | [34.2, 52.7] | 423/841 | 52.6 | [42.2, 62.7] |
| Received SMC cycle 3 | 308/1112 | 34.2 | [25.7, 44.0] | 308/841 | 41.7 | [31.7, 52.3] |
| Received SMC cycle 4 | 209/1112 | 27.0 | [18.9, 37.0] | 209/841 | 32.9 | [23.4, 44.0] |
| | Confirmed by card if available, otherwise recall [^] | | | Maximum by card / recall | | |
| No. of SMC cycles | n/N | % | 95% Confidence Interval | n/N | % | 95% Confidence Interval |
| 0 | 111/1112 | 12.3 | [6.7, 21.6] | 37/1112 | 3.6 | [1.7, 7.7] |
| 1 | 71/1112 | 7.3 | [4.3, 12.2] | 41/1112 | 3.6 | [2.1, 6.3] |
| 2 | 118/1112 | 10.7 | [5.7, 19.3] | 66/1112 | 5.3 | [2.9, 9.5] |
| 3 | 299/1112 | 21.5 | [16.2, 28.0] | 401/1112 | 33.0 | [26.2, 40.5] |
| 4 | 323/1112 | 48.1 | [38.3, 58.1] | 364/1112 | 54.5 | [44.6, 64.0] |
| Received no SMC* | 254/1112 | 18.0 | [12.7, 25.1] | - | - | - |
| Received at least one cycle | 811/1112 | 77.3 | [69.2, 83.8] | 811/1112 | 77.3 | [69.2, 83.8] |
| Received at least 3 cycles | 622 /1112 | 61.4 | [52.2, 69.8] | 778/1112 | 77.2 | [70.9, 82.5] |
| Received all 4 cycles | 323/1112 | 42.4 | [33.8, 51.7] | 364/1112 | 54 | [44.3, 63.5] |

Percentages are survey -weighted and will not equate to n/N. [§] aged at least 3 months at time of first cycle, and under 5 years at time of survey. * this is confirmed as no receipt, rather than failure to indicate receipt.