

**Additional file 2.** Surveys included in the analysis for parasitemia prevalence. ITN and IRS coverage estimates are at the national level. Percentage of households by season and transmission area is based on the number of households included for each sub-analysis.

| Country      | Survey | Year of Survey | No. of Households Sampled | % Households Surveyed by Season |      | % Households in Transmission Area |      |      | % ITN Ownership |       | Parasitemia Measurements |              | Parasite Test Type |            |
|--------------|--------|----------------|---------------------------|---------------------------------|------|-----------------------------------|------|------|-----------------|-------|--------------------------|--------------|--------------------|------------|
|              |        |                |                           | Wet                             | Dry  | High                              | Med. | Low  | % ITN Ownership | % IRS | Total No. Children       | No. Positive | RDT                | Microscopy |
| Angola       | MIS    | 2006-2007      | 2,599                     | 7.8                             | 92.2 | 44.9                              | 53.1 | 2.0  | 26.6            | 3.8   | 799                      | 174          | Yes                | Yes*       |
| Angola       | MIS    | 2011           | 7,957                     | 47.9                            | 52.1 | 20.9                              | 71.9 | 7.2  | 32.4            | 7.0   | 2,935                    | 292          | Yes                | Yes        |
| Burkina Faso | DHS    | 2010-2011      | 14,424                    | 68.6                            | 31.4 | 93.7                              | 0.0  | 6.3  | 56.9            | 0.9   | 5,727                    | 3,715        | Yes                | Yes        |
| Cameroon     | DHS    | 2011           | 14,214                    | 66.2                            | 33.8 | 75.5                              | 23.5 | 1.0  | 36.4            | 2.3   | 4,539                    | 1,408        | Yes                | Yes        |
| Liberia      | MIS    | 2011           | 4,162                     | 100                             | 0.0  | 51.2                              | 45.2 | 3.6  | 47.2            | 10.7  | 2,550                    | 843          | Yes                | Yes        |
| Madagascar   | MIS    | 2011           | 8,094                     | 38.6                            | 61.4 | 30.5                              | 66.8 | 2.7  | 75.6            | 45.7  | 5,418                    | 215          | Yes                | Yes        |
| Nigeria      | MIS    | 2010           | 5,811                     | 79.5                            | 20.5 | 73.3                              | 26.4 | 0.3  | 37.5            | 0.01  | 4,606                    | 1,763        | Yes                | Yes        |
| Rwanda       | DHS    | 2007-2008      | 7,377                     | 7.8                             | 92.2 | 2.4                               | 52.2 | 45.4 | 50.5            | 6.2   | 1,478                    | 39           | Yes                | Yes        |
| Senegal      | MIS    | 2008-2009      | 9,291                     | 17.2                            | 82.8 | 0.0                               | 97.2 | 2.8  | 57.5            | 10.5  | 1,526                    | 147          | Yes                | Yes        |
| Senegal      | DHS    | 2010-2011      | 7,748                     | 69.9                            | 30.1 | 23.4                              | 71.3 | 5.3  | 65.0            | 4.3   | 3,348                    | 113          | Yes                | Yes        |
| Tanzania     | MIS    | 2007-2008      | 8,497                     | 65.0                            | 35.0 | 21.3                              | 43.5 | 35.2 | 44.5            | 25.1  | 3,792                    | 477          | Yes                | n/a        |
| Uganda       | MIS    | 2009-2010      | 4,421                     | 86.1                            | 13.9 | 62.7                              | 35.6 | 1.7  | 42.5            | 3.5   | 1,099                    | 458          | Yes**              | Yes**      |
| Zambia       | MIS    | 2006           | 2,967                     | 11.1                            | 88.9 | 0.0                               | 85.7 | 14.3 | 38.8            | 9.5   | 630                      | 77           | Yes***             | Yes***     |
| Zambia       | MIS    | 2008           | 4,405                     | 24.9                            | 75.1 | 0.0                               | 90.0 | 10.0 | 62.4            | 14.9  | 1,497                    | 221          | Yes***             | Yes***     |
| Zambia       | MIS    | 2010           | 4,361                     | 24.3                            | 75.7 | 5.2                               | 83.8 | 11.2 | 55.2            | 23.1  | 1,495                    | 347          | Yes***             | Yes***     |

*Notes:* \*Microscopy was used for a sub-population of the survey; \*\*Children were supposed to be diagnosed with both RDT and microscopy, but a small percentage was diagnosed with only the RDT or microscopy; \*\*\*Both RDTs and microscopy were supposed to be used for diagnosis, but no data were available differentiating diagnosis type.