Supplemental Table S1. Estimated annual study-wide coverage (median and range) for SCORE Gaining and Sustaining Control Studies, stratified by study. Overall coverage was calculated as the average of the medians across all years that villages received treatment.

| SCORE Study       | Type of MDA / Population Assessed | Year 1 Median % (Range) | Year 2 Median % (Range) | Year 3 Median % (Range) | Year 4 Median % (Range) | Overall % Coverage |
|-------------------|-----------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------|
| Côte d'Ivoire     | SBT SAC                           | 66 (6, 355)             | 84 (19, 205)            | 88 (18, 206)            | 95 (27, 208)            | 83                 |
| Sustaining Control|                                   |                         |                         |                         |                         |                    |
| Kenya             | SBT SAC                           | 95 (55, 100)            | 97 (75, 132)            | 95 (75, 100)            | 95 (82, 100)            | 95                 |
| Sustaining Control|                                   |                         |                         |                         |                         |                    |
| Kenya             | SBT SAC                           | 85 (59, 103)            | 88 (75, 125)            | 93 (62, 114)            | 91 (74, 109)            | 90                 |
| Gaining Control   |                                   |                         |                         |                         |                         |                    |
|                   | CWT SAC                           | 72 (9, 694)             | 79 (15, 693)            | 88 (61, 101)            | 87 (71, 99)             | 83                 |
|                   |                                   |                         |                         |                         |                         |                    |
|                   | CWT total population              | 90 (25, 109)            | 92 (44, 107)            | 92 (73, 101)            | 91 (77, 99)             | 91                 |
| Mozambique        | SBT SAC                           | 41 (3, 132)             | 33 (4, 375)             | 32 (4, 95)              | 26 (3, 79)              | 33                 |
| Gaining Control   |                                   |                         |                         |                         |                         |                    |
|                   | CWT SAC                           | 51 (4, 252)             | 55 (13, 186)            | 45 (14, 197)            | 145 (44, 294)           | 52                 |
| Mozambique        |                                   |                         |                         |                         |                         |                    |
|                  | Tanzania |                           |                           |                           | Gaining Control |                           |                           |                           |
|------------------|----------|---------------------------|---------------------------|---------------------------|-----------------|---------------------------|---------------------------|---------------------------|
|                  |          |                           |                           |                           |                 |                           |                           |                           |
| CWT total        | 29 (5, 98) | 43 (6, 130)              | 53 (18, 123)             | 120 (74, 283)            |                 |                           |                           |                           |
| population       |          |                           |                           |                           |                 |                           |                           |                           |
|                  |          |                           |                           |                           |                 |                           |                           |                           |
| Tanzania         | SBT SAC  | 81 (73, 100)             | 80 (68, 100)             | 77 (49, 95)              | 84 (50, 100)   | 81                        |                           |                           |
| Gaining Control  |          |                           |                           |                           |                 |                           |                           |                           |
|                  | CWT SAC  | 77 (47, 99)              | 78 (55, 100)             | 76 (56, 83)              | 76 (60, 100)   | 77                        |                           |                           |
|                  |          |                           |                           |                           |                 |                           |                           |                           |
| CWT total        | 79 (60, 99) | 79 (59, 100)             | 78 (63, 108)             | 76 (52, 94)              | 78              |                           |                           |                           |
| population       |          |                           |                           |                           |                 |                           |                           |                           |
Supplemental Table S2. Estimated study-wide coverage (median and range) in the Niger study, by year and by year 3 randomization to once-a-year vs. twice-a-year MDA. Overall coverage estimates are calculated as the average of the medians across all treatment years.

| Type of MDA/ Population Assessed | Year 1 Median % (Range) | Year 2 Median % (Range) | MDA Protocol for Years 3 and 4 | Year 3 Median % (Range) | Year 4 Median % (Range) | Overall Coverage |
|----------------------------------|-------------------------|-------------------------|--------------------------------|-------------------------|-------------------------|------------------|
| SBT (SAC only)                   | 90 (8, 352)             | 103 (0, 362)            | Once-a-year                     | 115 (15, 335)          | 87 (53, 102)          | 101              |
|                                  |                         |                         | Twice-a-year (1st)              | 119 (11, 394)          | 85 (45, 105)          | 102              |
|                                  |                         |                         |                                 | 94 (25, 416)           | 78 (32, 100)          | 86               |
| CWT SAC                          | 108 (45, 330)           | 120 (37, 459)           | Once-a-year                     | 108 (56, 333)          | 111 (57, 167)         | 110              |
|                                  |                         |                         | Twice-a-year (1st)              | 130 (38, 345)          | 124 (56, 209)         | 127              |
|                                  |                         |                         |                                 | 133 (40, 296)          | 110 (48, 233)         | 121              |
| CWT total population             | 65 (14, 158)            | 74 (36, 159)            | Once-a-year                     | 90 (18, 229)           | 84 (61, 99)           | 87               |
|                                  |                         |                         | Twice-a-year (1st)              | 96 (18, 229)           | 81 (61, 99)           | 89               |
