

## Antibiotic use for inpatient newborn care with suspected infection: EN-BIRTH multi-country validation study

Additional File 1: EN-BIRTH study data collection dates by site and time elapsed between birth and exit survey

| EN-BIRTH study                                                           | Bangladesh<br>Azampur<br>Tertiary | Bangladesh<br>Kushtia<br>District               | Nepal<br>Pokhara<br>Regional | Tanzania<br>Temeke<br>Regional | Tanzania<br>Muhimbili<br>National | All sites    |
|--------------------------------------------------------------------------|-----------------------------------|-------------------------------------------------|------------------------------|--------------------------------|-----------------------------------|--------------|
| <b>Tablet data collection dates</b>                                      | 17/8/17 to 30/4/18                | 11/7/17 to 30/5/18                              | 17/7/17 to 31/7/18           | 3/7/17 to 30/5/18              | 3/7/17 to 28/2/18                 |              |
| Duration                                                                 | 8 months                          | 10 months                                       | 1 year                       | 10 months                      | 7 months                          |              |
| Original register used:                                                  | 17/8/17 to<br>18/10/17            | 25/8/17 to 27/9/17<br>(due to short<br>supply)  | Not applicable               | Not applicable                 | Not applicable                    |              |
| Revised register used:                                                   | 19/10/17 to<br>30/4/18            | 11/7/17 to 24/8/17<br>and 28/9/17 to<br>30/5/18 | Not applicable               | Not applicable                 | Not applicable                    |              |
| <b>Register extraction comparison<br/>dates to assess biases</b>         |                                   |                                                 |                              |                                |                                   |              |
| <b>Pre-study</b>                                                         | 1/1/16 to 31/12/16                | 1/1/16 to 31/12/16                              | 1/4/16 to 31/3/17            | 1/1/16 to 31/12/16             | 1/1/16 to 31/12/16                |              |
| Duration                                                                 | 12 months                         | 12 months                                       | 12 months                    | 12 months                      | 12 months                         |              |
| <b>During/after-study</b>                                                | 17/8/17 to 17/8/18                | 11/7/17 to 11/7/18                              | 17/7/17 to 17/7/18           | 3/7/17 to 3/7/18               | 3/7/17 to 3/7/18                  |              |
| Duration                                                                 | 12 months                         | 12 months                                       | 12 months                    | 12 months                      | 12 months                         |              |
| <b>Time elapsed between delivery<br/>and exit survey interview/ days</b> |                                   |                                                 |                              |                                |                                   |              |
|                                                                          | n (%)                             | n (%)                                           | n (%)                        | n (%)                          | n (%)                             | n (%)        |
| <b>Total</b>                                                             | 2844                              | 2331                                            | 6922                         | 5752                           | 2783                              | 20632        |
| 0-1 day                                                                  | 725 (25.5)                        | 1345 (57.7)                                     | 5854 (84.6)                  | 5433 (94.5)                    | 1009 (36.3)                       | 14366 (69.6) |
| 2-3 days                                                                 | 511 (18)                          | 846 (36.3)                                      | 833 (12)                     | 181 (3.1)                      | 1098 (39.5)                       | 3469 (16.8)  |
| 4+ days                                                                  | 1599 (56.2)                       | 127 (5.4)                                       | 154 (2.2)                    | 43 (0.7)                       | 597 (21.5)                        | 2520 (12.2)  |
| Missing                                                                  | 9 (0.3)                           | 13 (0.6)                                        | 81 (1.2)                     | 95 (1.7)                       | 79 (2.8)                          | 277 (1.3)    |
| Mean                                                                     | 3.1                               | 1.3                                             | 0.6                          | 0.7                            | 3.2                               | 1.4          |
| Median                                                                   | 4.0                               | 0.0                                             | 0.0                          | 0.0                            | 2.0                               | 1.0          |

Sample size was calculated to observe at least 106 observations per intervention per country, based on estimated coverage of intervention during formative research [1].

1. Day LT, Ruysen H, Gordeev VS, et al. "Every Newborn-BIRTH" protocol: observational study validating indicators for coverage and quality of maternal and newborn health care in Bangladesh, Nepal and Tanzania. *Journal of Global Health* 2019; **9**(1).