

Additional file 3 Results of model selection performed to find the best model used to analyse febrile illness data. The table only reports the first six tested models.

| Model | <i>Gender</i> | <i>Dist shore</i> | <i>Rice</i> | <i>Development</i> | $f_1(\text{Age})$ | $f_2(\text{Month})$ | $f_3(\text{LLINs distr.})$ | $f_{\text{spat}}(\text{Com.})$ | $\text{rand}(\text{Com.})$ | $(\text{Month} * \text{Rice})$ | AIC | ΔAIC |
|-------|---------------|-------------------|-------------|--------------------|-------------------|---------------------|----------------------------|--------------------------------|----------------------------|--------------------------------|---------|--------------------|
| 1 | + | + | + | + | + | + | + | + | + | + | 29252.1 | 0 |
| 2 | - | + | - | + | + | + | + | + | + | - | 29248.4 | 3.7 |
| 3 | - | - | + | - | + | + | + | + | + | - | 29246.8 | 5.3 |
| 4 | + | + | + | - | + | + | + | + | + | - | 29244.7 | 7.4 |
| 5 | + | + | + | - | - | + | - | + | + | + | 29243.2 | 8.9 |
| 6 | - | + | - | + | + | - | + | + | + | - | 29241.3 | 10.8 |

‘+’= variable included; ‘-’=variable dropped