**Text S1: Costing the Kenya malaria case management system, interventions, and cost effectiveness**

**Table A:** Costing model parameterization of access to and cost of the Kenya case management system

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Value** | **Cost (2012 USD)** |
| Proportion of the most recent episode of fevers within 2 week recall seeking medical care | 0.618 [[1](#_ENREF_1)] |  |
| Proportion of fevers treated at a formal health facility | 0.486 [[1](#_ENREF_1)] |  |
| *Health center without beds* | 0.556 [[1](#_ENREF_1)] | 1.59 [[2](#_ENREF_2)] |
| *Health center with beds* | 0.209 [[1](#_ENREF_1)] | 1.97 [[2](#_ENREF_2)] |
| *Hospital outpatient* | 0.235 [[1](#_ENREF_1)] | 2.29 [[2](#_ENREF_2)] |
| *Hospital inpatient* |  | 6.96 [[2](#_ENREF_2)] |
| Coartem (ACT) | 0.439 |  |
| *(6 x 2 tablets co-pack) 20mg + 120mg tab-cap* | **Table A2** | 0.0898\*[[3](#_ENREF_3)] |
| Proportion of ACT treatments with full adherence | 0.771 |  |
| Quinine (QN) |  |  |
| *Intravenous (IV), Day 1* | **Table A2** | 0.1324\* [[3](#_ENREF_3)] |
| *Intravenous (IV), Day 2* | **Table A2** |  |
| *Oral, Day 3* | **Table A2** | 0.0524\* [[3](#_ENREF_3)] |
| Sulfadoxine-Pyrimethamine (SP) | 0.214 | 0.0299\* [[3](#_ENREF_3)] |
| Proportion of children under 5 with fever tested for malaria in any setting |  |  |
| *Paracheck® rapid diagnostic test (RDT)* | 0.12 [[4](#_ENREF_4)] | 0.62 [[5](#_ENREF_5)] |
| Cost of travel to seek treatment |  | 0.40\*\* |
| Cost of consumables while seeking treatment |  | 0.20 [[6-8](#_ENREF_6)] |
| \*Median supplier price \*\*Multi-country literature review |

**Table B:** Drug dosing per full course per age group for treatment of uncomplicated and severe illness as per 2010 WHO malaria treatment guidelines [[9](#_ENREF_9)]

|  |  |  |
| --- | --- | --- |
| **Years of age** | **ACT dose** | **Quinine Dose**  |
| *20mg + 120mg tab-cap* | *Day 1 (IV, per 300 ampule)* | *Day 2 (IV, per 300 ampule)* | *Day 3 (oral, per 300mg tablet)* |
|  | 20 mg/kg over 4 hours | 10 mg/kg every 8 hours | 10 mg/kg every 8 hours |
| **<1** | 6 | 180 | 270 | 270 |
| **1 - 3** | 6 | 240 | 360 | 360 |
| **3 - 5** | 12 | 360 | 540 | 540 |
| **5 - 6**  | 12 | 420 | 630 | 630 |
| **6 - 10** | 12 | 600 | 900 | 900 |
| **10 – 12** | 18 | 840 | 1260 | 1260 |
| **12 - 16** | 24 | 1080 | 1620 | 1620 |
| **> 16** | 24 | 1200 | 1800 | 1800 |

**Table C:** Source for methodology followed in the costing exercise

|  |  |
| --- | --- |
| **Methodology** | **Source** |
| Costing of case management system | Tediosi et al. [[6](#_ENREF_6)] |
| Costing of malaria control interventions | Kolaczinski et al. [[10](#_ENREF_10)], White et al. [[11](#_ENREF_11)] |
| Calculating the burden of disease (DALYs) | Murray and Lopez [[12](#_ENREF_12),[13](#_ENREF_13)] |
| Cost-effectiveness analysis | Drummond et al. [[14](#_ENREF_14)] |

**References**

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