Table S1. Epidemiological and economic input parameters

| Description | Base case analysis | Low | High | Distri-bution a | Ref |
| --- | --- | --- | --- | --- | --- |
| ***Epidemiological parameters*** | | | | | |
| Baseline infection prevalence (without treatment) b | | | | | |
| Hookworm | 0.028 | 0.028 | 0.11 | B | [1] |
| *Ascaris* | 0.0084 | 0.0084 | 0.017 | B | [1] |
| *Trichuris* | 0.0056 | 0.0056 | 0.015 | B | [1] |
| *Strongyloides* | 0.20 | 0.06 | 0.34 | B | [2-6] |
| *Drug efficacy* b |  |  |  |  |  |
| Albendazole against hookworm | 0.72 | 0.72 | 0.93 | B | [1, 7, 8] |
| Albendazole against *Trichuris* | 0.28 | 0.28 | 0.73 | B | [1, 7, 8] |
| Albendazole against *Ascaris* | 0.88 | 0.88 | 0.94 | B | [1, 7, 8] |
| Ivermectin against *Strongyloides* | 0.90 | 0.57 | 0.99 | B | [9-11] |
| *Test sensitivity* b | | | | | |
| *Strongyloides* serologic test | 0.91 | 0.89 | 0.92 | B | [12] |
| Two stool O&P for hookworm | 0.78 | 0.53 | 0.88 | B | [13, 14] |
| Two stool O&P for *Ascaris* | 0.81 | 0.57 | 0.95 | B | [13, 14] |
| Two stool O&P for *Trichuris* | 0.96 | 0.81 | 0.99 | B | [13, 14] |
| *Test specificity* b | | | | | |
| *Strongyloides* serologic test | 0.92 | 0.89 | 0.97 | B | [12, 15, 16] |
| Two stool O&P for hookworm, *Ascaris*, or *Trichuris* | 1 | 1 | 1 | NA | Assumption |
| *Duration of infection* b | | | | | |
| Hookworm | 6 | 5 | 7 | G | [17] |
| *Trichuris* | 2 | 1 | 2 | G | [17] |
| *Ascaris* | 1 | 1 | 1 | N/A | [17] |
| *Annual probability of seeking treatment given infection* b | | | | | |
| Outpatient visit for hookworm/ trichuriasis/ascariasis | 0.001 | 0.00012 | 0.005 | B | [18, 19] |
| Outpatient visit for strongyloidiasis | 0.001 | 0.00012 | 0.005 | B | [18, 19] |
| Inpatient strongyloidiasis | 2.9E-05 | 6.6E-06 | 1.2E-04 | B | [18, 19] |
| Case fatality rate for inpatient strongyloidiasis | 0.167 | 0.02 | 0.25 | B | [20] |
| *Program parameters* | | | | | |
| Proportion of refugees receiving domestic comprehensive medical exam | 0.9 | 0.8 | 1.0 | U | Assumption |
| Probability refugees arrive from countries with presumptive treatment program | 1.00 | 0.75 | 1.00 | U | IOM report |
| Probability refugees receive presumptive treatment | 0.90 | 0.80 | 0.98 | U | Assumption |
| Probability stool O&P will be ordered given presumptive treatment | 0.05 | 0.03 | 0.07 | U | Assumption |
| Adjustment factor for overseas versus domestic treatment 0-1 | 1 | 0.75 | 1 | U | Assumption |
| *Demographics* | | | | | |
| Probability of death background rate | Varies with age | | | N/A | [21] |
| Median age of refugees at arrival | 24 |  |  |  | [22] |
| **Economic parameters** | | | | | |
| *U.S. cost estimates (2013 USD)* | | | | | |
| Screen for all nematodes c | 116 | 78 | 260 | G | [23-25] |
| Screen for strongyloides, assuming albendazole presumptive treatment c | 54 | 38 | 113 | G | [23-25] |
| Screen, assuming albendazole + ivermectin presumptive treatment c | 78 | 57 | 171 | G | [23-25] |
| Albendazole treatment 400mg c | 173 | 152 | 234 | G | [23-26] |
| Outpatient treatment for intestinal parasites (screening + albendazole cost) d | 494 | 345 | 1030 | G | [23-26] |
| Outpatient treatment for intestinal parasites (screening + ivermectin cost) d | 408 | 259 | 940 | G | [23-26] |
| Inpatient treatment for strongyloidiasis d | 20,000 | 15,000 | 24,000 | G | [27] |
| Ivermectin treatment 18mg d | 87 | 66 | 150 | G | [23-26] |
| *Overseas cost estimates (2013 USD) e* | | | | | |
| Presumptive albendazole treatment in Asia | 3.2 | 2.7 | 3.7 | G | IOM data |
| Presumptive ivermectin treatment in Asia | 7.6 | 3.8 | 13.3 | G | IOM data |
| *Opportunity cost estimates (2013 USD)* | | | | | |
| Screening (all parasites) c | 7 | 7 | 22 | G | [28, 29] |
| Screening (*Strongyloides* only) c | 1 | 1 | 2.20 | G | [28, 29] |
| Treatment after screening c | 6 | 6 | 22 | G | [28, 29] |
| Outpatient cases d | 140 | 140 | 176 | G | [28, 29] |
| Inpatient strongyloidiasis d | 1,400 | 1,400 | 1,760 | G | [27-29] |
| *QALY estimates* | | | | | |
| QALY decrement for *Strongyloides* infections | 0.001 | 0 | 0.01 | B | Assumption |
| QALY decrement for hookworm, *Ascaris*, *Trichuris* infections | 0.001 | 0 | 0.01 | B | Assumption |
| a Distribution types: U- uniform, B- beta, G- gamma (See Section 5 of appendix for more details)  b Details in Section 2 of Appendix  c Details in Section 3 of Appendix  d Details in Section 4 of Appendix  e Details in Section 5 of Appendix | | | | | |

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