August 15, 2013

Dear Elie and Tim,

Please find enclosed a submission from Evidence Action regarding Deworm the World Initiative work in India.

We are providing the following information:

* Monitoring reports provided to our government partners in Rajasthan and Bihar.
* Prevalence reports and associated data provided to our government partners.
* Cost per beneficiary in Rajasthan, Bihar, Delhi.
* Self-reported and validated coverage data in Rajasthan, Bihar (2 rounds), Delhi.
* Process monitoring data generating by independent monitors to verify training (pre deworming day) and drug administration/reporting (on deworming day).

In the remainder of this note, we provide some commentary and context to facilitate the assessment of this data. We cover three major topics:

1. Estimation of government expenditures/ leverage;
2. Differences in costs across settings and associated leverage ratios;
3. Data quality considerations.

I look forward to continuing our conversation.

Best,

Alix

**Estimation of government expenditure and leverage**

As agreed with Givewell, this submission includes an analysis of program expenditure by partner. This analysis allows for an assessment of the claim made by DtWI that funds provided to our partnership are highly leveraged, and that this support represents good value for money. The table below summarizes the findings of this analysis:

Table 1: Mass deworming expenses by partner

|  |  |  |  |
| --- | --- | --- | --- |
|  | Rajasthan | Bihar | Delhi |
| Total treated (millions) | 10.8 | 17.1 | 2.65 |
| Program unit cost ($) | 0.29 | 0.35 | 0.31 |
| Government unit cost ($) | 0.23 | 0.32 | 0.18 |
| Other partner unit cost ($) | 0.02 | 0.00 | 0.02 |
| DtWI unit cost ($) | 0.03 | 0.03 | 0.11 |

We stress that these figures do represent an estimate of total program costs. As we detail in the workbook, we must impute some of the government costs as these are often in kind. However, we have made a good faith estimate to capture the full costs as we understand them. In addition, we are also able to document direct spending on certain areas of deworming by the government. We note that preliminary estimates of program costs in Kenya, which we can estimate with far greater precision, suggest programming costs there of about $0.40 per child.

There is significant difference in the costs borne by DtWI across settings in the data that we present. In Delhi, in particular, DtWI had much higher unit costs than in Rajasthan or Bihar. While there may be several potential explanations for these differences in costs, we also believe there are significant non-linearities in programming costs, as we discuss further below.

Even within the DtWI data it is necessary to make some judgment calls in allocating costs across categories of work, though we do provide this estimate for Rajasthan and Delhi. As a young organization, our historical accounting of costs was primarily concerned with documenting total cost outflows to particular state programs and not to documenting details tied to spending on different core activities. For example, a trip for M&E to Bihar may simply have been documented as “Air Travel to Bihar”, without necessarily documenting the purpose of the trip (and therefore the activity category under which such a cost would fall). Alternatively, a person hired for M&E in India may simply have been recorded under the category of “Salaries to non-US personnel”. This made it difficult to break down our cost by output with complete accuracy. M&E expenditures are particularly underestimated, with many costs related to M&E charged to personnel /consulting.

We recommend focusing primarily on the Rajasthan analysis, which is the most accurate of the three, as a result of these considerations.

**Cost differences across settings**

While our data is currently too incomplete to truly understand the magnitudes and linearity/non-linearity of the scale effects in our business model, it is important to recognize that they do appear to exist. In the case of states like Bihar, where 17 million people were dewormed in 2011, DtWI costs amounted to approximately 2.8 cents a person. In Rajasthan, where we dewormed approximately 10 million children, the per child cost that DtWI incurred was approximately 3.0 cents a child. In places like Delhi where 2.65 million children were dewormed in 2012, the cost to DtWI was approximately 11 cents a child. This is despite the fact that some prevalence survey costs were reimbursed by the government in Delhi. On the basis of this evidence, it appears to us that states with smaller populations tend to have higher per child costs because a large portion of our costs are fixed.

The difference in cost per child may also reflect differences in costs related to pursuing anganwadi schools. Anganwadi schools are small community schools with pre-school age children. They are highly disorganized, with no accurate databases reflecting their presence or enrolment. Often their existence and assessment of need are difficult to ascertain. Thus they are a little more costly to deworm, given the additional costs of training, logistics, and drug distribution, compared to regular government schools. In Bihar, we did not do deworming in anganwadi schools. To assess the extent to which this is an important driver of our costs, we would need to examine the relative proportion of anganwadi and non-anganwadi beneficiaries. We have not done that analysis at this time, but it is feasible.

It may simply be more expensive to operate in urban Delhi than Rajasthan. This is plausible, but unlikely to explain fully the cost differences observed. The salaries we offer our staff are very similar across all the states, and indeed costs in Rajasthan are not three times those in Delhi, excluding certain costs like real estate. Even in real estate, the cost difference between our Delhi and Rajasthan offices are small. We are a low-cost operation, and our office location and size reflect this low-cost philosophy.

The most likely reason for this difference in costs is that the fixed costs of the program (the core state staff necessary to run these programs, the advocacy costs, the awareness costs) are similar in each state. When these fixed costs are spread across fewer beneficiaries in a smaller state, per unit costs fall. This supports DtWI’s claim that deworming is most efficiently done at the national (or state, in India) level; district level programming, often still undertaken by some actors in this space, is inefficient.

**Data quality considerations**

Please note that there are some issues with data completeness for Bihar Round 2. Seventeen of 534 blocks in Bihar have still not reported their coverage data. It is believed that some of these blocks did not do the deworming, while others have simply not returned coverage forms, despite many entreaties to return them. The data we report for Bihar is therefore not complete and may also suffer some inconsistencies, since coverage forms have been trickling in over the last few months. These inconsistencies and possible problems are explained in the “Note” tab in the relevant excel file.

We also note that in the Bihar Round 1 report, the coverage numbers are different from the excel file raw figures. This was due to the time at which the report was written and the fact that the data may not have been completely clean and verified at the time it was written. The differences, when they do exist, are relatively small.

In the case of Delhi Round 1, the process monitoring data is also relatively sparse. This may have been due to the fact that we used government appointed independent monitors for the purpose, or that these monitors were poorly trained and did not accurately fill in their forms. We are no longer going to be using these government appointed independent monitors in the next round of deworming. In addition, we have expended more resources to train the independent monitors more thoroughly. This evolution reflects the collective learning we all experience with each round of treatment.

In addition, as we have learned and tried to improve, the process monitoring forms have been continuously updated between the rounds, and sometimes within the round itself. In the case of Bihar Round 1, the deworming was done in three phases, as they do in Kenya. The program manager at the time decided to update the forms based on observations from the first phase. Therefore, the forms in Phase 1 are different from the forms in phases 2 and 3. However, the deworming in Bihar in Round 2 was done on one day (with a mop up day), and the forms that were used were consistent.

Given these caveats, we believe that the data reflected in this submission are as accurate as can be.