2017 GiveWell cost-effectiveness analysis (CEA) — Version 4
Release notes

<u>Summary</u>

In this update, we made several miscellaneous updates to our cost-effectiveness model. The table below shows how the median results of our model came out after these changes:

Charity	Median *[charity]* vs. cash[1] before	Median *[charity]* vs. cash after	Percentage change
AMF	3.8x	4.0x	6.5%
Deworm the World	11.9x	11.9x	0.2%
Malaria Consortium	3.3x	3.4x	5.0%
SCI	5.0x	5.1x	0.8%
Sightsavers	3.7x	3.7x	-0.2%

<u>Change 1: Adjusted the country-level supplementary calculations in the nets CEA</u>

What changed? We previously had a column labeled "Other areas" which accounted for data from areas that could potentially be covered by future AMF distributions. This column was removed, and a new column was added to include data from Zambia.

Why did we make this change? It is no longer necessary to keep the details of potential distributions private. Work recently started on a distribution of roughly three million nets in Zambia. Other potential distributions previously included in that column have not gone forward. We are not projecting potential distributions for future years because, given the information we have at this time, we believe our best approximation of future AMF spending is to assume that it will resemble past spending.

How does the change affect the results?

Charity	Median *[charity]* vs. cash before	Median *[charity]* vs. cash after	Percentage change
AMF	3.8x	3.7x	-3.0%

<u>Change 2: Updated mortality estimates from the Global Burden of Disease Project and other sources</u>

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[1] The tables in this document list "*[charity]* vs. cash" metrics. These metrics capture how cost-effective we expect a charity is relative to GiveDirectly. For example, if we listed AMF as 2x cash, that would indicate that our model suggests a dollar spent by AMF accomplishes twice as much good as a dollar spent by GiveDirectly.

What changed? Several parts of the CEA draw on mortality estimates from the Global Burden of Disease Project, the World Bank, or the World Health Organization. We updated these data to reflect the most up-to-date versions of the estimates.

Why did we make this change? We want our CEA to be up-to-date and reflective of the best information available.

How does the change affect the results?

Charity	Median *[charity]* vs. cash before	Median *[charity]* vs. cash after	Percentage change
AMF	3.7x	3.9x	7.6%
Malaria Consortium	3.3x	3.2x	-1.4%

Change 3: Adjusted the *Transfers as a percentage of total cost* parameter in the GiveDirectly CEA

What changed? The *Transfers as a percentage of total cost* parameter was moved from the *Parameters* tab to the *Cash* tab. This parameter was set to a default value of 81.5%. The value comes from an analysis of GiveDirectly's financials through July 2017. The previous value, using the same estimation method for an earlier period, was 82.3%.

Why did we make this change? We want to minimize the number of items on the *Parameters* tab to encourage engagement with our CEA. Since this parameter is not especially uncertain or subjective in nature, we thought it should be moved to the *Cash* tab. The 81.5% value draws on new financial information from GiveDirectly, but is not substantially different from values that we previously suggested for the parameter.

How does this change affect the results?

Charity	Median *[charity]* vs. cash before	Median *[charity]* vs. cash after	Percentage change
AMF	3.9x	4.0x	1.2%
Deworm the World	11.9x	11.9x	0.2%
Malaria Consortium	3.2x	3.3x	1.3%
SCI	5.0x	5.1x	0.8%
Sightsavers	3.7x	3.7x	-0.2%

Charity	Median cost per life saved equivalent before	Median cost per life saved equivalent after	Percentage change
GiveDirectly	$9,492	$9,402	-0.9%

Change 4: Changed the coverage adjustment process in the SMC CEA

What changed? We previously adjusted the expected efficacy of SMC treatment by the level of coverage achieved in the ACCESS-SMC program. We now adjust SMC efficacy by the difference between the coverage level in the ACCESS-SMC program and the estimated coverage level in SMC research trials.

Why did we make this change? We realized that we were making an error by implicitly assuming that coverage in the RCTs that measured SMC efficacy was 100%.

How does this change affect the results?

Charity	Median *[charity]* vs. cash before	Median *[charity]* vs. cash after	Percentage change
Malaria Consortium	3.3x	3.5x	5.9%

Change 5: Adjusted a supplementary calculation in the SMC CEA

What changed? The parameter labeled *Portion of post-neonatal (1 month to 1 year old) malaria deaths that occur in 1-3 month-olds* used to be calculated with the expression "*(2/11)*1.5*". Now the expression used is just *(2/11)*.

Why did we make this change? This parameter captures the proportion of post-neonatal malaria deaths that occur in the second and third month of life. It was a rough estimate and was not based on data. That continues to be the case, but after discussing with Malaria Consortium, we believe our initial estimate was overly conservative. In particular, Malaria Consortium argued that infants received some amount of malaria immunity from their mothers in the first few months of life.

How does this change affect the results?

Charity	Median *[charity]* vs. cash before	Median *[charity]* vs. cash after	Percentage change
Malaria Consortium	3.5x	3.4x	-0.7%

Change 6: Updated AMF spending figures

What changed? We updated country-level spending data used in the supplementary calculation section of the nets CEA.

Why did we make this change? We want our CEA to be up-to-date and reflective of the best information available.

How does this change affect the results?

Charity	Median *[charity]* vs. cash before	Median *[charity]* vs. cash after	Percentage change
AMF	4.0x	4.1x	1.4%

Change 7: Updated data from the Demographic and Health Surveys (DHS) Program

What changed? We updated data used in the supplementary calculation section of the nets CEA to reflect a new Malaria Indicator Survey from Ghana and a new Demographic and Health Survey from Malawi.

Why did we make this change? We want our CEA to be up-to-date and reflective of the best information available.

How does this change affect the results?

Charity	Median *[charity]* vs. cash before	Median *[charity]* vs. cash after	Percentage change
AMF	4.1x	4.0x	-0.6%