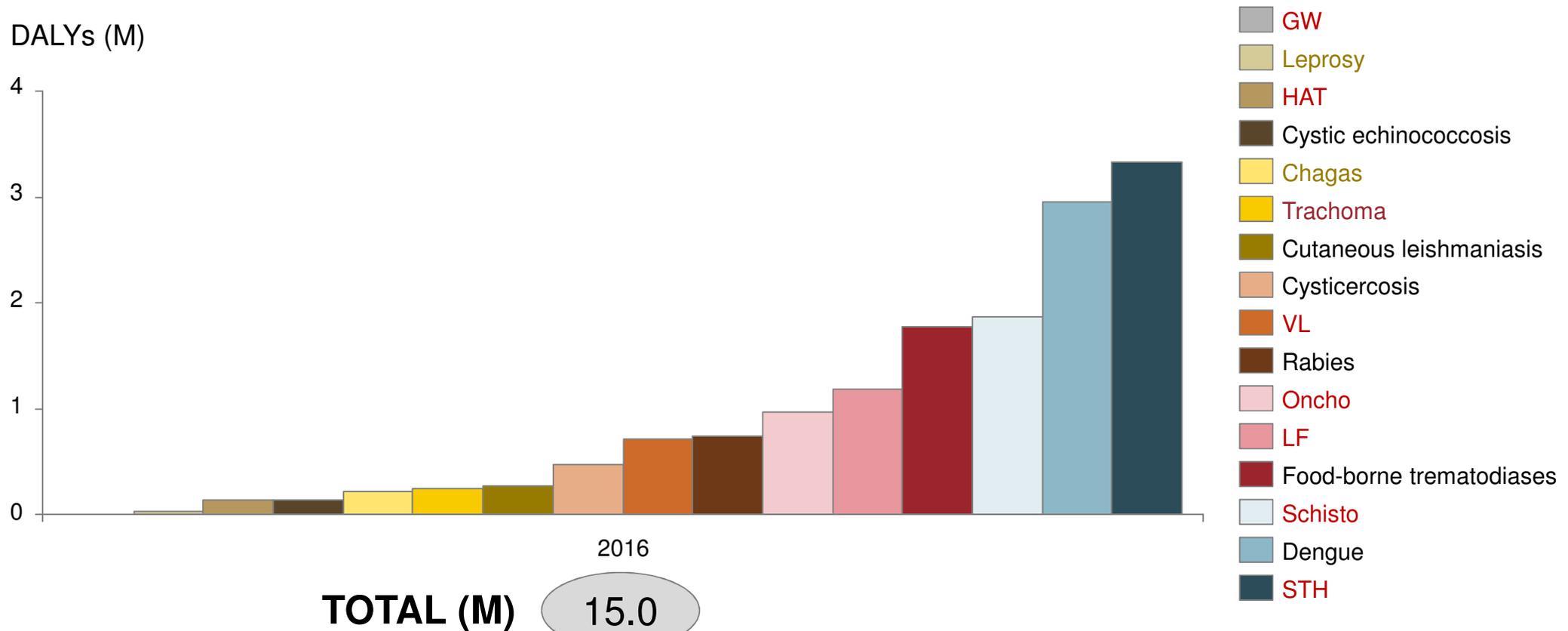


LEVERAGING THE NTD PLATFORM

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NTD DALYs – ALL DISEASES AND ALL GEOGRAPHIES

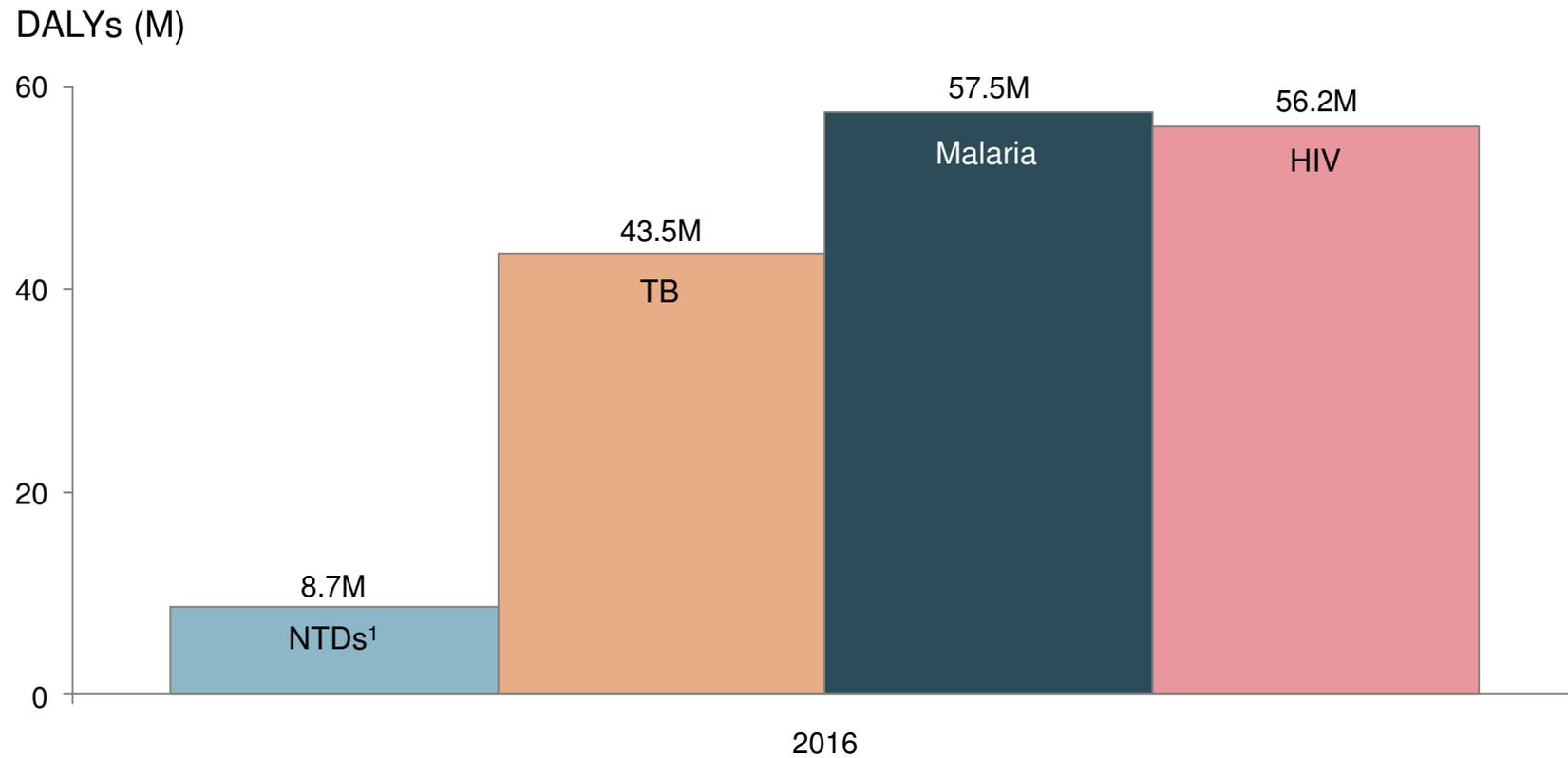


London Declaration diseases

BMGF Priority Diseases (all London Declaration diseases)

Source: IHME Global Disease Burden Data

COMPARISON OF ALL NTD DALYS VS HIV, TB, AND MALARIA

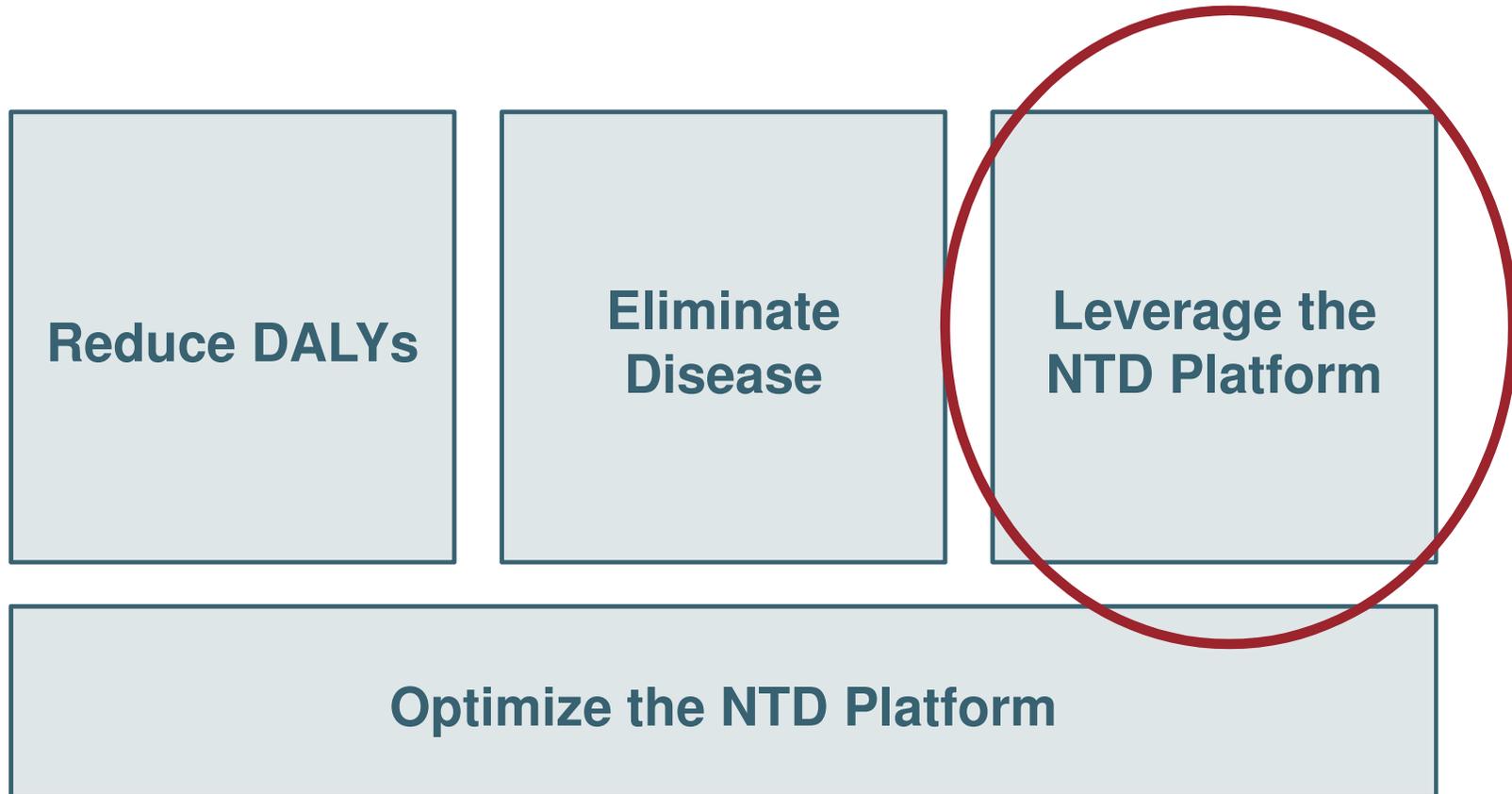


1. Only includes diseases of the London Declaration
Source: IHME Global Disease Burden data

■ SLIDE ON ROI



■ BMGF NTD TEAM GOALS



MASS ADMINISTRATION OF AZITHROMYCIN SIGNIFICANTLY REDUCES CHILD MORTALITY: MORDOR

Background

- Trachoma control programs have distributed 600M+ doses of azithromycin; overall mortality reduction has been observed
- MORDOR was to be the **definitive trial of azithromycin MDA for reducing childhood morbidity and mortality**

Design

- MORDOR was a placebo-controlled trial of azithromycin given to children aged 1-60 months every 6 months in **Tanzania, Malawi, and Niger**
- 4 rounds of MDA were conducted between 2015 and 2017

Results

- Taking all three sites together, **deaths among children 1-60 months of age were decreased by 13.8%***
- By age, the strongest effect was in the **1-5m age group with a 25.1%* reduction** in deaths taking all 3 sites together

Country	Mortality reduction	U5 MR
Niger	18.1%*	113
Malawi	6.4%	73
Tanzania	3.0%	59

* $P \leq 0.001$

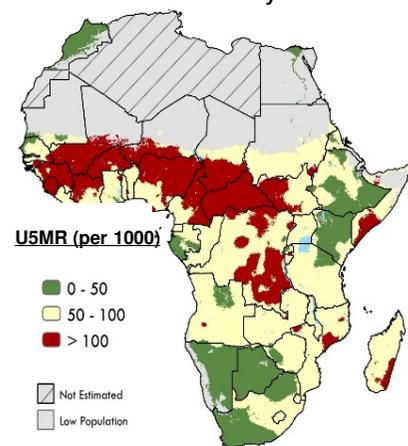
Interpretation

- Based on verbal autopsy, reduction in deaths are **not due to a reduction in a specific syndrome** such as respiratory illness or malaria
- The reduction in deaths appears to increase with each subsequent round of administration in high mortality settings indicating that **increasing resistance is not dampening the effect of this intervention**

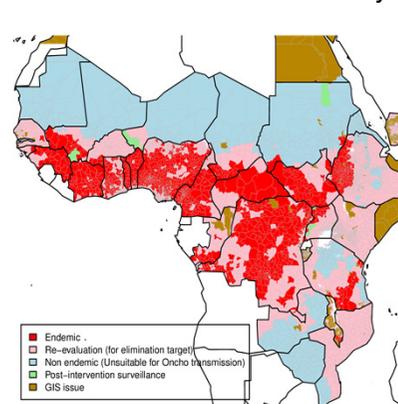
NTD'S MDA PROGRAMS' FOCUS ON EQUITY AND HIGH-MORTALITY SETTINGS MAKE THEM ATTRACTIVE CHANNELS

NTDs impact marginalized populations¹

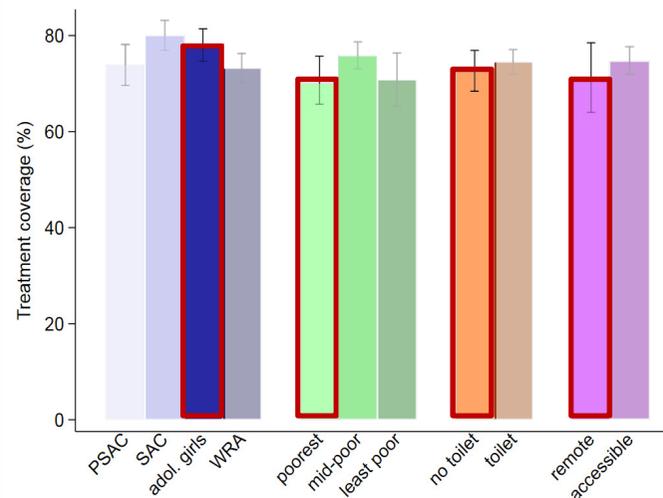
Geographical distribution of under 5 mortality²



District-level distribution of onchocerciasis endemicity³



NTD MDA's focus on equity⁴



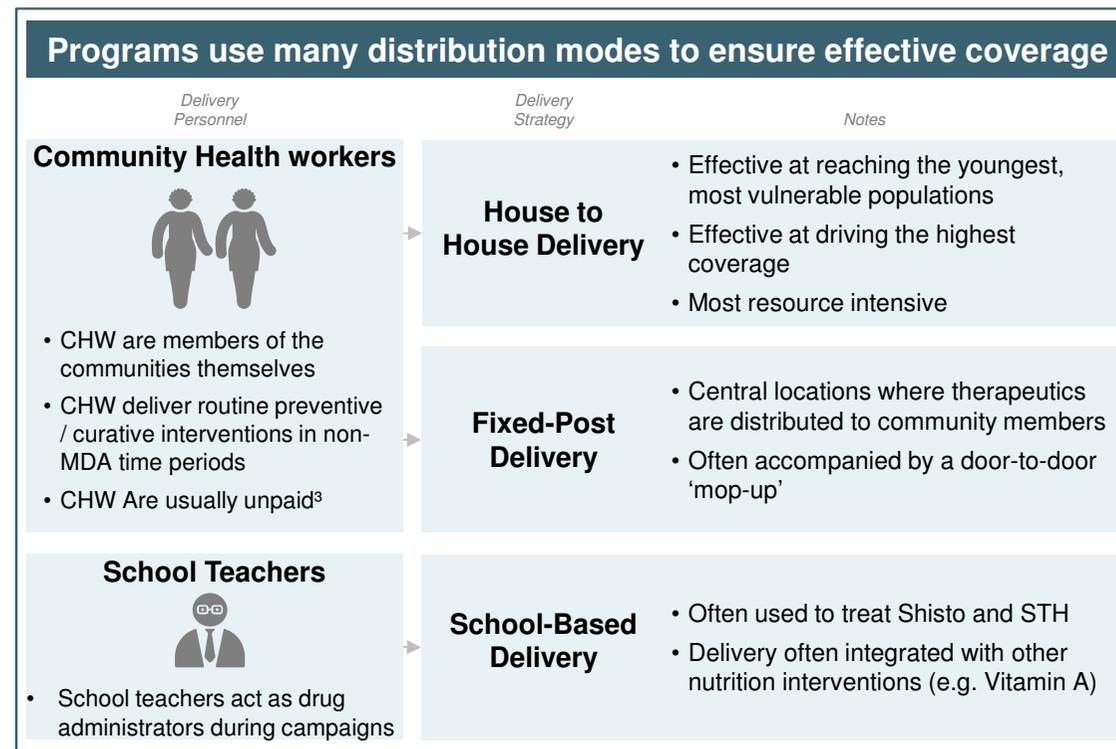
Treatment coverage of a community-based STH program

A stated goal of the NTD strategy is to identify ways to opportunistically leverage NTD platforms to deliver high-impact interventions to these vulnerable populations

¹An Investment Case for Ending Neglected Tropical Diseases. Fitzpatrick, Nwanko, Lenk, Vlas, Bundy ⁴Modeled estimates by IHME
²ESPEN Data Portal ³TUMIKA Project

MDA¹ STRATEGIES EFFECTIVELY CONTROL AND ELIMINATE NTDS FOR ENTIRE AT-RISK POPULATIONS

Many NTDS leverage MDA Strategies			
Diseases Targeted	Global Prevalence	DALYS Averted Through MDA ²	Target Pop. Coverage
Lymphatic Filariasis (LF)	857M	1.2M	≥65%
Soil Transmitted Helminths	836M	3.3M	≥75%
Schistosomiasis	206M	1.9M	≥65%
Onchocerciasis	198M	1M	≥65%
Trachoma	156M	0.2M	≥80%



- NTD interventions are available for as little as \$3 per DALY, making them some of the most cost-effective in public-health⁴
- NTD MDA's target a variety of age-ranges but consistently reach 'at-risk' populations with high levels of intervention coverage
- NTD MDA's leverage community members to deliver interventions, thus contributing to long-term sustainability

¹Mass Drug Administration - Distribution of therapeutics to entire 'at-risk' populations regardless of disease status over the course of a limited period of time ²DALY impact of annual MDA campaigns from 2016; WHO ³Some countries, such as Burkina Faso, are moving to a compensated CHW model which is driving improved health outcomes ⁴An Investment Case for Ending Neglected Tropical Diseases. Fitzpatrick, Nwanko, Lenk, Vlas, Bundy