

S1 File. Summary table results for all 9 countries.**Table A.** Averted financial costs due to ivermectin MDA for all 9 countries

Uptake	Efficacy	Griffin Scenario	Severe case	2023	2024	2025	2026	2027	Sum
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	15,969,012	26,678,956	37,386,236	48,356,865	59,609,638	188,000,708
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	18,514,280	30,931,260	43,345,150	56,064,365	69,110,694	217,965,748
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	12,833,063	20,549,573	27,572,905	34,142,698	40,290,380	135,388,619
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	14,878,498	23,824,927	31,967,693	39,584,632	46,712,179	156,967,928
Conservative	efficacy=0.2	Innovate	severe case=0.01	11,025,378	17,143,117	22,318,967	26,812,941	30,696,280	107,996,683
Conservative	efficacy=0.2	Innovate	severe case=0.03	12,782,690	19,875,523	25,876,341	31,086,599	35,588,896	125,210,049
Conservative	efficacy=0.2	Sustain	severe case=0.01	18,755,948	32,329,343	46,776,026	62,474,207	79,525,575	239,861,099
Conservative	efficacy=0.2	Sustain	severe case=0.03	21,745,419	37,482,249	54,231,559	72,431,840	92,200,991	278,092,059
Conservative	efficacy=0.2	No change	severe case=0.01	17,274,376	29,303,435	41,710,227	54,801,635	68,622,204	211,711,877
Conservative	efficacy=0.2	No change	severe case=0.03	20,027,702	33,974,049	48,358,333	63,536,353	79,559,753	245,456,191
Conservative	efficacy=0.4	Accelerate 1	severe case=0.01	31,938,025	53,332,362	74,712,557	96,606,221	119,049,853	375,639,018
Conservative	efficacy=0.4	Accelerate 1	severe case=0.03	37,028,560	61,832,896	86,620,835	112,004,085	138,024,961	435,511,337
Conservative	efficacy=0.4	Accelerate 2	severe case=0.01	25,666,125	41,078,613	55,099,619	68,206,012	80,460,975	270,511,345
Conservative	efficacy=0.4	Accelerate 2	severe case=0.03	29,756,996	47,626,047	63,881,833	79,077,226	93,285,482	313,627,583
Conservative	efficacy=0.4	Innovate	severe case=0.01	22,050,756	34,268,594	44,599,376	53,561,568	61,298,399	215,778,694
Conservative	efficacy=0.4	Innovate	severe case=0.03	25,565,379	39,730,594	51,707,978	62,098,635	71,068,623	250,171,209
Conservative	efficacy=0.4	Sustain	severe case=0.01	37,511,896	64,628,676	93,479,492	124,814,016	158,832,476	479,266,556
Conservative	efficacy=0.4	Sustain	severe case=0.03	43,490,839	74,929,706	108,378,994	144,707,861	184,148,452	555,655,852
Conservative	efficacy=0.4	No change	severe case=0.01	34,548,752	58,579,232	83,354,666	109,483,376	137,052,494	423,018,520
Conservative	efficacy=0.4	No change	severe case=0.03	40,055,405	67,916,053	96,640,392	126,933,703	158,897,005	490,442,558
Rapid	efficacy=0.2	Accelerate 1	severe case=0.01	15,969,012	49,324,399	84,346,625	120,271,853	157,080,020	426,991,910
Rapid	efficacy=0.2	Accelerate 1	severe case=0.03	18,514,280	57,186,112	97,790,457	139,441,733	182,116,677	495,049,259
Rapid	efficacy=0.2	Accelerate 2	severe case=0.01	12,833,063	37,969,003	62,185,416	84,898,260	106,148,631	304,034,372
Rapid	efficacy=0.2	Accelerate 2	severe case=0.03	14,878,498	44,020,803	72,097,019	98,430,016	123,067,440	352,493,776
Rapid	efficacy=0.2	Innovate	severe case=0.01	11,025,378	31,660,985	50,323,598	66,660,645	80,859,805	240,530,411
Rapid	efficacy=0.2	Innovate	severe case=0.03	12,782,690	36,707,363	58,344,571	77,285,546	93,747,881	278,868,051
Rapid	efficacy=0.2	Sustain	severe case=0.01	18,755,948	59,796,945	105,556,539	155,410,609	209,592,548	549,112,588
Rapid	efficacy=0.2	Sustain	severe case=0.03	21,745,419	69,327,855	122,380,975	180,181,181	242,999,067	636,634,498
Rapid	efficacy=0.2	No change	severe case=0.01	17,274,376	54,188,187	94,113,232	136,312,560	180,842,681	482,731,037
Rapid	efficacy=0.2	No change	severe case=0.03	20,027,702	62,825,130	109,113,744	158,039,135	209,666,818	559,672,529
Rapid	efficacy=0.4	Accelerate 1	severe case=0.01	31,938,025	98,600,891	168,444,472	239,942,583	313,052,948	851,978,918
Rapid	efficacy=0.4	Accelerate 1	severe case=0.03	37,028,560	114,316,681	195,292,485	278,186,530	362,949,804	987,774,060

Rapid	efficacy=0.4	Accelerate 2	severe case=0.01	25,666,125	75,899,506	124,179,254	169,352,984	211,514,993	606,612,863
Rapid	efficacy=0.4	Accelerate 2	severe case=0.03	29,756,996	87,996,970	143,971,926	196,345,802	245,227,927	703,299,621
Rapid	efficacy=0.4	Innovate	severe case=0.01	22,050,756	63,288,894	100,487,403	132,962,153	161,104,940	479,894,146
Rapid	efficacy=0.4	Innovate	severe case=0.03	25,565,379	73,376,378	116,503,880	154,154,713	186,783,121	556,383,472
Rapid	efficacy=0.4	Sustain	severe case=0.01	37,511,896	119,537,622	210,811,561	310,069,357	417,755,574	1,095,686,010
Rapid	efficacy=0.4	Sustain	severe case=0.03	43,490,839	138,590,475	244,412,375	359,490,664	484,340,763	1,270,325,115
Rapid	efficacy=0.4	No change	severe case=0.01	34,548,752	108,324,552	187,953,192	271,954,577	360,431,056	963,212,128
Rapid	efficacy=0.4	No change	severe case=0.03	40,055,405	125,590,176	217,910,659	315,300,849	417,879,409	1,116,736,499
National	efficacy=0.2	Accelerate 1	severe case=0.01	15,969,012	33,149,083	67,194,129	136,062,056	208,130,265	460,504,545
National	efficacy=0.2	Accelerate 1	severe case=0.03	18,514,280	38,432,646	77,904,061	157,748,703	241,303,714	533,903,403
National	efficacy=0.2	Accelerate 2	severe case=0.01	12,833,063	25,526,553	49,530,785	96,000,288	140,605,027	324,495,715
National	efficacy=0.2	Accelerate 2	severe case=0.03	14,878,498	29,595,177	57,425,394	111,301,574	163,015,768	376,216,410
National	efficacy=0.2	Innovate	severe case=0.01	11,025,378	21,291,080	40,077,733	75,352,830	107,084,519	254,831,539
National	efficacy=0.2	Innovate	severe case=0.03	12,782,690	24,684,620	46,465,639	87,363,160	124,152,497	295,448,607
National	efficacy=0.2	Sustain	severe case=0.01	18,755,948	40,177,229	84,101,454	175,871,215	277,766,820	596,672,667
National	efficacy=0.2	Sustain	severe case=0.03	21,745,419	46,580,994	97,506,209	203,902,961	322,039,494	691,775,078
National	efficacy=0.2	No change	severe case=0.01	17,274,376	36,413,365	74,979,276	154,233,384	239,640,214	522,540,615
National	efficacy=0.2	No change	severe case=0.03	20,027,702	42,217,215	86,930,067	178,816,321	277,835,968	605,827,273
National	efficacy=0.4	Accelerate 1	severe case=0.01	31,938,025	66,266,228	134,254,192	271,580,928	414,607,145	918,646,517
National	efficacy=0.4	Accelerate 1	severe case=0.03	37,028,560	76,828,263	155,652,687	314,867,645	480,690,512	1,065,067,668
National	efficacy=0.4	Accelerate 2	severe case=0.01	25,666,125	51,027,440	98,958,283	191,599,992	280,042,828	647,294,668
National	efficacy=0.4	Accelerate 2	severe case=0.03	29,756,996	59,160,597	114,731,038	222,138,714	324,678,269	750,465,614
National	efficacy=0.4	Innovate	severe case=0.01	22,050,756	42,560,108	80,069,287	150,381,418	213,252,484	508,314,053
National	efficacy=0.4	Innovate	severe case=0.03	25,565,379	49,343,675	92,831,364	174,350,399	247,242,352	589,333,169
National	efficacy=0.4	Sustain	severe case=0.01	37,511,896	80,316,947	168,040,474	351,062,796	553,397,360	1,190,329,473
National	efficacy=0.4	Sustain	severe case=0.03	43,490,839	93,118,497	194,824,094	407,017,963	641,602,210	1,380,053,602
National	efficacy=0.4	No change	severe case=0.01	34,548,752	72,792,180	149,811,310	307,860,749	477,406,599	1,042,419,590
National	efficacy=0.4	No change	severe case=0.03	40,055,405	84,394,374	173,689,422	356,930,031	553,499,441	1,208,568,673

Note: this table summarizes the averted cost of treatment due to reduced incidence, for each year; the last column is the sum of averted cost of treatment for all years.

Table B. Summary of costs, averted cases and averted deaths, and CER for all 9 countries

Uptake	Efficacy	Griffin Scenario	Severity	Gross Cost Averted	Net Cost Of iMDA	Cases Averted	Deaths Averted	Scale-up costs	Net Cost Of iMDA/ Cases Averted	Net Cost Of iMDA/ Deaths Averted
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	188,000,708	479,794,372	17,915,482	28,196	667,795,080	27	17,016
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	217,965,748	449,829,331	17,915,482	28,196	667,795,080	25	15,954
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	135,388,619	532,406,461	12,901,825	18,596	667,795,080	41	28,630
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	156,967,928	510,827,152	12,901,825	18,596	667,795,080	40	27,470
Conservative	efficacy=0.2	Innovate	severe case=0.01	107,996,683	559,798,396	10,291,518	15,930	667,795,080	54	35,140
Conservative	efficacy=0.2	Innovate	severe case=0.03	125,210,049	542,585,031	10,291,518	15,930	667,795,080	53	34,060
Conservative	efficacy=0.2	Sustain	severe case=0.01	239,861,099	427,933,981	22,857,505	38,428	667,795,080	19	11,136
Conservative	efficacy=0.2	Sustain	severe case=0.03	278,092,059	389,703,021	22,857,505	38,428	667,795,080	17	10,141
Conservative	efficacy=0.2	No change	severe case=0.01	211,711,877	456,083,203	20,175,032	36,454	667,795,080	23	12,511
Conservative	efficacy=0.2	No change	severe case=0.03	245,456,191	422,338,889	20,175,032	36,454	667,795,080	21	11,585
Conservative	efficacy=0.4	Accelerate 1	severe case=0.01	375,639,018	292,156,062	35,796,429	56,338	667,795,080	8	5,186
Conservative	efficacy=0.4	Accelerate 1	severe case=0.03	435,511,337	232,283,743	35,796,429	56,338	667,795,080	6	4,123
Conservative	efficacy=0.4	Accelerate 2	severe case=0.01	270,511,345	397,283,735	25,778,313	37,155	667,795,080	15	10,693
Conservative	efficacy=0.4	Accelerate 2	severe case=0.03	313,627,583	354,167,496	25,778,313	37,155	667,795,080	14	9,532
Conservative	efficacy=0.4	Innovate	severe case=0.01	215,778,694	452,016,386	20,562,578	31,829	667,795,080	22	14,202
Conservative	efficacy=0.4	Innovate	severe case=0.03	250,171,209	417,623,870	20,562,578	31,829	667,795,080	20	13,121
Conservative	efficacy=0.4	Sustain	severe case=0.01	479,266,556	188,528,524	45,671,590	76,782	667,795,080	4	2,455
Conservative	efficacy=0.4	Sustain	severe case=0.03	555,655,852	112,139,228	45,671,590	76,782	667,795,080	2	1,460
Conservative	efficacy=0.4	No change	severe case=0.01	423,018,520	244,776,560	40,311,447	72,839	667,795,080	6	3,361
Conservative	efficacy=0.4	No change	severe case=0.03	490,442,558	177,352,521	40,311,447	72,839	667,795,080	4	2,435
Rapid	efficacy=0.2	Accelerate 1	severe case=0.01	426,991,910	1,101,731,323	40,690,090	63,740	1,528,723,233	27	17,285
Rapid	efficacy=0.2	Accelerate 1	severe case=0.03	495,049,259	1,033,673,974	40,690,090	63,740	1,528,723,233	25	16,217
Rapid	efficacy=0.2	Accelerate 2	severe case=0.01	304,034,372	1,224,688,861	28,972,881	41,416	1,528,723,233	42	29,570
Rapid	efficacy=0.2	Accelerate 2	severe case=0.03	352,493,776	1,176,229,457	28,972,881	41,416	1,528,723,233	41	28,400
Rapid	efficacy=0.2	Innovate	severe case=0.01	240,530,411	1,288,192,822	22,921,287	35,272	1,528,723,233	56	36,522
Rapid	efficacy=0.2	Innovate	severe case=0.03	278,868,051	1,249,855,182	22,921,287	35,272	1,528,723,233	55	35,435
Rapid	efficacy=0.2	Sustain	severe case=0.01	549,112,588	979,610,645	52,327,550	87,768	1,528,723,233	19	11,161
Rapid	efficacy=0.2	Sustain	severe case=0.03	636,634,498	892,088,736	52,327,550	87,768	1,528,723,233	17	10,164
Rapid	efficacy=0.2	No change	severe case=0.01	482,731,037	1,045,992,197	46,001,737	83,119	1,528,723,233	23	12,584
Rapid	efficacy=0.2	No change	severe case=0.03	559,672,529	969,050,705	46,001,737	83,119	1,528,723,233	21	11,659

Rapid	efficacy=0.4	Accelerate 1	severe case=0.01	851,978,918	676,744,315	81,189,124	127,179	1,528,723,233	8	5,321
Rapid	efficacy=0.4	Accelerate 1	severe case=0.03	987,774,060	540,949,174	81,189,124	127,179	1,528,723,233	7	4,253
Rapid	efficacy=0.4	Accelerate 2	severe case=0.01	606,612,863	922,110,370	57,807,025	82,632	1,528,723,233	16	11,159
Rapid	efficacy=0.4	Accelerate 2	severe case=0.03	703,299,621	825,423,612	57,807,025	82,632	1,528,723,233	14	9,989
Rapid	efficacy=0.4	Innovate	severe case=0.01	479,894,146	1,048,829,087	45,731,396	70,372	1,528,723,233	23	14,904
Rapid	efficacy=0.4	Innovate	severe case=0.03	556,383,472	972,339,761	45,731,396	70,372	1,528,723,233	21	13,817
Rapid	efficacy=0.4	Sustain	severe case=0.01	1,095,686,010	433,037,224	104,413,131	175,129	1,528,723,233	4	2,473
Rapid	efficacy=0.4	Sustain	severe case=0.03	1,270,325,115	258,398,118	104,413,131	175,129	1,528,723,233	2	1,475
Rapid	efficacy=0.4	No change	severe case=0.01	963,212,128	565,511,105	91,789,065	165,851	1,528,723,233	6	3,410
Rapid	efficacy=0.4	No change	severe case=0.03	1,116,736,499	411,986,735	91,789,065	165,851	1,528,723,233	4	2,484
National	efficacy=0.2	Accelerate 1	severe case=0.01	460,504,545	1,201,790,549	43,883,668	68,444	1,662,295,094	27	17,559
National	efficacy=0.2	Accelerate 1	severe case=0.03	533,903,403	1,128,391,691	43,883,668	68,444	1,662,295,094	26	16,486
National	efficacy=0.2	Accelerate 2	severe case=0.01	324,495,715	1,337,799,379	30,922,740	43,878	1,662,295,094	43	30,489
National	efficacy=0.2	Accelerate 2	severe case=0.03	376,216,410	1,286,078,684	30,922,740	43,878	1,662,295,094	42	29,310
National	efficacy=0.2	Innovate	severe case=0.01	254,831,539	1,407,463,555	24,284,109	37,177	1,662,295,094	58	37,858
National	efficacy=0.2	Innovate	severe case=0.03	295,448,607	1,366,846,488	24,284,109	37,177	1,662,295,094	56	36,766
National	efficacy=0.2	Sustain	severe case=0.01	596,672,667	1,065,622,427	56,859,776	95,159	1,662,295,094	19	11,198
National	efficacy=0.2	Sustain	severe case=0.03	691,775,078	970,520,017	56,859,776	95,159	1,662,295,094	17	10,199
National	efficacy=0.2	No change	severe case=0.01	522,540,615	1,139,754,479	49,795,381	89,973	1,662,295,094	23	12,668
National	efficacy=0.2	No change	severe case=0.03	605,827,273	1,056,467,822	49,795,381	89,973	1,662,295,094	21	11,742
National	efficacy=0.4	Accelerate 1	severe case=0.01	918,646,517	743,648,577	87,542,196	136,533	1,662,295,094	8	5,447
National	efficacy=0.4	Accelerate 1	severe case=0.03	1,065,067,668	597,227,426	87,542,196	136,533	1,662,295,094	7	4,374
National	efficacy=0.4	Accelerate 2	severe case=0.01	647,294,668	1,015,000,426	61,683,788	87,524	1,662,295,094	16	11,597
National	efficacy=0.4	Accelerate 2	severe case=0.03	750,465,614	911,829,480	61,683,788	87,524	1,662,295,094	15	10,418
National	efficacy=0.4	Innovate	severe case=0.01	508,314,053	1,153,981,041	48,439,664	74,156	1,662,295,094	24	15,562
National	efficacy=0.4	Innovate	severe case=0.03	589,333,169	1,072,961,925	48,439,664	74,156	1,662,295,094	22	14,469
National	efficacy=0.4	Sustain	severe case=0.01	1,190,329,473	471,965,622	113,432,157	189,835	1,662,295,094	4	2,486
National	efficacy=0.4	Sustain	severe case=0.03	1,380,053,602	282,241,492	113,432,157	189,835	1,662,295,094	2	1,487
National	efficacy=0.4	No change	severe case=0.01	1,042,419,590	619,875,504	99,337,121	179,487	1,662,295,094	6	3,454
National	efficacy=0.4	No change	severe case=0.03	1,208,568,673	453,726,421	99,337,121	179,487	1,662,295,094	5	2,528

Note: gross cost averted is the cost averted due to reduced cases from iMDA and their reduced treatment costs. NetCostOfiMDA is the scale-up cost of iMDA minus the gross cost averted cost due to iMDA. Note that, all numbers are summations over all years where the MDA is applied.

Table C. Scale up costs of for all 9 countries

Uptake	2023	2024	2025	2026	2027	Sum
Conservative	56,356,547	92,816,894	131,371,043	172,112,406	215,138,189	667,795,080
Rapid	56,356,547	174,031,677	298,570,553	430,281,014	569,483,442	1,528,723,233
National	56,356,547	116,021,118	238,856,442	491,749,730	759,311,257	1,662,295,094

Note: this table summarizes the cost of implementing iMDA for each year, which only depends on uptake levels. The last column is the sum of the cost for all years.

S2 File. Summary table results for Burkina Faso.

Table A. Averted financial costs due to ivermectin MDA for Burkina Faso

Uptake	Efficacy	Griffin Scenario	Severe case	2023	2024	2025	2026	2027	Sum
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	884,965	1,477,829	2,069,964	2,676,066	3,297,122	10,405,947
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	1,026,018	1,713,377	2,399,891	3,102,598	3,822,644	12,064,529
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	711,178	1,138,305	1,526,630	1,889,456	2,228,540	7,494,109
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	824,531	1,319,737	1,769,957	2,190,613	2,583,742	8,688,580
Conservative	efficacy=0.2	Innovate	severe case=0.01	611,001	949,611	1,235,736	1,483,829	1,697,872	5,978,049
Conservative	efficacy=0.2	Innovate	severe case=0.03	708,387	1,100,967	1,432,698	1,720,333	1,968,493	6,930,877
Conservative	efficacy=0.2	Sustain	severe case=0.01	1,039,411	1,790,821	2,589,847	3,457,316	4,398,708	13,276,103
Conservative	efficacy=0.2	Sustain	severe case=0.03	1,205,080	2,076,256	3,002,638	4,008,371	5,099,809	15,392,153
Conservative	efficacy=0.2	No change	severe case=0.01	957,305	1,623,207	2,309,370	3,032,718	3,795,623	11,718,224
Conservative	efficacy=0.2	No change	severe case=0.03	1,109,888	1,881,926	2,677,456	3,516,097	4,400,600	13,585,967
Conservative	efficacy=0.4	Accelerate 1	severe case=0.01	1,769,930	2,954,243	4,136,609	5,346,179	6,584,869	20,791,830
Conservative	efficacy=0.4	Accelerate 1	severe case=0.03	2,052,036	3,425,113	4,795,935	6,198,295	7,634,417	24,105,797
Conservative	efficacy=0.4	Accelerate 2	severe case=0.01	1,422,356	2,275,471	3,050,702	3,774,517	4,450,450	14,973,498
Conservative	efficacy=0.4	Accelerate 2	severe case=0.03	1,649,063	2,638,154	3,536,947	4,376,130	5,159,798	17,360,092
Conservative	efficacy=0.4	Innovate	severe case=0.01	1,222,001	1,898,244	2,469,336	2,964,096	3,390,534	11,944,212
Conservative	efficacy=0.4	Innovate	severe case=0.03	1,416,773	2,200,801	2,862,919	3,436,538	3,930,944	13,847,975
Conservative	efficacy=0.4	Sustain	severe case=0.01	2,078,821	3,579,979	5,175,675	6,907,192	8,785,314	26,526,981
Conservative	efficacy=0.4	Sustain	severe case=0.03	2,410,160	4,150,584	6,000,615	8,008,114	10,185,587	30,755,061
Conservative	efficacy=0.4	No change	severe case=0.01	1,914,611	3,244,882	4,615,096	6,058,798	7,580,626	23,414,012
Conservative	efficacy=0.4	No change	severe case=0.03	2,219,776	3,762,077	5,350,686	7,024,497	8,788,886	27,145,923
Rapid	efficacy=0.2	Accelerate 1	severe case=0.01	884,965	2,732,213	4,670,003	6,655,819	8,688,374	23,631,374
Rapid	efficacy=0.2	Accelerate 1	severe case=0.03	1,026,018	3,167,694	5,414,345	7,716,676	10,073,196	27,397,930
Rapid	efficacy=0.2	Accelerate 2	severe case=0.01	711,178	2,103,207	3,443,010	4,698,255	5,871,274	16,826,924
Rapid	efficacy=0.2	Accelerate 2	severe case=0.03	824,531	2,438,433	3,991,784	5,447,100	6,807,084	19,508,933
Rapid	efficacy=0.2	Innovate	severe case=0.01	611,001	1,753,789	2,786,260	3,688,991	4,472,505	13,312,546
Rapid	efficacy=0.2	Innovate	severe case=0.03	708,387	2,033,322	3,230,356	4,276,971	5,185,369	15,434,405
Rapid	efficacy=0.2	Sustain	severe case=0.01	1,039,411	3,312,315	5,844,326	8,600,386	11,592,928	30,389,365
Rapid	efficacy=0.2	Sustain	severe case=0.03	1,205,080	3,840,258	6,775,841	9,971,183	13,440,701	35,233,063
Rapid	efficacy=0.2	No change	severe case=0.01	957,305	3,001,631	5,210,748	7,543,506	10,002,726	26,715,917
Rapid	efficacy=0.2	No change	severe case=0.03	1,109,888	3,480,055	6,041,278	8,745,850	11,597,040	30,974,111
Rapid	efficacy=0.4	Accelerate 1	severe case=0.01	1,769,930	5,461,770	9,326,226	13,278,356	17,315,481	47,151,764
Rapid	efficacy=0.4	Accelerate 1	severe case=0.03	2,052,036	6,332,311	10,812,714	15,394,765	20,075,360	54,667,185

Rapid	efficacy=0.4	Accelerate 2	severe case=0.01	1,422,356	4,204,281	6,875,408	9,371,953	11,699,256	33,573,254
Rapid	efficacy=0.4	Accelerate 2	severe case=0.03	1,649,063	4,874,392	7,971,265	10,865,729	13,563,976	38,924,425
Rapid	efficacy=0.4	Innovate	severe case=0.01	1,222,001	3,505,745	5,563,668	7,358,097	8,910,995	26,560,506
Rapid	efficacy=0.4	Innovate	severe case=0.03	1,416,773	4,064,519	6,450,450	8,530,889	10,331,300	30,793,930
Rapid	efficacy=0.4	Sustain	severe case=0.01	2,078,821	6,621,511	11,671,950	17,159,143	23,106,746	60,638,172
Rapid	efficacy=0.4	Sustain	severe case=0.03	2,410,160	7,676,900	13,532,318	19,894,103	26,789,682	70,303,163
Rapid	efficacy=0.4	No change	severe case=0.01	1,914,611	6,000,390	10,406,359	15,049,887	19,936,038	53,307,284
Rapid	efficacy=0.4	No change	severe case=0.03	2,219,776	6,956,779	12,065,007	17,448,657	23,113,602	61,803,821
National	efficacy=0.2	Accelerate 1	severe case=0.01	884,965	1,836,225	3,720,317	7,529,608	11,512,015	25,483,130
National	efficacy=0.2	Accelerate 1	severe case=0.03	1,026,018	2,128,897	4,313,291	8,729,736	13,346,891	29,544,833
National	efficacy=0.2	Accelerate 2	severe case=0.01	711,178	1,413,991	2,742,358	5,312,612	7,777,092	17,957,231
National	efficacy=0.2	Accelerate 2	severe case=0.03	824,531	1,639,364	3,179,456	6,159,378	9,016,667	20,819,397
National	efficacy=0.2	Innovate	severe case=0.01	611,001	1,179,376	2,218,974	4,169,993	5,923,022	14,102,365
National	efficacy=0.2	Innovate	severe case=0.03	708,387	1,367,354	2,572,652	4,834,639	6,867,080	16,350,111
National	efficacy=0.2	Sustain	severe case=0.01	1,039,411	2,225,533	4,656,418	9,732,623	15,363,716	33,017,702
National	efficacy=0.2	Sustain	severe case=0.03	1,205,080	2,580,256	5,398,595	11,283,886	17,812,507	38,280,324
National	efficacy=0.2	No change	severe case=0.01	957,305	2,017,042	4,151,355	8,535,198	13,254,877	28,915,778
National	efficacy=0.2	No change	severe case=0.03	1,109,888	2,338,534	4,813,030	9,895,606	15,367,544	33,524,603
National	efficacy=0.4	Accelerate 1	severe case=0.01	1,769,930	3,670,679	7,433,208	15,029,141	22,932,532	50,835,491
National	efficacy=0.4	Accelerate 1	severe case=0.03	2,052,036	4,255,741	8,617,972	17,424,604	26,587,700	58,938,053
National	efficacy=0.4	Accelerate 2	severe case=0.01	1,422,356	2,826,560	5,478,994	10,603,044	15,489,591	35,820,545
National	efficacy=0.4	Accelerate 2	severe case=0.03	1,649,063	3,277,079	6,352,279	12,293,041	17,958,444	41,529,907
National	efficacy=0.4	Innovate	severe case=0.01	1,222,001	2,357,530	4,433,174	8,322,033	11,795,321	28,130,059
National	efficacy=0.4	Innovate	severe case=0.03	1,416,773	2,733,292	5,139,769	9,648,464	13,675,353	32,613,650
National	efficacy=0.4	Sustain	severe case=0.01	2,078,821	4,448,988	9,303,839	19,427,618	30,609,211	65,868,477
National	efficacy=0.4	Sustain	severe case=0.03	2,410,160	5,158,103	10,786,759	22,524,145	35,487,949	76,367,115
National	efficacy=0.4	No change	severe case=0.01	1,914,611	4,032,170	8,294,553	17,036,844	26,406,057	57,684,234
National	efficacy=0.4	No change	severe case=0.03	2,219,776	4,674,849	9,616,604	19,752,310	30,614,863	66,878,404

Note: this table summarizes the averted cost of treatment due to reduced incidence for each year in this country; the last column is the sum of averted cost of treatment for all years.

Table B. Summary of costs, averted cases and averted deaths, and CER for Burkina Faso

Uptake	Efficacy	Griffin Scenario	Severity	Gross Cost Averted	Net Cost Of iMDA	Cases Averted	Deaths Averted	Scale-up costs	Net Cost Of iMDA/ Cases Averted	Net Cost Of iMDA/ Deaths Averted
Rapid	efficacy=0.4	Accelerate 1	severe case=0.03	54,667,185	5,631,072	4,493,316	13,691	60,298,256	1	411
Rapid	efficacy=0.4	Accelerate 2	severe case=0.03	38,924,425	21,373,831	3,199,355	8,895	60,298,256	7	2,403
Rapid	efficacy=0.4	Innovate	severe case=0.03	30,793,930	29,504,326	2,531,077	7,576	60,298,256	12	3,895
Rapid	efficacy=0.4	Sustain	severe case=0.03	70,303,163	-10,004,907	5,778,500	18,852	60,298,256	-2	-531
Rapid	efficacy=0.4	No change	severe case=0.03	61,803,821	-1,505,564	5,079,905	17,853	60,298,256	-0	-84
Rapid	efficacy=0.2	Accelerate 1	severe case=0.03	27,397,930	32,900,327	2,251,946	6,862	60,298,256	15	4,795
Rapid	efficacy=0.2	Accelerate 2	severe case=0.03	19,508,933	40,789,324	1,603,518	4,459	60,298,256	25	9,149
Rapid	efficacy=0.2	Innovate	severe case=0.03	15,434,405	44,863,852	1,268,616	3,797	60,298,256	35	11,815
Rapid	efficacy=0.2	Sustain	severe case=0.03	35,233,063	25,065,194	2,895,947	9,448	60,298,256	9	2,653
Rapid	efficacy=0.2	No change	severe case=0.03	30,974,111	29,324,145	2,545,887	8,947	60,298,256	12	3,277
National	efficacy=0.4	Accelerate 1	severe case=0.03	58,938,053	6,623,027	4,844,356	14,696	65,561,080	1	451
National	efficacy=0.4	Accelerate 2	severe case=0.03	41,529,907	24,031,173	3,413,510	9,421	65,561,080	7	2,551
National	efficacy=0.4	Innovate	severe case=0.03	32,613,650	32,947,430	2,680,647	7,982	65,561,080	12	4,128
National	efficacy=0.4	Sustain	severe case=0.03	76,367,115	-10,806,035	6,276,920	20,433	65,561,080	-2	-529
National	efficacy=0.4	No change	severe case=0.03	66,878,404	-1,317,323	5,497,005	19,319	65,561,080	-0	-68
National	efficacy=0.2	Accelerate 1	severe case=0.03	29,544,833	36,016,248	2,428,409	7,367	65,561,080	15	4,889
National	efficacy=0.2	Accelerate 2	severe case=0.03	20,819,397	44,741,684	1,711,230	4,723	65,561,080	26	9,473
National	efficacy=0.2	Innovate	severe case=0.03	16,350,111	49,210,969	1,343,881	4,002	65,561,080	37	12,297
National	efficacy=0.2	Sustain	severe case=0.03	38,280,324	27,280,756	3,146,414	10,242	65,561,080	9	2,663
National	efficacy=0.2	No change	severe case=0.03	33,524,603	32,036,477	2,755,522	9,684	65,561,080	12	3,308
Conservative	efficacy=0.4	Accelerate 1	severe case=0.03	24,105,797	2,236,755	1,981,352	6,065	26,342,552	1	369
Conservative	efficacy=0.4	Accelerate 2	severe case=0.03	17,360,092	8,982,460	1,426,896	4,000	26,342,552	6	2,245
Conservative	efficacy=0.4	Innovate	severe case=0.03	13,847,975	12,494,577	1,138,221	3,427	26,342,552	11	3,646
Conservative	efficacy=0.4	Sustain	severe case=0.03	30,755,061	-4,412,509	2,527,882	8,266	26,342,552	-2	-534
Conservative	efficacy=0.4	No change	severe case=0.03	27,145,923	-803,371	2,231,233	7,842	26,342,552	-0	-102
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	12,064,529	14,278,023	991,632	3,036	26,342,552	14	4,704
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	8,688,580	17,653,972	714,149	2,002	26,342,552	25	8,818
Conservative	efficacy=0.2	Innovate	severe case=0.03	6,930,877	19,411,675	569,677	1,715	26,342,552	34	11,318
Conservative	efficacy=0.2	Sustain	severe case=0.03	15,392,153	10,950,399	1,265,143	4,137	26,342,552	9	2,647
Conservative	efficacy=0.2	No change	severe case=0.03	13,585,967	12,756,585	1,116,685	3,925	26,342,552	11	3,250
Rapid	efficacy=0.4	Accelerate 1	severe case=0.01	47,151,764	13,146,493	4,493,316	13,691	60,298,256	3	960

Rapid	efficacy=0.4	Accelerate 2	severe case=0.01	33,573,254	26,725,002	3,199,355	8,895	60,298,256	8	3,004
Rapid	efficacy=0.4	Innovate	severe case=0.01	26,560,506	33,737,750	2,531,077	7,576	60,298,256	13	4,453
Rapid	efficacy=0.4	Sustain	severe case=0.01	60,638,172	-339,915	5,778,500	18,852	60,298,256	-0	-18
Rapid	efficacy=0.4	No change	severe case=0.01	53,307,284	6,990,972	5,079,905	17,853	60,298,256	1	392
Rapid	efficacy=0.2	Accelerate 1	severe case=0.01	23,631,374	36,666,882	2,251,946	6,862	60,298,256	16	5,344
Rapid	efficacy=0.2	Accelerate 2	severe case=0.01	16,826,924	43,471,332	1,603,518	4,459	60,298,256	27	9,750
Rapid	efficacy=0.2	Innovate	severe case=0.01	13,312,546	46,985,711	1,268,616	3,797	60,298,256	37	12,374
Rapid	efficacy=0.2	Sustain	severe case=0.01	30,389,365	29,908,891	2,895,947	9,448	60,298,256	10	3,166
Rapid	efficacy=0.2	No change	severe case=0.01	26,715,917	33,582,340	2,545,887	8,947	60,298,256	13	3,753
National	efficacy=0.4	Accelerate 1	severe case=0.01	50,835,491	14,725,590	4,844,356	14,696	65,561,080	3	1,002
National	efficacy=0.4	Accelerate 2	severe case=0.01	35,820,545	29,740,535	3,413,510	9,421	65,561,080	9	3,157
National	efficacy=0.4	Innovate	severe case=0.01	28,130,059	37,431,021	2,680,647	7,982	65,561,080	14	4,689
National	efficacy=0.4	Sustain	severe case=0.01	65,868,477	-307,396	6,276,920	20,433	65,561,080	-0	-15
National	efficacy=0.4	No change	severe case=0.01	57,684,234	7,876,846	5,497,005	19,319	65,561,080	1	408
National	efficacy=0.2	Accelerate 1	severe case=0.01	25,483,130	40,077,951	2,428,409	7,367	65,561,080	17	5,440
National	efficacy=0.2	Accelerate 2	severe case=0.01	17,957,231	47,603,849	1,711,230	4,723	65,561,080	28	10,079
National	efficacy=0.2	Innovate	severe case=0.01	14,102,365	51,458,716	1,343,881	4,002	65,561,080	38	12,859
National	efficacy=0.2	Sustain	severe case=0.01	33,017,702	32,543,378	3,146,414	10,242	65,561,080	10	3,177
National	efficacy=0.2	No change	severe case=0.01	28,915,778	36,645,302	2,755,522	9,684	65,561,080	13	3,784
Conservative	efficacy=0.4	Accelerate 1	severe case=0.01	20,791,830	5,550,722	1,981,352	6,065	26,342,552	3	915
Conservative	efficacy=0.4	Accelerate 2	severe case=0.01	14,973,498	11,369,054	1,426,896	4,000	26,342,552	8	2,842
Conservative	efficacy=0.4	Innovate	severe case=0.01	11,944,212	14,398,340	1,138,221	3,427	26,342,552	13	4,202
Conservative	efficacy=0.4	Sustain	severe case=0.01	26,526,981	-184,429	2,527,882	8,266	26,342,552	-0	-22
Conservative	efficacy=0.4	No change	severe case=0.01	23,414,012	2,928,540	2,231,233	7,842	26,342,552	1	373
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	10,405,947	15,936,605	991,632	3,036	26,342,552	16	5,250
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	7,494,109	18,848,443	714,149	2,002	26,342,552	26	9,414
Conservative	efficacy=0.2	Innovate	severe case=0.01	5,978,049	20,364,503	569,677	1,715	26,342,552	36	11,873
Conservative	efficacy=0.2	Sustain	severe case=0.01	13,276,103	13,066,449	1,265,143	4,137	26,342,552	10	3,158
Conservative	efficacy=0.2	No change	severe case=0.01	11,718,224	14,624,329	1,116,685	3,925	26,342,552	13	3,726

Note: gross cost averted is the cost averted due to reduced cases from iMDA and their reduced treatment costs. NetCostOfiMDA is the scale-up cost of iMDA minus the gross cost averted cost due to iMDA. Note that, all numbers are summations over all years where the MDA is applied.

Table C. Scale up costs of Burkina Faso

Uptake	2023	2024	2025	2026	2027	Sum
Conservative	2,225,165	3,663,511	5,183,410	6,788,382	8,482,084	26,342,552
Rapid	2,225,165	6,869,083	11,780,478	16,970,956	22,452,575	60,298,256
National	2,225,165	4,579,389	9,424,382	19,395,378	29,936,766	65,561,080

Note: this table summarizes the cost of implementing iMDA for each year, which only depends on uptake levels. The last column is the sum of the cost for all years.

S3 File. Summary table results for Democratic Republic of the Congo.**Table A.** Averted financial costs due to ivermectin MDA for Dem. Rep. Congo

Uptake	Efficacy	Griffin Scenario	Severe case	2023	2024	2025	2026	2027	Sum
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	3,053,307	5,113,235	7,182,745	9,312,900	11,507,615	36,169,802
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	3,539,968	5,928,223	8,327,587	10,797,264	13,341,789	41,934,831
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	2,453,707	3,938,477	5,297,360	6,575,409	7,778,005	26,042,958
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	2,844,799	4,566,223	6,141,695	7,623,450	9,017,725	30,193,891
Conservative	efficacy=0.2	Innovate	severe case=0.01	2,108,074	3,285,598	4,287,951	5,163,783	5,925,857	20,771,263
Conservative	efficacy=0.2	Innovate	severe case=0.03	2,444,076	3,809,282	4,971,398	5,986,828	6,870,367	24,081,952
Conservative	efficacy=0.2	Sustain	severe case=0.01	3,586,175	6,196,190	8,986,762	12,031,753	15,352,427	46,153,307
Conservative	efficacy=0.2	Sustain	severe case=0.03	4,157,768	7,183,788	10,419,143	13,949,469	17,799,418	53,509,586
Conservative	efficacy=0.2	No change	severe case=0.01	3,302,895	5,616,243	8,013,493	10,554,095	13,247,507	40,734,234
Conservative	efficacy=0.2	No change	severe case=0.03	3,829,337	6,511,405	9,290,747	12,236,290	15,359,000	47,226,778
Conservative	efficacy=0.4	Accelerate 1	severe case=0.01	6,106,615	10,221,585	14,354,007	18,605,147	22,982,603	72,269,956
Conservative	efficacy=0.4	Accelerate 1	severe case=0.03	7,079,935	11,850,782	16,641,862	21,570,582	26,645,752	83,788,913
Conservative	efficacy=0.4	Accelerate 2	severe case=0.01	4,907,415	7,873,029	10,585,867	13,135,567	15,532,943	52,034,821
Conservative	efficacy=0.4	Accelerate 2	severe case=0.03	5,689,598	9,127,894	12,273,127	15,229,218	18,008,706	60,328,543
Conservative	efficacy=0.4	Innovate	severe case=0.01	4,216,149	6,567,822	8,568,512	10,315,211	11,833,582	41,501,277
Conservative	efficacy=0.4	Innovate	severe case=0.03	4,888,152	7,614,654	9,934,229	11,959,331	13,719,712	48,116,078
Conservative	efficacy=0.4	Sustain	severe case=0.01	7,172,350	12,386,643	17,959,618	24,037,686	30,662,743	92,219,040
Conservative	efficacy=0.4	Sustain	severe case=0.03	8,315,536	14,360,924	20,822,164	27,869,003	35,550,013	106,917,640
Conservative	efficacy=0.4	No change	severe case=0.01	6,605,791	11,227,202	16,014,377	21,085,156	26,458,057	81,390,584
Conservative	efficacy=0.4	No change	severe case=0.03	7,658,674	13,016,683	18,566,875	24,445,875	30,675,152	94,363,260
Rapid	efficacy=0.2	Accelerate 1	severe case=0.01	3,053,307	9,453,733	16,205,206	23,163,089	30,324,572	82,199,907
Rapid	efficacy=0.2	Accelerate 1	severe case=0.03	3,539,968	10,960,544	18,788,120	26,855,005	35,157,942	95,301,579
Rapid	efficacy=0.2	Accelerate 2	severe case=0.01	2,453,707	7,277,295	11,947,418	16,350,448	20,492,097	58,520,965
Rapid	efficacy=0.2	Accelerate 2	severe case=0.03	2,844,799	8,437,208	13,851,692	18,956,512	23,758,289	67,848,499
Rapid	efficacy=0.2	Innovate	severe case=0.01	2,108,074	6,068,267	9,668,436	12,838,054	15,610,019	46,292,851
Rapid	efficacy=0.2	Innovate	severe case=0.03	2,444,076	7,035,476	11,209,468	14,884,285	18,098,067	53,671,372
Rapid	efficacy=0.2	Sustain	severe case=0.01	3,586,175	11,460,962	20,280,233	29,930,521	40,462,321	105,720,211
Rapid	efficacy=0.2	Sustain	severe case=0.03	4,157,768	13,287,701	23,512,657	34,701,084	46,911,525	122,570,735
Rapid	efficacy=0.2	No change	severe case=0.01	3,302,895	10,385,955	18,081,648	26,252,394	34,912,043	92,934,935
Rapid	efficacy=0.2	No change	severe case=0.03	3,829,337	12,041,350	20,963,644	30,436,708	40,476,601	107,747,640
Rapid	efficacy=0.4	Accelerate 1	severe case=0.01	6,106,615	18,898,307	32,362,731	46,210,691	60,435,941	164,014,284
Rapid	efficacy=0.4	Accelerate 1	severe case=0.03	7,079,935	21,910,468	37,520,959	53,576,117	70,068,699	190,156,179

Rapid	efficacy=0.4	Accelerate 2	severe case=0.01	4,907,415	14,547,230	23,858,118	32,615,685	40,833,545	116,761,993
Rapid	efficacy=0.4	Accelerate 2	severe case=0.03	5,689,598	16,865,882	27,660,813	37,814,231	47,341,919	135,372,443
Rapid	efficacy=0.4	Innovate	severe case=0.01	4,216,149	12,130,210	19,306,246	25,607,113	31,101,667	92,361,385
Rapid	efficacy=0.4	Innovate	severe case=0.03	4,888,152	14,063,619	22,383,428	29,688,577	36,058,897	107,082,674
Rapid	efficacy=0.4	Sustain	severe case=0.01	7,172,350	22,911,165	40,502,676	59,716,595	80,649,344	210,952,131
Rapid	efficacy=0.4	Sustain	severe case=0.03	8,315,536	26,562,928	46,958,313	69,234,699	93,503,875	244,575,351
Rapid	efficacy=0.4	No change	severe case=0.01	6,605,791	20,762,001	36,110,920	52,375,964	69,582,533	185,437,208
Rapid	efficacy=0.4	No change	severe case=0.03	7,658,674	24,071,213	41,866,564	60,724,059	80,673,148	214,993,658
National	efficacy=0.2	Accelerate 1	severe case=0.01	3,053,307	6,353,377	12,909,885	26,204,766	40,180,545	88,701,880
National	efficacy=0.2	Accelerate 1	severe case=0.03	3,539,968	7,366,029	14,967,565	30,381,488	46,584,838	102,839,887
National	efficacy=0.2	Accelerate 2	severe case=0.01	2,453,707	4,892,425	9,516,233	18,489,053	27,144,387	62,495,806
National	efficacy=0.2	Accelerate 2	severe case=0.03	2,844,799	5,672,219	11,033,006	21,435,984	31,470,874	72,456,882
National	efficacy=0.2	Innovate	severe case=0.01	2,108,074	4,080,646	7,700,026	14,512,455	20,673,065	49,074,266
National	efficacy=0.2	Innovate	severe case=0.03	2,444,076	4,731,052	8,927,317	16,825,565	23,968,102	56,896,111
National	efficacy=0.2	Sustain	severe case=0.01	3,586,175	7,700,411	16,158,289	33,871,841	53,624,337	114,941,053
National	efficacy=0.2	Sustain	severe case=0.03	4,157,768	8,927,763	18,733,725	39,270,603	62,171,408	133,261,268
National	efficacy=0.2	No change	severe case=0.01	3,302,895	6,979,018	14,405,645	29,704,485	46,263,743	100,655,786
National	efficacy=0.2	No change	severe case=0.03	3,829,337	8,091,389	16,701,730	34,439,021	53,637,624	116,699,102
National	efficacy=0.4	Accelerate 1	severe case=0.01	6,106,615	12,700,648	25,794,076	52,305,173	80,042,666	176,949,177
National	efficacy=0.4	Accelerate 1	severe case=0.03	7,079,935	14,724,978	29,905,339	60,641,985	92,800,500	205,152,737
National	efficacy=0.4	Accelerate 2	severe case=0.01	4,907,415	9,779,943	19,012,671	36,901,145	54,063,980	124,665,154
National	efficacy=0.4	Accelerate 2	severe case=0.03	5,689,598	11,338,748	22,043,061	42,782,741	62,681,125	144,535,273
National	efficacy=0.4	Innovate	severe case=0.01	4,216,149	8,157,076	15,383,535	28,962,616	41,169,613	97,888,989
National	efficacy=0.4	Innovate	severe case=0.03	4,888,152	9,457,215	17,835,484	33,578,907	47,731,552	113,491,311
National	efficacy=0.4	Sustain	severe case=0.01	7,172,350	15,393,649	32,285,447	67,613,109	106,837,250	229,301,805
National	efficacy=0.4	Sustain	severe case=0.03	8,315,536	17,847,211	37,431,357	78,389,821	123,865,816	265,849,741
National	efficacy=0.4	No change	severe case=0.01	6,605,791	13,951,430	28,783,069	59,292,540	92,166,608	200,799,438
National	efficacy=0.4	No change	severe case=0.03	7,658,674	16,175,120	33,370,743	68,743,054	106,856,851	232,804,441

Note: this table summarizes the averted cost of treatment due to reduced incidence for each year in this country; the last column is the sum of averted cost of treatment for all years.

Table B. Summary of costs, averted cases and averted deaths, and CER for Dem. Rep. Congo

Uptake	Efficacy	Griffin Scenario	Severity	Gross Cost Averted	Net Cost Of iMDA	Cases Averted	Deaths Averted	Scale-up costs	Net Cost Of iMDA/ Cases Averted	Net Cost Of iMDA/ Deaths Averted
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	36,169,802	78,458,964	3,446,792	4,981	114,628,766	23	15,751
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	41,934,831	72,693,935	3,446,792	4,981	114,628,766	21	14,594
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	26,042,958	88,585,808	2,481,757	3,284	114,628,766	36	26,972
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	30,193,891	84,434,875	2,481,757	3,284	114,628,766	34	25,708
Conservative	efficacy=0.2	Innovate	severe case=0.01	20,771,263	93,857,503	1,979,392	2,813	114,628,766	47	33,362
Conservative	efficacy=0.2	Innovate	severe case=0.03	24,081,952	90,546,815	1,979,392	2,813	114,628,766	46	32,186
Conservative	efficacy=0.2	Sustain	severe case=0.01	46,153,307	68,475,459	4,398,168	6,790	114,628,766	16	10,085
Conservative	efficacy=0.2	Sustain	severe case=0.03	53,509,586	61,119,180	4,398,168	6,790	114,628,766	14	9,002
Conservative	efficacy=0.2	No change	severe case=0.01	40,734,234	73,894,533	3,881,759	6,441	114,628,766	19	11,473
Conservative	efficacy=0.2	No change	severe case=0.03	47,226,778	67,401,988	3,881,759	6,441	114,628,766	17	10,465
Conservative	efficacy=0.4	Accelerate 1	severe case=0.01	72,269,956	42,358,810	6,886,948	9,952	114,628,766	6	4,256
Conservative	efficacy=0.4	Accelerate 1	severe case=0.03	83,788,913	30,839,853	6,886,948	9,952	114,628,766	4	3,099
Conservative	efficacy=0.4	Accelerate 2	severe case=0.01	52,034,821	62,593,945	4,958,646	6,562	114,628,766	13	9,539
Conservative	efficacy=0.4	Accelerate 2	severe case=0.03	60,328,543	54,300,223	4,958,646	6,562	114,628,766	11	8,275
Conservative	efficacy=0.4	Innovate	severe case=0.01	41,501,277	73,127,490	3,954,854	5,621	114,628,766	18	13,010
Conservative	efficacy=0.4	Innovate	severe case=0.03	48,116,078	66,512,688	3,954,854	5,621	114,628,766	17	11,833
Conservative	efficacy=0.4	Sustain	severe case=0.01	92,219,040	22,409,727	8,787,991	13,566	114,628,766	3	1,652
Conservative	efficacy=0.4	Sustain	severe case=0.03	106,917,640	7,711,126	8,787,991	13,566	114,628,766	1	568
Conservative	efficacy=0.4	No change	severe case=0.01	81,390,584	33,238,182	7,756,096	12,869	114,628,766	4	2,583
Conservative	efficacy=0.4	No change	severe case=0.03	94,363,260	20,265,507	7,756,096	12,869	114,628,766	3	1,575
Rapid	efficacy=0.2	Accelerate 1	severe case=0.01	82,199,907	180,372,674	7,833,220	11,267	262,572,582	23	16,008
Rapid	efficacy=0.2	Accelerate 1	severe case=0.03	95,301,579	167,271,003	7,833,220	11,267	262,572,582	21	14,846
Rapid	efficacy=0.2	Accelerate 2	severe case=0.01	58,520,965	204,051,617	5,576,741	7,320	262,572,582	37	27,877
Rapid	efficacy=0.2	Accelerate 2	severe case=0.03	67,848,499	194,724,082	5,576,741	7,320	262,572,582	35	26,602
Rapid	efficacy=0.2	Innovate	severe case=0.01	46,292,851	216,279,730	4,411,466	6,233	262,572,582	49	34,697
Rapid	efficacy=0.2	Innovate	severe case=0.03	53,671,372	208,901,209	4,411,466	6,233	262,572,582	47	33,513
Rapid	efficacy=0.2	Sustain	severe case=0.01	105,720,211	156,852,371	10,074,582	15,517	262,572,582	16	10,108
Rapid	efficacy=0.2	Sustain	severe case=0.03	122,570,735	140,001,847	10,074,582	15,517	262,572,582	14	9,022
Rapid	efficacy=0.2	No change	severe case=0.01	92,934,935	169,637,647	8,856,212	14,695	262,572,582	19	11,544
Rapid	efficacy=0.2	No change	severe case=0.03	107,747,640	154,824,942	8,856,212	14,695	262,572,582	17	10,536
Rapid	efficacy=0.4	Accelerate 1	severe case=0.01	164,014,284	98,558,297	15,629,701	22,482	262,572,582	6	4,384

Rapid	efficacy=0.4	Accelerate 1	severe case=0.03	190,156,179	72,416,403	15,629,701	22,482	262,572,582	5	3,221
Rapid	efficacy=0.4	Accelerate 2	severe case=0.01	116,761,993	145,810,589	11,126,806	14,604	262,572,582	13	9,984
Rapid	efficacy=0.4	Accelerate 2	severe case=0.03	135,372,443	127,200,139	11,126,806	14,604	262,572,582	11	8,710
Rapid	efficacy=0.4	Innovate	severe case=0.01	92,361,385	170,211,196	8,801,556	12,436	262,572,582	19	13,687
Rapid	efficacy=0.4	Innovate	severe case=0.03	107,082,674	155,489,908	8,801,556	12,436	262,572,582	18	12,503
Rapid	efficacy=0.4	Sustain	severe case=0.01	210,952,131	51,620,451	20,102,632	30,962	262,572,582	3	1,667
Rapid	efficacy=0.4	Sustain	severe case=0.03	244,575,351	17,997,231	20,102,632	30,962	262,572,582	1	581
Rapid	efficacy=0.4	No change	severe case=0.01	185,437,208	77,135,374	17,671,194	29,321	262,572,582	4	2,631
Rapid	efficacy=0.4	No change	severe case=0.03	214,993,658	47,578,924	17,671,194	29,321	262,572,582	3	1,623
National	efficacy=0.2	Accelerate 1	severe case=0.01	88,701,880	196,981,465	8,452,824	12,106	285,683,345	23	16,271
National	efficacy=0.2	Accelerate 1	severe case=0.03	102,839,887	182,843,457	8,452,824	12,106	285,683,345	22	15,103
National	efficacy=0.2	Accelerate 2	severe case=0.01	62,495,806	223,187,539	5,955,523	7,760	285,683,345	37	28,763
National	efficacy=0.2	Accelerate 2	severe case=0.03	72,456,882	213,226,463	5,955,523	7,760	285,683,345	36	27,479
National	efficacy=0.2	Innovate	severe case=0.01	49,074,266	236,609,078	4,676,520	6,574	285,683,345	51	35,991
National	efficacy=0.2	Innovate	severe case=0.03	56,896,111	228,787,234	4,676,520	6,574	285,683,345	49	34,801
National	efficacy=0.2	Sustain	severe case=0.01	114,941,053	170,742,291	10,953,280	16,833	285,683,345	16	10,143
National	efficacy=0.2	Sustain	severe case=0.03	133,261,268	152,422,077	10,953,280	16,833	285,683,345	14	9,055
National	efficacy=0.2	No change	severe case=0.01	100,655,786	185,027,558	9,591,969	15,916	285,683,345	19	11,626
National	efficacy=0.2	No change	severe case=0.03	116,699,102	168,984,243	9,591,969	15,916	285,683,345	18	10,618
National	efficacy=0.4	Accelerate 1	severe case=0.01	176,949,177	108,734,167	16,862,329	24,150	285,683,345	6	4,503
National	efficacy=0.4	Accelerate 1	severe case=0.03	205,152,737	80,530,607	16,862,329	24,150	285,683,345	5	3,335
National	efficacy=0.4	Accelerate 2	severe case=0.01	124,665,154	161,018,191	11,879,935	15,478	285,683,345	14	10,403
National	efficacy=0.4	Accelerate 2	severe case=0.03	144,535,273	141,148,072	11,879,935	15,478	285,683,345	12	9,119
National	efficacy=0.4	Innovate	severe case=0.01	97,888,989	187,794,355	9,328,307	13,113	285,683,345	20	14,321
National	efficacy=0.4	Innovate	severe case=0.03	113,491,311	172,192,034	9,328,307	13,113	285,683,345	18	13,131
National	efficacy=0.4	Sustain	severe case=0.01	229,301,805	56,381,540	21,851,260	33,581	285,683,345	3	1,679
National	efficacy=0.4	Sustain	severe case=0.03	265,849,741	19,833,603	21,851,260	33,581	285,683,345	1	591
National	efficacy=0.4	No change	severe case=0.01	200,799,438	84,883,907	19,135,134	31,750	285,683,345	4	2,673
National	efficacy=0.4	No change	severe case=0.03	232,804,441	52,878,903	19,135,134	31,750	285,683,345	3	1,665

Note: gross cost averted is the cost averted due to reduced cases from iMDA and their reduced treatment costs. NetCostOfiMDA is the scale-up cost of iMDA minus the gross cost averted cost due to iMDA. Note that, all numbers are summations over all years where the MDA is applied.

Table C. Scale up costs of Dem. Rep. Congo

Uptake	2023	2024	2025	2026	2027	Sum
Conservative	9,609,828	15,867,748	22,516,334	29,574,182	37,060,674	114,628,766
Rapid	9,609,828	29,752,027	51,173,487	73,935,454	98,101,785	262,572,582
National	9,609,828	19,834,685	40,938,790	84,497,662	130,802,380	285,683,345

Note: this table summarizes the cost of implementing iMDA for each year, which only depends on uptake levels. The last column is the sum of the cost for all years

S4 File. Summary table results for Ghana.

Table A. Averted financial costs due to ivermectin MDA for Ghana

Uptake	Efficacy	Griffin Scenario	Severe case	2023	2024	2025	2026	2027	Sum
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	722,283	1,198,199	1,666,948	2,140,428	2,619,267	8,347,125
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	837,407	1,389,177	1,932,640	2,481,586	3,036,746	9,677,556
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	580,443	922,926	1,229,414	1,511,284	1,770,397	6,014,464
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	672,959	1,070,029	1,425,368	1,752,164	2,052,577	6,973,097
Conservative	efficacy=0.2	Innovate	severe case=0.01	498,681	769,940	995,161	1,186,853	1,348,837	4,799,472
Conservative	efficacy=0.2	Innovate	severe case=0.03	578,165	892,659	1,153,778	1,376,023	1,563,825	5,564,450
Conservative	efficacy=0.2	Sustain	severe case=0.01	848,337	1,451,958	2,085,595	2,765,280	3,494,345	10,645,516
Conservative	efficacy=0.2	Sustain	severe case=0.03	983,552	1,683,382	2,418,014	3,206,033	4,051,302	12,342,283
Conservative	efficacy=0.2	No change	severe case=0.01	781,325	1,316,064	1,859,735	2,425,683	3,015,267	9,398,075
Conservative	efficacy=0.2	No change	severe case=0.03	905,859	1,525,829	2,156,155	2,812,307	3,495,864	10,896,015
Conservative	efficacy=0.4	Accelerate 1	severe case=0.01	1,444,567	2,395,242	3,331,206	4,276,062	5,231,033	16,678,108
Conservative	efficacy=0.4	Accelerate 1	severe case=0.03	1,674,813	2,777,014	3,862,160	4,957,614	6,064,796	19,336,397
Conservative	efficacy=0.4	Accelerate 2	severe case=0.01	1,160,887	1,844,923	2,456,753	3,019,028	3,535,491	12,017,081
Conservative	efficacy=0.4	Accelerate 2	severe case=0.03	1,345,918	2,138,982	2,848,330	3,500,224	4,099,005	13,932,459
Conservative	efficacy=0.4	Innovate	severe case=0.01	997,362	1,539,082	1,988,591	2,370,837	2,693,505	9,589,377
Conservative	efficacy=0.4	Innovate	severe case=0.03	1,156,330	1,784,393	2,305,548	2,748,720	3,122,817	11,117,807
Conservative	efficacy=0.4	Sustain	severe case=0.01	1,696,675	2,902,558	4,167,932	5,524,567	6,979,009	21,270,741
Conservative	efficacy=0.4	Sustain	severe case=0.03	1,967,104	3,365,191	4,832,250	6,405,117	8,091,379	24,661,040
Conservative	efficacy=0.4	No change	severe case=0.01	1,562,651	2,630,879	3,716,516	4,846,019	6,022,038	18,778,102
Conservative	efficacy=0.4	No change	severe case=0.03	1,811,718	3,050,209	4,308,884	5,618,416	6,981,878	21,771,104
Rapid	efficacy=0.2	Accelerate 1	severe case=0.01	722,283	2,215,023	3,760,569	5,323,402	6,901,908	18,923,186
Rapid	efficacy=0.2	Accelerate 1	severe case=0.03	837,407	2,568,070	4,359,959	6,171,888	8,001,989	21,939,313
Rapid	efficacy=0.2	Accelerate 2	severe case=0.01	580,443	1,705,092	2,772,544	3,757,759	4,664,101	13,479,939
Rapid	efficacy=0.2	Accelerate 2	severe case=0.03	672,959	1,976,863	3,214,454	4,356,701	5,407,502	15,628,479
Rapid	efficacy=0.2	Innovate	severe case=0.01	498,681	1,421,820	2,243,699	2,950,552	3,552,958	10,667,709
Rapid	efficacy=0.2	Innovate	severe case=0.03	578,165	1,648,441	2,601,317	3,420,834	4,119,257	12,368,013
Rapid	efficacy=0.2	Sustain	severe case=0.01	848,337	2,685,306	4,706,176	6,878,638	9,209,166	24,327,624
Rapid	efficacy=0.2	Sustain	severe case=0.03	983,552	3,113,312	5,456,284	7,975,010	10,676,996	28,205,154
Rapid	efficacy=0.2	No change	severe case=0.01	781,325	2,433,438	4,195,997	6,033,363	7,945,977	21,390,100
Rapid	efficacy=0.2	No change	severe case=0.03	905,859	2,821,298	4,864,788	6,995,008	9,212,470	24,799,424
Rapid	efficacy=0.4	Accelerate 1	severe case=0.01	1,444,567	4,427,878	7,509,966	10,620,000	13,754,807	37,757,218
Rapid	efficacy=0.4	Accelerate 1	severe case=0.03	1,674,813	5,133,629	8,706,964	12,312,700	15,947,157	43,775,262

Rapid	efficacy=0.4	Accelerate 2	severe case=0.01	1,160,887	3,408,442	5,536,484	7,495,741	9,293,571	26,895,125
Rapid	efficacy=0.4	Accelerate 2	severe case=0.03	1,345,918	3,951,707	6,418,933	8,690,471	10,774,854	31,181,883
Rapid	efficacy=0.4	Innovate	severe case=0.01	997,362	2,842,144	4,480,221	5,885,089	7,078,704	21,283,520
Rapid	efficacy=0.4	Innovate	severe case=0.03	1,156,330	3,295,147	5,194,314	6,823,101	8,206,964	24,675,855
Rapid	efficacy=0.4	Sustain	severe case=0.01	1,696,675	5,368,067	9,398,812	13,723,751	18,355,050	48,542,355
Rapid	efficacy=0.4	Sustain	severe case=0.03	1,967,104	6,223,672	10,896,868	15,911,151	21,280,623	56,279,420
Rapid	efficacy=0.4	No change	severe case=0.01	1,562,651	4,864,531	8,379,722	12,036,826	15,836,428	42,680,158
Rapid	efficacy=0.4	No change	severe case=0.03	1,811,718	5,639,879	9,715,348	13,955,351	18,360,564	49,482,859
National	efficacy=0.2	Accelerate 1	severe case=0.01	722,283	1,488,720	2,995,743	6,021,845	9,144,552	20,373,144
National	efficacy=0.2	Accelerate 1	severe case=0.03	837,407	1,726,004	3,473,228	6,981,654	10,602,084	23,620,377
National	efficacy=0.2	Accelerate 2	severe case=0.01	580,443	1,146,402	2,208,269	4,248,822	6,177,779	14,361,714
National	efficacy=0.2	Accelerate 2	severe case=0.03	672,959	1,329,124	2,560,241	4,926,032	7,162,442	16,650,798
National	efficacy=0.2	Innovate	severe case=0.01	498,681	956,191	1,786,827	3,335,016	4,705,018	11,281,734
National	efficacy=0.2	Innovate	severe case=0.03	578,165	1,108,597	2,071,625	3,866,578	5,454,941	13,079,906
National	efficacy=0.2	Sustain	severe case=0.01	848,337	1,804,343	3,749,508	7,783,679	12,204,066	26,389,933
National	efficacy=0.2	Sustain	severe case=0.03	983,552	2,091,934	4,347,134	9,024,303	14,149,247	30,596,170
National	efficacy=0.2	No change	severe case=0.01	781,325	1,635,314	3,342,822	6,826,054	10,528,959	23,114,474
National	efficacy=0.2	No change	severe case=0.03	905,859	1,895,963	3,875,628	7,914,045	12,207,147	26,798,642
National	efficacy=0.4	Accelerate 1	severe case=0.01	1,444,567	2,975,995	5,985,465	12,019,471	18,215,922	40,641,420
National	efficacy=0.4	Accelerate 1	severe case=0.03	1,674,813	3,450,333	6,939,476	13,935,230	21,119,320	47,119,172
National	efficacy=0.4	Accelerate 2	severe case=0.01	1,160,887	2,291,643	4,411,899	8,479,782	12,303,893	28,648,104
National	efficacy=0.4	Accelerate 2	severe case=0.03	1,345,918	2,656,903	5,115,103	9,831,357	14,264,985	33,214,265
National	efficacy=0.4	Innovate	severe case=0.01	997,362	1,911,385	3,569,783	6,655,576	9,369,466	22,503,572
National	efficacy=0.4	Innovate	severe case=0.03	1,156,330	2,216,037	4,138,763	7,716,394	10,862,846	26,090,370
National	efficacy=0.4	Sustain	severe case=0.01	1,696,675	3,606,989	7,491,720	15,537,055	24,313,577	52,646,016
National	efficacy=0.4	Sustain	severe case=0.03	1,967,104	4,181,900	8,685,810	18,013,474	28,188,867	61,037,155
National	efficacy=0.4	No change	severe case=0.01	1,562,651	3,269,065	6,679,031	13,625,089	20,974,978	46,110,813
National	efficacy=0.4	No change	severe case=0.03	1,811,718	3,790,115	7,743,588	15,796,763	24,318,136	53,460,320

Note: this table summarizes the averted cost of treatment due to reduced incidence for each year in this country; the last column is the sum of averted cost of treatment for all years.

Table B. Summary of costs, averted cases and averted deaths, and CER for Ghana

Uptake	Efficacy	Griffin Scenario	Severity	Gross Cost Averted	Net Cost Of iMDA	Cases Averted	Deaths Averted	Scale-up costs	Net Cost Of iMDA/ Cases Averted	Net Cost Of iMDA/ Deaths Averted
Rapid	efficacy=0.4	Accelerate 1	severe case=0.03	43,775,262	42,367,468	3,598,065	5,172	86,142,731	12	8,192
Rapid	efficacy=0.4	Accelerate 2	severe case=0.03	31,181,883	54,960,848	2,562,964	3,362	86,142,731	21	16,347
Rapid	efficacy=0.4	Innovate	severe case=0.03	24,675,855	61,466,875	2,028,208	2,864	86,142,731	30	21,463
Rapid	efficacy=0.4	Sustain	severe case=0.03	56,279,420	29,863,311	4,625,832	7,119	86,142,731	6	4,195
Rapid	efficacy=0.4	No change	severe case=0.03	49,482,859	36,659,871	4,067,195	6,742	86,142,731	9	5,437
Rapid	efficacy=0.2	Accelerate 1	severe case=0.03	21,939,313	64,203,418	1,803,280	2,592	86,142,731	36	24,770
Rapid	efficacy=0.2	Accelerate 2	severe case=0.03	15,628,479	70,514,252	1,284,568	1,685	86,142,731	55	41,844
Rapid	efficacy=0.2	Innovate	severe case=0.03	12,368,013	73,774,718	1,016,577	1,435	86,142,731	73	51,394
Rapid	efficacy=0.2	Sustain	severe case=0.03	28,205,154	57,937,577	2,318,295	3,568	86,142,731	25	16,239
Rapid	efficacy=0.2	No change	severe case=0.03	24,799,424	61,343,307	2,038,364	3,379	86,142,731	30	18,154
National	efficacy=0.4	Accelerate 1	severe case=0.03	47,119,172	46,392,974	3,872,914	5,543	93,512,145	12	8,370
National	efficacy=0.4	Accelerate 2	severe case=0.03	33,214,265	60,297,880	2,730,014	3,555	93,512,145	22	16,962
National	efficacy=0.4	Innovate	severe case=0.03	26,090,370	67,421,775	2,144,472	3,013	93,512,145	31	22,381
National	efficacy=0.4	Sustain	severe case=0.03	61,037,155	32,474,990	5,016,889	7,704	93,512,145	6	4,216
National	efficacy=0.4	No change	severe case=0.03	53,460,320	40,051,825	4,394,119	7,284	93,512,145	9	5,499
National	efficacy=0.2	Accelerate 1	severe case=0.03	23,620,377	69,891,768	1,941,454	2,778	93,512,145	36	25,155
National	efficacy=0.2	Accelerate 2	severe case=0.03	16,650,798	76,861,347	1,368,596	1,782	93,512,145	56	43,128
National	efficacy=0.2	Innovate	severe case=0.03	13,079,906	80,432,240	1,075,090	1,510	93,512,145	75	53,256
National	efficacy=0.2	Sustain	severe case=0.03	30,596,170	62,915,976	2,514,822	3,862	93,512,145	25	16,293
National	efficacy=0.2	No change	severe case=0.03	26,798,642	66,713,503	2,202,688	3,651	93,512,145	30	18,271
Conservative	efficacy=0.4	Accelerate 1	severe case=0.03	19,336,397	18,360,084	1,589,336	2,295	37,696,481	12	7,999
Conservative	efficacy=0.4	Accelerate 2	severe case=0.03	13,932,459	23,764,022	1,145,165	1,515	37,696,481	21	15,688
Conservative	efficacy=0.4	Innovate	severe case=0.03	11,117,807	26,578,674	913,817	1,298	37,696,481	29	20,476
Conservative	efficacy=0.4	Sustain	severe case=0.03	24,661,040	13,035,441	2,026,990	3,127	37,696,481	6	4,169
Conservative	efficacy=0.4	No change	severe case=0.03	21,771,104	15,925,377	1,789,455	2,966	37,696,481	9	5,369
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	9,677,556	28,018,925	795,437	1,149	37,696,481	35	24,391
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	6,973,097	30,723,384	573,147	758	37,696,481	54	40,523
Conservative	efficacy=0.2	Innovate	severe case=0.03	5,564,450	32,132,031	457,365	650	37,696,481	70	49,460
Conservative	efficacy=0.2	Sustain	severe case=0.03	12,342,283	25,354,198	1,014,462	1,565	37,696,481	25	16,203
Conservative	efficacy=0.2	No change	severe case=0.03	10,896,015	26,800,466	895,587	1,485	37,696,481	30	18,052
Rapid	efficacy=0.4	Accelerate 1	severe case=0.01	37,757,218	48,385,513	3,598,065	5,172	86,142,731	13	9,356

Rapid	efficacy=0.4	Accelerate 2	severe case=0.01	26,895,125	59,247,606	2,562,964	3,362	86,142,731	23	17,622
Rapid	efficacy=0.4	Innovate	severe case=0.01	21,283,520	64,859,211	2,028,208	2,864	86,142,731	32	22,647
Rapid	efficacy=0.4	Sustain	severe case=0.01	48,542,355	37,600,376	4,625,832	7,119	86,142,731	8	5,282
Rapid	efficacy=0.4	No change	severe case=0.01	42,680,158	43,462,573	4,067,195	6,742	86,142,731	11	6,446
Rapid	efficacy=0.2	Accelerate 1	severe case=0.01	18,923,186	67,219,545	1,803,280	2,592	86,142,731	37	25,933
Rapid	efficacy=0.2	Accelerate 2	severe case=0.01	13,479,939	72,662,791	1,284,568	1,685	86,142,731	57	43,119
Rapid	efficacy=0.2	Innovate	severe case=0.01	10,667,709	75,475,022	1,016,577	1,435	86,142,731	74	52,578
Rapid	efficacy=0.2	Sustain	severe case=0.01	24,327,624	61,815,106	2,318,295	3,568	86,142,731	27	17,326
Rapid	efficacy=0.2	No change	severe case=0.01	21,390,100	64,752,630	2,038,364	3,379	86,142,731	32	19,163
National	efficacy=0.4	Accelerate 1	severe case=0.01	40,641,420	52,870,725	3,872,914	5,543	93,512,145	14	9,539
National	efficacy=0.4	Accelerate 2	severe case=0.01	28,648,104	64,864,042	2,730,014	3,555	93,512,145	24	18,247
National	efficacy=0.4	Innovate	severe case=0.01	22,503,572	71,008,573	2,144,472	3,013	93,512,145	33	23,571
National	efficacy=0.4	Sustain	severe case=0.01	52,646,016	40,866,129	5,016,889	7,704	93,512,145	8	5,305
National	efficacy=0.4	No change	severe case=0.01	46,110,813	47,401,332	4,394,119	7,284	93,512,145	11	6,508
National	efficacy=0.2	Accelerate 1	severe case=0.01	20,373,144	73,139,001	1,941,454	2,778	93,512,145	38	26,323
National	efficacy=0.2	Accelerate 2	severe case=0.01	14,361,714	79,150,431	1,368,596	1,782	93,512,145	58	44,413
National	efficacy=0.2	Innovate	severe case=0.01	11,281,734	82,230,411	1,075,090	1,510	93,512,145	76	54,446
National	efficacy=0.2	Sustain	severe case=0.01	26,389,933	67,122,212	2,514,822	3,862	93,512,145	27	17,382
National	efficacy=0.2	No change	severe case=0.01	23,114,474	70,397,671	2,202,688	3,651	93,512,145	32	19,280
Conservative	efficacy=0.4	Accelerate 1	severe case=0.01	16,678,108	21,018,373	1,589,336	2,295	37,696,481	13	9,157
Conservative	efficacy=0.4	Accelerate 2	severe case=0.01	12,017,081	25,679,400	1,145,165	1,515	37,696,481	22	16,952
Conservative	efficacy=0.4	Innovate	severe case=0.01	9,589,377	28,107,104	913,817	1,298	37,696,481	31	21,654
Conservative	efficacy=0.4	Sustain	severe case=0.01	21,270,741	16,425,740	2,026,990	3,127	37,696,481	8	5,253
Conservative	efficacy=0.4	No change	severe case=0.01	18,778,102	18,918,379	1,789,455	2,966	37,696,481	11	6,378
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	8,347,125	29,349,356	795,437	1,149	37,696,481	37	25,549
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	6,014,464	31,682,017	573,147	758	37,696,481	55	41,788
Conservative	efficacy=0.2	Innovate	severe case=0.01	4,799,472	32,897,009	457,365	650	37,696,481	72	50,637
Conservative	efficacy=0.2	Sustain	severe case=0.01	10,645,516	27,050,965	1,014,462	1,565	37,696,481	27	17,287
Conservative	efficacy=0.2	No change	severe case=0.01	9,398,075	28,298,406	895,587	1,485	37,696,481	32	19,061

Note: gross cost averted is the cost averted due to reduced cases from iMDA and their reduced treatment costs. NetCostOfiMDA is the scale-up cost of iMDA minus the gross cost averted cost due to iMDA. Note that, all numbers are summations over all years where the MDA is applied.

Table C. Scale up costs of Ghana

Uptake	2023	2024	2025	2026	2027	Sum
Conservative	3,240,985	5,299,659	7,447,346	9,686,966	12,021,525	37,696,481
Rapid	3,240,985	9,936,861	16,925,786	24,217,415	31,821,683	86,142,731
National	3,240,985	6,624,574	13,540,629	27,677,046	42,428,911	93,512,145

Note: this table summarizes the cost of implementing iMDA for each year, which only depends on uptake levels. The last column is the sum of the cost for all years.

S5 File. Summary table results for Mali.

Table A. Averted financial costs due to ivermectin MDA for Mali

Uptake	Efficacy	Griffin Scenario	Severe case	2023	2024	2025	2026	2027	Sum
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	829,815	1,387,040	1,944,673	2,516,524	3,103,562	9,781,613
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	962,078	1,608,117	2,254,630	2,917,627	3,598,233	11,340,684
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	666,858	1,068,372	1,434,224	1,776,808	2,097,708	7,043,969
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	773,147	1,238,658	1,662,822	2,060,009	2,432,057	8,166,693
Conservative	efficacy=0.2	Innovate	severe case=0.01	572,924	891,270	1,160,936	1,395,361	1,598,192	5,618,683
Conservative	efficacy=0.2	Innovate	severe case=0.03	664,241	1,033,328	1,345,975	1,617,765	1,852,925	6,514,234
Conservative	efficacy=0.2	Sustain	severe case=0.01	974,636	1,680,804	2,433,091	3,251,202	4,140,484	12,480,216
Conservative	efficacy=0.2	Sustain	severe case=0.03	1,129,981	1,948,704	2,820,896	3,769,404	4,800,427	14,469,412
Conservative	efficacy=0.2	No change	severe case=0.01	897,647	1,523,487	2,169,589	2,851,915	3,572,800	11,015,438
Conservative	efficacy=0.2	No change	severe case=0.03	1,040,721	1,766,312	2,515,395	3,306,476	4,142,262	12,771,166
Conservative	efficacy=0.4	Accelerate 1	severe case=0.01	1,659,630	2,772,751	3,886,230	5,027,456	6,198,308	19,544,375
Conservative	efficacy=0.4	Accelerate 1	severe case=0.03	1,924,155	3,214,694	4,505,648	5,828,771	7,186,243	22,659,513
Conservative	efficacy=0.4	Accelerate 2	severe case=0.01	1,333,717	2,135,677	2,866,046	3,549,486	4,189,182	14,074,108
Conservative	efficacy=0.4	Accelerate 2	severe case=0.03	1,546,295	2,476,078	3,322,859	4,115,231	4,856,887	16,317,350
Conservative	efficacy=0.4	Innovate	severe case=0.01	1,145,847	1,781,623	2,319,867	2,787,378	3,191,485	11,226,200
Conservative	efficacy=0.4	Innovate	severe case=0.03	1,328,481	2,065,593	2,689,626	3,231,652	3,700,169	13,015,521
Conservative	efficacy=0.4	Sustain	severe case=0.01	1,949,271	3,360,049	4,862,409	6,495,413	8,269,587	24,936,730
Conservative	efficacy=0.4	Sustain	severe case=0.03	2,259,962	3,895,600	5,637,419	7,530,704	9,587,659	28,911,343
Conservative	efficacy=0.4	No change	severe case=0.01	1,795,294	3,045,537	4,335,757	5,697,594	7,135,614	22,009,796
Conservative	efficacy=0.4	No change	severe case=0.03	2,081,442	3,530,959	5,026,825	6,605,721	8,272,944	25,517,892
Rapid	efficacy=0.2	Accelerate 1	severe case=0.01	829,815	2,564,395	4,387,369	6,259,045	8,178,353	22,218,977
Rapid	efficacy=0.2	Accelerate 1	severe case=0.03	962,078	2,973,128	5,086,662	7,256,661	9,481,884	25,760,413
Rapid	efficacy=0.2	Accelerate 2	severe case=0.01	666,858	1,974,023	3,234,631	4,418,171	5,526,612	15,820,295
Rapid	efficacy=0.2	Accelerate 2	severe case=0.03	773,147	2,288,658	3,750,192	5,122,374	6,407,487	18,341,858
Rapid	efficacy=0.2	Innovate	severe case=0.01	572,924	1,646,066	2,617,626	3,469,070	4,209,951	12,515,636
Rapid	efficacy=0.2	Innovate	severe case=0.03	664,241	1,908,429	3,034,844	4,021,997	4,880,966	14,510,478
Rapid	efficacy=0.2	Sustain	severe case=0.01	974,636	3,108,867	5,490,625	8,087,698	10,912,418	28,574,244
Rapid	efficacy=0.2	Sustain	severe case=0.03	1,129,981	3,604,383	6,365,764	9,376,780	12,651,726	33,128,633
Rapid	efficacy=0.2	No change	severe case=0.01	897,647	2,817,265	4,895,389	7,093,818	9,415,556	25,119,676
Rapid	efficacy=0.2	No change	severe case=0.03	1,040,721	3,266,303	5,675,655	8,224,487	10,916,282	29,123,448
Rapid	efficacy=0.4	Accelerate 1	severe case=0.01	1,659,630	5,126,300	8,761,803	12,486,822	16,299,093	44,333,649
Rapid	efficacy=0.4	Accelerate 1	severe case=0.03	1,924,155	5,943,370	10,158,329	14,477,070	18,896,972	51,399,897

Rapid	efficacy=0.4	Accelerate 2	severe case=0.01	1,333,717	3,946,045	6,459,301	8,813,271	11,012,515	31,564,849
Rapid	efficacy=0.4	Accelerate 2	severe case=0.03	1,546,295	4,574,996	7,488,836	10,218,000	12,767,777	36,595,904
Rapid	efficacy=0.4	Innovate	severe case=0.01	1,145,847	3,290,413	5,226,945	6,919,459	8,387,914	24,970,578
Rapid	efficacy=0.4	Innovate	severe case=0.03	1,328,481	3,814,865	6,060,057	8,022,337	9,724,847	28,950,587
Rapid	efficacy=0.4	Sustain	severe case=0.01	1,949,271	6,214,811	10,965,574	16,136,288	21,750,443	57,016,387
Rapid	efficacy=0.4	Sustain	severe case=0.03	2,259,962	7,205,376	12,713,353	18,708,218	25,217,201	66,104,110
Rapid	efficacy=0.4	No change	severe case=0.01	1,795,294	5,631,838	9,776,571	14,152,757	18,765,838	50,122,298
Rapid	efficacy=0.4	No change	severe case=0.03	2,081,442	6,529,485	11,334,838	16,408,536	21,756,885	58,111,186
National	efficacy=0.2	Accelerate 1	severe case=0.01	829,815	1,723,427	3,495,172	7,080,815	10,836,312	23,965,541
National	efficacy=0.2	Accelerate 1	severe case=0.03	962,078	1,998,120	4,052,261	8,209,411	12,563,489	27,785,358
National	efficacy=0.2	Accelerate 2	severe case=0.01	666,858	1,327,129	2,576,394	4,995,955	7,320,602	16,886,939
National	efficacy=0.2	Accelerate 2	severe case=0.03	773,147	1,538,658	2,987,040	5,792,250	8,487,418	19,578,513
National	efficacy=0.2	Innovate	severe case=0.01	572,924	1,106,926	2,084,683	3,921,438	5,575,354	13,261,325
National	efficacy=0.2	Innovate	severe case=0.03	664,241	1,283,357	2,416,956	4,546,468	6,463,998	15,375,020
National	efficacy=0.2	Sustain	severe case=0.01	974,636	2,088,822	4,374,626	9,152,529	14,461,948	31,052,561
National	efficacy=0.2	Sustain	severe case=0.03	1,129,981	2,421,755	5,071,889	10,611,332	16,767,008	36,001,964
National	efficacy=0.2	No change	severe case=0.01	897,647	1,893,138	3,900,126	8,026,471	12,476,881	27,194,263
National	efficacy=0.2	No change	severe case=0.03	1,040,721	2,194,881	4,521,759	9,305,794	14,465,545	31,528,700
National	efficacy=0.4	Accelerate 1	severe case=0.01	1,659,630	3,445,194	6,983,375	14,133,375	21,586,580	47,808,154
National	efficacy=0.4	Accelerate 1	severe case=0.03	1,924,155	3,994,316	8,096,440	16,386,064	25,027,220	55,428,196
National	efficacy=0.4	Accelerate 2	severe case=0.01	1,333,717	2,652,925	5,147,418	9,971,073	14,580,462	33,685,594
National	efficacy=0.4	Accelerate 2	severe case=0.03	1,546,295	3,075,769	5,967,854	11,560,342	16,904,411	39,054,671
National	efficacy=0.4	Innovate	severe case=0.01	1,145,847	2,212,706	4,164,886	7,826,011	11,103,010	26,452,460
National	efficacy=0.4	Innovate	severe case=0.03	1,328,481	2,565,385	4,828,718	9,073,382	12,872,696	30,668,663
National	efficacy=0.4	Sustain	severe case=0.01	1,949,271	4,175,695	8,740,808	18,269,707	28,812,723	61,948,203
National	efficacy=0.4	Sustain	severe case=0.03	2,259,962	4,841,250	10,133,987	21,181,677	33,405,123	71,821,998
National	efficacy=0.4	No change	severe case=0.01	1,795,294	3,784,480	7,792,596	16,021,420	24,856,247	54,250,038
National	efficacy=0.4	No change	severe case=0.03	2,081,442	4,387,680	9,034,642	18,575,041	28,818,032	62,896,838

Note: this table summarizes the averted cost of treatment due to reduced incidence for each year in this country; the last column is the sum of averted cost of treatment for all years.

Table B. Summary of costs, averted cases and averted deaths, and CER for Mali

Uptake	Efficacy	Griffin Scenario	Severity	Gross Cost Averted	Net Cost Of iMDA	Cases Averted	Deaths Averted	Scale-up costs	Net Cost Of iMDA/ Cases Averted	Net Cost Of iMDA/ Deaths Averted
Rapid	efficacy=0.4	Accelerate 1	severe case=0.03	51,399,897	7,286,792	4,224,764	5,881	58,686,688	2	1,239
Rapid	efficacy=0.4	Accelerate 2	severe case=0.03	36,595,904	22,090,785	3,007,965	3,821	58,686,688	7	5,782
Rapid	efficacy=0.4	Innovate	severe case=0.03	28,950,587	29,736,102	2,379,565	3,254	58,686,688	12	9,139
Rapid	efficacy=0.4	Sustain	severe case=0.03	66,104,110	-7,417,422	5,433,363	8,098	58,686,688	-1	-916
Rapid	efficacy=0.4	No change	severe case=0.03	58,111,186	575,502	4,776,392	7,669	58,686,688	0	75
Rapid	efficacy=0.2	Accelerate 1	severe case=0.03	25,760,413	32,926,275	2,117,352	2,947	58,686,688	16	11,171
Rapid	efficacy=0.2	Accelerate 2	severe case=0.03	18,341,858	40,344,830	1,507,591	1,915	58,686,688	27	21,067
Rapid	efficacy=0.2	Innovate	severe case=0.03	14,510,478	44,176,211	1,192,675	1,631	58,686,688	37	27,087
Rapid	efficacy=0.2	Sustain	severe case=0.03	33,128,633	25,558,055	2,722,976	4,059	58,686,688	9	6,297
Rapid	efficacy=0.2	No change	severe case=0.03	29,123,448	29,563,240	2,393,773	3,844	58,686,688	12	7,692
National	efficacy=0.4	Accelerate 1	severe case=0.03	55,428,196	8,395,092	4,555,866	6,314	63,823,288	2	1,330
National	efficacy=0.4	Accelerate 2	severe case=0.03	39,054,671	24,768,617	3,210,061	4,048	63,823,288	8	6,119
National	efficacy=0.4	Innovate	severe case=0.03	30,668,663	33,154,625	2,520,781	3,429	63,823,288	13	9,668
National	efficacy=0.4	Sustain	severe case=0.03	71,821,998	-7,998,710	5,903,339	8,780	63,823,288	-1	-911
National	efficacy=0.4	No change	severe case=0.03	62,896,838	926,450	5,169,744	8,301	63,823,288	0	112
Conservative	efficacy=0.4	Accelerate 1	severe case=0.03	22,659,513	2,972,901	1,862,476	2,605	25,632,414	2	1,141
Conservative	efficacy=0.4	Accelerate 2	severe case=0.03	16,317,350	9,315,064	1,341,189	1,718	25,632,414	7	5,423
Conservative	efficacy=0.4	Innovate	severe case=0.03	13,015,521	12,616,893	1,069,798	1,471	25,632,414	12	8,574
Conservative	efficacy=0.4	Sustain	severe case=0.03	28,911,343	-3,278,929	2,376,340	3,550	25,632,414	-1	-924
Conservative	efficacy=0.4	No change	severe case=0.03	25,517,892	114,522	2,097,418	3,368	25,632,414	0	34
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	11,340,684	14,291,730	932,136	1,304	25,632,414	15	10,963
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	8,166,693	17,465,721	671,253	860	25,632,414	26	20,315
Conservative	efficacy=0.2	Innovate	severe case=0.03	6,514,234	19,118,180	535,431	736	25,632,414	36	25,959
Conservative	efficacy=0.2	Sustain	severe case=0.03	14,469,412	11,163,002	1,189,299	1,777	25,632,414	9	6,283
Conservative	efficacy=0.2	No change	severe case=0.03	12,771,166	12,861,248	1,049,713	1,685	25,632,414	12	7,631
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	27,785,358	36,037,930	2,283,790	3,165	63,823,288	16	11,385
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	19,578,513	44,244,775	1,609,237	2,029	63,823,288	27	21,805
Conservative	efficacy=0.2	Innovate	severe case=0.03	15,375,020	48,448,268	1,263,735	1,719	63,823,288	38	28,180
Conservative	efficacy=0.2	Sustain	severe case=0.03	36,001,964	27,821,324	2,959,146	4,401	63,823,288	9	6,322
Conservative	efficacy=0.2	No change	severe case=0.03	31,528,700	32,294,588	2,591,471	4,161	63,823,288	12	7,761
Rapid	efficacy=0.4	Accelerate 1	severe case=0.01	44,333,649	14,353,040	4,224,764	5,881	58,686,688	3	2,441

Rapid	efficacy=0.4	Accelerate 2	severe case=0.01	31,564,849	27,121,840	3,007,965	3,821	58,686,688	9	7,098
Rapid	efficacy=0.4	Innovate	severe case=0.01	24,970,578	33,716,110	2,379,565	3,254	58,686,688	14	10,362
Rapid	efficacy=0.4	Sustain	severe case=0.01	57,016,387	1,670,301	5,433,363	8,098	58,686,688	0	206
Rapid	efficacy=0.4	No change	severe case=0.01	50,122,298	8,564,391	4,776,392	7,669	58,686,688	2	1,117
Rapid	efficacy=0.2	Accelerate 1	severe case=0.01	22,218,977	36,467,712	2,117,352	2,947	58,686,688	17	12,373
Rapid	efficacy=0.2	Accelerate 2	severe case=0.01	15,820,295	42,866,394	1,507,591	1,915	58,686,688	28	22,384
Rapid	efficacy=0.2	Innovate	severe case=0.01	12,515,636	46,171,052	1,192,675	1,631	58,686,688	39	28,310
Rapid	efficacy=0.2	Sustain	severe case=0.01	28,574,244	30,112,444	2,722,976	4,059	58,686,688	11	7,419
Rapid	efficacy=0.2	No change	severe case=0.01	25,119,676	33,567,013	2,393,773	3,844	58,686,688	14	8,733
National	efficacy=0.4	Accelerate 1	severe case=0.01	47,808,154	16,015,134	4,555,866	6,314	63,823,288	4	2,536
National	efficacy=0.4	Accelerate 2	severe case=0.01	33,685,594	30,137,694	3,210,061	4,048	63,823,288	9	7,446
National	efficacy=0.4	Innovate	severe case=0.01	26,452,460	37,370,828	2,520,781	3,429	63,823,288	15	10,898
National	efficacy=0.4	Sustain	severe case=0.01	61,948,203	1,875,085	5,903,339	8,780	63,823,288	0	214
National	efficacy=0.4	No change	severe case=0.01	54,250,038	9,573,250	5,169,744	8,301	63,823,288	2	1,153
Conservative	efficacy=0.4	Accelerate 1	severe case=0.01	19,544,375	6,088,039	1,862,476	2,605	25,632,414	3	2,337
Conservative	efficacy=0.4	Accelerate 2	severe case=0.01	14,074,108	11,558,306	1,341,189	1,718	25,632,414	9	6,729
Conservative	efficacy=0.4	Innovate	severe case=0.01	11,226,200	14,406,214	1,069,798	1,471	25,632,414	13	9,790
Conservative	efficacy=0.4	Sustain	severe case=0.01	24,936,730	695,684	2,376,340	3,550	25,632,414	0	196
Conservative	efficacy=0.4	No change	severe case=0.01	22,009,796	3,622,618	2,097,418	3,368	25,632,414	2	1,076
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	9,781,613	15,850,801	932,136	1,304	25,632,414	17	12,159
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	7,043,969	18,588,445	671,253	860	25,632,414	28	21,621
Conservative	efficacy=0.2	Innovate	severe case=0.01	5,618,683	20,013,730	535,431	736	25,632,414	37	27,175
Conservative	efficacy=0.2	Sustain	severe case=0.01	12,480,216	13,152,198	1,189,299	1,777	25,632,414	11	7,402
Conservative	efficacy=0.2	No change	severe case=0.01	11,015,438	14,616,976	1,049,713	1,685	25,632,414	14	8,672
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	23,965,541	39,857,748	2,283,790	3,165	63,823,288	17	12,592
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	16,886,939	46,936,349	1,609,237	2,029	63,823,288	29	23,131
Conservative	efficacy=0.2	Innovate	severe case=0.01	13,261,325	50,561,963	1,263,735	1,719	63,823,288	40	29,410
Conservative	efficacy=0.2	Sustain	severe case=0.01	31,052,561	32,770,727	2,959,146	4,401	63,823,288	11	7,446
Conservative	efficacy=0.2	No change	severe case=0.01	27,194,263	36,629,025	2,591,471	4,161	63,823,288	14	8,803

Note: gross cost averted is the cost averted due to reduced cases from iMDA and their reduced treatment costs. NetCostOfiMDA is the scale-up cost of iMDA minus the gross cost averted cost due to iMDA. Note that, all numbers are summations over all years where the MDA is applied.

Table C. Scale up costs of Mali

Uptake	2023	2024	2025	2026	2027	Sum
Conservative	2,159,729	3,559,234	5,040,765	6,607,985	8,264,701	25,632,414
Rapid	2,159,729	6,673,564	11,456,284	16,519,962	21,877,149	58,686,688
National	2,159,729	4,449,042	9,165,027	18,879,956	29,169,533	63,823,288

Note: this table summarizes the cost of implementing iMDA for each year, which only depends on uptake levels. The last column is the sum of the cost for all years.

S6 File. Summary table results for Mozambique.

Table A. Averted financial costs due to ivermectin MDA for Mozambique

Uptake	Efficacy	Griffin Scenario	Severe case	2023	2024	2025	2026	2027	Sum
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	1,007,992	1,683,276	2,357,729	3,048,090	3,755,485	11,852,572
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	1,168,654	1,951,570	2,733,522	3,533,919	4,354,064	13,741,729
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	810,046	1,296,551	1,738,861	2,152,127	2,538,349	8,535,934
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	939,157	1,503,205	2,016,015	2,495,150	2,942,931	9,896,458
Conservative	efficacy=0.2	Innovate	severe case=0.01	695,941	1,081,625	1,407,527	1,690,109	1,933,909	6,809,111
Conservative	efficacy=0.2	Innovate	severe case=0.03	806,866	1,254,023	1,631,870	1,959,492	2,242,151	7,894,402
Conservative	efficacy=0.2	Sustain	severe case=0.01	1,183,908	2,039,779	2,949,885	3,937,949	5,010,212	15,121,735
Conservative	efficacy=0.2	Sustain	severe case=0.03	1,372,609	2,364,895	3,420,061	4,565,611	5,808,779	17,531,956
Conservative	efficacy=0.2	No change	severe case=0.01	1,090,389	1,848,864	2,630,416	3,454,324	4,323,287	13,347,280
Conservative	efficacy=0.2	No change	severe case=0.03	1,264,184	2,143,550	3,049,673	4,004,901	5,012,367	15,474,675
Conservative	efficacy=0.4	Accelerate 1	severe case=0.01	2,015,984	3,364,939	4,711,677	6,089,400	7,500,291	23,682,291
Conservative	efficacy=0.4	Accelerate 1	severe case=0.03	2,337,308	3,901,269	5,462,661	7,059,977	8,695,747	27,456,962
Conservative	efficacy=0.4	Accelerate 2	severe case=0.01	1,620,091	2,591,805	3,474,808	4,299,247	5,069,148	17,055,100
Conservative	efficacy=0.4	Accelerate 2	severe case=0.03	1,878,314	3,004,908	4,028,650	4,984,495	5,877,109	19,773,476
Conservative	efficacy=0.4	Innovate	severe case=0.01	1,391,883	2,162,136	2,812,621	3,376,162	3,861,883	13,604,685
Conservative	efficacy=0.4	Innovate	severe case=0.03	1,613,732	2,506,755	3,260,919	3,914,282	4,477,420	15,773,108
Conservative	efficacy=0.4	Sustain	severe case=0.01	2,367,817	4,077,664	5,895,193	7,867,423	10,006,640	30,214,737
Conservative	efficacy=0.4	Sustain	severe case=0.03	2,745,218	4,727,594	6,834,815	9,121,395	11,601,578	35,030,601
Conservative	efficacy=0.4	No change	severe case=0.01	2,180,778	3,695,983	5,256,682	6,901,086	8,634,478	26,669,007
Conservative	efficacy=0.4	No change	severe case=0.03	2,528,368	4,285,078	6,094,533	8,001,036	10,010,709	30,919,724
Rapid	efficacy=0.2	Accelerate 1	severe case=0.01	1,007,992	3,112,042	5,319,223	7,581,105	9,896,224	26,916,586
Rapid	efficacy=0.2	Accelerate 1	severe case=0.03	1,168,654	3,608,064	6,167,043	8,789,441	11,473,562	31,206,765
Rapid	efficacy=0.2	Accelerate 2	severe case=0.01	810,046	2,395,593	3,921,654	5,351,403	6,687,493	19,166,188
Rapid	efficacy=0.2	Accelerate 2	severe case=0.03	939,157	2,777,422	4,546,718	6,204,351	7,753,398	22,221,046
Rapid	efficacy=0.2	Innovate	severe case=0.01	695,941	1,997,599	3,173,603	4,201,831	5,094,269	15,163,244
Rapid	efficacy=0.2	Innovate	severe case=0.03	806,866	2,315,992	3,679,437	4,871,552	5,906,234	17,580,081
Rapid	efficacy=0.2	Sustain	severe case=0.01	1,183,908	3,772,790	6,656,799	9,796,004	13,204,566	34,614,067
Rapid	efficacy=0.2	Sustain	severe case=0.03	1,372,609	4,374,127	7,717,812	11,357,368	15,309,214	40,131,131
Rapid	efficacy=0.2	No change	severe case=0.01	1,090,389	3,418,915	5,935,142	8,592,198	11,393,296	30,429,939
Rapid	efficacy=0.2	No change	severe case=0.03	1,264,184	3,963,849	6,881,131	9,961,690	13,209,249	35,280,103
Rapid	efficacy=0.4	Accelerate 1	severe case=0.01	2,015,984	6,221,061	10,622,749	15,124,300	19,722,663	53,706,758
Rapid	efficacy=0.4	Accelerate 1	severe case=0.03	2,337,308	7,212,623	12,315,887	17,534,931	22,866,218	62,266,966

Rapid	efficacy=0.4	Accelerate 2	severe case=0.01	1,620,091	4,788,756	7,831,221	10,674,834	13,325,676	38,240,577
Rapid	efficacy=0.4	Accelerate 2	severe case=0.03	1,878,314	5,552,026	9,079,423	12,376,273	15,449,628	44,335,663
Rapid	efficacy=0.4	Innovate	severe case=0.01	1,391,883	3,993,111	6,337,124	8,381,013	10,149,793	30,252,924
Rapid	efficacy=0.4	Innovate	severe case=0.03	1,613,732	4,629,564	7,347,185	9,716,845	11,767,547	35,074,874
Rapid	efficacy=0.4	Sustain	severe case=0.01	2,367,817	7,542,028	13,294,574	19,544,591	26,319,024	69,068,035
Rapid	efficacy=0.4	Sustain	severe case=0.03	2,745,218	8,744,136	15,413,568	22,659,763	30,513,959	80,076,644
Rapid	efficacy=0.4	No change	severe case=0.01	2,180,778	6,834,558	11,853,041	17,142,108	22,707,528	60,718,014
Rapid	efficacy=0.4	No change	severe case=0.03	2,528,368	7,923,904	13,742,273	19,874,353	26,326,833	70,395,731
National	efficacy=0.2	Accelerate 1	severe case=0.01	1,007,992	2,091,495	4,237,512	8,576,367	13,112,405	29,025,771
National	efficacy=0.2	Accelerate 1	severe case=0.03	1,168,654	2,424,854	4,912,921	9,943,336	15,202,364	33,652,128
National	efficacy=0.2	Accelerate 2	severe case=0.01	810,046	1,610,563	3,123,598	6,051,166	8,858,257	20,453,629
National	efficacy=0.2	Accelerate 2	severe case=0.03	939,157	1,867,267	3,621,461	7,015,649	10,270,156	23,713,690
National	efficacy=0.2	Innovate	severe case=0.01	695,941	1,343,332	2,527,454	4,749,701	6,746,435	16,062,862
National	efficacy=0.2	Innovate	severe case=0.03	806,866	1,557,443	2,930,299	5,506,746	7,821,735	18,623,088
National	efficacy=0.2	Sustain	severe case=0.01	1,183,908	2,534,925	5,303,749	11,085,644	17,499,566	37,607,792
National	efficacy=0.2	Sustain	severe case=0.03	1,372,609	2,938,961	6,149,103	12,852,561	20,288,785	43,602,020
National	efficacy=0.2	No change	severe case=0.01	1,090,389	2,297,450	4,728,472	9,721,754	15,097,558	32,935,623
National	efficacy=0.2	No change	severe case=0.03	1,264,184	2,663,635	5,482,133	11,271,284	17,503,926	38,185,163
National	efficacy=0.4	Accelerate 1	severe case=0.01	2,015,984	4,180,974	8,466,566	17,118,478	26,120,592	57,902,594
National	efficacy=0.4	Accelerate 1	severe case=0.03	2,337,308	4,847,370	9,816,034	19,846,957	30,283,898	67,131,567
National	efficacy=0.4	Accelerate 2	severe case=0.01	1,620,091	3,219,505	6,240,679	12,077,070	17,642,939	40,800,284
National	efficacy=0.4	Accelerate 2	severe case=0.03	1,878,314	3,732,656	7,235,367	14,002,009	20,455,010	47,303,356
National	efficacy=0.4	Innovate	severe case=0.01	1,391,883	2,685,272	5,049,470	9,478,954	13,435,096	32,040,674
National	efficacy=0.4	Innovate	severe case=0.03	1,613,732	3,113,272	5,854,294	10,989,785	15,576,488	37,147,570
National	efficacy=0.4	Sustain	severe case=0.01	2,367,817	5,067,482	10,597,250	22,128,427	34,864,475	75,025,452
National	efficacy=0.4	Sustain	severe case=0.03	2,745,218	5,875,178	12,286,324	25,655,431	40,421,451	86,983,602
National	efficacy=0.4	No change	severe case=0.01	2,180,778	4,592,719	9,447,654	19,405,290	30,077,003	65,703,443
National	efficacy=0.4	No change	severe case=0.03	2,528,368	5,324,742	10,953,496	22,498,258	34,870,914	76,175,778

Note: this table summarizes the averted cost of treatment due to reduced incidence for each year in this country; the last column is the sum of averted cost of treatment for all years.

Table B. Summary of costs, averted cases and averted deaths, and CER for Mozambique

Uptake	Efficacy	Griffin Scenario	Severity	Gross Cost Averted	Net Cost Of iMDA	Cases Averted	Deaths Averted	Scale-up costs	Net Cost Of iMDA/ Cases Averted	Net Cost Of iMDA/ Deaths Averted
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	11,852,572	27,486,288	1,129,488	1,576	39,338,860	24	17,443
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	13,741,729	25,597,131	1,129,488	1,576	39,338,860	23	16,245
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	8,535,934	30,802,926	813,430	1,039	39,338,860	38	29,639
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	9,896,458	29,442,402	813,430	1,039	39,338,860	36	28,330
Conservative	efficacy=0.2	Innovate	severe case=0.01	6,809,111	32,529,748	648,873	890	39,338,860	50	36,537
Conservative	efficacy=0.2	Innovate	severe case=0.03	7,894,402	31,444,458	648,873	890	39,338,860	48	35,318
Conservative	efficacy=0.2	Sustain	severe case=0.01	15,121,735	24,217,125	1,441,022	2,147	39,338,860	17	11,277
Conservative	efficacy=0.2	Sustain	severe case=0.03	17,531,956	21,806,904	1,441,022	2,147	39,338,860	15	10,155
Conservative	efficacy=0.2	No change	severe case=0.01	13,347,280	25,991,580	1,271,926	2,037	39,338,860	20	12,758
Conservative	efficacy=0.2	No change	severe case=0.03	15,474,675	23,864,184	1,271,926	2,037	39,338,860	19	11,714
Conservative	efficacy=0.4	Accelerate 1	severe case=0.01	23,682,291	15,656,568	2,256,798	3,148	39,338,860	7	4,973
Conservative	efficacy=0.4	Accelerate 1	severe case=0.03	27,456,962	11,881,898	2,256,798	3,148	39,338,860	5	3,774
Conservative	efficacy=0.4	Accelerate 2	severe case=0.01	17,055,100	22,283,760	1,625,262	2,076	39,338,860	14	10,731
Conservative	efficacy=0.4	Accelerate 2	severe case=0.03	19,773,476	19,565,383	1,625,262	2,076	39,338,860	12	9,422
Conservative	efficacy=0.4	Innovate	severe case=0.01	13,604,685	25,734,174	1,296,455	1,779	39,338,860	20	14,467
Conservative	efficacy=0.4	Innovate	severe case=0.03	15,773,108	23,565,752	1,296,455	1,779	39,338,860	18	13,248
Conservative	efficacy=0.4	Sustain	severe case=0.01	30,214,737	9,124,123	2,879,306	4,291	39,338,860	3	2,126
Conservative	efficacy=0.4	Sustain	severe case=0.03	35,030,601	4,308,259	2,879,306	4,291	39,338,860	1	1,004
Conservative	efficacy=0.4	No change	severe case=0.01	26,669,007	12,669,853	2,541,416	4,071	39,338,860	5	3,113
Conservative	efficacy=0.4	No change	severe case=0.03	30,919,724	8,419,136	2,541,416	4,071	39,338,860	3	2,068
Rapid	efficacy=0.2	Accelerate 1	severe case=0.01	26,916,586	63,130,295	2,565,010	3,562	90,046,881	25	17,725
Rapid	efficacy=0.2	Accelerate 1	severe case=0.03	31,206,765	58,840,116	2,565,010	3,562	90,046,881	23	16,520
Rapid	efficacy=0.2	Accelerate 2	severe case=0.01	19,166,188	70,880,693	1,826,437	2,314	90,046,881	39	30,626
Rapid	efficacy=0.2	Accelerate 2	severe case=0.03	22,221,046	67,825,835	1,826,437	2,314	90,046,881	37	29,306
Rapid	efficacy=0.2	Innovate	severe case=0.01	15,163,244	74,883,637	1,444,978	1,971	90,046,881	52	37,992
Rapid	efficacy=0.2	Innovate	severe case=0.03	17,580,081	72,466,800	1,444,978	1,971	90,046,881	50	36,765
Rapid	efficacy=0.2	Sustain	severe case=0.01	34,614,067	55,432,814	3,298,539	4,904	90,046,881	17	11,303
Rapid	efficacy=0.2	Sustain	severe case=0.03	40,131,131	49,915,750	3,298,539	4,904	90,046,881	15	10,178
Rapid	efficacy=0.2	No change	severe case=0.01	30,429,939	59,616,942	2,899,814	4,645	90,046,881	21	12,836
Rapid	efficacy=0.2	No change	severe case=0.03	35,280,103	54,766,778	2,899,814	4,645	90,046,881	19	11,792
Rapid	efficacy=0.4	Accelerate 1	severe case=0.01	53,706,758	36,340,123	5,117,972	7,107	90,046,881	7	5,114

Rapid	efficacy=0.4	Accelerate 1	severe case=0.03	62,266,966	27,779,915	5,117,972	7,107	90,046,881	5	3,909
Rapid	efficacy=0.4	Accelerate 2	severe case=0.01	38,240,577	51,806,304	3,644,127	4,618	90,046,881	14	11,220
Rapid	efficacy=0.4	Accelerate 2	severe case=0.03	44,335,663	45,711,218	3,644,127	4,618	90,046,881	13	9,900
Rapid	efficacy=0.4	Innovate	severe case=0.01	30,252,924	59,793,957	2,882,945	3,932	90,046,881	21	15,205
Rapid	efficacy=0.4	Innovate	severe case=0.03	35,074,874	54,972,007	2,882,945	3,932	90,046,881	19	13,979
Rapid	efficacy=0.4	Sustain	severe case=0.01	69,068,035	20,978,847	6,581,822	9,786	90,046,881	3	2,144
Rapid	efficacy=0.4	Sustain	severe case=0.03	80,076,644	9,970,237	6,581,822	9,786	90,046,881	2	1,019
Rapid	efficacy=0.4	No change	severe case=0.01	60,718,014	29,328,867	5,786,108	9,267	90,046,881	5	3,165
Rapid	efficacy=0.4	No change	severe case=0.03	70,395,731	19,651,150	5,786,108	9,267	90,046,881	3	2,120
National	efficacy=0.2	Accelerate 1	severe case=0.01	29,025,771	68,880,390	2,766,004	3,824	97,906,161	25	18,012
National	efficacy=0.2	Accelerate 1	severe case=0.03	33,652,128	64,254,033	2,766,004	3,824	97,906,161	23	16,802
National	efficacy=0.2	Accelerate 2	severe case=0.01	20,453,629	77,452,532	1,949,124	2,452	97,906,161	40	31,592
National	efficacy=0.2	Accelerate 2	severe case=0.03	23,713,690	74,192,471	1,949,124	2,452	97,906,161	38	30,262
National	efficacy=0.2	Innovate	severe case=0.01	16,062,862	81,843,299	1,530,707	2,077	97,906,161	53	39,399
National	efficacy=0.2	Innovate	severe case=0.03	18,623,088	79,283,073	1,530,707	2,077	97,906,161	52	38,166
National	efficacy=0.2	Sustain	severe case=0.01	37,607,792	60,298,369	3,583,825	5,317	97,906,161	17	11,341
National	efficacy=0.2	Sustain	severe case=0.03	43,602,020	54,304,141	3,583,825	5,317	97,906,161	15	10,214
National	efficacy=0.2	No change	severe case=0.01	32,935,623	64,970,538	3,138,592	5,027	97,906,161	21	12,924
National	efficacy=0.2	No change	severe case=0.03	38,185,163	59,720,998	3,138,592	5,027	97,906,161	19	11,880
National	efficacy=0.4	Accelerate 1	severe case=0.01	57,902,594	40,003,567	5,517,814	7,629	97,906,161	7	5,244
National	efficacy=0.4	Accelerate 1	severe case=0.03	67,131,567	30,774,594	5,517,814	7,629	97,906,161	6	4,034
National	efficacy=0.4	Accelerate 2	severe case=0.01	40,800,284	57,105,877	3,888,053	4,890	97,906,161	15	11,677
National	efficacy=0.4	Accelerate 2	severe case=0.03	47,303,356	50,602,805	3,888,053	4,890	97,906,161	13	10,347
National	efficacy=0.4	Innovate	severe case=0.01	32,040,674	65,865,487	3,053,308	4,144	97,906,161	22	15,896
National	efficacy=0.4	Innovate	severe case=0.03	37,147,570	60,758,591	3,053,308	4,144	97,906,161	20	14,664
National	efficacy=0.4	Sustain	severe case=0.01	75,025,452	22,880,710	7,149,532	10,606	97,906,161	3	2,157
National	efficacy=0.4	Sustain	severe case=0.03	86,983,602	10,922,560	7,149,532	10,606	97,906,161	2	1,030
National	efficacy=0.4	No change	severe case=0.01	65,703,443	32,202,718	6,261,194	10,028	97,906,161	5	3,211
National	efficacy=0.4	No change	severe case=0.03	76,175,778	21,730,383	6,261,194	10,028	97,906,161	3	2,167

Note: gross cost averted is the cost averted due to reduced cases from iMDA and their reduced treatment costs. NetCostOfiMDA is the scale-up cost of iMDA minus the gross cost averted cost due to iMDA. Note that, all numbers are summations over all years where the MDA is applied.

Table C. Scale up costs of Mozambique

Uptake	2023	2024	2025	2026	2027	Sum
Conservative	3,322,967	5,470,933	7,740,687	10,137,485	12,666,787	39,338,860
Rapid	3,322,967	10,258,000	17,592,470	25,343,712	33,529,731	90,046,881
National	3,322,967	6,838,667	14,073,976	28,964,243	44,706,309	97,906,161

Note: this table summarizes the cost of implementing iMDA for each year, which only depends on uptake levels. The last column is the sum of the cost for all years.

S7 File. Summary table results for Niger.

Table A. Averted financial costs due to ivermectin MDA for Niger

Uptake	Efficacy	Griffin Scenario	Severe case	2023	2024	2025	2026	2027	Sum
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	935,442	1,575,382	2,225,778	2,902,596	3,607,448	11,246,646
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	1,084,540	1,826,478	2,580,541	3,365,235	4,182,432	13,039,225
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	751,742	1,213,431	1,641,523	2,049,368	2,438,250	8,094,314
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	871,561	1,406,838	1,903,161	2,376,012	2,826,878	9,384,450
Conservative	efficacy=0.2	Innovate	severe case=0.01	645,851	1,012,276	1,328,722	1,609,392	1,857,624	6,453,865
Conservative	efficacy=0.2	Innovate	severe case=0.03	748,791	1,173,620	1,540,504	1,865,910	2,153,707	7,482,533
Conservative	efficacy=0.2	Sustain	severe case=0.01	1,098,696	1,909,049	2,784,823	3,750,021	4,812,771	14,355,360
Conservative	efficacy=0.2	Sustain	severe case=0.03	1,273,815	2,213,328	3,228,690	4,347,729	5,579,869	16,643,431
Conservative	efficacy=0.2	No change	severe case=0.01	1,011,908	1,730,362	2,483,218	3,289,457	4,152,892	12,667,836
Conservative	efficacy=0.2	No change	severe case=0.03	1,173,194	2,006,161	2,879,012	3,813,756	4,814,813	14,686,936
Conservative	efficacy=0.4	Accelerate 1	severe case=0.01	1,870,883	3,149,266	4,448,019	5,798,793	7,204,730	22,471,691
Conservative	efficacy=0.4	Accelerate 1	severe case=0.03	2,169,079	3,651,221	5,156,980	6,723,050	8,353,077	26,053,407
Conservative	efficacy=0.4	Accelerate 2	severe case=0.01	1,503,484	2,425,660	3,280,318	4,094,010	4,869,313	16,172,785
Conservative	efficacy=0.4	Accelerate 2	severe case=0.03	1,743,122	2,812,281	3,803,161	4,746,546	5,645,422	18,750,532
Conservative	efficacy=0.4	Innovate	severe case=0.01	1,291,701	2,023,518	2,655,168	3,214,956	3,709,598	12,894,942
Conservative	efficacy=0.4	Innovate	severe case=0.03	1,497,583	2,346,043	3,078,370	3,727,382	4,300,863	14,950,240
Conservative	efficacy=0.4	Sustain	severe case=0.01	2,197,392	3,816,340	5,565,362	7,492,042	9,612,419	28,683,556
Conservative	efficacy=0.4	Sustain	severe case=0.03	2,547,630	4,424,618	6,452,414	8,686,183	11,144,523	33,255,368
Conservative	efficacy=0.4	No change	severe case=0.01	2,023,816	3,459,106	4,962,551	6,571,777	8,294,267	25,311,517
Conservative	efficacy=0.4	No change	severe case=0.03	2,346,387	4,010,445	5,753,521	7,619,239	9,616,273	29,345,866
Rapid	efficacy=0.2	Accelerate 1	severe case=0.01	935,442	2,912,915	5,021,868	7,219,575	9,506,513	25,596,313
Rapid	efficacy=0.2	Accelerate 1	severe case=0.03	1,084,540	3,377,198	5,822,294	8,370,287	11,021,737	29,676,056
Rapid	efficacy=0.2	Accelerate 2	severe case=0.01	751,742	2,242,295	3,702,386	5,096,135	6,424,049	18,216,607
Rapid	efficacy=0.2	Accelerate 2	severe case=0.03	871,561	2,599,690	4,292,501	5,908,398	7,447,964	21,120,114
Rapid	efficacy=0.2	Innovate	severe case=0.01	645,851	1,869,761	2,996,136	4,001,361	4,893,537	14,406,646
Rapid	efficacy=0.2	Innovate	severe case=0.03	748,791	2,167,779	3,473,684	4,639,130	5,673,507	16,702,891
Rapid	efficacy=0.2	Sustain	severe case=0.01	1,098,696	3,531,399	6,284,720	9,328,936	12,684,703	32,928,454
Rapid	efficacy=0.2	Sustain	severe case=0.03	1,273,815	4,094,261	7,286,429	10,815,856	14,706,492	38,176,852
Rapid	efficacy=0.2	No change	severe case=0.01	1,011,908	3,200,158	5,603,378	8,182,488	10,944,686	28,942,618
Rapid	efficacy=0.2	No change	severe case=0.03	1,173,194	3,710,225	6,496,488	9,486,678	12,689,136	33,555,721
Rapid	efficacy=0.4	Accelerate 1	severe case=0.01	1,870,883	5,823,024	10,029,046	14,403,364	18,946,583	51,072,900
Rapid	efficacy=0.4	Accelerate 1	severe case=0.03	2,169,079	6,751,143	11,627,555	16,699,086	21,966,440	59,213,303

Rapid	efficacy=0.4	Accelerate 2	severe case=0.01	1,503,484	4,482,335	7,393,458	10,165,867	12,801,150	36,346,294
Rapid	efficacy=0.4	Accelerate 2	severe case=0.03	1,743,122	5,196,764	8,571,886	11,786,184	14,841,498	42,139,454
Rapid	efficacy=0.4	Innovate	severe case=0.01	1,291,701	3,737,585	5,982,837	7,981,343	9,750,185	28,743,651
Rapid	efficacy=0.4	Innovate	severe case=0.03	1,497,583	4,333,311	6,936,428	9,253,473	11,304,246	33,325,041
Rapid	efficacy=0.4	Sustain	severe case=0.01	2,197,392	7,059,501	12,551,635	18,613,113	25,283,611	65,705,253
Rapid	efficacy=0.4	Sustain	severe case=0.03	2,547,630	8,184,700	14,552,214	21,579,819	29,313,513	76,177,876
Rapid	efficacy=0.4	No change	severe case=0.01	2,023,816	6,397,281	11,190,618	16,325,058	21,814,093	57,750,866
Rapid	efficacy=0.4	No change	severe case=0.03	2,346,387	7,416,930	12,974,267	18,927,075	25,290,995	66,955,655
National	efficacy=0.2	Accelerate 1	severe case=0.01	935,442	1,957,534	4,000,766	8,168,101	12,596,760	27,658,602
National	efficacy=0.2	Accelerate 1	severe case=0.03	1,084,540	2,269,541	4,638,439	9,469,998	14,604,531	32,067,049
National	efficacy=0.2	Accelerate 2	severe case=0.01	751,742	1,507,392	2,949,056	5,763,056	8,509,807	19,481,054
National	efficacy=0.2	Accelerate 2	severe case=0.03	871,561	1,747,652	3,419,100	6,681,617	9,866,168	22,586,098
National	efficacy=0.2	Innovate	severe case=0.01	645,851	1,257,272	2,386,207	4,523,526	6,481,002	15,293,857
National	efficacy=0.2	Innovate	severe case=0.03	748,791	1,457,666	2,766,540	5,244,522	7,513,995	17,731,513
National	efficacy=0.2	Sustain	severe case=0.01	1,098,696	2,372,577	5,007,467	10,557,997	16,811,534	35,848,271
National	efficacy=0.2	Sustain	severe case=0.03	1,273,815	2,750,738	5,805,596	12,240,814	19,491,089	41,562,052
National	efficacy=0.2	No change	severe case=0.01	1,011,908	2,150,304	4,464,311	9,258,994	14,503,906	31,389,422
National	efficacy=0.2	No change	severe case=0.03	1,173,194	2,493,037	5,175,868	10,734,765	16,815,653	36,392,516
National	efficacy=0.4	Accelerate 1	severe case=0.01	1,870,883	3,913,197	7,993,615	16,303,864	25,094,274	55,175,833
National	efficacy=0.4	Accelerate 1	severe case=0.03	2,169,079	4,536,913	9,267,701	18,902,502	29,093,998	63,970,194
National	efficacy=0.4	Accelerate 2	severe case=0.01	1,503,484	3,013,281	5,892,014	11,502,263	16,949,551	38,860,593
National	efficacy=0.4	Accelerate 2	severe case=0.03	1,743,122	3,493,562	6,831,129	13,335,585	19,651,105	45,054,502
National	efficacy=0.4	Innovate	severe case=0.01	1,291,701	2,513,252	4,767,326	9,027,749	12,906,988	30,507,015
National	efficacy=0.4	Innovate	severe case=0.03	1,497,583	2,913,834	5,527,180	10,466,663	14,964,205	35,369,465
National	efficacy=0.4	Sustain	severe case=0.01	2,197,392	4,742,957	10,005,342	21,075,531	33,494,835	71,516,057
National	efficacy=0.4	Sustain	severe case=0.03	2,547,630	5,498,927	11,600,073	24,434,716	38,833,506	82,914,852
National	efficacy=0.4	No change	severe case=0.01	2,023,816	4,298,584	8,919,927	18,481,908	28,895,333	62,619,567
National	efficacy=0.4	No change	severe case=0.03	2,346,387	4,983,727	10,341,655	21,427,700	33,500,900	72,600,369

Note: this table summarizes the averted cost of treatment due to reduced incidence for each year in this country; the last column is the sum of averted cost of treatment for all years.

Table B. Summary of costs, averted cases and averted deaths, and CER for Niger

Uptake	Efficacy	Griffin Scenario	Severity	Gross Cost Averted	Net Cost Of iMDA	Cases Averted	Deaths Averted	Scale-up costs	Net Cost Of iMDA/ Cases Averted	Net Cost Of iMDA/ Deaths Averted
Rapid	efficacy=0.4	Accelerate 1	severe case=0.03	59,213,303	14,145,076	4,866,980	9,006	73,358,379	3	1,571
Rapid	efficacy=0.4	Accelerate 2	severe case=0.03	42,139,454	31,218,925	3,463,611	5,848	73,358,379	9	5,339
Rapid	efficacy=0.4	Innovate	severe case=0.03	33,325,041	40,033,337	2,739,119	4,979	73,358,379	15	8,041
Rapid	efficacy=0.4	Sustain	severe case=0.03	76,177,876	-2,819,498	6,261,366	12,407	73,358,379	-0	-227
Rapid	efficacy=0.4	No change	severe case=0.03	66,955,655	6,402,723	5,503,355	11,749	73,358,379	1	545
Rapid	efficacy=0.2	Accelerate 1	severe case=0.03	29,676,056	43,682,323	2,439,194	4,514	73,358,379	18	9,678
Rapid	efficacy=0.2	Accelerate 2	severe case=0.03	21,120,114	52,238,265	1,735,947	2,931	73,358,379	30	17,823
Rapid	efficacy=0.2	Innovate	severe case=0.03	16,702,891	56,655,488	1,372,878	2,495	73,358,379	41	22,703
Rapid	efficacy=0.2	Sustain	severe case=0.03	38,176,852	35,181,527	3,137,909	6,218	73,358,379	11	5,658
Rapid	efficacy=0.2	No change	severe case=0.03	33,555,721	39,802,658	2,758,080	5,888	73,358,379	14	6,760
National	efficacy=0.4	Sustain	severe case=0.03	82,914,852	-2,992,278	6,815,105	13,475	79,922,574	-0	-222
National	efficacy=0.4	No change	severe case=0.03	72,600,369	7,322,205	5,967,316	12,739	79,922,574	1	575
National	efficacy=0.2	Accelerate 1	severe case=0.03	32,067,049	47,855,525	2,635,720	4,856	79,922,574	18	9,855
National	efficacy=0.2	Accelerate 2	severe case=0.03	22,586,098	57,336,476	1,856,442	3,111	79,922,574	31	18,428
National	efficacy=0.2	Innovate	severe case=0.03	17,731,513	62,191,061	1,457,424	2,636	79,922,574	43	23,596
National	efficacy=0.2	Sustain	severe case=0.03	41,562,052	38,360,522	3,416,152	6,754	79,922,574	11	5,679
National	efficacy=0.2	No change	severe case=0.03	36,392,516	43,530,058	2,991,247	6,386	79,922,574	15	6,817
National	efficacy=0.2	Accelerate 1	severe case=0.03	63,970,194	15,952,381	5,257,968	9,687	79,922,574	3	1,647
National	efficacy=0.2	Accelerate 2	severe case=0.03	45,054,502	34,868,072	3,703,211	6,206	79,922,574	9	5,618
National	efficacy=0.2	Innovate	severe case=0.03	35,369,465	44,553,109	2,907,159	5,257	79,922,574	15	8,475
Conservative	efficacy=0.4	Accelerate 1	severe case=0.03	26,053,407	5,926,904	2,141,434	3,981	31,980,311	3	1,489
Conservative	efficacy=0.4	Accelerate 2	severe case=0.03	18,750,532	13,229,780	1,541,182	2,623	31,980,311	9	5,043
Conservative	efficacy=0.4	Innovate	severe case=0.03	14,950,240	17,030,071	1,228,820	2,247	31,980,311	14	7,580
Conservative	efficacy=0.4	Sustain	severe case=0.03	33,255,368	-1,275,057	2,733,392	5,429	31,980,311	-0	-235
Conservative	efficacy=0.4	No change	severe case=0.03	29,345,866	2,634,445	2,412,055	5,149	31,980,311	1	512
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	13,039,225	18,941,086	1,071,746	1,992	31,980,311	18	9,507
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	9,384,450	22,595,861	771,346	1,313	31,980,311	29	17,210
Conservative	efficacy=0.2	Innovate	severe case=0.03	7,482,533	24,497,778	615,019	1,124	31,980,311	40	21,787
Conservative	efficacy=0.2	Sustain	severe case=0.03	16,643,431	15,336,880	1,367,991	2,717	31,980,311	11	5,645
Conservative	efficacy=0.2	No change	severe case=0.03	14,686,936	17,293,375	1,207,178	2,577	31,980,311	14	6,710
Rapid	efficacy=0.4	Accelerate 1	severe case=0.01	51,072,900	22,285,478	4,866,980	9,006	73,358,379	5	2,475

Rapid	efficacy=0.4	Accelerate 2	severe case=0.01	36,346,294	37,012,085	3,463,611	5,848	73,358,379	11	6,329
Rapid	efficacy=0.4	Innovate	severe case=0.01	28,743,651	44,614,728	2,739,119	4,979	73,358,379	16	8,961
Rapid	efficacy=0.4	Sustain	severe case=0.01	65,705,253	7,653,125	6,261,366	12,407	73,358,379	1	617
Rapid	efficacy=0.4	No change	severe case=0.01	57,750,866	15,607,513	5,503,355	11,749	73,358,379	3	1,328
Rapid	efficacy=0.2	Accelerate 1	severe case=0.01	25,596,313	47,762,066	2,439,194	4,514	73,358,379	20	10,582
Rapid	efficacy=0.2	Accelerate 2	severe case=0.01	18,216,607	55,141,772	1,735,947	2,931	73,358,379	32	18,814
Rapid	efficacy=0.2	Innovate	severe case=0.01	14,406,646	58,951,733	1,372,878	2,495	73,358,379	43	23,624
Rapid	efficacy=0.2	Sustain	severe case=0.01	32,928,454	40,429,924	3,137,909	6,218	73,358,379	13	6,502
Rapid	efficacy=0.2	No change	severe case=0.01	28,942,618	44,415,761	2,758,080	5,888	73,358,379	16	7,543
National	efficacy=0.4	Sustain	severe case=0.01	71,516,057	8,406,517	6,815,105	13,475	79,922,574	1	624
National	efficacy=0.4	No change	severe case=0.01	62,619,567	17,303,007	5,967,316	12,739	79,922,574	3	1,358
National	efficacy=0.2	Accelerate 1	severe case=0.01	27,658,602	52,263,972	2,635,720	4,856	79,922,574	20	10,762
National	efficacy=0.2	Accelerate 2	severe case=0.01	19,481,054	60,441,521	1,856,442	3,111	79,922,574	33	19,426
National	efficacy=0.2	Innovate	severe case=0.01	15,293,857	64,628,717	1,457,424	2,636	79,922,574	44	24,521
National	efficacy=0.2	Sustain	severe case=0.01	35,848,271	44,074,303	3,416,152	6,754	79,922,574	13	6,525
National	efficacy=0.2	No change	severe case=0.01	31,389,422	48,533,152	2,991,247	6,386	79,922,574	16	7,600
National	efficacy=0.2	Accelerate 1	severe case=0.01	55,175,833	24,746,741	5,257,968	9,687	79,922,574	5	2,555
National	efficacy=0.2	Accelerate 2	severe case=0.01	38,860,593	41,061,981	3,703,211	6,206	79,922,574	11	6,616
National	efficacy=0.2	Innovate	severe case=0.01	30,507,015	49,415,559	2,907,159	5,257	79,922,574	17	9,400
Conservative	efficacy=0.4	Accelerate 1	severe case=0.01	22,471,691	9,508,620	2,141,434	3,981	31,980,311	4	2,389
Conservative	efficacy=0.4	Accelerate 2	severe case=0.01	16,172,785	15,807,526	1,541,182	2,623	31,980,311	10	6,026
Conservative	efficacy=0.4	Innovate	severe case=0.01	12,894,942	19,085,369	1,228,820	2,247	31,980,311	16	8,495
Conservative	efficacy=0.4	Sustain	severe case=0.01	28,683,556	3,296,755	2,733,392	5,429	31,980,311	1	607
Conservative	efficacy=0.4	No change	severe case=0.01	25,311,517	6,668,795	2,412,055	5,149	31,980,311	3	1,295
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	11,246,646	20,733,665	1,071,746	1,992	31,980,311	19	10,406
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	8,094,314	23,885,997	771,346	1,313	31,980,311	31	18,192
Conservative	efficacy=0.2	Innovate	severe case=0.01	6,453,865	25,526,446	615,019	1,124	31,980,311	42	22,702
Conservative	efficacy=0.2	Sustain	severe case=0.01	14,355,360	17,624,951	1,367,991	2,717	31,980,311	13	6,487
Conservative	efficacy=0.2	No change	severe case=0.01	12,667,836	19,312,475	1,207,178	2,577	31,980,311	16	7,494

Note: gross cost averted is the cost averted due to reduced cases from iMDA and their reduced treatment costs. NetCostOfiMDA is the scale-up cost of iMDA minus the gross cost averted cost due to iMDA. Note that, all numbers are summations over all years where the MDA is applied.

Table C. Scale up costs of Niger

Uptake	2023	2024	2025	2026	2027	Sum
Conservative	2,640,890	4,385,990	6,259,905	8,269,903	10,423,622	31,980,311
Rapid	2,640,890	8,223,732	14,227,056	20,674,758	27,591,942	73,358,379
National	2,640,890	5,482,488	11,381,645	23,628,295	36,789,256	79,922,574

Note: this table summarizes the cost of implementing iMDA for each year, which only depends on uptake levels. The last column is the sum of the cost for all years.

S8 File. Summary table results for Nigeria.**Table A.** Averted financial costs due to ivermectin MDA for Nigeria

Uptake	Efficacy	Griffin Scenario	Severe case	2023	2024	2025	2026	2027	Sum
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	6,306,947	10,502,354	14,667,814	18,907,547	23,227,781	73,612,443
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	7,312,198	12,176,302	17,005,686	21,921,181	26,930,009	85,345,376
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	5,068,406	8,089,515	10,817,791	13,349,886	15,699,847	53,025,445
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	5,876,249	9,378,886	12,542,017	15,477,696	18,202,213	61,477,060
Conservative	efficacy=0.2	Innovate	severe case=0.01	4,354,463	6,748,556	8,756,528	10,483,978	11,961,395	42,304,919
Conservative	efficacy=0.2	Innovate	severe case=0.03	5,048,511	7,824,194	10,152,212	12,154,997	13,867,897	49,047,812
Conservative	efficacy=0.2	Sustain	severe case=0.01	7,407,644	12,726,628	18,351,656	24,427,325	30,988,180	93,901,433
Conservative	efficacy=0.2	Sustain	severe case=0.03	8,588,333	14,755,099	21,276,688	28,320,745	35,927,321	108,868,187
Conservative	efficacy=0.2	No change	severe case=0.01	6,822,499	11,535,481	16,364,222	21,427,408	26,739,601	82,889,210
Conservative	efficacy=0.2	No change	severe case=0.03	7,909,922	13,374,097	18,972,481	24,842,677	31,001,570	96,100,748
Conservative	efficacy=0.4	Accelerate 1	severe case=0.01	12,613,893	20,994,617	29,312,041	37,772,910	46,389,311	147,082,772
Conservative	efficacy=0.4	Accelerate 1	severe case=0.03	14,624,395	24,340,905	33,984,026	43,793,456	53,783,206	170,525,988
Conservative	efficacy=0.4	Accelerate 2	severe case=0.01	10,136,812	16,170,921	21,617,398	26,668,624	31,352,853	105,946,607
Conservative	efficacy=0.4	Accelerate 2	severe case=0.03	11,752,498	18,748,370	25,062,950	30,919,280	36,350,118	122,833,216
Conservative	efficacy=0.4	Innovate	severe case=0.01	8,708,925	13,490,144	17,497,875	20,942,721	23,885,969	84,525,635
Conservative	efficacy=0.4	Innovate	severe case=0.03	10,097,023	15,640,310	20,286,825	24,280,737	27,693,104	97,997,999
Conservative	efficacy=0.4	Sustain	severe case=0.01	14,815,288	25,441,404	36,674,747	48,801,917	61,890,850	187,624,206
Conservative	efficacy=0.4	Sustain	severe case=0.03	17,176,666	29,496,456	42,520,258	56,580,352	71,755,503	217,529,237
Conservative	efficacy=0.4	No change	severe case=0.01	13,644,997	23,060,045	32,702,544	42,807,773	53,404,156	165,619,516
Conservative	efficacy=0.4	No change	severe case=0.03	15,819,845	26,735,538	37,914,935	49,630,814	61,916,133	192,017,265
Rapid	efficacy=0.2	Accelerate 1	severe case=0.01	6,306,947	19,415,985	33,091,007	47,025,459	61,207,576	167,046,974
Rapid	efficacy=0.2	Accelerate 1	severe case=0.03	7,312,198	22,510,658	38,365,314	54,520,749	70,963,324	193,672,242
Rapid	efficacy=0.2	Accelerate 2	severe case=0.01	5,068,406	14,946,098	24,396,790	33,194,804	41,361,960	118,968,057
Rapid	efficacy=0.2	Accelerate 2	severe case=0.03	5,876,249	17,328,325	28,285,343	38,485,654	47,954,556	137,930,128
Rapid	efficacy=0.2	Innovate	severe case=0.01	4,354,463	12,463,034	19,743,183	26,064,084	31,508,026	94,132,790
Rapid	efficacy=0.2	Innovate	severe case=0.03	5,048,511	14,449,491	22,890,008	30,218,384	36,530,024	109,136,418
Rapid	efficacy=0.2	Sustain	severe case=0.01	7,407,644	23,538,343	41,411,989	60,764,243	81,669,203	214,791,424
Rapid	efficacy=0.2	Sustain	severe case=0.03	8,588,333	27,290,071	48,012,560	70,449,329	94,686,287	249,026,581
Rapid	efficacy=0.2	No change	severe case=0.01	6,822,499	21,330,542	36,922,603	53,297,167	70,466,760	188,839,571
Rapid	efficacy=0.2	No change	severe case=0.03	7,909,922	24,730,372	42,807,620	61,792,091	81,698,310	218,938,316
Rapid	efficacy=0.4	Accelerate 1	severe case=0.01	12,613,893	38,813,048	66,084,083	93,815,070	121,982,253	333,308,348
Rapid	efficacy=0.4	Accelerate 1	severe case=0.03	14,624,395	44,999,379	76,617,087	108,768,059	141,424,750	386,433,670

Rapid	efficacy=0.4	Accelerate 2	severe case=0.01	10,136,812	29,876,991	48,718,165	66,215,587	82,418,031	237,365,586
Rapid	efficacy=0.4	Accelerate 2	severe case=0.03	11,752,498	34,639,022	56,483,252	76,769,551	95,554,469	275,198,792
Rapid	efficacy=0.4	Innovate	severe case=0.01	8,708,925	24,913,005	39,423,463	51,987,261	62,775,697	187,808,352
Rapid	efficacy=0.4	Innovate	severe case=0.03	10,097,023	28,883,837	45,707,087	60,273,402	72,781,385	217,742,733
Rapid	efficacy=0.4	Sustain	severe case=0.01	14,815,288	47,054,464	82,705,287	121,233,499	162,779,434	428,587,973
Rapid	efficacy=0.4	Sustain	severe case=0.03	17,176,666	54,554,377	95,887,510	140,556,654	188,724,508	496,899,715
Rapid	efficacy=0.4	No change	severe case=0.01	13,644,997	42,640,616	73,737,633	106,331,250	140,443,060	376,797,556
Rapid	efficacy=0.4	No change	severe case=0.03	15,819,845	49,437,015	85,490,520	123,279,166	162,827,986	436,854,532
National	efficacy=0.2	Accelerate 1	severe case=0.01	6,306,947	13,049,105	26,361,355	53,197,454	81,097,912	180,012,773
National	efficacy=0.2	Accelerate 1	severe case=0.03	7,312,198	15,128,975	30,563,037	61,676,485	94,023,938	208,704,633
National	efficacy=0.2	Accelerate 2	severe case=0.01	5,068,406	10,048,539	19,431,810	37,534,267	54,786,969	126,869,991
National	efficacy=0.2	Accelerate 2	severe case=0.03	5,876,249	11,650,154	22,529,006	43,516,775	63,519,350	147,091,534
National	efficacy=0.2	Innovate	severe case=0.01	4,354,463	8,381,264	15,723,252	29,461,585	41,725,789	99,646,353
National	efficacy=0.2	Innovate	severe case=0.03	5,048,511	9,717,136	18,229,348	34,157,406	48,376,376	115,528,777
National	efficacy=0.2	Sustain	severe case=0.01	7,407,644	15,815,690	32,994,288	68,761,835	108,231,428	233,210,885
National	efficacy=0.2	Sustain	severe case=0.03	8,588,333	18,336,519	38,253,178	79,721,641	125,482,209	270,381,881
National	efficacy=0.2	No change	severe case=0.01	6,822,499	14,334,070	29,415,557	60,301,991	93,375,607	204,249,723
National	efficacy=0.2	No change	severe case=0.03	7,909,922	16,618,747	34,104,042	69,913,399	108,258,550	236,804,660
National	efficacy=0.4	Accelerate 1	severe case=0.01	12,613,893	26,085,597	52,669,934	106,181,800	161,549,356	359,100,580
National	efficacy=0.4	Accelerate 1	severe case=0.03	14,624,395	30,243,326	61,064,885	123,105,895	187,298,370	416,336,872
National	efficacy=0.4	Accelerate 2	severe case=0.01	10,136,812	20,086,941	38,822,960	74,911,371	109,117,555	253,075,639
National	efficacy=0.4	Accelerate 2	severe case=0.03	11,752,498	23,288,556	45,010,870	86,851,338	126,509,575	293,412,837
National	efficacy=0.4	Innovate	severe case=0.01	8,708,925	16,753,819	31,412,578	58,795,959	83,093,206	198,764,487
National	efficacy=0.4	Innovate	severe case=0.03	10,097,023	19,424,175	36,419,363	68,167,325	96,337,258	230,445,144
National	efficacy=0.4	Sustain	severe case=0.01	14,815,288	31,616,564	65,924,631	137,257,031	215,627,581	465,241,096
National	efficacy=0.4	Sustain	severe case=0.03	17,176,666	36,655,862	76,432,220	159,134,143	249,996,011	539,394,903
National	efficacy=0.4	No change	severe case=0.01	13,644,997	28,654,494	58,773,151	120,366,223	186,018,555	407,457,420
National	efficacy=0.4	No change	severe case=0.03	15,819,845	33,221,674	68,140,881	139,551,144	215,667,664	472,401,207

Note: this table summarizes the averted cost of treatment due to reduced incidence for each year in this country; the last column is the sum of averted cost of treatment for all years.

Table B. Summary of costs, averted cases and averted deaths, and CER for Nigeria

Uptake	Efficacy	Griffin Scenario	Severity	Gross Cost Averted	Net Cost Of iMDA	Cases Averted	Deaths Averted	Scale-up costs	Net Cost Of iMDA/ Cases Averted	Net Cost Of iMDA/ Deaths Averted
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	73,612,443	181,899,403	7,014,880	10,242	255,511,846	26	17,760
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	85,345,376	170,166,470	7,014,880	10,242	255,511,846	24	16,615
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	53,025,445	202,486,401	5,053,047	6,757	255,511,846	40	29,967
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	61,477,060	194,034,786	5,053,047	6,757	255,511,846	38	28,716
Conservative	efficacy=0.2	Innovate	severe case=0.01	42,304,919	213,206,927	4,031,437	5,789	255,511,846	53	36,829
Conservative	efficacy=0.2	Innovate	severe case=0.03	49,047,812	206,464,034	4,031,437	5,789	255,511,846	51	35,665
Conservative	efficacy=0.2	Sustain	severe case=0.01	93,901,433	161,610,413	8,948,314	13,955	255,511,846	18	11,581
Conservative	efficacy=0.2	Sustain	severe case=0.03	108,868,187	146,643,659	8,948,314	13,955	255,511,846	16	10,508
Conservative	efficacy=0.2	No change	severe case=0.01	82,889,210	172,622,636	7,898,907	13,239	255,511,846	22	13,039
Conservative	efficacy=0.2	No change	severe case=0.03	96,100,748	159,411,098	7,898,907	13,239	255,511,846	20	12,041
Conservative	efficacy=0.4	Accelerate 1	severe case=0.01	147,082,772	108,429,074	14,016,217	20,464	255,511,846	8	5,299
Conservative	efficacy=0.4	Accelerate 1	severe case=0.03	170,525,988	84,985,858	14,016,217	20,464	255,511,846	6	4,153
Conservative	efficacy=0.4	Accelerate 2	severe case=0.01	105,946,607	149,565,239	10,096,156	13,500	255,511,846	15	11,079
Conservative	efficacy=0.4	Accelerate 2	severe case=0.03	122,833,216	132,678,630	10,096,156	13,500	255,511,846	13	9,828
Conservative	efficacy=0.4	Innovate	severe case=0.01	84,525,635	170,986,211	8,054,850	11,566	255,511,846	21	14,783
Conservative	efficacy=0.4	Innovate	severe case=0.03	97,997,999	157,513,847	8,054,850	11,566	255,511,846	20	13,618
Conservative	efficacy=0.4	Sustain	severe case=0.01	187,624,206	67,887,640	17,879,603	27,884	255,511,846	4	2,435
Conservative	efficacy=0.4	Sustain	severe case=0.03	217,529,237	37,982,609	17,879,603	27,884	255,511,846	2	1,362
Conservative	efficacy=0.4	No change	severe case=0.01	165,619,516	89,892,330	15,782,671	26,453	255,511,846	6	3,398
Conservative	efficacy=0.4	No change	severe case=0.03	192,017,265	63,494,581	15,782,671	26,453	255,511,846	4	2,400
Rapid	efficacy=0.2	Accelerate 1	severe case=0.01	167,046,974	417,402,451	15,918,701	23,133	584,449,425	26	18,044
Rapid	efficacy=0.2	Accelerate 1	severe case=0.03	193,672,242	390,777,183	15,918,701	23,133	584,449,425	25	16,893
Rapid	efficacy=0.2	Accelerate 2	severe case=0.01	118,968,057	465,481,367	11,337,032	15,035	584,449,425	41	30,960
Rapid	efficacy=0.2	Accelerate 2	severe case=0.03	137,930,128	446,519,297	11,337,032	15,035	584,449,425	39	29,699
Rapid	efficacy=0.2	Innovate	severe case=0.01	94,132,790	490,316,635	8,970,361	12,806	584,449,425	55	38,289
Rapid	efficacy=0.2	Innovate	severe case=0.03	109,136,418	475,313,006	8,970,361	12,806	584,449,425	53	37,117
Rapid	efficacy=0.2	Sustain	severe case=0.01	214,791,424	369,658,001	20,468,496	31,847	584,449,425	18	11,607
Rapid	efficacy=0.2	Sustain	severe case=0.03	249,026,581	335,422,844	20,468,496	31,847	584,449,425	16	10,532
Rapid	efficacy=0.2	No change	severe case=0.01	188,839,571	395,609,854	17,995,421	30,161	584,449,425	22	13,116
Rapid	efficacy=0.2	No change	severe case=0.03	218,938,316	365,511,108	17,995,421	30,161	584,449,425	20	12,119
Rapid	efficacy=0.4	Accelerate 1	severe case=0.01	333,308,348	251,141,077	31,762,538	46,156	584,449,425	8	5,441

Rapid	efficacy=0.4	Accelerate 1	severe case=0.03	386,433,670	198,015,755	31,762,538	46,156	584,449,425	6	4,290
Rapid	efficacy=0.4	Accelerate 2	severe case=0.01	237,365,586	347,083,838	22,619,696	29,997	584,449,425	15	11,571
Rapid	efficacy=0.4	Accelerate 2	severe case=0.03	275,198,792	309,250,633	22,619,696	29,997	584,449,425	14	10,309
Rapid	efficacy=0.4	Innovate	severe case=0.01	187,808,352	396,641,073	17,897,151	25,549	584,449,425	22	15,525
Rapid	efficacy=0.4	Innovate	severe case=0.03	217,742,733	366,706,692	17,897,151	25,549	584,449,425	20	14,353
Rapid	efficacy=0.4	Sustain	severe case=0.01	428,587,973	155,861,452	40,842,186	63,547	584,449,425	4	2,453
Rapid	efficacy=0.4	Sustain	severe case=0.03	496,899,715	87,549,710	40,842,186	63,547	584,449,425	2	1,378
Rapid	efficacy=0.4	No change	severe case=0.01	376,797,556	207,651,868	35,906,831	60,182	584,449,425	6	3,450
Rapid	efficacy=0.4	No change	severe case=0.03	436,854,532	147,594,893	35,906,831	60,182	584,449,425	4	2,452
National	efficacy=0.2	Accelerate 1	severe case=0.01	180,012,773	455,014,932	17,154,273	24,820	635,027,704	27	18,333
National	efficacy=0.2	Accelerate 1	severe case=0.03	208,704,633	426,323,072	17,154,273	24,820	635,027,704	25	17,177
National	efficacy=0.2	Accelerate 2	severe case=0.01	126,869,991	508,157,713	12,090,045	15,915	635,027,704	42	31,929
National	efficacy=0.2	Accelerate 2	severe case=0.03	147,091,534	487,936,170	12,090,045	15,915	635,027,704	40	30,658
National	efficacy=0.2	Innovate	severe case=0.01	99,646,353	535,381,351	9,495,775	13,486	635,027,704	56	39,698
National	efficacy=0.2	Innovate	severe case=0.03	115,528,777	519,498,927	9,495,775	13,486	635,027,704	55	38,521
National	efficacy=0.2	Sustain	severe case=0.01	233,210,885	401,816,820	22,223,774	34,502	635,027,704	18	11,646
National	efficacy=0.2	Sustain	severe case=0.03	270,381,881	364,645,823	22,223,774	34,502	635,027,704	16	10,569
National	efficacy=0.2	No change	severe case=0.01	204,249,723	430,777,981	19,463,928	32,623	635,027,704	22	13,205
National	efficacy=0.2	No change	severe case=0.03	236,804,660	398,223,044	19,463,928	32,623	635,027,704	20	12,207
National	efficacy=0.4	Accelerate 1	severe case=0.01	359,100,580	275,927,125	34,220,402	49,512	635,027,704	8	5,573
National	efficacy=0.4	Accelerate 1	severe case=0.03	416,336,872	218,690,833	34,220,402	49,512	635,027,704	6	4,417
National	efficacy=0.4	Accelerate 2	severe case=0.01	253,075,639	381,952,065	24,116,781	31,747	635,027,704	16	12,031
National	efficacy=0.4	Accelerate 2	severe case=0.03	293,412,837	341,614,868	24,116,781	31,747	635,027,704	14	10,761
National	efficacy=0.4	Innovate	severe case=0.01	198,764,487	436,263,217	18,941,213	26,900	635,027,704	23	16,218
National	efficacy=0.4	Innovate	severe case=0.03	230,445,144	404,582,560	18,941,213	26,900	635,027,704	21	15,040
National	efficacy=0.4	Sustain	severe case=0.01	465,241,096	169,786,609	44,335,037	68,829	635,027,704	4	2,467
National	efficacy=0.4	Sustain	severe case=0.03	539,394,903	95,632,802	44,335,037	68,829	635,027,704	2	1,389
National	efficacy=0.4	No change	severe case=0.01	407,457,420	227,570,285	38,828,556	65,079	635,027,704	6	3,497
National	efficacy=0.4	No change	severe case=0.03	472,401,207	162,626,497	38,828,556	65,079	635,027,704	4	2,499

Note: gross cost averted is the cost averted due to reduced cases from iMDA and their reduced treatment costs. NetCostOfiMDA is the scale-up cost of iMDA minus the gross cost averted cost due to iMDA. Note that, all numbers are summations over all years where the MDA is applied.

Table C. Scale up costs of Nigeria

Uptake	2023	2024	2025	2026	2027	Sum
Conservative	21,747,085	35,700,015	50,363,796	65,765,960	81,934,991	255,511,846
Rapid	21,747,085	66,937,527	114,463,172	164,414,900	216,886,741	584,449,425
National	21,747,085	44,625,018	91,570,537	187,902,743	289,182,321	635,027,704

Note: this table summarizes the cost of implementing iMDA for each year, which only depends on uptake levels. The last column is the sum of the cost for all years.

S9 File. Summary table results for Tanzania.

Table A. Averted financial costs due to ivermectin MDA for Tanzania

Uptake	Efficacy	Griffin Scenario	Severe case	2023	2024	2025	2026	2027	Sum
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	790,792	1,323,057	1,856,757	2,405,081	2,968,998	9,344,685
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	916,834	1,533,937	2,152,701	2,788,422	3,442,220	10,834,115
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	635,498	1,019,088	1,369,383	1,698,120	2,006,751	6,728,840
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	736,789	1,181,519	1,587,646	1,968,780	2,326,603	7,801,336
Conservative	efficacy=0.2	Innovate	severe case=0.01	545,981	850,155	1,108,449	1,333,565	1,528,893	5,367,043
Conservative	efficacy=0.2	Innovate	severe case=0.03	633,004	985,660	1,285,122	1,546,119	1,772,580	6,222,485
Conservative	efficacy=0.2	Sustain	severe case=0.01	928,802	1,603,272	2,323,097	3,107,229	3,960,965	11,923,365
Conservative	efficacy=0.2	Sustain	severe case=0.03	1,076,842	1,858,815	2,693,371	3,602,483	4,592,295	13,823,805
Conservative	efficacy=0.2	No change	severe case=0.01	855,434	1,453,211	2,071,506	2,725,622	3,417,893	10,523,665
Conservative	efficacy=0.2	No change	severe case=0.03	991,780	1,684,835	2,401,679	3,160,053	3,962,664	12,201,010
Conservative	efficacy=0.4	Accelerate 1	severe case=0.01	1,581,583	2,644,849	3,710,543	4,804,824	5,929,569	18,671,368
Conservative	efficacy=0.4	Accelerate 1	severe case=0.03	1,833,669	3,066,406	4,301,958	5,570,655	6,874,671	21,647,359
Conservative	efficacy=0.4	Accelerate 2	severe case=0.01	1,270,996	2,037,160	2,736,474	3,392,297	4,007,545	13,444,473
Conservative	efficacy=0.4	Accelerate 2	severe case=0.03	1,473,578	2,361,858	3,172,635	3,932,989	4,646,300	15,587,360
Conservative	efficacy=0.4	Innovate	severe case=0.01	1,091,962	1,699,437	2,214,985	2,663,936	3,053,103	10,723,423
Conservative	efficacy=0.4	Innovate	severe case=0.03	1,266,008	1,970,307	2,568,027	3,088,535	3,539,731	12,432,607
Conservative	efficacy=0.4	Sustain	severe case=0.01	1,857,604	3,205,059	4,642,596	6,207,783	7,911,055	23,824,096
Conservative	efficacy=0.4	Sustain	severe case=0.03	2,153,683	3,715,906	5,382,570	7,197,228	9,171,981	27,621,368
Conservative	efficacy=0.4	No change	severe case=0.01	1,710,868	2,905,053	4,139,750	5,445,289	6,826,241	21,027,201
Conservative	efficacy=0.4	No change	severe case=0.03	1,983,559	3,368,084	4,799,576	6,313,202	7,914,261	24,378,682
Rapid	efficacy=0.2	Accelerate 1	severe case=0.01	790,792	2,446,135	4,189,054	5,981,899	7,823,791	21,231,671
Rapid	efficacy=0.2	Accelerate 1	severe case=0.03	916,834	2,836,020	4,856,738	6,935,341	9,070,809	24,615,742
Rapid	efficacy=0.2	Accelerate 2	severe case=0.01	635,498	1,882,988	3,088,417	4,222,531	5,287,004	15,116,438
Rapid	efficacy=0.2	Accelerate 2	severe case=0.03	736,789	2,183,113	3,580,673	4,895,552	6,129,689	17,525,816
Rapid	efficacy=0.2	Innovate	severe case=0.01	545,981	1,570,154	2,499,301	3,315,453	4,027,423	11,958,312
Rapid	efficacy=0.2	Innovate	severe case=0.03	633,004	1,820,418	2,897,659	3,843,896	4,669,345	13,864,322
Rapid	efficacy=0.2	Sustain	severe case=0.01	928,802	2,965,501	5,242,445	7,729,589	10,439,336	27,305,673
Rapid	efficacy=0.2	Sustain	severe case=0.03	1,076,842	3,438,165	6,078,028	8,961,592	12,103,240	31,657,867
Rapid	efficacy=0.2	No change	severe case=0.01	855,434	2,687,345	4,674,113	6,779,712	9,007,362	24,003,966
Rapid	efficacy=0.2	No change	severe case=0.03	991,780	3,115,676	5,419,110	7,860,316	10,443,026	27,829,908
Rapid	efficacy=0.4	Accelerate 1	severe case=0.01	1,581,583	4,889,898	8,365,770	11,933,943	15,592,521	42,363,716
Rapid	efficacy=0.4	Accelerate 1	severe case=0.03	1,833,669	5,669,289	9,699,172	13,836,070	18,077,781	49,115,981

Rapid	efficacy=0.4	Accelerate 2	severe case=0.01	1,270,996	3,764,069	6,167,333	8,423,035	10,535,103	30,160,536
Rapid	efficacy=0.4	Accelerate 2	severe case=0.03	1,473,578	4,364,016	7,150,332	9,765,565	12,214,271	34,967,761
Rapid	efficacy=0.4	Innovate	severe case=0.01	1,091,962	3,138,671	4,990,677	6,613,070	8,024,275	23,858,655
Rapid	efficacy=0.4	Innovate	severe case=0.03	1,266,008	3,638,937	5,786,131	7,667,114	9,303,248	27,661,436
Rapid	efficacy=0.4	Sustain	severe case=0.01	1,857,604	5,928,215	10,469,938	15,421,837	20,807,575	54,485,168
Rapid	efficacy=0.4	Sustain	severe case=0.03	2,153,683	6,873,100	12,138,720	17,879,892	24,124,050	63,169,446
Rapid	efficacy=0.4	No change	severe case=0.01	1,710,868	5,372,124	9,334,673	13,526,123	17,952,341	47,896,128
Rapid	efficacy=0.4	No change	severe case=0.03	1,983,559	6,228,376	10,822,507	15,682,023	20,813,727	55,530,192
National	efficacy=0.2	Accelerate 1	severe case=0.01	790,792	1,643,937	3,337,199	6,767,348	10,366,583	22,905,859
National	efficacy=0.2	Accelerate 1	severe case=0.03	916,834	1,905,960	3,869,108	7,845,982	12,018,891	26,556,776
National	efficacy=0.2	Accelerate 2	severe case=0.01	635,498	1,265,917	2,459,944	4,774,780	7,003,263	16,139,402
National	efficacy=0.2	Accelerate 2	severe case=0.03	736,789	1,467,688	2,852,030	5,535,822	8,119,498	18,711,827
National	efficacy=0.2	Innovate	severe case=0.01	545,981	1,055,869	1,990,456	3,747,830	5,333,664	12,673,801
National	efficacy=0.2	Innovate	severe case=0.03	633,004	1,224,162	2,307,711	4,345,189	6,183,786	14,693,852
National	efficacy=0.2	Sustain	severe case=0.01	928,802	1,992,480	4,176,906	8,747,355	13,835,070	29,680,613
National	efficacy=0.2	Sustain	severe case=0.03	1,076,842	2,310,058	4,842,655	10,141,578	16,040,213	34,411,344
National	efficacy=0.2	No change	severe case=0.01	855,434	1,805,821	3,723,850	7,671,144	11,936,043	25,992,292
National	efficacy=0.2	No change	severe case=0.03	991,780	2,093,647	4,317,387	8,893,831	13,838,504	30,135,149
National	efficacy=0.4	Accelerate 1	severe case=0.01	1,581,583	3,286,292	6,667,749	13,507,720	20,650,933	45,694,277
National	efficacy=0.4	Accelerate 1	severe case=0.03	1,833,669	3,810,087	7,730,508	15,660,687	23,942,442	52,977,393
National	efficacy=0.4	Accelerate 2	severe case=0.01	1,270,996	2,530,562	4,914,766	9,529,665	13,948,472	32,194,462
National	efficacy=0.4	Accelerate 2	severe case=0.03	1,473,578	2,933,903	5,698,121	11,048,579	16,171,690	37,325,870
National	efficacy=0.4	Innovate	severe case=0.01	1,091,962	2,110,647	3,976,639	7,479,557	10,621,742	25,280,547
National	efficacy=0.4	Innovate	severe case=0.03	1,266,008	2,447,058	4,610,467	8,671,708	12,314,719	29,309,961
National	efficacy=0.4	Sustain	severe case=0.01	1,857,604	3,983,103	8,345,757	17,460,956	27,563,889	59,211,309
National	efficacy=0.4	Sustain	severe case=0.03	2,153,683	4,617,962	9,675,970	20,244,022	31,957,239	68,648,876
National	efficacy=0.4	No change	severe case=0.01	1,710,868	3,609,931	7,440,399	15,312,190	23,778,889	51,852,277
National	efficacy=0.4	No change	severe case=0.03	1,983,559	4,185,310	8,626,309	17,752,768	27,568,957	60,116,903

Note: this table summarizes the averted cost of treatment due to reduced incidence for each year in this country; the last column is the sum of averted cost of treatment for all years.

Table B. Summary of costs, averted cases and averted deaths, and CER for Tanzania

Uptake	Efficacy	Griffin Scenario	Severity	Gross Cost Averted	Net Cost Of iMDA	Cases Averted	Deaths Averted	Scale-up costs	Net Cost Of iMDA/ Cases Averted	Net Cost Of iMDA/ Deaths Averted
Rapid	efficacy=0.4	Accelerate 1	severe case=0.03	49,115,981	125,437,567	4,037,040	10,778	174,553,547	31	11,639
Rapid	efficacy=0.4	Accelerate 2	severe case=0.03	34,967,761	139,585,786	2,874,141	7,002	174,553,547	49	19,936
Rapid	efficacy=0.4	Innovate	severe case=0.03	27,661,436	146,892,111	2,273,605	5,963	174,553,547	65	24,636
Rapid	efficacy=0.4	Sustain	severe case=0.03	63,169,446	111,384,102	5,192,151	14,842	174,553,547	21	7,505
Rapid	efficacy=0.4	No change	severe case=0.03	55,530,192	119,023,355	4,564,250	14,056	174,553,547	26	8,468
Rapid	efficacy=0.2	Accelerate 1	severe case=0.03	24,615,742	149,937,805	2,023,267	5,402	174,553,547	74	27,758
Rapid	efficacy=0.2	Accelerate 2	severe case=0.03	17,525,816	157,027,732	1,440,517	3,509	174,553,547	109	44,746
Rapid	efficacy=0.2	Innovate	severe case=0.03	13,864,322	160,689,225	1,139,564	2,989	174,553,547	141	53,768
Rapid	efficacy=0.2	Sustain	severe case=0.03	31,657,867	142,895,681	2,602,087	7,438	174,553,547	55	19,211
Rapid	efficacy=0.2	No change	severe case=0.03	27,829,908	146,723,640	2,287,452	7,044	174,553,547	64	20,829
National	efficacy=0.2	Accelerate 1	severe case=0.03	26,556,776	163,317,581	2,182,808	5,802	189,874,357	75	28,147
National	efficacy=0.2	Accelerate 2	severe case=0.03	18,711,827	171,162,530	1,538,000	3,719	189,874,357	111	46,020
National	efficacy=0.2	Innovate	severe case=0.03	14,693,852	175,180,506	1,207,747	3,151	189,874,357	145	55,592
National	efficacy=0.2	Sustain	severe case=0.03	34,411,344	155,463,013	2,828,407	8,068	189,874,357	55	19,270
National	efficacy=0.2	No change	severe case=0.03	30,135,149	159,739,208	2,476,929	7,628	189,874,357	64	20,942
National	efficacy=0.2	Accelerate 1	severe case=0.03	52,977,393	136,896,964	4,354,425	11,574	189,874,357	31	11,827
National	efficacy=0.2	Accelerate 2	severe case=0.03	37,325,870	152,548,487	3,067,963	7,419	189,874,357	50	20,562
National	efficacy=0.2	Innovate	severe case=0.03	29,309,961	160,564,396	2,409,104	6,286	189,874,357	67	25,545
National	efficacy=0.2	Sustain	severe case=0.03	68,648,876	121,225,481	5,642,527	16,094	189,874,357	21	7,532
National	efficacy=0.2	No change	severe case=0.03	60,116,903	129,757,454	4,941,250	15,217	189,874,357	26	8,527
Conservative	efficacy=0.4	Accelerate 1	severe case=0.03	21,647,359	54,573,815	1,779,284	4,772	76,221,174	31	11,435
Conservative	efficacy=0.4	Accelerate 2	severe case=0.03	15,587,360	60,633,814	1,281,188	3,147	76,221,174	47	19,268
Conservative	efficacy=0.4	Innovate	severe case=0.03	12,432,607	63,788,567	1,021,886	2,696	76,221,174	62	23,663
Conservative	efficacy=0.4	Sustain	severe case=0.03	27,621,368	48,599,806	2,270,311	6,505	76,221,174	21	7,471
Conservative	efficacy=0.4	No change	severe case=0.03	24,378,682	51,842,492	2,003,782	6,171	76,221,174	26	8,401
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	10,834,115	65,387,059	890,499	2,388	76,221,174	73	27,376
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	7,801,336	68,419,838	641,223	1,575	76,221,174	107	43,440
Conservative	efficacy=0.2	Innovate	severe case=0.03	6,222,485	69,998,690	511,451	1,349	76,221,174	137	51,882
Conservative	efficacy=0.2	Sustain	severe case=0.03	13,823,805	62,397,369	1,136,234	3,256	76,221,174	55	19,166
Conservative	efficacy=0.2	No change	severe case=0.03	12,201,010	64,020,164	1,002,850	3,088	76,221,174	64	20,730
Rapid	efficacy=0.4	Accelerate 1	severe case=0.01	42,363,716	132,189,831	4,037,040	10,778	174,553,547	33	12,265

Rapid	efficacy=0.4	Accelerate 2	severe case=0.01	30,160,536	144,393,011	2,874,141	7,002	174,553,547	50	20,623
Rapid	efficacy=0.4	Innovate	severe case=0.01	23,858,655	150,694,892	2,273,605	5,963	174,553,547	66	25,274
Rapid	efficacy=0.4	Sustain	severe case=0.01	54,485,168	120,068,379	5,192,151	14,842	174,553,547	23	8,090
Rapid	efficacy=0.4	No change	severe case=0.01	47,896,128	126,657,419	4,564,250	14,056	174,553,547	28	9,011
Rapid	efficacy=0.2	Accelerate 1	severe case=0.01	21,231,671	153,321,877	2,023,267	5,402	174,553,547	76	28,385
Rapid	efficacy=0.2	Accelerate 2	severe case=0.01	15,116,438	159,437,109	1,440,517	3,509	174,553,547	111	45,432
Rapid	efficacy=0.2	Innovate	severe case=0.01	11,958,312	162,595,236	1,139,564	2,989	174,553,547	143	54,406
Rapid	efficacy=0.2	Sustain	severe case=0.01	27,305,673	147,247,875	2,602,087	7,438	174,553,547	57	19,796
Rapid	efficacy=0.2	No change	severe case=0.01	24,003,966	150,549,582	2,287,452	7,044	174,553,547	66	21,372
National	efficacy=0.2	Accelerate 1	severe case=0.01	22,905,859	166,968,499	2,182,808	5,802	189,874,357	76	28,777
National	efficacy=0.2	Accelerate 2	severe case=0.01	16,139,402	173,734,956	1,538,000	3,719	189,874,357	113	46,712
National	efficacy=0.2	Innovate	severe case=0.01	12,673,801	177,200,556	1,207,747	3,151	189,874,357	147	56,233
National	efficacy=0.2	Sustain	severe case=0.01	29,680,613	160,193,744	2,828,407	8,068	189,874,357	57	19,856
National	efficacy=0.2	No change	severe case=0.01	25,992,292	163,882,065	2,476,929	7,628	189,874,357	66	21,485
National	efficacy=0.2	Accelerate 1	severe case=0.01	45,694,277	144,180,080	4,354,425	11,574	189,874,357	33	12,457
National	efficacy=0.2	Accelerate 2	severe case=0.01	32,194,462	157,679,895	3,067,963	7,419	189,874,357	51	21,254
National	efficacy=0.2	Innovate	severe case=0.01	25,280,547	164,593,810	2,409,104	6,286	189,874,357	68	26,186
National	efficacy=0.2	Sustain	severe case=0.01	59,211,309	130,663,048	5,642,527	16,094	189,874,357	23	8,119
National	efficacy=0.2	No change	severe case=0.01	51,852,277	138,022,081	4,941,250	15,217	189,874,357	28	9,070
Conservative	efficacy=0.4	Accelerate 1	severe case=0.01	18,671,368	57,549,806	1,779,284	4,772	76,221,174	32	12,059
Conservative	efficacy=0.4	Accelerate 2	severe case=0.01	13,444,473	62,776,701	1,281,188	3,147	76,221,174	49	19,949
Conservative	efficacy=0.4	Innovate	severe case=0.01	10,723,423	65,497,751	1,021,886	2,696	76,221,174	64	24,298
Conservative	efficacy=0.4	Sustain	severe case=0.01	23,824,096	52,397,079	2,270,311	6,505	76,221,174	23	8,055
Conservative	efficacy=0.4	No change	severe case=0.01	21,027,201	55,193,973	2,003,782	6,171	76,221,174	28	8,944
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	9,344,685	66,876,489	890,499	2,388	76,221,174	75	27,999
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	6,728,840	69,492,334	641,223	1,575	76,221,174	108	44,121
Conservative	efficacy=0.2	Innovate	severe case=0.01	5,367,043	70,854,131	511,451	1,349	76,221,174	139	52,517
Conservative	efficacy=0.2	Sustain	severe case=0.01	11,923,365	64,297,809	1,136,234	3,256	76,221,174	57	19,750
Conservative	efficacy=0.2	No change	severe case=0.01	10,523,665	65,697,509	1,002,850	3,088	76,221,174	66	21,273

Note: gross cost averted is the cost averted due to reduced cases from iMDA and their reduced treatment costs. NetCostOfiMDA is the scale-up cost of iMDA minus the gross cost averted cost due to iMDA. Note that, all numbers are summations over all years where the MDA is applied.

Table C. Scale up costs of Tanzania

Uptake	2023	2024	2025	2026	2027	Sum
Conservative	6,406,065	10,567,445	14,980,674	19,657,368	24,609,621	76,221,174
Rapid	6,406,065	19,813,959	34,046,987	49,143,421	65,143,115	174,553,547
National	6,406,065	13,209,306	27,237,590	56,163,910	86,857,486	189,874,357

Note: this table summarizes the cost of implementing iMDA for each year, which only depends on uptake levels. The last column is the sum of the cost for all years.

S10 File. Summary table results for Uganda.**Table A.** Averted financial costs due to ivermectin MDA for Uganda

Uptake	Efficacy	Griffin Scenario	Severe case	2023	2024	2025	2026	2027	Sum
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	1,437,470	2,418,585	3,413,828	4,447,633	5,522,359	17,239,875
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	1,666,585	2,804,079	3,957,951	5,156,532	6,402,557	19,987,703
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	1,155,183	1,862,908	2,517,719	3,140,241	3,732,533	12,408,584
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	1,339,306	2,159,833	2,919,013	3,640,758	4,327,453	14,386,362
Conservative	efficacy=0.2	Innovate	severe case=0.01	992,462	1,554,087	2,037,957	2,466,071	2,843,700	9,894,278
Conservative	efficacy=0.2	Innovate	severe case=0.03	1,150,649	1,801,790	2,362,783	2,859,133	3,296,951	11,471,306
Conservative	efficacy=0.2	Sustain	severe case=0.01	1,688,339	2,930,841	4,271,269	5,746,131	7,367,483	22,004,064
Conservative	efficacy=0.2	Sustain	severe case=0.03	1,957,440	3,397,982	4,952,057	6,661,995	8,541,771	25,511,245
Conservative	efficacy=0.2	No change	severe case=0.01	1,554,973	2,656,517	3,808,678	5,040,415	6,357,332	19,417,915
Conservative	efficacy=0.2	No change	severe case=0.03	1,802,817	3,079,933	4,415,735	5,843,796	7,370,614	22,512,896
Conservative	efficacy=0.4	Accelerate 1	severe case=0.01	2,874,939	4,834,871	6,822,225	8,885,451	11,029,139	34,446,625
Conservative	efficacy=0.4	Accelerate 1	severe case=0.03	3,333,170	5,605,491	7,909,606	10,301,685	12,787,051	39,937,001
Conservative	efficacy=0.4	Accelerate 2	severe case=0.01	2,310,367	3,723,967	5,031,251	6,273,235	7,454,051	24,792,871
Conservative	efficacy=0.4	Accelerate 2	severe case=0.03	2,678,611	4,317,523	5,833,172	7,273,113	8,642,136	28,744,555
Conservative	efficacy=0.4	Innovate	severe case=0.01	1,984,925	3,106,587	4,072,420	4,926,270	5,678,741	19,768,943
Conservative	efficacy=0.4	Innovate	severe case=0.03	2,301,298	3,601,739	4,721,514	5,711,458	6,583,864	22,919,874
Conservative	efficacy=0.4	Sustain	severe case=0.01	3,376,678	5,858,981	8,535,960	11,479,993	14,714,858	43,966,470
Conservative	efficacy=0.4	Sustain	severe case=0.03	3,914,879	6,792,832	9,896,489	13,309,765	17,060,229	50,974,194
Conservative	efficacy=0.4	No change	severe case=0.01	3,109,947	5,310,545	7,611,393	10,069,884	12,697,016	38,798,785
Conservative	efficacy=0.4	No change	severe case=0.03	3,605,635	6,156,982	8,824,557	11,674,902	14,720,767	44,982,843
Rapid	efficacy=0.2	Accelerate 1	severe case=0.01	1,437,470	4,471,958	7,702,325	11,062,461	14,552,709	39,226,923
Rapid	efficacy=0.2	Accelerate 1	severe case=0.03	1,666,585	5,184,734	8,929,983	12,825,683	16,872,234	45,479,220
Rapid	efficacy=0.2	Accelerate 2	severe case=0.01	1,155,183	3,442,413	5,678,567	7,808,754	9,834,043	27,918,959
Rapid	efficacy=0.2	Accelerate 2	severe case=0.03	1,339,306	3,991,092	6,583,661	9,053,375	11,401,470	32,368,903
Rapid	efficacy=0.2	Innovate	severe case=0.01	992,462	2,870,494	4,595,354	6,131,249	7,491,118	22,080,677
Rapid	efficacy=0.2	Innovate	severe case=0.03	1,150,649	3,328,016	5,327,798	7,108,496	8,685,111	25,600,070
Rapid	efficacy=0.2	Sustain	severe case=0.01	1,688,339	5,421,463	9,639,225	14,294,593	19,417,906	50,461,526
Rapid	efficacy=0.2	Sustain	severe case=0.03	1,957,440	6,285,578	11,175,601	16,572,979	22,512,886	58,504,483
Rapid	efficacy=0.2	No change	severe case=0.01	1,554,973	4,912,938	8,594,215	12,537,914	16,754,275	44,354,316
Rapid	efficacy=0.2	No change	severe case=0.03	1,802,817	5,696,001	9,964,029	14,536,306	19,424,704	51,423,858
Rapid	efficacy=0.4	Accelerate 1	severe case=0.01	2,874,939	8,939,604	15,382,097	22,070,036	29,003,605	78,270,280
Rapid	efficacy=0.4	Accelerate 1	severe case=0.03	3,333,170	10,364,469	17,833,817	25,587,732	33,626,429	90,745,617

Rapid	efficacy=0.4	Accelerate 2	severe case=0.01	2,310,367	6,881,360	11,339,765	15,577,010	19,596,146	55,704,648
Rapid	efficacy=0.4	Accelerate 2	severe case=0.03	2,678,611	7,978,166	13,147,187	18,059,798	22,719,535	64,583,296
Rapid	efficacy=0.4	Innovate	severe case=0.01	1,984,925	5,738,010	9,176,222	12,229,708	14,925,710	44,054,575
Rapid	efficacy=0.4	Innovate	severe case=0.03	2,301,298	6,652,580	10,638,801	14,178,976	17,304,687	51,076,341
Rapid	efficacy=0.4	Sustain	severe case=0.01	3,376,678	10,837,860	19,251,115	28,520,537	38,704,346	100,690,536
Rapid	efficacy=0.4	Sustain	severe case=0.03	3,914,879	12,565,284	22,319,510	33,066,366	44,873,351	116,739,390
Rapid	efficacy=0.4	No change	severe case=0.01	3,109,947	9,821,212	17,163,656	25,014,604	33,393,198	88,502,616
Rapid	efficacy=0.4	No change	severe case=0.03	3,605,635	11,386,594	19,899,335	29,001,629	38,715,670	102,608,864
National	efficacy=0.2	Accelerate 1	severe case=0.01	1,437,470	3,005,263	6,136,179	12,515,753	19,283,182	42,377,846
National	efficacy=0.2	Accelerate 1	severe case=0.03	1,666,585	3,484,266	7,114,211	14,510,613	22,356,688	49,132,363
National	efficacy=0.2	Accelerate 2	severe case=0.01	1,155,183	2,314,195	4,523,123	8,830,578	13,026,871	29,849,951
National	efficacy=0.2	Accelerate 2	severe case=0.03	1,339,306	2,683,050	5,244,054	10,238,066	15,103,197	34,607,672
National	efficacy=0.2	Innovate	severe case=0.01	992,462	1,930,204	3,659,854	6,931,285	9,921,171	23,434,976
National	efficacy=0.2	Innovate	severe case=0.03	1,150,649	2,237,855	4,243,191	8,036,048	11,502,486	27,170,228
National	efficacy=0.2	Sustain	severe case=0.01	1,688,339	3,642,447	7,680,202	16,177,712	25,735,156	54,923,855
National	efficacy=0.2	Sustain	severe case=0.03	1,957,440	4,223,010	8,904,333	18,756,243	29,837,028	63,678,054
National	efficacy=0.2	No change	severe case=0.01	1,554,973	3,301,208	6,847,139	14,187,292	22,202,640	48,093,253
National	efficacy=0.2	No change	severe case=0.03	1,802,817	3,827,381	7,938,490	16,448,575	25,741,473	55,758,736
National	efficacy=0.4	Accelerate 1	severe case=0.01	2,874,939	6,007,652	12,260,204	24,981,906	38,414,290	84,538,991
National	efficacy=0.4	Accelerate 1	severe case=0.03	3,333,170	6,965,199	14,214,332	28,963,720	44,537,064	98,013,484
National	efficacy=0.4	Accelerate 2	severe case=0.01	2,310,367	4,626,079	9,036,883	17,624,578	25,946,385	59,544,292
National	efficacy=0.4	Accelerate 2	severe case=0.03	2,678,611	5,363,421	10,477,253	20,433,723	30,081,926	69,034,933
National	efficacy=0.4	Innovate	severe case=0.01	1,984,925	3,858,422	7,311,897	13,832,963	19,758,042	46,746,248
National	efficacy=0.4	Innovate	severe case=0.03	2,301,298	4,473,408	8,477,325	16,037,770	22,907,235	54,197,035
National	efficacy=0.4	Sustain	severe case=0.01	3,376,678	7,281,518	15,345,679	32,293,363	51,273,820	109,571,058
National	efficacy=0.4	Sustain	severe case=0.03	3,914,879	8,442,104	17,791,594	37,440,535	59,446,247	127,035,360
National	efficacy=0.4	No change	severe case=0.01	3,109,947	6,599,307	13,680,929	28,319,246	44,232,930	95,942,360
National	efficacy=0.4	No change	severe case=0.03	3,605,635	7,651,157	15,861,504	32,832,992	51,283,125	111,234,412

Note: this table summarizes the averted cost of treatment due to reduced incidence for each year in this country; the last column is the sum of averted cost of treatment for all years.

Table B. Summary of costs, averted cases and averted deaths, and CER for Uganda

Uptake	Efficacy	Griffin Scenario	Severity	Gross Cost Averted	Net Cost Of iMDA	Cases Averted	Deaths Averted	Scale-up costs	Net Cost Of iMDA/ Cases Averted	Net Cost Of iMDA/ Deaths Averted
Conservative	efficacy=0.2	Accelerate 1	severe case=0.01	17,239,875	43,202,800	1,642,870	1,529	60,442,675	26	28,262
Conservative	efficacy=0.2	Accelerate 1	severe case=0.03	19,987,703	40,454,972	1,642,870	1,529	60,442,675	25	26,465
Conservative	efficacy=0.2	Accelerate 2	severe case=0.01	12,408,584	48,034,091	1,182,473	1,007	60,442,675	41	47,678
Conservative	efficacy=0.2	Accelerate 2	severe case=0.03	14,386,362	46,056,313	1,182,473	1,007	60,442,675	39	45,715
Conservative	efficacy=0.2	Innovate	severe case=0.01	9,894,278	50,548,398	942,873	863	60,442,675	54	58,586
Conservative	efficacy=0.2	Innovate	severe case=0.03	11,471,306	48,971,369	942,873	863	60,442,675	52	56,758
Conservative	efficacy=0.2	Sustain	severe case=0.01	22,004,064	38,438,612	2,096,872	2,084	60,442,675	18	18,441
Conservative	efficacy=0.2	Sustain	severe case=0.03	25,511,245	34,931,430	2,096,872	2,084	60,442,675	17	16,759
Conservative	efficacy=0.2	No change	severe case=0.01	19,417,915	41,024,760	1,850,425	1,977	60,442,675	22	20,749
Conservative	efficacy=0.2	No change	severe case=0.03	22,512,896	37,929,780	1,850,425	1,977	60,442,675	20	19,184
Conservative	efficacy=0.4	Accelerate 1	severe case=0.01	34,446,625	25,996,050	3,282,583	3,054	60,442,675	8	8,511
Conservative	efficacy=0.4	Accelerate 1	severe case=0.03	39,937,001	20,505,674	3,282,583	3,054	60,442,675	6	6,714
Conservative	efficacy=0.4	Accelerate 2	severe case=0.01	24,792,871	35,649,804	2,362,631	2,013	60,442,675	15	17,710
Conservative	efficacy=0.4	Accelerate 2	severe case=0.03	28,744,555	31,698,120	2,362,631	2,013	60,442,675	13	15,747
Conservative	efficacy=0.4	Innovate	severe case=0.01	19,768,943	40,673,732	1,883,877	1,724	60,442,675	22	23,594
Conservative	efficacy=0.4	Innovate	severe case=0.03	22,919,874	37,522,801	1,883,877	1,724	60,442,675	20	21,766
Conservative	efficacy=0.4	Sustain	severe case=0.01	43,966,470	16,476,205	4,189,774	4,165	60,442,675	4	3,956
Conservative	efficacy=0.4	Sustain	severe case=0.03	50,974,194	9,468,481	4,189,774	4,165	60,442,675	2	2,273
Conservative	efficacy=0.4	No change	severe case=0.01	38,798,785	21,643,890	3,697,321	3,951	60,442,675	6	5,479
Conservative	efficacy=0.4	No change	severe case=0.03	44,982,843	15,459,833	3,697,321	3,951	60,442,675	4	3,913
Rapid	efficacy=0.2	Accelerate 1	severe case=0.01	39,226,923	99,387,821	3,738,120	3,462	138,614,744	27	28,707
Rapid	efficacy=0.2	Accelerate 1	severe case=0.03	45,479,220	93,135,524	3,738,120	3,462	138,614,744	25	26,901
Rapid	efficacy=0.2	Accelerate 2	severe case=0.01	27,918,959	110,695,785	2,660,530	2,248	138,614,744	42	49,235
Rapid	efficacy=0.2	Accelerate 2	severe case=0.03	32,368,903	106,245,841	2,660,530	2,248	138,614,744	40	47,256
Rapid	efficacy=0.2	Innovate	severe case=0.01	22,080,677	116,534,067	2,104,173	1,914	138,614,744	55	60,874
Rapid	efficacy=0.2	Innovate	severe case=0.03	25,600,070	113,014,674	2,104,173	1,914	138,614,744	54	59,036
Rapid	efficacy=0.2	Sustain	severe case=0.01	50,461,526	88,153,218	4,808,719	4,769	138,614,744	18	18,484
Rapid	efficacy=0.2	Sustain	severe case=0.03	58,504,483	80,110,261	4,808,719	4,769	138,614,744	17	16,797
Rapid	efficacy=0.2	No change	severe case=0.01	44,354,316	94,260,428	4,226,734	4,516	138,614,744	22	20,871
Rapid	efficacy=0.2	No change	severe case=0.03	51,423,858	87,190,886	4,226,734	4,516	138,614,744	21	19,306
Rapid	efficacy=0.4	Accelerate 1	severe case=0.01	78,270,280	60,344,464	7,458,747	6,908	138,614,744	8	8,736

Rapid	efficacy=0.4	Accelerate 1	severe case=0.03	90,745,617	47,869,127	7,458,747	6,908	138,614,744	6	6,930
Rapid	efficacy=0.4	Accelerate 2	severe case=0.01	55,704,648	82,910,096	5,308,361	4,486	138,614,744	16	18,483
Rapid	efficacy=0.4	Accelerate 2	severe case=0.03	64,583,296	74,031,448	5,308,361	4,486	138,614,744	14	16,504
Rapid	efficacy=0.4	Innovate	severe case=0.01	44,054,575	94,560,169	4,198,170	3,819	138,614,744	23	24,758
Rapid	efficacy=0.4	Innovate	severe case=0.03	51,076,341	87,538,403	4,198,170	3,819	138,614,744	21	22,920
Rapid	efficacy=0.4	Sustain	severe case=0.01	100,690,536	37,924,208	9,595,280	9,516	138,614,744	4	3,985
Rapid	efficacy=0.4	Sustain	severe case=0.03	116,739,390	21,875,354	9,595,280	9,516	138,614,744	2	2,299
Rapid	efficacy=0.4	No change	severe case=0.01	88,502,616	50,112,128	8,433,835	9,012	138,614,744	6	5,561
Rapid	efficacy=0.4	No change	severe case=0.03	102,608,864	36,005,880	8,433,835	9,012	138,614,744	4	3,996
National	efficacy=0.2	Accelerate 1	severe case=0.01	42,377,846	108,606,592	4,038,387	3,724	150,984,439	27	29,163
National	efficacy=0.2	Accelerate 1	severe case=0.03	49,132,363	101,852,076	4,038,387	3,724	150,984,439	25	27,349
National	efficacy=0.2	Accelerate 2	severe case=0.01	29,849,951	121,134,488	2,844,544	2,386	150,984,439	43	50,764
National	efficacy=0.2	Accelerate 2	severe case=0.03	34,607,672	116,376,767	2,844,544	2,386	150,984,439	41	48,771
National	efficacy=0.2	Innovate	severe case=0.01	23,434,976	127,549,463	2,233,230	2,021	150,984,439	57	63,100
National	efficacy=0.2	Innovate	severe case=0.03	27,170,228	123,814,211	2,233,230	2,021	150,984,439	55	61,252
National	efficacy=0.2	Sustain	severe case=0.01	54,923,855	96,060,584	5,233,955	5,180	150,984,439	18	18,546
National	efficacy=0.2	Sustain	severe case=0.03	63,678,054	87,306,385	5,233,955	5,180	150,984,439	17	16,856
National	efficacy=0.2	No change	severe case=0.01	48,093,253	102,891,186	4,583,035	4,897	150,984,439	22	21,011
National	efficacy=0.2	No change	severe case=0.03	55,758,736	95,225,703	4,583,035	4,897	150,984,439	21	19,446
National	efficacy=0.4	Accelerate 1	severe case=0.01	84,538,991	66,445,448	8,056,123	7,429	150,984,439	8	8,944
National	efficacy=0.4	Accelerate 1	severe case=0.03	98,013,484	52,970,955	8,056,123	7,429	150,984,439	7	7,130
National	efficacy=0.4	Accelerate 2	severe case=0.01	59,544,292	91,440,146	5,674,259	4,760	150,984,439	16	19,211
National	efficacy=0.4	Accelerate 2	severe case=0.03	69,034,933	81,949,506	5,674,259	4,760	150,984,439	14	17,217
National	efficacy=0.4	Innovate	severe case=0.01	46,746,248	104,238,191	4,454,672	4,032	150,984,439	23	25,853
National	efficacy=0.4	Innovate	severe case=0.03	54,197,035	96,787,404	4,454,672	4,032	150,984,439	22	24,005
National	efficacy=0.4	Sustain	severe case=0.01	109,571,058	41,413,381	10,441,547	10,333	150,984,439	4	4,008
National	efficacy=0.4	Sustain	severe case=0.03	127,035,360	23,949,079	10,441,547	10,333	150,984,439	2	2,318
National	efficacy=0.4	No change	severe case=0.01	95,942,360	55,042,079	9,142,804	9,769	150,984,439	6	5,634
National	efficacy=0.4	No change	severe case=0.03	111,234,412	39,750,027	9,142,804	9,769	150,984,439	4	4,069

Note: gross cost averted is the cost averted due to reduced cases from iMDA and their reduced treatment costs. NetCostOfiMDA is the scale-up cost of iMDA minus the gross cost averted cost due to iMDA. Note that, all numbers are summations over all years where the MDA is applied.

Table C. Scale up costs of Uganda

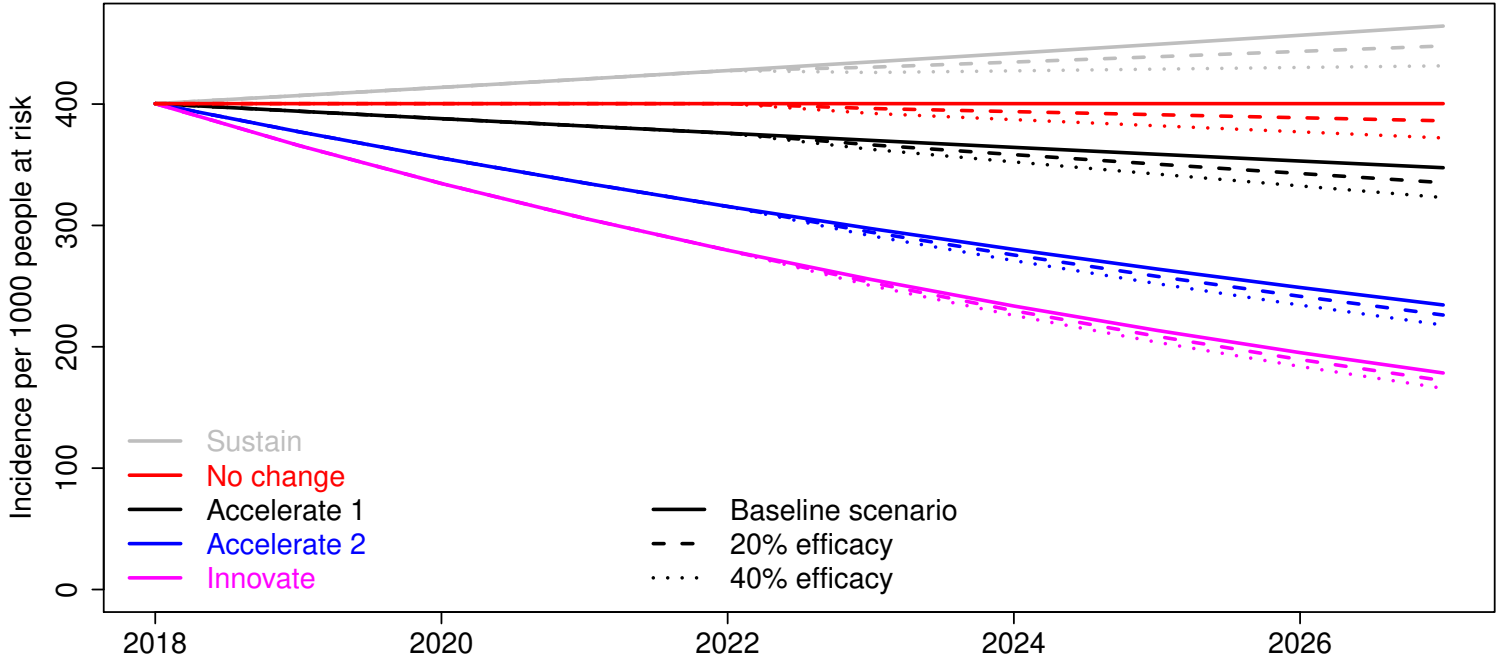
Uptake	2023	2024	2025	2026	2027	Sum
Conservative	5,003,833	8,302,359	11,838,126	15,624,174	19,674,183	60,442,675
Rapid	5,003,833	15,566,923	26,904,832	39,060,435	52,078,721	138,614,744
National	5,003,833	10,377,949	21,523,866	44,640,498	69,438,294	150,984,439

Note: this table summarizes the cost of implementing iMDA for each year, which only depends on uptake levels. The last column is the sum of the cost for all years.

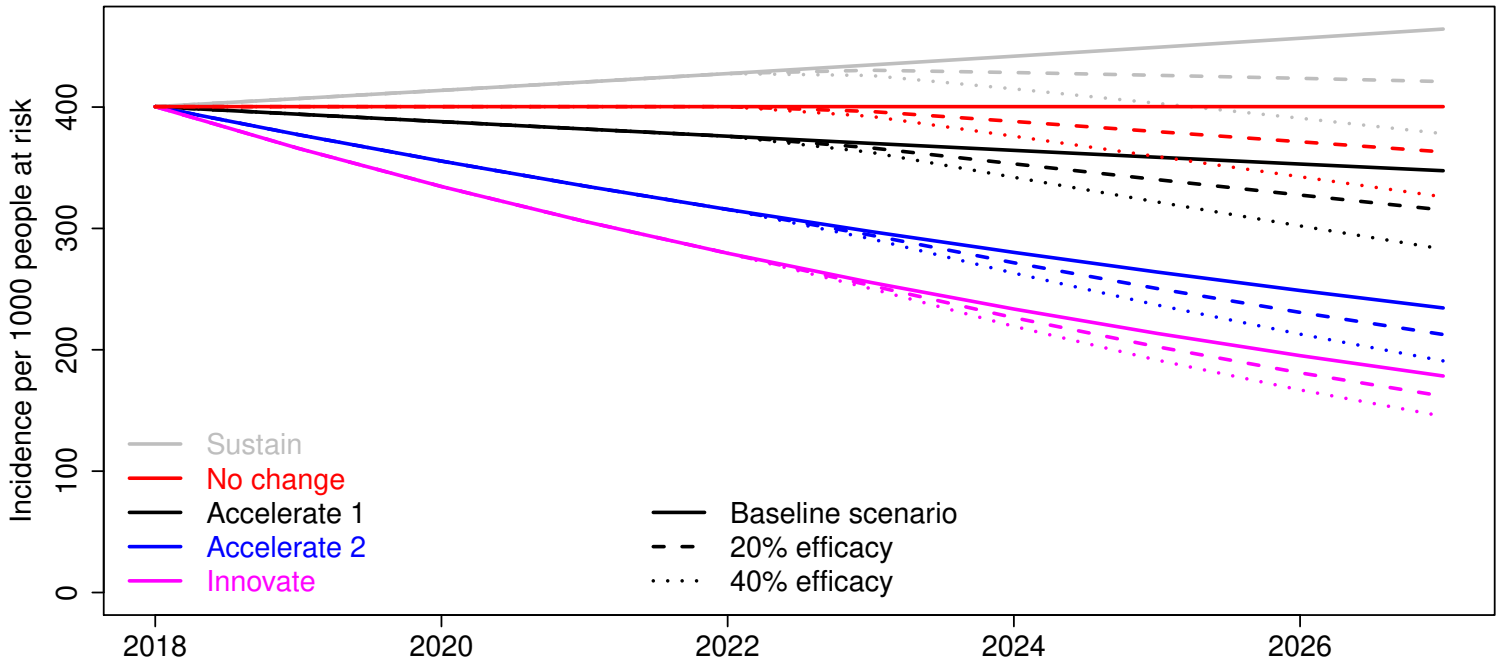
S10 File. Summary table results for Uganda.

Fig A. Simulated malaria incidence in Burkina Faso for different Griffin scenarios and uptake levels

Conservative Uptake



Rapid Uptake



National Uptake

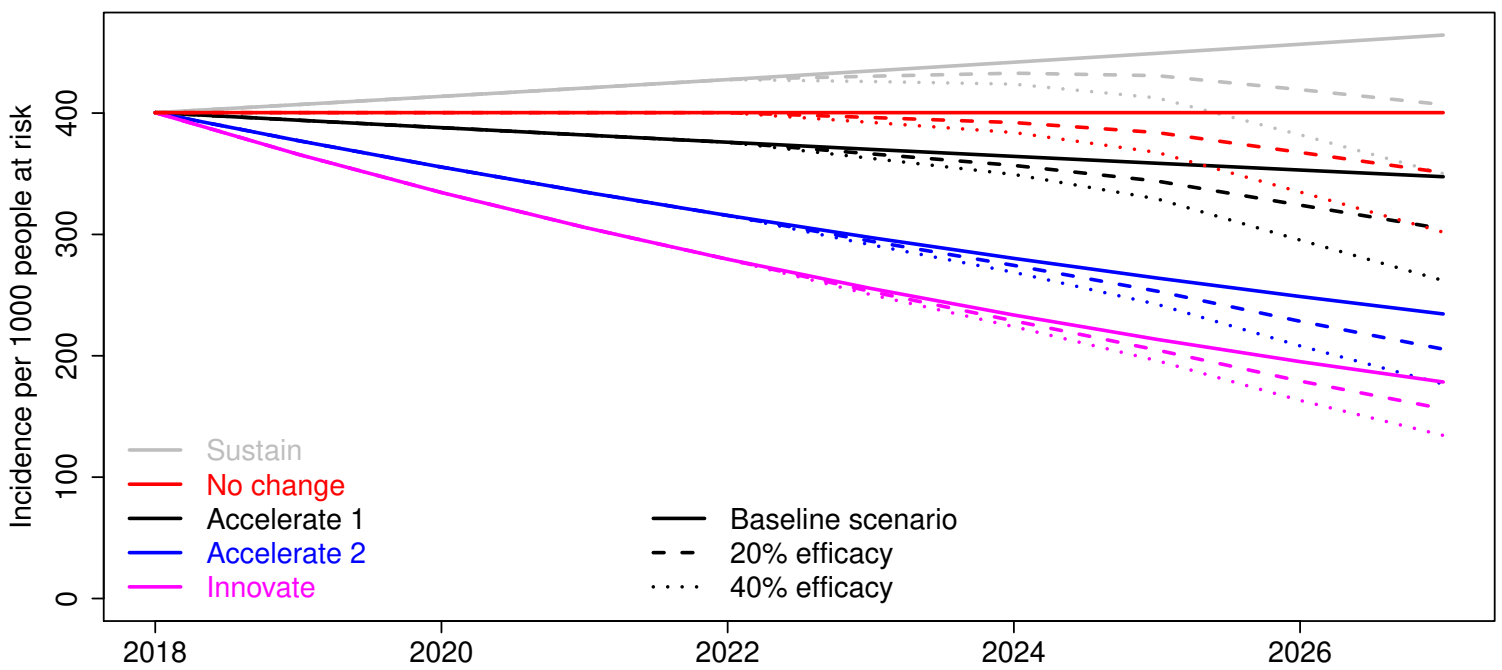


Fig B. Cumulative averted cases in Burkina Faso for different Griffin scenarios and uptake levels

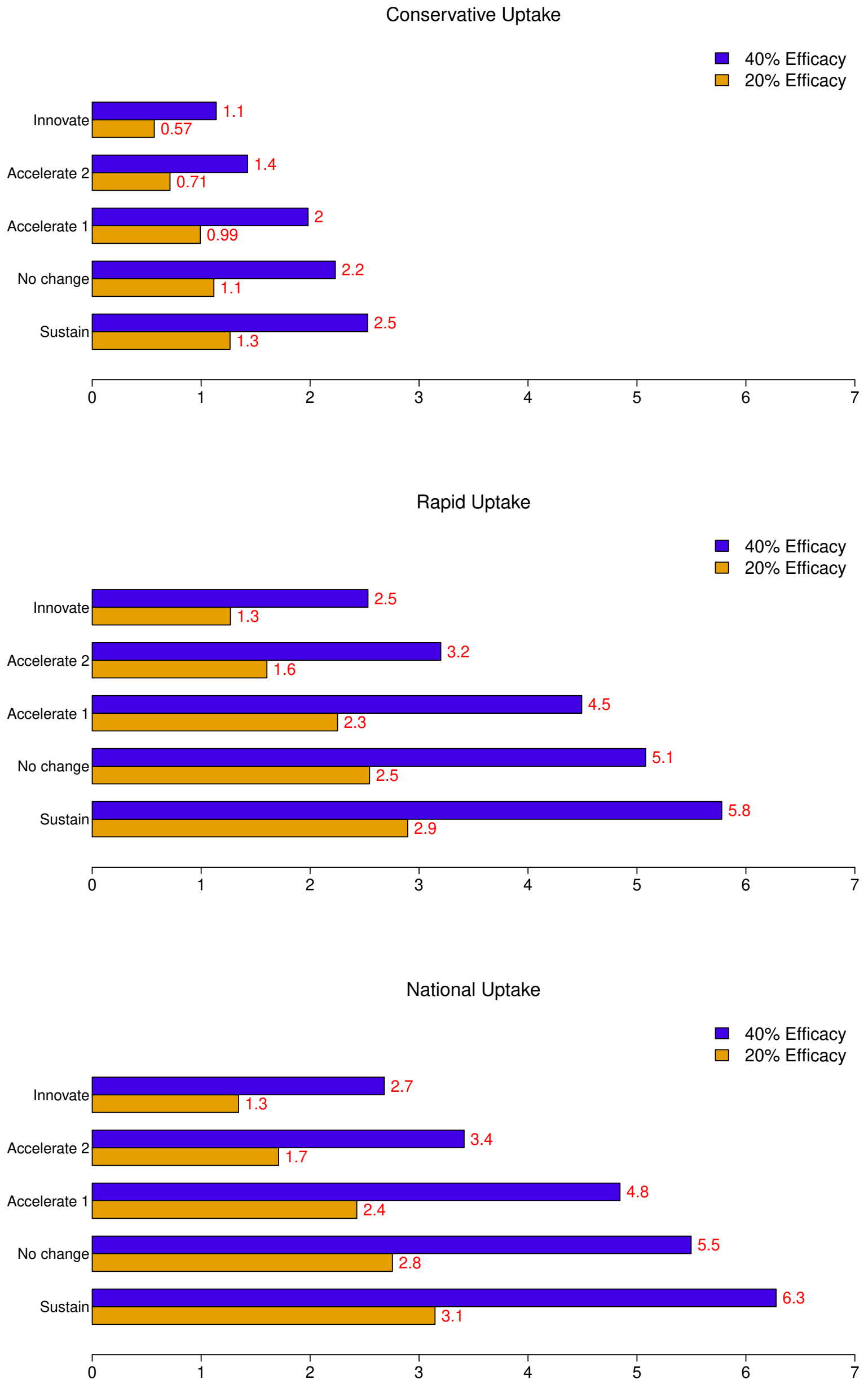


Fig C. Cumulative averted deaths in Burkina Faso for different Griffin scenarios and uptake levels

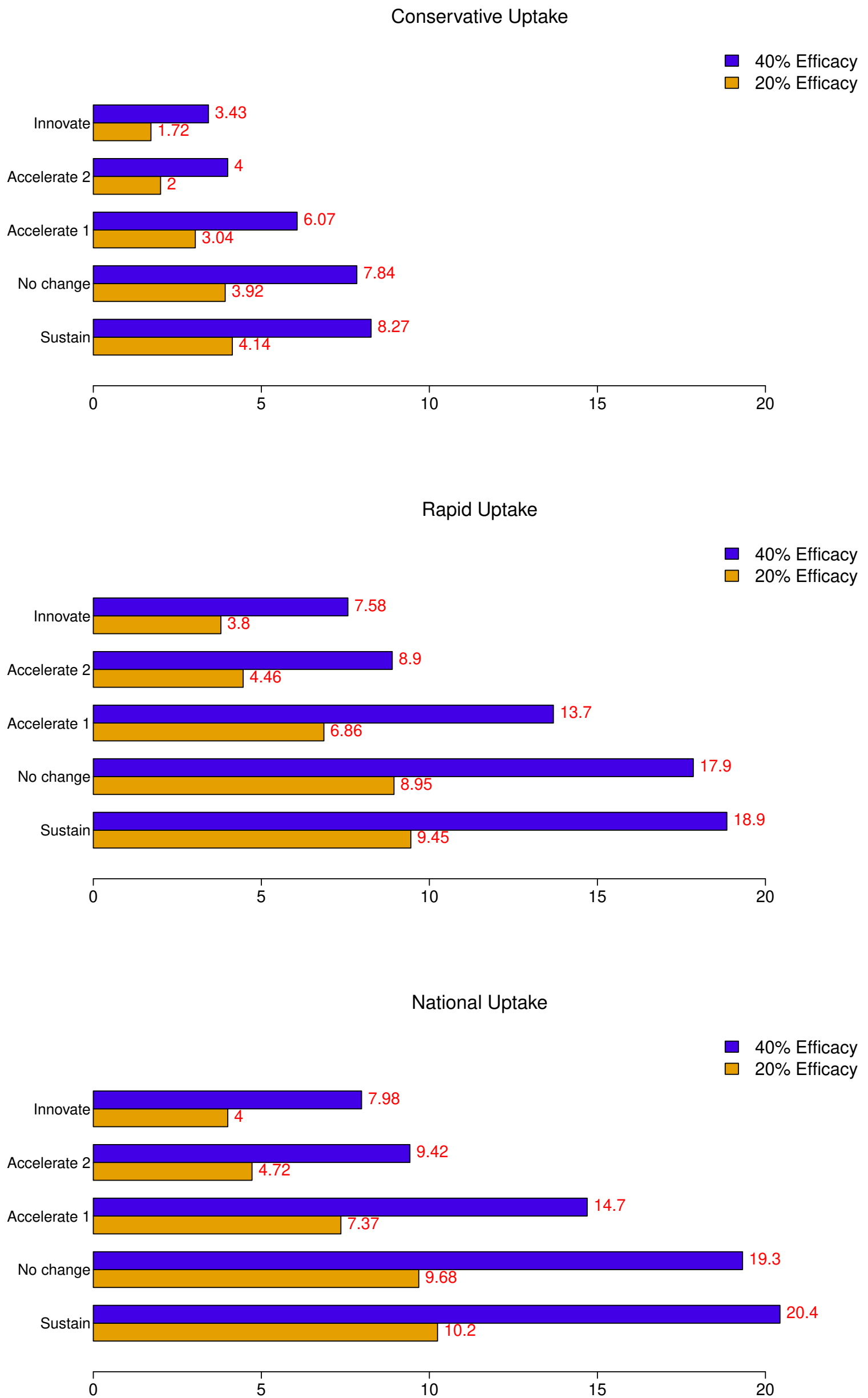


Fig D. Cumulative averted financial costs in Burkina Faso for different Griffin scenarios and uptake levels

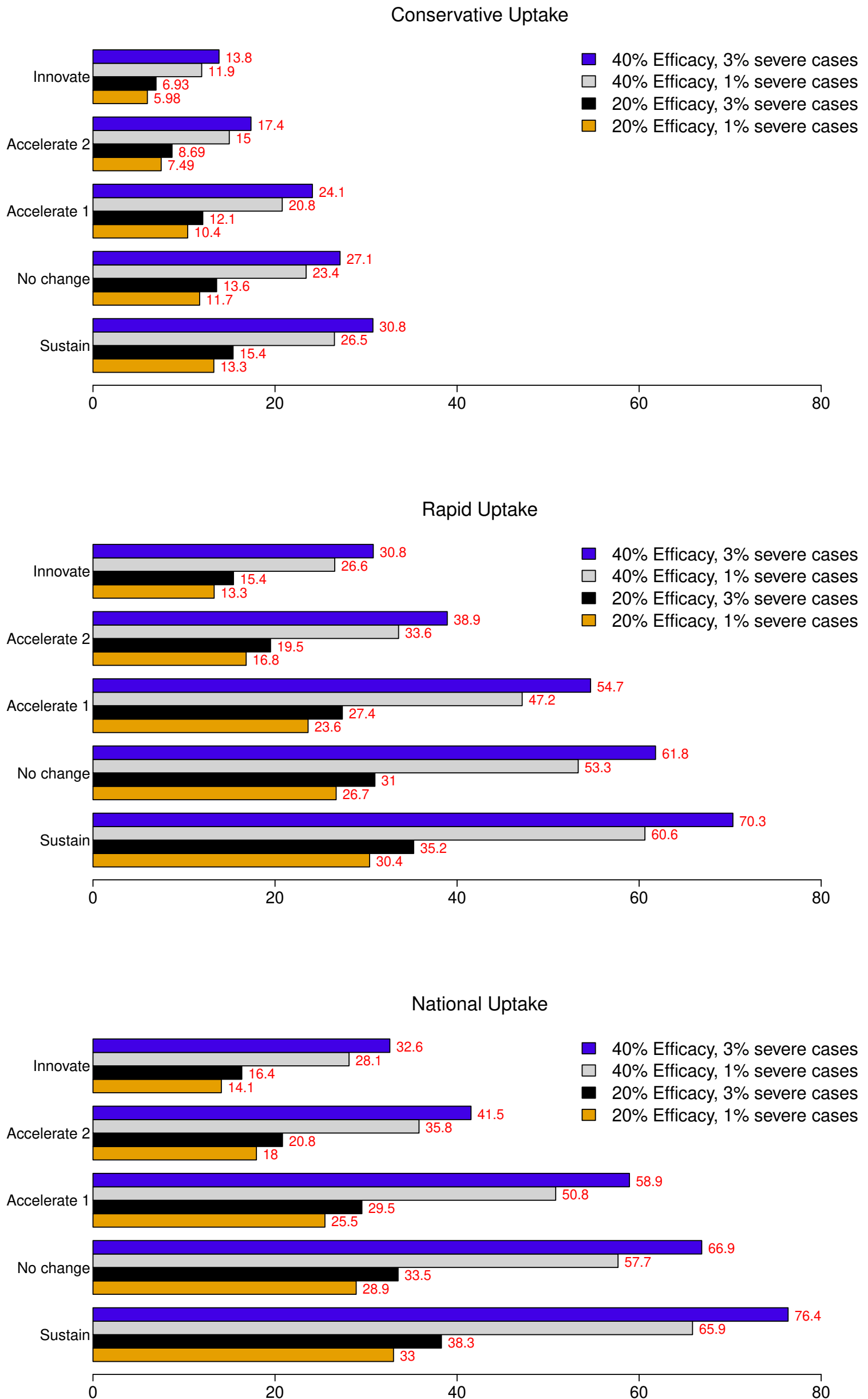
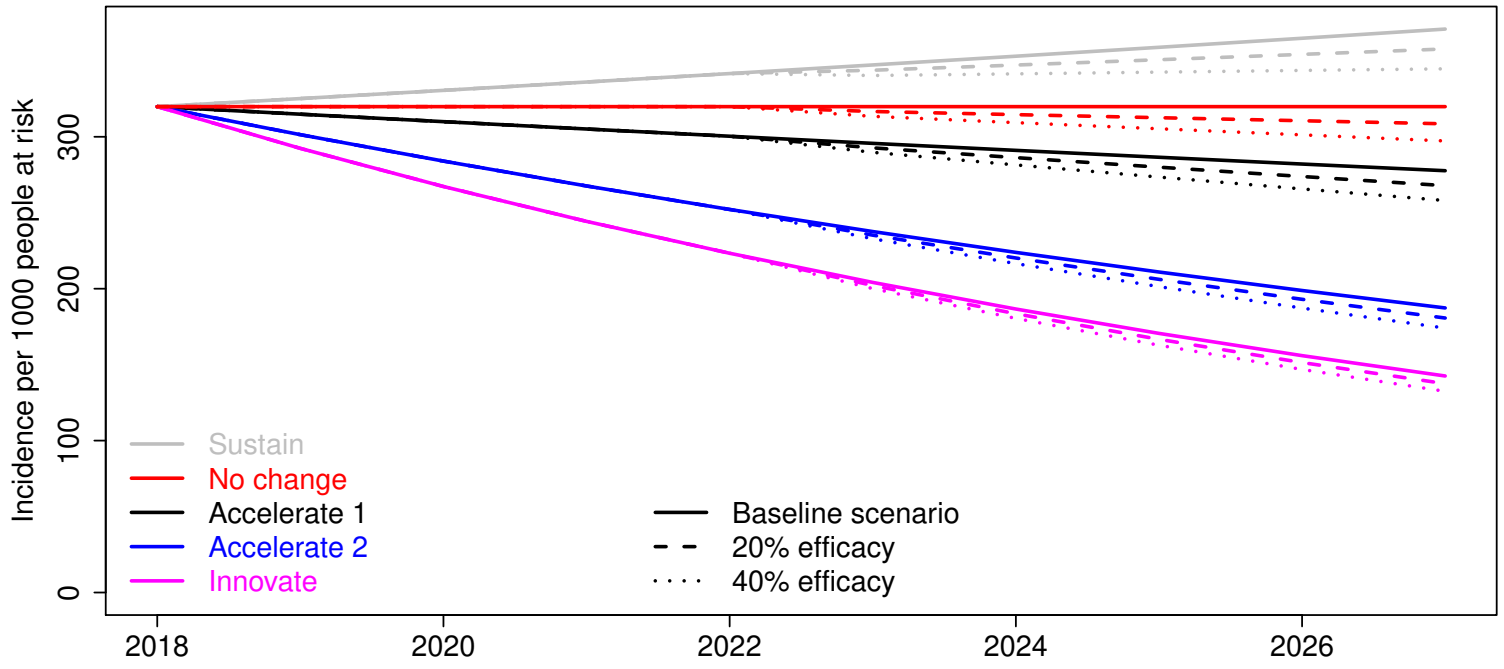
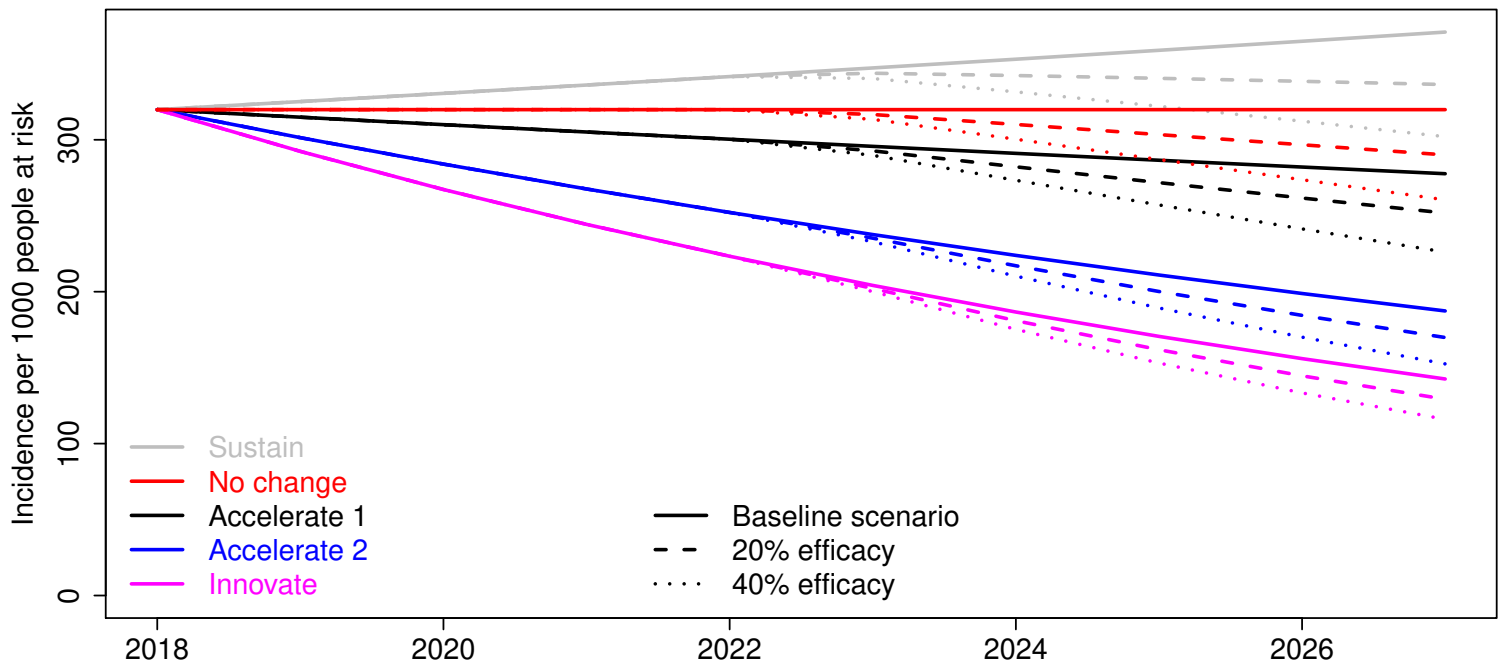


Fig A. Simulated malaria incidence in Dem. Rep. Congo for different Griffin scenarios and uptake levels

Conservative Uptake



Rapid Uptake



National Uptake

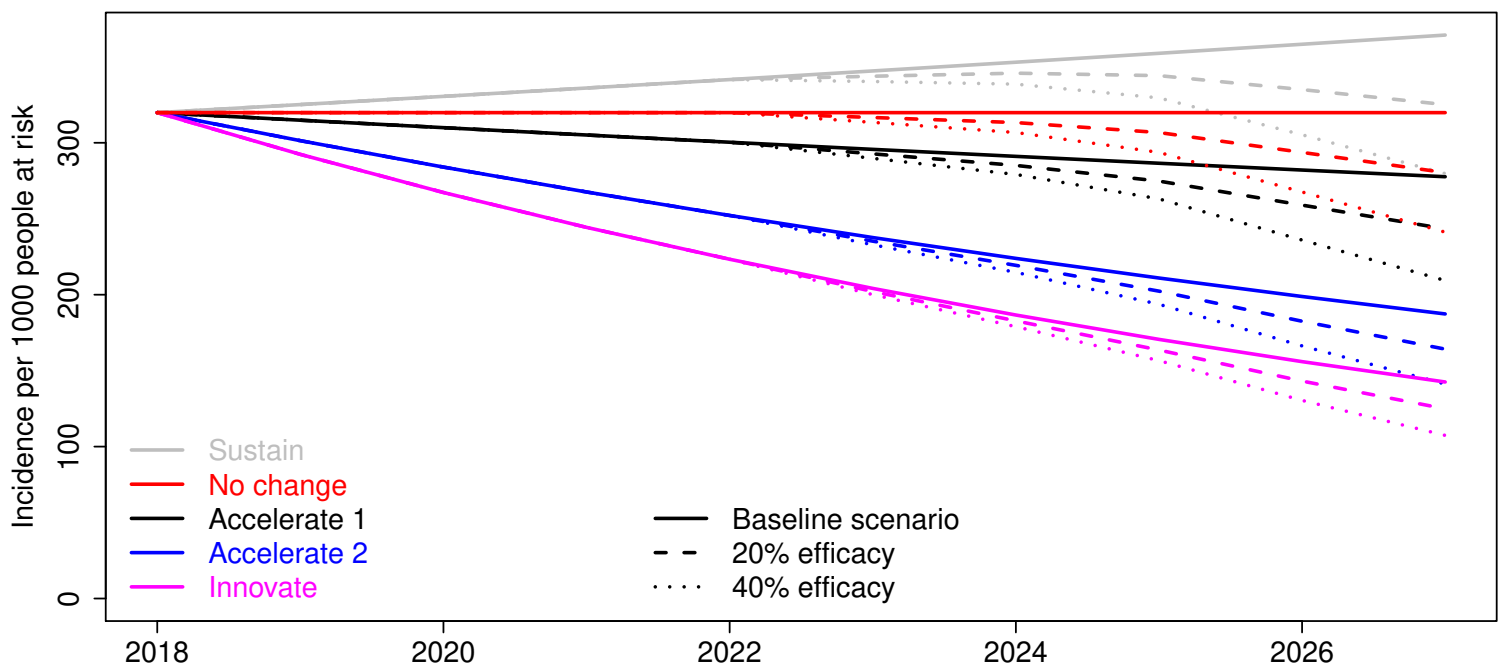
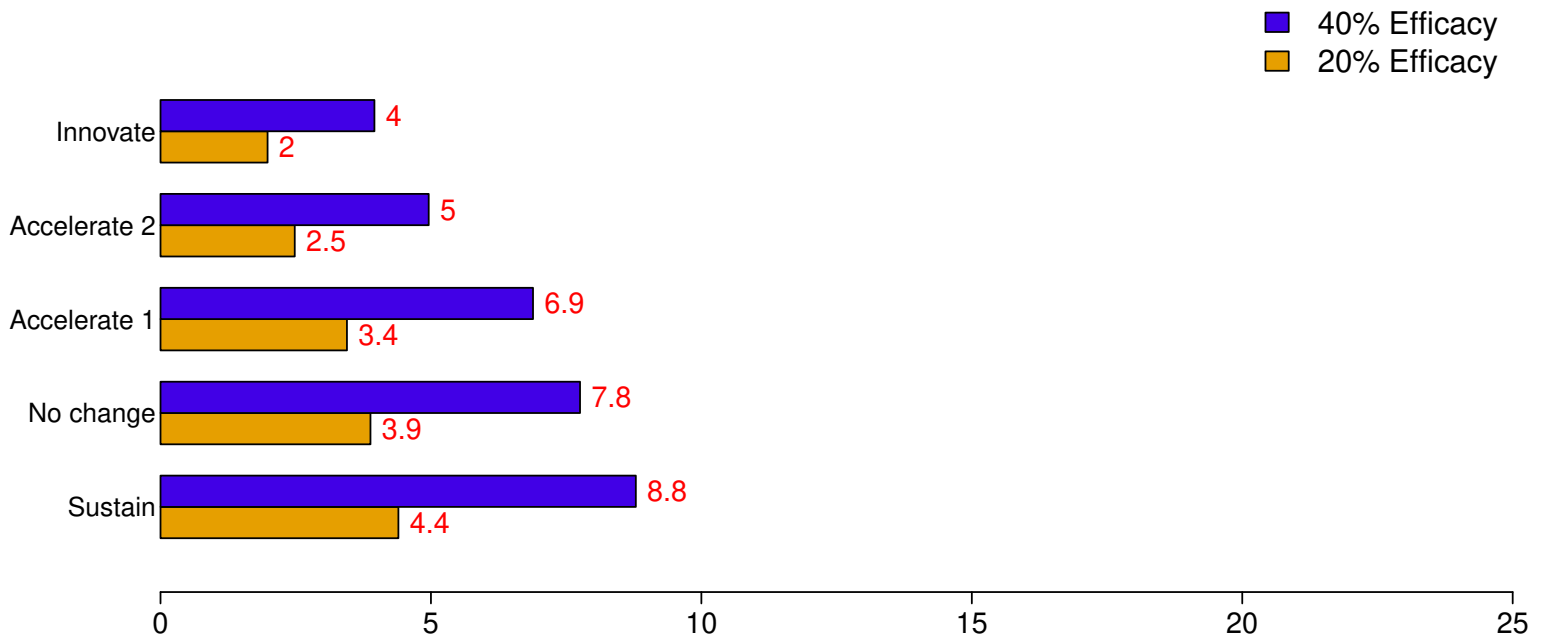
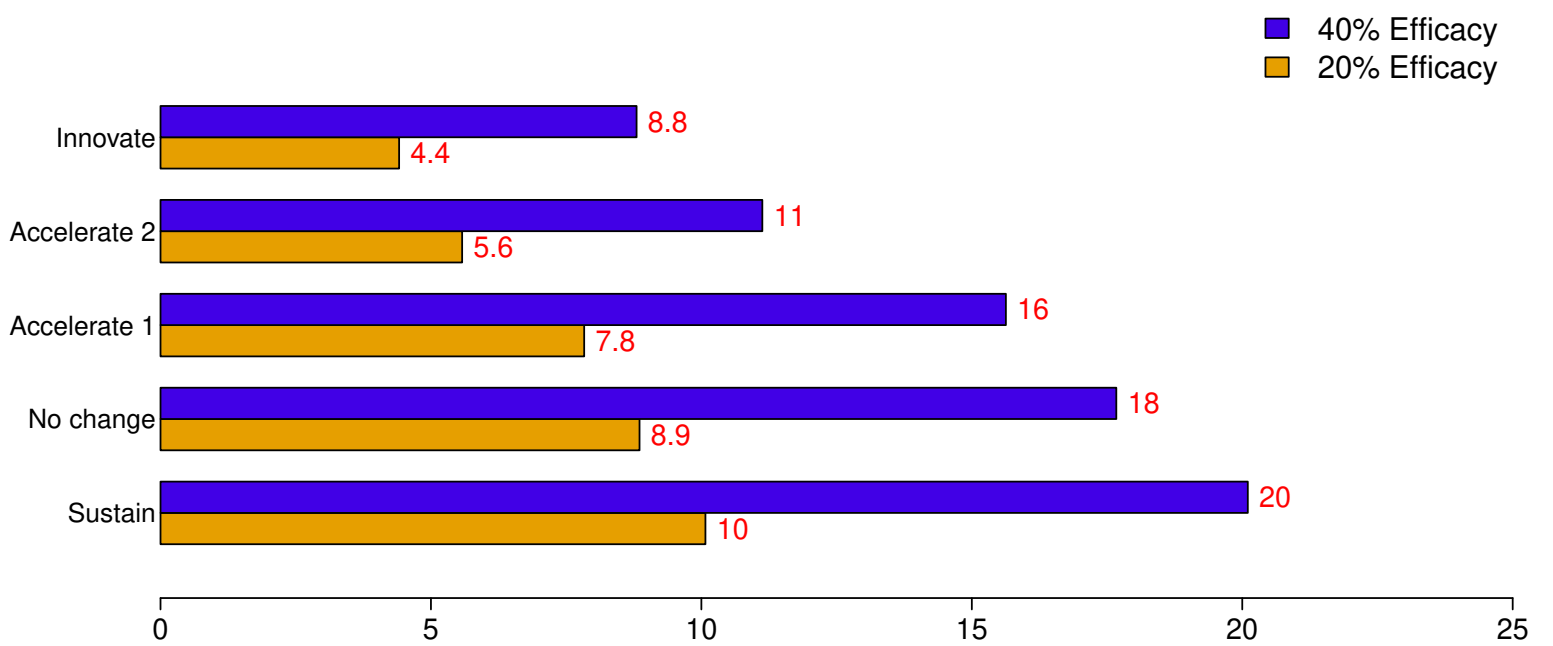


Fig B. Cumulative averted cases in Dem. Rep. Congo for different Griffin scenarios and uptake levels

Conservative Uptake



Rapid Uptake



National Uptake

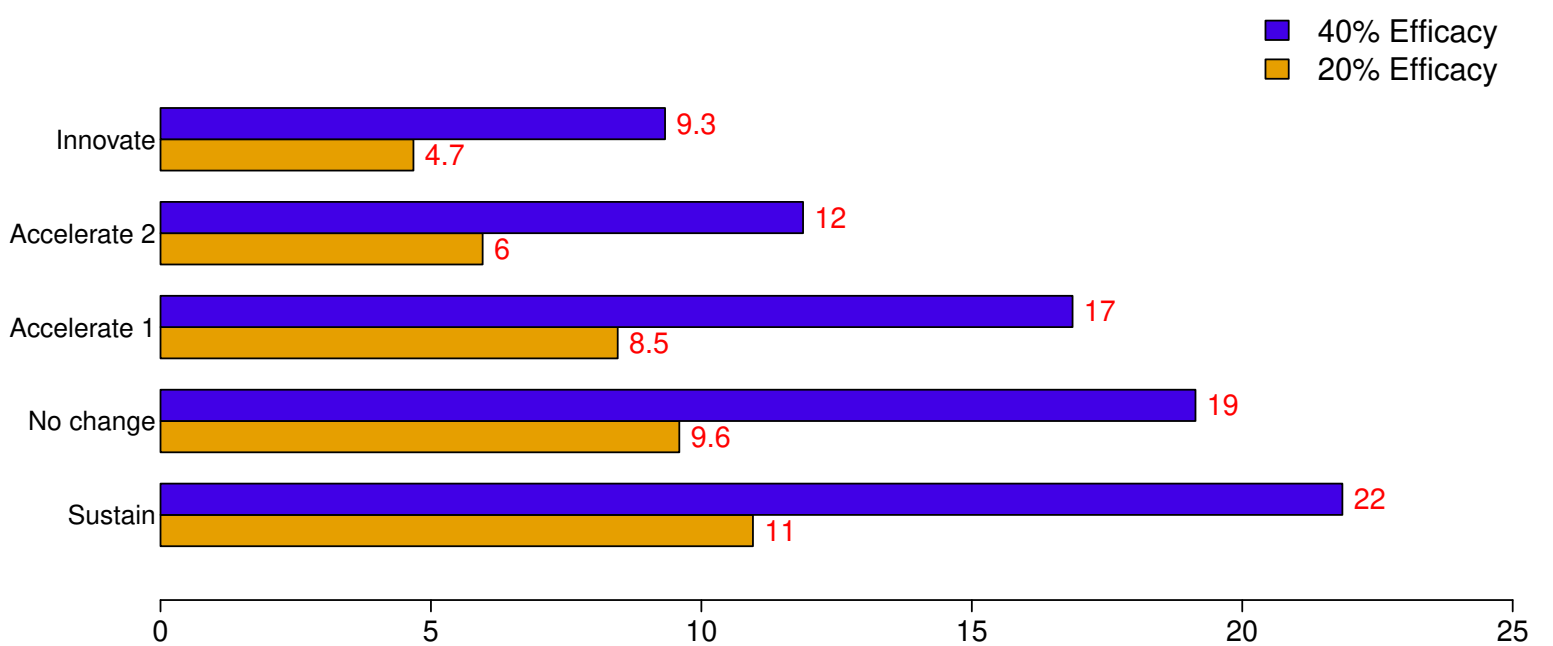
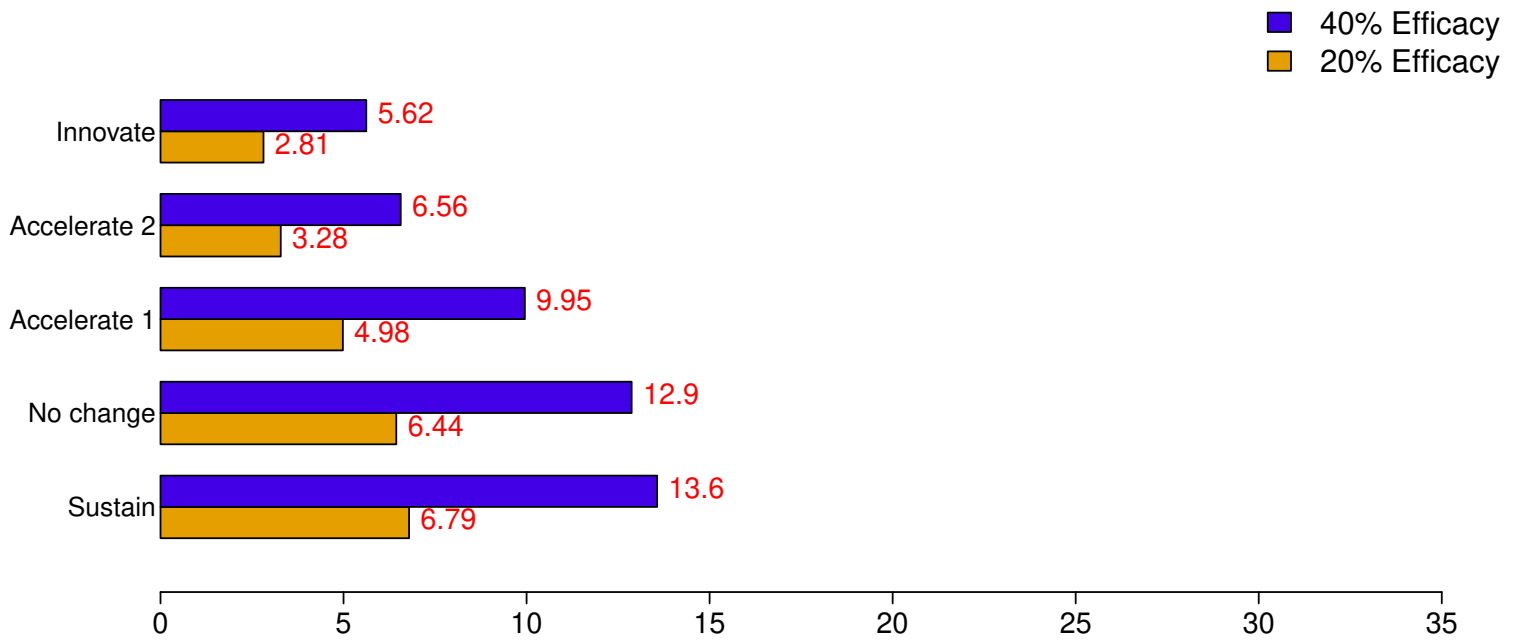
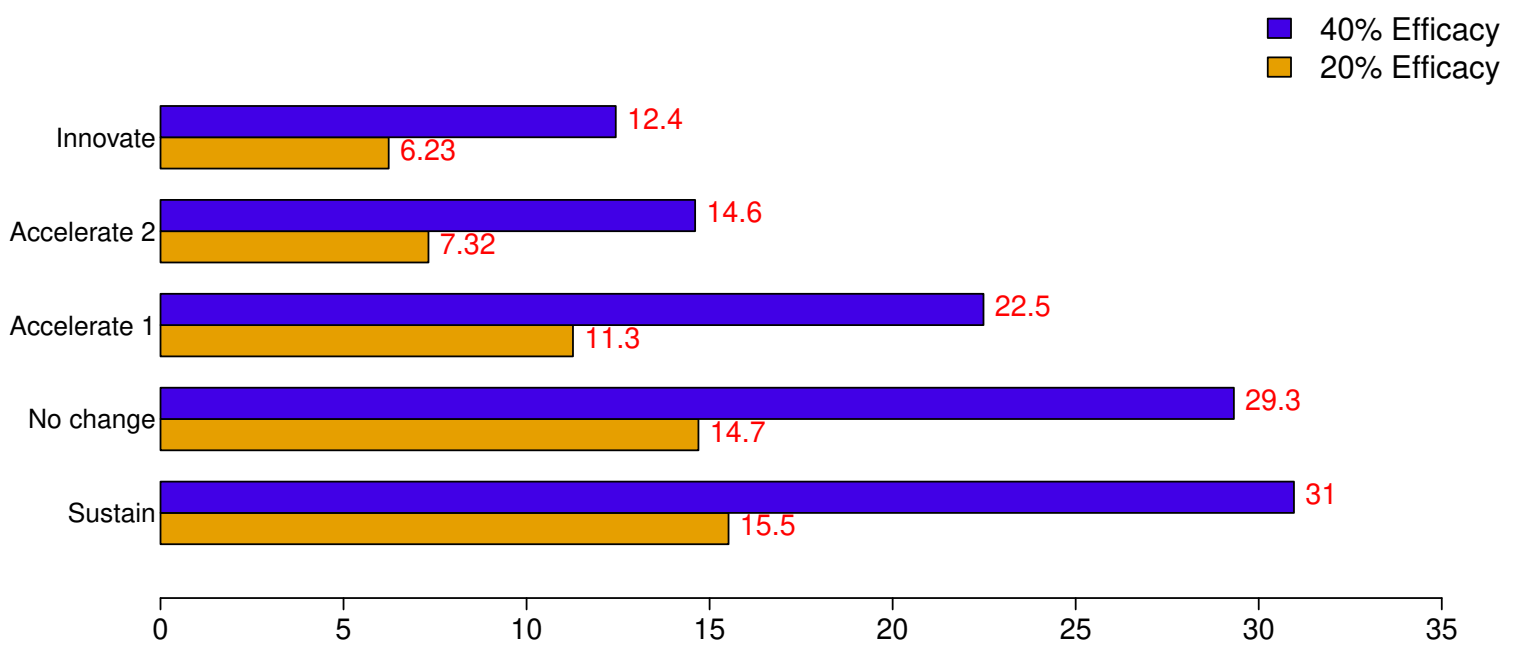


Fig C. Cumulative averted deaths in Dem. Rep. Congo for different Griffin scenarios and uptake levels

Conservative Uptake



Rapid Uptake



National Uptake

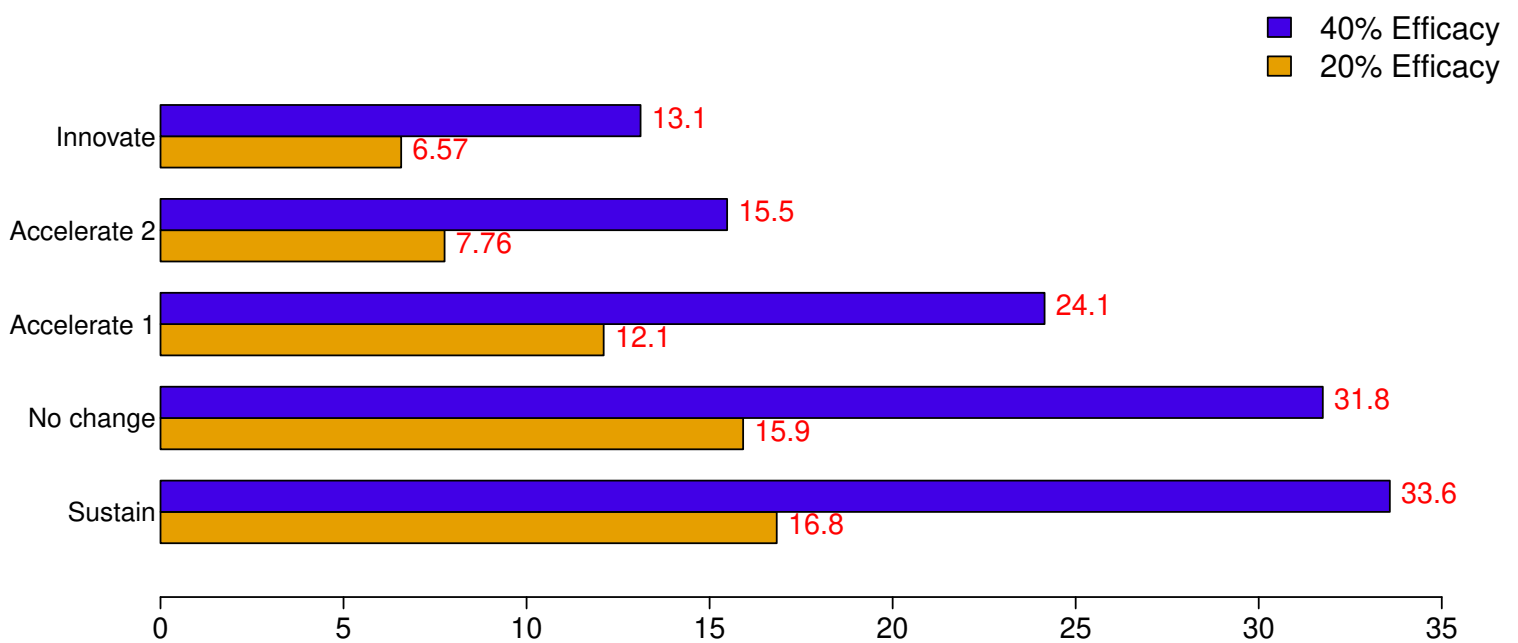


Fig D. Cumulative averted financial costs in Dem. Rep. Congo for different Griffin scenarios and uptake levels

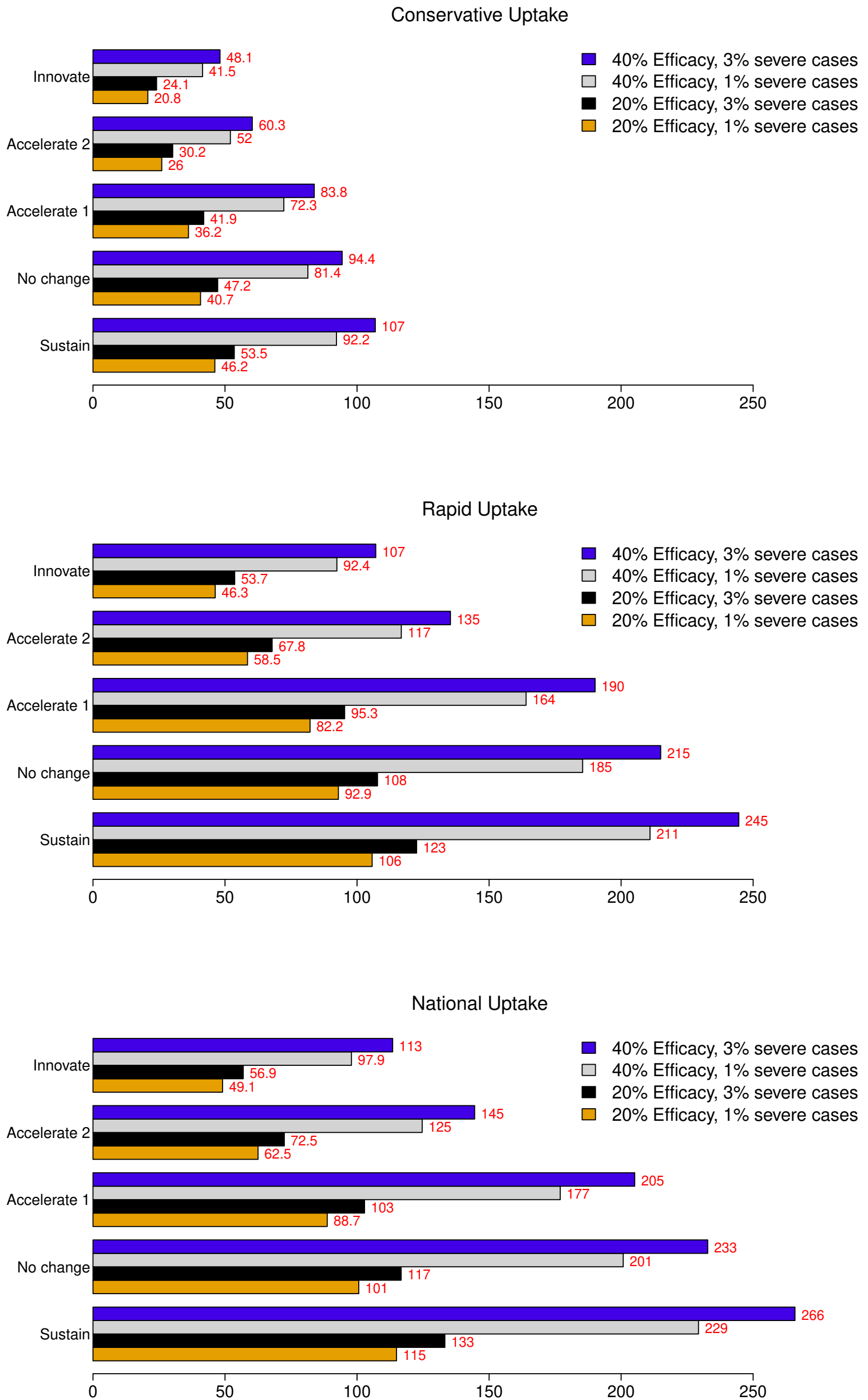
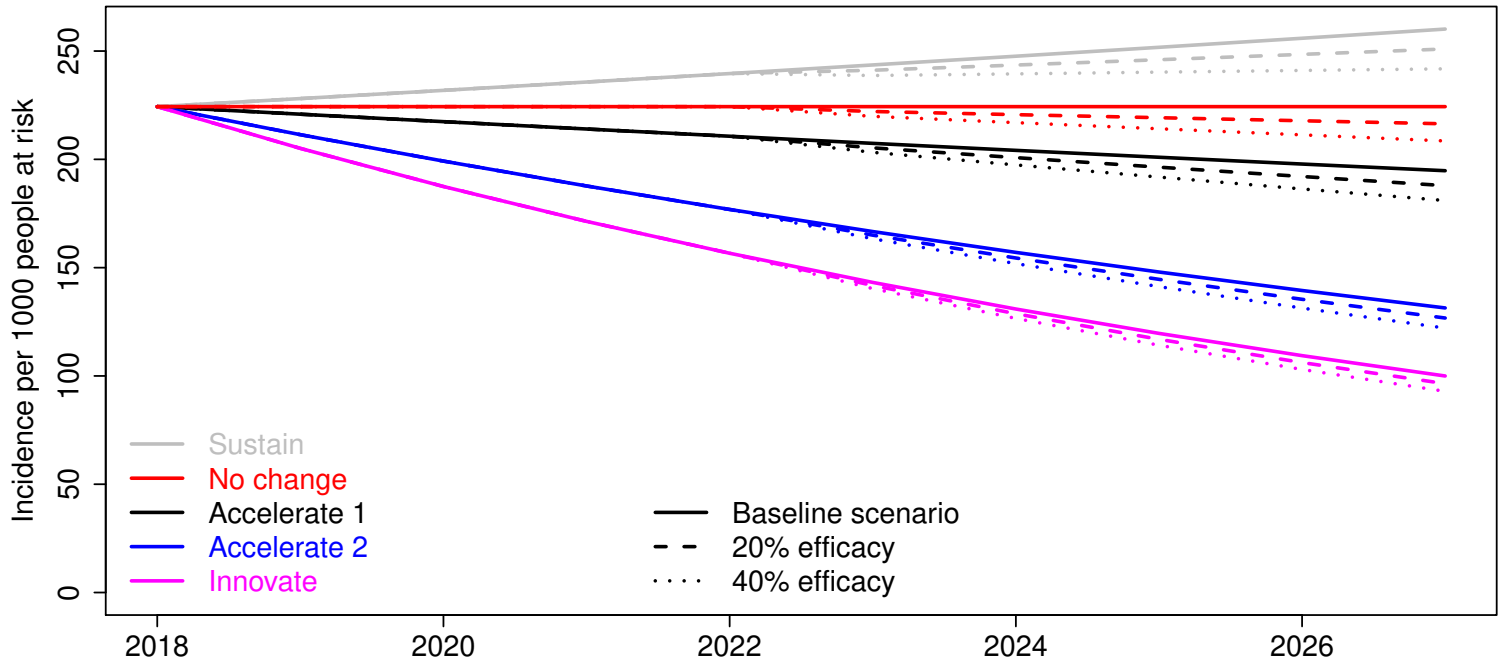
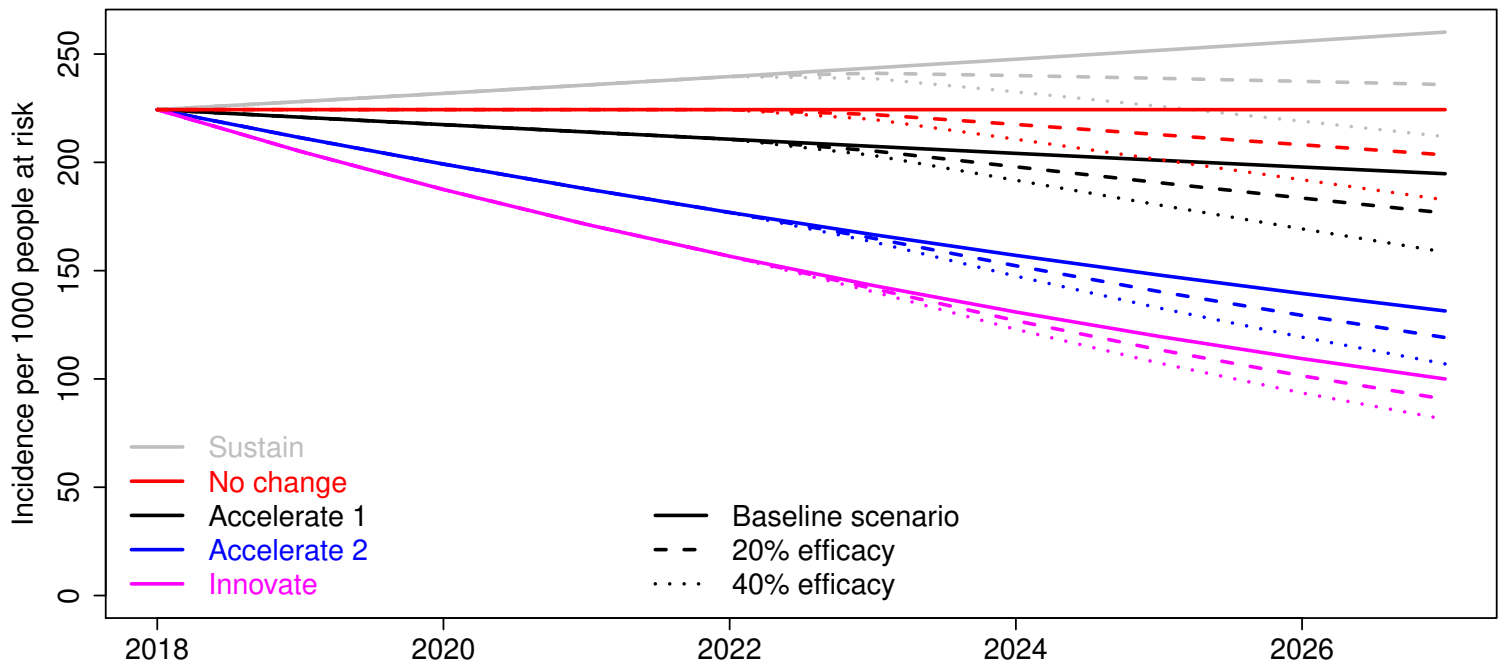


Fig A. Simulated malaria incidence in Ghana for different Griffin scenarios and uptake levels

Conservative Uptake



Rapid Uptake



National Uptake

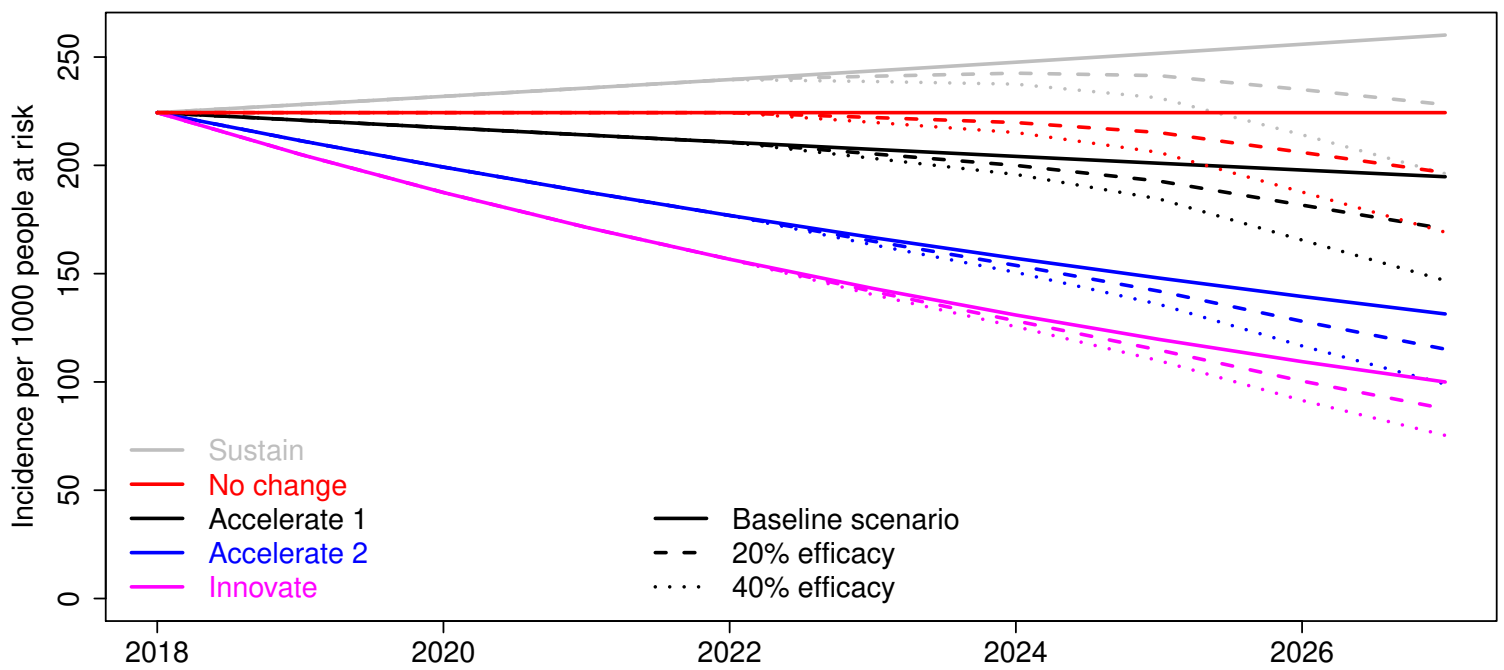


Fig B. Cumulative averted cases in Ghana for different Griffin scenarios and uptake levels

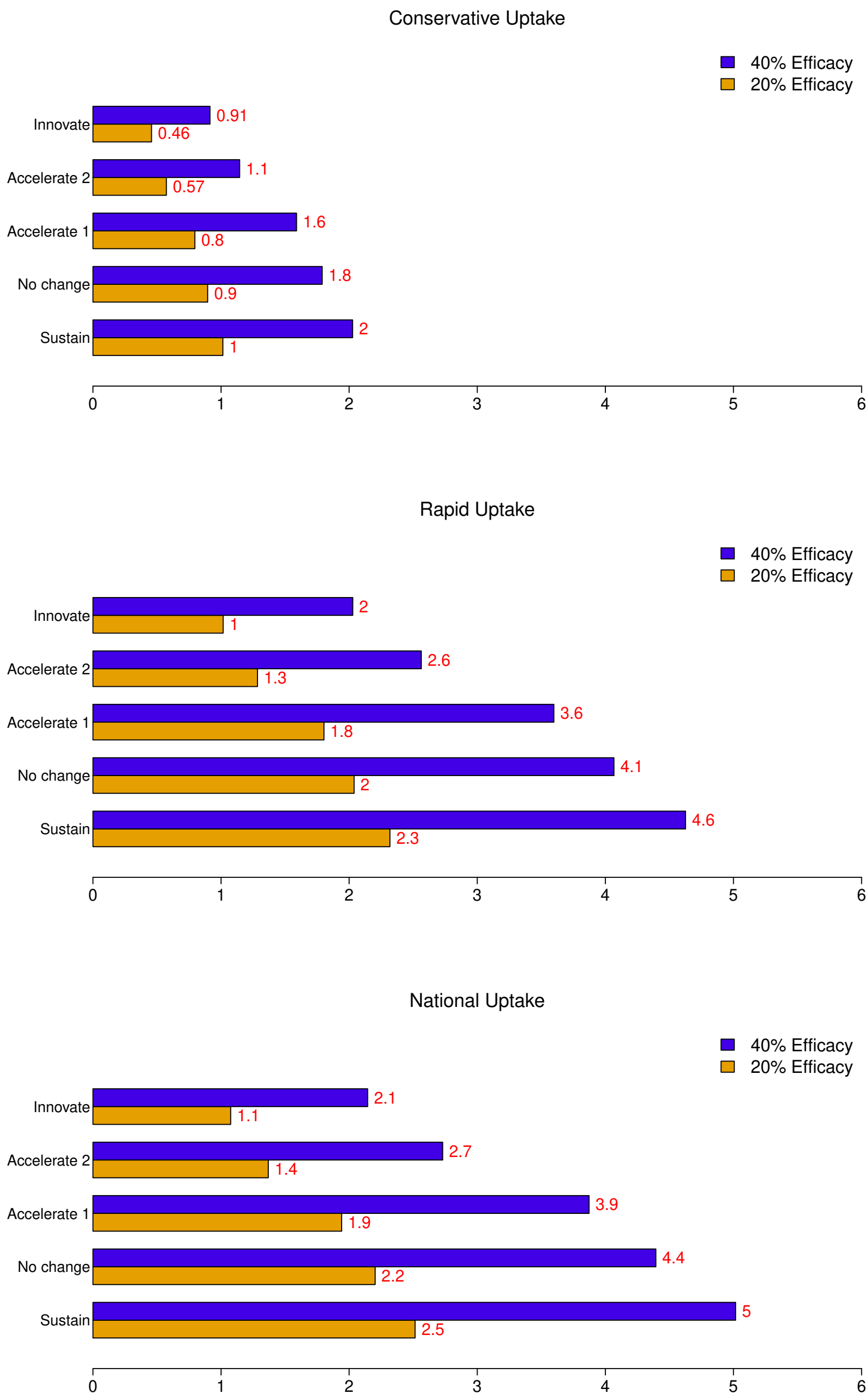
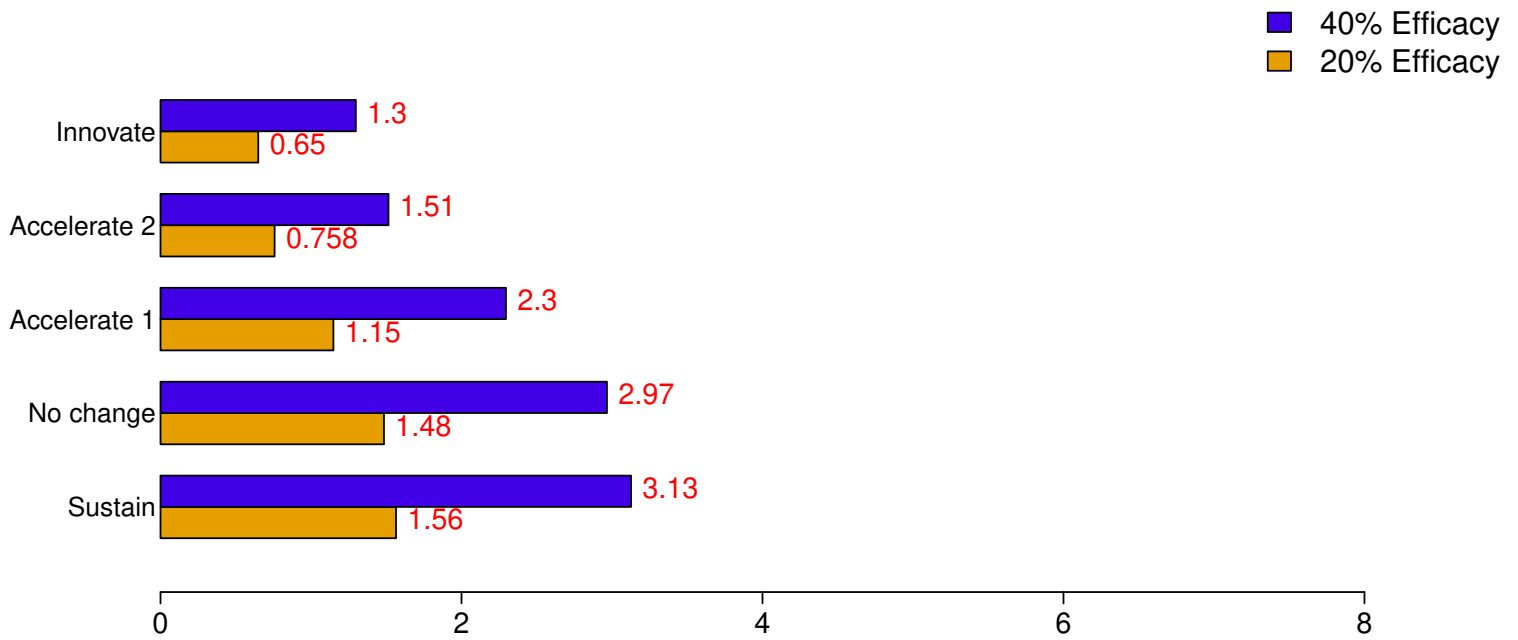
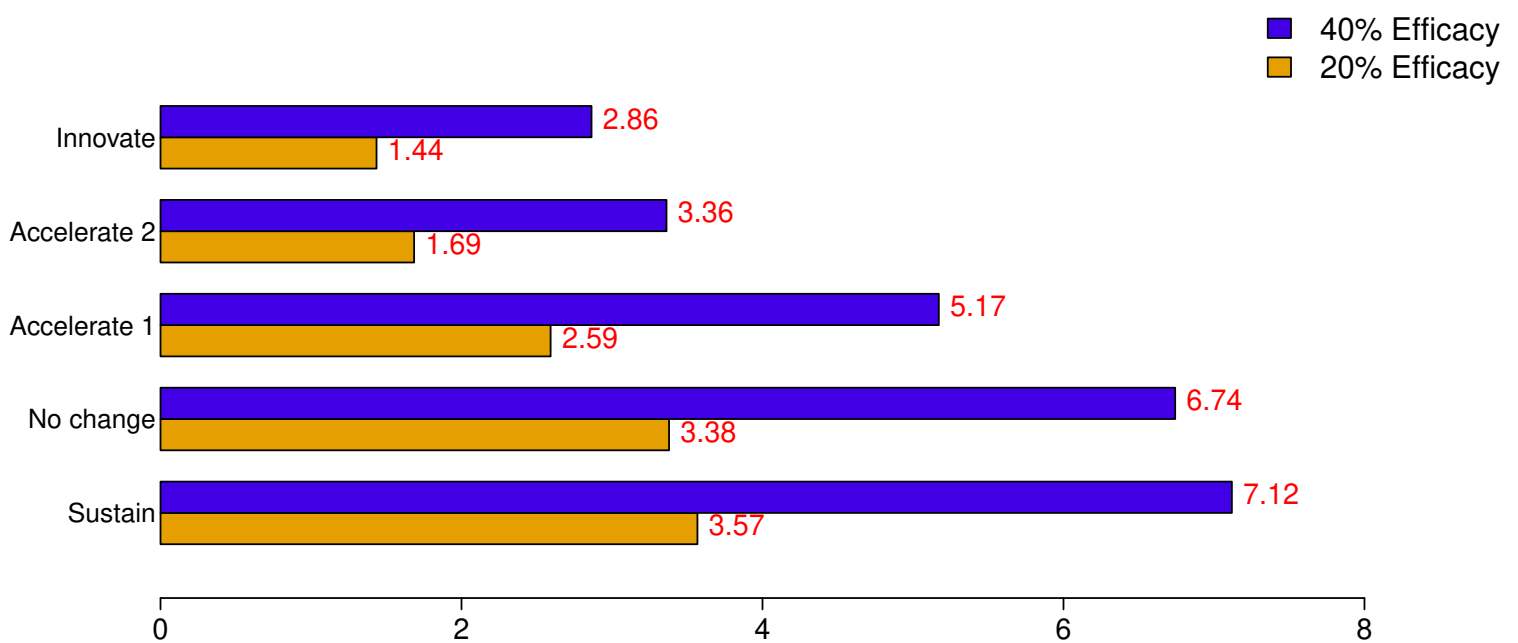


Fig C. Cumulative averted deaths in Ghana for different Griffin scenarios and uptake levels

Conservative Uptake



Rapid Uptake



National Uptake

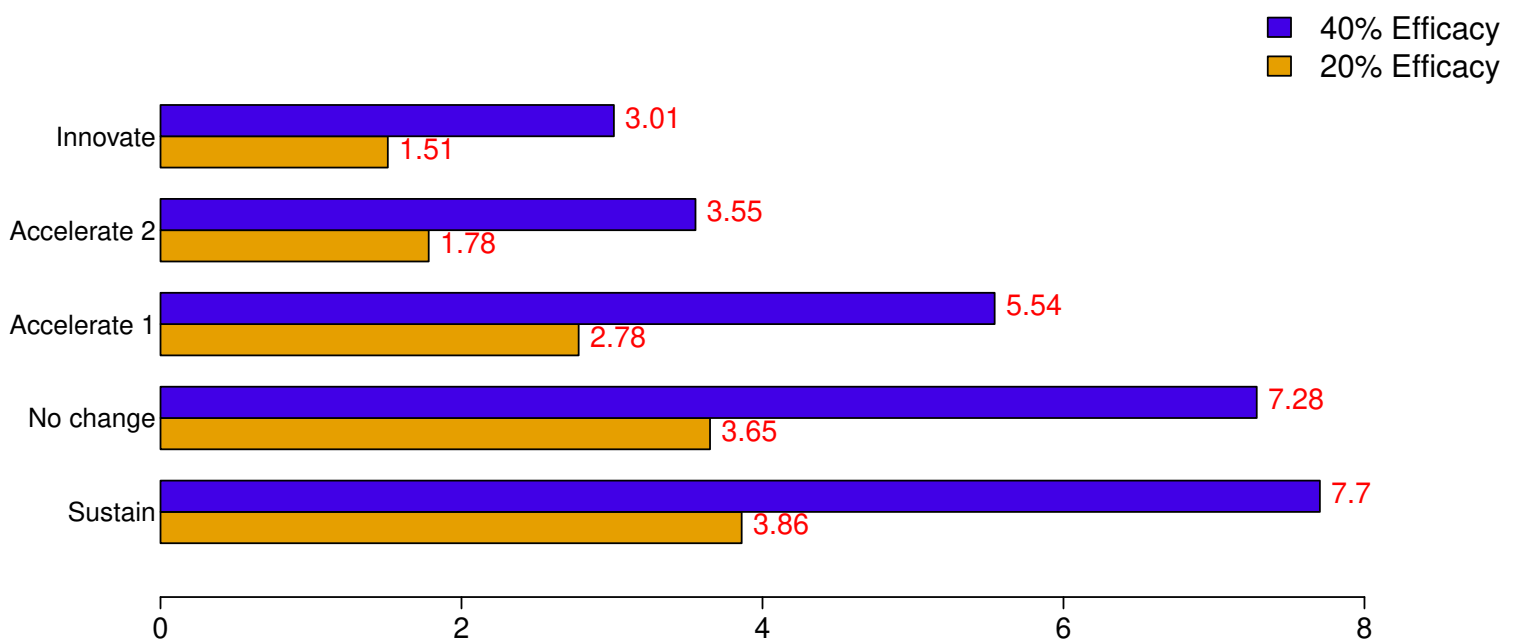


Fig D. Cumulative averted financial costs in Ghana for different Griffin scenarios and uptake levels

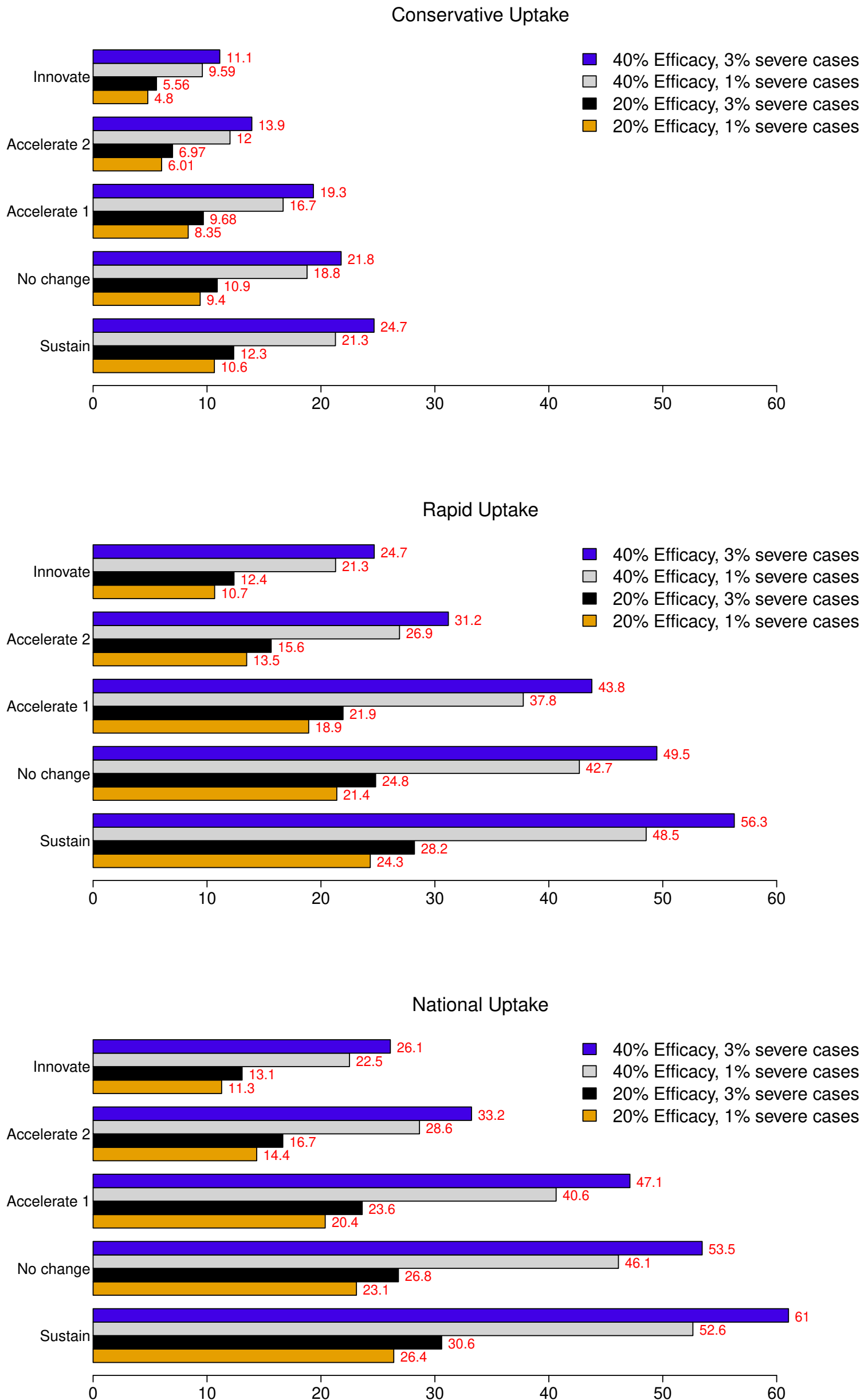
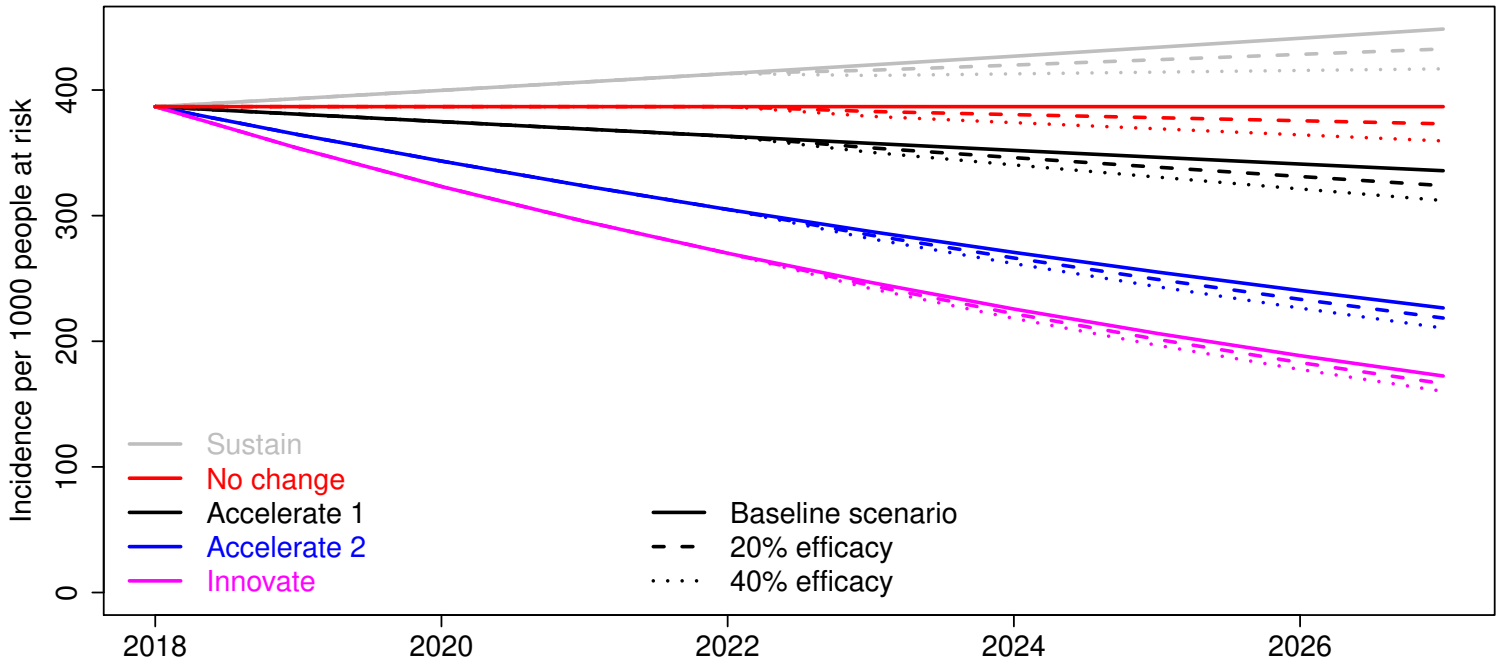
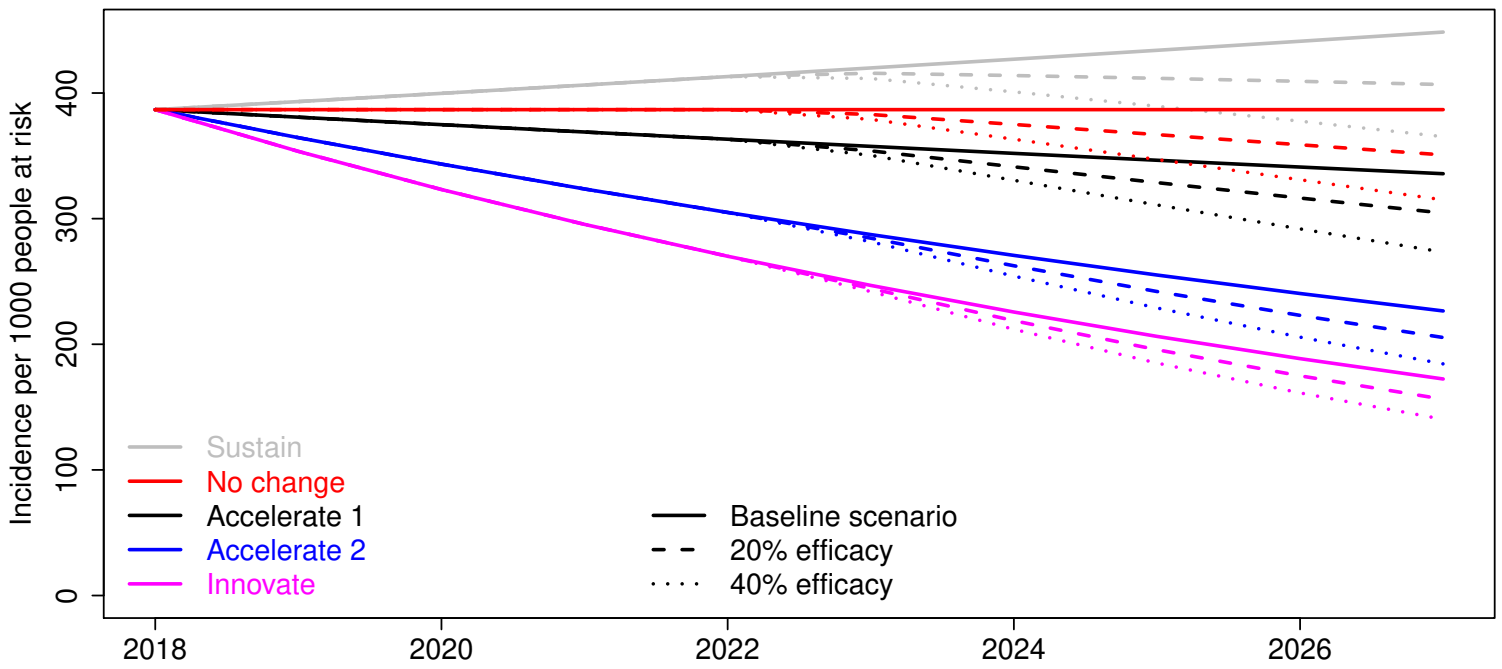


Fig A. Simulated malaria incidence in Mali for different Griffin scenarios and uptake levels

Conservative Uptake



Rapid Uptake



National Uptake

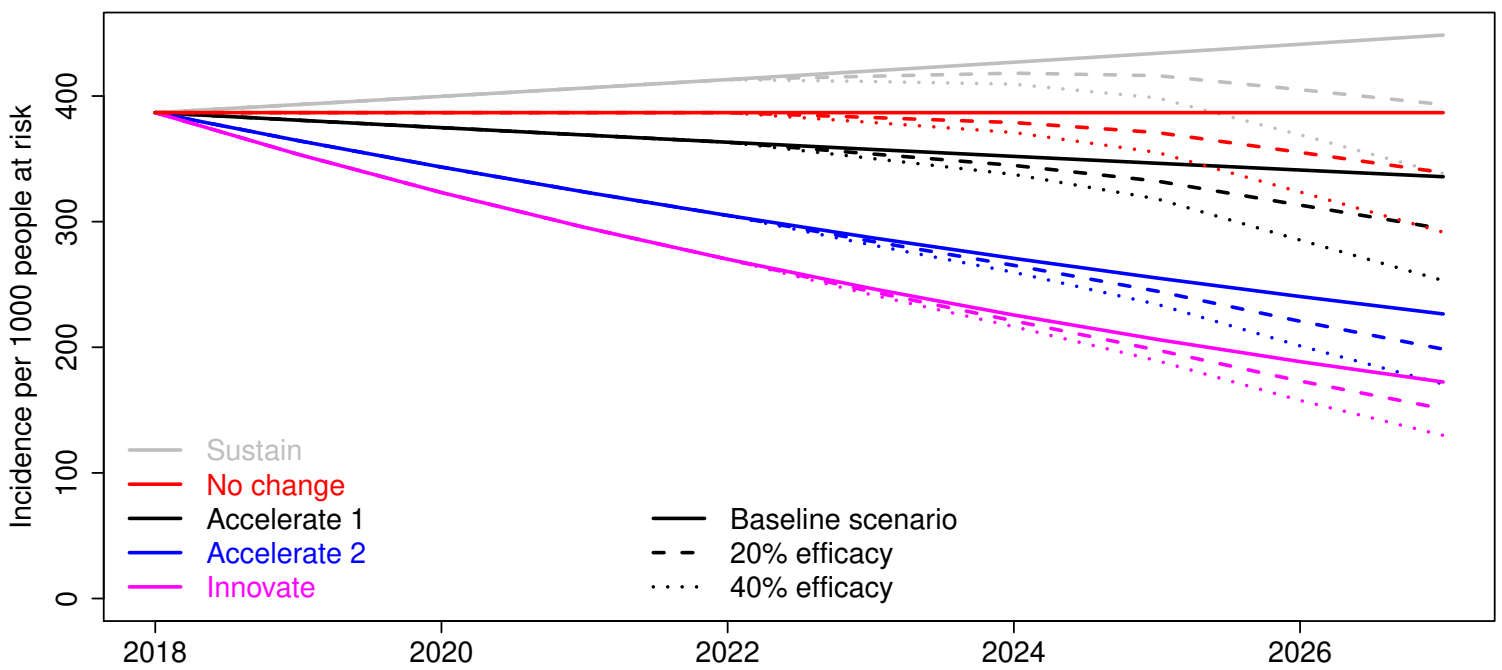


Fig B. Cumulative averted cases in Mali for different Griffin scenarios and uptake levels

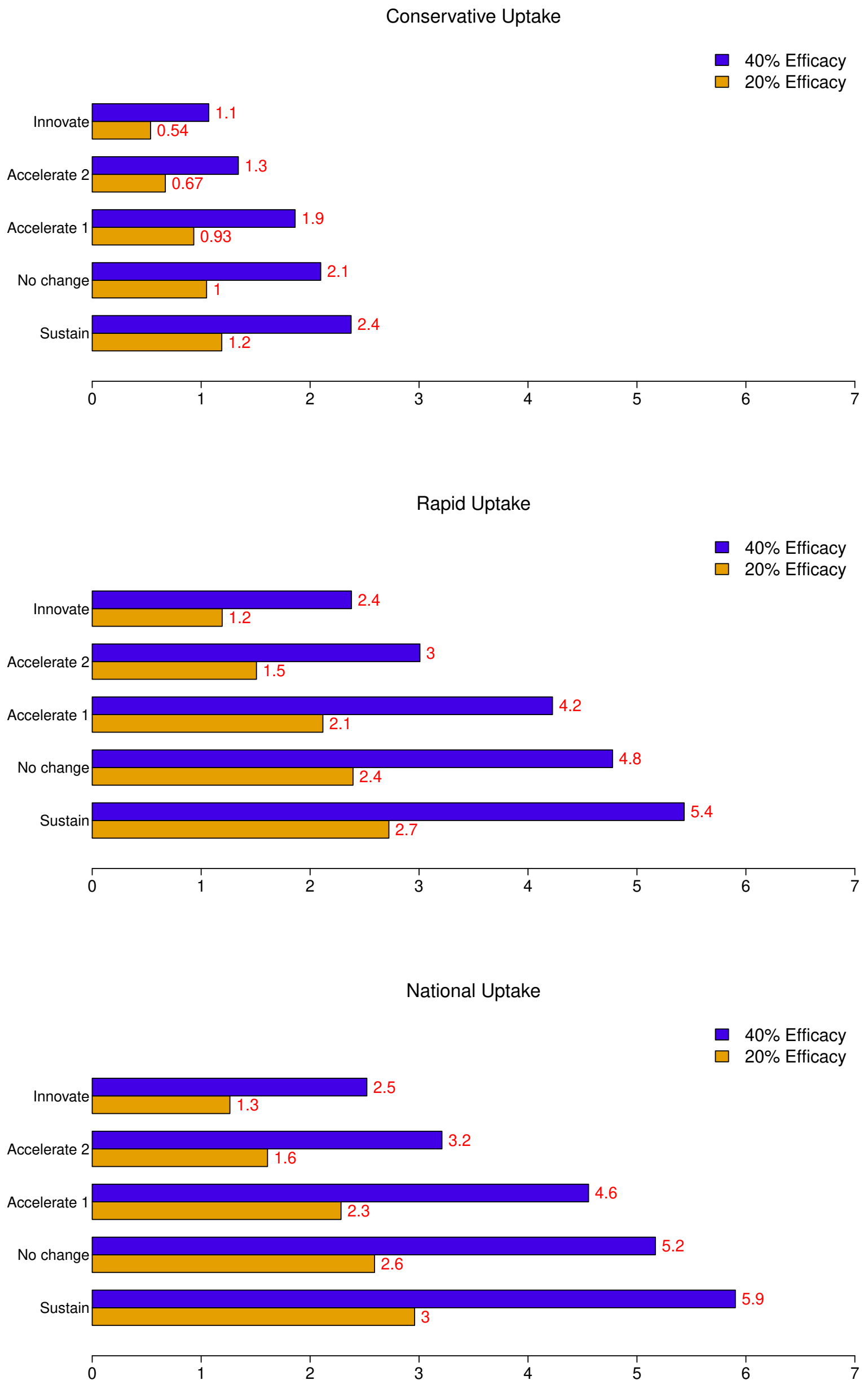


Fig C. Cumulative averted deaths in Mali for different Griffin scenarios and uptake levels

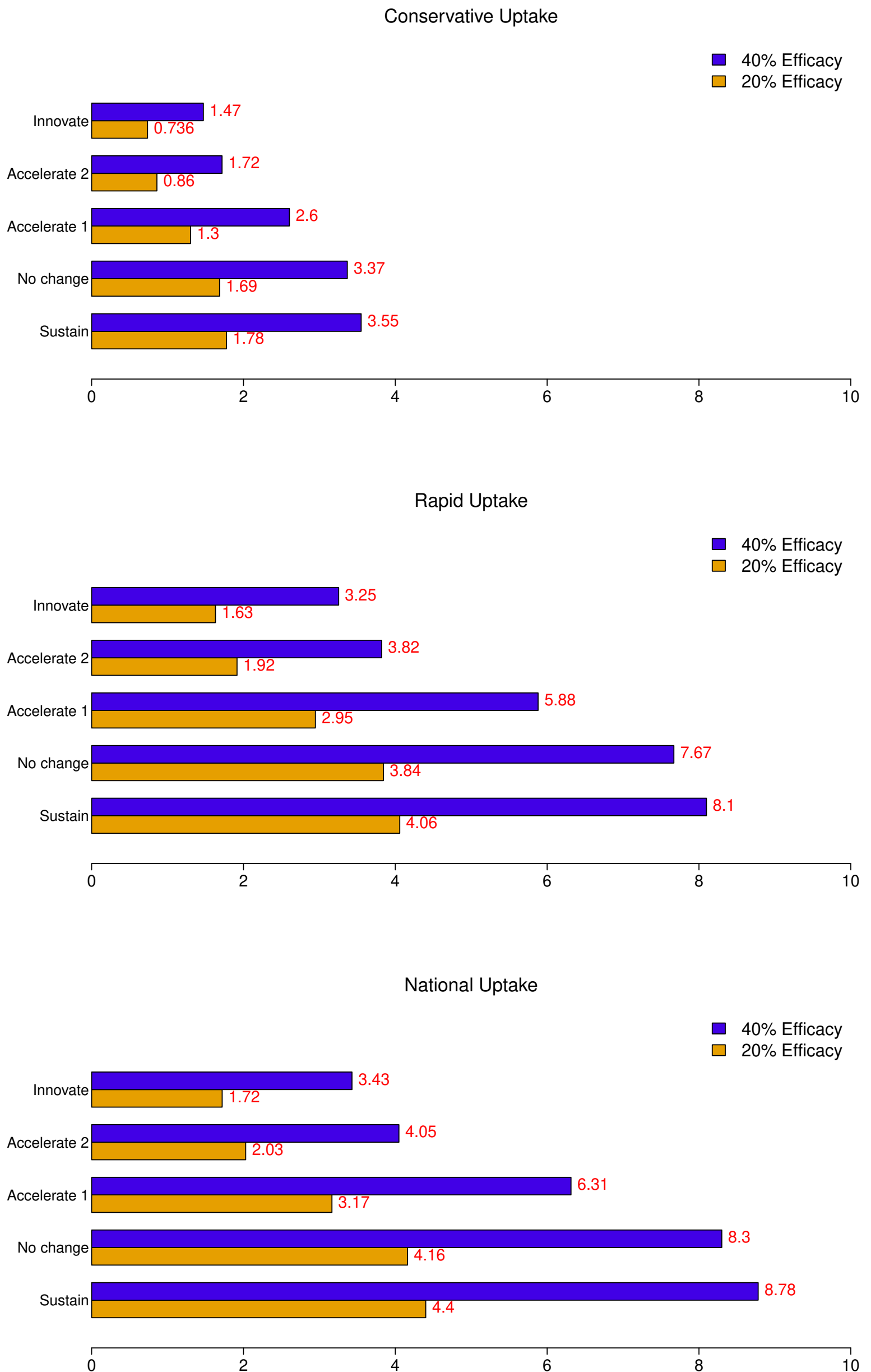


Fig D. Cumulative averted financial costs in Mali for different Griffin scenarios and uptake levels

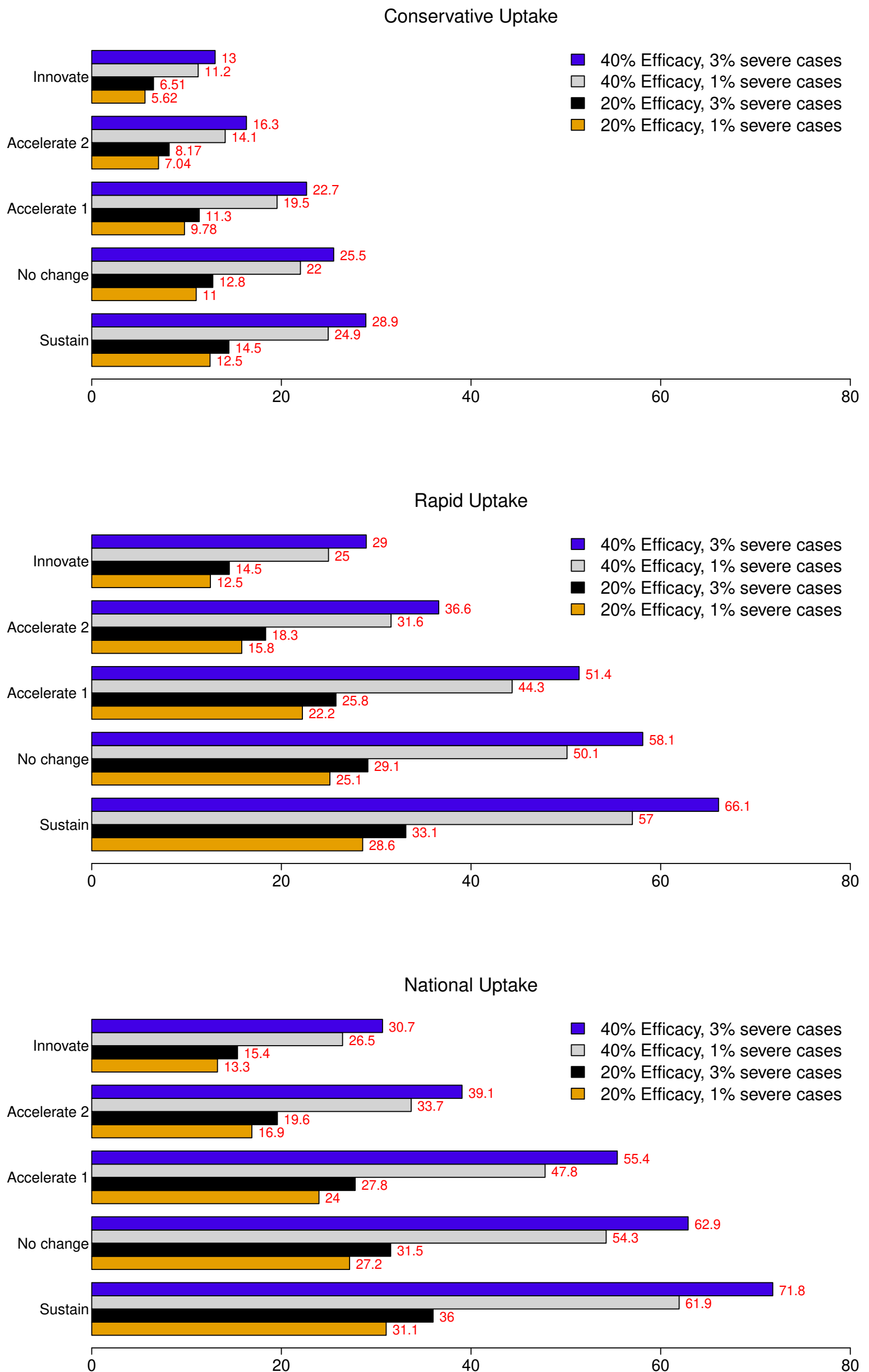
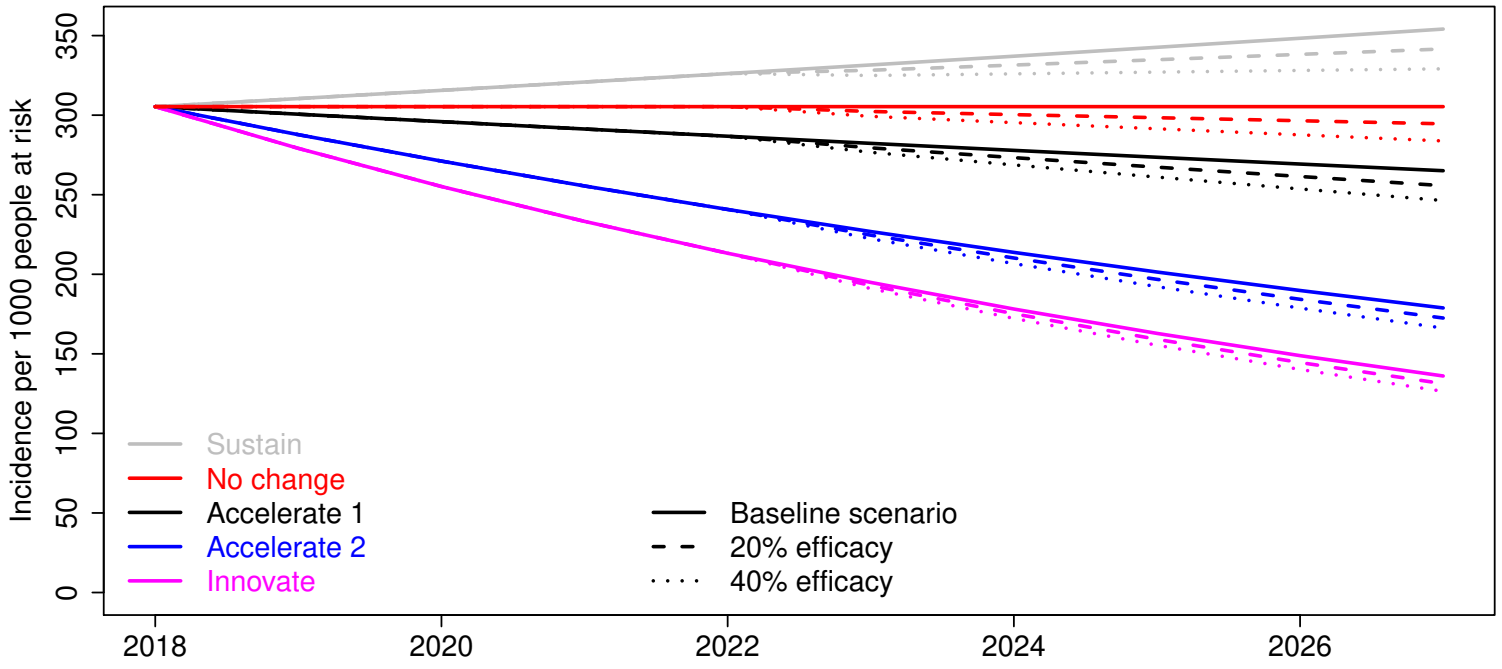
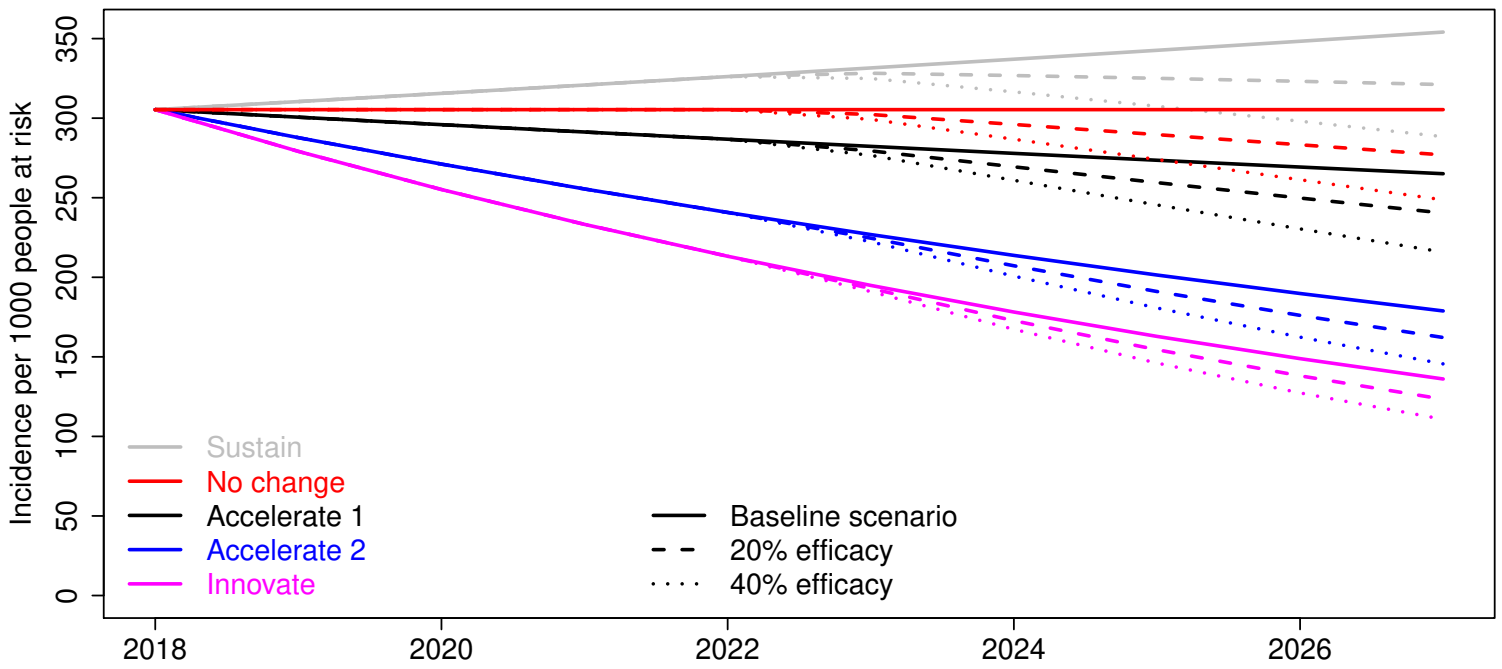


Fig A. Simulated malaria incidence in Mozambique for different Griffin scenarios and uptake levels

Conservative Uptake



Rapid Uptake



National Uptake

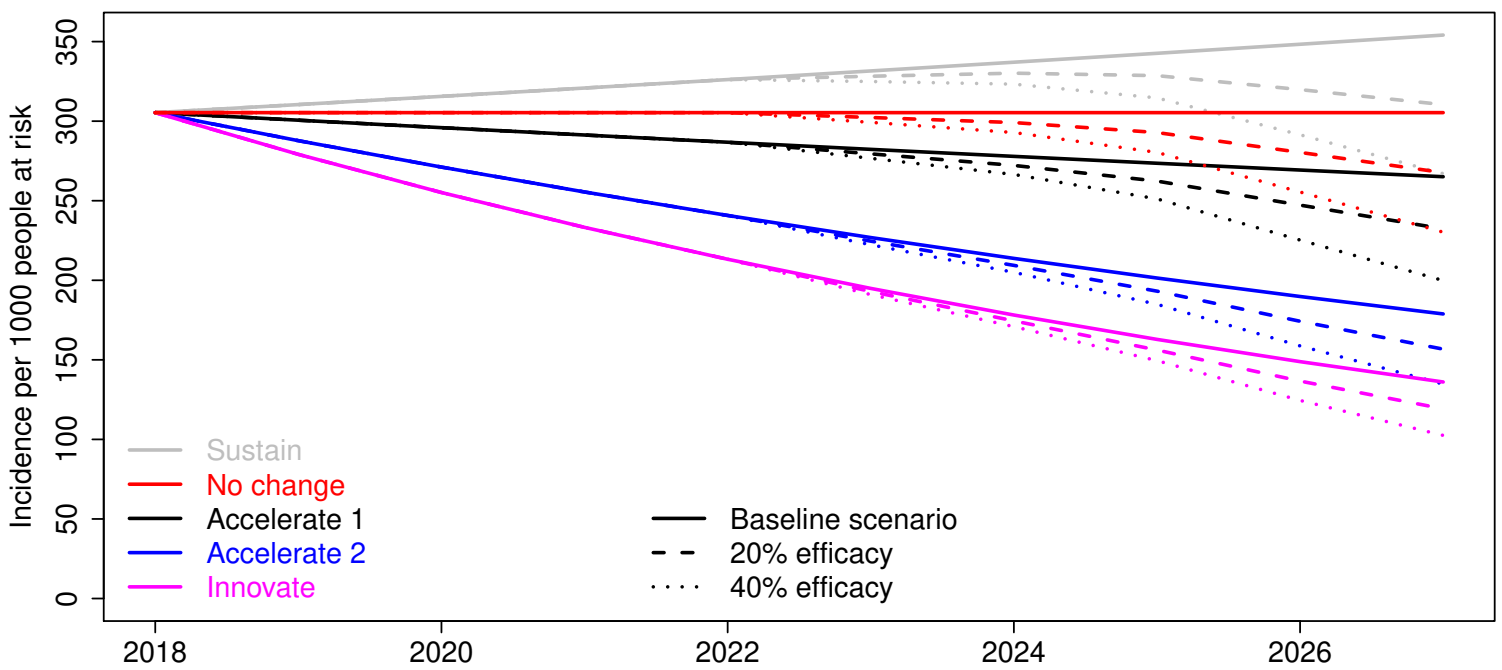


Fig B. Cumulative averted cases in Mozambique for different Griffin scenarios and uptake levels

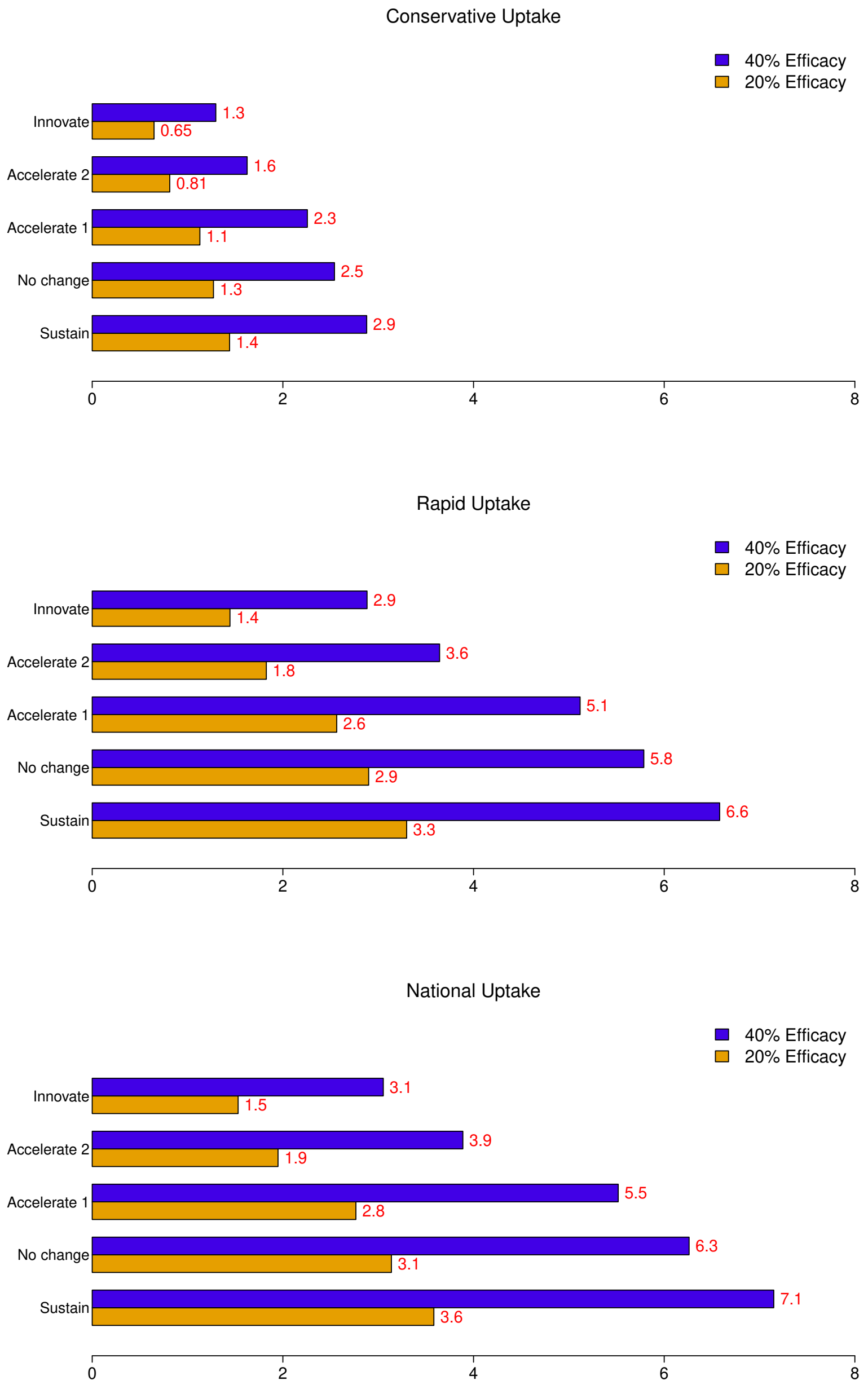


Fig C. Cumulative averted deaths in Mozambique for different Griffin scenarios and uptake levels

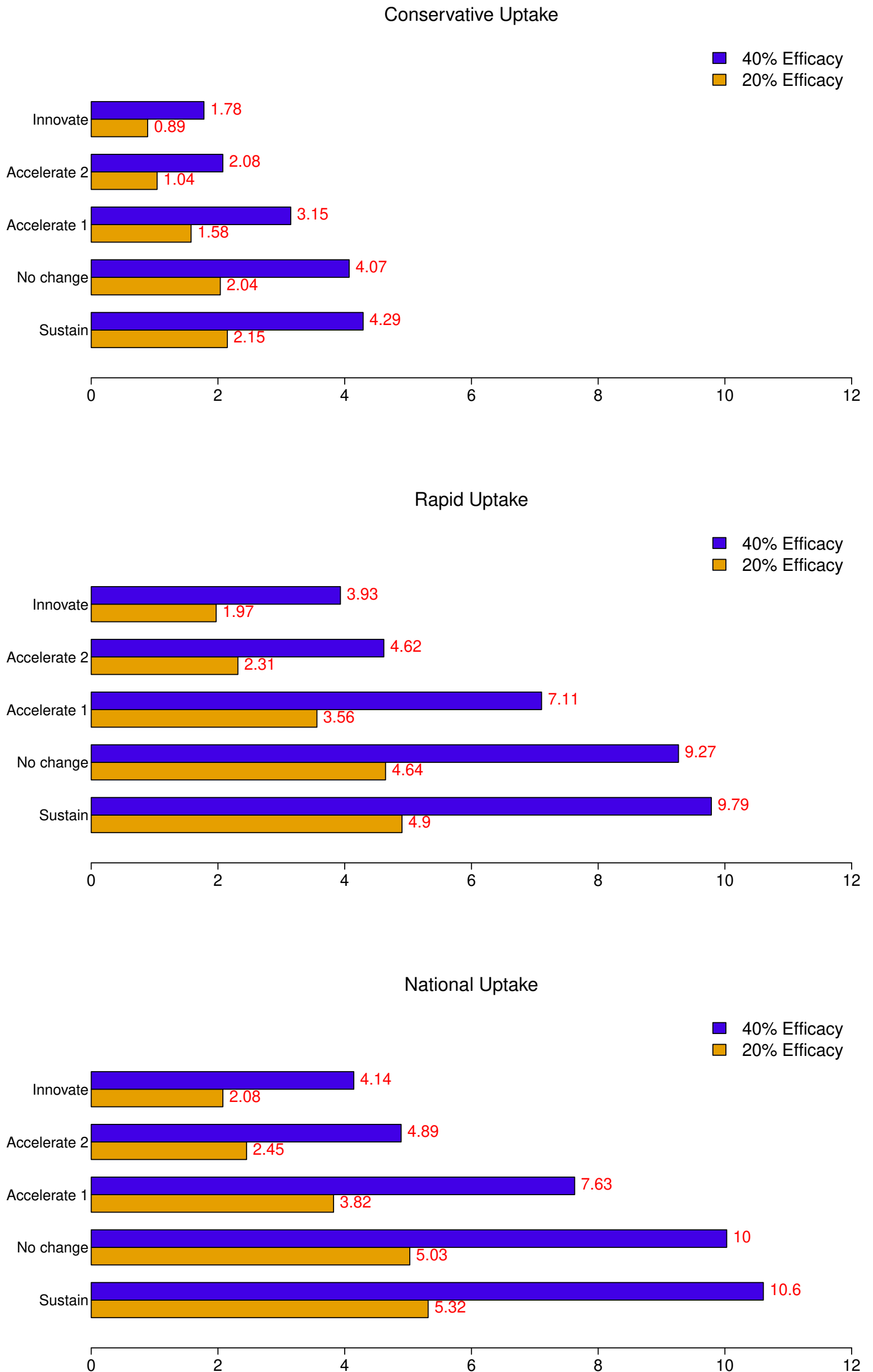


Fig D. Cumulative averted financial costs in Mozambique for different Griffin scenarios and uptake levels

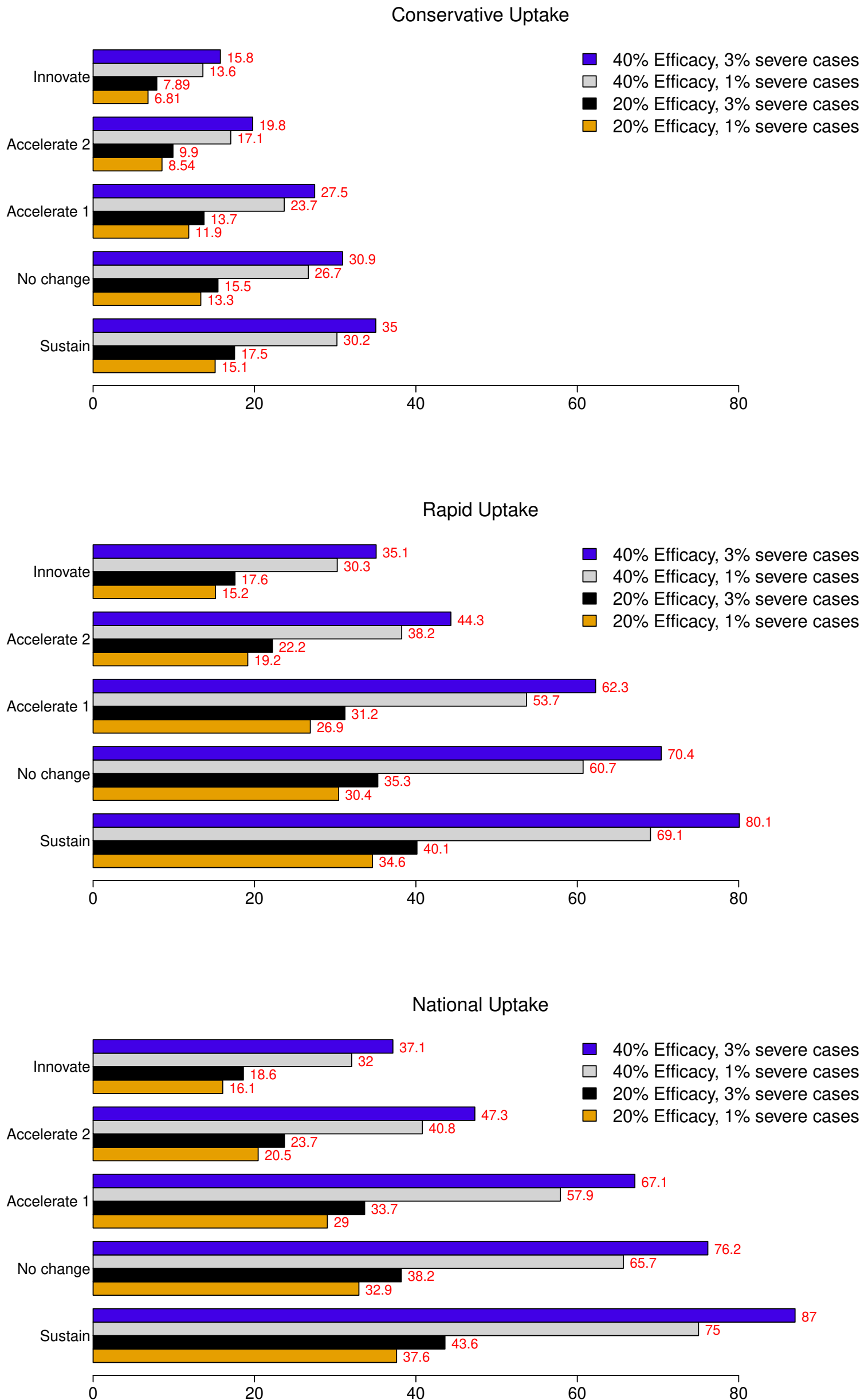
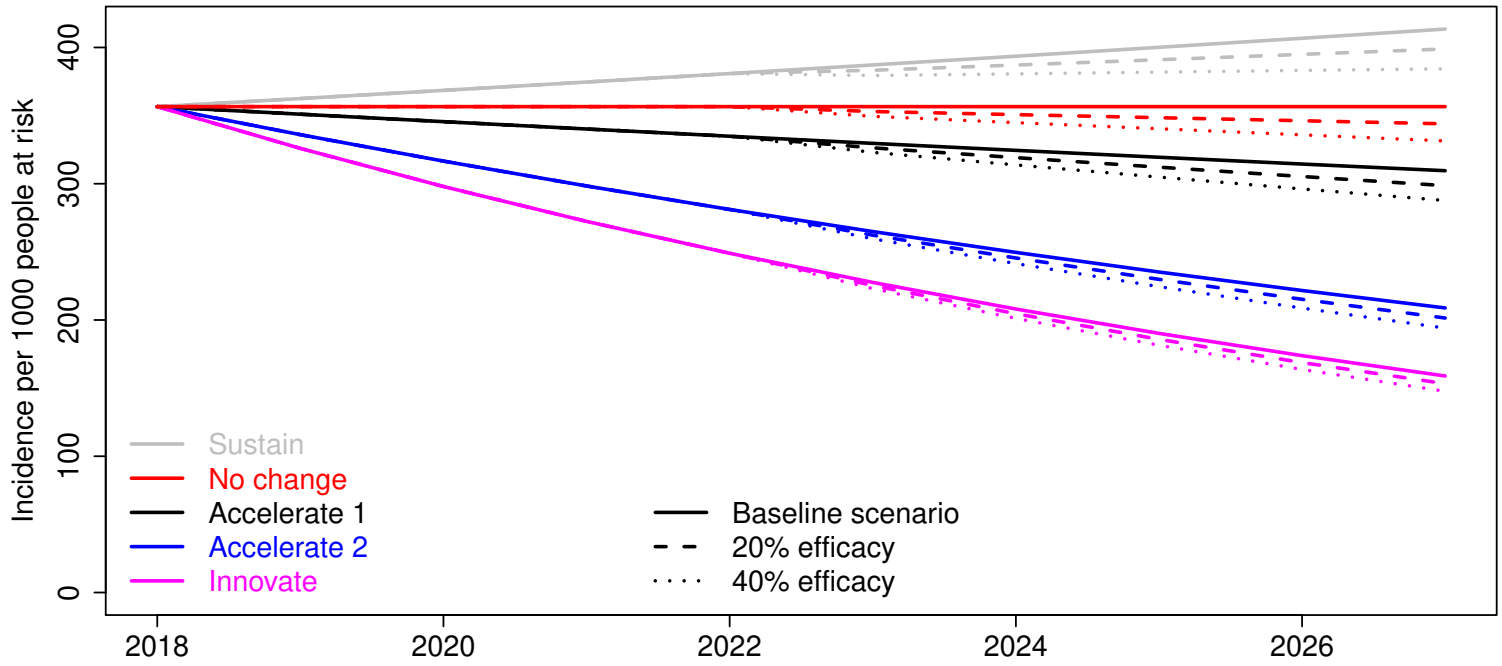
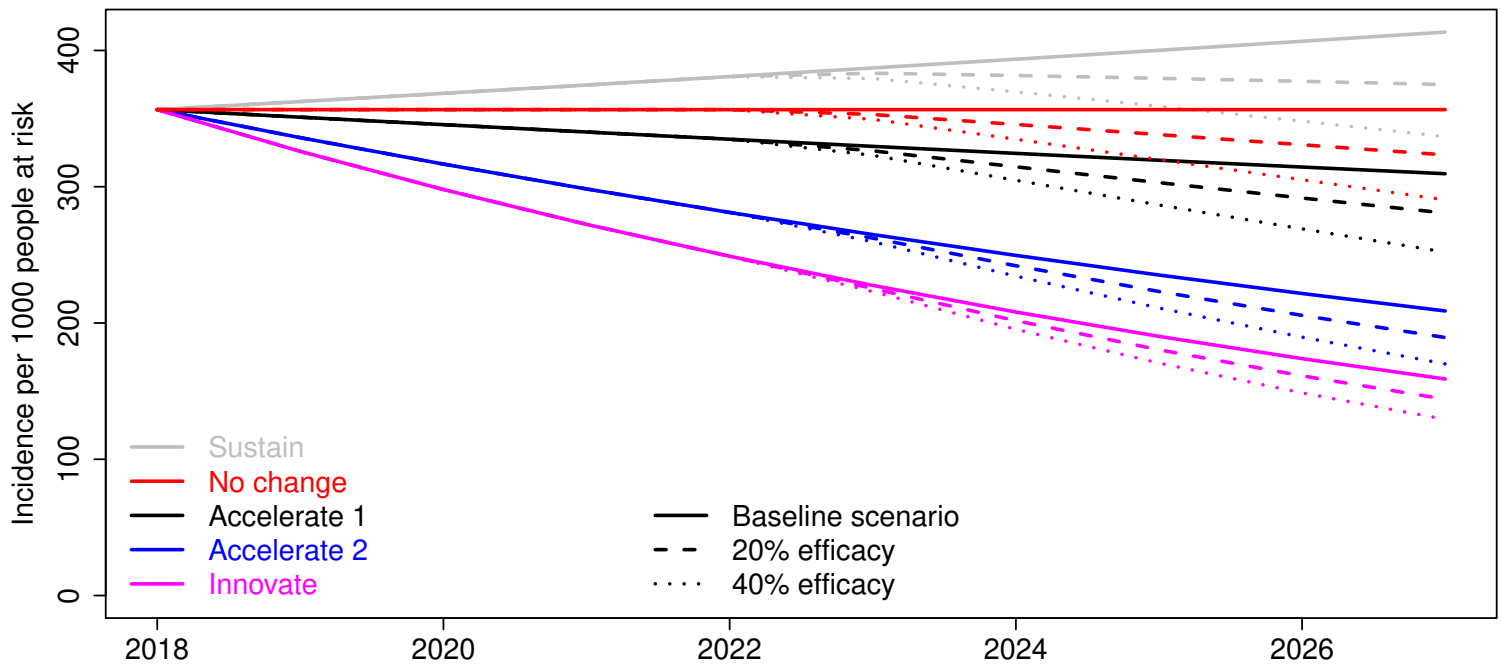


Fig A. Simulated malaria incidence in Niger for different Griffin scenarios and uptake levels

Conservative Uptake



Rapid Uptake



National Uptake

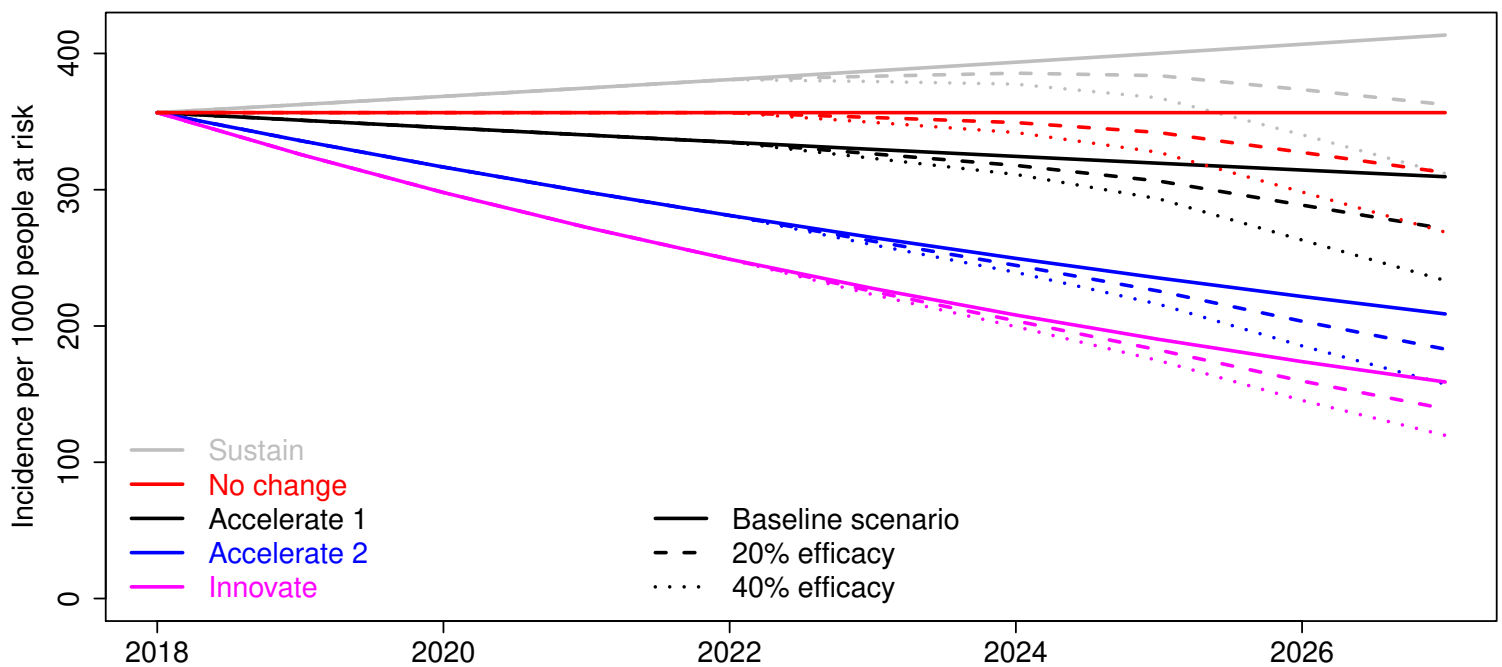


Fig B. Cumulative averted cases in Niger for different Griffin scenarios and uptake levels

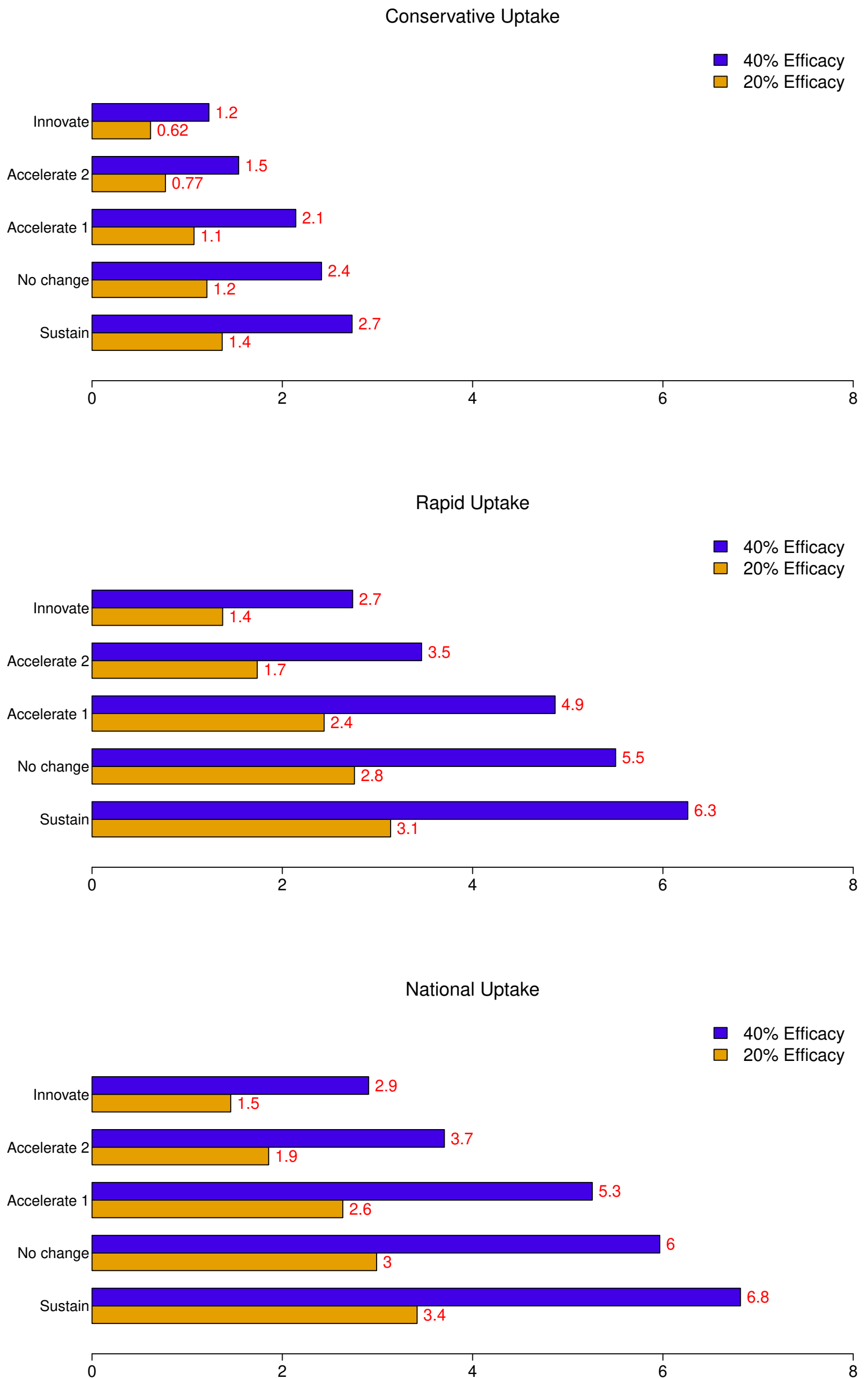
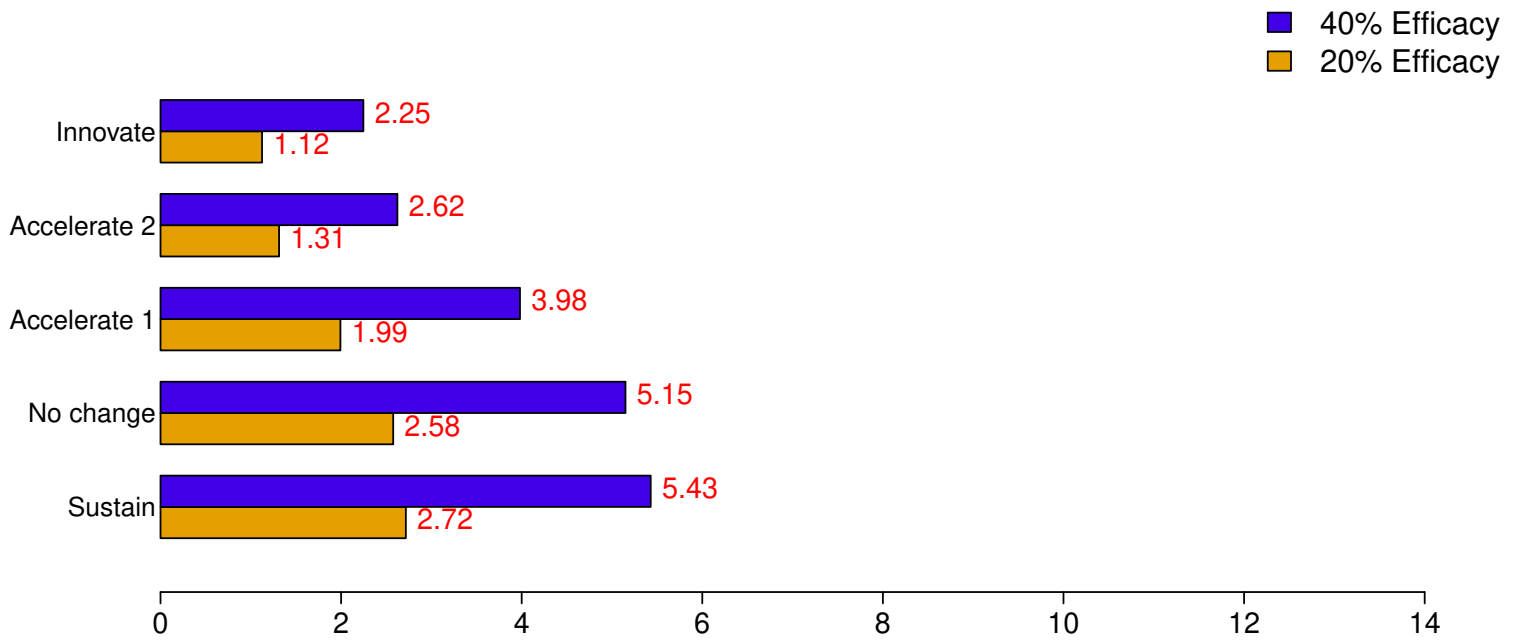
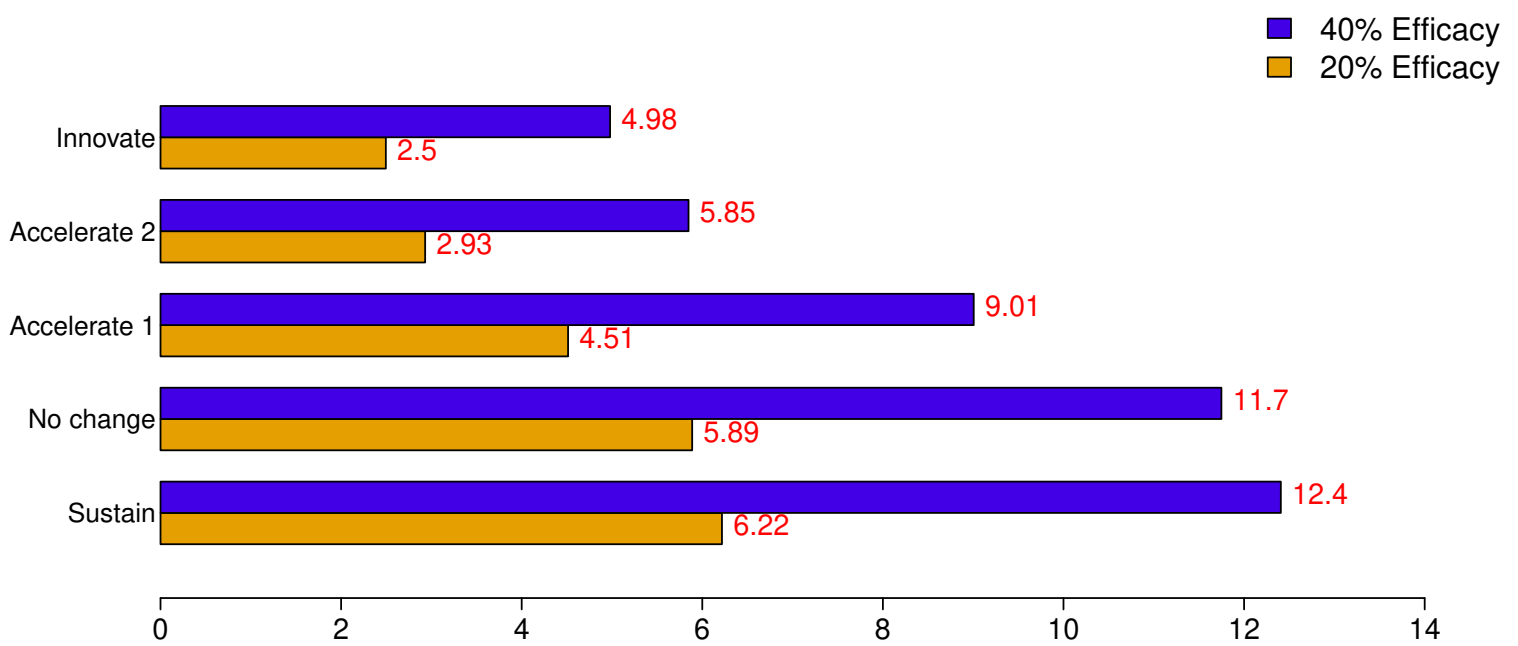


Fig C. Cumulative averted deaths in Niger for different Griffin scenarios and uptake levels

Conservative Uptake



Rapid Uptake



National Uptake

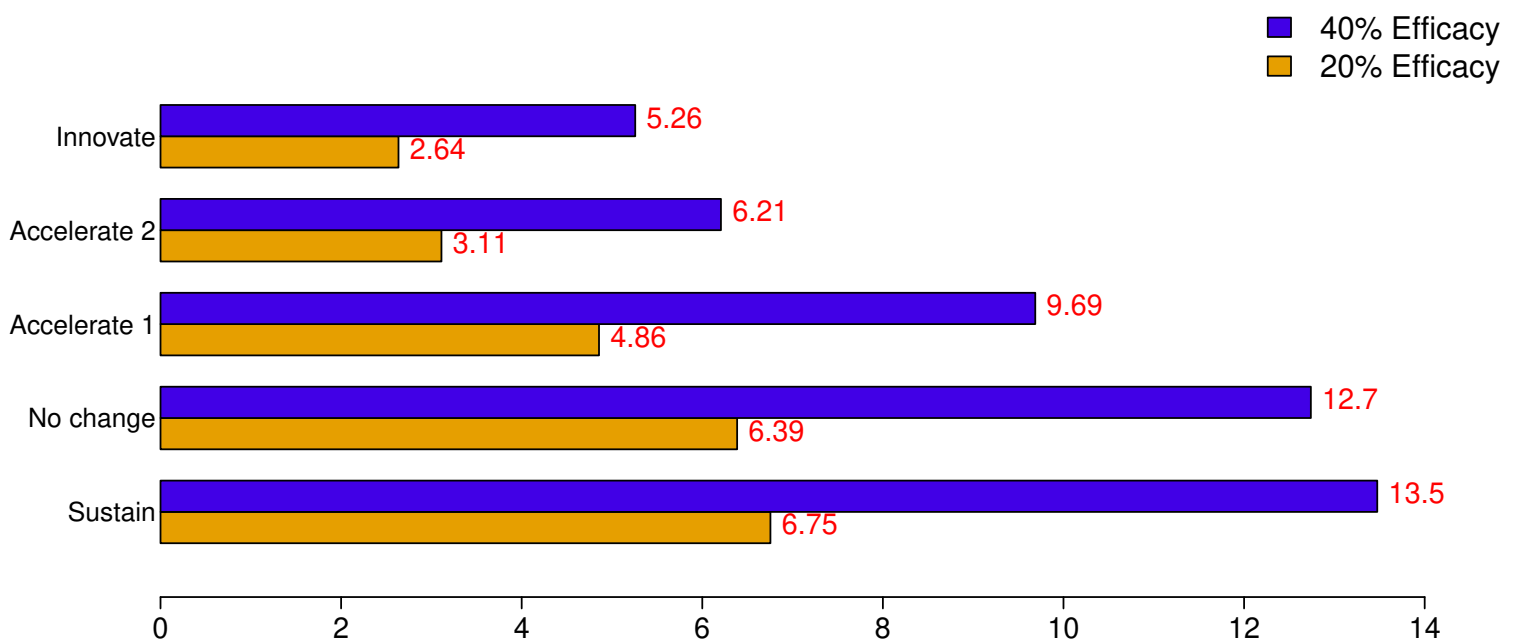


Fig D. Cumulative averted financial costs in Niger for different Griffin scenarios and uptake levels

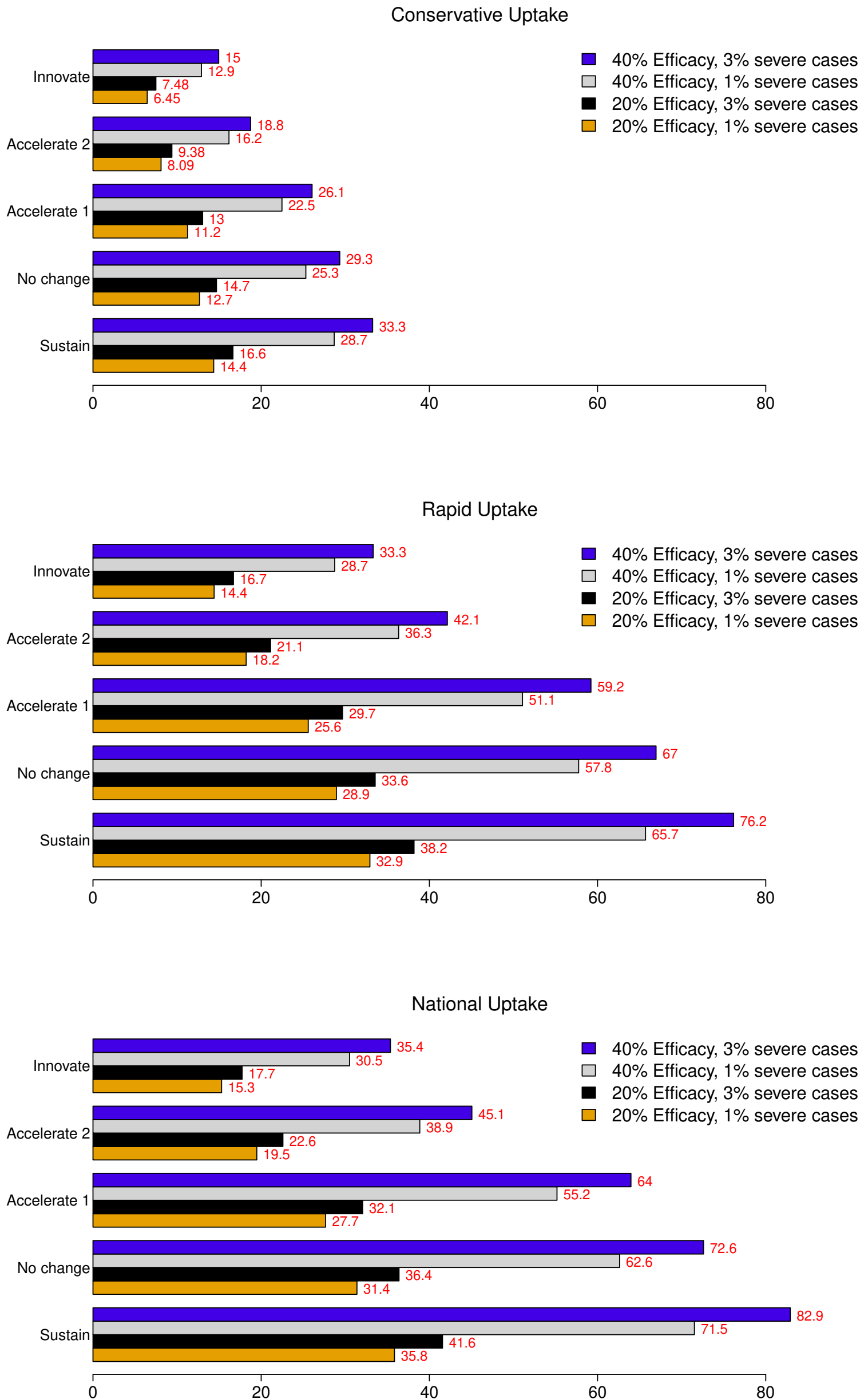
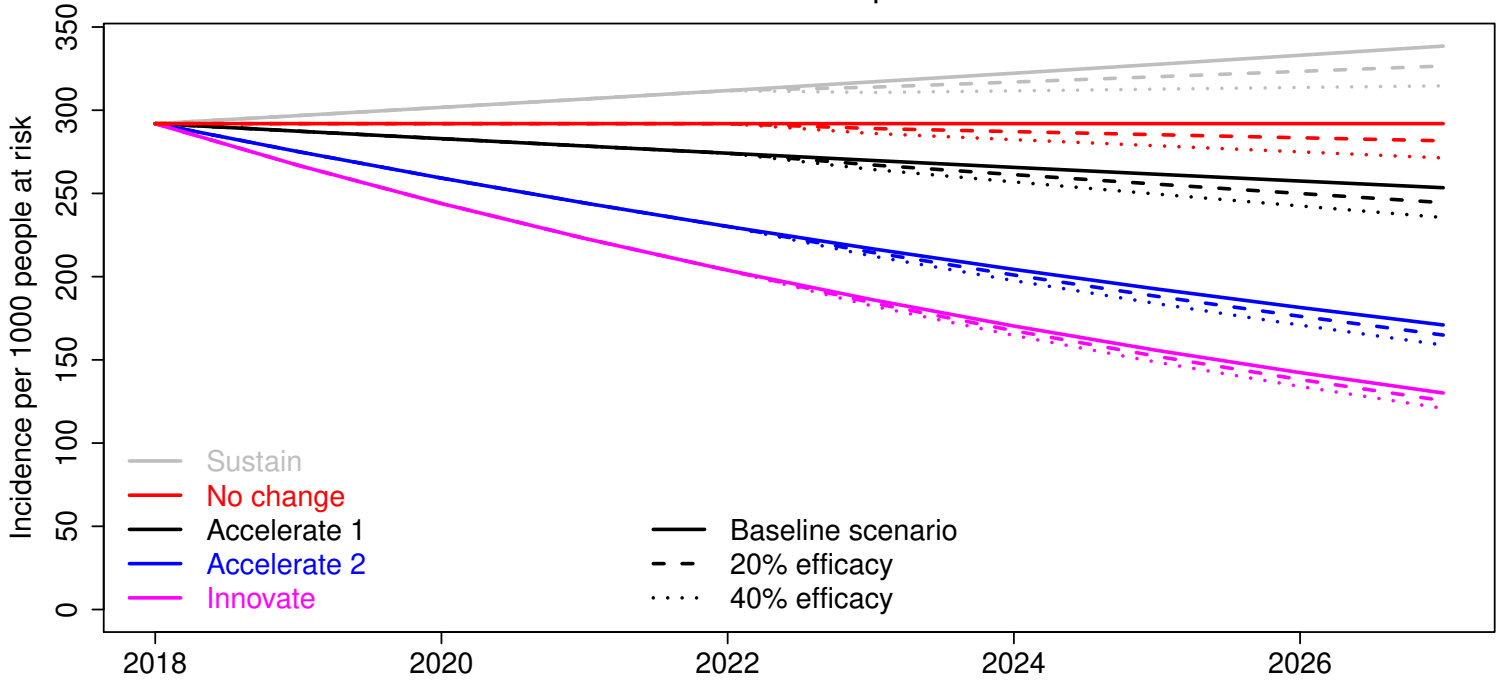
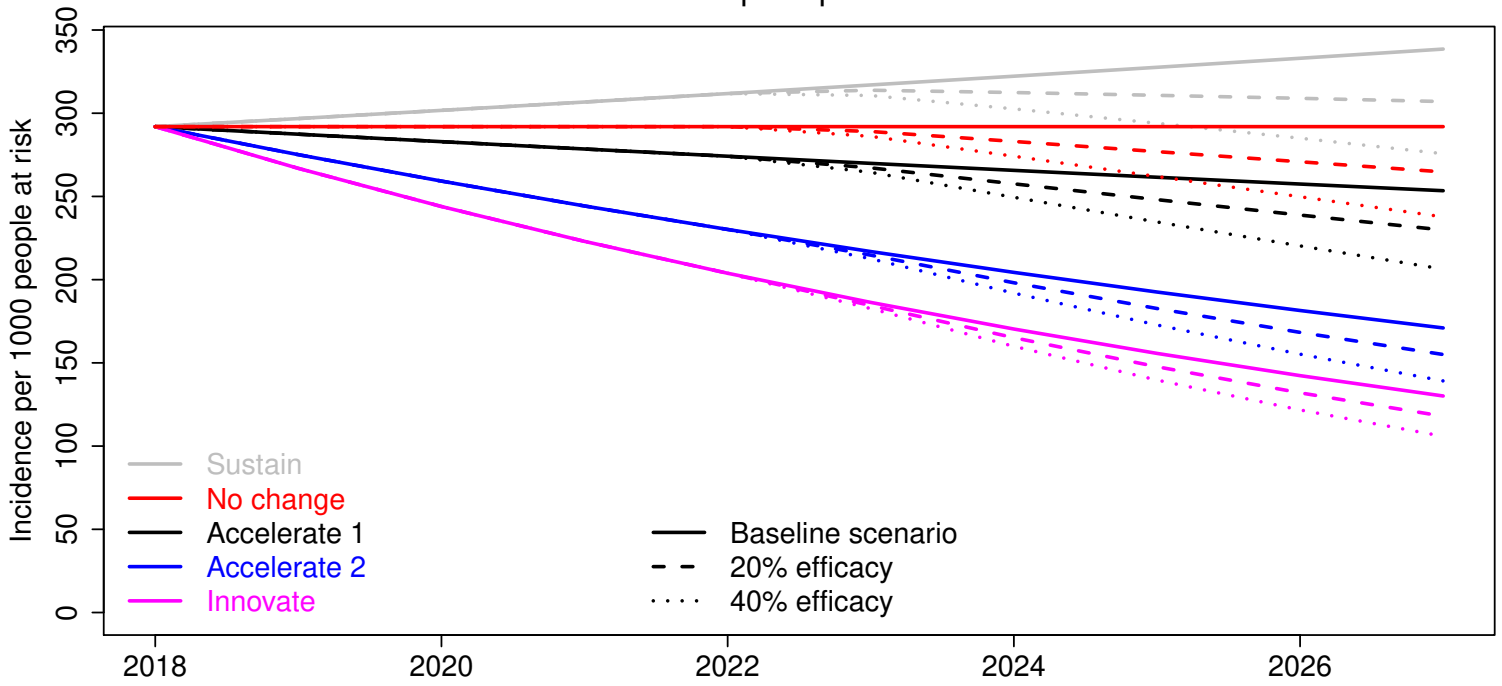


Fig A. Simulated malaria incidence in Nigeria for different Griffin scenarios and uptake levels

Conservative Uptake



Rapid Uptake



National Uptake

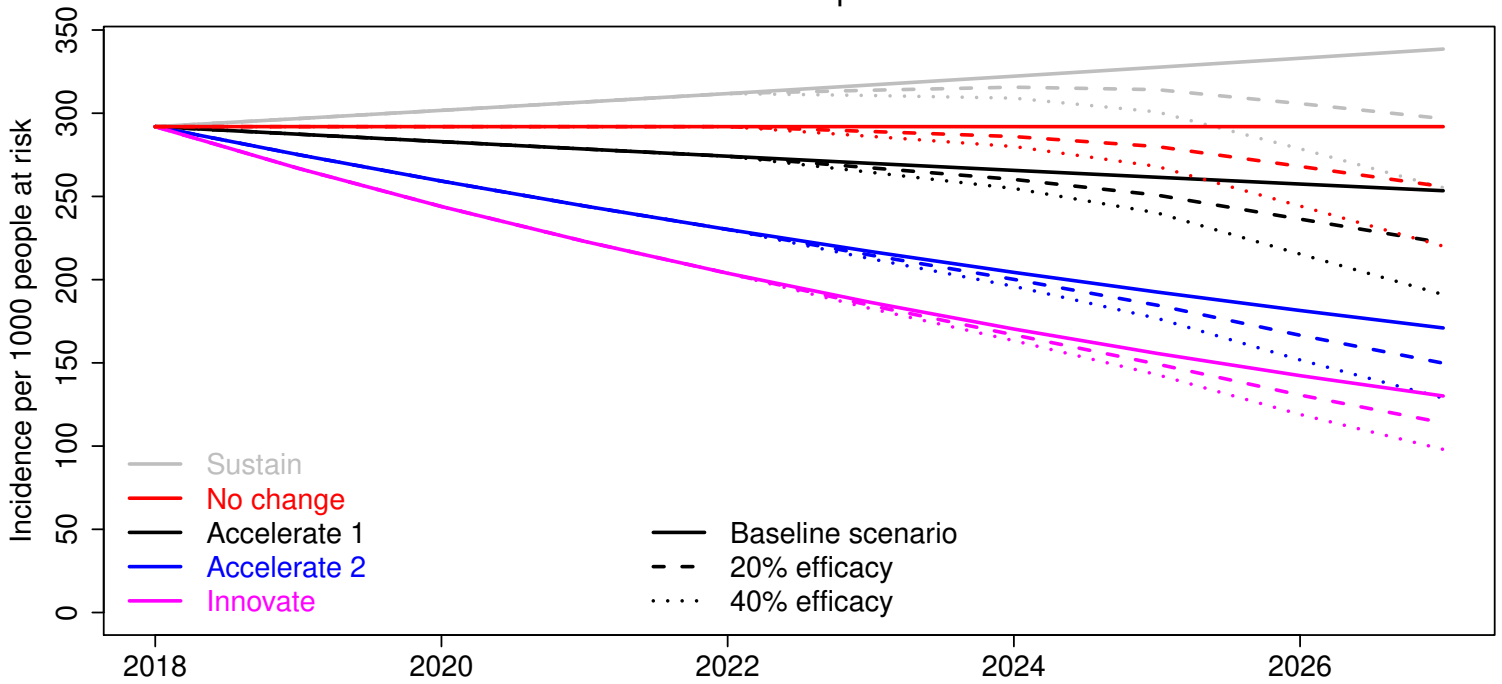


Fig B. Cumulative averted cases in Nigeria for different Griffin scenarios and uptake levels

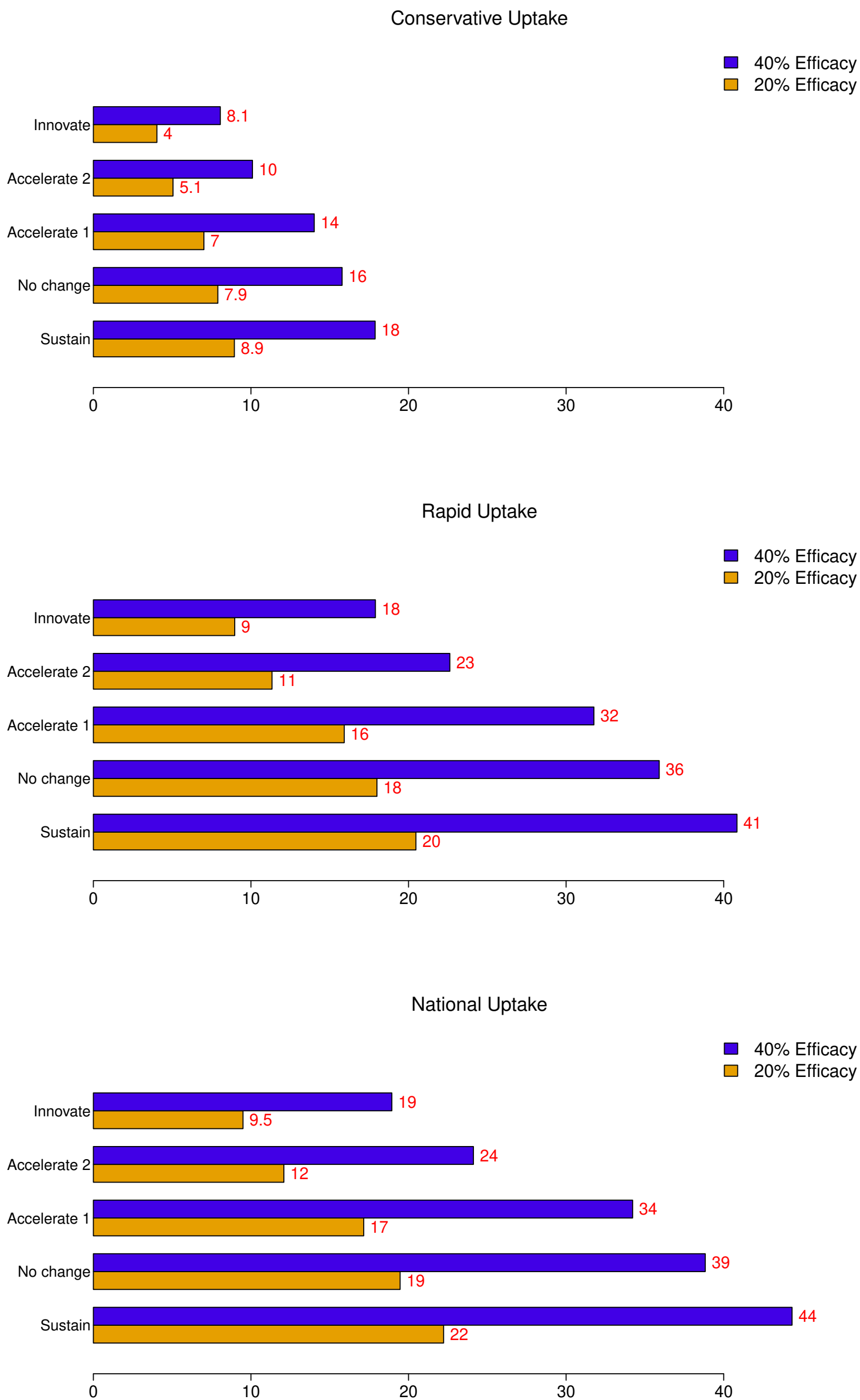


Fig C. Cumulative averted deaths in Nigeria for different Griffin scenarios and uptake levels

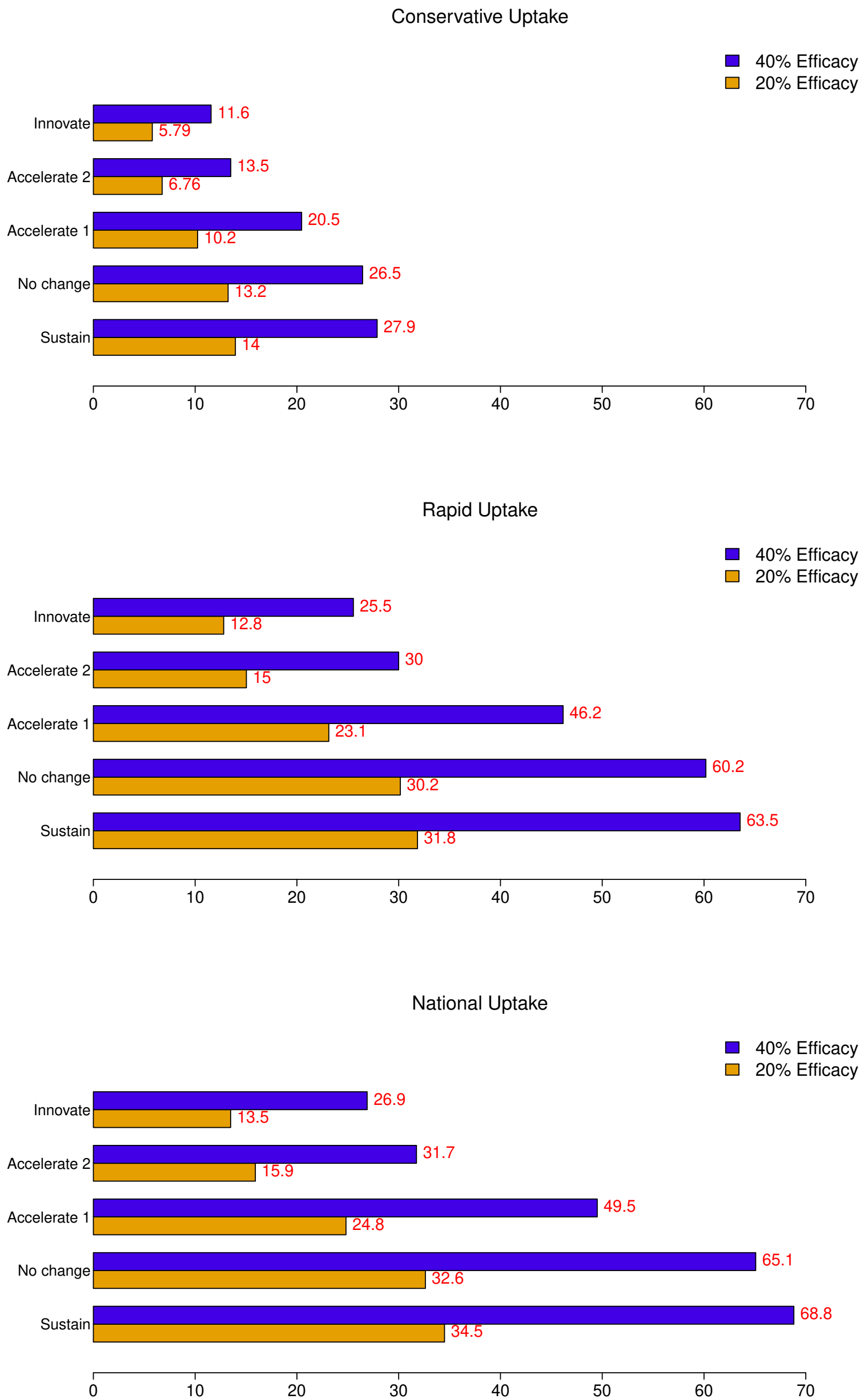


Fig D. Cumulative averted financial costs in Nigeria for different Griffin scenarios and uptake levels

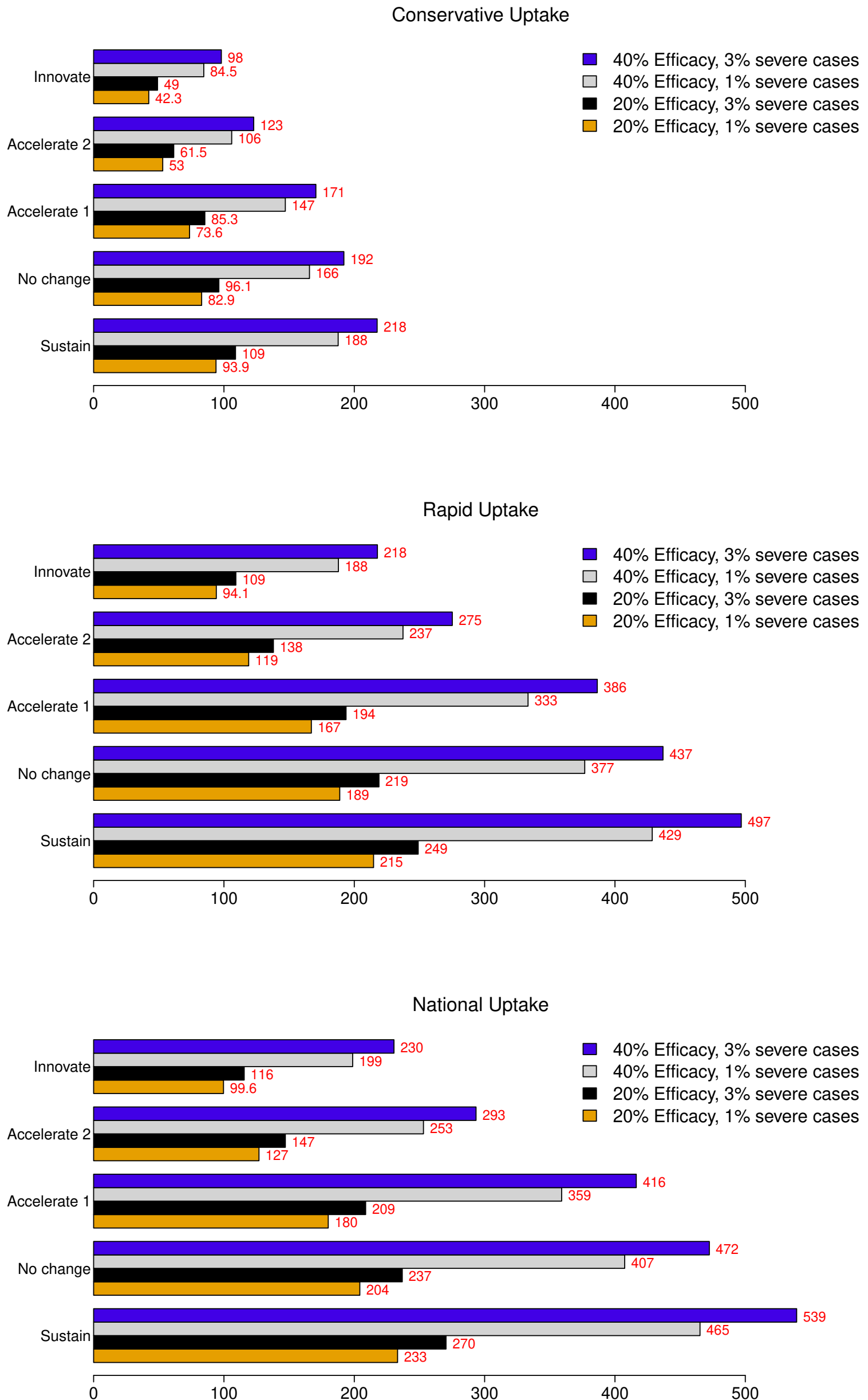
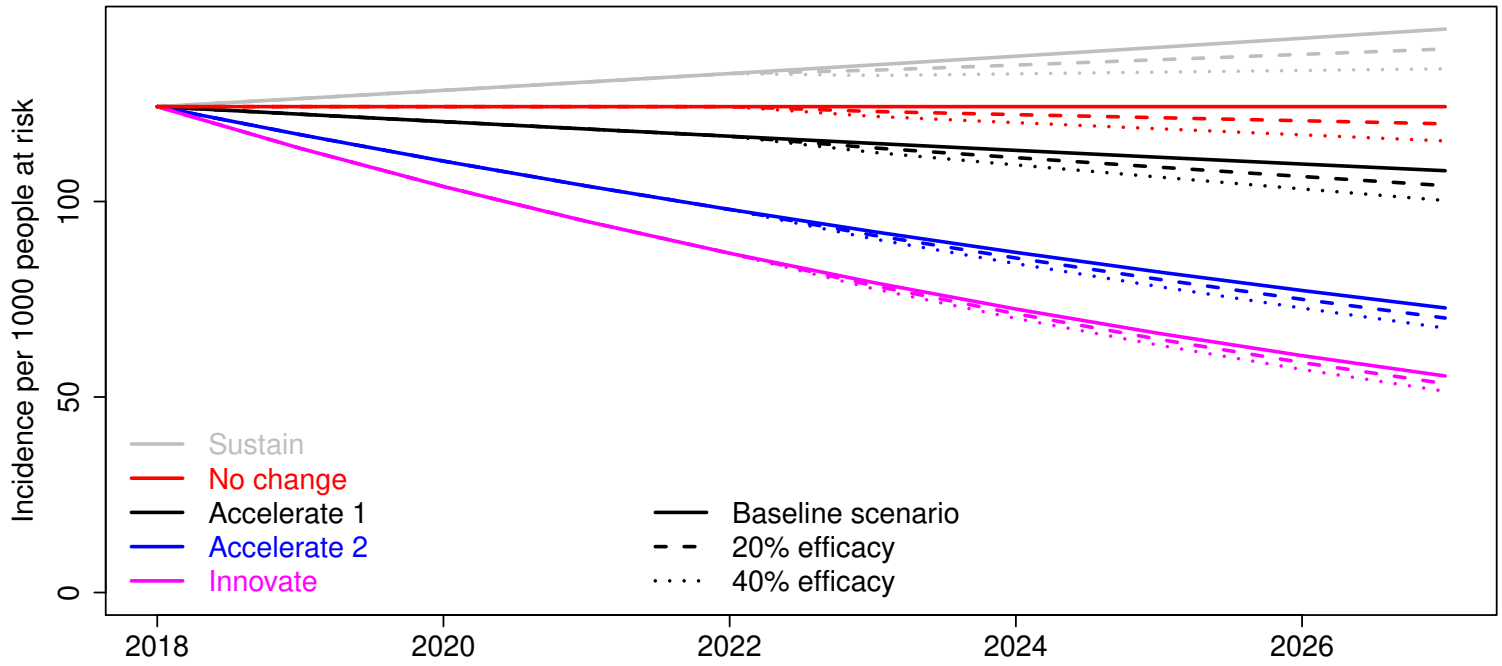
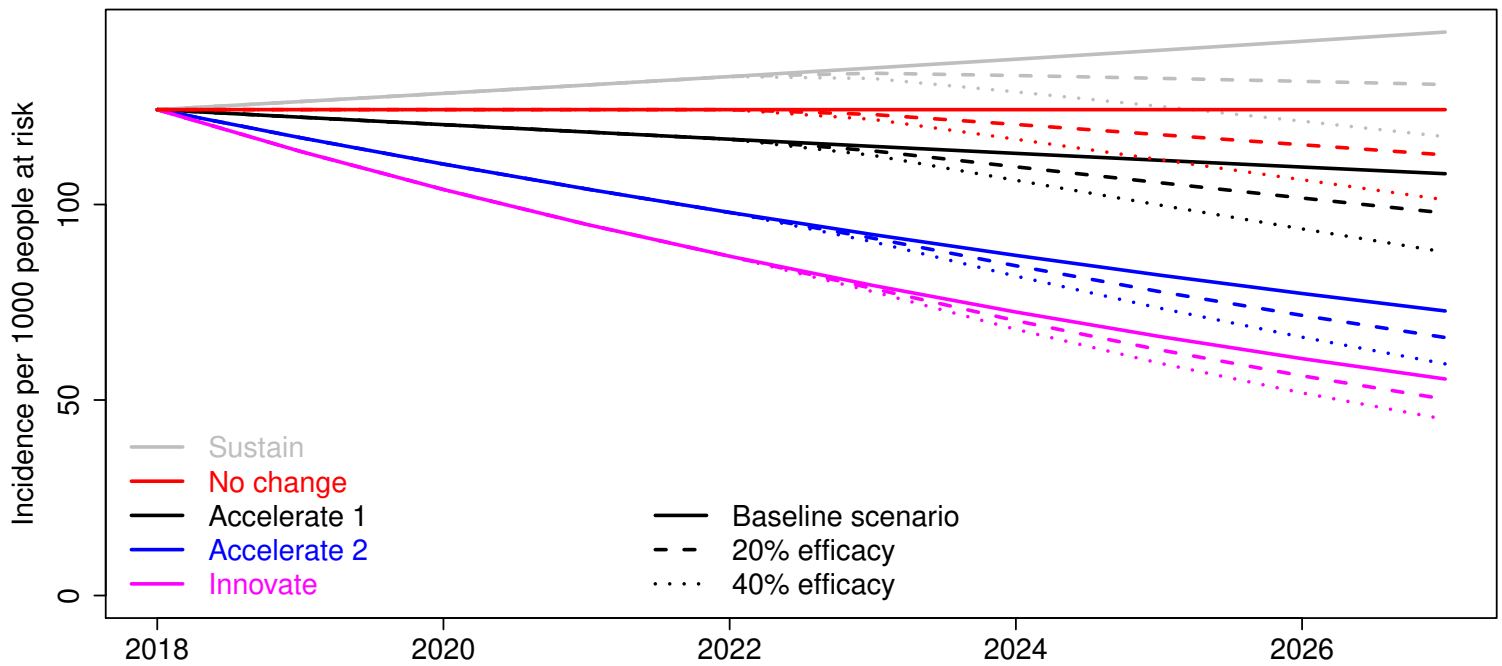


Fig A. Simulated malaria incidence in Tanzania for different Griffin scenarios and uptake levels

Conservative Uptake



Rapid Uptake



National Uptake

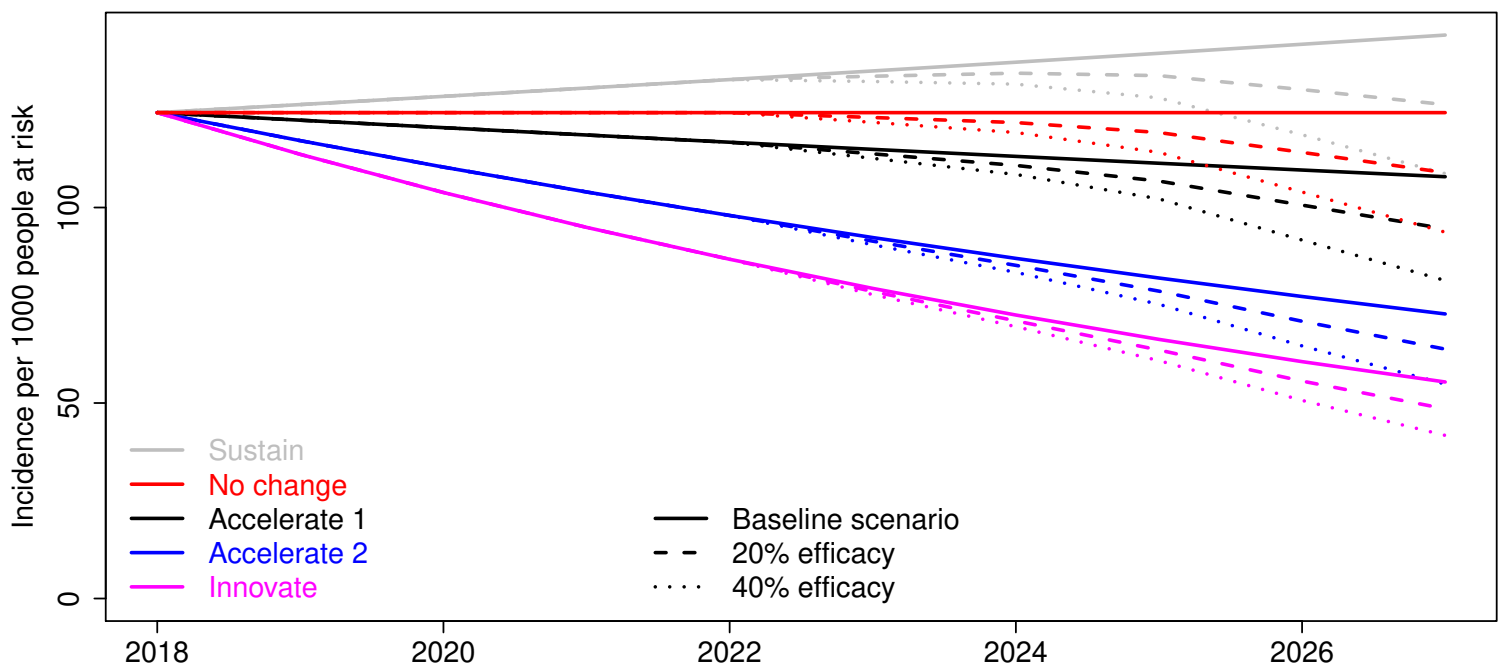


Fig B. Cumulative averted cases in Tanzania for different Griffin scenarios and uptake levels

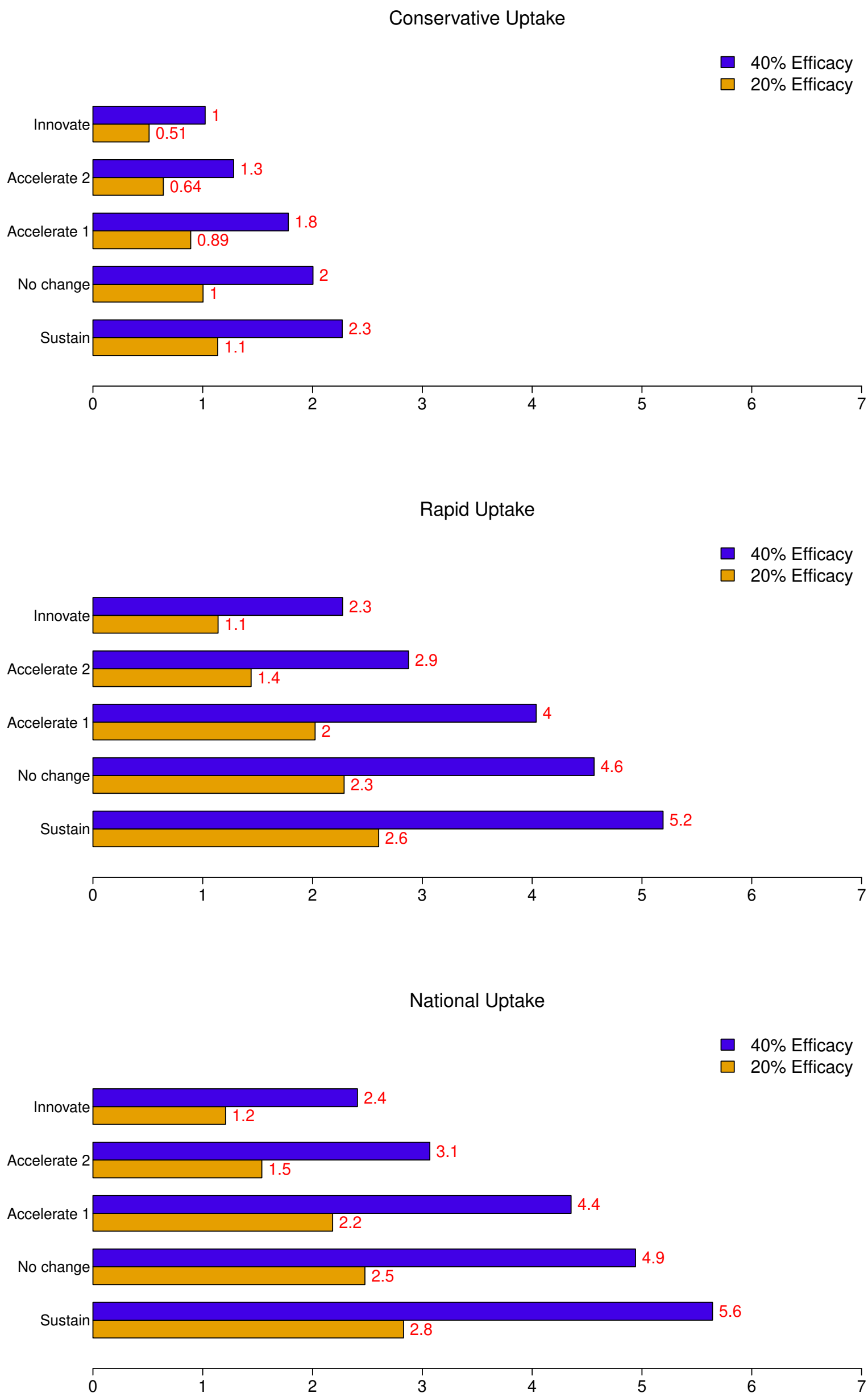


Fig C. Cumulative averted deaths in Tanzania for different Griffin scenarios and uptake levels

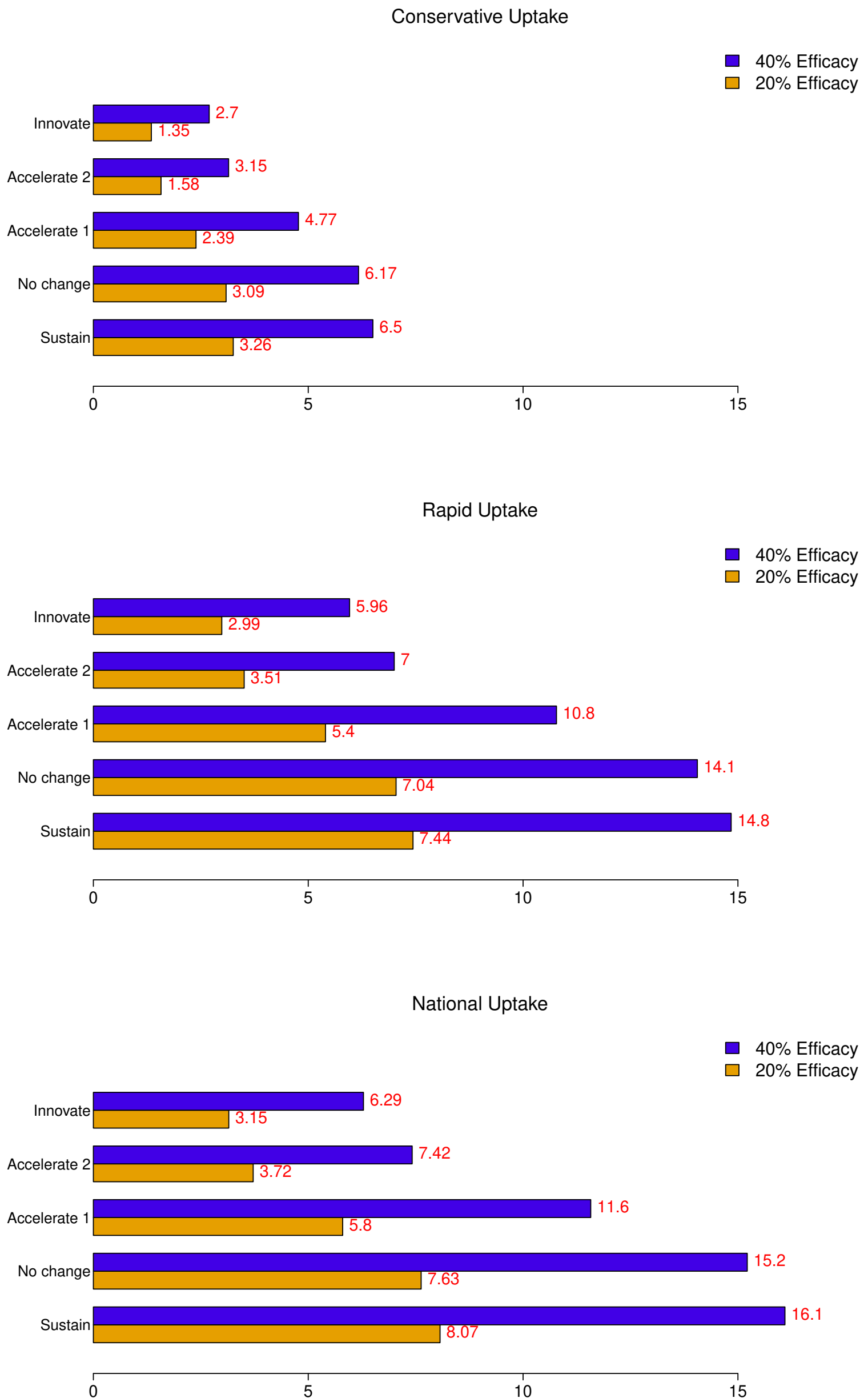


Fig D. Cumulative averted financial costs in Tanzania for different Griffin scenarios and uptake levels

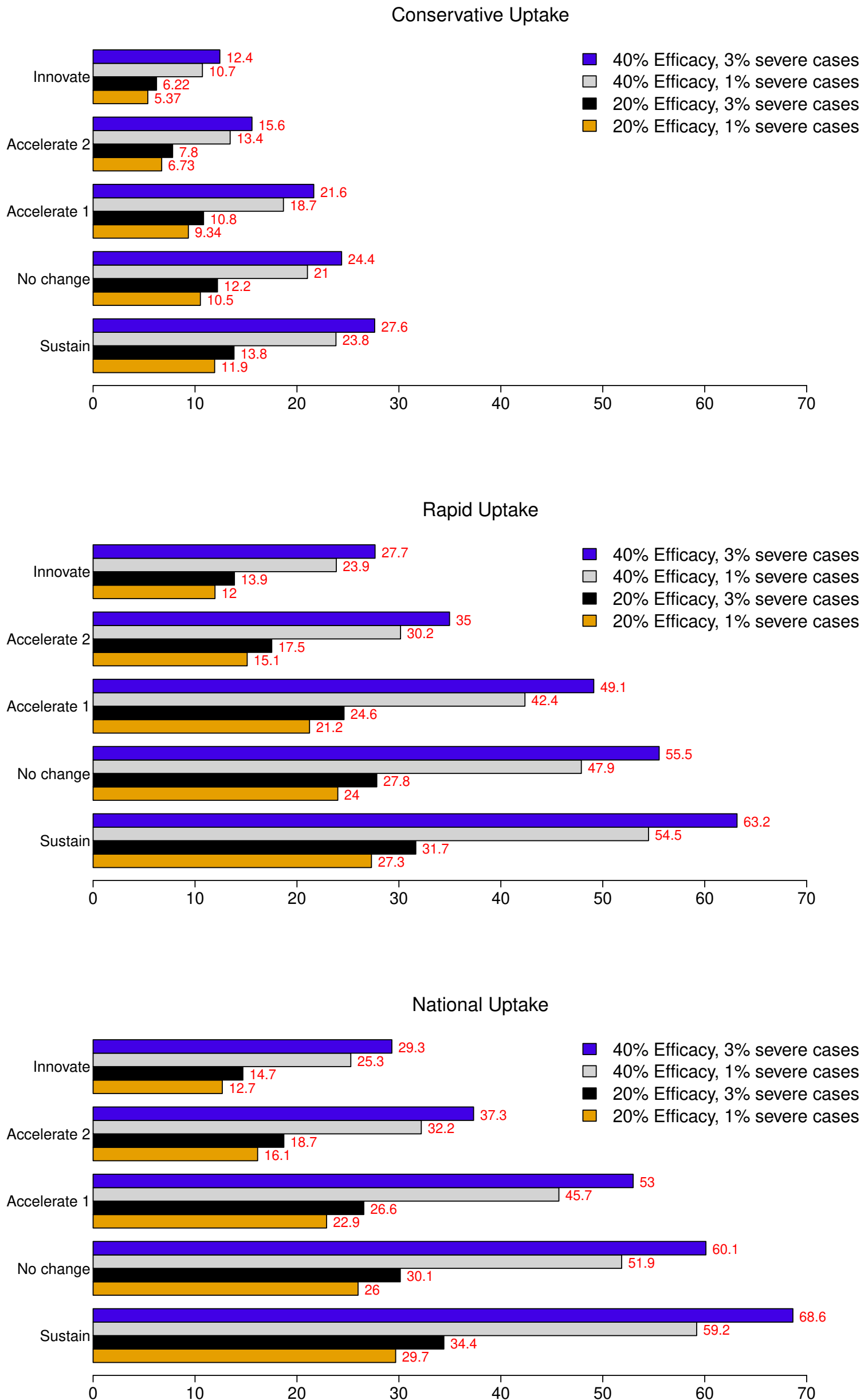
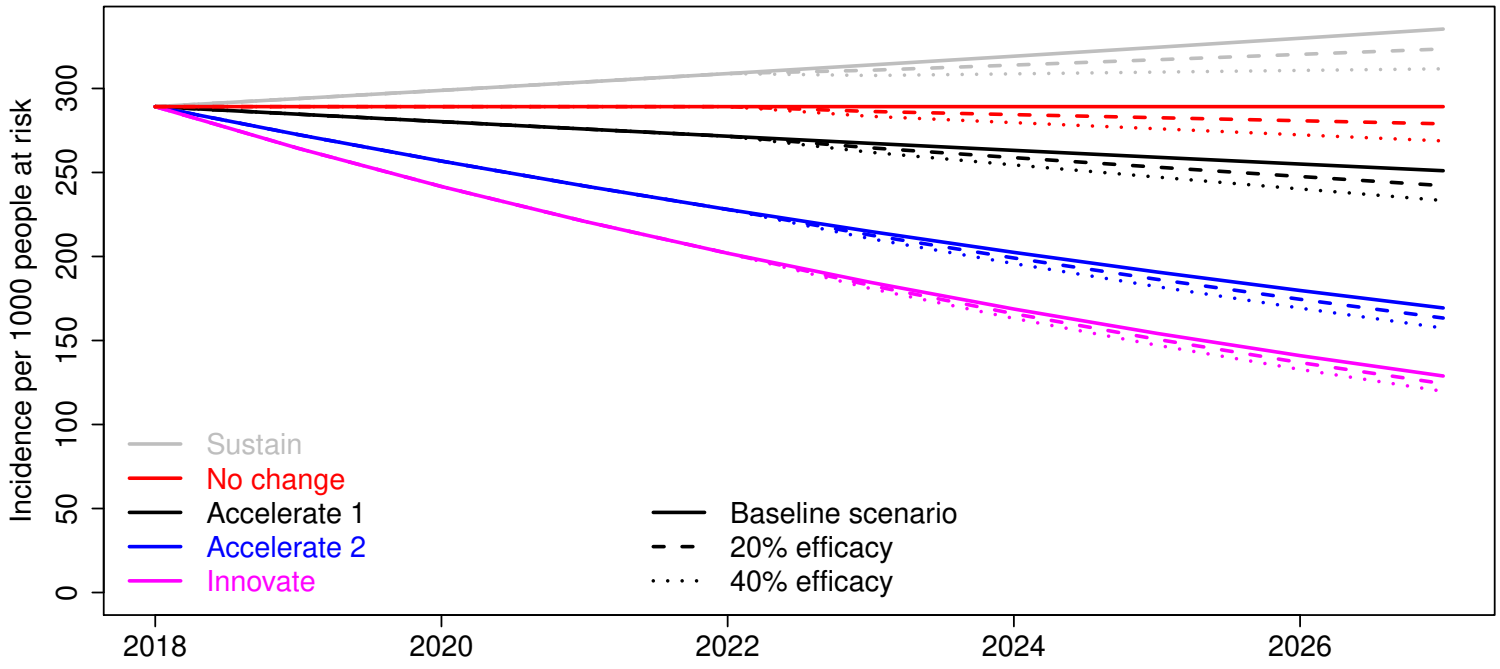
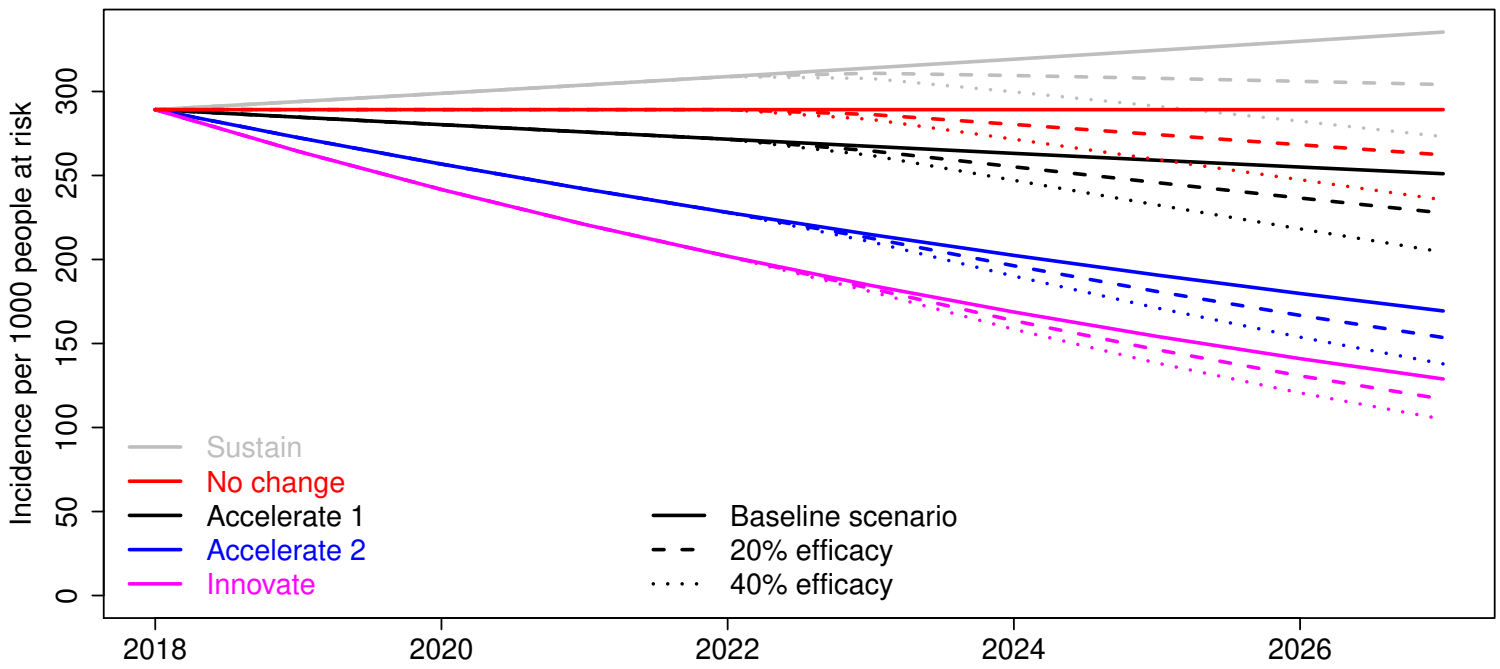


Fig A. Simulated malaria incidence in Uganda for different Griffin scenarios and uptake levels

Conservative Uptake



Rapid Uptake



National Uptake

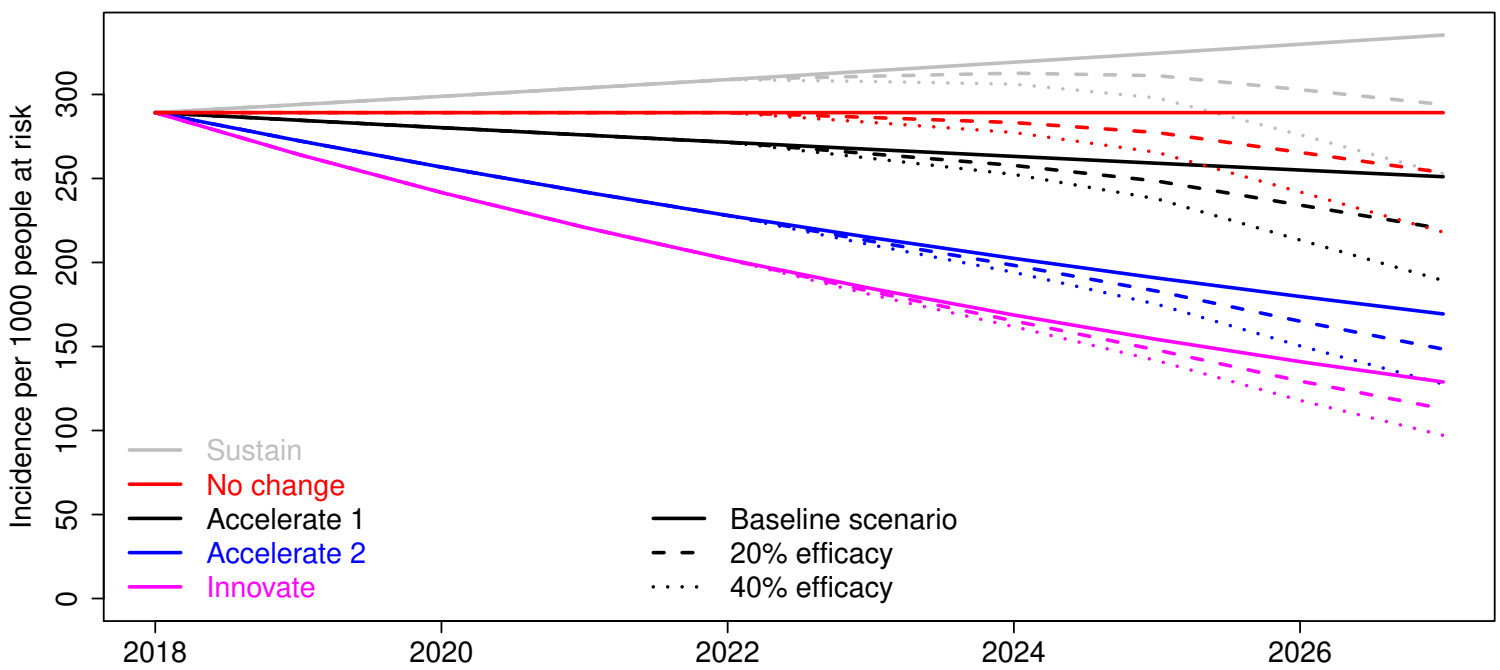


Fig B. Cumulative averted cases in Uganda for different Griffin scenarios and uptake levels

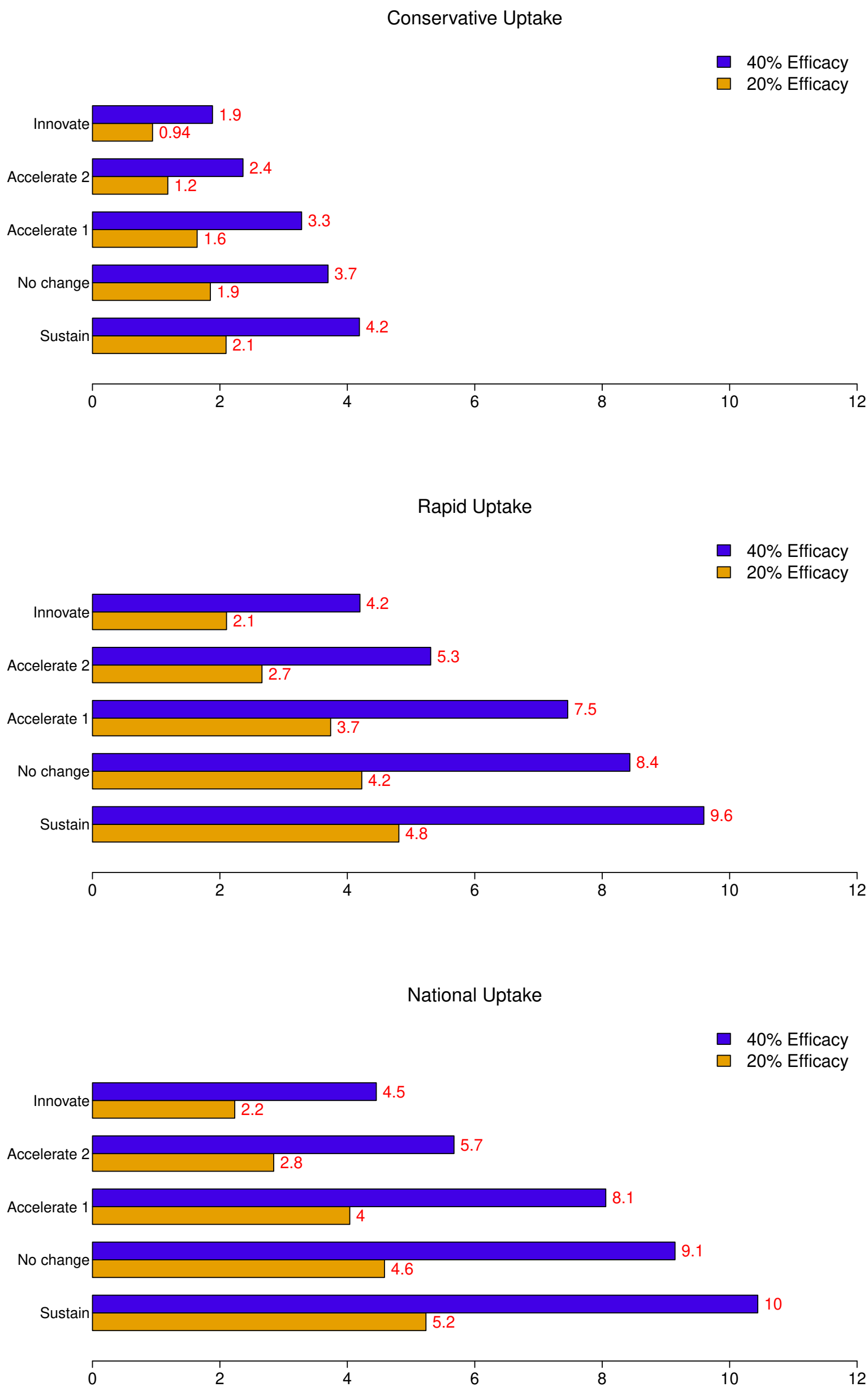
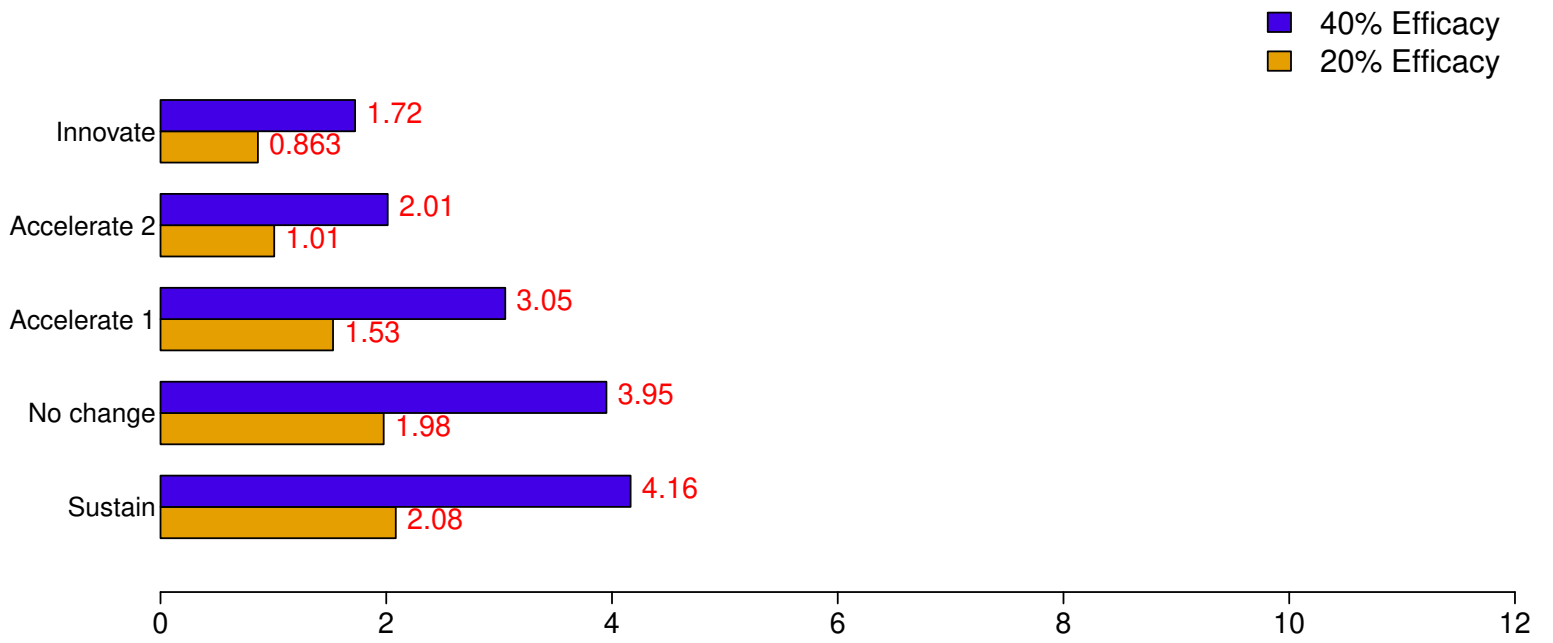
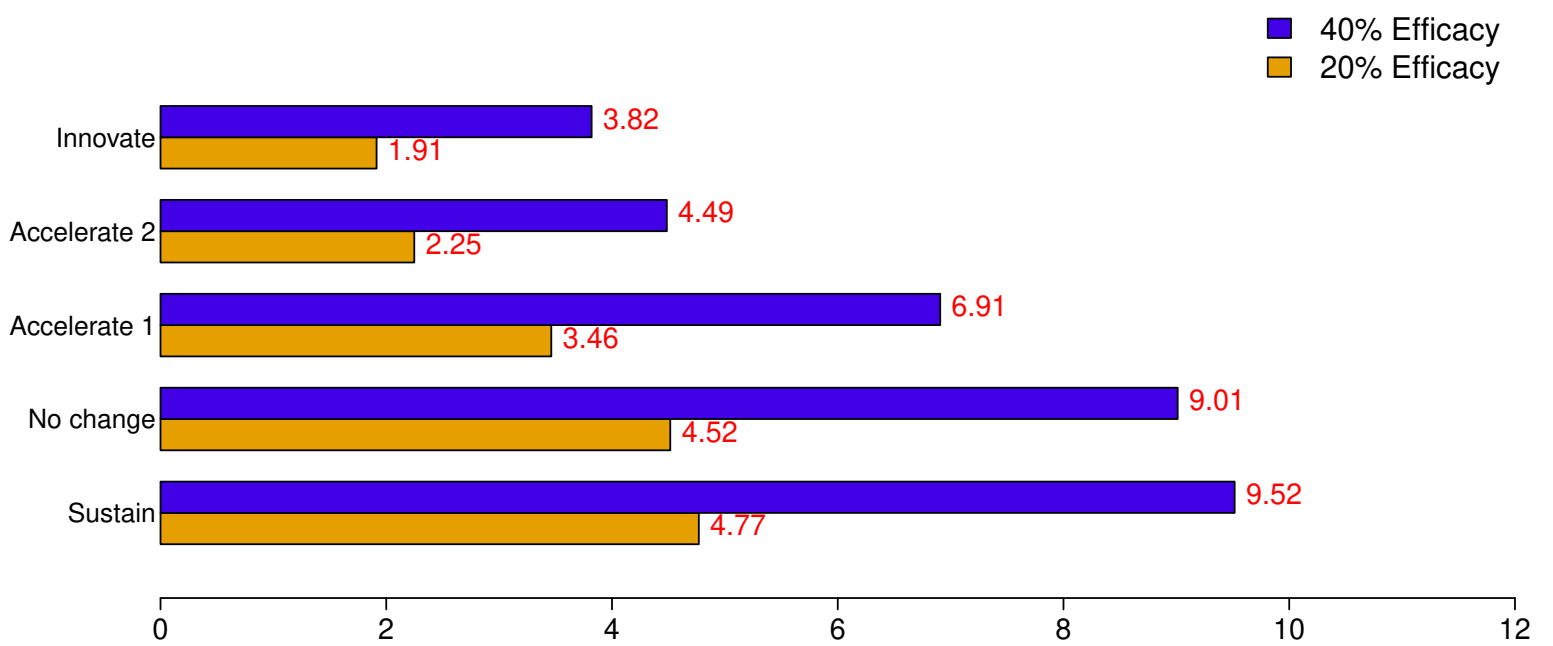


Fig C. Cumulative averted deaths in Uganda for different Griffin scenarios and uptake levels

Conservative Uptake



Rapid Uptake



National Uptake

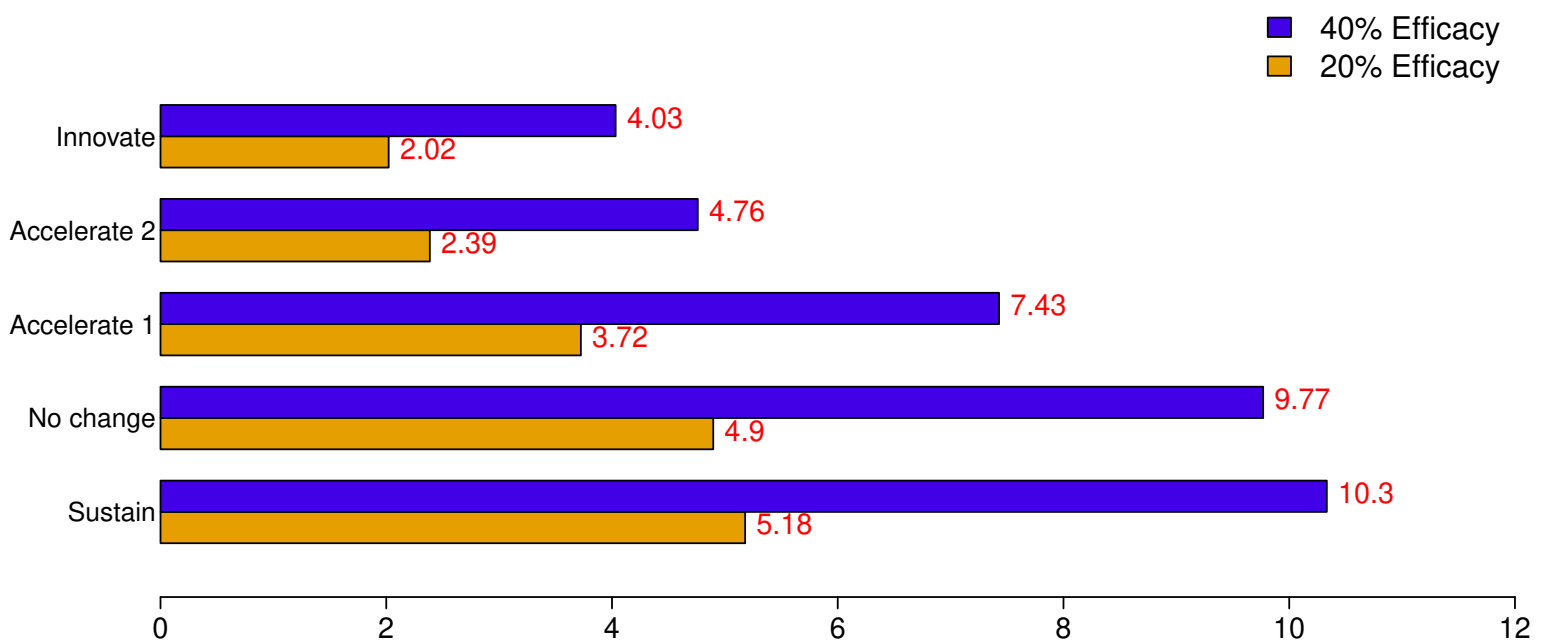
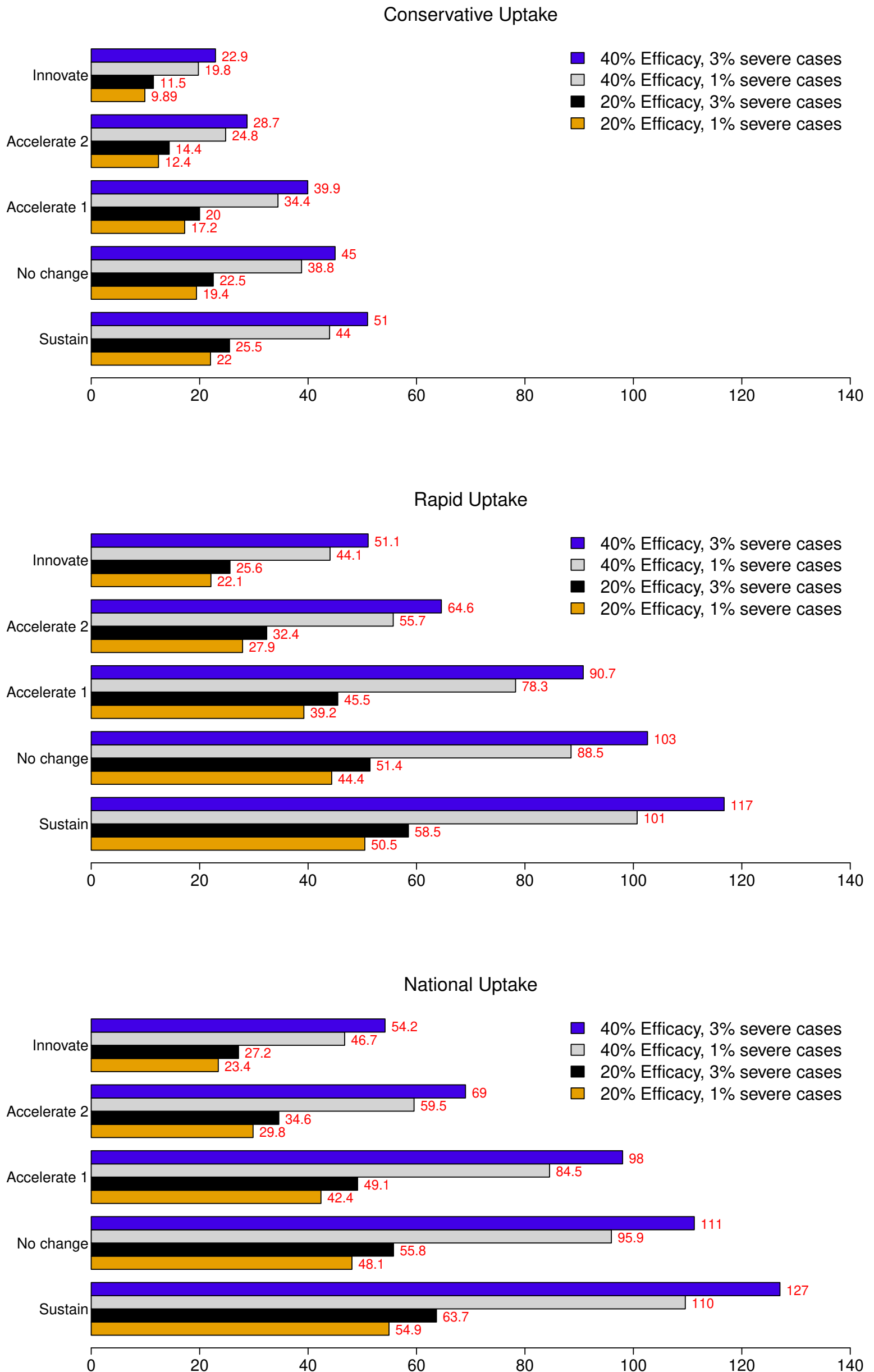


Fig D. Cumulative averted financial costs in Uganda for different Griffin scenarios and uptake levels



20 File. Data of all 9 HBHI countries

The table below reports the original data used for the full factorial experimental simulation analysis

Country	Year	Population at-risk	cases_point_estimated	deaths_point_estimated	pop_growth_annual_WDI (2018)
Nigeria	2018	1.96E+08	57184148	95844	0.026
Dem. Rep. Congo	2018	84068092	26888424	44615	0.032
Mozambique	2018	29496009	9006864	14426	0.029
Uganda	2018	42729032	12356577	13203	0.037
Burkina Faso	2018	19751466	7907562	27791	0.029
Ghana	2018	29767108	6678000	11070	0.022
Niger	2018	22442831	8002454	17084	0.038
Mali	2018	19077755	7378847	11848	0.03
Tanzania	2018	56313444	6997809	21550	0.031

Data used in the simulation

- 1 Country population at risk and point estimates of malaria cases and deaths in 2018
- 2 Country population growth rates
The median provider's economic cost of treating malaria is \$9.31 and \$89.93 for uncomplicated and severe case respectively.
- 3
The implementing cost consists of a purchasing cost of \$0.15 per tablet and a distribution cost of \$0.46 per person
- 4 per round.

Sources:

World Health Organization's 2019 World Malaria Report (Annex 3 – F)

World Bank's World Development Indicators 2018 database

(<https://databank.worldbank.org/source/world-development-indicators>)

Conteh, L., Shuford, K., Agboraw, E., Kont, M., Kolaczinski, J., & Patouillard, E. (2021). Costs and Cost-Effectiveness of Malaria Control Interventions: A Systematic Literature Review. *Value in Health*

Keating, J., Yukich, J. O., Mollenkopf, S., & Tediosi, F. (2014). Lymphatic filariasis and onchocerciasis prevention, treatment, and control costs across diverse settings: a systematic review. *Acta tropica*, 135, 86-95.