

Table S1: Mixed Effects Logistic Regression of AL Use by Malaria Status by Quarters and by age category

MALARIA NEGATIVE

Age	Unadjusted OR			Adjusted OR		
	0-5 years	6 + years	All ages	0-5 years	6 + years	All ages
Quarter 1	0.515 (0.330 - 0.802)	0.522 (0.324 - 0.841)	0.520 (0.377 - 0.718)	0.502 (0.321 - 0.785)	0.519 (0.322 - 0.837)	0.514 (0.371 - 0.711)
Quarter 2	0.576 (0.373 - 0.891)	0.437 (0.272 - 0.701)	0.516 (0.377 - 0.707)	0.611 (0.393 - 0.949)	0.448 (0.277 - 0.723)	0.531 (0.385 - 0.733)
Quarter 3	0.314 (0.195 - 0.505)	0.238 (0.140 - 0.404)	0.285 (0.201 - 0.403)	0.320 (0.198 - 0.516)	0.240 (0.141 - 0.409)	0.284 (0.199 - 0.404)
Quarter 4	0.368 (0.237 - 0.571)	0.496 (0.315 - 0.780)	0.436 (0.319 - 0.596)	0.360 (0.232 - 0.561)	0.496 (0.315 - 0.782)	0.422 (0.308 - 0.579)
Intervention facility	1.558 (0.348 - 6.969)	1.735 (0.425 - 7.085)	1.719 (0.431 - 6.858)	1.272 (0.514 - 3.148)	1.504 (0.581 - 3.894)	1.441 (0.628 - 3.305)
Quarter 1 x Intervention	0.854 (0.474 - 1.541)	0.870 (0.470 - 1.609)	0.860 (0.564 - 1.311)	0.865 (0.479 - 1.564)	0.863 (0.466 - 1.597)	0.859 (0.561 - 1.314)
Quarter 2 x Intervention	0.617 (0.345 - 1.104)	0.930 (0.507 - 1.709)	0.739 (0.488 - 1.119)	0.597 (0.333 - 1.070)	0.902 (0.490 - 1.661)	0.721 (0.474 - 1.097)
Quarter 3 x Intervention	0.854 (0.461 - 1.583)	1.226 (0.634 - 2.371)	0.974 (0.625 - 1.517)	0.960 (0.514 - 1.791)	1.241 (0.639 - 2.408)	1.060 (0.675 - 1.664)
Quarter 4 x Intervention	0.433 (0.236 - 0.793)	0.275 (0.146 - 0.519)	0.341 (0.221 - 0.526)	0.468 (0.254 - 0.861)	0.275 (0.145 - 0.520)	0.364 (0.235 - 0.565)
RDT used				0.660 (0.466 - 0.935)	0.913 (0.639 - 1.304)	0.773 (0.602 - 0.992)
Age <6						1.263 (1.116 - 1.430)
Female				1.059 (0.896 - 1.251)	0.859 (0.711 - 1.037)	0.965 (0.852 - 1.093)
High Transmission Area				11.33 (5.210 - 24.62)	9.450 (4.215 - 21.18)	10.36 (4.962 - 21.64)
Mean monthly slides read (2012)				1.000 (0.998 - 1.001)	1.000 (0.998 - 1.002)	1.000 (0.998 - 1.002)
Constant	0.156 (0.0521 - 0.467)	0.118 (0.0419 - 0.333)	0.132 (0.0478 - 0.362)	0.0552 (0.0178 - 0.171)	0.0452 (0.0149 - 0.137)	0.0415 (0.0155 - 0.111)
Standard deviation: facility random effect	1.461 (0.989 - 2.159)	1.378 (0.959 - 1.980)	1.401 (0.988 - 1.989)	0.715 (0.473 - 1.081)	0.789 (0.539 - 1.155)	0.733 (0.511 - 1.052)
ICC	0.394 (0.229 - 0.586)	0.366 (0.219 - 0.544)	0.374 (0.229 - 0.546)	0.135 (0.0637 - 0.262)	0.159 (0.0810 - 0.288)	0.140 (0.0734 - 0.252)
Observations (n)	5,414	6,328	11,927	5,412	6,328	11,740
Number of Facilities	17	17	17	17	17	17

MALARIA POSITIVE

Unadjusted OR			Adjusted OR		
0-5 years	6 + years	All ages	0-5 years	6 + years	All ages
0.730	1.218	0.925	0.730	1.260	0.941
(0.390 - 1.364)	(0.636 - 2.335)	(0.593 - 1.441)	(0.391 - 1.364)	(0.656 - 2.417)	(0.602 - 1.472)
1.299	1.802	1.522	1.310	1.887	1.544
(0.677 - 2.491)	(0.929 - 3.495)	(0.963 - 2.405)	(0.682 - 2.515)	(0.969 - 3.673)	(0.973 - 2.450)
1.232	2.091	1.466	1.241	2.067	1.591
(0.654 - 2.321)	(1.081 - 4.044)	(0.936 - 2.295)	(0.656 - 2.348)	(1.065 - 4.013)	(1.007 - 2.515)
1.163	1.908	1.468	1.122	1.834	1.452
(0.606 - 2.230)	(0.987 - 3.688)	(0.929 - 2.317)	(0.584 - 2.155)	(0.949 - 3.544)	(0.915 - 2.305)
1.119	0.970	1.046	1.246	0.938	1.067
(0.451 - 2.772)	(0.452 - 2.082)	(0.555 - 1.970)	(0.533 - 2.913)	(0.446 - 1.975)	(0.590 - 1.928)
1.343	1.679	1.467	1.323	1.597	1.480
(0.535 - 3.370)	(0.690 - 4.086)	(0.783 - 2.747)	(0.527 - 3.323)	(0.654 - 3.903)	(0.786 - 2.786)
0.876	0.619	0.692	0.889	0.567	0.691
(0.343 - 2.236)	(0.259 - 1.478)	(0.370 - 1.293)	(0.348 - 2.270)	(0.237 - 1.358)	(0.368 - 1.297)
0.679	0.821	0.811	0.798	0.873	0.849
(0.271 - 1.704)	(0.344 - 1.957)	(0.437 - 1.505)	(0.313 - 2.034)	(0.364 - 2.090)	(0.452 - 1.595)
0.931	0.885	0.879	0.978	0.873	0.914
(0.349 - 2.486)	(0.359 - 2.181)	(0.457 - 1.690)	(0.365 - 2.618)	(0.354 - 2.155)	(0.473 - 1.768)
			0.724	0.775	0.764
			(0.461 - 1.137)	(0.520 - 1.156)	(0.565 - 1.033)
					1.028
					(0.858 - 1.231)
			1.226	0.764	0.970
			(0.952 - 1.579)	(0.596 - 0.980)	(0.814 - 1.156)
			2.045	1.708	1.737
			(1.253 - 3.336)	(1.273 - 2.292)	(1.238 - 2.437)
			1.001	1.000	1.000
			(1.000 - 1.002)	(0.999 - 1.001)	(0.999 - 1.001)
2.982	1.973	2.464	1.136	1.801	1.578
(1.587 - 5.602)	(1.112 - 3.500)	(1.559 - 3.894)	(0.461 - 2.802)	(0.896 - 3.620)	(0.851 - 2.927)
0.478	0.270	0.372	0.313	0.129	0.254
(0.295 - 0.774)	(0.146 - 0.501)	(0.240 - 0.577)	(0.162 - 0.607)	(0.0332 - 0.498)	(0.149 - 0.435)
0.0649	0.0217	0.0404	0.0289	0.00500	0.0193
(0.0258 - 0.154)	(0.00641 - 0.071)	(0.0172 - 0.092)	(0.00787 - 0.101)	(0.000335 - 0.0700)	(0.00667 - 0.054)
1,458	1,475	2,972	1,458	1,474	2,932
16	17	17	16	17	17