

Supplementary Materials

Supplementary Table 1. Comparison of patients included and excluded during the two study periods

Pre-implementation period	Excluded patients (N=249)	Included patients (N=304)	P value
Age – median (IQR)	23 (8-36)	24 (9-45)	0.21
Sex			0.46
Male	81 (32.5%)	108 (35.5%)	
Female	168 (67.5%)	196 (64.5%)	
Return visit	43 (17.3%)	65 (21.4%)	0.22
Diagnosis			
Malaria	24 (13.6%)	33 (10.9%)	0.37
Systemic infection	10 (5.7%)	27 (8.9%)	0.20
Respiratory tract infection	20 (11.4%)	29 (9.6%)	0.53
Gastroenteritis/acute watery diarrhoea	11 (6.2%)	15 (5.0%)	0.55
Urinary tract infection	22 (12.5%)	47 (15.5%)	0.37
Genital infection	14 (8.0%)	30 (9.9%)	0.48
Intra-abdominal infection	1 (0.6%)	0 (0.0%)	0.37
Gastritis/peptic ulcer disease	14 (8.0%)	23 (7.6%)	0.89
Trauma/injury	19 (10.8%)	28 (9.2%)	0.58
Pregnancy-related complaints	8 (4.5%)	12 (4.0%)	0.76
Allergy/asthma	3 (1.7%)	3 (1.0%)	0.67
Severe acute malnutrition	11 (6.2%)	5 (1.7%)	0.015
Renal failure	4 (2.3%)	5 (1.7%)	0.73
Liver failure/cirrhosis	3 (1.7%)	2 (0.7%)	0.36
Sickle cell disease	3 (1.7%)	6 (2.0%)	1.00
Hypertension	19 (10.8%)	31 (10.2%)	0.85
Diabetes mellitus	4 (2.3%)	13 (4.3%)	0.31
Cardiac disease	2 (1.1%)	3 (1.0%)	1.00
Epilepsy	11 (6.2%)	24 (7.9%)	0.50
Other neurological disorder	5 (2.8%)	17 (5.6%)	0.18
Psychiatric disorder/intoxication	1 (0.6%)	3 (1.0%)	1.00
Disposition			0.011
Discharge	219 (88.0%)	243 (79.9%)	
Admission	30 (12.0%)	61 (20.1%)	
Post-implementation period	Excluded patients (N=289)	Included patients (N=246)	P value
Age – median (IQR)	22 (8-35)	20 (6-43)	0.77
Sex			0.078
Male	125 (43.3%)	88 (35.8%)	
Female	164 (56.7%)	158 (64.2%)	
Return visit	61 (21.1%)	34 (13.8%)	0.028
Diagnosis			
Malaria	61 (22.6%)	57 (27.0%)	0.26
Systemic infection	25 (9.3%)	25 (11.8%)	0.36
Respiratory tract infection	30 (11.1%)	27 (12.8%)	0.57

Post-implementation period	Excluded patients (N=289)	Included patients (N=246)	P value
Urinary tract infection	32 (11.9%)	21 (10.0%)	0.51
Genital infection	23 (8.5%)	16 (7.6%)	0.71
Intra-abdominal infection	1 (0.4%)	3 (1.4%)	0.32
Gastritis/peptic ulcer disease	10 (3.7%)	21 (10.0%)	0.006
Trauma/injury	25 (9.3%)	24 (11.4%)	0.45
Pregnancy-related complaints	14 (5.2%)	7 (3.3%)	0.32
Allergy/asthma	6 (2.2%)	5 (2.4%)	1.00
Severe acute malnutrition	4 (1.5%)	3 (1.4%)	1.00
Renal failure	4 (1.5%)	4 (1.9%)	0.73
Liver failure/cirrhosis	7 (2.6%)	3 (1.4%)	0.52
Sickle cell disease	15 (5.6%)	13 (6.2%)	0.78
Hypertension	9 (3.3%)	5 (2.4%)	0.60
Diabetes mellitus	10 (3.7%)	6 (2.8%)	0.60
Cardiac disease	3 (1.1%)	4 (1.9%)	0.70
Epilepsy	7 (2.6%)	1 (0.5%)	0.085
Other neurological disorder	8 (3.0%)	16 (7.6%)	0.021
Psychiatric disorder/intoxication	6 (2.2%)	6 (2.8%)	0.66
Disposition			0.003
Discharge	245 (84.8%)	183 (74.4%)	
Admission	44 (15.2%)	63 (25.6%)	

Supplementary Table 2. Sensitivity analysis for triage outcomes

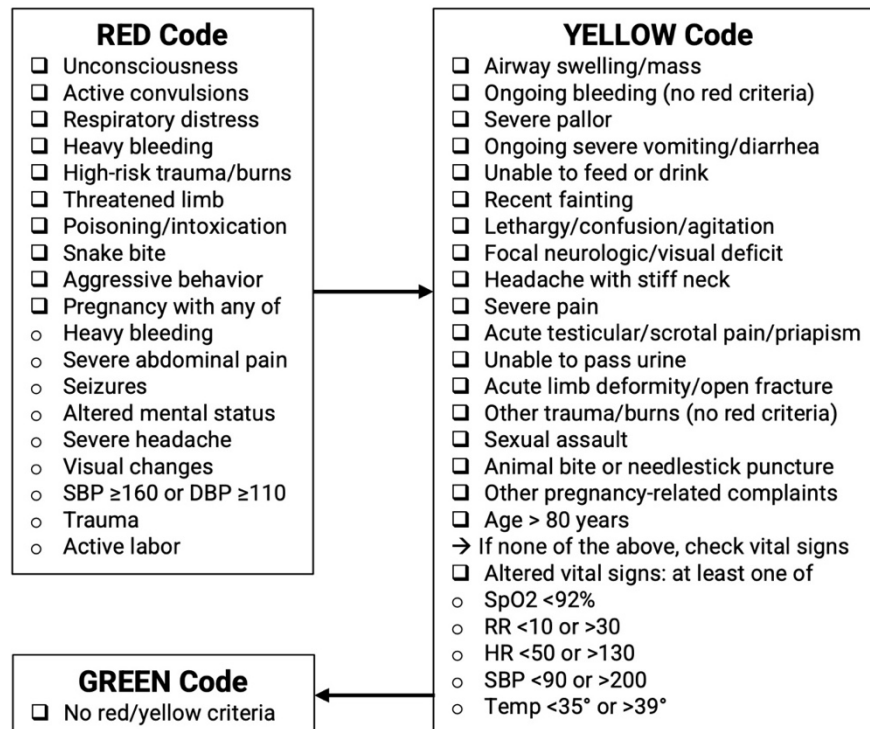
	Pre-implementation	Post-implementation	Odds Ratio (95% CI)	
			Unadjusted	Adjusted*
New visits	n=239	n=212		
Emergency/urgent cases	47 (19.7%)	49 (23.1%)	1.23 (0.78-1.93)	1.10 (0.68-1.80)
Overtriage	4 (1.7%)	13 (6.1%)	3.84 (1.23-11.96)	3.2 (0.94-10.96)
Undertriage	17 (7.1%)	22 (10.4%)	1.51 (0.78-2.93)	1.18 (0.57-2.43)
Malaria cases	n=33	n=57		
Emergency/urgent cases	11 (33%)	22 (39%)	1.26 (0.51-3.09)	1.38 (0.56-3.40)
Overtriage	0 (0%)	1 (2%)	1.00	1.00
Undertriage	11 (33%)	14 (25%)	0.65 (0.25-1.67)	0.70 (0.27-1.80)
Trauma cases	n=28	n=24		
Emergency/urgent cases	10 (36%)	6 (25%)	0.90 (0.29-2.84)	0.96 (0.30-3.05)
Overtriage	2 (7%)	4 (17%)	2.60 (0.43-15.65)	2.67 (0.44-16.20)
Undertriage	1 (4%)	2 (8%)	2.45 (0.21-28.89)	3.50 (0.23-52.89)

* The logistic regression model was adjusted for malaria diagnosis and/or outpatient department reattendance status.

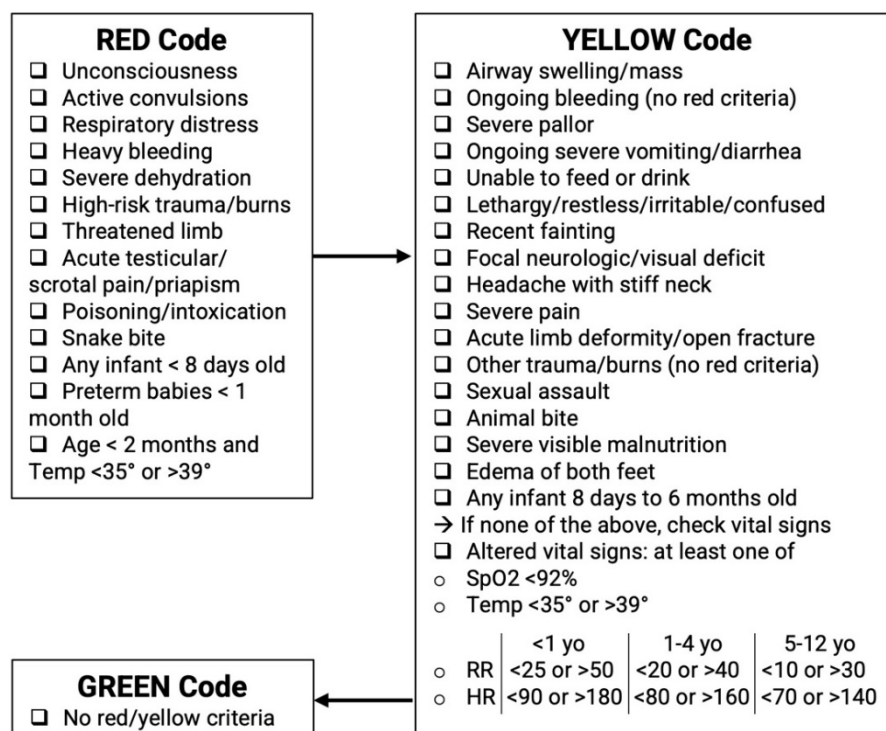
Supplementary Figure 1. Triage checklists implemented in the outpatient department (OPD) of Dr Ambrosoli Memorial Hospital during the study period

The triage checklists were adapted from the Interagency Integrated Triage Tool and were printed on the first page of each patient's OPD chart.

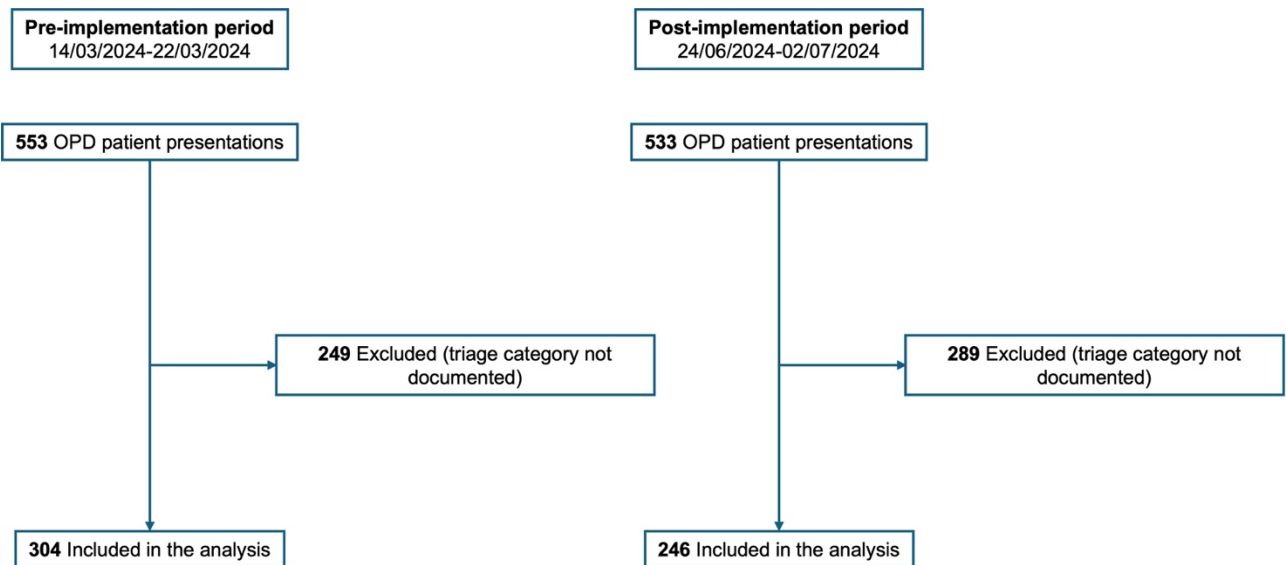
ADULT TRIAGE



PEDIATRIC TRIAGE



Supplementary Figure 2. Study flow diagram



Supplementary Figure 3. Outpatient department wait times during the two study periods
The figure shows the time to provider and the provider-to-disposition time for each triage category both before and after IITT implementation. Created in <https://BioRender.com>

