



UCSF

THE REPUBLIC OF UGANDA

UGANDA MALARIA SURVEILLANCE PROJECT

Mulago Hospital Complex, P.O.Box 7475, Kampala, Tel. 041-530692, Fax 041-540524;
website umsp.muucsf.org

UMSP sentinel site malaria surveillance report April 2010

Introduction

Uganda Malaria Surveillance Project (UMSP) manages 6 sentinel sites located around the country with varying malaria transmission intensity. Based on historical entomological and epidemiological data these sites include two with relatively low transmission intensity (Kamwezi and Kihihi), two sites with medium transmission intensity (Walukuba and Kasambya) and two sites with high transmission intensity (Nagongera and Aduku). The sentinel sites collect high quality malaria data, which is analyzed to produce monthly reports. Data is presented by sentinel site in the order of historical levels of transmission intensity. These reports aim to give an overview of the malaria situation in the different parts of the country where the sentinel sites are located. UMSP also maintains a website umsp.muucsf.org that can be accessed for more information.

Data summary

District	Site	Total number of patients seen		Malaria suspected (number and proportion) ¹		Patients sent to the laboratory (number and proportion) ²		Laboratory confirmed malaria (number and proportion) ³	
		Total	< 5 years	Total	< 5 years	Total	< 5 years	Total	< 5 years
Kabale	Kamwezi	2564	499	926	237	840	211	237	66
			(19%)	(36%)	(47%)	(91%)	(89%)	(29%)	(32%)
Kanungu	Kihihi	2046	587	1,323	481	1,310	479	339	171
			(29%)	(65%)	(82%)	(99%)	(99%)	(26%)	(36%)
Jinja	Walukuba	2983	663	1,570	484	1,533	471	578	200
			(23%)	(53%)	(73%)	(98%)	(97%)	(38%)	(43%)
Mubende	Kasambya	1236	385	1,036	348	873	294	332	135
			(31%)	(84%)	(90%)	(84%)	(84%)	(38%)	(46%)
Tororo	Nagongera	2249	794	1,661	732	1,599	713	718	463
			(35%)	(74%)	(92%)	(96%)	(97%)	(45%)	(65%)
Aduku	Aduku	1602	449	871	383	840	367	421	252
			(28%)	(54%)	(85%)	(96%)	(96%)	(50%)	(69%)

¹ Denominator used to calculate proportion is total number of patients seen

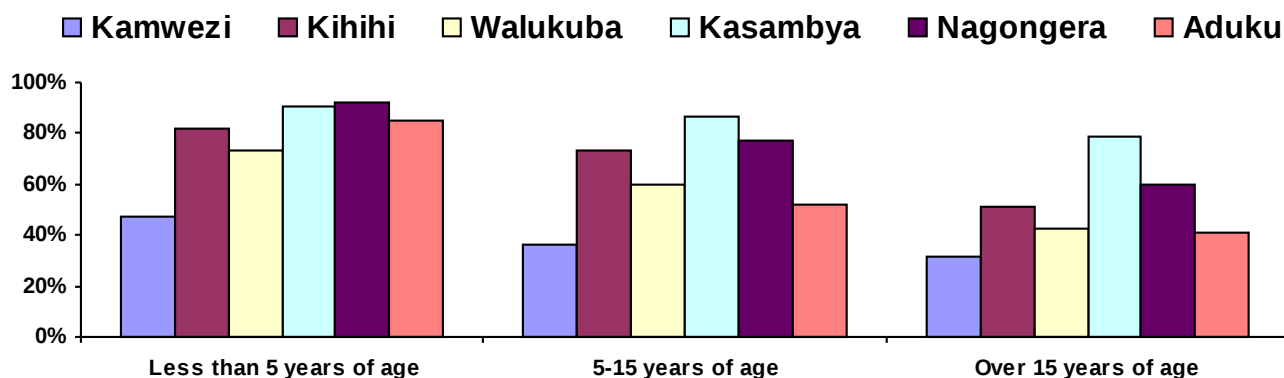
² Denominator used to calculate proportion is the number with malaria suspected

³ Denominator used to calculate proportion is the number of patients with laboratory test done

With reference to last month, total OPD attendance decreased at Kamwezi, Kihihi, Kasambya, and Aduku, while it increased at Walukuba and Nagongera. The proportion of patients suspected of malaria ranged from 36% (Kihihi) to 84% (Kasambya) irrespective of age, while it ranged from 47% (Kihihi) to 92% (Nagongera) among the under 5s. At all sites,

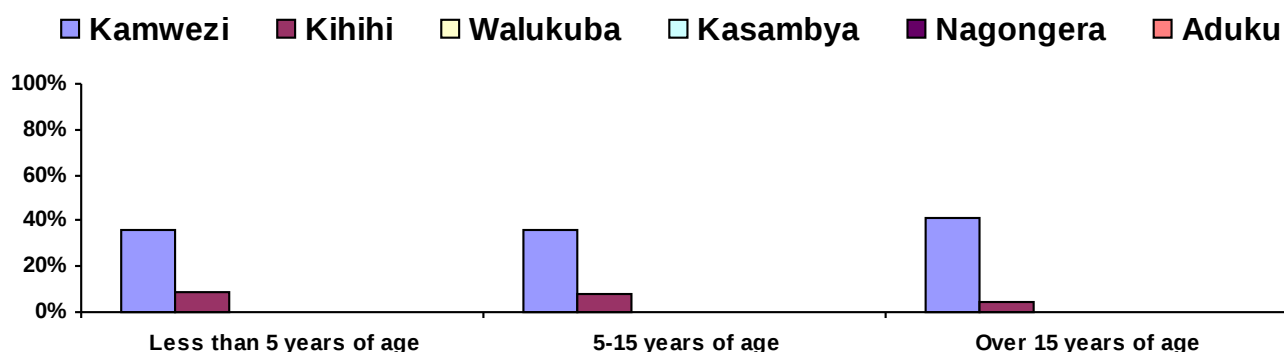
except Kasambya, over 90% of patients suspected of malaria were referred for a confirmatory test. The overall proportion of laboratory confirmed malaria cases this month was comparable to the previous month. However, there was an 8% increase in the proportion of laboratory confirmed malaria at Kihihi, and a 7% increase in Aduku. While there was a 7% decrease at Kamwezi.

Proportion of total patients seen suspected of having malaria stratified by age group



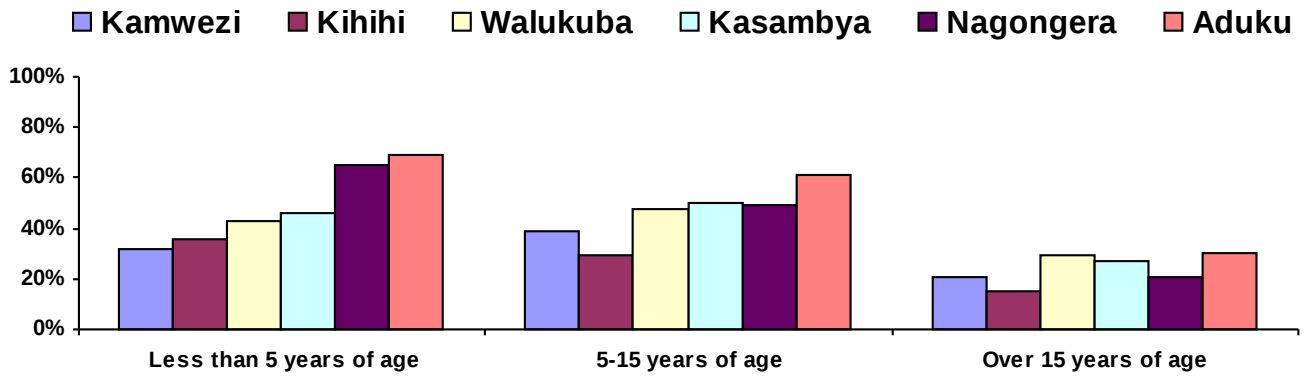
Suspected malaria cases are defined as all patients referred for a malaria laboratory test plus all patients not referred for a malaria laboratory test but given a clinical diagnosis of malaria. The proportion of patients suspected of malaria did not change from last months' except at Kamwezi where it reduced from 77% to 47% among children less than 5 years old, from 61% to 36% in those aged 5 – 15, and from 58% to 32% among those over 15 years of age.

Proportion of laboratory tests done that were RDTs



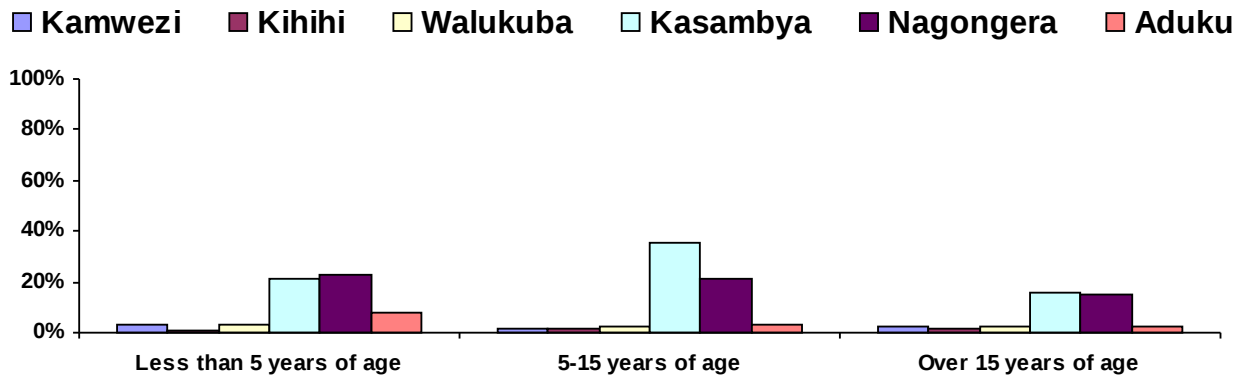
Walukuba, Kasambya, Nagongera and Aduku did not have any RDTs this month. Kamwezi performed 30% of malaria confirmatory tests using RDTs.

Proportion of laboratory tests done that were positive



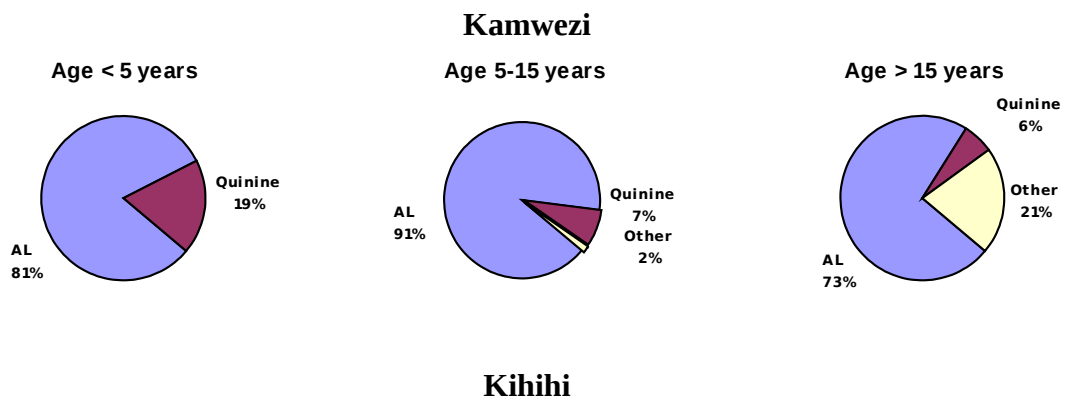
Compared to the previous month, the slide positivity rate was relatively stable for all age groups at Kamwezi, Kasambya, Nagongera and Walukuba. At Aduku those who tested positive increased from 59% to 69% among under-5s and from 19% to 30% among those over 15 years of age. At Kihihi, the proportion of those who tested positive increased from 23% to 36% among under-5s and from 20% to 30% among those aged 5 – 15 years.

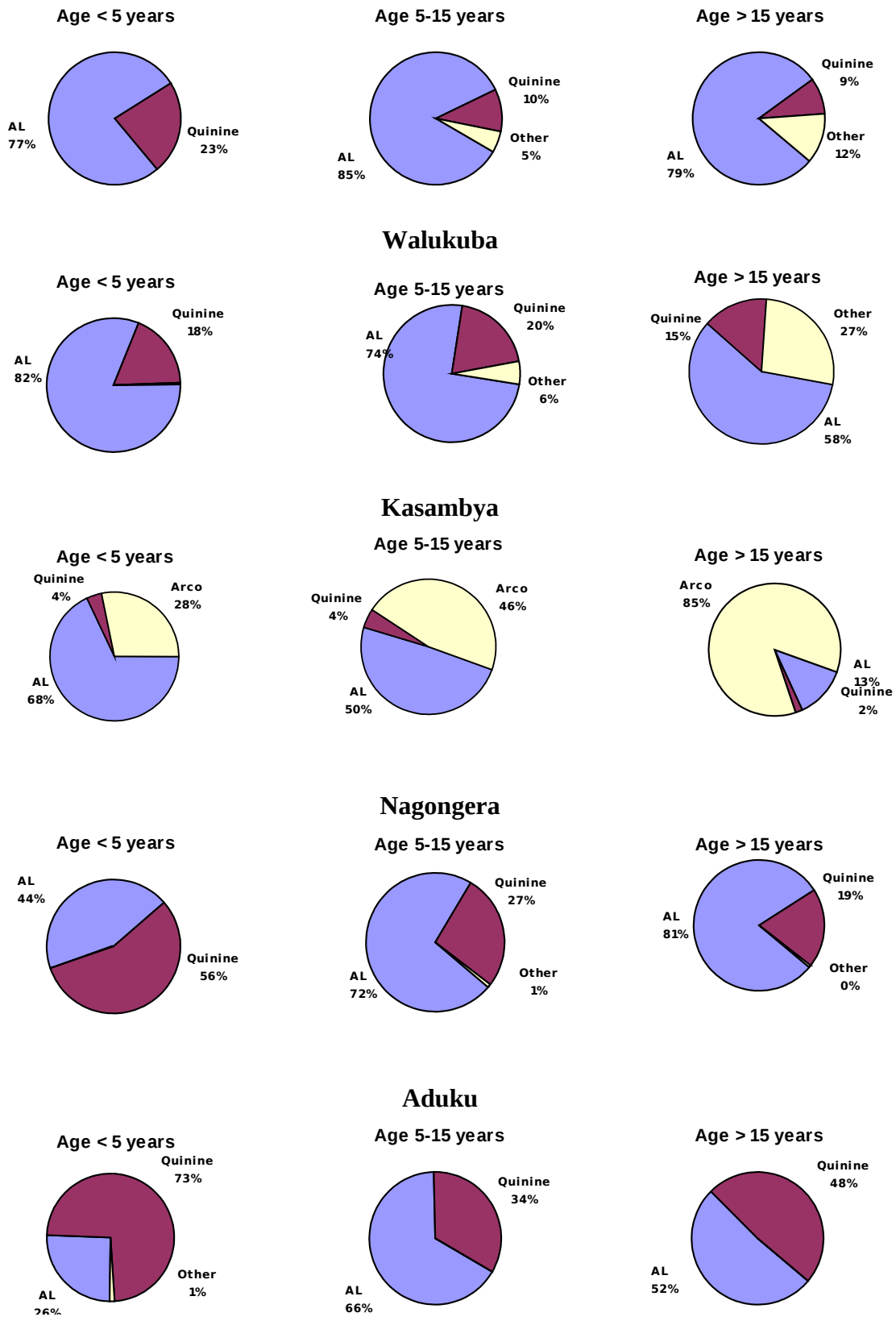
Proportion of patients with negative lab test result who were prescribed antimalarials



Prescription of antimalarials to patients who tested negative have remained relatively rare at most of the site. Nagongera and Kasambya are the only sites where over 10% of the patients with negative blood tests were treated with an antimalarial.

Antimalarial drug treatment practices among those prescribed antimalarials

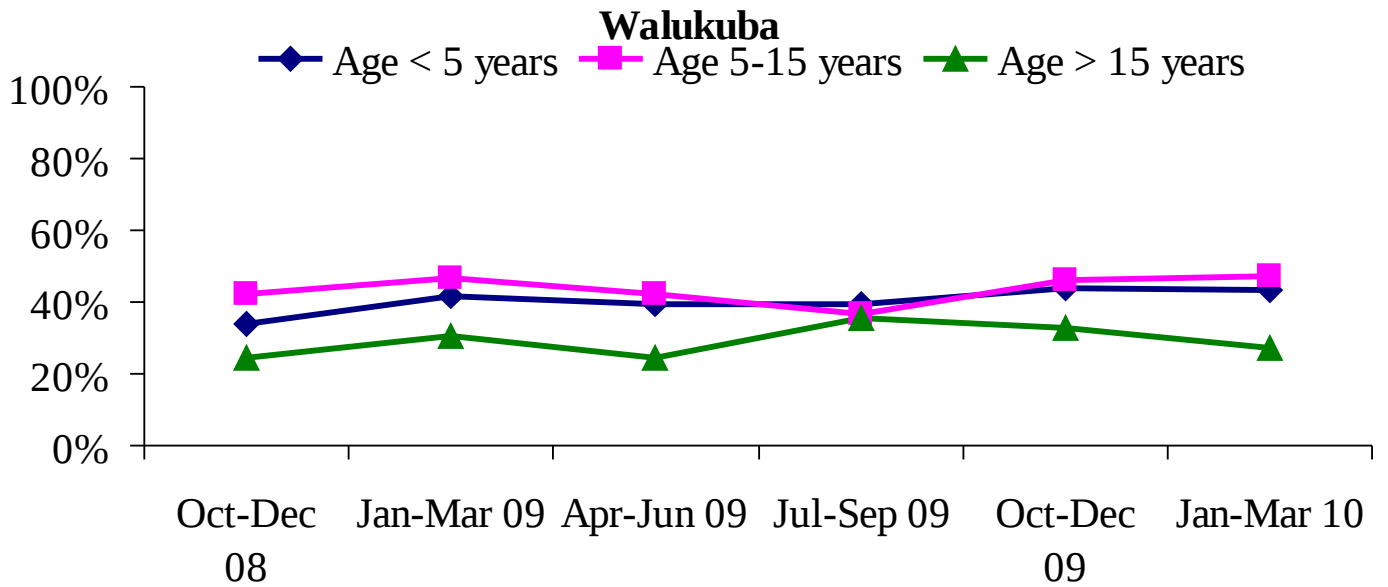
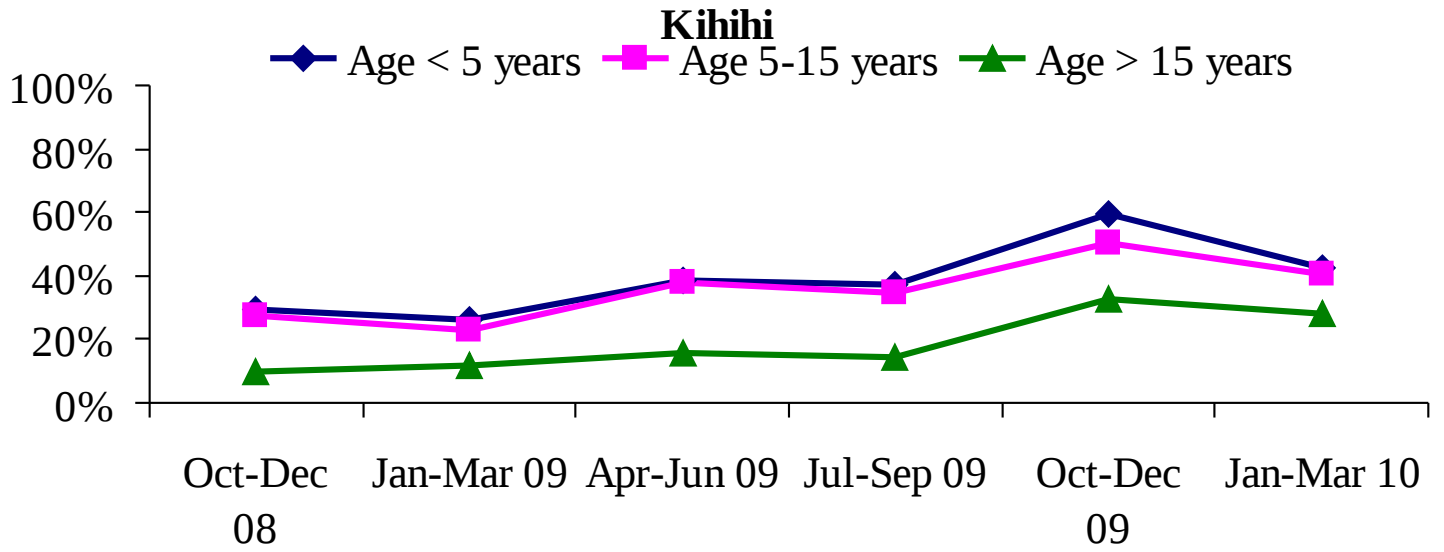


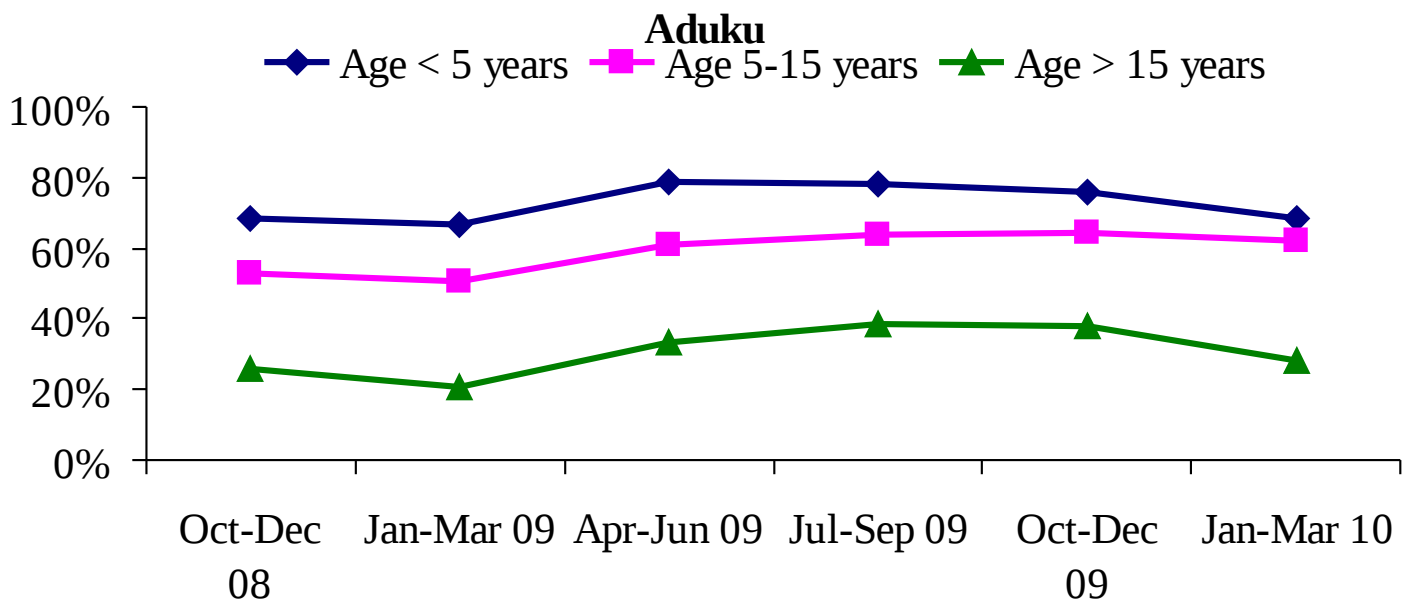
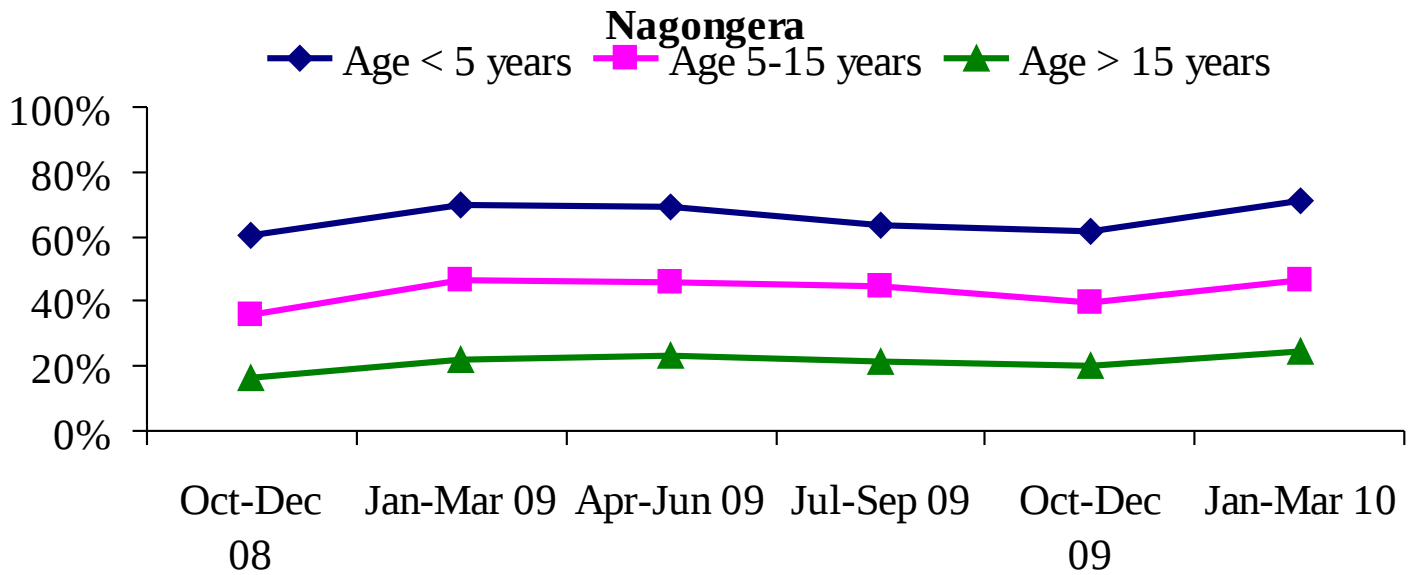
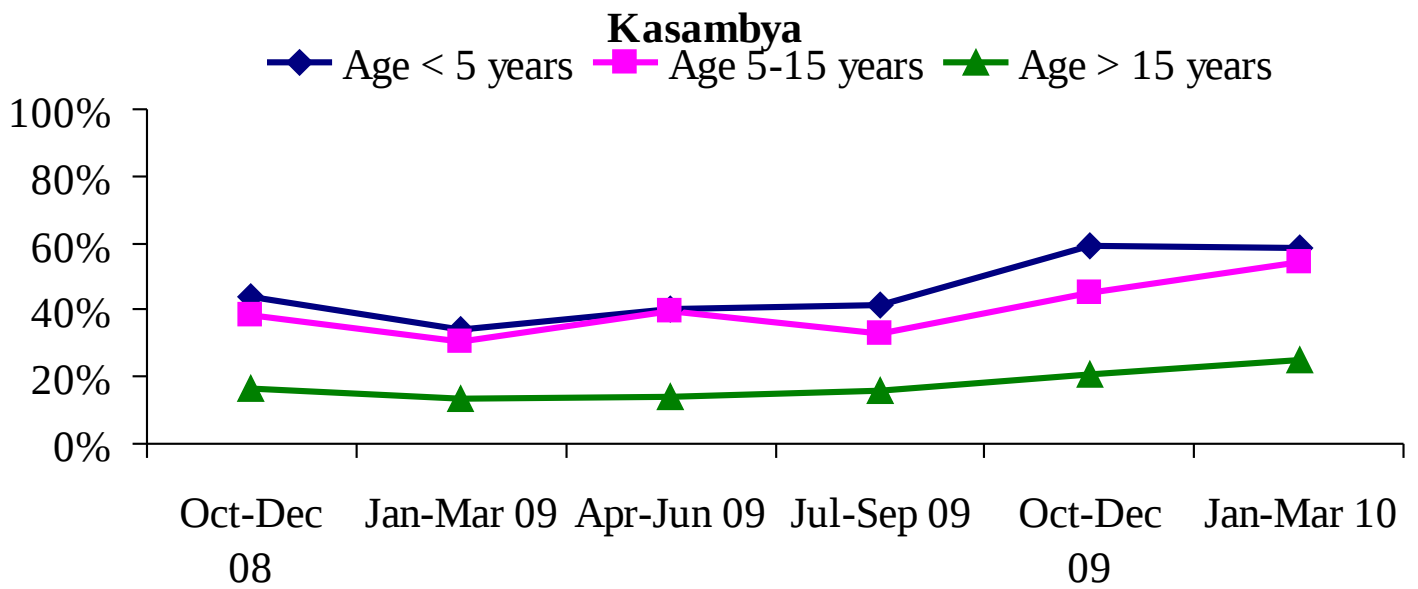


At most of the sites among all age groups, Artemether-lumefantrine was the predominantly prescribed antimalarial. Overall treatment with quinine decreased from 37% in March to 27% this month, with decreases in each age group (54% to 40% in under-5s, 25% to 16% in 5-15 year olds, 23% to 16% in those over 15 years old). Specifically, prescription of quinine at walukuba has reduced significantly from 42% (Mar 10) to 18% (Apr 10) among under 5s, from 52% (Mar 10) to 20% (Apr 10) among 5 – 15s and from 48% (Mar 10) to 15% (Apr 10) among greater than 5s.

Artemether-naphoquine prescriptions at Kasambya also reduced significantly from 85% to 28% among under 5s and from 97% (Mar 10) to 46% (Apr 10) among 5 – 15s.

Temporal trends in the proportion of patients with a laboratory test for which the test is positive





SPR (proportion of blood smears read as positive) standardised for age

