



UCSF

THE REPUBLIC OF UGANDA

## UGANDA MALARIA SURVEILLANCE PROJECT

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### UMSP sentinel site malaria surveillance report May 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](http://umsp.muucsf.org) that can be accessed for more information.

#### Data summary

District	Site	Total number of patients seen		Malaria suspected (number and proportion) <sup>1</sup>		Patients sent to the laboratory (number and proportion) <sup>2</sup>		Laboratory confirmed malaria (number and proportion) <sup>3</sup>	
		Total	< 5 years	Total	< 5 years	Total	< 5 years	Total	< 5 years
Kabale	Kamwezi	3264	683	1,810	440	1,481	352	725	188
			(21%)	(55%)	(64%)	(82%)	(80%)	(45%)	(53%)
Kanungu	Kihihi	2023	628	1,487	553	1,480	549	576	278
			(31%)	(74%)	(88%)	(99%)	(99%)	(39%)	(51%)
Jinja	Walukuba	3703	744	2,111	572	2,062	565	818	256
			(20%)	(57%)	(77%)	(98%)	(99%)	(40%)	(45%)
Mubende	Kasambya	1724	519	1,534	497	1,494	485	592	245
			(30%)	(89%)	(96%)	(97%)	(98%)	(40%)	(51%)
Tororo	Nagongera	2194	702	1,541	623	1,449	593	703	409
			(32%)	(70%)	(89%)	(94%)	(95%)	(49%)	(69%)
Aduku	Aduku	1918	576	1,148	502	1,114	488	553	321
			(30%)	(60%)	(87%)	(97%)	(97%)	(50%)	(66%)

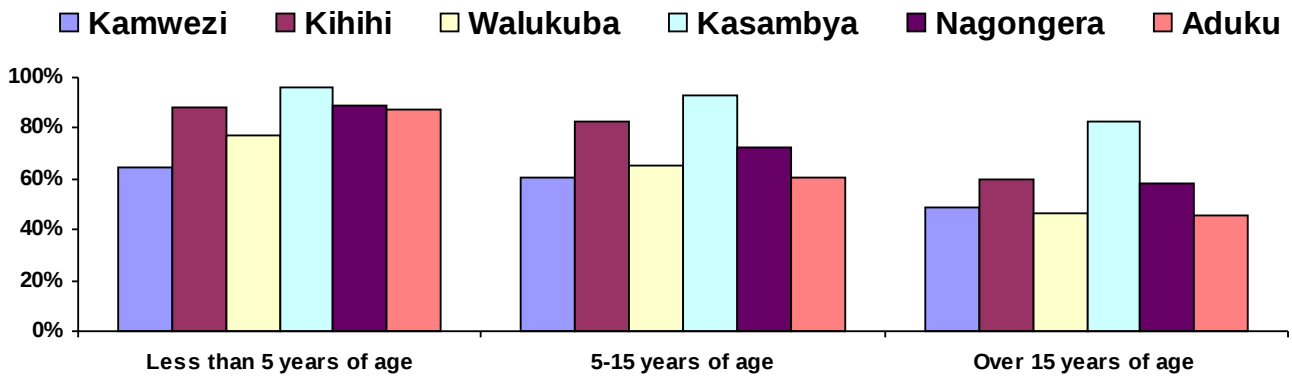
<sup>1</sup> Denominator used to calculate proportion is total number of patients seen

<sup>2</sup> Denominator used to calculate proportion is the number with malaria suspected

<sup>3</sup> Denominator used to calculate proportion is the number of patients with laboratory test done

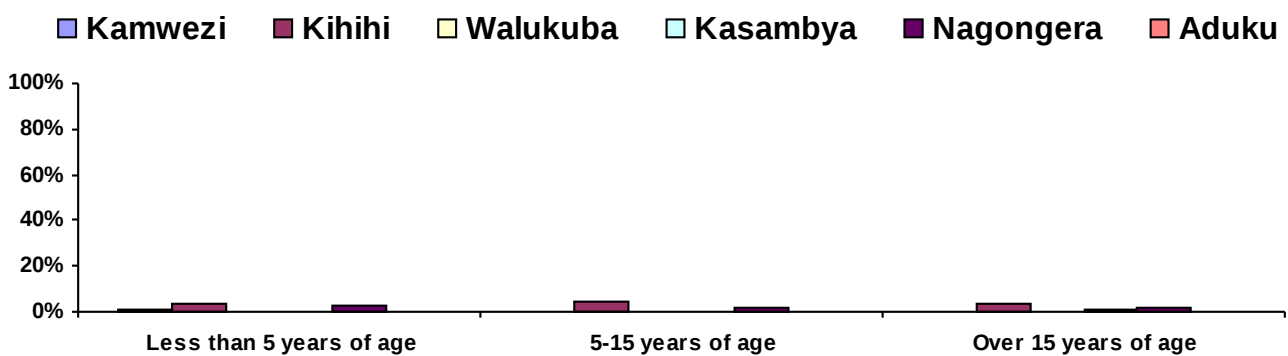
Compared to last month, total out-patient attendance increased at Kamwezi by 21%, Walukuba by 19%, Kasambya by 28% and Aduku by 16% but remained stable at Kihihi and Nagongera. However, the out-patient attendance among under 5 years remained relatively stable as did the overall proportion of suspected malaria at the majority of sites. More than 90% of the patients suspected of malaria were referred for a confirmatory test at all the sites except Kamwezi where 82% of patients were referred, a decline from 91% the previous month. Overall the slide positivity rate ranged from 39% (Kihihi) to 50% (Aduku), with noticeable increments at Kamwezi from 29% (April 2010) to 45% (May 10) and from 26% (April 2010) to 39% (May 2010) at Kihihi.

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



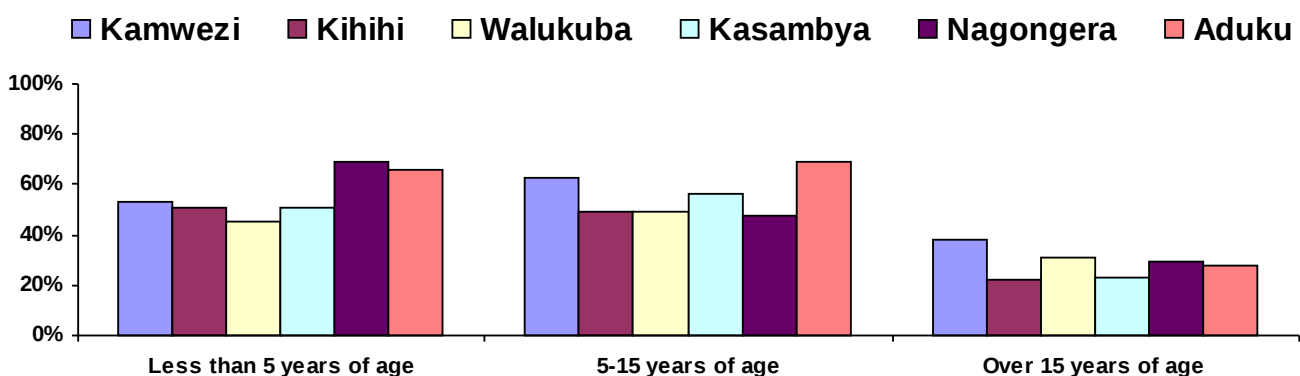
Suspected malaria cases are defined as all patients referred for a malaria laboratory test plus all patients not referred for a malaria laboratory test but given a clinical diagnosis of malaria. Overall, the proportion suspected of malaria increased at Kamwezi in all age groups, but remained relatively stable at other sites.

### Proportion of laboratory tests done that were RDTs



There is very little use of the RDTs at the sites as they are out of stock country-wide.

### Proportion of laboratory tests done that were positive



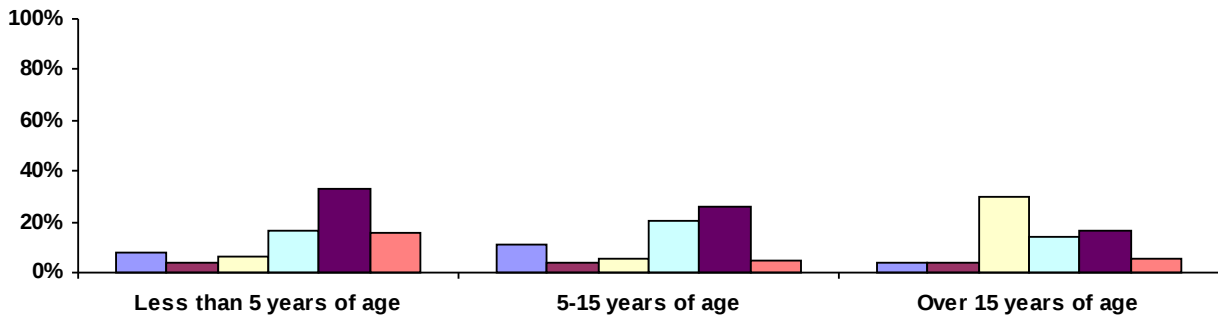
At Kamwezi, the slide positivity rate (SPR) has increased from 32% (Apr 10) to 53% (May 10) among children under 5, from 39% (Apr 10) to 63% (May 10) among children 5 -15 years and from 21% (Apr 2010) to 49% (May 2010) among adults over 15 years.

Similarly at Kihihi, the SPR has increased from 36% (Apr 2010) to 51% (May 2010) among children under 5 years, from 30% (Apr 2010) to 49% (May 2010) among 5 – 15 years and from 15% (Apr 2010) to 22% (May 2010) among adults over 15 years.

The SPR at Walukuba, Kasambya, Nagongera and Aduku has remained stable.

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

■ Kamwezi   
 ■ Kihihi   
 ■ Walukuba   
 ■ Kasambya   
 ■ Nagongera   
 ■ Aduku

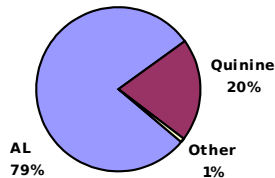


This month, antimalarial prescription for patients with negative lab test results was highest at Nagongera (22%) and lowest at Kihihi (4%). Kasambya registered a slight decrease in prescribing antimalarials for patients with negative test results from 21% (Apr 10) to (16% (May 10), while this practice remained unchanged at the other sites.

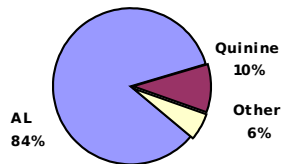
### Antimalarial drug treatment practices among those prescribed antimalarials

#### Kamwezi

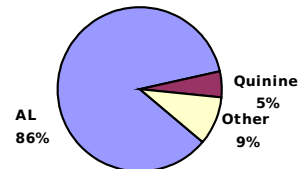
Age < 5 years



Age 5-15 years

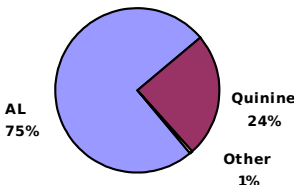


Age > 15 years

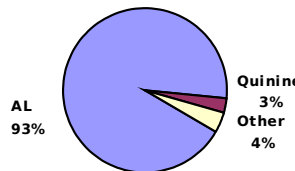


#### Kihihi

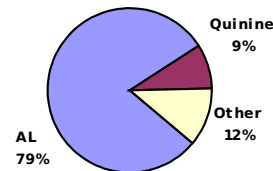
Age < 5 years



Age 5-15 years

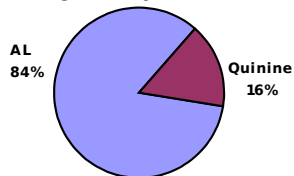


Age > 15 years

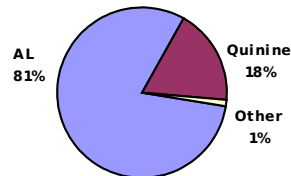


#### Walukuba

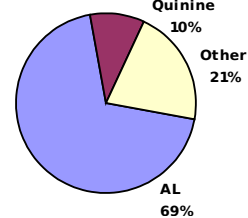
Age 5-15 years



Age 5-15 years

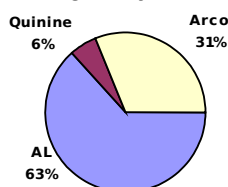


Age > 15 years

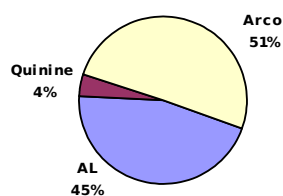


#### Kasambya

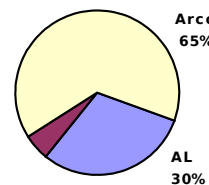
Age < 5 years



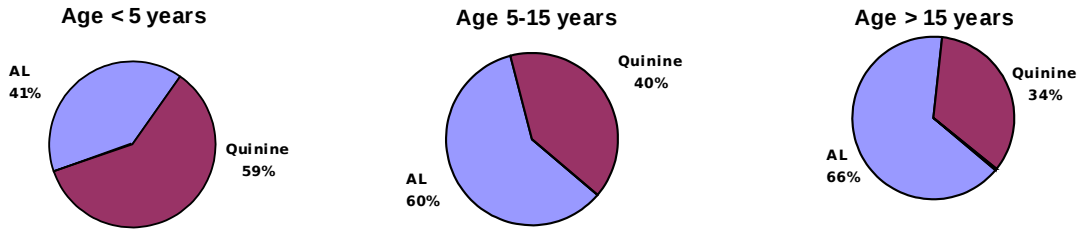
Age 5-15 years



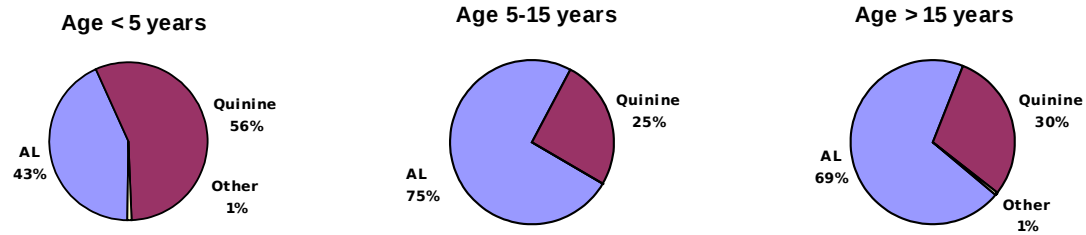
Age > 15 years



## Nagongera

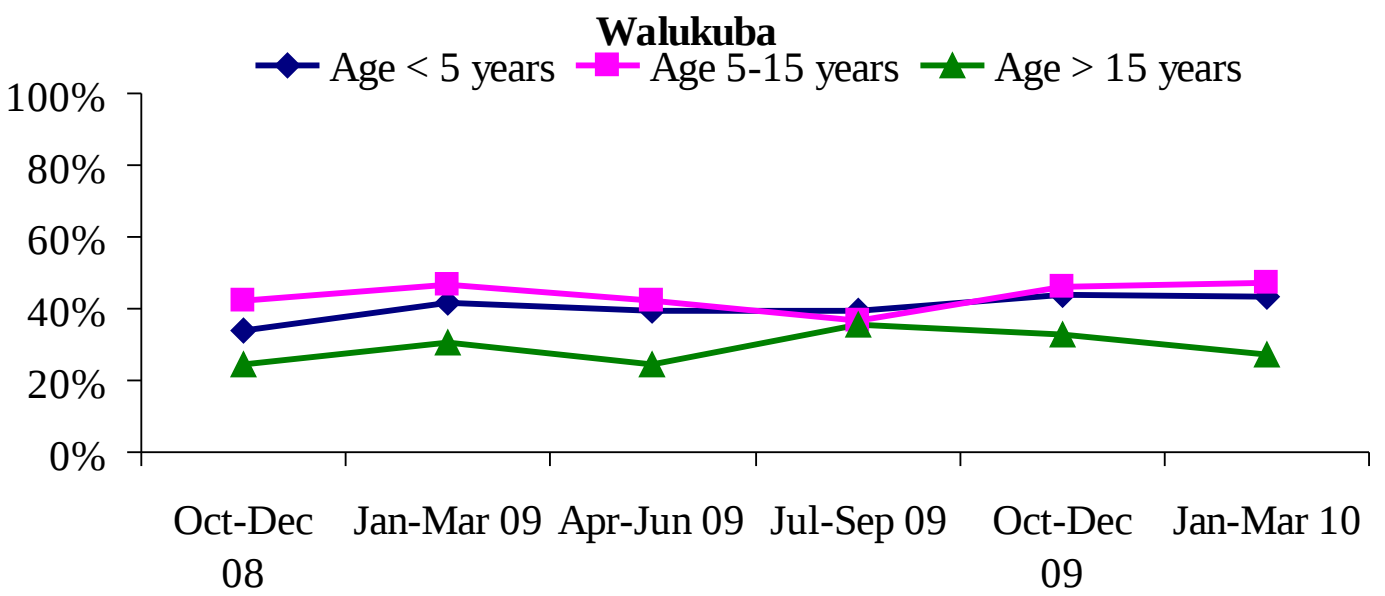
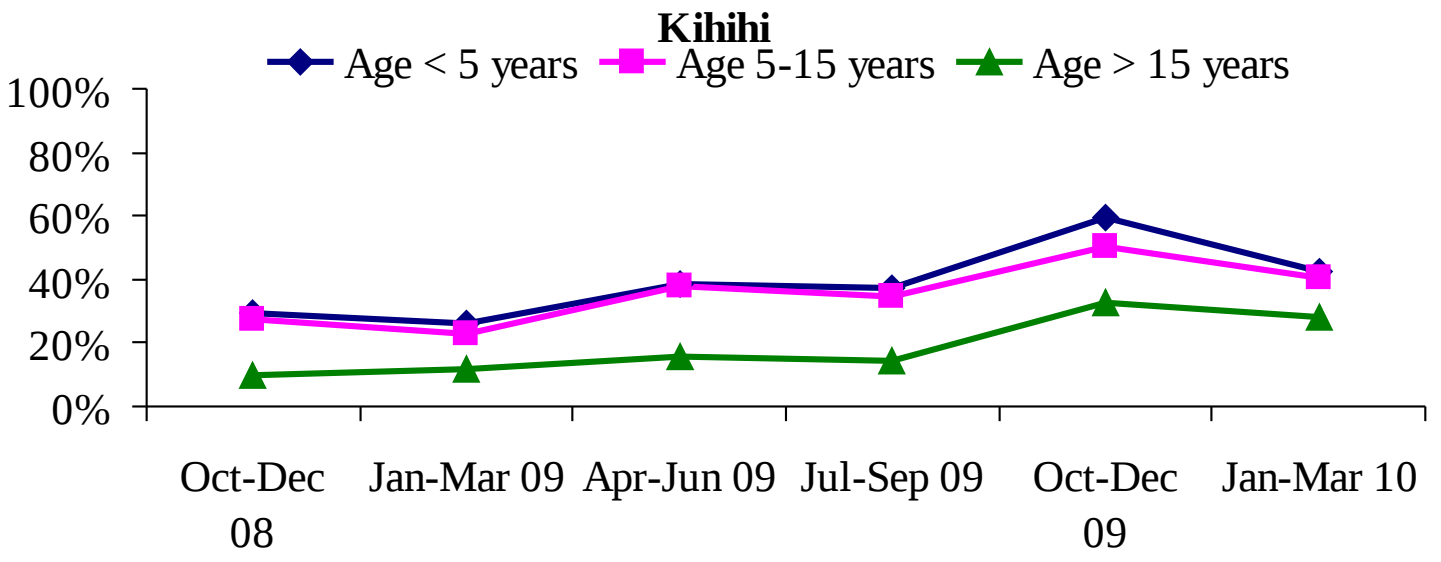
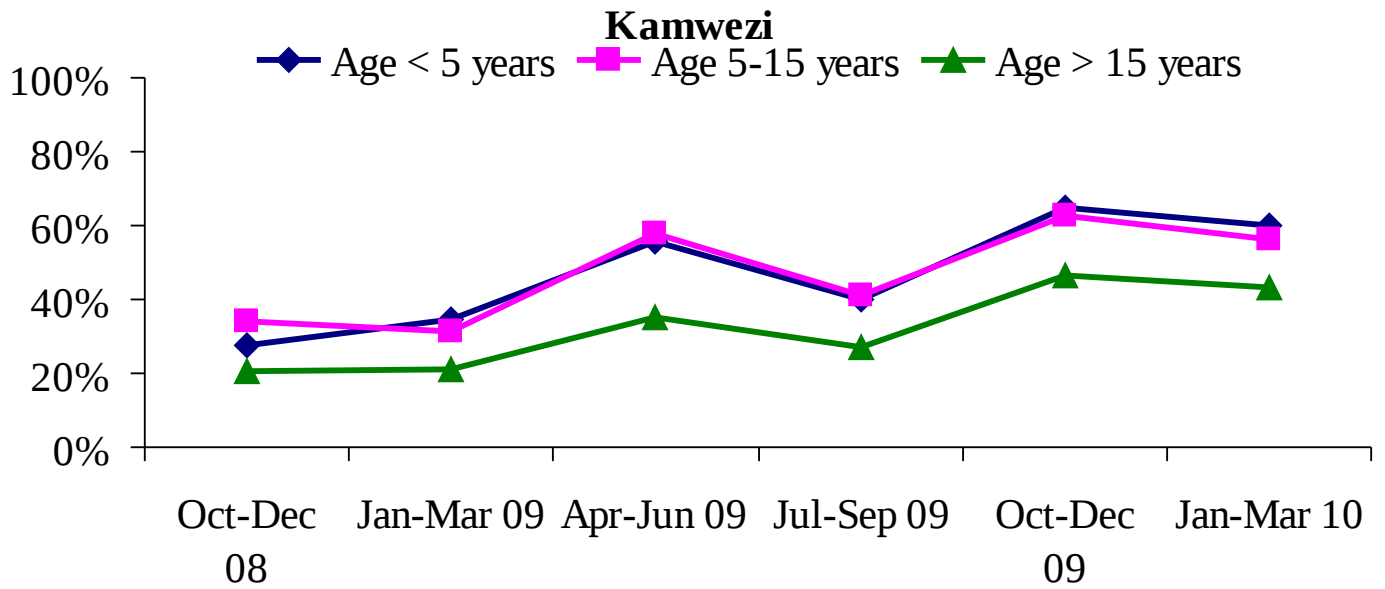


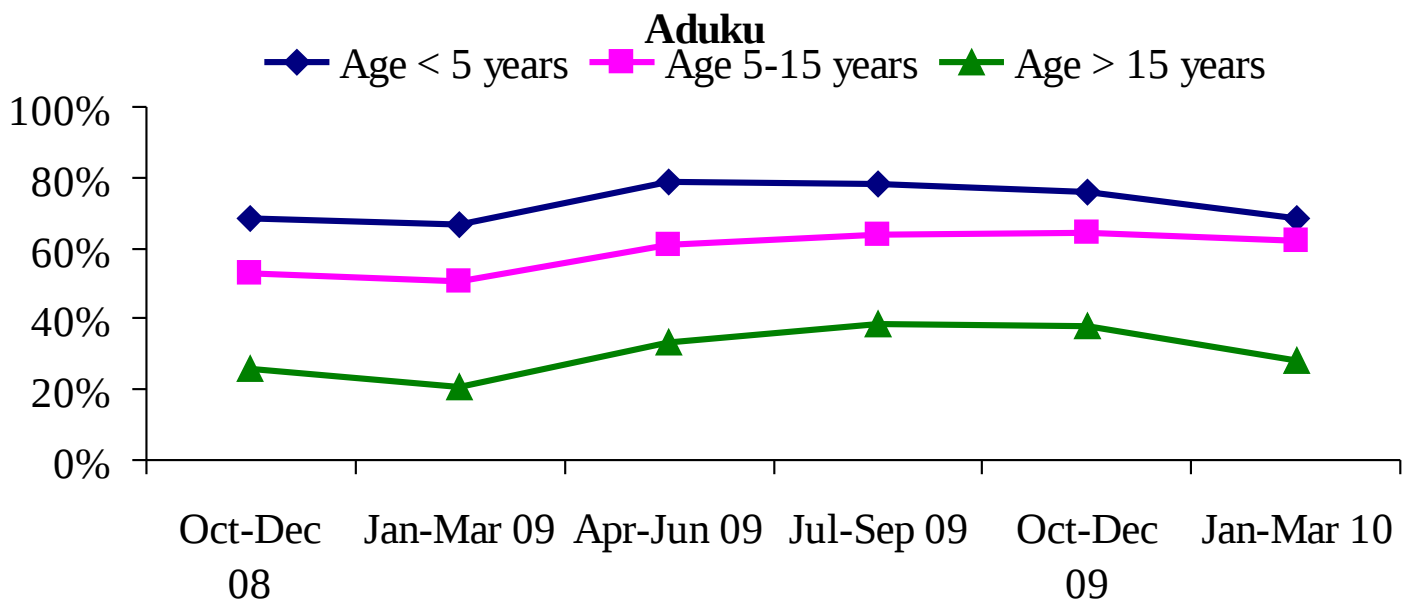
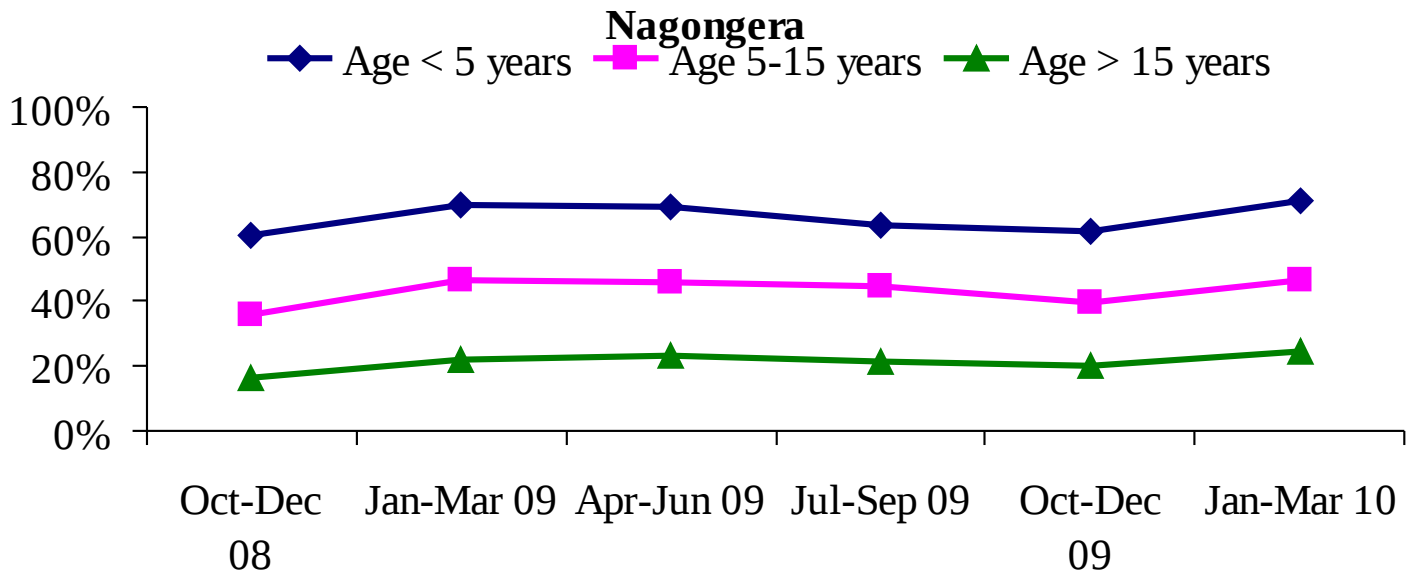
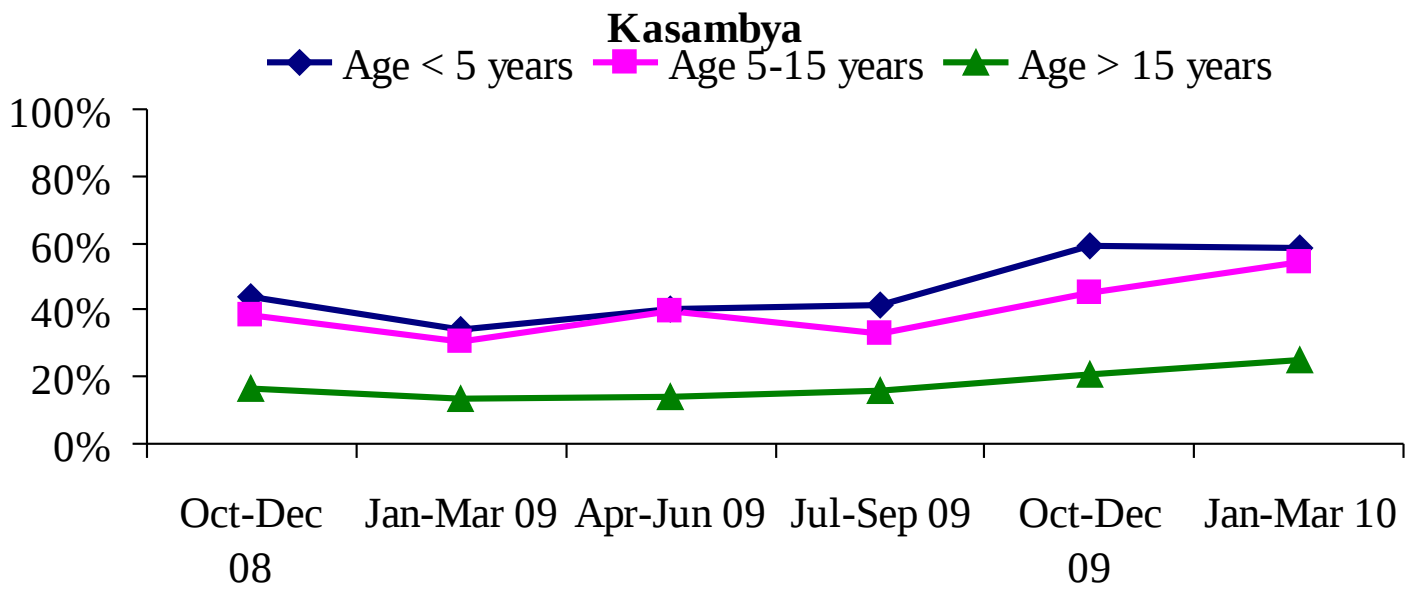
## Aduku



Most of the sites predominantly prescribed artemether-lumefantrine at all age groups except at Kasambya where artemether-naphoquine was predominantly prescribed among patients aged 5 years and above. Treatment of children under 5 with quinine continued to be high at Nagongera and Aduku.

**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) standardized for age**

