





UGANDA MALARIA SURVEILLANCE PROJECT

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Inpatient Surveillance Monthly Report

December 2011

Introduction

The Uganda Malaria Surveillance Project (UMSP) was formed in 2001 as a collaboration between researchers at the Makerere University-University of California San Francisco malaria research collaboration and the Ministry of Health. Although Uganda's Health Management Information System (HMIS) remains the primary source of malaria morbidity and mortality data, there are several limitations to this data. To address some of these limitations, UMSP started an inpatient health facility-based surveillance system in different epidemiological settings. The program began in 2010 with the goal of including 6 sentinel district hospitals by July 2011. The objective of this surveillance system is to provide accurate and timely data on malaria morbidity and mortality patterns among hospitalized children at participating sites to help guide policy makers and other stakeholders.

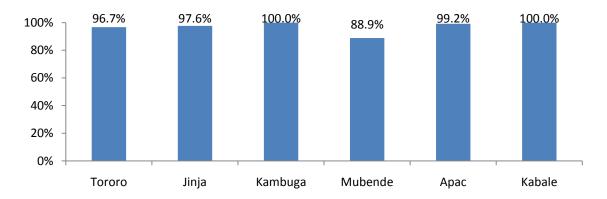
This monthly report is comprised of a table and graphs highlighting malaria indicators of morbidity and mortality including treatment practices at participating sites for a specified month. The table below provides a summary of the total number of hospitalized children per site who fulfil each of the criteria for specified indicators. For each indicator a bar graph allowing for comparison of results across the sites is generated, each bar representative of the results (in proportions) for each site for that particular indicator.

A list of definitions of terms used in the report and a table showing the numerators and denominator used to determine the indicators as proportions are included in the Appendix section (last page).

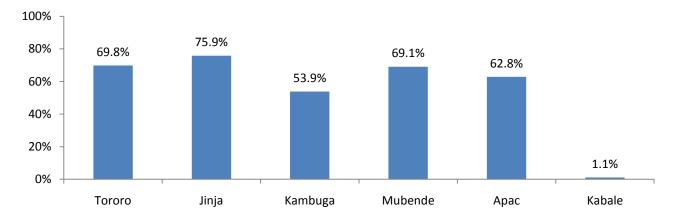
Absolute numbers of children hospitalized

Site	Total		Hospitalized children under 5 years of age only					
		< 5 years	Any malaria lab test result	Clinical diagnosis of malaria	Lab confirmed malaria	Lab confirmed complicated malaria	Any death	Lab confirmed death with malaria
Tororo Hospital	339	302	292	210	194	157	5	1
Jinja Hospital	701	591	577	446	266	206	23	3
Kambuga Hospital	100	78	78	42	33	24	1	1
Mubende Hospital	287	252	224	174	89	78	7	1
Apac Hospital	155	121	120	76	74	34	4	0
Kabale Hospital	120	89	89	1	3	2	4	0

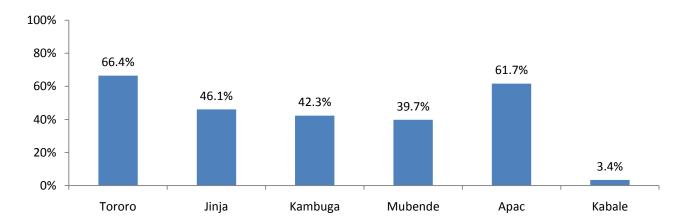
Data below only includes children under 5 years of age admitted to the hospital Proportion of patients with any malaria diagnostic test result during hospitalization



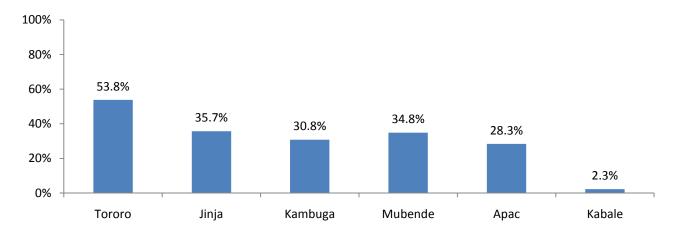
Proportion of patients with clinical diagnosis of malaria at discharge



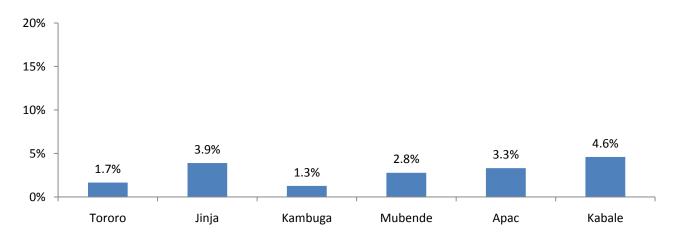
Proportion of patients with laboratory confirmed malaria



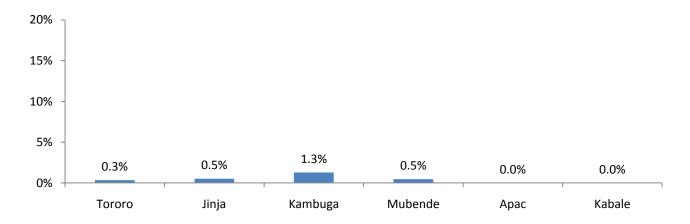
Proportion of patients with laboratory confirmed complicated malaria



Proportion of patients who died from any cause during hospitalization

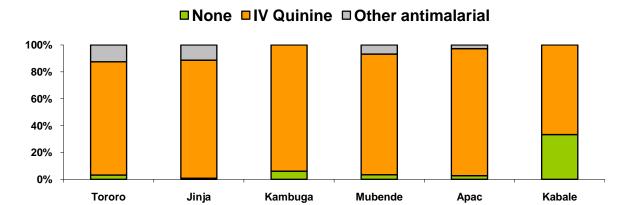


Proportion of patients who died with laboratory confirmed malaria during hospitalization

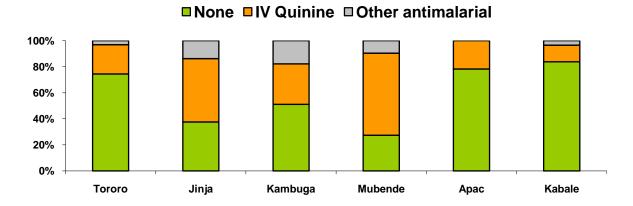


Antimalarial treatment practices based on laboratory testing

Any positive laboratory test result

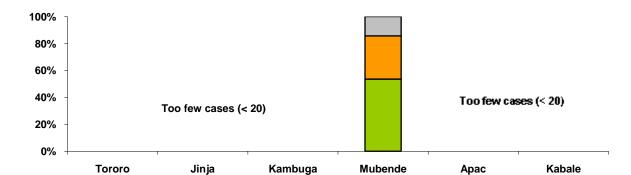


Only negative laboratory test results



No laboratory test done

■None ■IV Quinine ■Other antimalarial



Appendix I. Definitions

Laboratory confirmed malaria: Any hospitalized child with a positive malaria test (thick blood smear or RDT) result

Clinical diagnosis of malaria: Any hospitalized child with a final discharge diagnosis of malaria (confirmed or unconfirmed) as indicated by the clinician.

Laboratory confirmed complicated malaria: Any hospitalized child with a positive malaria test result and fulfils any of the following: 1) any criteria for severe malaria. 2) one or more general danger signs (vomiting everything, inability to drink, feed or breastfeed, lethargy or unconscious or convulsions) or 3) dies during hospitalization

Indicators expressed as proportions

Indicator	Definition				
Proportion of hospitalized children < 5 years of age with malaria diagnostic test result	Numerator: Number of hospitalized children < 5 years of age with a malaria test result				
	Denominator: Number of hospitalized children < 5 years of age				
Proportion of hospitalized children < 5 years of age with a clinical diagnosis of malaria	Numerator: Number of hospitalized children < 5 years of age with a final diagnosis of malaria				
	Denominator: Number of hospitalized children < 5 years of age with any final diagnosis				
Proportion of hospitalized children < 5 years of age with laboratory confirmed malaria	Numerator: Number of hospitalized children < 5 years of age with a positive malaria lab test				
	Denominator: Number of hospitalized children < 5 years of age with a malaria test result				
Proportion of hospitalized children< 5 years of age with complicated malaria	Numerator: Number of hospitalized children < 5 years of age with + lab test and complicated malaria				
	Denominator: Number of hospitalized children < 5 years of age with a malaria test result				
Proportion of hospitalized children < 5 years of age who died of any cause	Numerator: Number of hospitalized children < 5 years of age who died of any cause				
	Denominator: Number of hospitalized children < 5 years of age with a disposition				
Proportion of hospitalized children < 5 years of age who died with malaria	Numerator: Number of hospitalized children < 5 years of age who died with a positive malaria lab test				
	Denominator: Number of hospitalized children < 5 years of age with a malaria test result & disposition				
Antimalarial treatment practices	Numerator: Number in each treatment category stratified by malaria test results				
	Denominator: Totals for each malaria test results strata				