

# Managing acute febrile illness in the community

## Implications for policy in the era of malaria rapid diagnostics tests

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A community health worker in Uganda examines a child for fever

### Key messages

- Malaria positivity rate is still very high in both Uganda and Zambia.
- In Uganda, CHWs who use mRDTs diagnose twice as many children with pneumonia and diarrhoea and use significantly less artemisinin combination therapies (ACTs) for malaria.
- Antibiotic prescription to children with malaria negative fevers was the same in Uganda and Zambia, and was not reduced by the use of antipyretics.

### Introduction

Integrated Community Case Management (ICCM) using community health workers (CHWs) to treat malaria, pneumonia and diarrhoea in children under five years is now policy in many African countries.

CHWs are equipped with respiratory timers to assess pneumonia symptoms, as well as treatment for all three diseases.

ICCM treatment algorithms vary for malaria; some prescribe antimalarials based on fever presence (Central Uganda), some based on positive malaria rapid diagnostic tests (mRDTs) (Zambia and Midwest Uganda) and some also prescribe antipyretics for fever (Zambia).

### Objectives

To compare the diagnoses and treatments prescribed to sick children under five years in three settings with differing ICCM algorithms.

### Methods

CHW patient registers for January-December 2012 were collected from 95 CHWs in Midwest Uganda, 39 CHWs in Central Uganda and 63 CHWs in Luapula province in Zambia.

A total of 31,086 child consultations were documented across the three settings.

### Results

**Table 1. Diagnoses given to 31,086 children seen by CHWs**

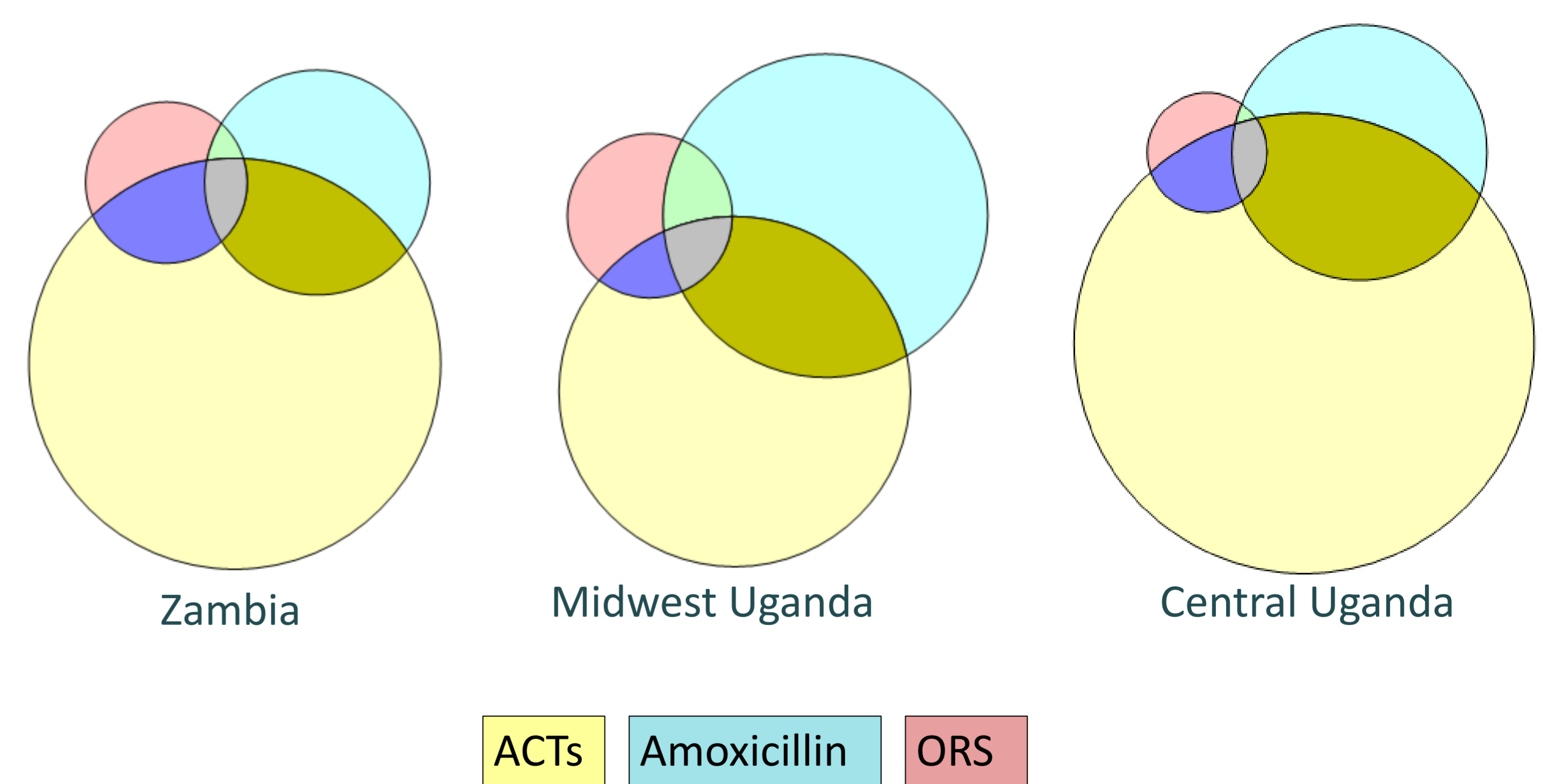
Diagnosis	Zambia (N=9,389)	Midwest Ug (N=15,470)	Central Ug (N=6,227)
Fever	89%	67%	81%
Malaria (M)*	71%	52%	-
Pneumonia (P)	18%	44%	22%
Diarrhoea (D)	16%	14%	6%
M & P	9%	16%	14%**
M & P & D	1%	2%	1%***

\*The mRDT positivity rate in children with fever was 80% in Zambia and 78% in Midwest Uganda \*\*Fever & pneumonia \*\*\*Fever & pneumonia & diarrhoea

**Table 2. Treatment given to 31,086 children seen by CHWs**

Treatment*	Zambia (N=9,389)	Midwest Ug (N=15,470)	Central Ug (N=6,227)
ACTs	71%	52%	80%
Amoxicillin**	21%	44%	25%
ORS	11%	11%	5%
Paracetamol	56%	-	-

\*Total figures, not correlated to diagnosis \*\*Of mRDT negative fevers, 40% received amoxicillin in Zambia and 45% in Uganda (p=0.09)



**Figure 1. Prescriptions given to 31,086 children seen by CHWs**