



a decade in communicable disease control and child health

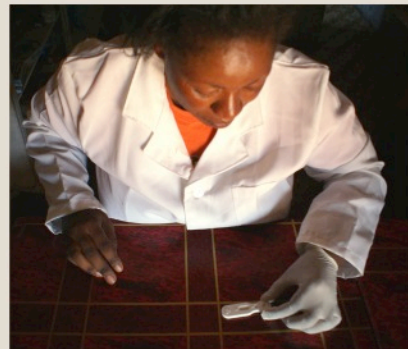
# Why do health workers give antimalarials to patients with negative rapid diagnostic test results?

*A qualitative study of factors affecting provider decision making at rural health facilities in Uganda*

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# Background

- ▶ Uganda adopted WHO recommendation for malaria diagnosis in 2010
- ▶ Scale up of rapid diagnostic tests (RDT) use in all public health centres without functional laboratory services
- ▶ Malaria Consortium's Pioneer project and the Ugandan Ministry of Health (MoH) introduced RDTs at 88 health facilities (HFs) in five districts in mid-western Uganda
- ▶ Training, supply of RDTs and support supervision





# Study objective

- ▶ To explore the determinants of health worker decision making to prescribe antimalarials following a negative RDT result for malaria



# Methods

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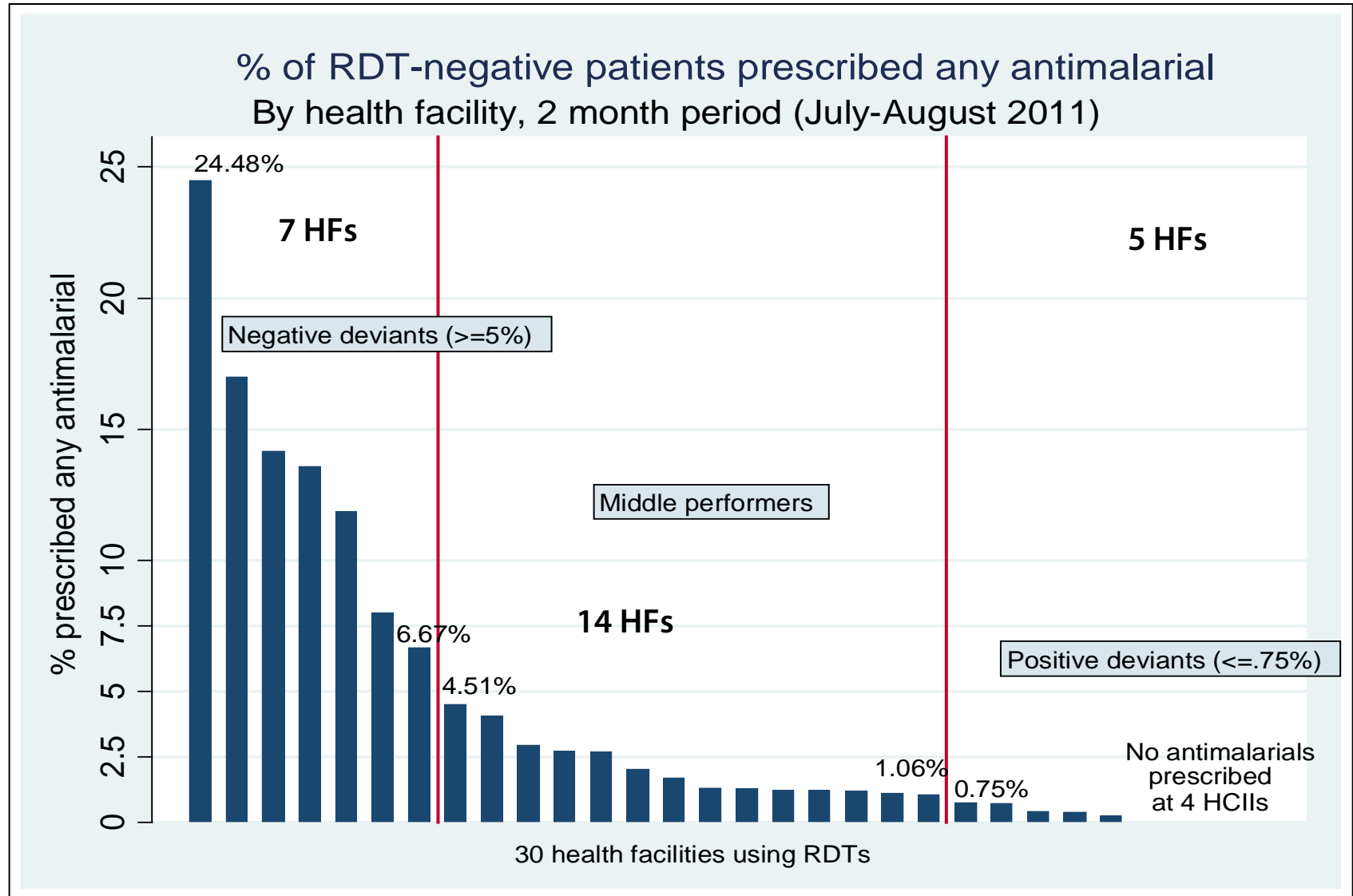
## **Prescription data audit at 30 health facilities**

- ▶ To select health facilities for study sites
- ▶ HFs were ranked according to prescribing performance:
  - Positive and negative deviants
  - Middle performers

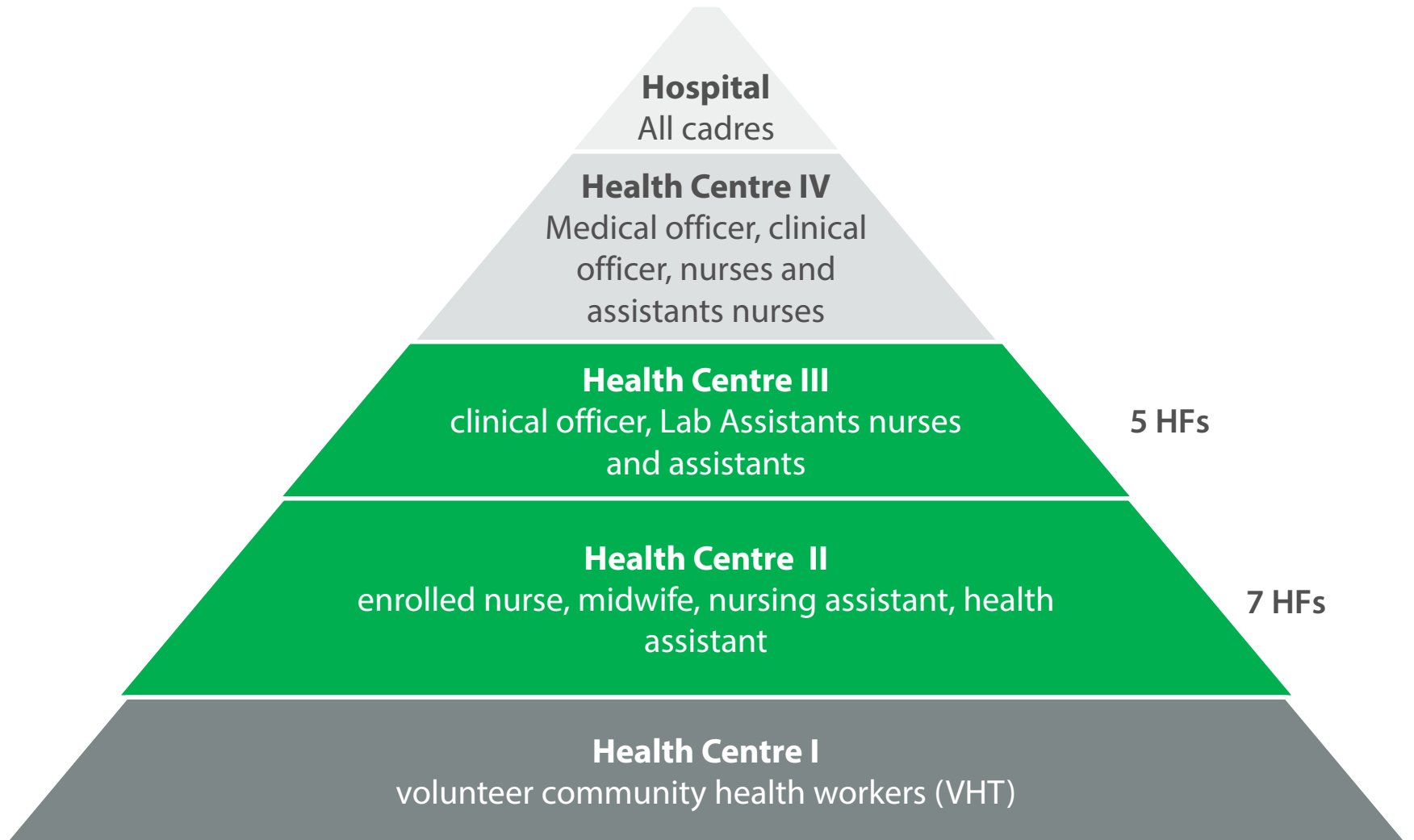
## **Purposive sampling for qualitative enquiry**

- ▶ Positive (5) and negative (7) deviants selected to provide maximum range of health worker prescribing behaviours

# Ranking and categorisation of health facility prescribing performance



# Uganda health system structure



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# Data collection methods and participants

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- ▶ Observed 22 prescribing health workers (11 nurses, nine nursing assistants, two clinical officers) managing 55 patients with fever (average 2.5 per health worker)
- ▶ Semi-structured interviews with all observed health worker and observed patients/caregivers

## Data analysis

- ▶ Qualitative thematic analysis using the 'systematic framework approach' (Pope et al, 2000)



# Key findings

- ▶ 8,368 RDT-negative patients identified
- ▶ 330 (3.9%) had been prescribed antimalarial drugs
- ▶ High (96.1%) adherence to RDT results
- ▶ Majority (78%) of RDT negative patients were prescribed antibiotics



# Key findings

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- ▶ Challenge of managing RDT negative patients who have already taken ACTs
- ▶ Limited health worker understanding of what RDTs detect
- ▶ Concerns for patient safety lead to presumptive treatment of RDT negative cases
- ▶ Health workers lacked the ability to make an alternative diagnosis
  - Low clinical skills
  - Limited alternative point of care diagnostic tools
  - Environmental constraints such as workload

# Key findings

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- ▶ Health worker-patient communication gap
  - Tendency not to explain purpose and outcome of testing
  - Health worker perception of patient demand: antimalarial prescription

*“The most challenging part is communicating the results to the patient because some patients come here with a belief that they have malaria and expect to get treatment, so telling them a negative result is a disappointment on their side.”*

*Nurse in charge, HCII*

*“Many patients pressurise me to give [ACT] even when the results are negative and I give them [SP], but if the patient says that it is only [ACT] that he uses, then I give [ACT]. However these cases are few.”*

*Nursing Assistant, HCII*

# Potential opportunities for health worker behaviour change

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- ▶ Improve understanding of how RDTs work
- ▶ Health workers lacked the ability to make an alternative diagnosis
  - Low clinical skills
  - Limited alternative point of care diagnostic tools
  - Environmental constraints
- ▶ Develop better methods for assisting providers in diagnostic decision making
- ▶ Improve interpersonal communication skills to:
  - Communicate test results and diagnosis
  - Influence patient adherence to test results and treatment

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