

# The Impact of Ghana's National Health Insurance Scheme Median Pharmaceutical Pricing Methodology and Reimbursement Policy on the Pharmaceutical System

Dumebi O. Mordi<sup>1</sup>, Kwesi Eghan<sup>1</sup>

<sup>1</sup>Systems for Improved Access to Pharmaceuticals and Services, Center for Pharmaceutical Management, Management Sciences for Health, Arlington, Virginia, USA, 22203

## Background

Over ten years after the establishment of the National Health Insurance Scheme (NHIS) in Ghana, the median pricing methodology for pharmaceuticals remains a topic of debate due to negative outcomes. Ghana's pharmaceutical system has limited local production capacity and is heavily dependent on importation. Medicine prices continue to rise and medicine reimbursement amounts constitute increasingly larger proportions of overall claims values. With finite NHIS resources, this presents a sustainability challenge.

## Methodology

The SIAPS qualitative assessment tool for medicines benefits management programs was used to interview pharmaceutical system stakeholders from healthcare facilities, importers/wholesalers, Ministry of Health, professional organizations in the Greater Accra, Cape Coast and Kumasi regions of Ghana about the impact of pricing policy.



Mr. Eghan interviewing claims office worker and pharmacist at Ga South Municipal Hospital, Weija Accra Ghana

- 60 facilities were selected based on NHIS claims values and facility type; 29 granted interview access and quantitative medicine pricing data was shared by 3 facilities.

**Table 1: Geographical distribution of interview and data collection sites**

Type	Location	Number with lowest claim values	Number with highest claim values
CHPs compound	Accra	1	1
Pharmacies/chemists	Accra	3	2
Private hospital	Accra	3	3
Public hospital	Accra	3	3
Maternity home	Accra	5	0
CHPs compound	Cape Coast	3	3
Pharmacies/chemists	Cape Coast	2	3
Private hospital	Cape Coast	2	3
Public hospital	Cape Coast	3	3
Maternity home	Cape Coast	1	0
CHPs compound	Kumasi	1	1
Pharmacies/chemists	Kumasi	1	3
Private hospital	Kumasi	1	2
Public hospital	Kumasi	1	2
Maternity home	Kumasi	1	0

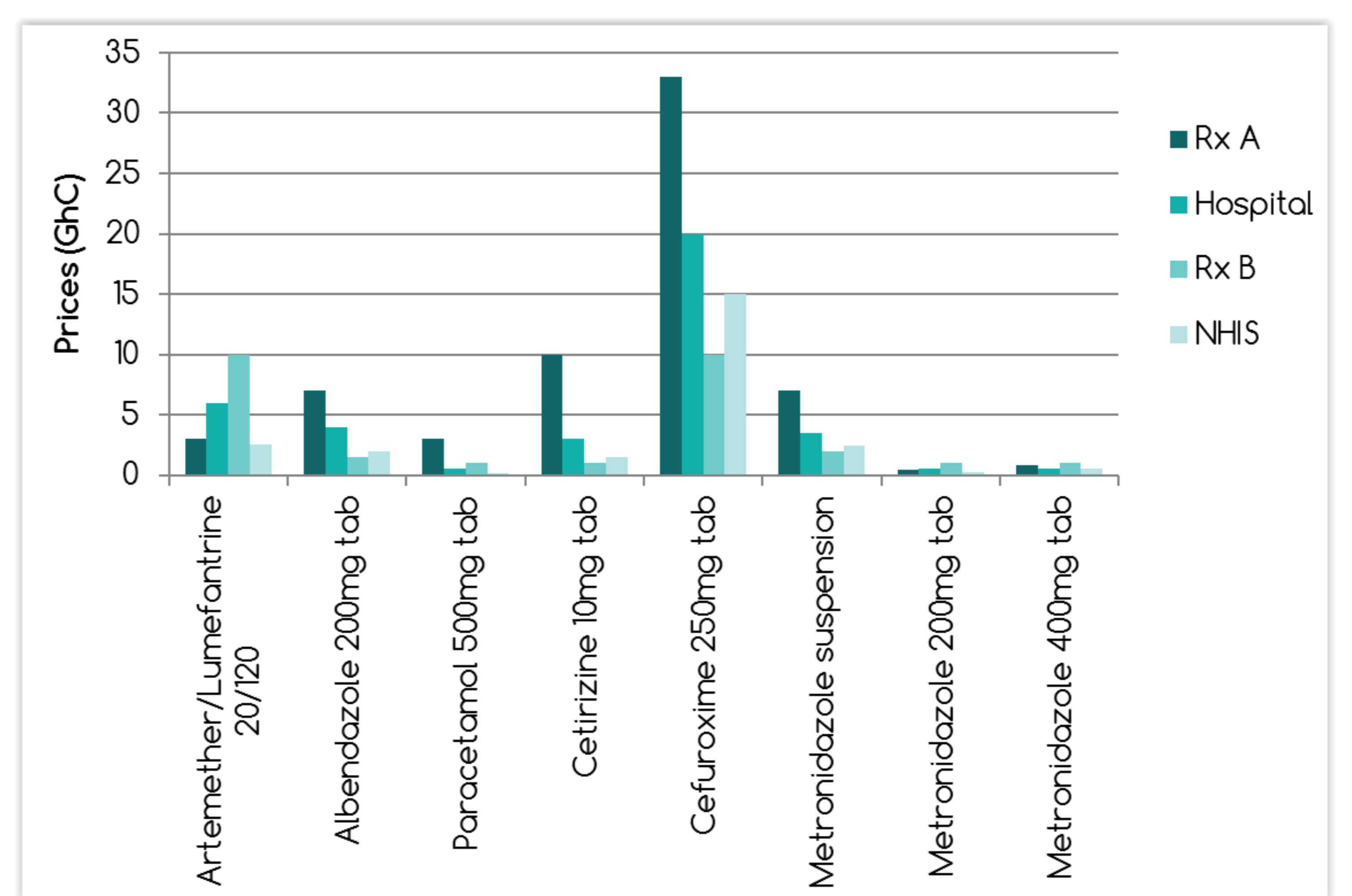
- 33 distinct tracer medicines were selected; pricing data from all 3 sources were available for 8 medicines (Artemether/Lumefantrine 20mg/120mg tablets, Cetirizine 10mg tablets, Albendazole 200mg tablets, Cefuroxime 250mg tablets, Metronidazole 100mg/5ml suspension, Metronidazole 200mg, Metronidazole 400mg tablets and Paracetamol 500mg tablets).

- Data was then compared to reimbursement prices listed in the July 2014 NHIS subscriber handbook.

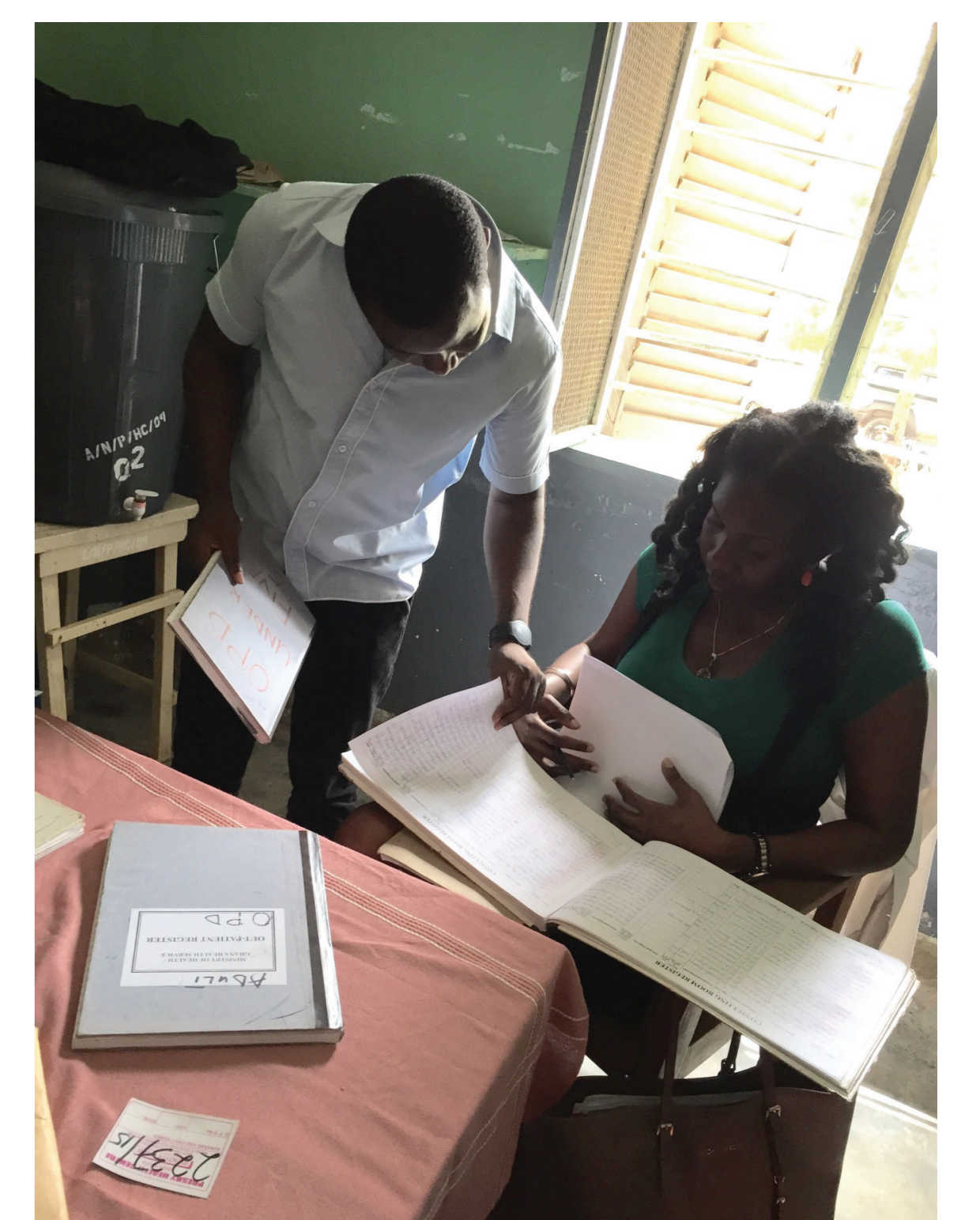
## Results

- NHIS prices are on average 37% below market prices (MPs) for the selected medicines
- Range is -50%-93% difference from MP, median is 50%

**Figure 1: Market prices for medicines compared to NHIS reimbursement prices**



- Paracetamol had the highest price disparity (MPs were 60-93% higher than NHIS prices)
- In Rx B, 50% of the highlighted medicines were less than NHIS prices
- From the interviews
  - NHIS median pricing methodology is viewed as inefficient and outdated
  - This methodology does not consider importation fees, foreign exchange, demand and supply chain challenges
  - Ripple effect on the entire pharmaceutical system
    - Proliferation of low quality medicines to match low prices
    - Irrational medicine use
    - Inaccurate billing
    - Unauthorized copayments to match price differences
    - Inability to restock
    - Denial of service to NHIS patients
- The prices are updated too infrequently to match market fluctuations
  - NHIS price list was last published in July 2014
  - Foreign exchange (which has heavy influence on medicine prices) of the US Dollar to Ghana Cedis changes on a daily basis



Dr. Dumebi Mordi reviewing patient medication records with staff member at Assin Nsuta Presbyterian Health Center, Cape Coast, Ghana

## Lessons Learned

- Pharmaceutical pricing and reimbursement policies should be evidence based and informed by analysis of detailed medicine consumption data and economic factors that impact pricing in an import based pharmaceutical sector.
- Detailed deliberation about medicines benefits during initial UHC designs and policy discussions
- Medicine pricing should be in the forefront of discussions to develop and strengthen universal health coverage plans