

Managing Medicines in Indonesian Primary Health Centres : Concept, Challenges and Coping Mechanisms

Relmbuss Fanda*, Ari Probandari, Maarten Olivier Kok, Roland Bal

Research Gap:

- There is limited knowledge regarding local government agencies medicine management, including District Health Offices (DHOs) and Primary Health Centre (PHCs).
- This research aims to illustrate the policy and practice of managing access to medicines in a local system.

Policy Designs

- Medicine selection:Based on EML and National Formulary
- Medicine quantification and planning: A bottom-up approach (PHC → DHO)
- Procurement: DHO Procurements and PHC procurements (if necessary)
- Pharmaceutical logistic services: Supervised by pharmacist in a pharmaceutical room (section)
- Monitoring: 80% of the most needed medicines should be available



Results

Local pharmaceutical system outcome

- Not every PHC can ensure the availability of 10 medicines in four years
- Well-Stocked Volume, Situational Stockout, and Stockout for more than two months.

Managing essential medicine systems In Practice

- A DHO serves as a central hub for supplying all medicines.
- Variations in managing medicine for Hypertension and Diabetes Mellitus, MNCH and Tuberculosis were designed to divide the responsibility among the national, provincial and governments
- The local pharmaceutical system copes with the current challenges but not every challenge can be solved

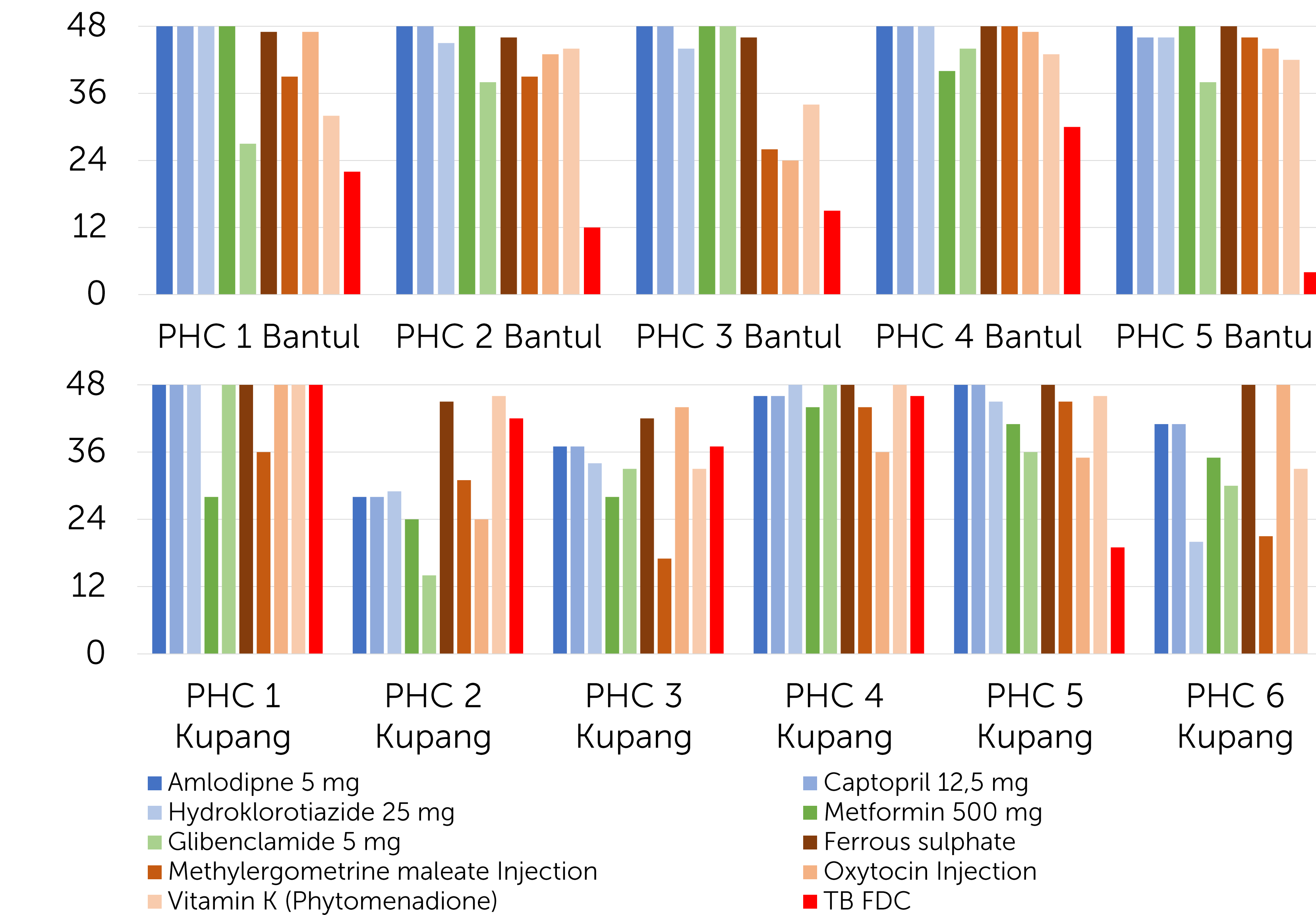


Figure 1. The availability of 10 selected medicines over four years in 11 PHCs in Indonesia.

"We are implementing one-stop-service for managing medicines, so all medicines logistics are supervised by our pharmacist. If we don't have any medicines for MNH services, we coordinate with the pharmacist to check the medicines availability in the DHO and require them". MNH program manager in Kupang District.



"We have only 5 mg of amlodipine available; the 10 mg dosage is not provided. We only receive medicine supplied from the warehouse [without conducting an independent procurement]". Pharmacist in PHC 3 in Bantul District.

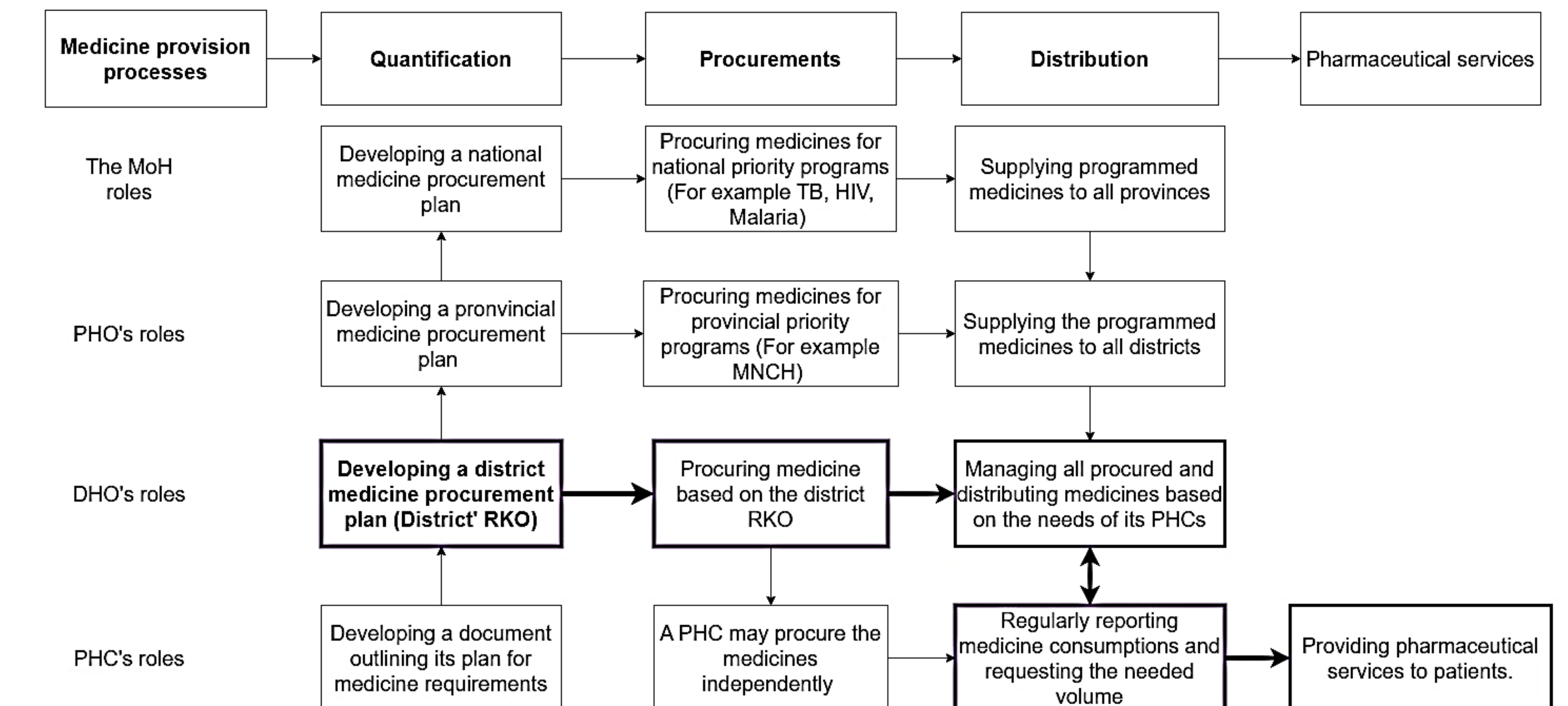


Figure 2. Managing medicines for primary health centres using a local system perspective.

Table 1. Challenges and Coping Mechanisms in managing medicines experienced by local governments		
Components in Managing Medicines	Challenges	Coping Mechanisms
Leadership and Management	Unexpected medicine stock outs in DHOs	Borrowing medicines from another district within its province
	Unexpected medicine stock outs both in DHOs and PHCs	Facilitating PHCs to procure medicines independently
	Unexpected medicine stock outs in PHCs	Offering a pre-delivery policy
	Medicines for routine programs (MNH and TB) were stock out	Facilitating PHCs to procure medicines independently
	An unclear division of responsibility	No Coping mechanism
Finance	Inadequate financial capacity	Selecting medicines with less side effects
Human Resources for Health	No pharmacist in a district warehouse	Task delegations
	Unpredictable staff rotations	No Coping mechanism
Data and monitoring system	Data gets less valuable	Digitalised patient and medicine stock data
	Paper-based report	
	Lack of internal coordination at the PHC level between pharmacists and health program managers	No Coping mechanism
Medicine services	Medicines were not available in PHCs shelves	Changing the dosage, or substitute to medicine with similar use (Amlodipine to Captopril)

Discussion

- Two entities play a critical role in managing medicine, which are DHO and PHC
- Local governments can adapt coping mechanisms to their specific context, making them replicable and effective.
- Ensuring the creativity of health workers in organizing their systems is crucial, especially in problematic districts. Central governments can facilitate this by providing capacity-building platforms.



Relmbuss' Contact information:
fanda@eshpm.eur.nl
Bayle building - Campus Woudestein
The Netherlands