



KEMENTERIAN
KESEHATAN
REPUBLIK
INDONESIA



THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP



RGHI

Global
five

Enhancing pharmaceutical logistics systems in Indonesia to strengthen UHC: Insights from local system dynamics

iHEA Pre-congress session
20th of July 2025

Meet our best team:



Relmbuss Fanda, PhD(Cand)



Erasmus School of
Health Policy
& Management



Prof. dr. Ari Probandari



KEMENTERIAN
KESEHATAN
REPUBLIK
INDONESIA



Australian
National
University



Prof. Dr. Roland Bal

Erasmus School of
Health Policy
& Management



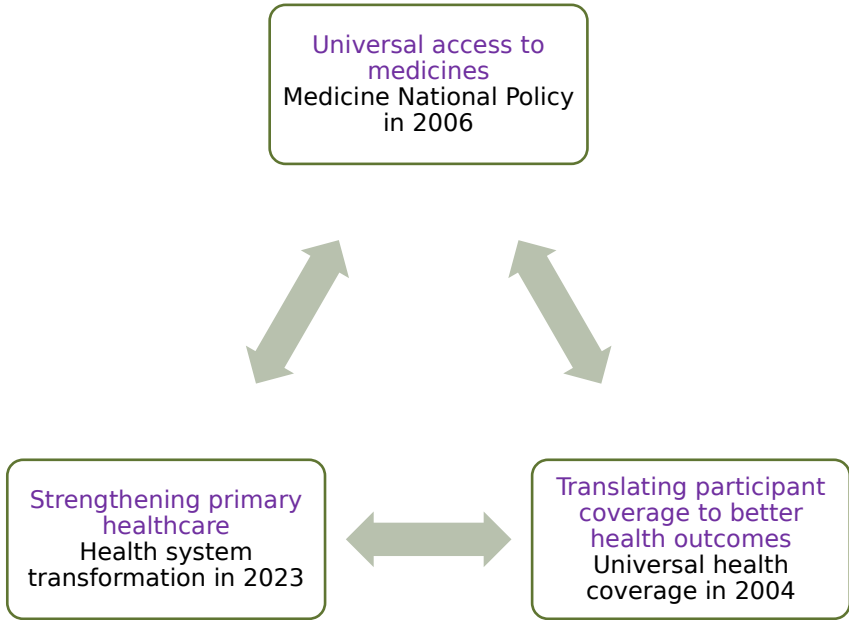
Dr. Maarten Kok

Erasmus School of
Health Policy
& Management



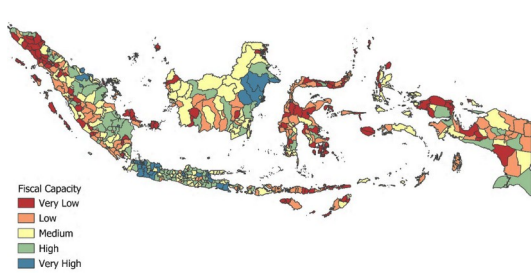
Collaborators :

Interconnection of universal health coverage, access to medicines and health system transformation **has been addressed as Indonesia's political commitments**

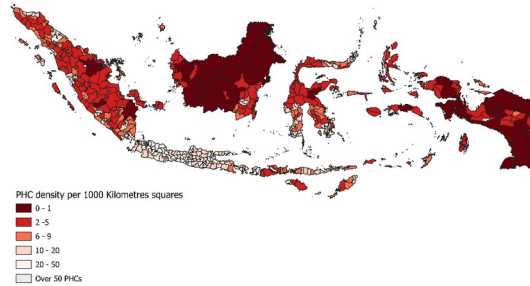


The **Primary Healthcare Centre function is crucial** to achieve universal Health Coverage and ensure Access to Medicines in Indonesia

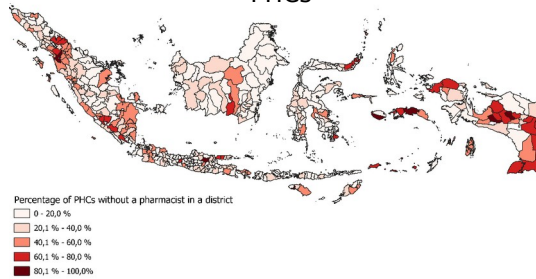
Variations in PHCs and their district capacities



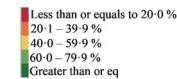
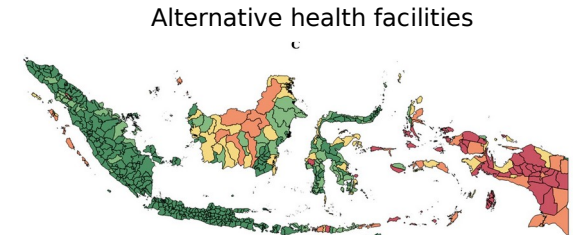
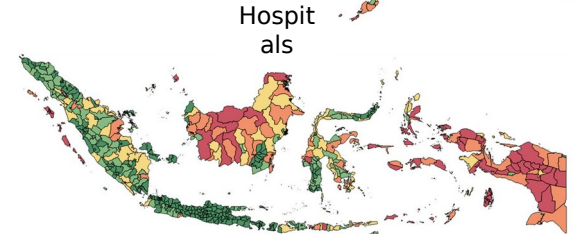
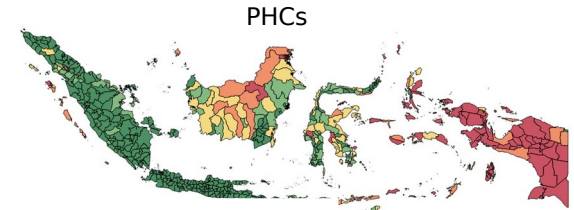
Variations in district fiscal capacities



Variations in numbers of PHCs



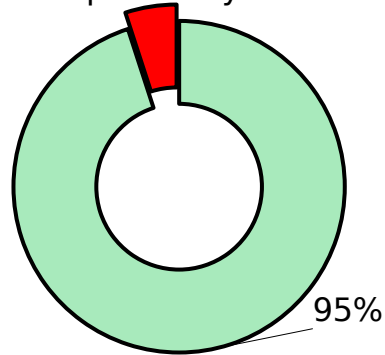
Variations in the percentage of PHCs without a pharmacist



Variations in accessibility to health facilities

Previous studies into the availability of medicines in public facilities offer a mixed picture.

The availability of medicines reported by MoH



■ Yes ■ No



Sources

1. Sutisnyono H et al (2020). Dampak Kebijakan Pengadaan Obat Pada Puskesmas di Jakarta Era Jaminan Kesehatan Nasional. *JMoH*. 2020 Oct 25;295-307
2. Kristina S (2020). Evaluating Accessibility of Essential Medicines in Indonesia: A Survey on Availability and Prices in Public and Private Health Sectors. *Ijpr*
3. World Bank. Indonesia Public Expenditure Review Spending for Better Results.pdf. World Bank; 2020.
4. Ministry of National Development/Planning/Bappenas. The Consolidated Report on Indonesia Health Sector Review 2018 National Health System Strengthening. 2018

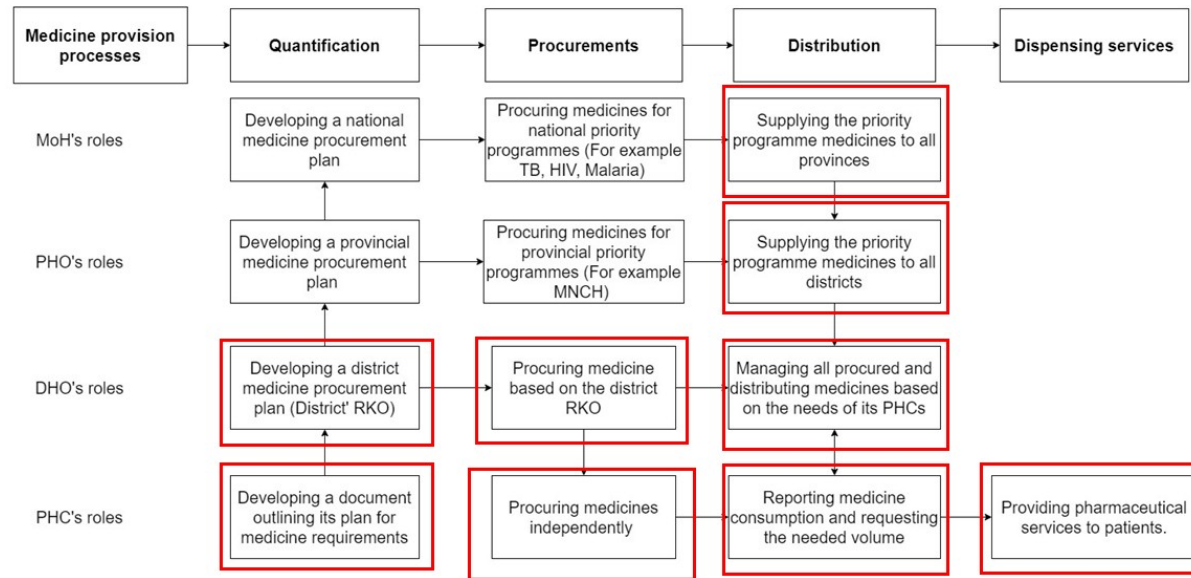
The 17 most needed essential medicines in PHCs reported by the Indonesian Ministry of Health **were highly available.**

Smaller studies, whereby researchers visited facilities and looked for specific medicines, **paint a more worrying picture**



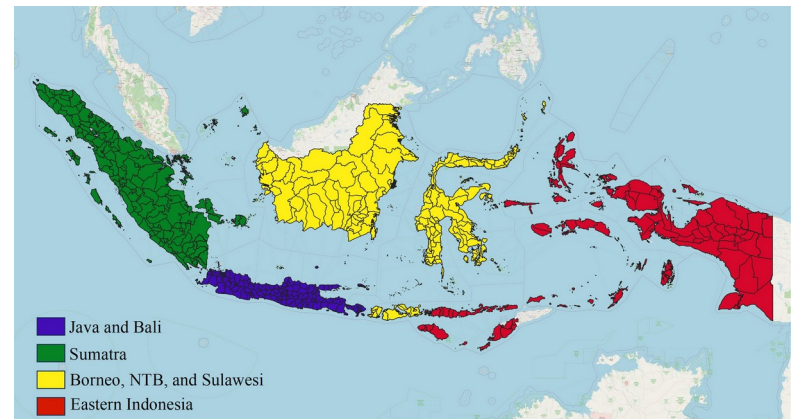
“ need to understand which essential medicines are actually available and why some medications are not available.”

Understanding the context of medicines management in public primary healthcare centres in Indonesia - is naturally complex



Local system perspectives on medicine management logistics for PHCs within the decentralised system in Indonesia.

Variations in health system readiness and socioeconomic status are a natural property of Indonesia



	Region				Type of districts		National
	Sumatera	Java and Bali	Borneo, NTB and Sulawesi	Eastern Indonesia	Rural	Urban	
Population (in million people)	59.3	162.4	42.5	15.0	206.9	72.5	279.4
Population density	10864	110741	8242	3693	9495	293389	15038
Districts	154	128	147	85	416	98	514
Primary Health Centres	2547	3696	2373	1215	8131	1700	9831
Hospitals	711	1.466	437	177	1.583	1.208	2.791
Private pharmacies	5611	14647	5203	1227	1728	9405	26688
Drug stores	3933	10952	1828	147	1268	4176	16860
Villages	25621	25988	18996	13332	7869	5246	83937
Percentage of population with JKN coverage	73%	79%	86%	80%	76%	88%	79%
Percentage of JKN participants that are subsidised	47%	45%	55%	62%	51%	38%	48%

NTB: West Nusa Tenggara; JKN, Jaminan Kesehatan Nasional; PHC, Primary Health Centres; M, Median; IQR, Interquartile range, *included facilities: primary health centres, pharmacies, private clinics, general practitioner practices and hospitals and ** included medicine providers are pharmacies, hospitals and drug stores.

Our analytical approach to answering the questions

Quantitative data

- Collaborate with the Ministry of Health (Balitbangkes) to manage the Health facility survey in 2019:
 - Surveyed 9831 PHCs
 - Surveyed 514 District health offices
 - Inspected 60 essential medicines in Indonesia
- Combined the data with another national representative dataset in 2019
 - Village potential
 - Sismonev JKN 2019

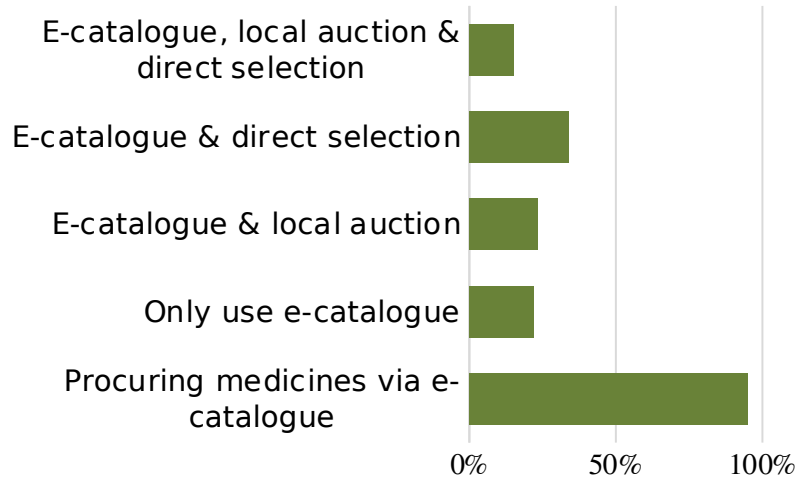
Qualitative data

- Interviewed 81 participants from
 - 3 districts
 - 1 in Java (Bantul) and 2 in Eastern Indonesia (in South Central Timor and Kupang).
 - 3 DHOs: Pharmacists, Procurement staff, Health Programme managers
 - 14 PHCs: Pharmacists, GPs, Health Programme managers, nurses and midwives.
 - 6 Medicine suppliers: National suppliers and private pharmacists

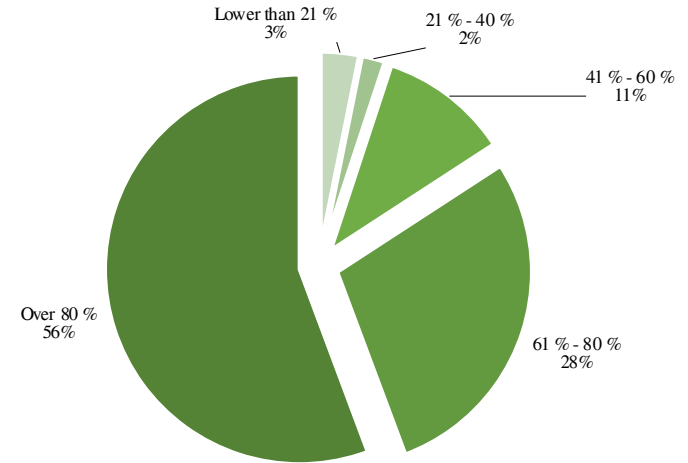
Dynamics in ensuring medicine provision in public healthcare in Indonesia

Our findings

The majority of medicines in the primary healthcare centres are expected to come from the e-catalogue platform.



Distribution of the 514 DHO medicine procurement planning based on the channel/ platform in 2019.



Distribution of DHO expectations regarding the use of e-catalogue purchasing to meet medicine stock needs

Reasons from local governments to use the e-catalogue



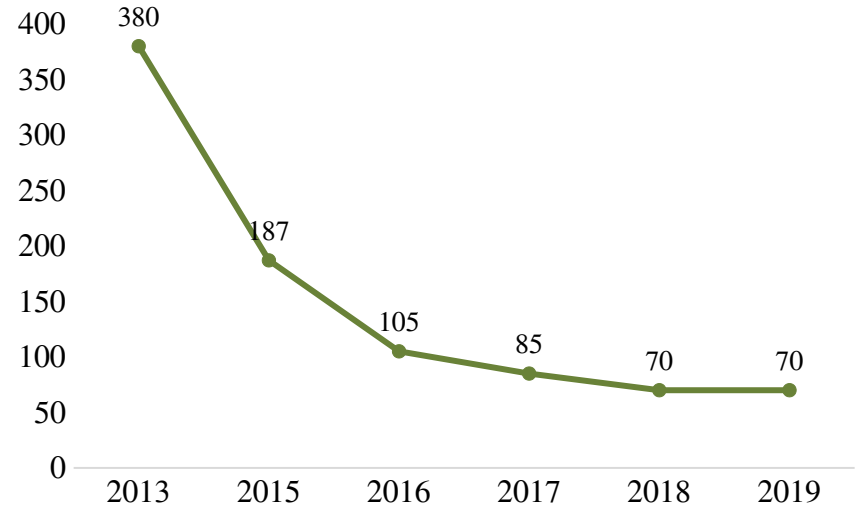
Lowest price points in the market



More accountable to avoid a corruption speculation

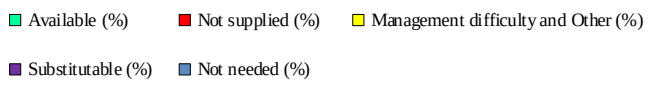
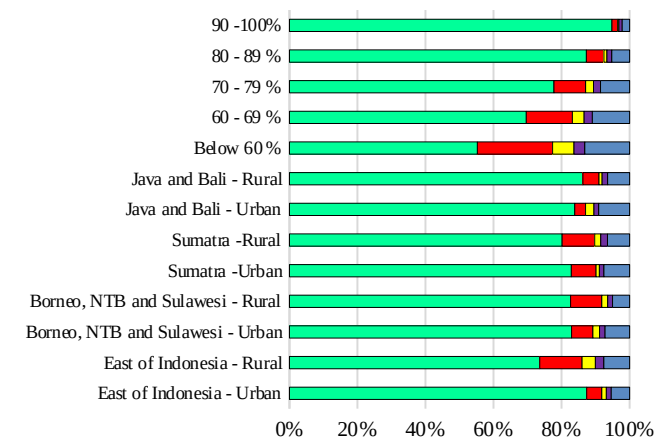
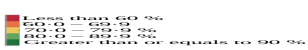
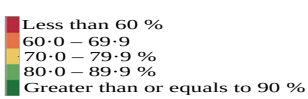
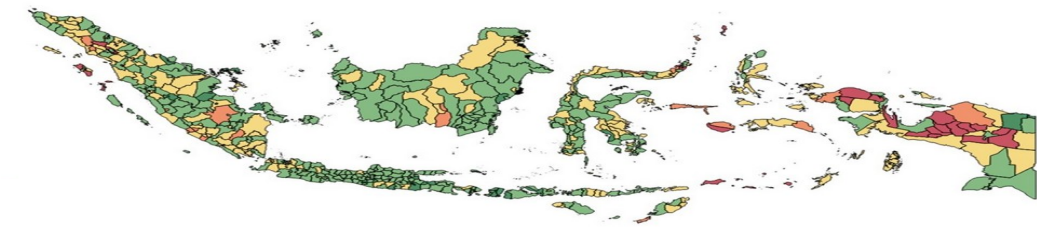


Supporting the central government programs



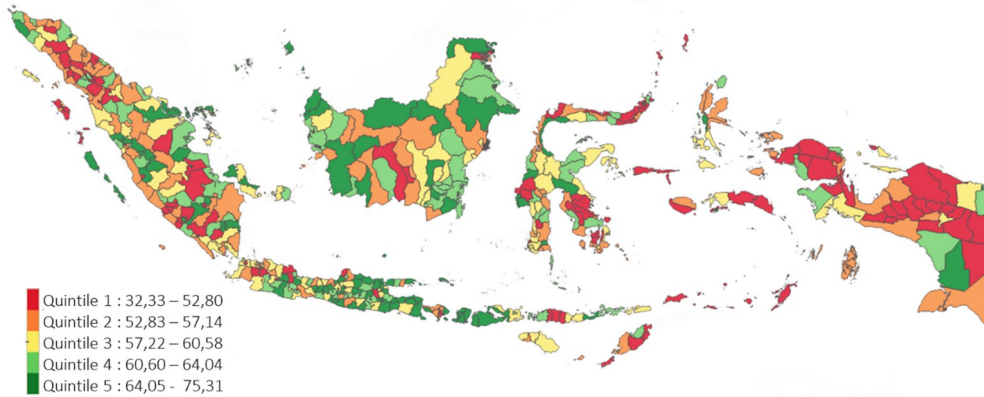
Prices of Amlodipine 5 Mg at the e-catalogue platform per tablet (IDR)

The most needed essential medicines in PHCs at the district level were generally available with 82 %; however, the availability remains varied across the regions

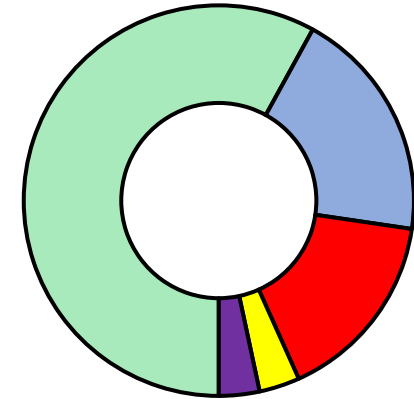


Average availability of 17 most needed essential medicines in PHCs at district level.

A broader selection of 60 selected essential medicines shows that the availability rate was significantly lower (58%) and varied across the regions



Average availability of 60 selected essential medicines in PHCs at the district level.



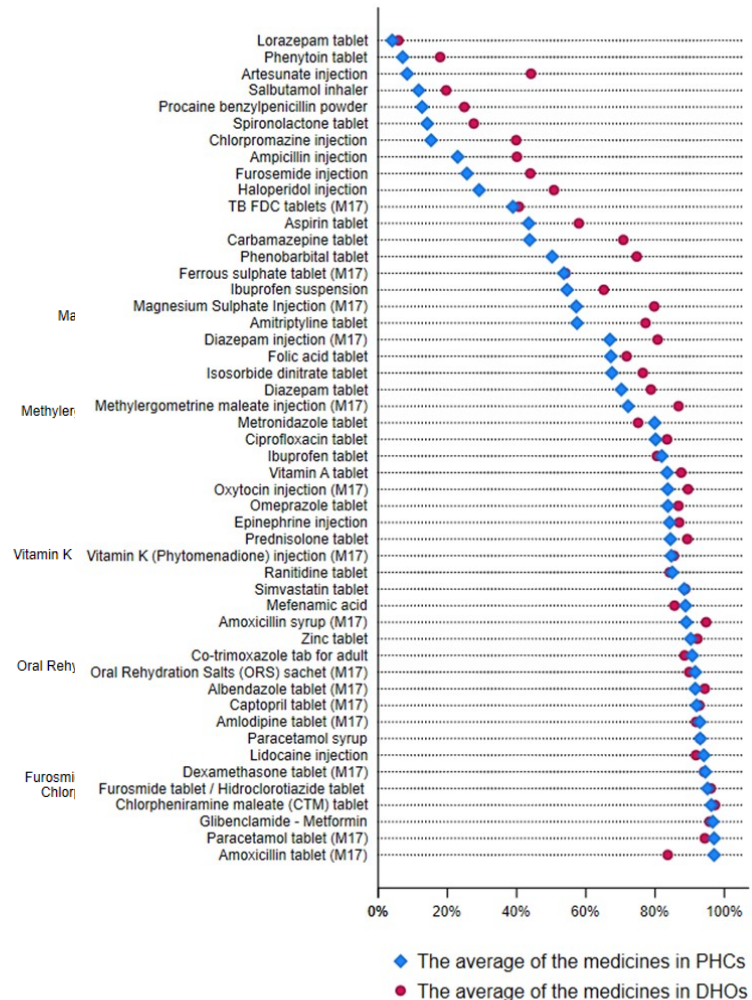
Available (%) Not needed (%)
Not supplied (%) Management difficulty (%)
Substitutable (%)

Average availability of 60 selected essential medicines in PHCs at the district level.

The main source of medicine provision in PHCs is their DHOs

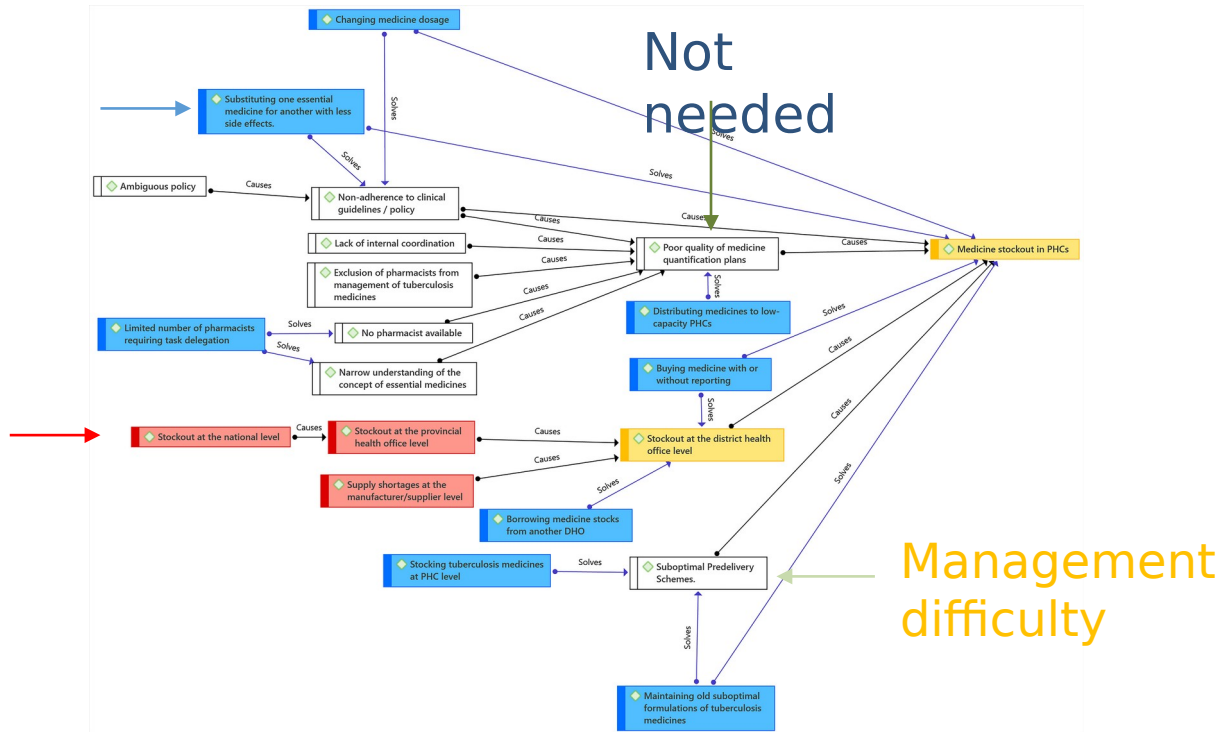
The availability of medicines in PHCs is similar to their associated DHOs

- “If we (the DHOs) can procure all needed medicines, our PHCs will be fine.”. A staff member in the DHO in Kupang district
- “All medicines are supplied by the DHO”. A staff member in the DHO in South Central Timor.
- “Our capitation fund is limited in use; the maximum we can use is Rp 1.000.000 (USD)”. The staff in PHC 1 in Bantul.



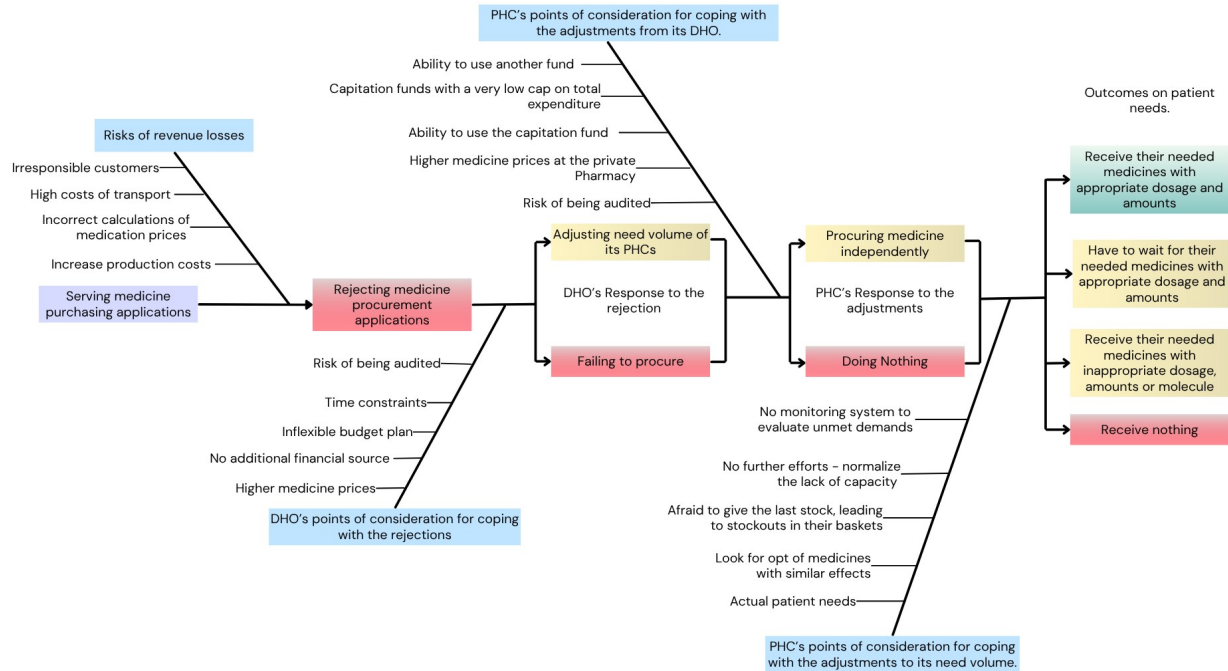
Repair works - important to cover temporary stockouts. They may conceal deeper systemic issues, and not resolve or identify the root problem

repair works

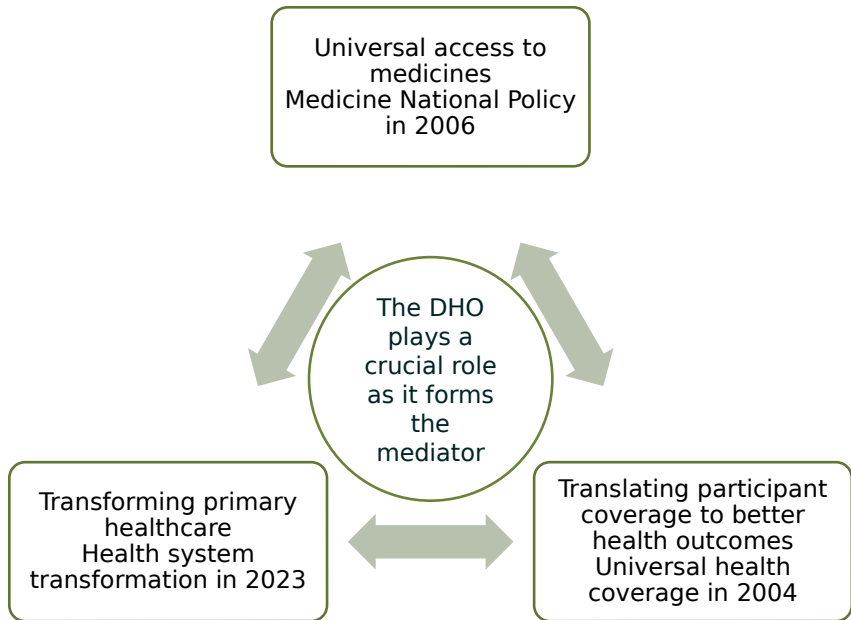


Not supplied

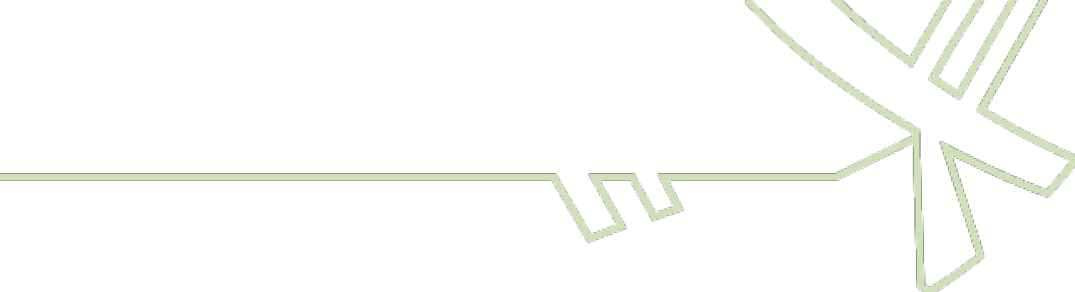
The consequences of medicine application rejections in the e-catalogue vary based on the repair works performed by DHOs and PHCs



Conclusions and implications



- Variations in medicine availability are a **natural property of this large system.**
- Empowering **all DHOs to enhance their medicine management** is vital, particularly in promoting awareness of risks linked to failed medication applications **in the e-catalogue.**
- Local system functions to manage medicine are **dynamic and should be adaptive**, involving **repair work** to ensure the system's sustainability.
- Current plans to bypass the DHO by strengthening primary care — while this strengthening in itself is good — **might be counterproductive.**
- **Designing pool procurement mechanisms in the Eastern Indonesia** region to better ensure adequate medicine supply dynamics.



Thank you
Terimakasih
Dank u wel

