

ESTIMATING TOTAL PHARMACEUTICAL EXPENDITURE USING HEALTH ACCOUNTS FRAMEWORK

Malaysia National Health Accounts Steering Meeting 2024 Planning Division Ministry of Health

1

Outline

Introduction Methodology Results Discussion Summary

Introduction

Expenditure on pharmaceutical 20 to 60 percent of total health expenditure in low- and middle-income countries (WHO 2017)

Generally, reports are limited to those pharmaceuticals purchased **only in retail pharmacies** (OECD 2022)

MNHA's annual health expenditure report based on the **primary intention/function**.

- Pharmaceutical **embedded within curative care** or other **main functions**

Functions of Health Care	2020	2021	2022
Curative Care	41,708	44,775	51,096
Preventive Care	5,360	11,123	5,555
Pharmaceuticals and Medical Non- Durables	3,974	4,585	5,304

*Sources: MNHA Database 2011-2023



Objective

To estimate national Total Pharmaceuticals Expenditure (TPE) using System of Health Accounts 2011 (SHA 2011) and MNHA framework.

Steep Increase (108%) on 2021 due to COVID-19

Vaccination Programme

Pharmaceutical expenditure maintains the similar pattern

Methodology



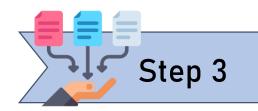
Step 1

Planning & Preparation



Step 2

Identifying data sources and collecting PE data



Data Analyses



Step 4

Data Verification & Data Validation

TEH

Prescribed
Medicines
(Retail End User
Price)

Over-thecounter drugs (OTC) (Retail End User/ Consumer Price)

Pharmaceutical within treatment packages (i.e. Hospital Inpatient)

Overhead Cost

Components of Total Pharmaceutical Expenditures (OECD 2022)

TPE Definition

The sum of final consumption expenditure on pharmaceuticals together with pharmaceutical consumption used in other episodes of care, for example an inpatient hospital stay

TPE Boundaries

- Medicine
- Vaccine
- Medical Gas
- Overhead Cost (Public Sector)
- Selling Price (Private Sector)

Data Source & Collections

Public Sector



Overhead Estimation Cost (2)



Final Consumer Price (Public)

Private Sector



Markup Range (1)



Final Consumer Price (Private)



Data Mapping to SHA 2011 and MNHA Framework

[1] Medicine Price Monitoring Survey, Pharmacy Division MOH (2017, 2020)

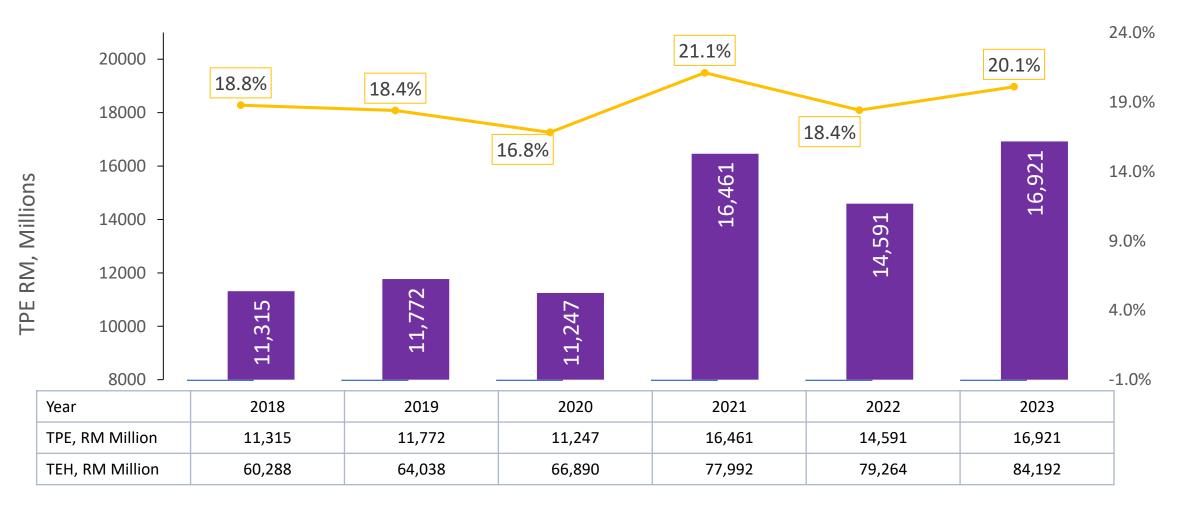
[2] Estimation Overhead, Pharmacy Division MOH



Results

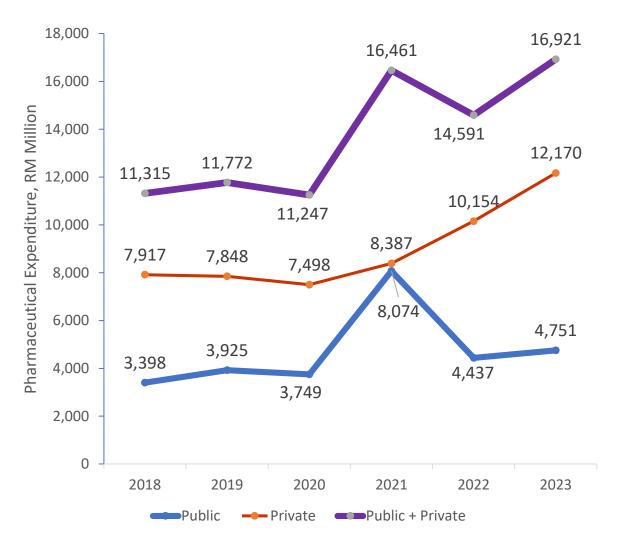


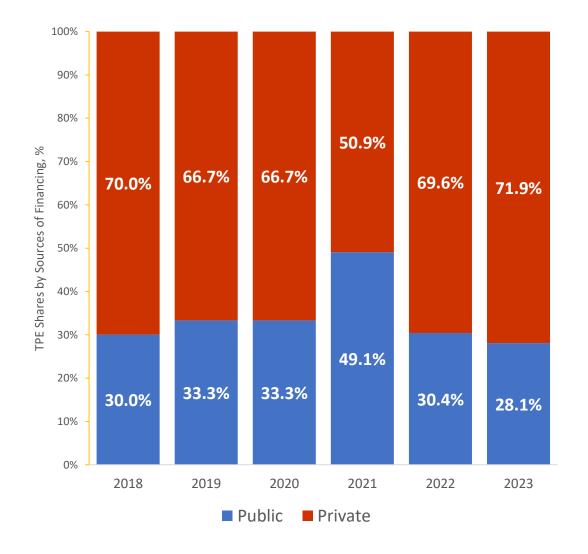
TPE as percentage of TEH, % 2018 - 2023



*CAGR TPE 2018-2023: 8.4%

TPE by Sources of Financing, 2018–2023

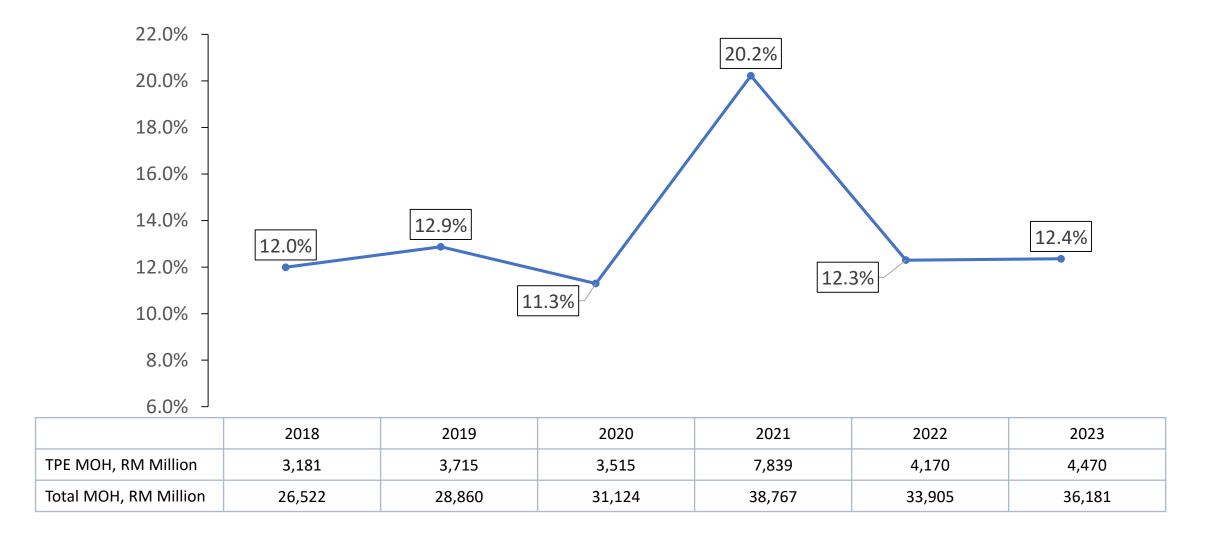




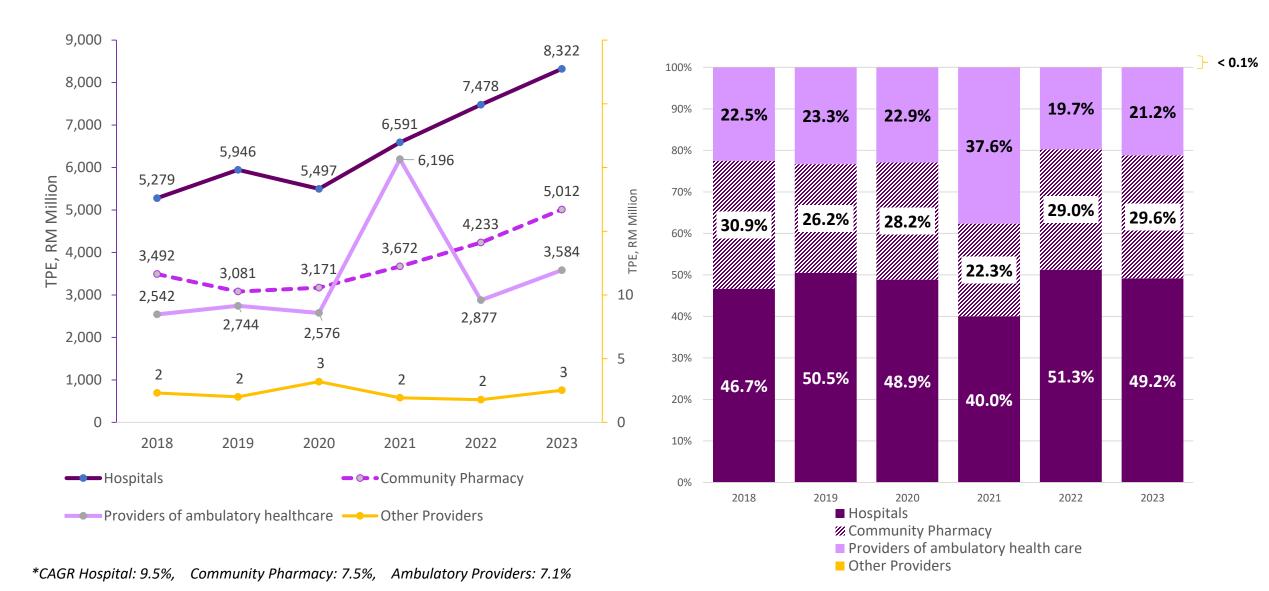
*CAGR Public: 6.9%, Private: 9.0%

Seksyen MNHA, Bahagian Perancangan – 2024

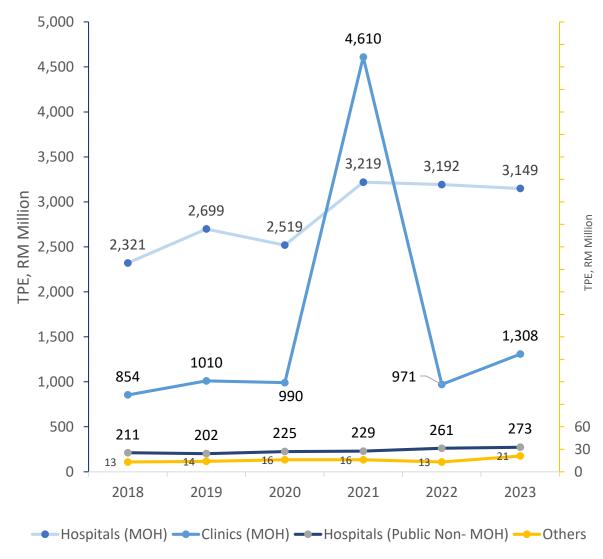
TPE MOH as Percentage of Total MOH, 2018-2023

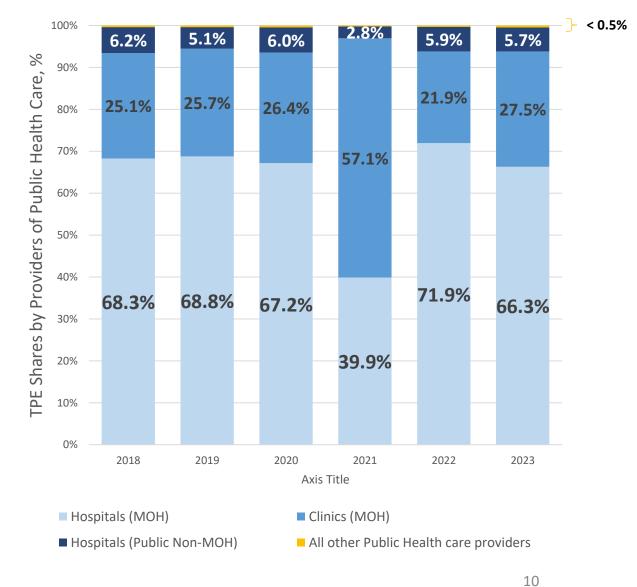


TPE by Providers of Health Care, 2018–2023



TPE by Providers of Public Health Care Sector, 2018–2023

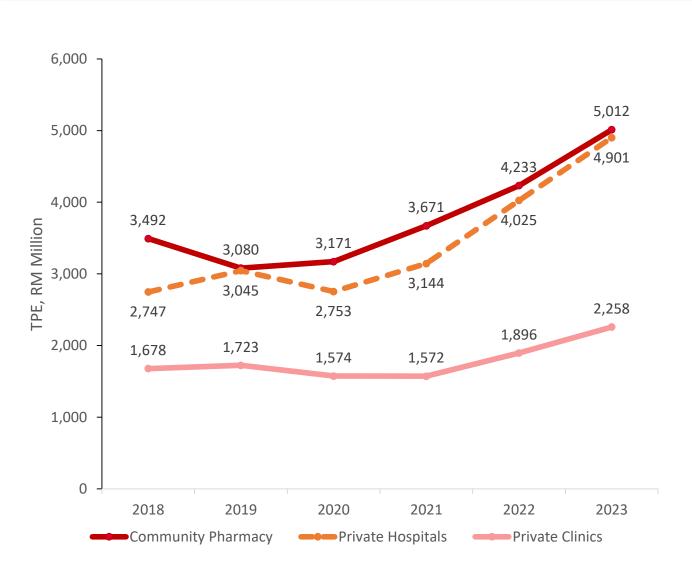


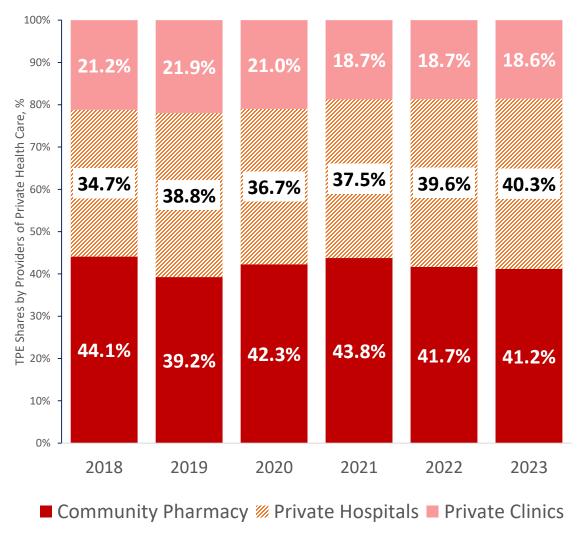


Seksyen MNHA, Bahagian Perancangan – 2024

^{*}CAGR Hospital MOH: 6.3%, Clinic: 8.9%.

TPE by Providers of Private Health Care, 2018–2023





Seksyen MNHA, Bahagian Perancangan – 2024

^{*}CAGR Community Pharmacy: 7.5%, Private Hospitals: 12.3%, Clinic: 6.1%.

Findings

- Malaysia spends 18 to 20% or one fifth of Total Expenditure of Health (TEH) for pharmaceuticals.
- Private sector pharmaceutical spending surpasses public by 2 to 3 folds in comparison to public sector.
- MOH spends 11% to 13% of total MOH expenditure for pharmaceuticals except in 2021 (20%) where resources are utilized for COVID-19 vaccinations procurement.
- MOH Hospital remains the largest providers for pharmaceutical for public sector and community pharmacy are the largest providers for pharmaceutical for private sector.
- **Higher** TPE seen in **post pandemic years contributed mostly by** private sector pharmaceutical spendings.

Discussion

Key Growth of TPE

- Private Sector Price Variations
 Private sector's open market resulted in varying cost across different healthcare providers¹
- Increasing Drug Price
 Medicines Consumer Price Index² (CPI) inflation rate from 2018 to 2023 are 4.3%
- Increasing Drug Utilization
 Increase demand and utilizations³ of symptomatic drugs by public post pandemic

Recommendations

- To strengthen cost containment efforts, and enforced price transparency, especially in private sector.
- To focus on strategic procurement may help address ongoing pharmaceutical expenditure concerns effectively.

(1) Medicine Price Monitoring Survey (2017, 2020), Pharmacy (2) Medicine Statistic On Medicine 2018-2022, Pharmacy Division

(3) OpenDOSM, Consumer Price Index (CPI)

SUMMARY 2023 TOTAL PHARMACEUTICALS **EXPENDITURES (TPE) ESTIMATION**

TRE RM 16,921 m

TPE as % of TEH

Total Pharmaceutical Expenditure as Percentage of Total Expenditure of Health 20.1 %

TPE MOH as % MOH 12.4 %

TPE consist of costs of









Vaccines

Medical Gasses





Who paid for it? SOURCE Public 28.1% RM4,751million Private 71.9% RM12,170million

