FHSMPP16/123

Malaysia National Health Accounts (MNHA) Out-of-pocket (OOP) Health Expenditure Estimates Using Integrative Approach

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Introduction

- OOP health expenses can create financial hardship by forcing people to choose between health expenses & other necessities.
- By tracking national OOP health expenditure, policymakers, researchers, and public health officials can gain insights into the affordability and accessibility of healthcare services within a country.

OOP HEALTH EXPENDITURE = **spending made by individuals for their own/ another individual (family/household member)** without the benefit of insurance or third-party reimbursement [1] » **purchasing of health care services or products**

- MNHA under the Planning Division of the Ministry of Health (MOH) uses the integrative approach when estimating the national OOP health expenditure based on the standardised and internationally accepted NHA framework[2].

Objective

This study was aimed to explore the methodology when generating timely annual reports on OOP health estimation using the nationally adapted MNHA framework.

Methods

- The integrative approach takes into account several different health expenditure flows from various perspectives, including sources of financing (e.g., private health insurance schemes, MOH's user charges, Household Expenditure Survey) and providers' aspect (e.g., private hospital and clinic surveys)[2].
- Gross OOP expenditure encompasses reconciled data from multiple sources, which is further classified into Non-residual Items (NRI) and residual Items (RI).

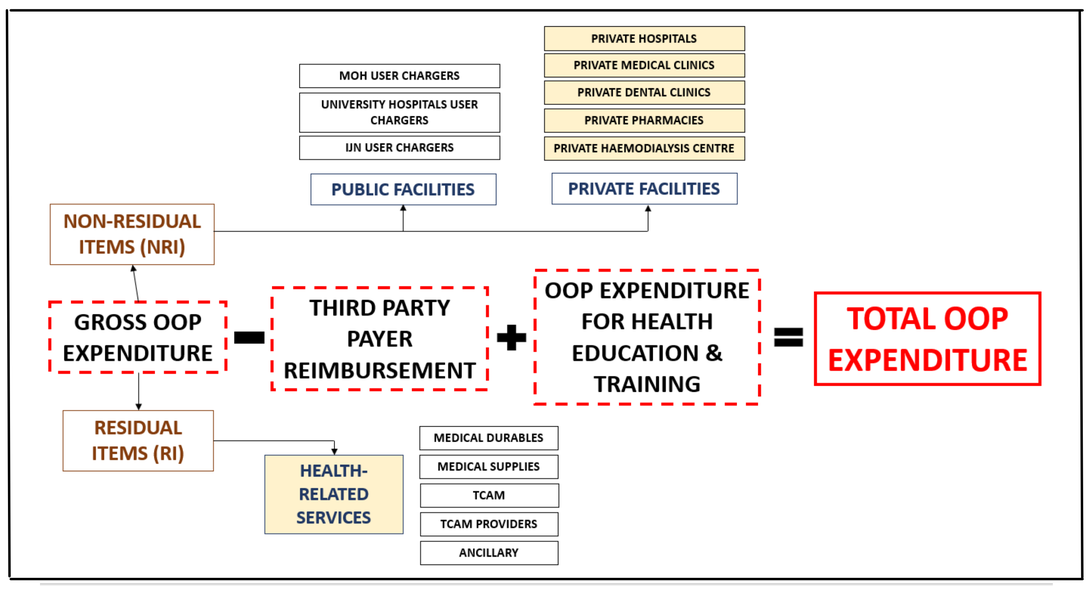

Figure 1: Integrative Approach Methodology under the MNHA framework

- Estimating OOP health expenditure becomes challenging when reimbursement occurs. Reimbursement can occur through multiple channels such as private insurance enterprises, private corporations, the Employees Provident Fund (EPF), the Social Security Organisation (SOCSO), and other agencies. This reimbursed expenses if reported as OOP pose a risk of overestimation. To mitigate this, the recommended best practice is to conduct third-party deduction (TPD) during analysis.

Table 1: List of data sources with its purposes for Gross OOP Expenditure

Data sources for Gross OOP Expenditure		Purposes
Department of Statistics (DOSM) Survey (aggregated data)	• National Economic Census (formerly Professional & Industrial (PNI) Survey)	• Private hospital revenue • Private medical clinic revenue • Private dental clinic revenue • State proportion for private hospitals • Allocation statistics & state proportion for private medical clinic • Allocation statistics & state proportion for private dental clinic
	• Economic Indicators (GDP, GDP Deflators)	• Interpolation and extrapolation (log linear) imputation technique for missing data
	• Household Expenditure Survey (HES)	• Allocation statistics for Medical Supplies • Allocation statistics for Medical Durables / Prosthesis / Equipment • Allocation statistics for Ancillary Services • Allocation statistics for Traditional Medicine • Allocation statistics for Traditional Treatment Provider
MNHA Surveys	• MNHA National Heart Institute Survey	• National Heart Institute User Chargers
	• MNHA University Hospital Survey	• University Hospital User Chargers
	• MNHA Private Hospital Survey	• Allocation statistics for function in Private Hospitals
	• MNHA Private Haemodialysis Centre Survey	• Private haemodialysis centre revenue & allocation statistics
	• MNHA FOMEMA Survey	• FOMEMA expenditure in private clinic estimation
Account General MOH data		• MOH Hospital User Chargers
IQVIA Malaysia Sdn. Bhd. (formerly IMS)		• Total pharmaceutical expenditure
Pharmacy Services Division, MOH data		• State allocation for pharmacy centres

Results & Discussion

- In 2021, the OOP health expenditure amounted to 31.5% of the TEH. When looking at provider perspective, OOP expenditure was highest for private hospitals at 46.4% of total OOP expenditure. For function, outpatient services took up 40.5% of total OOP expenditure.

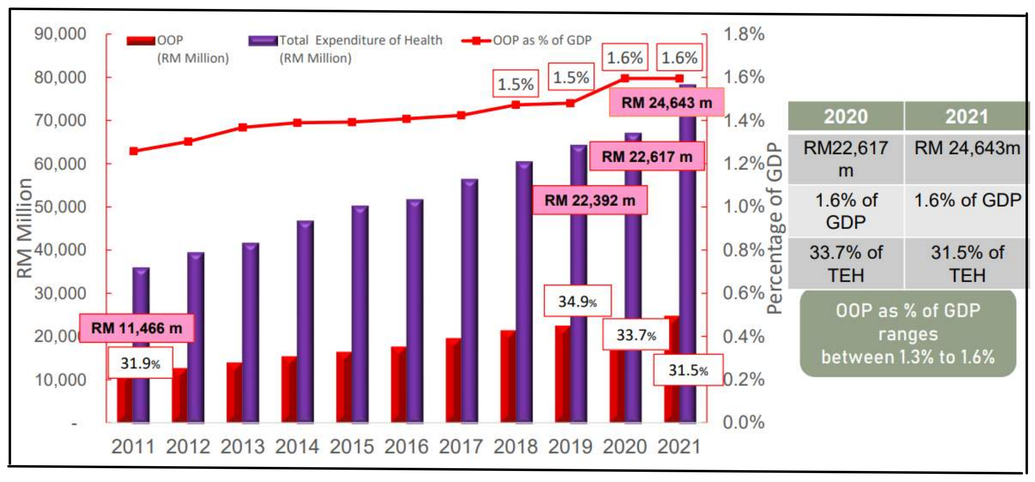

Figure 2: OOP health expenditure time series 2011-2021

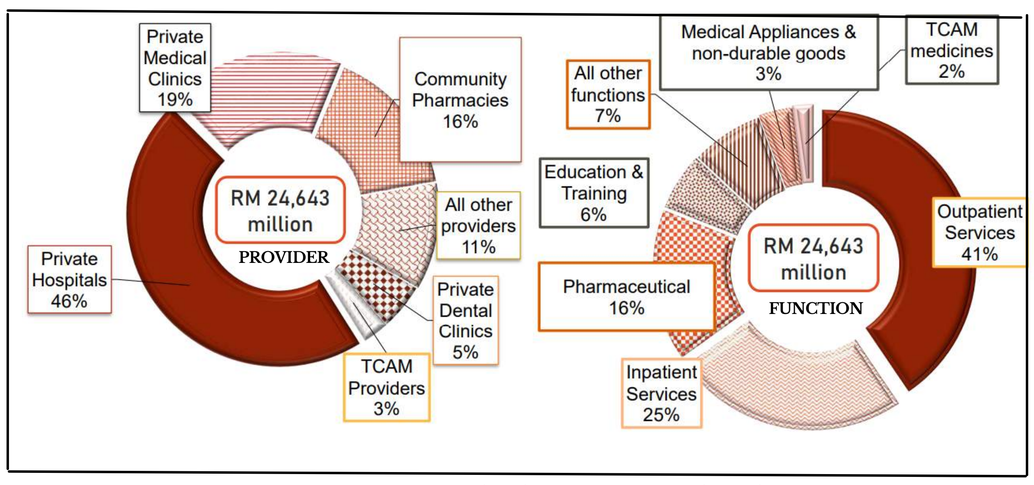

Figure 3: OOP expenditure for Providers (left) and Functions (right) of healthcare,2021

- Under the Universal Health Coverage (UHC) framework, countries aim to reduce OOP payments and increase the proportion of healthcare financing through prepayment mechanisms[3]. This is to ensure that people have access to healthcare services when needed without experiencing financial hardship.
- The advantage of using a standardised method like National Health Accounts (NHA) when producing OOP estimation is that it allows for homogeneity of data produced and ensures better cross-country comparability.
- While there is no specific target percentage, many countries strive to keep the OOP health expenditure as low as possible, with benchmarking to high-income countries with well-established healthcare systems that have achieved relatively low OOP expenditure, often below 20% of total health expenditure[4].
- An integrative approach that combines source and provider data yields more reliable estimates, enables the inclusion of new relevant data, and allows for potential error adjustments.

Conclusion

- Malaysia's OOP health expenditure is on rise, compared to other high-income nations.
- Tracking OOP health expenditure provides evidence-based information for policymakers, aiding evaluation of affordability and accessibility of equitable health care services.

Recommendation

- NHA is a data repository of multiple data sets. Each in itself is a rich source of information. Researches are further encouraged to carry out in depth analysis linking NHA data to other outcome data, that can provide more policy relevant information.

Acknowledgement

The Authors would like to expresses their gratitude to :

1. MNHA Steering Committee members, co-chaired by the Secretary-General, Ministry of Health Malaysia and the Director-General of Health Malaysia
2. Director of Planning Division
3. Public and private sectors' stakeholders
4. Malaysia National Health Accounts (MNHA) team

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