

Horizontal equity in the Australian healthcare system: Exploring the unknowns and updating the knowns

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Certificate of Authorship/Originality

I, Mohammad Habibullah Pulok, declare that this thesis is submitted in fulfilment of the requirements for the award of Doctor of Philosophy in Health Economics in the UTS Business School at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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Ethical approval

Ethics approval has been sought and obtained from the University of Technology Sydney Human Research Ethics Committee (UTS HREC). The ethics application number of this PhD research is UTS HREC ETH17-1317.

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List of Abbreviations

AATISH	Australian Aboriginal and Torres Strait Islander Health Survey
ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
BTOS	Broad type of services
BTOS	Broad type of services
CC	Concentration curve
CI	Concentration index
EI	Erreygers's index
FFS	Fee-for-service
GCI	Generalised concentration index
GDP	Gross domestic product
GP	General practitioner
HI	Horizontal Inequity
HILDA	Household, Income and Labour Dynamics in Australia
LTC	Long-term conditions
MBS	Medicare Benefit Schedule
NB	Negative binomial
NHS	National Health Survey
OECD	Organisation for Economic Cooperation and Development
OLS	Ordinary least square
OOP	Out-of-pocket
OR	Odds ratio
PBS	Pharmaceutical Benefits Scheme
PHI	Private health insurance
PHN	Primary health network
SAH	Self-assessed health
SDG	Sustainable development goal
SE	Standard error
SES	Socioeconomic status
UHC	Universal health coverage

UK	United Kingdom
USA	United States of America
WHO	World Health Organisation
WI	Wagstaff index

Abstract

Australia has a tax-funded universal health insurance system known as Medicare, which aims to ensure universal and equitable use of healthcare services. This thesis assesses the fairness of the Australian healthcare system in delivering healthcare services during the period of encouraging greater private healthcare financing. This thesis first measures the degree of horizontal inequity (unequal care for equal need) in eight indicators of healthcare use between 2011-12 and 2014-15. Secondly, it examines inequity in GP and specialist visit by making a distinction between the probability of visit and the conditional visit. Thirdly, this thesis investigates how co-payment is related to area-level socioeconomic inequality in Medicare-funded specialist care by using national administrative data. Finally, it measures and explains inequity in use of healthcare services within the non-remote Indigenous Australians.

The overall finding is that there was pro-rich inequity in use of out-of-hospital services while the utilisation of hospital-related services was almost equitable. There was a small degree of pro-rich inequity in the probability of GP visits, but significant pro-poor inequity in conditional visits to GP. On the contrary, there was considerable inequity in the probability of visiting a specialist favouring richer people. The distribution of conditional visits for this care was almost equitable, but it appears to be pro-rich when higher users were excluded from the analysis. Income, private health insurance, and education significantly accounted for pro-rich inequity while the contribution of concession card to inequity was pro-poor. The analysis of Medicare Benefit Schedule (MBS) data shows that inequality in specialist services was favourable to the individuals living in socioeconomically advantaged areas. Most importantly, this inequality was higher for visits with co-payment while there was almost no inequality in visits without co-payment. Finally, there was no evidence of inequity in the utilisation of GP services and inpatient admission within the Indigenous Australians. However, wealthier Indigenous Australians were higher users of specialist services than their poorer counterparts despite having similar levels of need. Pro-rich inequity in specialist services suggests the need for policy discussions to reform Medicare safety net arrangements so that poorer people have a chance to access larger benefits. Policy reforms should ensure that Medicare serves financially vulnerable and sicker people equitably.