Health Policy 119 (2015) 907–914

Contents lists available at ScienceDirect

Health Policy

journal homepage: www.elsevier.com/locate/healthpol

Affordability of out-of-pocket health care expenses among older Australians

Anthony Carpenter*, M. Mofizul Islam, Laurann Yen, Ian McRae

Australian Primary Health Care Research Institute, The Australian National University, Acton, Australian Capital Territory, 0200, Australia

ARTICLE INFO

Article history:
Received 9 July 2014
Received in revised form 12 February 2015
Accepted 16 March 2015

Keywords:
Health care costs
Health services for the aged
Chronic disease
Health services accessibility

ABSTRACT

Australia has universal health insurance, and provides price concessions on health care and prescription pharmaceuticals through government subsidies. However Australia ranks among the highest OECD nations for out-of-pocket health care spending. With high prevalence of multimorbidity (27% aged 65 and over have 2 or more long-term health conditions) older Australians may face a severe financial burden from out-of-pocket health expenses. We surveyed 4574 members of National Seniors Australia aged 50 years or more on their inability to pay out-of-pocket health-related expenses across categories of medical consultations and tests, medications, dental appointments, allied health appointments (e.g. physiotherapy, podiatry) and transport to medical appointments or tests. Almost 4% of those surveyed were unable to afford out-of-pocket costs in at least one category of health care expenses in the previous 3 months. The odds of being unable to afford out-of-pocket medical costs increased with the number of chronic medical conditions (3 conditions: OR 3.05, 95% CI 1.17–6.30; 4 or more conditions: OR 3.45, 95% CI 1.34–7.28, compared with no chronic medical conditions). Despite Australia's universal health insurance, and safety nets for medical and pharmaceutical contributions, older Australians with multiple chronic conditions are at risk of being unable to afford out-of-pocket health care expenses.

1. Introduction

The prevalence of multiple chronic medical conditions (CMCs) has increased in Australia as the Australian population has aged. Almost 27% of the Australian population aged 65 and over have 2 or more CMCs, while 15% have 3 or more CMCs [1].

Australia has universal, taxpayer funded health insurance (Medicare) which provides free hospital care in public hospitals, and subsidises services provided by doctors to patients through the Medicare Benefits Schedule (MBS) and prescribed pharmaceuticals through the Pharmaceutical Benefits Scheme (PBS) [2]. Many Australians (47.2%) purchase optional private health insurance to cover admission to private hospitals, or 'ancillary' insurance (55.2%) [3,4] for non-hospital services such as eye glasses, dental services, physiotherapy and ambulance services, most of which are not covered by Medicare [4]. However, patients incur out-of-pocket health care expenses (OOPHE) for many health care items.

Abbreviations: CI, confidence interval; CMC, chronic medical condition; MBS, Medicare Benefits Schedule; OECD, Organisation for Economic Co-operation and Development; OOP, out-of-pocket; OOPHE, out-of-pocket health care expense(s); OR, odds ratio; PBS, Pharmaceutical Benefit Scheme.

* Corresponding author at: Research School of Population Health, The Australian National University, Building 63, Corner Mills & Eggleston Roads, Acton, Australian Capital Territory, 0200, Australia.
Tel.: +61 2 6125 6570; fax: +61 2 6125 0740.
E-mail address: anthony.carpenter@anu.edu.au (A. Carpenter).

http://dx.doi.org/10.1016/j.healthpol.2015.03.010
0168-8510/

Eighty-two percent of General Practitioner (GP) services, 87.7% of pathology services, and 76% of diagnostic imaging services are billed at the level of Medicare subsidy and attract no patient co-payment [5]. However many health services attract significant patient co-payments. For in-hospital services in private hospitals these OOPHE can be mitigated by private health insurance, but some private health insurance policies still attract significant patient co-payments.

Patients are responsible for the cost of services provided outside of public hospitals, Medicare rebatable services, and PBS approved pharmaceuticals. Allied health services, including dental services, durable medical equipment, and non-PBS insured pharmaceuticals are major OOPHE cost categories, especially for those with CMCs [6].

The Pharmaceutical Benefits Scheme (PBS) subsidises government approved pharmaceuticals (concessional & Veterans patients' co-payment $6.10, non-concessional co-payment $37.70, per item per month). Both the PBS and MBS have annual safety nets which apply when OOPHE for each scheme reaches prescribed levels each year [2]. Despite these safety nets, there is concern that older Australians with CMCs may incur OOPHE which cause difficulty in paying health care bills [6,7].

Previous research has used the percentage of household income, or nonsubsistence spending, spent on medical bills (10%, 20% or 40%) to define burdensome levels of health spending [8,9]. However there is no consensus on the percentage of household income which is burdensome [9,10], and little information about the impact of OOPHE on individual households. We have previously reported the number of older Australians spending at least 10% (11.8%, 95% CI 10.5–13.1%) and at least 20% (5.1%, 95% CI 4.2–5.9%) of household equivalized income on health care expenses [11]. In those studies we found a positive relationship between the number of CMCs and OOPHE [11,12].

The average percentage of household equivalized income spent on OOPHE across a population does not explicitly measure individual household's financial hardship due to OOPHE. In this study we aimed to capture the financial burden on individual households by investigating participants' inability to afford OOPHE. We also assessed the relationship between inability to afford OOPHE and the number of CMCs, household income, and household coping strategies when unable to afford out-of-pocket medical bills.

2. Materials and methods

2.1. Setting and participants

The study population included all members of National Seniors Australia (NSA), a nation-wide organisation with 285,000 members aged over 50 years [13]. In this paper we refer to our whole sample as older Australians. An opt-in invitation and study questionnaire were mailed to a representative sample (n = 10,000) of NSA's members in 2009. The sample was stratified by residential location (urban/regional/rural, remote or very remote) and age. Those aged 75 years or older were over-sampled to permit analysis of this age group. The survey and study were approved by the Australian National University Human Research Ethics Committee (no. 2009/309).

2.2. Questionnaire

A structured questionnaire adapted from Essue et al. [6] that was used for data collection included questions on demographic information, self-reported chronic illness and disability, health service use and OOP health care spending, household economic circumstances and quality of life. The survey questions were drawn from existing validated tools, including: the Australian 45 and Up Study [14], the Household, Income and Labour Dynamics in Australia survey [15] and the Quality Metric Short Form Version 12 (SF-12) survey of health related quality of life [16], which includes a measure of self-assessed health. While information was collected on all conditions that lasted more than 6 months, this study focussed on a sub-set comprising the most common burdensome CMCs in Australia [17]: cancer, heart disease, high blood pressure, stroke, diabetes, bronchitis/emphysema, arthritis, osteoporosis, depression (including anxiety), Parkinson's disease and asthma/hayfever.

2.3. Measurement of out-of-pocket spending

Respondents were asked to report their personal OOPHE over the previous 3 months on 5 categories, including direct expenses (1-medications; 2-medical consultations and tests; 3-costs of home care needed because of your health; 4-medical equipment) and indirect expenses (5-transport to medical consultations and tests). Participants with total OOP costs of $5000 or over in the last 3 months (e.g. housing modifications, new hearing aids) were considered outliers and excluded from our analysis (n = 26). Participants who responded 'don't know' in any category were excluded from the calculation of total OOPHE across the 5 categories.

2.4. Measurement of income

Income was adjusted for household size using the modified Organisation for Economic Co-operation and Development equivalence scales [18]. A weight of 1 was applied to the first adult in a household, 0.5 to the second and later adults, and 0.3 to children, yielding 'household equivalized income'.

2.5. Measurement of inability to pay

We asked participants to report whether they had been unable to pay the full amount of OOP health-related expenses in the past 12 months across 5 categories (1-medical consultations and tests; 2-medications; 3-dental appointments; 4-allied health appointments (physiotherapy, podiatry); 5-transport to medical appointments or tests[1]). Participants indicated whether they were unable to

[1] Open-ended space was provided to list OOP expenses not in one of these 5 categories.