

# Evaluating primary care expenditure in Australia: the Primary Care Spend (PC Spend) model

Michael Wright<sup>1,2</sup> , Shona Bates<sup>1,3</sup>, Andrew W Bazemore<sup>4</sup>, Michael R Kidd AM<sup>1,5</sup>

**The known:** Health systems built on strong primary care are associated with better health outcomes. Recent Australian health policy aims to strengthen primary health care, but does not specify how progress will be assessed.

**The new:** In 2020–21, 33.2% of health spending in Australia was primary health care spending, 6.0% supported comprehensive primary care services, and 0.8% was for long term holistic patient care services.

**The implications:** Health reform in Australia requires a tool for assessing expenditure on primary health care. Our adaptation of the Primary Care Spend model to Australia provides a tool for monitoring and directing expenditure across different types of health care.

Health systems built on strong primary health care are associated with better health outcomes, less high cost tertiary care, and more public value from health care expenditure than those that are not.<sup>1–4</sup> The World Health Organization (WHO) *Declaration of Astana* (2018) states that “strengthening primary health care ... is the most inclusive, effective and efficient approach to enhance people’s physical and mental health.”<sup>5</sup> Health systems around the world are therefore calling for increased spending on primary health care.<sup>6,7</sup>

Primary health care is broadly defined by the WHO as including a “whole-of-society approach with three components: (a) primary care and essential public health functions as a core of integrated health services; (b) multisectoral policy and action; and (c) empowered people and communities.”<sup>8</sup> Primary care services, a subset of primary health care, are the foundation of high performance health systems.<sup>4</sup> Primary care, including general practice, provides first contact and coordinated, comprehensive, and continuous care to individuals, families, and communities (the four Cs).<sup>8,9</sup> The increasing range of community health services, including mental health care and alcohol and drug treatment services, has led to some uncertainty about what constitutes primary care and primary health care.

Health care expenditure is difficult to monitor in Australia, as it is split between the federal and state and territory governments, insurance is provided through government and private schemes, and health care is delivered by both public and private providers. Monitoring is also complicated by inconsistencies in the definitions of primary health care. The Australian Institute of Health and Welfare (AIHW) recently reported that health care expenditure increased during 2010–11 to 2020–21 more rapidly for hospital care (from 40.3% to 42.9% of recurrent health expenditure) than for primary health care (declined from 37.7% to 35.1%; table A9 in reference).<sup>10</sup> Federal spending on general practice care per capita is declining.<sup>11</sup>

The Australian health system is undergoing reforms that aim to strengthen primary care. The *Strengthening Medicare Taskforce*

## Abstract

**Objectives:** To assess the distribution of health care expenditure (public and private) for primary care and primary health care as proportions of overall health care funding.

**Study design:** The Primary Care Spend model; estimated distribution of expenditure for three tiers of primary care services by provider and function.

**Setting:** Primary Care Spend model applied to Australian health expenditure, public and private, 2020–21, from a health sector perspective, as recorded by the Australian Institute of Health and Welfare.

**Main outcome measures:** Proportions of all health care spending for essential community and primary health care functions (tier A), comprehensive primary care (services delivered in general practices and family physician clinics; tier B), and enhanced primary care services (long-term holistic patient care; tier C).

**Results:** In 2020–21, 33.2% of health spending in Australia was classified as primary health care spending (tier A), 6.0% as comprehensive primary care services (tier B), and 0.8% as long term holistic patient care services (tier C).

**Conclusions:** The application of the Primary Care Spend model to Australian data provides a more nuanced analysis of expenditure for primary health care than routine health expenditure reports. Its output could be used to inform targets for spending on different tiers, types, and locations of primary care, especially comprehensive and other high value primary care services, and to monitor progress toward these targets.

*Report*<sup>12</sup> recommended increasing access to primary care, multidisciplinary teams, voluntary enrolment of patients with general practices, and improving data collection and use. The report provides a blueprint for changing how primary care is funded and delivered. However, a tool is required to better assess funding changes for different components of primary health care, as health outcomes and the impact of funding changes may differ by care type.

Several organisations report on primary health care and primary care expenditure in Australia, including the AIHW, the Productivity Commission, the Australian Department of Health and Aged Care, and the Organisation for Economic Co-operation and Development (OECD). These organisations estimate expenditure using the Systems of Health Accounts framework; the OECD provides guidance for broad and narrow definitions of primary health care expenditure, facilitating international comparisons.<sup>13</sup> However, Systems of Health Accounts-based reporting yields estimates with large variations that are related to local differences in definitions of primary health care and primary care.<sup>14</sup> Further, inconsistencies in estimated Australian health expenditure using different reporting systems, and poor differentiation of primary health care and primary care spending, have been reported; general practice expenditure comprises 4.9% to 7.6% of total health expenditure, depending on the classification system.<sup>15</sup>

<sup>1</sup>International Centre for Future Health Systems, University of New South Wales, Sydney, NSW. <sup>2</sup>Centre for Health Economics Research and Evaluation, University of Technology Sydney, Sydney, NSW. <sup>3</sup>The University of New South Wales, Sydney, NSW. <sup>4</sup>American Board of Family Medicine Inc, Lexington, KY, United States of America. <sup>5</sup>Oxford University, Oxford, United Kingdom. [✉ michael.wright2@unsw.edu.au](mailto:michael.wright2@unsw.edu.au) • doi: 10.5694/mja2.52574

An alternative method for evaluating and monitoring primary care expenditure is the primary care spend model (PC Spend model). The PC Spend model was the outcome of an international methods conference hosted by the Robert Graham Center for Policy Studies (American Academy of Family Physicians) and the American Board of Family Medicine in Washington in 2017.<sup>14</sup> Recognising variations in the definition of primary care, the model aimed to “describe expenditure (from all sources) on primary care in a uniform way in order to enable comparisons and benchmarking, and to inform policy interventions and targets for ongoing investment in primary care” for three defined tiers.<sup>14</sup> The model has been used to analyse the proportion of primary care expenditure in the United States for people aged 65 years or older,<sup>16</sup> expenditure by commercial insurers to establish spending thresholds for different types of primary health care,<sup>17</sup> differences in primary care expenditure in the United States by state,<sup>18</sup> and associations between primary care spending and secondary care use (such as emergency department and hospital clinic visits).<sup>7</sup>

We have adapted and applied the PC Spend model to assess the distribution of health care funding for primary care and primary health care as proportions of overall health care funding in Australia.

## Methods

Our modelling study had two components. First, to develop the PC Spend (Australia) model, we mapped the PC Spend tiers of health expenditure to expenditure categories used in Australia. Second, we applied the PC Spend (Australia) model to 2020–21 national public and private health expenditure data. We determined the distribution of health care expenditure and the proportions allocated to different tiers of primary care. We report our study according to the Consolidated Health Economic Evaluation Reporting Standards (CHEERS) 2022 statement<sup>19</sup> (Supporting Information).

### The PC Spend model

The PC Spend model defines three tiers of primary health care services by specificity in the context of total health expenditure (Box 1). Tier A comprises all spending on essential community and primary health care functions (similar to the OECD broad estimate of primary health care); tier B includes services delivered in general practices and family physician clinics; tier C is limited to enhanced primary care services and funding delivered in the context of the 4Cs of quality primary care.<sup>20</sup> In the United States, tier C is predominantly related to spending on advanced primary care, such as patient-centred medical home projects and initiatives that encourage practices to provide long term holistic care, rather than volume-based services. The output of the PC Spend Model — the distribution of investment by tier — is one indicator of how advanced primary care activities in the health system are.<sup>13</sup>

### Data sources and analysis

Our application of PC Spend (Australia) took an Australian health systems perspective, as our aim was to inform policy making and funding decisions. We used organisational health expenditure data for Australia, 2020–21, both public (federal, state, and territory governments) and private health care providers. The data excluded health-related expenditure for residential age care, welfare expenditure, some local government

### 1 Overview of the Primary Care Spend (PC Spend) model\*

- Tier A: All spending on essential community and primary health care services: primary health care providers, public health, community health, including health promotion and prevention; diagnosis, treatment, cure and rehabilitation; treatment and management of acute illness, chronic illness, and disability; palliative care; community health programs.
- Tier B (subset of tier A): all spending on services delivered by primary care professionals: activities of family physicians, general practitioners, primary care nurses, community-based physician assistants, and community-based nurse practitioners.
- Tier C (subset of tier B): all spending on primary care provided in the context of the four Cs (first contact, continuous, comprehensive, coordinated care).

\* Adapted from reference 13.

expenditure, and some non-government expenditure (for example, by the National Heart Foundation).<sup>21</sup> As we report the first application of PC Spend (Australia), our findings provide the baseline for future comparisons. The output of PC Spend (Australia), however, may not be directly comparable with the output of the PC Spend model in other countries.

We used two AIHW expenditure reports for 2020–21 to map and test the PC Spend (Australia) model. *Health expenditure Australia 2020–21* reported expenditure by Australian governments and non-government payers (including health insurance funds, individuals, and other);<sup>10</sup> we used the items “total health expenditure” (table A3), total health spending for “primary health care” (including unreferral medical services, dental services, other health practitioners, community health and other, public health, benefit-paid pharmaceuticals, and all other medications; table A3), and primary health care expenditure by “Health and other” for “unreferred medical services” (table A6). From the *Medicare-subsidised GP, allied health and specialist health care across local areas: 2019–20 to 2020–21* report we used the item “GP subtotal: enhanced primary care” for 2020–21 (primary health network table).<sup>22</sup>

Mapping and testing were completed by two authors (MW, SB), who also classified publicly reported categories of expenditure (in Australian dollars) according to the model, after consultation with the model authors (AB, MK).

### Ethics approval

We did not seek ethics approval for our analysis of publicly available aggregated data.

## Results

### Mapping the PC Spend model to Australian health care expenditure

We first mapped Australian health care expenditure to the three tiers of the PC Spend model (Box 2). We denote the output of this exercise, with its inclusions, exclusions, and major variations from the original PC Spend model that reflect health care data reporting in Australia, the PC Spend (Australia) model.

The major differences between tier A primary health care expenditure in Australia and the United States are the inclusion in Australia of dentistry and pharmaceutical costs and the exclusion of costs for disability services (other than primary care for people with disabilities), provided to many Australians under the National Disability Insurance Scheme. Tier A includes benefits available to former defence personnel provided by the Australian Department of Veterans’ Affairs,

## 2 The PC Spend (Australia) model

Expenditure type	PC Spend (Australia)
All health spending	<p>Includes primary health care and hospital care expenditure by:</p> <ul style="list-style-type: none"> <li>• Australian Departments of Health and Veterans' Affairs, including insurance rebates; state and territory governments; health insurance funds; individuals; and others.</li> </ul> <p>Excludes expenditure by:</p> <ul style="list-style-type: none"> <li>• justice facilities, National Disability Insurance Scheme, aged care (other than primary care provided by general practitioners).</li> </ul>
Tier A: expenditure for essential community and primary health care services	<p>Includes expenditure for:</p> <ul style="list-style-type: none"> <li>• unreferral medical services, dental, other health practitioners (including allied health,* included in Australia as primary health care services), community health, public health;</li> <li>• benefit-paid pharmaceuticals and all other medications;</li> <li>• expenditure by Australian Departments of Health and Veterans' Affairs, including insurance rebates; state and territory governments; health insurance funds; individuals; and others;</li> <li>• all primary health network<sup>†</sup> and Aboriginal Community Controlled Health Organisations funding;</li> <li>• injury and rehabilitation schemes.</li> </ul> <p>Excludes expenditure for:</p> <ul style="list-style-type: none"> <li>• hospitals, referred medical services (including radiology), patient transport, aids and appliances, administration and research;</li> <li>• justice facility health care (in-patient);</li> <li>• National Disability Insurance Scheme and aged care (other than primary care provided by general practitioners);</li> <li>• pathology.</li> </ul>
Tier B: direct expenditure for primary care services delivered by primary care professionals	<p>Includes expenditure for:</p> <ul style="list-style-type: none"> <li>• direct spending on primary care services (reported as non-referred Medicare Benefits Scheme spending);<sup>‡</sup></li> <li>• primary health network funding for after hours services;</li> <li>• funding for Aboriginal Community Controlled Health Organisations.</li> </ul>
Tier C: expenditure for enhanced primary care provided (four Cs care)	<p>Includes expenditure for:</p> <ul style="list-style-type: none"> <li>• comprehensive primary care services: enhanced primary care services delivering targeted care for people with chronic health conditions;</li> <li>• service incentive payments (Practice Incentives Payments program).</li> </ul>

\* Chinese medical practitioners, chiropractors, dentists, radiation therapists, occupational therapists, optometrists, osteopaths, pharmacists, physiotherapists, podiatrists, psychologists, and paramedics. † Includes services that could be associated with health system integration; that is, not direct primary health care services. ‡ Includes general practice support grants (eg, 2023 Strengthening Medicare: general practice grants<sup>23</sup>). ◆

but excludes primary care provided, for example, to people in justice facilities.

We limited tier B services to those provided by general practitioners, nurse practitioners working in general practices or independently, and primary care services provided by Aboriginal Community Controlled Health Organisations (ACCHOs). Tier B includes practice incentives payments and services available to former defence personnel through the Department of Veterans' Affairs. In the United States, internal medicine physicians and paediatricians provide primary care services and are included in tier B, unlike Australia.

Tier C includes expenditure related to the four Cs of primary care. For this review, and in line with Medicare Benefits Scheme (MBS) rebates, we included services provided by general practitioners for enhanced primary care and practice improvement funding for long term holistic care. Other general practice expenditure components could meet this definition but could not be classified on the basis of MBS data, such as state health initiatives for the better integration of hospital care. Further, we cannot differentiate between fragmented care for individuals at multiple primary care practices (potentially tier B care) and long term holistic care provided by a single general practice (tier C) in MBS data.

We made choices when classifying expenditure. For example, ACCHO spending could be split between tiers B and C, but it also includes elements of allied health funding that could be classified under tier A. Primary health networks directly provide some services to general practices, but most expenditure is for commissioning specialist services for priority patient groups (eg, youth mental health services), classified as tier A expenditure; more detailed data could facilitate allocating some of this spending to tier B.

### Applying the PC Spend (Australia) model to 2020–21 data

About 33.2% of total health expenditure in 2020–21 was classified as primary health care spending (tier A), 6.0% was for primary care services (tier B), and 0.8% was for comprehensive enhanced primary care (tier C). That is, 18% of all primary health care spending was allocated to tier B, 2.3% to tier C (Box 3).

### Discussion

Our application of the PC Spend (Australia) model to published data for 2020–21 identified that only small proportions of primary health care expenditure supported comprehensive primary care (tier B; 18.0%) or enhanced primary care (tier C; 2.3%). Our finding that 6.0% of total government health expenditure during 2020–21 was for primary care services was lower than the 6.5% reported by the Royal Australian College of General Practitioners in 2023.<sup>24</sup> We argue that the PC Spend (Australia) model more precisely classifies primary health care expenditure than other methods, including those used by the OECD, by removing some primary health network expenditure more correctly categorised as tier A expenditure. The model facilitates comparison between tier B and tier C expenditure, enabling better estimation of expenditure for general practice care. Given the potential impact of tier C services for supporting enhanced care for people with greater health care needs, the small proportion of tier C health care funding warrants further investigation to determine the adequacy of funding for supporting tier C activities, and whether this aspect of care requires greater funding, is underreported, or could be used more extensively.

Primary care services are under increasing pressure from our growing population and the increasing burden of chronic health

### 3 Application of the PC Spend (Australia) model to data for primary health care and total health care expenditure by Australian governments, 2020–21

Expenditure type	Expenditure (millions)	Proportion of primary health care expenditure	Proportion of total health care expenditure
Total health care expenditure*	\$220 893	—	100%
Tier A (primary health care) <sup>†</sup>	\$73 398	100%	33.2%
Tier B (primary care) <sup>‡</sup>	\$13 194	18.0%	0%
Tier C (enhanced primary care) <sup>§</sup>	\$1703	2.3%	0.8%

Sources: \* Reference 9, table A3, total health expenditure. † Reference 9, table A3, total health spending for primary health care. ‡ Reference 9, table A6, primary health care expenditure by health and other, unreferral medical services, including \$136 million for the Department of Health and Veterans' Affairs. § Reference 22, primary health networks table, total Medicare benefits paid for general practitioner enhanced primary care. ◆

conditions being increasingly managed in the community.<sup>12,25,26</sup> Current health policy initiatives could increase targeted funding of comprehensive, long term primary care. The introduction of MyMedicare in November 2023<sup>27</sup> provides an opportunity to better target the funding of primary care for people with high level needs and their care providers. By formally linking people with their preferred general practice and general practitioner through registration, MyMedicare could improve relational and informational continuity of care and facilitate higher payments to general practitioners and practices caring for people with more complex health needs.<sup>28</sup> The review of the Practice Incentives Program and the Workforce Incentives Program<sup>29</sup> provides further opportunity for increasing the funding of high value primary care services for people with greater care needs.

The PC Spend model is one measure for improving our understanding of the efficacy of primary health care over time. The model can also provide insights into the broader health system by quantifying the proportion of total health expenditure directed to tier A primary care services. The distribution of funding across the three tiers of the PC Spend model can be monitored by health professionals, policy makers, and the general public as measurable outcomes of the primary care reforms proposed by the Strengthening Medicare Taskforce report.<sup>11</sup> We recommend that policy makers, using the model, increase the proportions of tier B and C funding. An agreed method of disaggregating primary health care expenditure facilitates more nuanced monitoring over time, and could improve understanding of the impact of health care funding reforms.

The PC Spend model recognises the complexity of health systems, and enables people to map health care activities by tier; the model does not just count service episodes, but considers the allocation of resources to different functions.<sup>13</sup> This approach could provide insights into the impact of efforts to strengthen different areas of primary health care on population health. The PC Spend model provides an anchor point for health system funders and policymakers, and could provide a useful dashboard for key health system managers to review funding priorities over time. This aspect would be further supported by investigating the outcomes of investing in tier B and C care compared with investments in other areas of primary care. In the United States, this approach is used to set targets for minimum primary care expenditure in many states, such as the 12% primary care expenditure target in Oregon.<sup>30</sup> Similar initiatives in Australia could monitor both the strengthening of Medicare and the quality of primary care services.

The PC Spend model highlights differences between countries in primary health care expenditure classification. For example,

the inclusion of pharmaceutical expenditure in tier A, including many pharmaceuticals used in hospitals and specialist services, increases the level of primary health care spending in Australia compared with the United States. The model would also look different if applied to England, where out-of-pocket costs are less prominent.<sup>31</sup>

The small tier C expenditure proportion we report could reflect the limited granularity of the data. For example, some tier C expenditure by states and territories for integrated care initiatives may currently be included under total health care expenditure. Payments for holistic care for people with high care needs (recommended by the Strengthening Medicare Taskforce report<sup>12</sup>) provided through MyMedicare, and other models of general practitioner-led care funded by Medicare, could also be included in tier C were data collection and reporting more detailed. In the future, additional payments to general practitioners and registered general practices in the MyMedicare program could be included in tier B or tier C calculations.

#### Limitations

First, the mapping of health services to each of the tiers is subjective. By using publicly available data and being transparent about our decisions, however, the mapping is a good starting point for applying the PC Spend model in Australia. Second, only high level data were available for the model. Our initial results indicate the need to more clearly disaggregate primary health care expenditure data, including information that assists decisions about the allocation of expenditure for primary health networks. However, changes to expenditure classification should be tracked to ensure that outcomes remain comparable over time. Data limitations, including its availability only in aggregated form, also limit the ability to test alternative assumptions or to conduct sensitivity analyses. Third, as primary health care expenditure reporting does not provide information about health service need, the output of the model may require further contextual information. Finally, the original PC Spend model did not compare primary health care expenditure with that for other health care areas, examining only its allocation between primary care expenditure tiers. We recommend including all health expenditure in the model to facilitate comparisons of the proportion comprised by primary care expenditure over time.

#### Conclusion

We adapted the PC Spend model to Australia and provide the first estimates of primary care expenditure using this model. The PC

Spend (Australia) model differentiates between expenditure on overall health care, broadly defined primary health care (tier A), primary care provided by general practitioners, general practice nurses, and ACCHOs (tier B), and payments for care provided by general practitioners to manage chronic health problems and people with complex care needs (tier C). In 2023, the federal government allocated \$6.1 billion to the Strengthening Medicare program,<sup>12,32</sup> the first stage of implementing the *Strengthening Medicare Taskforce Report* recommendations. As the program seeks to increase integrated and person-centred care, we anticipate greater expenditure in tiers B and C. PC Spend (Australia) provides greater clarity about the allocation of primary care expenditure as a proportion of primary health care expenditure, providing a tool for monitoring expenditure over time and the impact of health system reform. PC Spend (Australia) is relevant to policy makers, funders, providers, and the community. The model could be used to set targets for different tiers, types, and locations of primary care (possibly different for urban and regional or remote areas because of differing access to hospital

services), and to facilitate monitoring of progress toward these targets.

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- Kringos DS, Boerma W, van der Zee J, Groenewegen P. Europe's strong primary care systems are linked to better population health but also to higher health spending. *Health Aff (Millwood)* 2013; 32: 686-694.
- Kringos D, Boerma W, Bourqueil Y, et al. The strength of primary care in Europe: an international comparative study. *Br J Gen Pract* 2013; 63: e742-e750.
- Starfield B. Primary care and equity in health: the importance to effectiveness and equity of responsiveness to peoples' needs. *Humanity Soc* 2009; 33: 56-73.
- Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *Milbank Q* 2005; 83: 457-502.
- World Health Organization; United Nations Children's Fund. Declaration of Astana. Declaration on primary health care. 2018. <https://www.who.int/primary-health/conference-phc/declaration> (viewed Jan 2024).
- Australian Department of Health. Guaranteeing Medicare: strengthening primary care [media release]. 2019. [https://www.health.gov.au/sites/default/files/guaranteeing-medicare-strengthening-primary-care\\_0.pdf](https://www.health.gov.au/sites/default/files/guaranteeing-medicare-strengthening-primary-care_0.pdf) (viewed Jan 2024).
- Jabbarpour Y, Greiner A, Jetty A, et al. Investing in primary care: a state-level analysis. Washington DC: Patient-Centred Primary Care Collaborative; Robert Graham Center, 2019. <https://www.graham-center.org/content/dam/rgc/documents/publications-reports/reports/Investing-Primary-Care-State-Level-PCMH-Report.pdf> (viewed Mar 2024).
- World Health Organization. Primary care. 2023. <https://www.who.int/teams/integrated-health-services/clinical-services-and-systems/primary-care> (viewed Jan 2024).
- Organisation for Economic Co-operation and Development. Realising the full potential of primary health care [OECD Health policy studies]. 30 May 2020. <https://www.oecd.org/health/realising-the-potential-of-primary-health-care-a92ade4-en.htm> (viewed Mar 2024).
- Australian Institute of Health and Welfare. Health expenditure Australia 2020-21. Updated 23 Nov 2022. <https://www.aihw.gov.au/reports/health-welfare-expenditure/health-expenditure-australia-2020-21/data> (viewed Mar 2024).
- Productivity Commission. Primary and community health. In: Report on government services 2023 (part E, section 10). 2 Feb 2023. <https://www.pc.gov.au/ongoing/report-on-government-services/2023/health/primary-and-community-health> (viewed Jan 2024).
- Strengthening Medicare Taskforce. Strengthening Medicare taskforce report. Dec 2022. [https://www.health.gov.au/sites/default/files/2023-02/strengthening-medicare-taskforce-report\\_0.pdf](https://www.health.gov.au/sites/default/files/2023-02/strengthening-medicare-taskforce-report_0.pdf) (viewed Jan 2024).
- Organisation for Economic Co-operation and Development. Deriving preliminary estimates of primary care spending under the SHA 2011 framework. Mar 2019. <https://web.archive.org/2019-03-06/510003-Preliminary-Estimates-of-Primary-Care-Spend-Under-SHA-2011-Framework.pdf> (viewed Mar 2024).
- Baillieu R, Kidd M, Phillips R, et al. The Primary Care Spend Model: a systems approach to measuring investment in primary care. *BMJ Glob Health* 2019; 4: e001601.
- Wright M, Versteeg R, van Gool K. How much of Australia's health expenditure is allocated to general practice and primary healthcare? *Aust J Gen Pract* 2021; 50: 673-678.
- Reid R, Damberg C, Friedberg MW. Primary care spending in the fee-for-service Medicare population. *JAMA Intern Med* 2019; 179: 977-980.
- Bailit M, Friedberg MW, Houy M. Standardizing the measurement of commercial health plan primary care spending. Milbank Memorial Fund, 15 July 2017. <https://www.milbank.org/publications/standardizing-measurement-commercial-health-plan-primary-care-spending> (viewed Mar 2024).
- Cohen DJ, Totten AM, Phillips RL, et al. Measuring primary care spending in the US by state. *JAMA Health Forum* 2024; 5: e240913.
- Husereau D, Drummond M, Augustovski F, et al; CHEERS 2022 ISPOR Good Research Practices Task Force. Consolidated Health Economic Evaluation Reporting Standards 2022 (CHEERS 2022) statement: updated reporting guidance for health economic evaluations. *BMJ* 2022; 376: e067975.
- Starfield B. Primary care: concept, evaluation, and policy. New York: Oxford University Press, 1992.
- METEOR Metadata Online Registry (Australian Institute of Health and Welfare). Health expenditure database 2020-21: quality statement. <https://meteor.aihw.gov.au/content/767468> (viewed May 2024).
- Australian Institute of Health and Welfare. Medicare-subsidised GP, allied health and specialist health care across local areas: 2019-20 to 2020-21. Updated 1 Dec 2022. <https://www.aihw.gov.au/reports/primary-health-care/medicare-subsidised-health-local-areas-2021-22/data> (viewed Mar 2024).
- Australian Department of Health and Aged Care. Strengthening Medicare: general practice (GP) grants program. May 2023. <https://www.health.gov.au/sites/default/files/2023-05/strengthening-medicare-general-practice-grants-program.pdf> (viewed Mar 2024).
- Royal Australian College of General Practitioners. General practice: health of the nation 2023. Nov 2023. <https://www.racgp.org.au/getmedia/122d4119-a779-41c0-bc67-a8914be52561/Health-of-the-Nation-2023.pdf.aspx> (viewed Mar 2024).
- Royal Australian College of General Practitioners. General practice crisis summit: white paper. Updated 24 Nov 2022. <https://www.racgp.org.au/advocacy/reports-and-submissions/view-all-reports-and-submissions/2022-reports-and-submissions/general-practice-crisis-summit-white-paper> (viewed Jan 2024).
- Douglas KA, Dykgraaf SH, Butler DC. Harnessing fast and slow thinking to ensure sustainability of general practice and functional universal health coverage in Australia. *Med J Aust* 2023; 218: 288-290. <https://www.mja.com.au/journal/2023/218/7/harnessing-fast-and-slow-thinking-ensure-sustainability-general-practice-and>
- Australian Department of Health and Aged Care. About MyMedicare. Updated 29 Sept 2023. <https://www.health.gov.au/our-work/my-medicare/about> (viewed Dec 2024).
- Wright M, Versteeg R. Introducing general practice enrolment in Australia: the devil is in the

detail. *Med J Aust* 2021; 214: 400-402. <https://www.mja.com.au/journal/2021/214/9/introducing-general-practice-enrolment-australia-devil-detail>

- 29 Australian Department of Health and Aged Care. Review of general practice incentives. Expert Advisory Panel report to the Australian Government. 30 Sept 2024. [https://www.health.gov.au/sites/default/files/2024-10/review-of-general-practice-incentives-expert-advisory-panel-report-to-the-australian-government\\_0.pdf](https://www.health.gov.au/sites/default/files/2024-10/review-of-general-practice-incentives-expert-advisory-panel-report-to-the-australian-government_0.pdf) (viewed Dec 2024).

- 30 Jabbarpour Y, Petterson S, Jetty A, et al. The health of US primary care: a baseline scorecard tracking support for high-quality primary care. Milbank Memorial Fund, 22 Feb 2023. <https://www.milbank.org/publications/health-of-us-primary-care-a-baseline-scorecard> (viewed Mar 2024).
- 31 Tikkanan R, Osborn R, Mossialos, et al, editors. International profiles of health care systems. New York: The Commonwealth Fund, 2020. [https://www.commonwealthfund.org/sites/default/files/2020-12/International\\_Profiles\\_of\\_Health\\_Care\\_Systems\\_Dec2020.pdf](https://www.commonwealthfund.org/sites/default/files/2020-12/International_Profiles_of_Health_Care_Systems_Dec2020.pdf) (viewed Dec 2024).

- 32 Australian Department of Health and Aged Care. Portfolio budget statements 2023–24; budget related paper no. 1.9. <https://www.health.gov.au/sites/default/files/2023-05/health-portfolio-budget-statements-budget-2023-24.pdf> (viewed Jan 2024). ■

## Supporting Information

Additional Supporting Information is included with the online version of this article.