

July 2018



## Mapping primary care in Australia

Hal Swerissen and Stephen Duckett

## Grattan Institute Support

### Founding members



**Australian Government**



### Endowment Supporters

The Myer Foundation  
National Australia Bank  
Susan McKinnon Foundation

### Affiliate Partners

Medibank Private  
Susan McKinnon Foundation

### Senior Affiliates

Google  
Maddocks  
PwC  
McKinsey & Company  
The Scanlon Foundation  
Wesfarmers

### Affiliates

Ashurst  
Corrs  
Deloitte  
GE ANZ  
Jemena  
Urbis  
Westpac  
Woodside

## Grattan Institute Report No. 2018-05, July 2018

This report was written by Hal Swerissen and Stephen Duckett. Naveen Tenetti and Greg Moran provided research support.

We would like to thank the members of Grattan Institute's Health Program Reference Group for their helpful comments and industry participants and officials for their input.

The opinions in this report are those of the authors and do not necessarily represent the views of Grattan Institute's founding members, affiliates, individual board members or reference group members. Any remaining errors or omissions are the responsibility of the authors.

Grattan Institute is an independent think-tank focused on Australian public policy. Our work is independent, practical and rigorous. We aim to improve policy outcomes by engaging with both decision-makers and the community.

For further information on the Institute's programs, or to join our mailing list, please go to: <http://www.grattan.edu.au/>

This report may be cited as: Hal Swerissen, Stephen Duckett, and Greg Moran. (2018). *Mapping primary care in Australia*. Grattan Institute.

ISBN: 978-1-925015-46-1

All material published or otherwise created by Grattan Institute is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License

## Overview

Strong primary care is central to an efficient, equitable and effective health system. Australia has good-quality primary care by international standards, but this report shows that it can and should be better. Too many poorer Australians still can't afford to go to a GP when they need to, or a dentist when they should. People in rural and remote areas still find it too hard to get to a pharmacist or medical specialist.

Australians' access to general practice varies according to their means. Two-thirds of Australians are bulk-billed for all their visits to the GP. But for those who are not, the financial barriers can be high. About 4 per cent of Australians say they delay seeing a GP because of the cost.

Individuals or their private health insurer have to pay for the bulk of dental care. As a result, about one in five Australians do not get the recommended level of oral health care. Worse, people on low incomes who can't afford to pay often wait for years to get public dental services.

Access to allied health services such as physiotherapy and podiatry varies significantly according to the patient's address. Victorians are nearly four times more likely to use Medicare-funded allied health services than people in the Northern Territory.

More broadly, the funding, organisation and management of primary care has not kept pace with changes to disease patterns, the economic pressure on health services, and technological advances.

In particular, primary care services are not organised well enough to support integrated, comprehensive care for the 20 per cent of Australians who have complex and chronic conditions. Nor is primary care well organised to prevent or reduce the incidence of conditions such as type 2 diabetes and obesity. Broader community-level functions of primary health care – such as developing self-help groups and promoting healthy environments – are also being neglected.

Primary care in Australia is typically delivered by many thousands of small, private businesses: the local dentist, pharmacist, physiotherapist or GP clinic. Funding and payment arrangements are fragmented and variable. There is insufficient data to properly plan the distribution of services and monitor the quality of care. Governance and accountability are split between various levels of government and numerous separate agencies, making overall management of the system difficult.

Primary care policy in Australia is under-done. Neither the Commonwealth nor the states have taken the lead. This report shows new policies are needed:

Australia needs a comprehensive national primary care framework to improve patient care and prevention; formal agreements between the Commonwealth, the states and Primary Health Networks to improve system management; and new funding, payment and organisational arrangements to help keep populations healthy and to provide better long-term care for the increasing number of older Australians who live with complex and chronic conditions.

## Table of contents

Overview . . . . .	3
1 Introduction . . . . .	6
2 General practice is central to primary care . . . . .	10
3 Pharmacists: providers of advice and medication . . . . .	18
4 Allied health and nursing services . . . . .	23
5 Aboriginal and Torres Strait Islander health practitioners . . . . .	30
6 Oral health services . . . . .	33
7 Community health, maternal and child health, and women’s health services . . . . .	37
8 Primary care and specialist services . . . . .	40
9 Primary care policy and organisation . . . . .	49
10 The challenges facing primary care . . . . .	53
11 Conclusion: Primary care policy is a renovator’s opportunity . . . . .	58
A Summary of previous recommendations for primary care reform . . . . .	60

## List of Figures

1.1	Primary Care Services link to all other parts of the health system . . . . .	6
1.2	Governments pay most of the general practice and community health bill . . . . .	9
2.1	GP numbers are increasing . . . . .	10
2.2	Access to GPs is lower in remote areas . . . . .	11
2.3	GPs work mainly in group private practice . . . . .	12
2.4	People in very remote areas pay more out-of-pocket for non-bulk billed services . . . . .	13
2.5	GP visits are increasing again . . . . .	14
2.6	Older people form a growing share of GP consultations . . . . .	15
3.1	Older people are the biggest users of prescribed medication . . . . .	20
3.2	Disadvantaged Australians are more likely to delay filling a prescription . . . . .	22
4.1	Allied Health practitioners work in a range of settings . . . . .	26
4.2	Optometry and psychology are the most-used allied health services . . . . .	27
4.3	People in Victoria use Medicare-funded allied health services most; people in the Northern Territory use them least . . . . .	28
4.4	People in very remote areas use allied health services least, and the cost to the patient is higher . . . . .	29
5.1	Most ATSI health practitioners work outside the major cities . . . . .	30
5.2	Most ATSI health practitioners work in Aboriginal health services . . . . .	31
6.1	Most oral health workers are dentists . . . . .	33
6.2	Poorer Australians are less likely to go to the dentist . . . . .	34
6.3	People in cities have best access to dental services . . . . .	35
6.4	Individuals contribute most for dental services . . . . .	36
8.1	Out-of-pocket costs for specialist medical practitioners are highest in very remote area . . . . .	42
8.2	Lack of care coordination is a problem for many Australians with long-term health conditions . . . . .	47
9.1	Members are using private health services more . . . . .	52

## 1 Introduction

Each year more than 20 million Australians see GPs, pharmacists, dentists and other primary care practitioners. These front-line services are usually our first point of contact with the health system.

This report maps these services, traces their relationship with other specialist community-based services (see Figure 1.1), and discusses the key policy issues facing primary care and the options for addressing them.

This chapter outlines what primary care is and where it sits in the health system. Primary care spending is growing much faster than the economy. This chapter outlines how primary care is organised, with responsibility split between the Commonwealth and the States.

### 1.1 What is primary care?

Primary care is the foundation of health care in the community.<sup>1</sup> In Australia, the major primary care services are general practice, allied health, pharmacy, nursing, dentistry, health promotion, maternal and child health, women’s health and family planning. These services vary in the extent to which they are universal and integrated with other services and sectors in the health system.

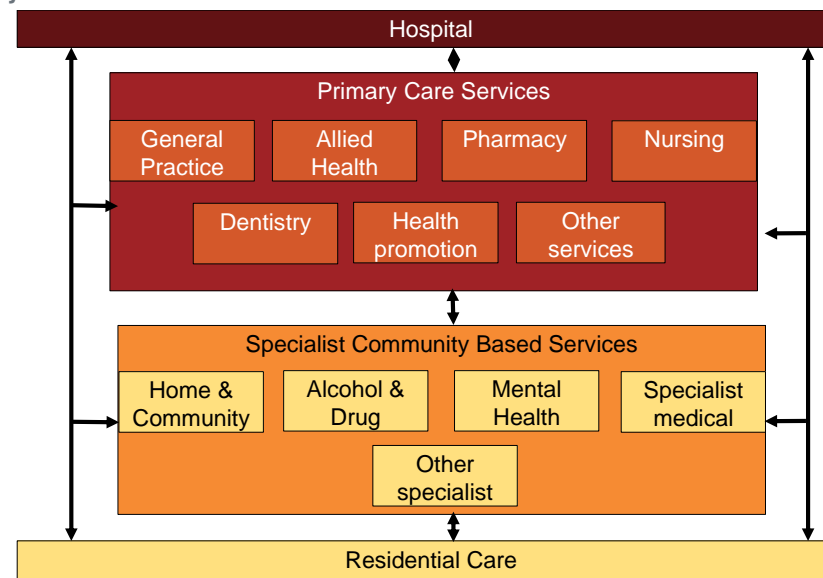
Primary care services aim to promote health and well-being, prevent illness, treat a range of conditions, assist people to rehabilitate and recover, and support people to live at home.<sup>2</sup>

Primary care is also the pathway to specialist services. It is central to the management, treatment and support of people with chronic and complex conditions at home and in the community.

1. DoH (2013a).

2. Anastasy et al. (2018); Kringos et al. (2015); and WHO (2010).

Figure 1.1: Primary Care Services link to all other parts of the health system



As Figure 1.1 shows, primary care intersects and interacts with hospital care, specialist community-based services and residential care. Most people who are ill or injured first attend a pharmacy, a general practice or a hospital emergency department. If they need primary care it is usually provided through a general practice.

When specialist health care is required, referrals are made to specialist medical practitioners, allied health practitioners, oral health practitioners, or specialist services such as alcohol and drug or mental health agencies.

### 1.1.1 Primary care and primary health care

Primary care is a component of *primary health care*. Primary health care includes a broader focus on the social, economic and environmental factors that influence health, including housing, education, the distribution of income and wealth, and the physical environment. These factors have a big impact on the health of any community.<sup>3</sup>

By contrast, primary care provides front-line personal health services to individuals. It has only a limited influence on broader social, economic and environmental factors. However, primary care services can reinforce community action to tackle these broader issues; primary care practitioners often take part in health promotion services that work with schools, workplaces and other community organisations.

## 1.2 Why is primary care important?

Internationally, the evidence suggests that primary care systems which provide universal access to a comprehensive range of local, community-based services that are well integrated, coordinated and continuous, produce better health outcomes and more efficient health services. Evidence remains limited, but to the extent it is available it

---

3. Muldoon et al. (2005).

suggests stronger primary care cuts the number of avoidable hospital visits, improves population health, ensures better access and reduces inequality.<sup>4</sup>

### 1.2.1 Demand for primary care is increasing

Life expectancy in Australia has increased dramatically over the past century, from around 50 years to 80 years, particularly as a result of reduced deaths in early life.<sup>5</sup> Most Australians will now die of chronic disease in older age. Health expenditure on people over 65 is about four times higher than for younger people.<sup>6</sup> Prevention and management of chronic and complex conditions as the population ages has increased demand for health services, including primary care and specialist community services.

People with chronic and complex conditions increasingly want to live at home and in the community rather than in an institution. Large-scale residential facilities for people with disabilities and mental illness have been closed, residential care for older people scaled back, and length of stay in hospitals reduced. As a result, demand for care, treatment and support at home and in the community has increased dramatically.<sup>7</sup>

Fortunately, innovation and technological improvements have expanded the range of health conditions that can be treated and managed at home and in the community.<sup>8</sup> Information and communication technology has also increased the capacity to provide services at home and in the community.<sup>9</sup>

---

4. Starfield (2012); Cathcart (2007); Rechel and McKee (2009); and De Maeseneer et al. (2007).

5. AIHW (2017a).

6. Tapper and Phillimore (2014).

7. Ibid.

8. Sorenson et al. (2013).

9. Weisfeld and Lustig (2015).

Governments are also seeking to improve primary care to reduce health costs. The demand for and cost of health services continue to increase faster than economic growth. From 1989-90 to 2013-14, Australian health expenditure grew from 6.5 per cent of GDP to 9.7 per cent of GDP.<sup>10</sup>

Growth in health spending is the biggest element of growth in overall government spending.<sup>11</sup> Governments have therefore sought to constrain growth in health spending, particularly in high-cost hospital and residential care, by emphasising the prevention, support and management of chronic disease in primary care and home and community settings.

At the same time as the demand for primary and specialist community care and home and community support has increased, informal community support from family and friends has reduced. Women are much more likely to be in the paid workforce. Families are getting smaller, and family members are much more geographically mobile. As result it is more difficult for families to provide support for relatives with chronic and complex care needs.<sup>12</sup>

The scope and role of primary care has therefore expanded. The traditional focus on prevention, early intervention and gate-keeping is no longer enough. Primary care is increasingly important in the treatment, management and support of people with complex and chronic conditions at home and in the community.

### 1.3 Responsibility for primary care in Australia

In Australia, the Commonwealth and the state and territory governments have agreed that the Commonwealth has 'lead responsibility'

---

10. AIHW (2016a).

11. Daley et al. (2013).

12. Deloitte Access Economics (2015).

for primary care. In practice, the Commonwealth has principal responsibility for the funding, organisation and management of primary *medical* care. The states and territories provide a range of primary care and specialist community health services, and are primarily responsible for hospital care.

Over the five years from 2010-11 to 2015-16, primary care expenditure increased by almost 20 per cent (\$32 billion to \$38 billion), substantially above the rate of inflation.

In 2015-16, primary care services (other than pharmaceuticals) cost almost \$40 billion, almost one quarter of total recurrent health spending.<sup>13</sup> About 40 per cent of primary care spending is by the Commonwealth Government, and about one quarter each by state governments and individuals as out-of-pocket payments. The balance is from private health insurance (7 per cent) and other payers (5 per cent).<sup>14</sup> Government and private shares of spending vary across different sectors (see Figure 1.2 on the next page).

The Commonwealth Government pays for 84 per cent of the cost of general practice visits, individual's out-of-pocket payments account for more than half (58 per cent) of the cost of dental services, and states are the dominant funder of community and public health services.

### 1.4 How this report is organised

The rest of this report describes in more detail the state of primary care in Australia.

Chapters 2 to 7 describe and discuss the functions, workforce, organisation, funding and usage of the main primary care services in

---

13. AIHW (2017b).

14. Strictly speaking, the category is 'state and local governments', shortened here to state governments because local government expenditure is trivially small.

Australia. For each of these services we consider access, outcomes, quality and efficiency.

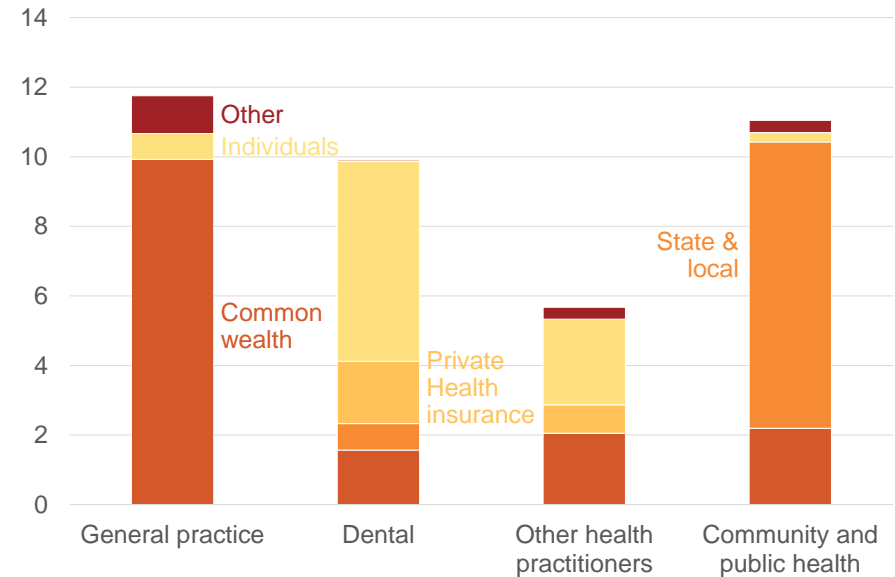
Chapter 8 describes the interaction between primary care and the main specialist community services, including specialist medical services, home care and support, mental health, and alcohol and drug services.

Chapter 9 discusses the national policy framework for primary care, how this has been implemented by the Commonwealth and the states and territories, and how primary care is managed and organised.

Chapter 10 summarises the policy issues, and Chapter 11 discuss the options to address them.

**Figure 1.2: Governments pay most of the general practice and community health bill**

Per cent of expenditure



Source: AIHW, Australian health expenditure, 2015-16.

## 2 General practice is central to primary care

GPs are central to primary care. But in Australia, access to GPs varies. It is much better in major cities than remote areas. About a third of Australians have out-of-pocket costs each year from seeing a GP. Around 4 per cent of Australians delay visiting a GP because of cost.

GPs are a gateway to specialist health services, and they have a significant role in coordinating services for people with complex care needs at home and in the community. But GP coordination of complex care could be improved: about a third of people with complex needs have problems with the coordination of their care (see Chapter 9). In particular, there is significant room to improve how GP services address common risk factors including obesity, alcohol use and smoking.

General practice is mainly delivered through numerous small practices owned as partnerships between participating GPs. Most GP remuneration comes from fees-for-service, made up of Commonwealth rebates and patient co-payments. Performance payments are only a minor component of overall GP remuneration. Most of the funding for GPs comes from the Commonwealth.

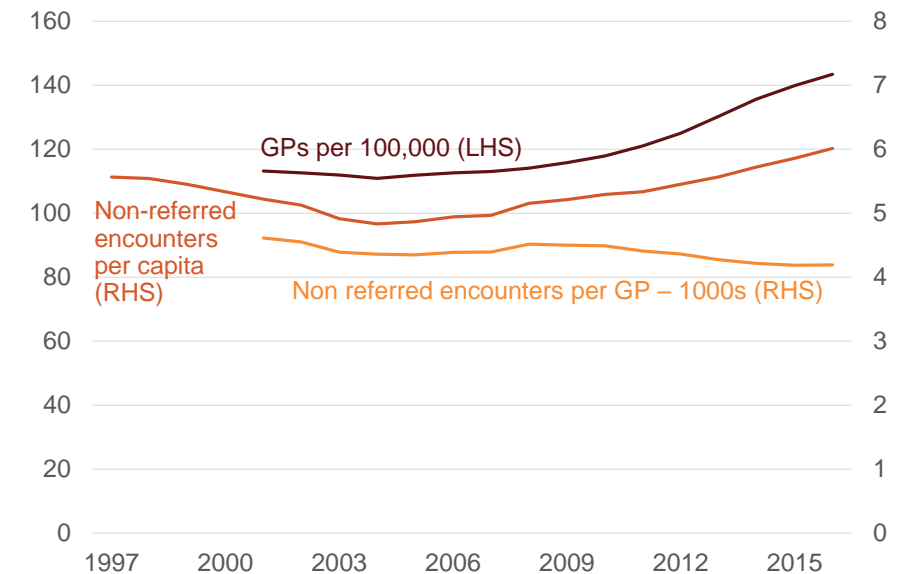
### 2.1 Workforce

In Australia, general practice is the most commonly used part of the primary care system. Typically, it is Australians' entry point into the health care system.

GPs, in addition to being a first point of contact, can:

- Coordinate the care of patients and refer patients to specialist practitioners;

Figure 2.1: GP numbers are increasing



Source: DoH (2017a).

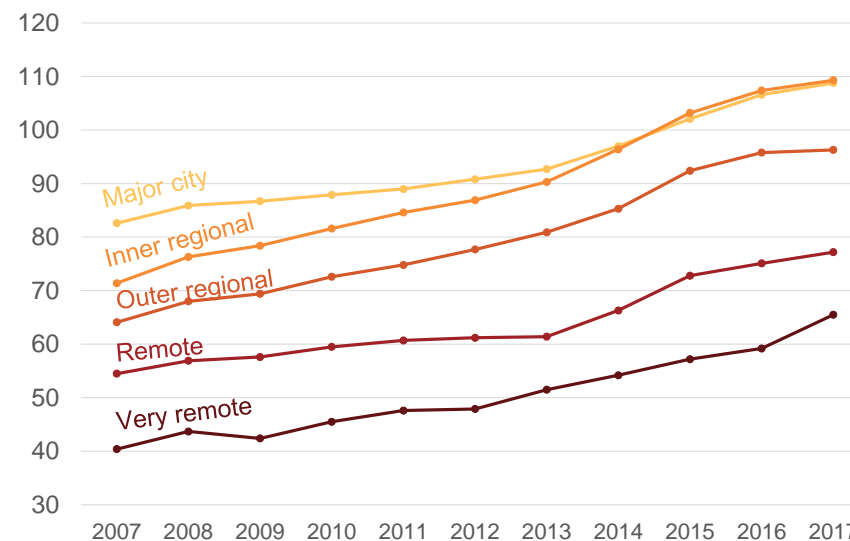
- Provide comprehensive care, advice and disease prevention and health promotion education to patients over a long period; and
- Provide general medical care for all diseases and people across the life cycle from birth to death.<sup>15</sup>

According to the Medical Board of Australia, there are about 25,000 GPs working in Australia.<sup>16</sup> As Figure 2.1 on the preceding page shows, the number of GPs grew broadly in line with population for much of the 2000s. But in the late-2000s, GP numbers accelerated.<sup>17</sup> There are now concerns that there is an oversupply of GPs in some parts of Australia, and that this leads to increasing levels of GP services and greater costs, for example, from ordering of diagnostic tests.<sup>18</sup>

Figure 2.1 shows that as GP numbers grew faster over the past decade or so, the number of non-referred encounters with GPs per person also increased. The workload of GPs – the number of non-referred encounters per GP – has fallen over the past decade.

The increasing number of GPs has improved access in remote areas, although it remains worse than in inner regional areas and major cities (see Figure 2.2). On a full-time service equivalent (FSE) basis, there are about 110 GPs per 100,000 people in major cities and inner regional areas, but only half as many in very remote areas.<sup>19</sup>

**Figure 2.2: Access to GPs is lower in remote areas**  
FSE per 100 000



Source: DoH (2017b).

15. RACGP (2017a).

16. Medical Board of Australia (2017). It should be noted that estimates of GP population ratios vary depending on whether data for registrations or services are used and whether estimates are adjusted for full-time equivalence.

17. The number of medical students increased significantly, and reliance on overseas-trained doctors in rural areas continued.

18. Birrell (2016).

19. DoH (2018a).

## 2.2 Organisation

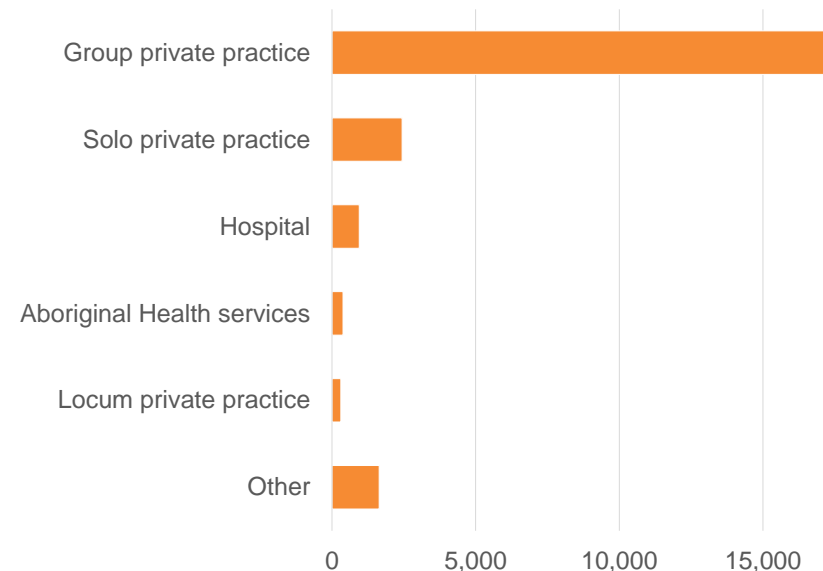
As Figure 2.3 shows, the vast majority of GPs mainly operate in private practice, either in a group practice or by themselves. The remainder principally work in a range of public and private organisations, including hospitals and Aboriginal health services.

There is no authoritative source for the number of GP clinics in Australia, but estimates generally put the number at around 7,000.<sup>20</sup> This suggests that in addition to the 3,000 solo private practices indicated by the data shown in Figure 2.1, there are about 4,000 group private practices.<sup>21</sup> Most general practices are small, locally based, privately owned business. The survey data in Table 2.1 suggest about 70 per cent of GPs work in practices of fewer than 10 GPs.

Ownership models for group practices differ. Some practices are owned by GPs as equal partners, some have a GP as principal with other GPs as associates, and some have corporate ownership with GPs as employees or contractors.<sup>22</sup>

The ‘corporatisation’ of general practice has been a trend in Australia since the late-1990s.<sup>23</sup> Australia’s three largest corporate chains currently manage around 5 per cent of practices and employ about 15 per cent of GPs.<sup>24</sup>

Figure 2.3: GPs work mainly in group private practice



Source: DoH (2017b).

Table 2.1: Most GP practices are small

Number of GPs in the practice	Per cent of surveyed GPs
1	8.3
2-4	24.3
5-9	38.6
10-14	17.9
15+	10.9

Source: BEACH (2017).

20. IBISWorld (2018a) estimates there were 7,185 GP ‘establishments’ in 2014-15. Erny-Albrecht and Bywood (2016) reported a figure of 7,035 practices in 2010-11 based on surveys of the then Divisions of General Practice.

21. IBISWorld (2018a).

22. Joyce et al. (2016).

23. DoHA (2012).

24. Erny-Albrecht and Bywood (2016).

### 2.3 Usage

In 2015-16, around 86 per cent of the population made a non-referred visit to a GP. There were 145 million non-referred encounters in total.<sup>25</sup>

About 85 per cent of non-referred visits were bulk billed.<sup>26</sup> However, only 65 per cent of people who saw a GP in 2016-17 had all their services bulk billed.<sup>27</sup> For those services that weren't bulk billed, the average patient's contribution was \$34. In 2016-17, about 4 per cent of patients reported delaying seeing a GP because of costs.<sup>28</sup>

On average, people made about five non-referred visits to a GP in 2015-16. As Figure 2.4 shows, people in remote and very remote areas made the least number of visits. On average, people in very remote locations made about half the number of non-referred visits to a GP than did people in major cities.

The proportion of bulk-billed services is about the same for people in major cities, inner regional and outer regional areas. The proportion of bulk-billed services increases for people in very remote areas, but the average out-of-pocket payment for non-bulk billed services increases from \$34 in major cities to \$38 in very remote areas (see Figure 2.4).

Surveys show that the proportion of patients who felt they had to wait longer than was acceptable to see a GP was marginally higher in outer regional and remote areas than in cities.<sup>29</sup>

As Figure 2.5 shows, the average number of non-referred visits to a GP is higher now than in the mid-1990s, after dipping in the early-to-mid 2000s. The share of non-referred visits that were bulk-billed followed a similar trend.

25. DoH (2017c).

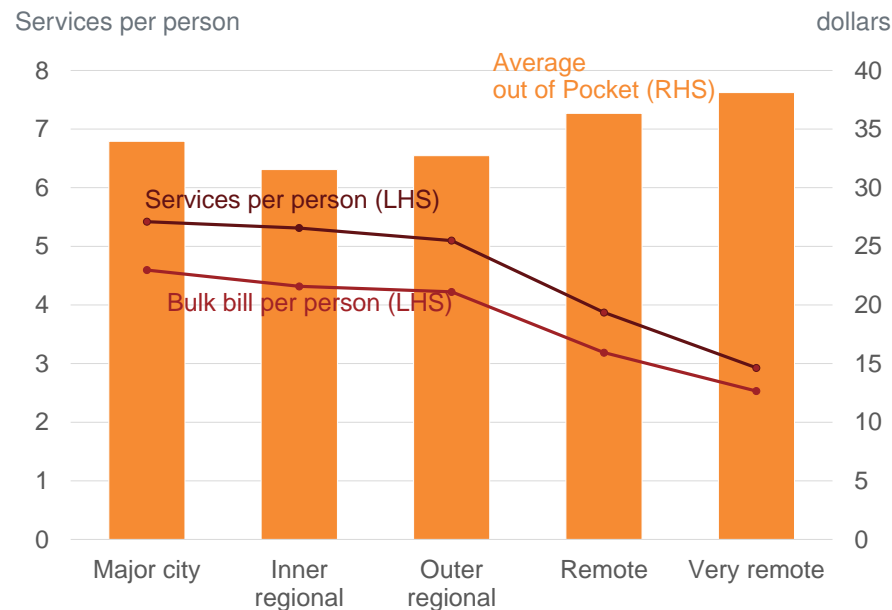
26. Ibid.

27. Senate Community Affairs Committee 2017 (2017).

28. ABS (2017).

29. Ibid.

**Figure 2.4: People in very remote areas pay more out-of-pocket for non-bulk billed services**



Source: DoH (2017d).

Figure 2.5 also shows that before the early-2000s, non-referred visits to a GP that were claimed through Medicare were almost entirely consultation items in Medicare Benefits Schedule groups A1 and A2. Table 2.2 on page 17 shows the individual item numbers included in each of these groups. A previous Grattan Institute report highlighted the fact that there is limited data on the quality of these encounters.<sup>30</sup>

GPs are often the gateway to other services. The Medicare rules effectively require a GP referral before patients can obtain rebates for specialist medical and allied health services. Similarly, access to pharmaceuticals, diagnostic imaging and radiology require GP (or other medical practitioner) prescriptions and referrals.

About 16 per cent of GP consultations result in a referral.<sup>31</sup> About 60 per cent of referrals are made to medical specialists, and the remainder to other specialist (allied health) services. The most common reasons for referral to a medical specialist are skin or skeletal problems or sleep disturbance. The most common reasons for referral to allied health services are mental health, diabetes and musculoskeletal complaints.

## 2.4 Patient characteristics

Unsurprisingly, older people are more likely to see a GP. Almost all (95 per cent) of people over the age of 65 saw a GP in 2016-17. Seventy-five per cent of people aged between 15 and 24 saw a GP.<sup>32</sup>

People over 65 now account for 26 per cent of item 23 (standard consultation less than 20 minutes) consultations, up from 18 per cent 20 years ago (see Figure 2.6).<sup>33</sup> This reflects both usage and demographics. Older people are having standard consultations with

30. Swerissen et al. (2016).

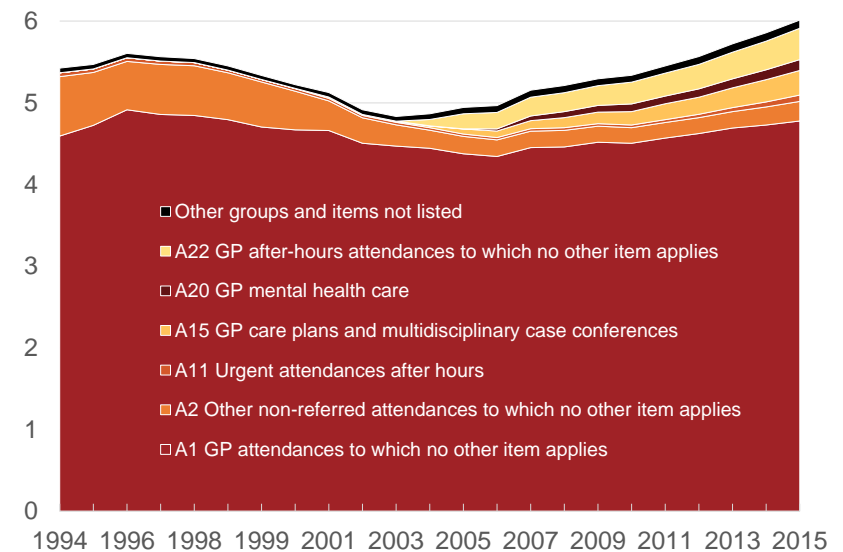
31. BEACH (2017).

32. ABS (2017, Table 5.1).

33. DoH (2017d).

**Figure 2.5: GP visits are increasing again**

New referral visits to GP



Source: DoH (2017d).

their GP more often. The number of item 23 consultations for over-65s has increased from 6.1 per person to 6.4 over the past 20 years, whereas it has fallen for other ages. Over the same period, the over-65 share of the population increased from 12 per cent to 15 per cent.

GP visits typically involve the management of a single problem. In 2015-16, GPs managed a single problem in 61 per cent of visits, two problems in 26 per cent of visits, three in 9 per cent, and four in 3 per cent of visits. On average, patients gave 1.5 reasons for their encounter with a GP. At least one chronic problem was managed in about half of all visits.<sup>34</sup>

### 2.5 Patient experience and outcomes

About a quarter of GP patients reported that the GP did not always listen to them carefully, and did not spend enough time with them.<sup>35</sup> A fifth of patients reported that the GP did not always show them respect.

As discussed in Grattan Institute’s May 2017 report, *Building better foundations for primary care*, there is currently no publicly available and consistent data set on outcomes for general practice patients.

The limited data that is available suggests there is considerable scope to improve the quality of treatment and care in general practice.

The BEACH data set (2015-16) provides information on the reason for and nature of GP visits, but little on the health outcomes for patients as a result of those visits. For example, the BEACH data indicate that on average for every 100 encounters, GPs:

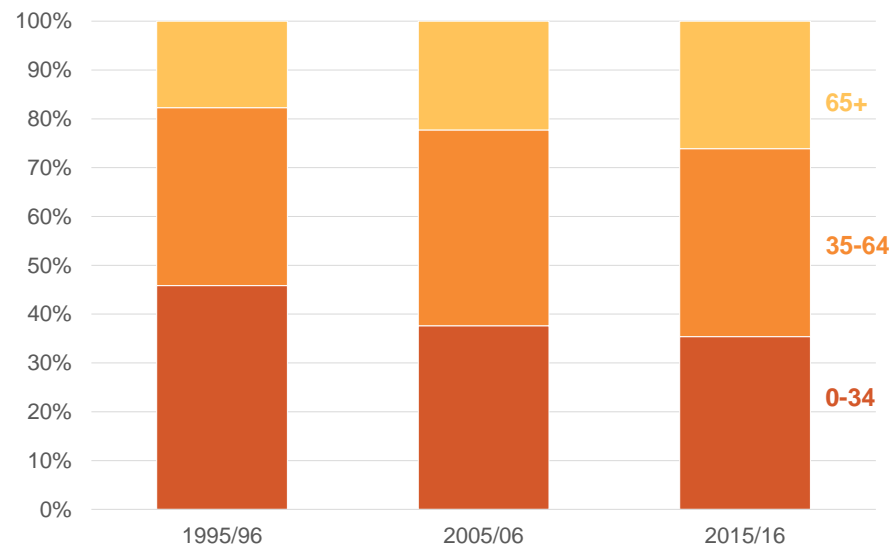
- Prescribed 82 medications and supplied nine;
- Advised purchase of 11 over-the counter medications;

34. BEACH (2017).

35. ABS (2017, Table 5.2).

**Figure 2.6: Older people form a growing share of GP consultations**

Older people form a growing share of GP consultations



Source: DoH (2017c).

- Provided 39 clinical treatments and performed 18 procedures;
- Made 10 referrals to medical specialists and six to allied health services; and
- Placed 48 pathology and 11 imaging test orders.

Yet there are no data on whether treatments provided or put in train made patients better.

Some limited information on outcomes is available from the Practice Incentives Program (PIP). In part, the PIP provides incentive payments for GPs who achieve agreed performance criteria for the management of asthma, diabetes, cervical screening and indigenous health.<sup>36</sup> Only practices accredited against the Royal Australian College of General Practice standards for general practice are eligible for PIP payments.<sup>37</sup> About 90 per cent of general practices are accredited.<sup>38</sup>

In 2016-17, GPs received incentive payments for providing appropriate care for about 280,000 people with diabetes and 65,000 with asthma. In total, there are about 1.2 million people with diabetes and 2.5 million people with asthma in Australia.<sup>39</sup>

Grattan Institute's March 2016 report, *Chronic failure in primary care*, analysed Medical Director data and concluded that there was considerable room for improvement in clinical outcomes for people with a range of chronic conditions in general practice.

That report also examined hospital admissions that can potentially be prevented by primary care interventions. These include conditions

---

36. The PIP also provides incentives for after-hours care, e-health, aged care, quality prescribing, teaching and rural care.

37. RACGP (2017b).

38. RACGP (2017c) states that 'over 6300' practices are accredited. If we assume that there are 7000 practices as stated previously, then about 90 per cent of general practices are accredited.

39. ABS (2015).

that can be prevented by vaccination, as well as acute conditions and chronic conditions. In 2015-16 there were more than 678,000 potentially preventable hospital admissions, accounting for 6.4 per cent of all hospital admissions. Poorer people, indigenous people and people who live outside metropolitan areas see the GP less, and have more preventable hospital admissions and worse overall health outcomes.<sup>40</sup>

## 2.6 Payments

GPs are paid a fee for each service they provide, and patients are eligible for a rebate through the Commonwealth Medicare Benefits Schedule (see Table 2.2 on the next page). The Schedule lists all services subsidised by the Australian Government, ranging from surgical procedures to general practice consultation items (attendances).<sup>41</sup>

Since the early-2000s several items have been added to the Medicare Benefits Schedule. The three most commonly utilised new groups relate to care coordination and planning (A15), mental health care (A20) and after-hours attendances (A22). These items now comprise an important share of non-referred encounters. The use of these items has been growing rapidly and accounts for most of the growth in expenditure on general practice (see Figure 2.5).

Groups A15 and A20 reflect the growing challenge of chronic disease management, which requires planning and coordination rather than just one-off consultations.<sup>42</sup> These new items allow GPs to assign and claim for the time that is required to diagnose, discuss and plan treatment for diseases that are more complex and likely to persist.

A proportion of GP remuneration from the Commonwealth also comes from Practice Incentive Payments. In part, these payments encourage

---

40. AIHW (2017c); and Greenfield et al. (2016).

41. DoH (2018b).

42. Swerissen et al. (2016); and Duckett et al. (2017).

adherence to agreed standards of practice for a limited range of priority conditions and prevention activities.<sup>43</sup>

## 2.7 Funding

The Commonwealth Government provides most of the funding for general practice. In 2015-16 it provided \$9.1 billion for ‘unreferred medical services’, which were mainly provided through general practice.<sup>44</sup> Smaller sources of non-Medicare, Commonwealth funding include benefits provided by the Department of Veterans’ Affairs and various workers’ and accident compensation schemes.

In 2015-16 individuals contributed 6.3 per cent (\$741 million) of funding for GP services, mainly due to the 14 per cent of consultations that were not bulk-billed.<sup>45</sup> Other sources, including insurance schemes (e.g. workers compensation), contributed a further \$1.1 billion for unreferred medical services.<sup>46</sup> State and territory governments provide very little funding to general practice, and private health insurance is prohibited by law from funding primary medical care.

Part of GP remuneration comes for the treatment of chronic disease. GPs receive Chronic Disease Medicare payments for preparing management plans for patients, coordinating team care, participating in multidisciplinary planning, and reviewing planning and coordination of care. As Figure 2.5 shows (item A15), the number and cost of these services has increased substantially. In 2016-17 these services cost the Commonwealth \$853 million.<sup>47</sup>

43. <https://www.humanservices.gov.au/organisations/health-professionals/services/medicare/practice-incentives-program>.

44. DoH (2017c).

45. Ibid.

46. AIHW (2017b).

47. DoH (2017c).

**Table 2.2: The main Medicare Benefits Schedule groups used by GPs**

Group	Name	Item Numbers
A1	GP attendances to which no other item applies	3, 4, 20, 23, 24, 35, 36, 37, 43, 44, 47, 51
A2	Other non-referred attendances to which no other item applies	52, 53, 54, 57, 58, 59, 60, 65, 92, 93, 95, 96
A11	Urgent attendances after hours	597, 598, 599, 600
A15	GP care plans and multidisciplinary case conferences	721, 723, 729, 731, 732, 735, 739, 743, 747, 750, 758
A20	GP mental health care	2700, 2701, 2712, 2713, 2715, 2717, 2721, 2723, 2725, 2727
A22	GP after-hours attendances to which no other item applies	5000, 5003, 5010, 5020, 5023, 5028, 5040, 5043, 5049, 5060, 5063, 5067

*Source: Commonwealth Medical Benefits Schedule.*

### 3 Pharmacists: providers of advice and medication

Pharmacists' main role in the primary care sector is to deliver medicines and advice to the public. Pharmacists are qualified to prepare, dispense and provide advice on medicines. One of their key roles is to provide medicines prescribed by medical practitioners, including medicines covered by the Pharmaceutical Benefits Scheme (PBS). Pharmacists also provide a range of over-the-counter medication that does not require prescription. In addition, they provide health checks, advice and information on appropriate over-the-counter medications for a range of common illnesses and health conditions.

Pharmacies are central to the delivery of medicines to Australians. Although pharmacies are widely distributed, people who live in metropolitan centres have much better access to a pharmacy than people in remote areas. Out-of-pocket costs cause a significant proportion of people, especially poorer people, to delay filling a prescription.

Pharmacists also provide advice and education. As argued in a previous Grattan Institute report, their role could be expanded to include providing vaccinations and repeat prescriptions. They could also help with the introduction of a new category of health worker, the 'physician assistant', to provide front-line health services, particularly in remote areas.<sup>48</sup>

There is insufficient data on patient outcomes from pharmaceutical use. There are indications that prescribing rates are too high for some pharmaceuticals.

The industry is highly regulated, and the sector has strongly resisted attempts to change the way it is organised and regulated. But the industry is shifting from smaller independent pharmacies to franchised operations and big box discounters.

48. Duckett (2013).

#### 3.1 Workforce and industry organisation

There are about 30,000 pharmacists registered in Australia, though the number actually working as pharmacists is closer to 23,000.<sup>49</sup> As Table 3.1 shows, most work in clinical roles in community pharmacies. There are around 5,500 community pharmacies in Australia.<sup>50</sup>

**Table 3.1: Job roles and settings for pharmacists**

Job role and setting	Per cent of all pharmacists
Clinician in community pharmacy	62
Clinician in hospital	18
Administrator in community pharmacy	3
Clinician in community health care service	2
Administrator in hospital	2
Clinician in medical centre	1
Clinician in private practice	1
Other	10

Source: DoH (2017b).

The pharmacy sector is highly regulated. Although community pharmacies are typically privately-owned businesses, they can be thought of as 'agents' of the Commonwealth Government because they supply PBS medicines.<sup>51</sup> To supply PBS medicines, a pharmacy must be approved under section 90 of the *National Health Act 1953*.<sup>52</sup>

49. Data from the Pharmacy Board of Australia gives the number of pharmacists registered in Australia, while the survey data collated through the Health Workforce Dataset indicates that the number of pharmacists 'employed in Australia working in registered profession' was around 23,000 in 2015.

50. King et al. (2017) says 5,511 as of June 2015. A PGA fact sheet says 5,587 as of November 2016. Richardson (2018, Key statistics) says 5,577 in 2015-16.

51. King et al. (2017, p. 58).

52. DHS (2018a).

Remote-area Aboriginal Health Services can supply PBS medicines under section 100 of the *National Health Act 1953*.

The conditions under which pharmacies supply PBS medicines are determined by five-year Community Pharmacy Agreements between the Commonwealth Government and the Pharmacy Guild of Australia. The Pharmacy Guild represents around 4,000 community pharmacies, who employ about 20,000 registered pharmacists and 60,000 staff. Community Pharmacy Agreements set out remuneration arrangements for dispensing PBS medicines, cover professional programs, and establish a funding pool of pharmaceutical wholesalers.<sup>53</sup>

The Agreements also set out rules that restrict the locations where new pharmacies can be established and existing pharmacies can be moved. These rules were originally instituted to reduce concentration of pharmacies and to ensure all Australians had a reasonable level of access to PBS medicines.<sup>54</sup> But the location rules restrict competition, especially in metropolitan areas, and appear mainly to be for the benefit of pharmacy owners rather than consumers.<sup>55</sup>

Community pharmacies are subject to ownership restrictions at state and territory level. Typically, ownership is restricted to registered pharmacists. There are also limits on the number of pharmacies that a pharmacist may own.<sup>56</sup>

Separately-owned pharmacies can operate under common brand names, such as Chemist Warehouse and Amcal.<sup>57</sup> These brands are, in turn, typically owned by larger corporate groups – currently, four such groups account for around 60 per cent of market revenue.<sup>58</sup> About

2,700 pharmacies, or just under half the total, are not aligned to major corporate groups.

The industry landscape is dynamic. Franchised, ‘big box’ discounters are on the rise, at the expense of smaller, independent pharmacies.<sup>59</sup> Yet new entrants continue to arrive, and consolidation continues to occur. There have been significant mergers in recent years, involving Terry White Chemists and Chemmart, and SmarterPharm and Pharmacy Alliance. At the same time, Ramsay Health Care has begun establishing a network of pharmacies, many located near its hospitals.<sup>60</sup>

A 2014 report by KordaMentha described the transition:<sup>61</sup>

Over the past 50 years, the community pharmacy landscape has evolved from small, independent pharmacies located on street corners and in small suburban shopping centres, to sophisticated franchise and banner groups. More recently, the dramatic rise of big box discount pharmacies has driven further change.

These developments are a response to a range of competitive pressures. PBS pricing reforms have reduced pharmacies’ dispensing revenues.<sup>62</sup> On average, pharmacies receive around 80 per cent of their revenue from selling medicines that are only available in pharmacies, and 20 per cent from general retail.<sup>63</sup>

Pharmacies in shopping strips and medical centres rely more on dispensing revenue, while those in shopping centres typically have more retail sales.<sup>64</sup> Of course, the retail component of revenue is

---

53. King et al. (2016, p. 8).

54. Ibid. (p. 28).

55. Duckett and Banerjee (2017); and Duckett and Romanes (2016).

56. Richardson (2018).

57. Ibid.

58. King et al. (2017, p. 12).

---

59. Ibid. (p. 11).

60. Richardson (2018).

61. KordaMentha (2014).

62. King et al. (2017, p. 12).

63. Richardson (2018, Products & Markets).

64. King et al. (2016, p. 7).

also subject to competition, not least from department stores and supermarkets.

The significant change in industry structure (small independents to franchise to big box) has not been accompanied by commensurate regulatory change – pharmacy regulation remains in the horse-and-buggy age of the independent pharmacies.

### 3.2 Usage

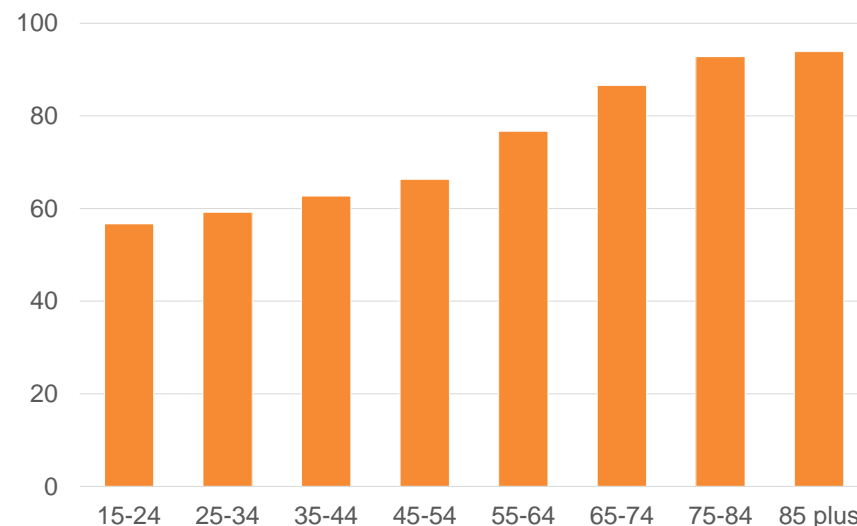
Prescriptions are the fundamental driver of demand for pharmacy services. Almost 70 per cent of people over the age of 15 had a medicine prescribed by a GP in 2015-16.<sup>65</sup> About 217 million prescriptions were dispensed for the PBS and Repatriation Pharmaceutical Benefits Scheme (RPBS) in 2015.<sup>66</sup> The Pharmacy Guild says the average Australian visits a pharmacy 14 times a year.<sup>67</sup>

Older people use pharmacy services most. As Figure 3.1 shows, the proportion of people who have at least one medicine prescribed over a year increases markedly with age. People over the age of 45 contribute around two-thirds of total pharmacy revenue.<sup>68</sup>

Australians in major cities generally have good access to pharmaceuticals through community pharmacies. But the further they live from a major city the further they have to travel to a pharmacy.<sup>69</sup>

Australians in the most disadvantaged SES group are more than twice as likely as people in the least disadvantaged group to have avoided or delayed getting a prescribed medication due to cost.<sup>70</sup> Overall, 7 per

**Figure 3.1: Older people are the biggest users of prescribed medication**  
Proportion of age group with prescription in a year



Source: ABS (2017).

65. ABS (2017).

66. Mabbott and Storey (2016).

67. The Pharmacy Guild of Australia (2017).

68. Richardson (2018, Products & Markets).

69. King et al. (2017).

70. ABS (2017).

cent of people who received a prescription in 2016-17 delayed filling it or did not fill it.

Prescription rates of a number of medicines, including antibiotics,<sup>71</sup> analgesics,<sup>72</sup> and anti-depressants are questionably high.<sup>73</sup> As with the general practice, there is insufficient patient outcomes data for pharmaceuticals.<sup>74</sup>

### 3.3 Funding

As noted earlier, about 80 per cent of pharmacy revenue is from selling medicines that are only available in pharmacies. Most of this revenue is effectively funded by the Commonwealth Government under the PBS.

This funding is formalised in remuneration arrangements set out in the five-year Community Pharmacy Agreements. These arrangements involve the Government paying pharmacy fees that cover procurement and handling of PBS medicines and the services involved in dispensing them, and additional fees such as those relating to dangerous drugs.<sup>75</sup>

In 2015-16 the Commonwealth spent \$9.4 billion on the PBS and RPBS schemes, and individuals contributed \$1.4 billion.<sup>76</sup> The Commonwealth gathers data on the price at which manufacturers sell pharmaceuticals, and adjusts the price it is willing to pay accordingly. Price disclosure and increasing competition have placed increasing pressure on the viability of community pharmacies, compounded by the emergence of online pharmacies and robotic dispensing machines.

PBS medicines attract a co-payment for general and concessional patients. Pharmacies have discretion in the amount they charge, but

cannot exceed the co-payment limits set by the Commonwealth. The price of medicines therefore varies from one pharmacy to another. In more remote areas where there is less price competition, co-payments are generally higher than in major cities.<sup>77</sup>

The PBS has a safety net scheme which caps annual patient payments depending on whether a person qualifies as a general or concessional patient. In 2017 the general safety net threshold was \$1521.80, after which people could purchase most PBS medications for the co-payment of \$6.40. The concessional safety net threshold was \$384, after which people could get benefits free of charge.

Despite the safety net, poorer Australians are more likely than others to avoid or delay filling a prescription due to cost (see Figure 3.2).

---

71. Goff et al. (2017).

72. Blanch et al. (2014).

73. OECD (2015).

74. King et al. (2016, p. 41).

75. King et al. (2017, p. 18); and The Pharmacy Guild of Australia (2017).

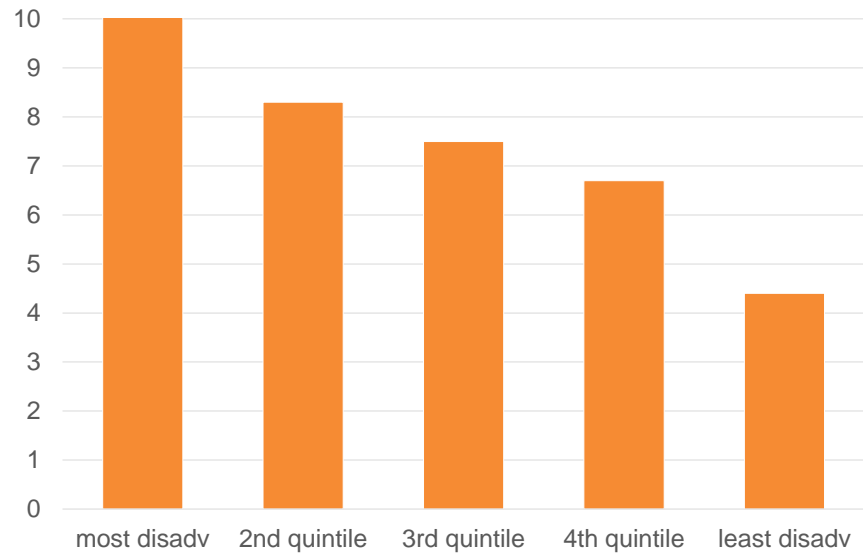
76. AIHW (2017b).

---

77. King et al. (2017).

**Figure 3.2: Disadvantaged Australians are more likely to delay filling a prescription**

Proportion of adults who either delayed getting or did not get prescribed medication due to cost, 2015-16



Source: ABS (2017).

## 4 Allied health and nursing services

Team work, involving GPs, pharmacists, nurses and allied health professionals, is central to better-integrated care, particularly for people who are at risk, or have complex and chronic conditions.<sup>78</sup> But organisational, clinical governance, payment and reporting arrangements for team care are under-developed.

The largest allied health professions are physiotherapists and psychologists. The most-used services (both in number of services and health insurance benefit payments) are psychology and optometry.

There is little information on the characteristics or problems of people using the services of allied health professionals and nurses. There is little or no information on the types of services provided or the effectiveness of these services. Similarly, there is little information on allied health services and nursing for the primary care services funded by state governments.

### 4.1 Workforce

The scope and role of allied health and nursing in primary health is not yet well defined or governed.<sup>79</sup> Historically, allied health professions emerged as specialised adjuncts to support medical practice, beyond the generalist support provided by nursing. But their roles now vary considerably.

Some allied health professionals such as sonographers and orthoptists provide support services for medical practitioners. Others such as physiotherapists and psychologists provide services either directly to patients or on referral from a medical practitioner. Still others such as

chiropractors and osteopaths are relatively independent of medical practitioners.

Contemporary allied health includes a broad range of professionals and technicians, assistants and support workers. Allied Health Professionals Australia has 22 professional associations as members.<sup>80</sup> They include professions which are:

- well-developed and accepted, with a strong evidence base, established professional associations and which engage in a range of relatively autonomous practice (*e.g.* speech pathology, optometry)
- relatively specific and technical, providing support services in close conjunction with medicine, dentistry and other health professions (*e.g.* sonography, perfusion, orthoptics, prosthetics, orthotics)
- emerging, with a relatively under-developed evidence base and professional organisation and regulation, and variable practice patterns and acceptance by the public and other health professions (*e.g.* art therapy, exercise and sports science)

---

80. Audiology Australia, Australasian Podiatry Association, Australasian Society of Genetic Counsellors, Australasian Sonographers Association, Australasian and New Zealand College of Perfusionists, Australian Association of Social Workers, Australian Music Therapy Association, Australian Orthotic Prosthetic Association, Australian Physiotherapy Association, Australian Society of Medical Imaging and Radiation Therapy, The Australian and New Zealand Arts Therapy Association, The Australian Psychological Society, Chiropractors' Association of Australia, Dietitians Society of Australia, Exercise & Sports Science Australia, Occupational Therapy Australia, Optometry Australia, Orthoptics Australia, Osteopathy Australia, Rehabilitation Counselling Association of Australasia, The Society of Hospital Pharmacists of Australia, Speech Pathology Australia.

---

78. Vision 2020 Australia (2015).

79. DoH (2013b).

- contested, because their evidence base for practice is weak and they have limited acceptance by medicine and other health professions, but they nevertheless have significant public support (e.g. osteopathy, chiropractic)

**Table 4.1: The number of allied health professionals in professions eligible for Medicare reimbursement**

Profession	Total claiming Medicare reimbursement
Aboriginal and Torres Strait Islander workers <sup>81</sup>	1 256
Audiologists <sup>82</sup>	2 400
Chiropractors <sup>83</sup>	5 286
Dietitians <sup>84</sup>	2 832
Diabetes educators <sup>85</sup>	1 213
Exercise physiologists <sup>86</sup>	4 552
Mental health nurses <sup>87</sup>	17 793
Occupational therapists <sup>88</sup>	19 691
Optometrists <sup>89</sup>	5 417
Osteopaths <sup>90</sup>	2 238
Physiotherapists <sup>91</sup>	30 574
Podiatrists <sup>92</sup>	4 939
Psychologists <sup>93</sup>	35 151
Speech pathologists <sup>94</sup>	5 295
Social workers <sup>95</sup>	15 730
<b>Total</b>	<b>154 367</b>

81. [http://pandora.nla.gov.au/pan/133228/20150419-0017/www.hwa.gov.au/sites/default/files/HWA%20Aboriginal%20and%20Torres%20Strait%20Islander%20Health%20Workers%20in%20Focus\\_FINAL.pdf](http://pandora.nla.gov.au/pan/133228/20150419-0017/www.hwa.gov.au/sites/default/files/HWA%20Aboriginal%20and%20Torres%20Strait%20Islander%20Health%20Workers%20in%20Focus_FINAL.pdf).

82. <http://audiology.asn.au/public/1/files/Audiology%20Australia%20Submission-%20Aged%20Care%20Sector%20workforce.pdf>.

83. <http://www.chiropracticboard.gov.au/About-the-Board/Statistics.aspx>.

84. [http://pandora.nla.gov.au/pan/133228/20150419-0017/www.hwa.gov.au/sites/default/files/HWA\\_Australia's%20Health%20Workforce%20Series\\_Dietitians%20in%20focus\\_vF\\_LR\\_0.pdf](http://pandora.nla.gov.au/pan/133228/20150419-0017/www.hwa.gov.au/sites/default/files/HWA_Australia's%20Health%20Workforce%20Series_Dietitians%20in%20focus_vF_LR_0.pdf).

85. <https://www.adea.com.au/wp-content/uploads/2009/10/35-Membership.pdf>.

86. [https://www.essa.org.au/wp-content/uploads/2017/04/ESSA-2016-annual-report\\_final\\_LR4.pdf](https://www.essa.org.au/wp-content/uploads/2017/04/ESSA-2016-annual-report_final_LR4.pdf)

87. <https://mhsa.aihw.gov.au/resources/workforce/mental-health-nursing-workforce/>

88. <http://www.occupationaltherapyboard.gov.au/About/Statistics.aspx>

89. <http://www.optometryboard.gov.au/About/Statistics.aspx>

90. <http://www.osteopathyboard.gov.au/About/Statistics.aspx>

91. <http://www.physiotherapyboard.gov.au/About/Statistics.aspx>

92. <http://www.podiatryboard.gov.au/About/Statistics.aspx>

93. <http://www.psychologyboard.gov.au/About/Statistics.aspx>

94. <https://industry.gov.au/Office-of-the-Chief-Economist/SkilledOccupationList/Documents/2015Submissions/Speech-Pathology-Australia.pdf>

95. <https://www.aasw.asn.au/document/item/8806>

This report focuses on allied health services funded by the Commonwealth and the states. These include the 15 allied health services reimbursed by the Commonwealth through the Medicare Benefits Schedule and listed in Table 4.1 on the previous page. An estimated 154,000 people are employed in these professions.<sup>96</sup> Some are required to register with the Australian Health Practitioner Regulation Agency,<sup>97</sup> others are not.<sup>98</sup>

The largest allied health professions are physiotherapy, psychology and occupational therapy. More women than men work in all the listed allied health disciplines, except chiropractic and podiatry. In occupational therapy, 91 per cent of the workforce are women; in psychology 78 per cent are women.<sup>99</sup>

The Australian Health Practitioner Regulation Agency also regulates Chinese medicine, but these services do not qualify for Medicare rebates. This report does not deal with services (mostly complementary therapies) that do not usually receive state or Commonwealth funding. These services mostly comprise complementary therapies.<sup>100</sup>

96. Workforce estimates for allied health are not compiled systematically. The estimates in Table 4.1 on the preceding page were collated from a range of sources.

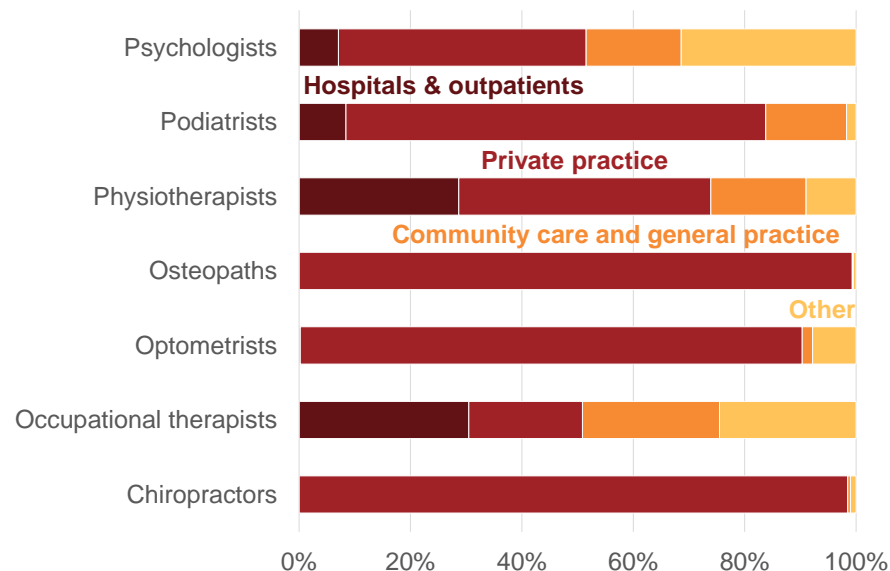
97. viz. Aboriginal and Torres Strait Islander workers, chiropractors, mental health nurses, occupational therapists, optometrists, osteopaths, physiotherapists, podiatrists, psychologists.

98. viz. Audiologists, dieticians, diabetes educators, exercise physiologists, speech pathologists, social workers.

99. DoH (2017a).

100. Complementary therapies comprise a wide range of services including acupuncture, massage therapy, naturopathy, herbal medicine, homeopathy, iridology, and Chinese medicine. Although these therapies are widely used by Australians (Reid et al. (2016) and Conrady and Bonney (2017)) they have a contested evidence base (Herman et al. (2005)). Chinese medicine, osteopathy and chiropractic are often included as complementary therapies. They are regulated by the Australian Health Practitioner Regulation Agency. Other therapies are partly regulated by the Therapeutic Goods Administration insofar as they use therapeutic compounds (<https://www.tga.gov.au/complementary-medicines>).

Figure 4.1: Allied Health practitioners work in a range of settings



Source: DoH (2017b).

## 4.2 Organisation

Even though many allied health professionals could be reimbursed through Medicare, in practice only about 10 per cent claim reimbursements (see Table 4.1 on page 25). Instead, the overwhelming majority are employed in state-funded services, including public hospitals and community health services, and in private hospitals.<sup>101</sup>

Allied health practitioners work in a variety of settings, as Figure 4.1 shows. More than 70 per cent work in major cities and inner regional areas.<sup>102</sup> Chiropractors, optometrists, osteopaths and podiatrists mainly work in private practice. Psychologists, physiotherapists and occupational therapists work in a range of settings including private practice, community health, government agencies and Aboriginal health services.

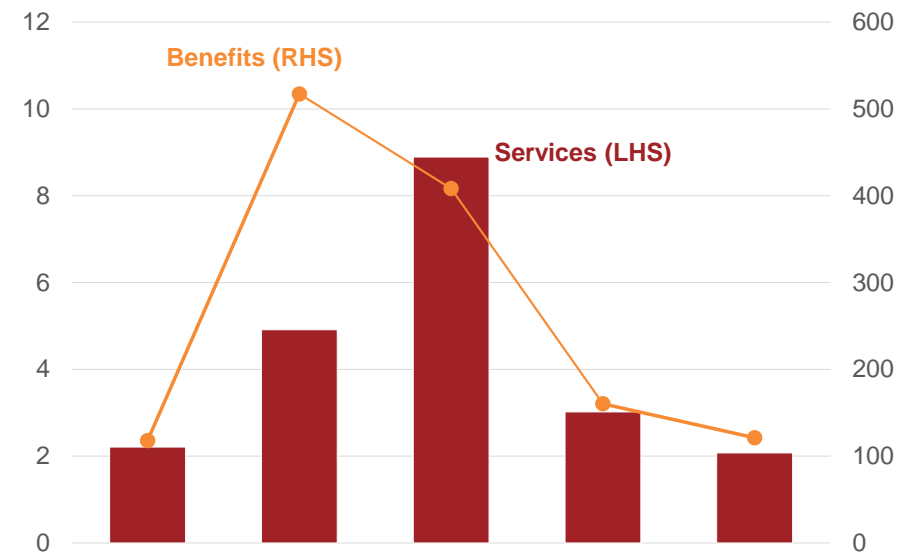
There is little analysis of the size and organisation of private allied health practice, but anecdotal evidence suggests these practices are often small or sole providers.<sup>103</sup>

## 4.3 Usage, funding and outcomes

Information is limited on the types of allied health services Australians use, and how effective they are. Medicare statistics for 2016-17 indicate the most-used allied health services were optometry, psychology, podiatry and physiotherapy. In that year, 21 million allied health services were provided, at a cost to the Commonwealth of \$1.3 billion (see Figure 4.2).

In 2015-16, 26.9 per cent of the population used optometry services and 11.3 per cent used other allied health services. Only 63.4 per cent of allied health consultations were bulk-billed, compared to

**Figure 4.2: Optometry and psychology are the most-used allied health services**



Source: DoH (2017d).

101. DoH (2017a).

102. AIHW (2013).

103. Raven (2014).

93.8 per cent of optometry consultations. On average, users pay a \$40 co-payment for allied health. Usage is lower in the Northern Territory, because more of the population lives in remote areas where there are fewer practitioners per person (Figure 4.4). But it is harder to understand why usage in the ACT is so much lower than in New South Wales and Victoria (Figure 4.3).

Use of Medicare-funded allied health services varies significantly across states and territories, from 141 per thousand people in the Northern Territory to 561 per thousand in Victoria (see Figure 4.3).

The number of Medicare-funded allied health services per person is much lower in remote areas, but the proportion of services bulk billed is much higher. For the small number of services that are not bulk billed, out-of-pocket costs are around \$50 per service in very remote areas.

#### 4.4 Community nurses

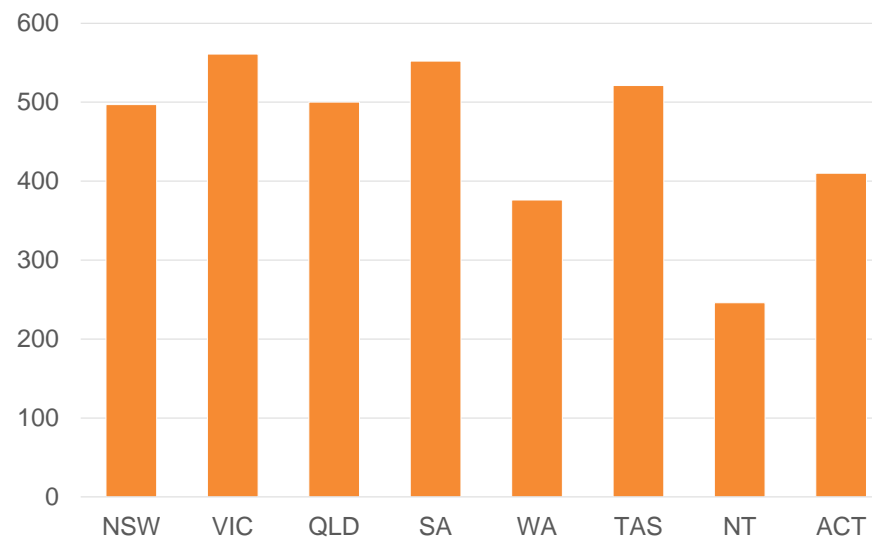
Nurses work in a range of roles across a variety of health services. In 2016, Australia had more than 315,000 nurses. Almost 64 per cent worked in hospital and outpatient settings, and 13 per cent in each of residential care and community health.

Nurses provide Medicare-funded primary care services. In 2016-17, about 2 million practice nurse and Aboriginal health practitioner services were provided, at a cost of \$28 million. The overwhelming majority of these services were for chronic disease management (88 per cent) or follow-up for health assessments (11 per cent).

Nurse practitioners are registered nurses who are 'authorised to function autonomously and collaboratively in an advanced and extended clinical role'.<sup>104</sup> In 2016-17, more than 400,000 services were provided, at a cost of \$12.7 million. It appears most of these services are provided in acute care.

104. DoH (2012a).

**Figure 4.3: People in Victoria use Medicare-funded allied health services most; people in the Northern Territory use them least**  
Services per 1000 people

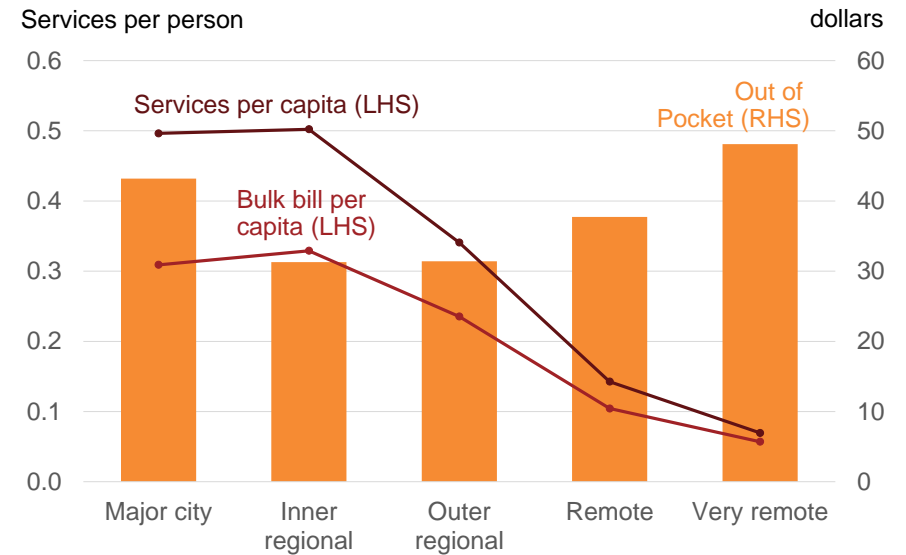


Source: DoH (2017d).

This data does not reflect the range of important but non-claimable administrative, triage, counselling and procedural services that nurses provide under the auspices of other practitioners, often in general practices. Nor does it reflect the impact of the Royal District Nursing Services and other community outreach nursing services.

As with allied health services, there is no available source of data on patient characteristics or outcomes for nursing services in primary care.

**Figure 4.4: People in very remote areas use allied health services least, and the cost to the patient is higher**



Source: Medicare BTOS statistics 2015-16.

## 5 Aboriginal and Torres Strait Islander health practitioners

Primary health care for Aboriginal and Torres Strait Islanders (ATSI) is delivered by a range of providers, including ATSI specific and general health service organisations. The Indigenous Australians Health Programme<sup>105</sup> provides Aboriginal and Torres Strait Islander people with access to primary care services in urban, rural and remote locations, primarily through Aboriginal and Community Controlled Health Services.

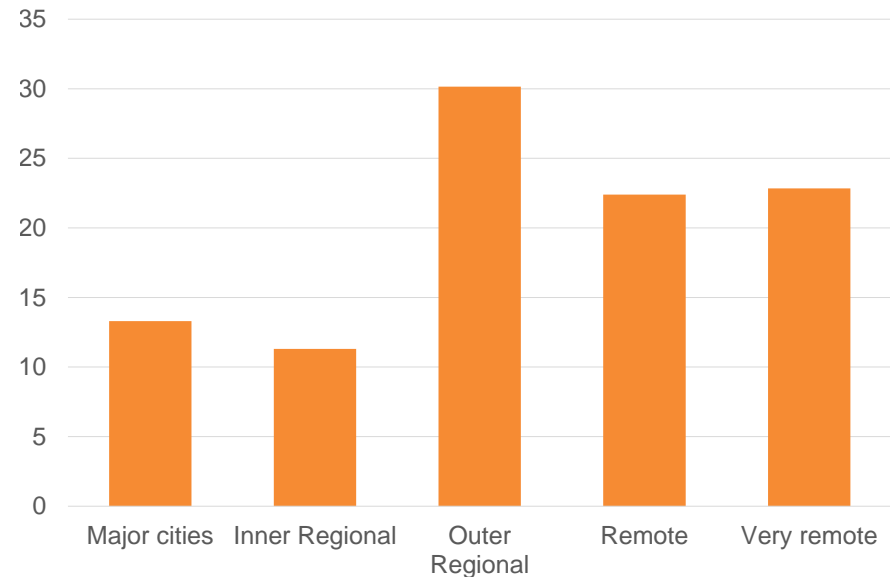
Commencing in 2015-16, the Commonwealth committed \$3.2 billion over four years to fund the Indigenous Australians Health Programme. The programme funds primary care services, remote area health, and integrated team care. It targets a range of infectious, chronic and behavioural conditions that are particularly relevant for indigenous populations.

Data on the outcomes of Indigenous health services is better than for many other primary care services. Most outcomes have improved over the last few years, although they remain well behind averages for the rest of the population.

### 5.1 Aboriginal and Torres Strait Islander health practitioners

According to National Health Workforce data, there were 451 ATSI health practitioners in 2015. As Figure 5.1 shows, most work in outer regional, remote and very remote areas,<sup>106</sup> and as Figure 5.2 on the next page shows, most work in Aboriginal health services. These services provide a comprehensive range of medical, oral, nursing and allied health services for Aboriginal and Torres Strait Islander people.

**Figure 5.1: Most ATSI health practitioners work outside the major cities**  
Percentage of ATSI health practitioners



Source: DoH (2017b).

105. DoH (2018c).

106. DoH (2017a).

## 5.2 Indigenous primary health services

In 2015-16, there were 204 Indigenous primary health care services. They employed 7766 full-time equivalent staff, of whom 53 per cent were Indigenous. They had about 5.4 million contacts with 461,500 patients. The vast majority of patients (79 per cent) were Indigenous.<sup>107</sup>

As Table 5.1 shows, most of these services (69 per cent) are in outer regional, remote and very remote areas, and a similar proportion are Aboriginal Community Controlled Health Organisations (ACCHOs).<sup>108</sup>

## 5.3 Performance measurement

Significant effort has been made to measure the impact of primary care services on the health of Aboriginal and Torres Strait Islander people. The 24 National Key Performance Indicators for Aboriginal and Torres Strait Islander Health<sup>109</sup> cover maternal and child health, preventative health and chronic disease management. They build on previous work including the Australian Primary Care Collaboratives Program.

The 2016 results indicated significant improvement on 12 of the 16 measures in the national minimum data set. This included improvements in recording patients' birth weight, alcohol consumption, and whether they smoke.

But outcome measures indicated high and increasing levels of chronic disease and chronic disease risk factors among patients from 2012 to 2016.

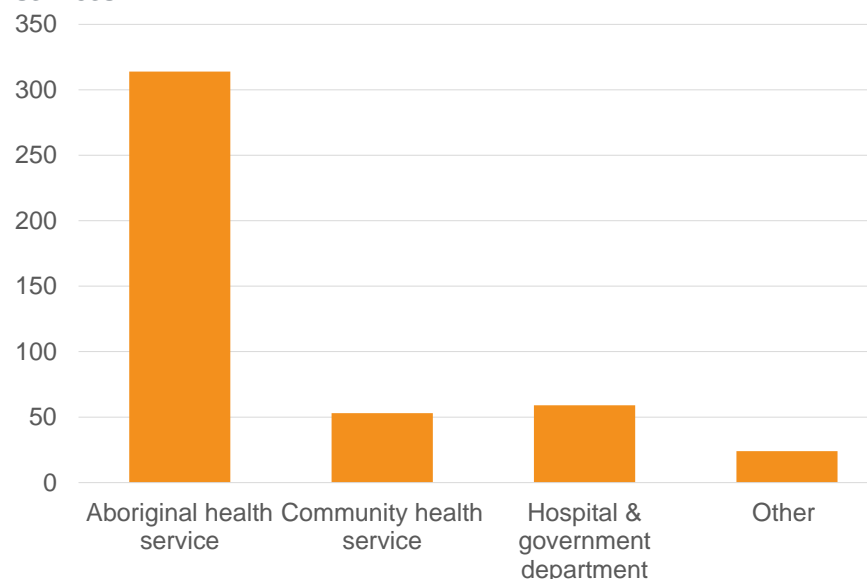
There were indications that coordination of the care of patients had improved. From 2012 to 2015, the proportion of patients with diabetes who had GP management plans and team care arrangements had

107. AIHW (2017d).

108. Ibid.

109. AIHW (2017e).

Figure 5.2: Most ATSI health practitioners work in Aboriginal health services



Source: DoH (2017a).

Table 5.1: Aboriginal health organisations types and location

Type of organisation	%
ACCHO	67
Government	26
NGO	7
Location	
Major cities	10
Inner regional	21
Outer regional	23
Remote	13
Very remote	33

tripled to around 50 per cent. Recording of blood pressure, blood sugar levels and kidney function also increased.

Results indicate that Aboriginal and Torres Strait Islander health services are on track to meet national goals by 2023, although results vary according to jurisdiction and remoteness.

All improvements must be considered in the context of the big gap in health outcomes between Indigenous and non-Indigenous Australians. The life expectancy of Indigenous Australians is about 10 years shorter than for other Australians.<sup>110</sup>

#### 5.4 Funding

In 2013-14, about \$6 billion was spent towards improving Indigenous health, of which 13 per cent went to community health services.<sup>111</sup> The Commonwealth has introduced a range of measures to improve Indigenous Australians' access to health care, including MBS and PBS concessions for Indigenous patients and deploying Medicare liaison officers to educate Indigenous people about the health care system.<sup>112</sup>

Available data suggests the distribution of Commonwealth-funded ATSI health services and other GP services matches the distribution of Indigenous populations, except in remote and very remote areas of Queensland and Western Australia.<sup>113</sup> But more data is needed, including on services provided by state and territory governments, and on the quality of the coordination of care for Indigenous patients.

The available data also suggests Indigenous Australians may have poorer access to specialist services. And of course, access to a service does not ensure that the care provided is culturally appropriate.

---

110. AIHW (2016b).

111. AIHW (2017f).

112. DHS (2018b).

113. AIHW (2016b).

## 6 Oral health services

Oral health is an important and well-developed area of primary care in Australia, but people face significant barriers to accessing services, particularly people on low incomes. Insufficient public funding for oral health results in high out-of-pocket costs, and insufficient capacity for public dental services results in long waiting times. About a fifth of the population do not have the recommended level of oral health care. This has a significant impact on population health outcomes.

### 6.1 Workforce organisation

Oral health includes preventive and restorative services. Oral health services include dentistry, oral therapy, oral hygiene and dental prosthetists. There were 19,075 oral health practitioners in Australia in 2015.

As Figure 6.1 shows, most oral health practitioners (75 per cent) are dentists. Most oral health practitioners work in private practice (80 per cent), 10 per cent work in community health care and 4 per cent in hospitals. In 2017 there were about 7,000 private dental practices listed in the Australian Dentists Directory.<sup>114</sup> Dentists are disproportionately concentrated in metropolitan areas: more than 90 per cent are based in major cities and inner regional areas.

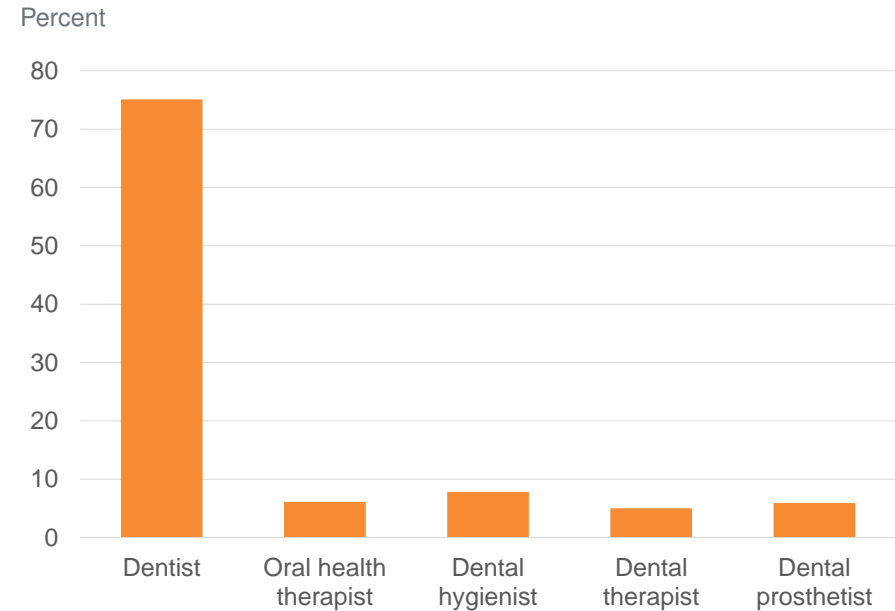
### 6.2 Usage

Oral health problems are a big burden on the health system. Australia's National Oral Health Plan 2015-2024 notes that more than half of six-year-old children have tooth decay and around a third of adults have untreated tooth decay. These problems are worse for disadvantaged people.<sup>115</sup>

114. <http://australiandentistsdirectory.com.au>.

115. COAG (2015).

**Figure 6.1: Most oral health workers are dentists**



Source: National Health Workforce data.

In 2015-16, 48 per cent of Australians aged 15 and over saw a dental professional. But about 20 per cent do not see an oral health provider at least once every two years, as recommended.<sup>116</sup> And in 2016-17, about 18 per cent of Australians reported delaying dental care because of cost.<sup>117</sup>

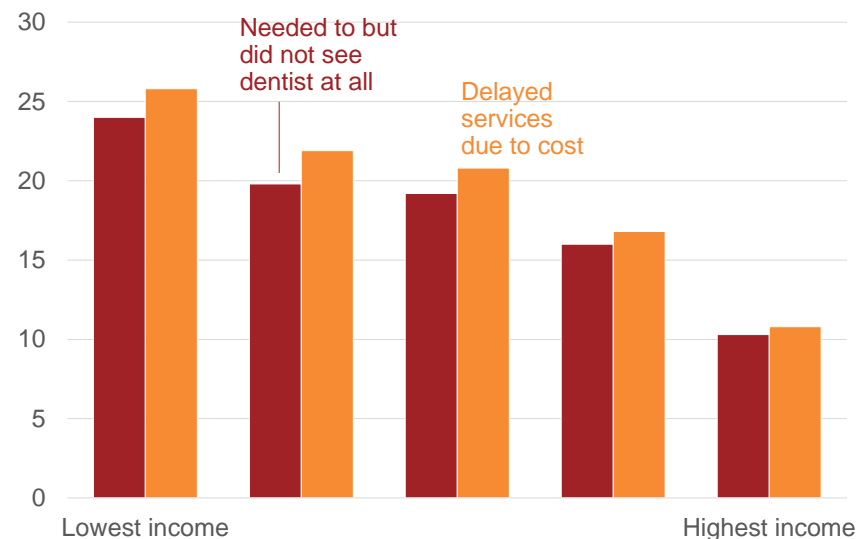
As Figure 6.2 shows, the most disadvantaged Australians are twice as likely as the least disadvantaged not to see a dentist or to delay seeing one because of cost.<sup>118</sup>

The Commonwealth and the states jointly fund public dental services for people on low incomes and for children. About 36 per cent of the population is eligible for public dental services, but there is capacity to provide services to only about one-fifth of this group. As a consequence, there are long waits for public dental services: in 2015-16 the 'best' average waiting time was 87 days in Western Australia, and the worst was 916 days in Tasmania.<sup>119</sup>

As Figure 6.3 on the next page shows, people in regional and remote areas say they are less likely to see a dentist when they need to, and more likely to delay treatment due to cost. And rates of potentially preventable hospital admissions due to dental problems are more than 40 per cent higher in remote and very remote areas than in major cities.<sup>120</sup>

Almost one quarter of Australians have 'unfavourable' visiting patterns ('favourable' is defined as visiting a dentist at least once a year and having a usual dentist).

**Figure 6.2: Poorer Australians are less likely to go to the dentist**  
Percentage of survey respondents



Source: ABS (2017).

116. AIHW (2016c).

117. ABS (2017).

118. ABS (2017); and AIHW (2016c).

119. AIHW (2016d).

120. AIHW (2016c).

### 6.3 Funding

Unlike all other primary care services, individuals pay much more for oral health services than governments do. As Figure 6.4 on the following page shows, in 2015-16 individuals paid \$5.7 billion, or 58 per cent, of a total of \$9.9 billion of dental costs. Health insurance contributed a further \$1.8 billion, or 18 per cent.

By contrast, individuals contribute only 6 per cent of the cost of GP services and 13 per cent of the cost of pharmaceuticals. And health insurance makes no contribution to the cost of these services. The average individual and insurance contributions for all other health services apart from dental were 15 per cent and 8 per cent respectively.<sup>121</sup>

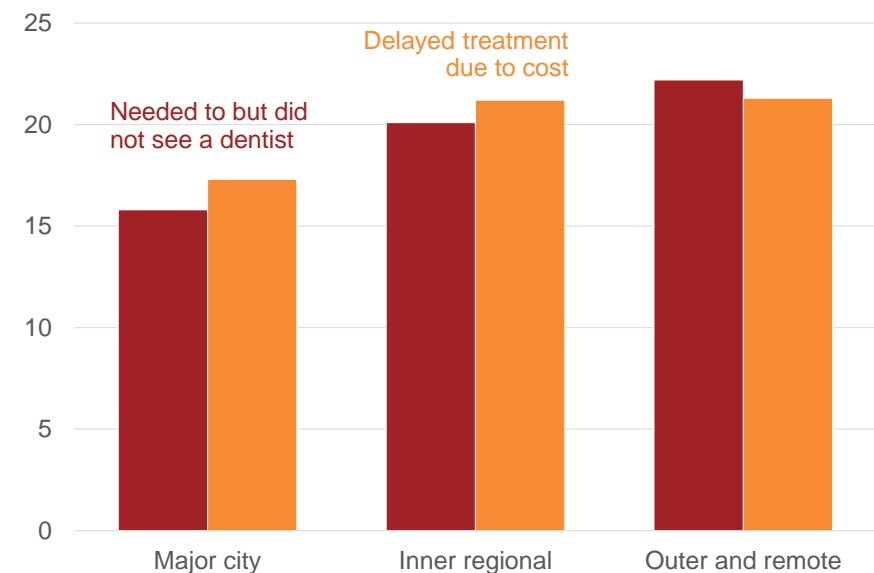
### 6.4 Outcomes

Child dental health surveys indicate tooth decay in children dropped from 1977 to 1996, then stabilised before beginning to increase again to 2010. About 60 per cent of eight-year-olds who visited a school dental service in 2010 had decayed, missing or filled teeth.<sup>122</sup>

The national survey of adult oral health indicated that in 2004 to 2006, about a quarter of the population had untreated tooth decay. Oral health was worse in regional and remote areas than in major cities.<sup>123</sup>

**Figure 6.3: People in cities have best access to dental services**

Percentage of survey respondents



Source: ABS (2017).

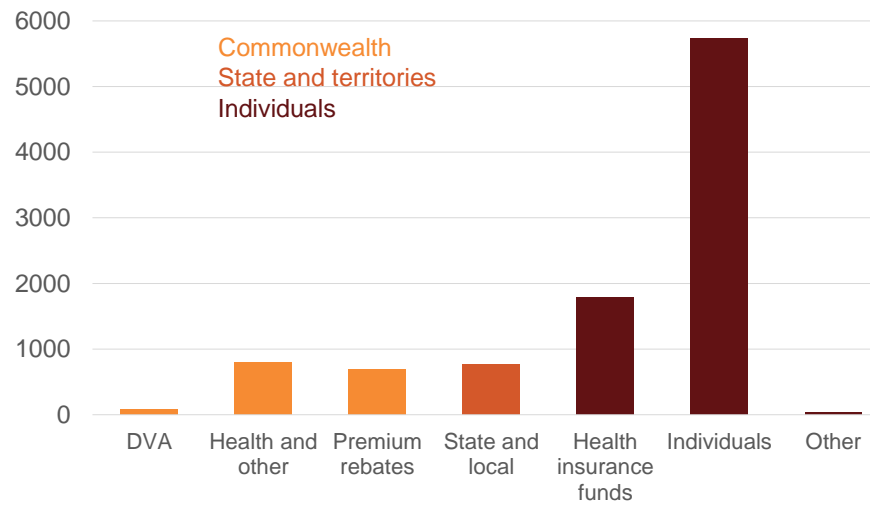
121. AIHW (2016d).

122. AIHW (2016c).

123. Ibid.

**Figure 6.4: Individuals contribute most for dental services**

\$ (millions)



Source: AIHW (2016d).

## 7 Community health, maternal and child health, and women's health services

State and territory governments provide primary care through community health services, maternal and child health service, and women's health services. These services also receive some Commonwealth funding as Table 7.1 illustrates.<sup>124</sup>

### 7.1 Community health services

Community health services include primary care and specialist community care services. They are often focused on particular groups such as Indigenous people, refugees and people on low incomes.<sup>125</sup> Services provided through community health include: allied health, mental health, child health, chronic disease management, disability, drug and alcohol, refugee health, and Indigenous health. Strategies include one-to-one services, groups and community development.

The scope and organisation of services varies between jurisdictions. In Victoria, community health services are comprehensive and universal, with priority access for people with specific health needs, and a schedule of fees that depends on a patient's circumstances. These services are provided through a mixture of independent community health centres and services that are part of rural or metropolitan public health services.

By contrast, in Western Australia community health services focus on community nursing. They provide child and school health, refugee health, Indigenous health, and immunisation, and are organised through state-run metropolitan and rural health services.

124. Vic DHHS (2018).

125. AIHW (2017b).

Table 7.1: Community health is mainly funded by the states

	Jurisdiction		Total
	Commonwealth	State	
NSW	330	1718	2048
VIC	199	575	774
QLD	253	2188	2441
WA	152	815	967
SA	93	685	778
TAS	27	66	93
ACT	17	195	212
NT	173	178	351
<b>Total</b>	<b>1244</b>	<b>6420</b>	<b>7664</b>

*Note: The AIHW definition for community health and other expenditure is: non-residential health services provided in community settings, and other recurrent health expenditure that could not otherwise be classified. It does not include dental or non-referred medical or pharmaceutical expenditure.*

*Source: AIHW (2015).*

The variety of service arrangements and lack of centralised data collection means there is limited information about the services delivered, patient outcomes and degree of access.

## 7.2 Maternal and child health services

Maternal and child health services are primary care services for women and families with children from birth to school-age. Maternal and child health services are primarily funded by state and territory governments. Services include: ante-natal and post-natal programs, parenting support, immunisation, educational information, early intervention and assistance with developmental delay and disability. Some specialised programs for post-natal distress and hearing assessment are also provided.<sup>126</sup>

In 2014, 307,844 women gave birth in Australia. The average age of the mother was 30, and the birth rate was 59 per 1000 women of reproductive age.<sup>127</sup> Overwhelmingly, births were in hospital (98 per cent).

Almost all women who gave birth had at least one ante-natal visit (99.9 per cent). About 95 per cent had five or more visits, 87 per cent had seven or more, and 58 per cent had 10 or more visits. Women in the lowest SES areas were less likely to attend ante-natal classes (59 per cent attendance in the first trimester) than women in the highest SES areas (70 per cent).

The organisation of maternal and child health services varies across states. Each state designs and manages its own programs. Funding is mostly borne by the states, although some jurisdictions have formed a partnership with the Commonwealth.<sup>128</sup>

---

126. PC (2017a).

127. AIHW (2016e).

128. PC (2016, Chapter 10).

There are a range of service providers. For example, in South Australia 43 per cent of women attend care at hospital clinics, 27 per cent with obstetricians in private practice, and 21.2 per cent with GPs. Post-natal care is provided by local maternal and child health services. Often a hospital will notify a local service, which contacts new parents to organise an appointment in the first few days at home. Services are generally provided for free.

There is no consistent national information on funding of maternal and child health services. In 2004-05 the Commonwealth Department of Health estimated total expenditure on maternity services was \$1.6 billion. Most of this was associated with hospital births (92 per cent), mainly in public hospitals (70 per cent).<sup>129</sup>

In 2016, maternity services accounted for 8.3 per cent of total acute admissions in public hospitals.<sup>130</sup> This figure does not include state and territory funding for community-based maternal and child health programs. There is no national dataset on patient outcomes and access.

## 7.3 Women's health and family planning

Biology and gender have a significant impact on health. Social and cultural factors often lead to health disadvantages for women and girls. One of the first comprehensive community health services established in Australia was the Leichhardt Women's Community Health Centre in NSW. It was created under the Whitlam Government's community health program and is still in operation today.

The National Women's Health Policy, adopted by the Commonwealth in 2010, identified mental health and well-being, sexual and reproductive health, healthy ageing, and prevention of chronic disease as key issues

---

129. DoH (2011).

130. PC (2016).

for women. And all states and territories provide women's health and family planning services,<sup>131</sup> including advocacy, training, sexual and reproductive health, terminations, cancer support, and domestic violence prevention and support.

Access to women's health and family planning services varies across states and territories.<sup>132</sup> For example, in some states abortions remain part of the criminal code. In others, terminations are legal only if it is proven that the woman may suffer physical or mental harm without the service. The only affordable surgical abortion clinic in Tasmania recently closed, so women in that state need to travel to Victoria or go to expensive private providers to have an abortion.<sup>133</sup>

The lack of consolidated data on women's health and family planning services, and the variation in legislation and practice across state and territory borders, means service quality and access is not as good as it should be.

---

131. <http://awhn.org.au/organisations/#toggle-id-7>.

132. Family Planning Alliance Australia (2016).

133. See Dawson (2018). Abortions are available only in the public health system, and only in extraordinary circumstances.

## 8 Primary care and specialist services

Australia has a broad range of specialist community and institutional health services that interact with primary care. General practice is an important gateway to specialist services. However, not all specialist services require a referral from a GP. People have direct access to a range of state and territory specialist services, including public hospitals and specialist community services such as mental health and alcohol and drug services.

Some specialist services, such as hospitals and residential care, provide more comprehensive treatment and support than can be provided at home or in the community. Others provide specific services at home and in the community, in combination with primary care and other specialist community service providers. These include specialist medical practitioners, alcohol and drug services, mental health services, home care and support services, and disability services.

There are significant barriers to access to specialist community-based services, including out-of-pocket costs, lack of services in rural and remote areas, and lack of capacity in state and territory services.

There are also significant problems in coordination of services for people with complex and chronic conditions. And lack of system-wide data makes it difficult to evaluate the quality, outcomes and effectiveness of specialist community-based health services. This chapter focuses on these community-based specialist services and their relationship to primary care.

### 8.1 Specialist medical practitioners

Medical specialists are the most common specialist service accessed through primary care services. In Australia, people can only see a medical specialist if they have a referral. A referral usually comes

from a general practitioner, but can come from a hospital (following presentation at an accident and emergency department or an inpatient admission) or from another specialist.

Specialists are not usually considered primary care providers, but they do provide a range of services that fit under this umbrella. For example, an obstetrician may deliver a baby and then provide the family with advice on family planning strategies. A cardiologist may stent a narrowed vessel and then counsel a patient on how to stop smoking and lose weight.

A referral from a GP to a specialist is valid for 12 months, unless otherwise specified. A referral covers only a 'single course of treatment for the referred condition'. This 'involves an initial attendance by the specialist and then the continuing management of the condition as needed until the patient is referred back to the referring practitioner'.

GPs commonly refer patients to specialist medical practitioners for assessment and treatment. Some conditions are dealt with by specialists without further assistance from the GP. Other conditions are treated and managed in partnership with GPs and other specialist services such as allied health.

#### 8.1.1 Specialist medical workforce and usage

All medical practitioners are registered through the Australian Health Practitioners Regulation Agency (AHPRA). Admission as a specialist is managed by the respective colleges (*e.g.* the Royal Australasian College of Surgeons). In 2017 there were 25,549 GPs and 41,838 medical specialists in Australia (see Table 8.1). Specialists included 10,243 physicians, 5,882 surgeons and 4,997 anaesthetists.<sup>134</sup>

---

134. DoH (2017c).

Most specialist medical practitioners work in metropolitan and regional cities. In 2016-17, about 36 per cent of Australians had seen a medical specialist in the previous 12 months. Patients were required to make out-of-pocket payments for about 70 per cent of specialist services. The average out-of-pocket cost for a visit to a specialist was \$75.22.<sup>135</sup> About 7 per cent of people who needed to see a specialist delayed going or did not go because of cost.<sup>136</sup> GPs make about 9.5 referrals to medical specialists per 100 encounters.<sup>137</sup>

Specialist care can be accessed for free through most public hospital outpatient services. But these services generally have long waiting times. Specialists are disproportionately concentrated in metropolitan areas. Australians from a low-SES or Indigenous background, or who live in rural Australia, have less access to specialist services.

The number of out-of-hospital services per person by specialist medical practitioners is much lower in outer regional and remote areas. In very remote areas, services per person are only about a third of those for major cities. The bulk-billing rate for specialists is higher in for regional areas, but average out-of-pocket costs for services that are not bulk billed are a little higher in very remote areas (see Figure 8.1 on the following page).

When a GP refers a patient to a specialist, the providers are expected to coordinate the patient's care. When multiple providers are involved, GPs and specialists are the main coordinators of care more than 80 per cent of the time. But studies suggest specialists are 'generally dissatisfied with the information conveyed in GPs' referral letters'.<sup>138</sup> And GPs say they often receive no feedback from the specialist, or the feedback they do get is inadequate. Chapter 9 has more detail on these coordination and integration deficiencies.

135. DHS (2018c).

136. ABS (2017).

137. Britt et al. (2016).

138. Piterman and Koritsas (2005).

**Table 8.1: Medical specialists in Australia 2017**

Specialty	N	Specialty	N
Addiction medicine	175	Palliative medicine	338
Anaesthesia	4,997	Pathology	2,117
Dermatology	544	Physicians	10,243
Emergency medicine	2,136	Psychiatry	3,707
Intensive care medicine	904	Public health medicine	436
Medical administration	338	Radiation oncology	393
Obstetrics & gynaecology	1,993	Radiology	2,493
Occupational & environmental medicine	310	Rehabilitation medicine	516
Ophthalmology	1,018	Sexual health medicine	130
Paediatrics & child health	2,753	Sport & exercise medicine	122
Pain medicine	293	Surgery	5,882
<b>Total</b>			<b>41,838</b>

*Note: GPs are also classified as a specialist category of medical practice and complete postgraduate qualifications for this purpose. They are separated here because they provide general rather than specialist care.*

*Source: Medical Board of Australia (2017).*

## 8.2 Diagnostic services: imaging and pathology

Diagnostic information, including diagnostic imaging and pathology, is vital for managing and monitoring patients in primary care.

GPs can request diagnostic imaging from both public and private providers. Physiotherapists, nurse practitioners and some allied health professionals also have a limited capacity to order imaging.<sup>139</sup>

Many hospitals run their own radiology service. Some contract-out the service to private providers. It is unclear what proportion of this service is run by public and private providers. Hospital providers can receive requests from primary care practitioners.

The major companies in this sector, accounting for more than 39 per cent of the industry, are I-MED Network (17.7 per cent), Sonic Healthcare Limited (12.2 per cent) and Primary Health Care Limited (9.3 per cent). The remaining 60.8 per cent is made up of numerous smaller providers.<sup>140</sup>

In 2015 there were 14,728 diagnostic imaging practitioners in Australia; 87 per cent were medical radiation practitioners and 13 per cent were radiologists.<sup>141</sup> Medical radiation practitioners include radiographers, medical imaging technologists, nuclear medicine scientists and radiation therapists.

In 2016-17, 25 million diagnostic imaging services were provided to nine million patients (37.3 per cent of the population). The total benefits paid were \$3.5 billion, or around \$369 per patient.<sup>142</sup> About three-quarters of the patients were bulk-billed. The average out-of-pocket patient contribution was \$97.

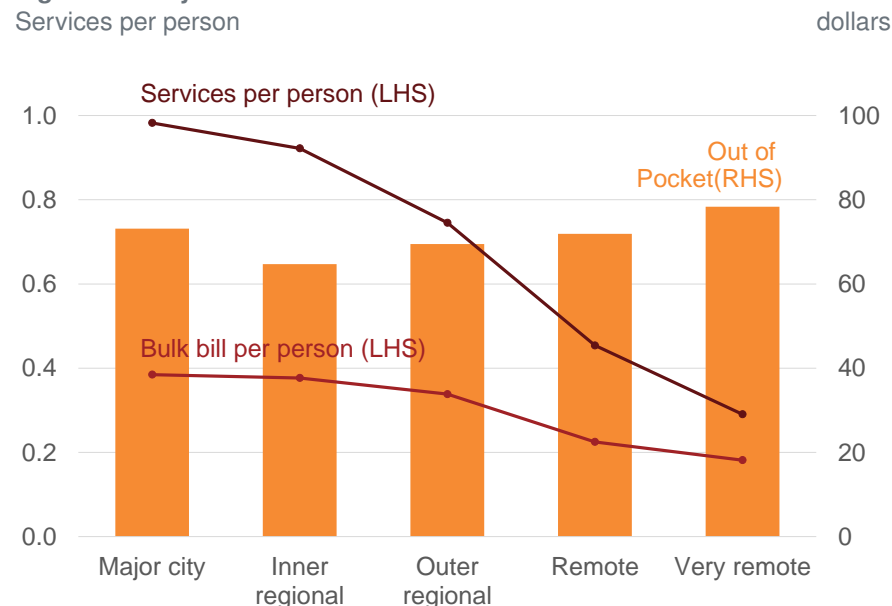
139. DHS (2018c).

140. IBISWorld (2018b).

141. DoH (2017a).

142. DoH (2017d).

**Figure 8.1: Out-of-pocket costs for specialist medical practitioners are highest in very remote area**



Source: DoH (2017d).

Pathology services have a similar structure to diagnostic imaging services. About 5500 establishments outside hospitals provide pathology services. The major providers, accounting for nearly 94 per cent of the market, are Sonic Healthcare Limited (44.4 per cent), Primary Health Care Limited (35.3 per cent) and Clinical Laboratories Pty Ltd (14 per cent).

GPs and other eligible primary care providers can order tests. About 60 per cent of services are provided privately and 40 per cent publicly.<sup>143</sup>

Most pathology services are funded by Medicare.<sup>144</sup> In 2016-17, about 135 million services were provided, at a cost of \$2.7 billion. Most (87.8 per cent) were bulk billed. The average out-of-pocket patient contribution was \$24.<sup>145</sup>

In 2013, pathology tests requested by GPs accounted for 70 per cent of MBS pathology services and generated 67 per cent of pathology costs to Medicare.<sup>146</sup>

About half the Australian population have a pathology test each year.<sup>147</sup> High proportions of diagnostic imaging and pathology services are bulk-billed. Out-of-hospital pathology and imaging are covered by the 'Extended Medicare Safety Net' which, once a capped amount is reached, will pay for 80 per cent of future out-of-pocket costs (that are eligible).

The high proportion of diagnostic services provided by large corporations calls into question whether fee-for-service is the appropriate way for public funding to be provided. Alternative funding methods, such as

tendering, should be considered, because they could save money for the Commonwealth and reduce out-of-pocket expenses for patients.<sup>148</sup>

### 8.3 Home care and support

Home care and support is provided to people who need help to live at home independently. Services include community nursing, allied health, respite care, food services, domestic and community assistance, social support and home modification. The Commonwealth Home Support Program provides basic services for people to remain in their own home. The Home Care Packages Program is for people with greater needs.<sup>149</sup>

In 2015-16 the Commonwealth spent \$3.8 billion on home care and support, mainly for people aged 65 and over, Indigenous people aged 50 and over, people aged 50 and over on low incomes, and people who are homeless or at risk of becoming homeless. Home care is an important component of aged care. Total aged care expenditure was \$16.2 billion, with consumer contributions of \$4.7 billion.<sup>150</sup> The numbers are expected to grow rapidly as the population ages.

People access the Commonwealth Home Support Program and Home Care Packages through Regional Assessment Services which determines support needs, service levels and allocations, and contribution fees. In 2015-16 about 1 million people received Home Support, at a total cost of \$2.2 billion, and about 88,000 people received a Home Care Package, at a total cost of \$1.5 billion.

The Commonwealth regulates supply by capping the number of packages. Available packages are allocated to individuals, who then

---

143. Wallace et al. (2011).

144. DoH (2016a).

145. DHS (2018c).

146. Wallace et al. (2011).

147. ABS (2017).

---

148. Duckett et al. (2016).

149. In 2015-16 Victoria and Western Australia continued to provide services through the Home and Community Care arrangements. The Commonwealth was progressively assuming responsibility from the states.

150. ACFA (2017).

direct the package to the provider of their choice. In 2015-16 about 40 per cent of people who were eligible had to wait for more than three months to get their allocated Home Care Package.

Home care and support increases significantly for people over the age of 85. Women, particularly those over 85, are more likely to need home care and support because they tend to have had lower lifetime earnings. People who live in small rural communities can find it difficult to access home care and support.<sup>151</sup>

In 2015-16, 496 providers delivered Home Care Packages, and 1,686 delivered Home Support.<sup>152</sup> The larger agencies include Bolton Clarke, Silver Chain, Uniting Care, Catholic Health Care, and Anglican Care. About 130 agencies provide residential care, Home Support, and Home Care Packages.

In 2016 about 130,000 people worked in home care and support. Of these, 86,000 were direct care workers.<sup>153</sup> Nurses are the largest occupational group of direct care workers (see Table 8.2). There is limited information on the types and quality of services these professionals deliver in homes and residential facilities.

The Commonwealth subsidises costs for people who cannot pay full service fees. Annual and lifetime caps are determined based on capacity to pay. Efforts are made to ensure Indigenous Australians and people from culturally and linguistically diverse backgrounds have equitable access to care. But there is limited data available on whether these measures are truly improving access. It is concerning that the number of Indigenous people in home care declined from a peak of 2035 in 2013 to 1705 in 2016. Those numbers would generally be expected to rise, because the population is ageing.

151. Ibid.

152. Ibid.

153. Full-time equivalent of 44,087 workers.

**Table 8.2: Direct care workers in home support and home care**

Occupation	Full-time equivalent	Per cent
Nurse practitioner	41	0.1
Registered nurse	4,651	10.5
Enrolled nurse	1,143	2.6
Community care worker	34,712	78.7
Allied health professional	2,785	6.3
Allied health assistant	755	1.7

Source: ACFA (2017).

Residential care facilities are usually serviced by visiting health professionals, including GPs and physiotherapists. There is limited information on the quality of care these providers deliver. And there is insufficient integration between primary care services and the home and care support sector.

#### 8.4 Alcohol and drug services

Alcohol and drug services are provided by private, government and not-for-profit specialised treatment services, as well as hospitals, mental health services, prisons and accommodation services.<sup>154</sup>

The proportion of government and non-government agencies varies across jurisdictions. New South Wales has a high level of government provision (over 70 per cent). Nationally, that figure is about 40 per cent. Most agencies (78 per cent) are located in major cities or inner regional areas.

In 2015-16 there were about 800 alcohol and other drug treatment agencies providing around 200,000 treatment episodes to about 134,000 people (0.5 per cent of the population). Two-thirds of service

154. AIHW (2017g).

users were male. Aboriginal and Torres Strait Islanders, and people in their 30s and 40s, were comparatively high service users.<sup>155</sup>

Alcohol was the most common reason for seeking treatment, but about half the service users had multi drug problems. Amphetamines and heroin are used more in major cities. Cannabis and alcohol are used more in remote and outer regional areas.

Counselling is the most common form of treatment. Depending on the person's problem, further services are often provided, including withdrawal management, pharmacotherapy, case management and rehabilitation.

Self or family referral is the most common pathway to treatment (36 per cent). About a quarter were referred by a health service, and a further 18 per cent were referred by police or court diversion programs. About 60 per cent of people receiving services complete their treatment as expected.<sup>156</sup>

In 2012-13 total health expenditure on alcohol and other drug treatment services was estimated at \$1.2 billion. About half was provided by the states and territories, 30 per cent by the Commonwealth and the rest from private sources.<sup>157</sup>

There is limited information on access to and success of drug and alcohol programs. It is unclear how drug and alcohol care is coordinated and integrated with a patient's other health needs. For instance, it is unclear whether GPs or other health providers are routinely notified or updated when a patient has been admitted or discharged from a drug and alcohol program, or how these services coordinate the person's ongoing monitoring and care.

---

155. Ibid.

156. Ibid.

157. Ritter et al. (2015).

## 8.5 Mental health services

Primary care services frequently provide mental health services and interact with specialised mental health services. Specialised mental health services are provided in residential and community settings, including to hospital outpatients. Service providers include public and private hospitals, community mental health care and residential services. The states and territories provide most public specialised mental health services.

In 2014-15 there were about 12,000 beds and residential places for people with a mental illness, across government and non-government facilities. About 1600 specialised mental health facilities provided services. About a quarter of these provided overnight care. They employed about 31,000 full-time equivalent staff, most of whom were nurses (51 per cent) or allied health professionals (18.7 per cent). Private psychiatric services employed a further 3,000 staff.

In 2015-16 there were about 270,000 mental health-related emergency presentations in public hospitals. There were about 244,000 overnight mental health-related hospital admissions in public and private hospitals. The average stay was 16 days, most commonly for depression or schizophrenia. A further 9.4 million services were provided to 410,000 people in state and territory community mental health care services.

In 2015-16 about 12.4 per cent (or 18 million encounters) of GP care was mental health-related and there were 3.2 million specific mental health services for 1.8 million patients. Depression, anxiety, sleep disturbance, acute stress and schizophrenia were the most common mental health conditions managed by GPs.

GPs can use a number of Medicare items relating to mental health, including the development of a mental health treatment plan. These plans include a comprehensive assessment of a patient's condition,

treatment and goals of management.<sup>158</sup> In 2016-17, almost 1.7 million services were provided relating to mental health treatment plans.

Mental health services are funded by the Commonwealth, the states and privately. In 2014-15 the states and territories spent \$5.2 billion on mental health services, \$2.2 billion on public hospital services and \$1.9 billion on community mental health.<sup>159</sup>

The Commonwealth spent \$3 billion. Medicare provided about a third, about 20 per cent was spent on pharmaceuticals, and the remainder came from a range of Commonwealth health and social services programs. Medicare-funded mental health services are provided by GPs, psychiatrists and psychologists.

There is limited information on access to mental health services or how care is coordinated among the various providers.

## 8.6 Disability services and the NDIS

Almost one in five Australians live with a disability. Of these, a third (or 1.4 million) have a severe or profound core activity limitation.<sup>160</sup> Most people with a disability live in the community. Primary health care services are often responsible for their ongoing care. This care is delivered by many of the providers that have already been discussed in this report, but also by specialised services and primary carers.

There are an estimated 2.7 million informal carers in Australia. A third of them are primary carers. And a third of those primary carers spend 40 or more hours a week in caring roles.

Funding comes from the National Disability Insurance Scheme (NDIS) and disability support payments. NDIS participants “receive

---

158. DoH (2012b, Section 2.1).

159. AIHW (2017h).

160. AIHW (2017i).

an individualised plan of the support . . . and a funding package to purchase this support”.<sup>161</sup> Once the NDIS is fully implemented, it is estimated the scheme will support about 11 per cent of people who have a disability, and 64 per cent of people with severe or profound disability.

States and the Commonwealth spent \$4.7 billion on disability services in 2015-16. This number is expected to rise to \$24 billion by the time the NDIS roll-out is complete.<sup>162</sup>

One in five people with a disability have delayed seeing or did not see a GP due to cost.<sup>163</sup> One in six have reported discrimination by health staff. Two in five have reported difficulty in accessing medical facilities.

The NDIS has lowered financial barriers for some, but a range of environmental and socio-cultural barriers remain for many people with a disability.

## 8.7 Coordination of complex care

About 20 per cent of Australians have ongoing complex care needs. These include people with two or more chronic conditions who need services from GPs and specialist services such as mental health services and alcohol and drug services. Some also need home care and support services.<sup>164</sup>

GPs are regarded as the gate-keepers and coordinators of patient care, yet ABS data show that patients identify GPs as the main coordinator of their care only 60 per cent of the time.<sup>165</sup> And survey data from the US-based private foundation, the Commonwealth Fund, suggest

---

161. Ibid.

162. Klapdor and Arthur (2016).

163. AIHW (2017j).

164. Hambleton (2016).

165. Osborn et al. (2017).

patients and GPs both identify care coordination as a problem at times (see Chapter 10).<sup>166</sup>

In the Commonwealth Fund survey, 36 per cent of elderly Australians with ‘high needs’ reported care coordination problems.<sup>167</sup> In surveys of primary care physicians, 15 per cent reported that their practice was not equipped to manage patients with multiple chronic conditions. Even higher proportions lacked confidence in their practices’ capacity to manage patients with dementia (54 per cent) and with severe mental health problems (66 per cent).

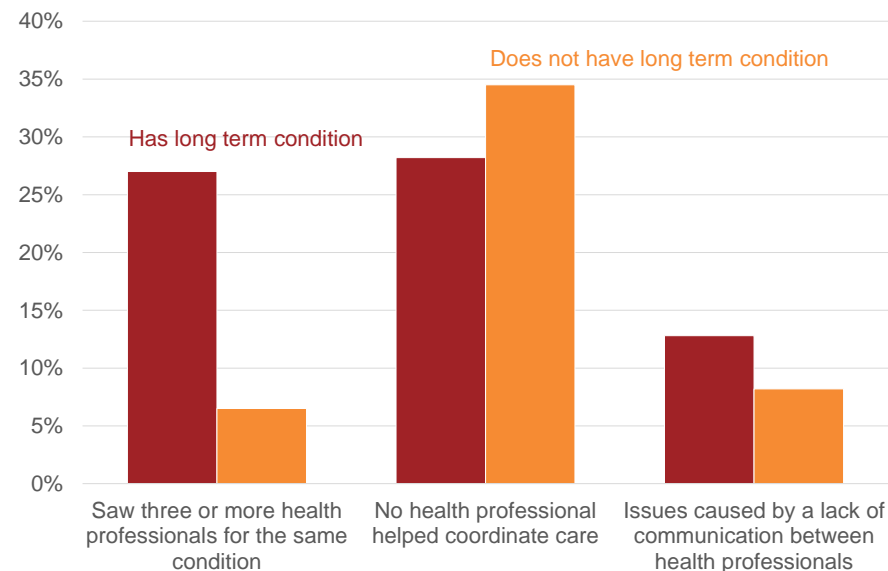
In 2016-17, about 17 per cent of Australians saw three or more health professionals for the same condition.<sup>168</sup> Approximately 30 per cent of them reported that no health professional assisted in the coordination of their care. And communication between providers caused problems for 12 per cent of respondents to the ABS patient experience survey.

As Figure 8.2 shows, Australians with long-term health conditions are much more likely to require coordination between health professionals and to have issues caused by poor communication between providers. More than 25 per cent report that no health professional helped to coordinate their care.

Australians with long-term health conditions are about four times more likely to visit an emergency department more than four times a year, seven times more likely to visit a GP more than 12 times a year and twice as likely to visit a specialist more than four times a year, compared to people without a long-term condition. Better coordination of care could significantly improve their health and quality of life.

Partly in response to perceived weaknesses in standard methods of care coordination for patients with complex care coordination needs,

**Figure 8.2: Lack of care coordination is a problem for many Australians with long-term health conditions**



Source: ABS (2017).

166. ABS (2017).

167. Osborn et al. (2017).

168. Ibid.

public hospitals are establishing enhanced outreach services aimed at reducing the risk of hospital admissions and re-admissions for such patients. Medibank has also established a range of care coordination services under the CareComplete banner, and in addition to providing services to its members it contracts with state governments to provide services more generally.

### **8.8 Acute services in the home**

More acute services are now being provided in patients' homes under the auspices of public hospitals – where the service is called 'Hospital in the Home' – and private health insurers, such as the 'Medibank at Home' initiative. Patients in Hospital in the Home programs are counted as hospital inpatients.

Initially these services enabled earlier discharge of patients from hospitals providing home-based rehabilitation or follow-up nursing care. In recent years home-based acute care has been used as an alternative to hospital admission, including for palliative care and renal dialysis.

Patient relationships with primary care providers in these programs vary; some patients are managed by a GP, some by hospital staff, and others have shared care.

## 9 Primary care policy and organisation

The Commonwealth is primarily responsible for primary care. It is trying to create more integrated primary care, particularly through Primary Health Networks. It is also hoping to coordinate primary care better with hospitals through the National Health Reform Agreements with the States. Private health insurers also pay for a number of primary care services, particularly dentistry and optometry.

### 9.1 Strategic framework for primary care

In 2013 the Commonwealth and the states agreed that the states should have the main responsibility for managing the public hospital system, and the Commonwealth should have the main responsibility for managing primary care.<sup>169</sup>

The Commonwealth developed a National Primary Health Care Strategic Framework, which was adopted by all Australian jurisdictions.<sup>170</sup> The Framework aims to improve the health of all Australians, particularly the most disadvantaged (see Box 1).

The Framework placed GPs in a pivotal role in the health system, promoted a broad view of primary health care, and put a greater focus on prevention, improved services to disadvantaged groups, and better management of chronic disease. In particular it emphasised the importance of developing more integrated service delivery across both primary care and specialist services.

#### Box 1: The National Primary Health Care Strategic Framework

##### *Vision:*

A strong, responsive and sustainable primary health care system that improves health care for all Australians, particularly those who currently experience inequitable outcomes, by keeping people healthy, preventing illness, reducing the need for hospital services and improving management of chronic conditions.

##### *Strategic outcomes:*

Building a consumer-focused and integrated primary health care system

Improving access and reducing inequity

Increasing the focus on health promotion and prevention, screening and early intervention

Improving quality, safety, performance and accountability

The Framework identified challenges for primary care, including: complex funding, reporting and governance arrangements; poor coordination of service planning and delivery with other sectors; workforce shortages; the growing prevalence of chronic disease; and inequitable outcomes for disadvantaged groups such as Indigenous people, people on low incomes and people in rural areas.

169. COAG (2011).

170. Standing Council on Health (2013).

## 9.2 Commonwealth initiatives in primary care

In 2015, after a review of organisational arrangements for primary care,<sup>171</sup> the Commonwealth established 31 independently governed Primary Health Networks. The Commonwealth's program guidelines for Networks are broadly consistent with the intent of the Strategic Framework, but put more focus on introducing integrated care for people with chronic and complex conditions to reduce hospital admissions (see Box 2).

The Networks have established local, GP-led Clinical Councils of health professionals to advise Network boards on local needs, and Community Advisory Committees to ensure the views of members of the local community are heard.

The Primary Health Networks generally do not deliver services. Instead they commission medical and health services from providers in their region. The Networks are expected to develop collaborative relationships with specialist health services, including hospitals, mental health and alcohol and drug services.<sup>172</sup>

The Commonwealth has focused Network activity on:

- potentially preventable hospital admissions
- childhood immunisation rates
- cancer screening rates, and
- mental health treatment rates

### Box 2: Primary Health Networks

#### Objectives:

Increase the efficiency and effectiveness of medical services for patients, particularly those at risk of poor health outcomes

Improve the coordination of care to ensure patients receive the right care in the right place at the right time

#### Activities:

Planning and analysis of health needs

Practice support for GPs to improve care, reduce preventable hospital admissions, improve safety and quality, and adopt e-health systems

Commission services for local groups most in need, including those with chronic conditions

---

171. Horvath (2014).

172. DoH (2017e).

Other Commonwealth reforms that may have a significant impact on primary care include the rolling review of the Medicare Benefits Schedule<sup>173</sup> payment scheme and the redesign of the Practice Incentives Program for general practice.<sup>174</sup>

### National Health Reform Agreements and primary care

Commonwealth and state cooperation and coordination on primary care has been formalised through the National Health Reform Agreement<sup>175</sup> and its revised schedules.<sup>176</sup> The Agreements emphasise reforms to reduce avoidable hospital admissions. In particular they propose that the Commonwealth and the states negotiate separate agreements on coordinated care of people with chronic and complex conditions, to reduce avoidable demand on public hospitals (see Box 3).

As part of the Agreements, the Commonwealth has created the Health Care Home model for selected Primary Health Networks. These Homes will train general practices and Aboriginal Medical Services in the care and management of patients with multiple and complex chronic conditions, and help coordinate patient enrolment and payment arrangements.<sup>177</sup>

### 9.3 Private health insurance and primary care

Private health insurance provides limited coverage for primary care services. General treatment cover (commonly known as ancillary or extras cover) covers a range of non-medical services, including dental, physiotherapy, and chiropractic care.

---

173. DoH (2017f).

174. DoH (2016b).

175. COAG (2011).

176. COAG (2017).

177. DoH (2018d).

#### Box 3: Bilateral agreements on coordinated care

The Agreements aim to introduce jurisdiction-specific, coordinated-care reforms to reduce avoidable hospital admissions for patients with chronic and complex conditions.

The Agreements say reforms should be:

Patient-centred, with a focus on empowering the estimated 20 per cent of the population with chronic and complex conditions

Evidence-based, targeting services to patients with multiple chronic and complex conditions

Consistent with whole-of-system efforts to improve patient health outcomes

Flexible and sustainable, so services are delivered efficiently across jurisdictions and in regional areas, while maintaining continuity of care.

Common core elements of Agreements include data collection and analysis, care coordination, and system integration.

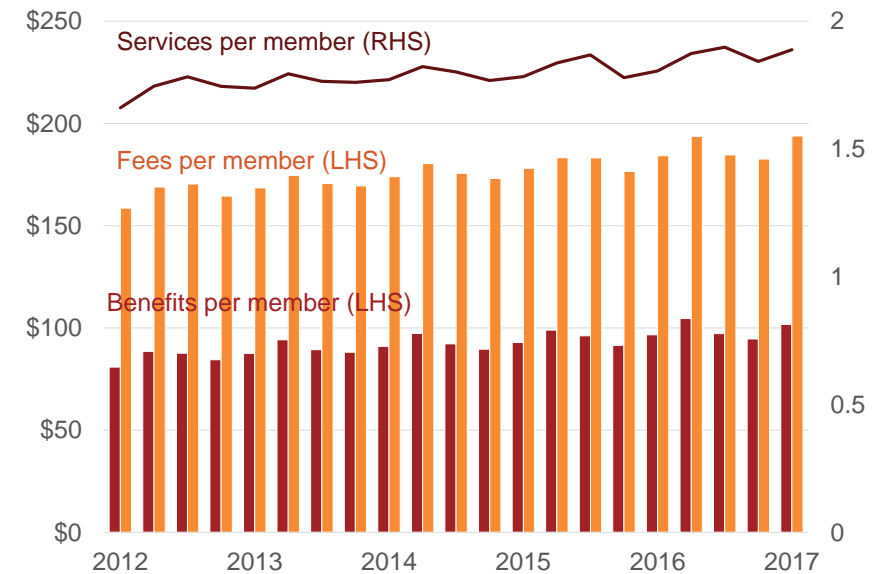
As of December 2017, 12.3 million Australians (50 per cent of the population) held general treatment cover. More members are female (52 per cent) and aged below 65 (85 per cent). Membership has increased, in line with population growth, by 18.5 per cent in the past decade.

In the quarter ending December 2017, 23.2 million services were provided, equating to \$1.25 billion in benefits and \$2.4 billion in fees, an average of 1.9 services per member, \$101.70 in benefits and \$197 in fees. Some people have much higher use than the average.

Figure 9.1 shows that over the past five years, services, benefits and fees per member have increased by 13, 26 and 22 per cent respectively.

Dental and optical services have been the largest component of general benefits over the past decade. Together they account for more than 70 per cent (about \$930 million) of total benefits. The other major uses are for chiropractic, physiotherapy and natural therapies.<sup>178</sup> The top five categories together account for 87 per cent of services and 91 per cent of benefits paid. Premiums have grown by 4-to-6 per cent a year over the past five years.<sup>179</sup>

Figure 9.1: Members are using private health services more



Source: APRA private health insurance statistics.

178. APRA (2017).

179. DoH (2017g).

## 10 The challenges facing primary care

The primary health care sector is a large, comprehensive and important part of Australia's health system. But it has significant problems. Access to some services is limited. Some care is poorly integrated and coordinated, especially for people with complex needs. Information on patient characteristics and outcomes is fragmented and incomplete. System governance and management is weak, and there are no independent, national, government-sponsored institutions to guide the development of primary care. This chapter reviews these issues.

### 10.1 Primary care is important

Australian primary care includes a broad and comprehensive range of services, including general practice, pharmacy, allied health, maternal and child and women's health.

Primary care is the most frequently used part of the health system. A quarter of total health expenditure goes to primary care (excluding pharmacy).

More than 20 million Australians use more than 400 million primary care services each year – most often GPs, diagnostic and pharmacy services. These services are provided by more than 90,000 staff working in 20,000 organisations.

### 10.2 Access to primary care services is problematic

Access to primary care services varies depending on the type of service and where the patient lives. Medicare and the Pharmaceutical Benefits Scheme are universal, uncapped entitlement programs based on fee-for-service payments to individual providers. Services are widely distributed across Australia, and most people can access services when they need them.

But out-of-pocket costs are a significant issue for people using Medicare and PBS-funded services, particularly people on low incomes. Patients make out-of-pocket payments for only about 15 per cent of GP services, but a third of patients incur out-of-pocket costs for at least one GP service each year (see Chapter 2).

Out-of-pocket payments are much more frequent and costly for people seeing specialist medical practitioners. Around 70 per cent of specialist medical services require patients to make a co-payment, and average co-payments are about \$75 per visit. A mandatory co-payment is required for all pharmaceuticals funded by the Commonwealth. Between 4 per cent and 7 per cent of patients delay or do not get necessary care because of the cost (see Chapters 2, 3, and 9).

Access to dental services is an even more serious problem. Patients pay for most dental services themselves, and around 18 per cent of people delay or do not get necessary services. The problem is much worse for people on low incomes, who often rely on public dental services and have to wait years to get access. Overall, about one-in-four Australians do not go to the dentist as often as recommended (see Chapter 6).

### 10.3 Primary care is comprehensive but fragmented

The overwhelming majority of primary care organisations are small. Most are private GP, pharmacy, dental and allied health practices. These practices have limited organisational capacity to manage critical issues such as quality assurance, staff and service development, clinical information systems, administrative systems, and relationships with specialist services.

### 10.3.1 Primary care is poorly coordinated

Primary care services are expected to coordinate with one another and with specialist services. This is difficult for small organisations funded largely on a fee-for-service basis.

An estimated 80 per cent of primary care users do not require extensive service coordination.<sup>180</sup> This group is generally younger, wealthier, and healthier. They use primary care services to monitor their health, or when they have a specific health need. Apart from dental services, primary care works reasonably well for this group.

The estimated 20 per cent of primary care users who do require service coordination are likely to be older, poorer and have two or more chronic and complex conditions. This group is more likely to need a range of primary care and specialist services, including general practice, specialist medical care, allied health and nursing, home care and support, mental health services, alcohol and drug services, disability services and hospital care.

GPs and medical specialists take primary responsibility for care coordination in about 80 per cent of cases. But the fragmentation of services, governance and funding arrangements, and the lack of consolidated data, makes this a complex task (see Chapters 9 and 11).

### 10.3.2 Primary care services are not well organised to provide integrated care

Primary care services, including GPs, pharmacies, dental practitioners and allied health, have only limited capacity to coordinate services for people with complex and chronic care. They are hampered by their scale, funding models, inadequate systems development and limited organisational support.

---

180. Hambleton (2016); and AIHW (2016b).

Coordinated, team-based care is central to improving services for people with complex needs. There is now considerable interest in the patient-centred ‘medical home’ model of care.<sup>181</sup> But only larger, multidisciplinary agencies such as extended care organisations and community health services have integrated primary care teams. GPs and other primary care providers rely on traditional referral and reporting arrangements between primary care providers and specialists.

Similarly, it is difficult for small, private practices to provide after-hours care and rapid response to urgent care needs in the patient’s home. Patients often have to rely on specialist locum services or hospital accident and emergency departments.

There has been some consolidation of general practice, but only about 15 per cent of general practice is corporatised (see Chapter 3). Corporatisation has reduced costs through administrative and purchasing efficiency, increasing market share, vertical integration with pathology and specialist services, and profit maximisation.<sup>182</sup> But development of multidisciplinary organisations with capacity to provide comprehensive integrated care for people with complex and chronic needs has not been a priority.

The scope and reach of extended care organisations, including major home care and home nursing providers, has expanded recently. These organisations put greater emphasis on providing multidisciplinary care for people with complex needs living at home and in the community.

Internationally, particularly in the United States and England, there is significant interest in the development of ‘accountable care’ organisations.<sup>183</sup> Such organisations take overall responsibility for the quality, outcomes and cost of health services for an enrolled population of

---

181. The Medical Home (2012).

182. DoHA (2012).

183. Ham (2018); and Alderwick et al. (2018).

patients. Typically, these organisations coordinate the services of a network of primary care and specialist providers for their enrolled population, using a combination of agreed care plans, performance information, incentives and agreements between providers.

Accountable care organisations strike risk-sharing agreements with funders for the cost of providing services for their patient population. Where costs are less than expected, accountable care organisations (and their network of providers) share in the savings with the funder.

Early indications suggest accountable care organisations improve the quality of care and reduce costs compared to usual practice.<sup>184</sup>

But in Australia, there has been only limited interest in accountable care organisations. There have been some trials of some models, including the recently introduced Health Care Home trial (see Chapter 9). Most of these trials have been narrowly focused on general practice.

General practices do not have the organisational capacity to develop, coordinate and manage integrated service delivery across a network of providers for people with complex care needs. In the UK, the House of Lords Select Committee on the future of the National Health Services has concluded that the small business model for general practice is no longer fit for purpose and that alternative models should be considered.<sup>185</sup> But in Australia, there has been little call for, or exploration of, alternative models.

#### 10.4 Primary care should have a bigger role in prevention

A high proportion of people who use primary care services have elevated, preventable risk factors that increase the probability of future chronic disease. Two thirds of Australians are overweight or obese, one in four men and one in ten women drink more alcohol

than recommended, and 15 per cent of adults are daily smokers.<sup>186</sup> The overwhelming majority of at-risk people have regular contact with primary care services, but their risk levels don't change much.

The recent focus of primary care reform has been on the need to improve service integration and continuity of care for those with chronic and complex conditions. There has been much less attention on the role of primary care in prevention and early intervention.

Where prevention has been promoted it has focused on improving childhood immunisation, and screening and health assessments for older people and people from Aboriginal and Torres Strait Islander backgrounds. Social and behavioural issues associated with obesity, substance abuse and violence have received less attention.

For the Commonwealth, prevention in primary care has focused on the development of specific fee-for-service Medicare payments for GPs. Health assessment item numbers, as well as the expansion of standard consultations to include the provision of 'appropriate preventive health care', allows GPs to claim for time spent on prevention and health promotion.

The BEACH survey reports that GPs provide 'advice/education', 'counselling/advice on nutrition/weight' and 'smoking counselling/advice' at a rate of 6.3, 3.8 and 0.6 per 100 patient encounters.<sup>187</sup> This is useful data but does not indicate whether these are appropriate rates. Nor does it tell us about the quality and outcomes of these behavioural interventions.

Previous Grattan Institute work suggests many patients who present to GPs with key risk factors do not have these factors addressed.<sup>188</sup> Yet the history of preventive health campaigns, such as advocating the

---

184. Medpac (2016).

185. Lord Patel et al. (2017).

---

186. ABS (2015).

187. BEACH (2017).

188. Swerissen et al. (2016).

wearing of seat-belts in cars or quitting smoking, suggests coordinated and well-funded efforts can produce big gains (for example, the proportion of Australian adults who smoke has fallen by 53 per cent since 1977).

These initiatives require action in a variety of community settings, and strategies for targeting relevant minority and at-risk groups.<sup>189</sup> It is not clear that general practice, or any other element of the primary health care system in Australia, is equipped to provide preventive care in a coordinated manner. Nor is there any systematic, national, government-sponsored approach to developing a comprehensive role for primary care in preventive health care.

Primary care is part of the broader primary health care landscape and should have an important role working with other organisations such as local government to improve the health of communities. The main focus of primary care is providing care to individuals, and personal prevention. But the neglect of broader primary health care makes the job of primary care practitioners that much harder.

### 10.5 Systems constraints

A number of system constraints have limited the development of primary care services. These include data and information gaps, weak system management, and a failure to establish national institutions to guide the development of service models, data collection, funding and payment systems, quality improvement and reporting and accountability.

#### 10.5.1 Data and information gaps

There is much less data and information on primary care in Australia than on hospital performance. There is no comprehensive, national

---

189. Peckham et al. (2015, Chapter 5).

data framework for primary care. We know little about the services that are provided, who they are provided for, the quality and efficiency of the services, or their success.

The availability and quality of data varies between different elements of the primary care system. There is good data on the workforce composition of doctors, pharmacists, dentists and some of the allied health disciplines. But there is less data on other professions.

Medicare and PBS statistics provide information on the number and funding of certain pharmaceuticals and consultation items in primary care, but they are inadequate for assessing the quality of these services, and they don't cover providers who do not claim from Medicare. General practice uses a range of electronic patient management systems. These could provide comprehensive information on the performance of general practice, including prescribing and referrals, but there is no comprehensive system of data extraction and reporting. As a result, information on patient characteristics and outcomes is particularly sparse. The ABS Patient Experience surveys provide only limited information on people's perceptions of GPs, dentists and medical specialists.

There is also little consolidated data on most services that are run at a state level, such as drug and alcohol services and maternal and child health. There is no national framework for collating and reporting these data.

More broadly, there is no national framework for collecting and evaluating the performance of primary care services in Australia.

#### 10.5.2 Weak system management

System management for primary care is weak. Despite formal intergovernmental agreement that the Commonwealth has lead responsibility,

the Commonwealth and the states continue to fund and regulate primary care services separately.

There is little regional planning and coordination of primary care services, even for services funded under programmatic rather than fee-for-service funding. The allocation and distribution of Commonwealth Medicare-funded general practice, allied health and nursing services are not required to take account of population needs. Providers have the right to locate their practice as they choose. The Australian Medical Association has strongly resisted proposals to allocate provider numbers on the basis of need.<sup>190</sup>

Where the Commonwealth funds agencies, it does so in tightly defined 'silos'. State-funded services have to adapt whenever a new Commonwealth silo is created.

There is no agreed policy framework between the Commonwealth and the States for the range, scope and eligibility of primary care services, nor for their funding and regulation or governance and management. It is common for both levels of government to fund the same service types for the same populations, with little reference to one another.

Community mental health services, alcohol and drug services, community health services and general practices are required adhere to different service models, funding arrangements and accountability and reporting requirements. This leads to confusion, duplication and inefficiency.

There is no overarching set of agreements between the states and territories to define the role of Primary Health Networks. PHNs have limited budgets, authority, and capacity to plan, coordinate and influence the development of primary care. As a result, in practice, the primary care system is largely unmanaged.

There are currently no national institutions to guide the development of primary care in Australia. This makes it more difficult to develop and implement systematic reforms to primary care.

---

190. AMA (2014).

## 11 Conclusion: Primary care policy is a renovator's opportunity

Primary care services and organisation in Australia need to be reformed. The Commonwealth and the states have made some progress through the National Health Reform Agreement. But these reforms are limited and piecemeal compared with the major reforms introduced in areas such as home care and support, and disability services.

Several recent reports (see Appendix) have made recommendations to improve primary care. The Productivity Commission, for example, says that more integrated, regionally flexible care is required if the needs of high-cost health users with complex and chronic conditions are to be met.<sup>191</sup>

The Commission suggests establishing regionally based prevention and chronic condition management funds to improve population health, manage chronic conditions and reduce hospital admissions.

It says data collection, reporting and presentation needs to be improved, so patients, providers and researchers can get better-quality information. The Commission suggests moving beyond fee-for-service funding, to stimulate innovation in service delivery. And it recommends reconfiguring health care delivery around the principles of patient-centred care.

Other reports, including by Grattan Institute,<sup>192</sup> have argued that integrated care to improve services for people with chronic and complex conditions will require much better data and information on the characteristics of patients, the services that are provided for them and the outcomes that are achieved.

---

191. PC (2017b).

192. Hambleton (2016); Horvath (2014); Swerissen et al. (2016); and Duckett et al. (2017).

We have also argued that regional governance for primary care needs to be strengthened by renegotiating the National Health Reform Agreement between the Commonwealth and the states and introducing trilateral agreements between the Commonwealth and the states for each of the 31 Primary Health Networks.

### 11.1 Future directions

This mapping study of primary care suggests that variable access, poor service integration for complex conditions, and inadequate risk-factor prevention are major problems that need to be fixed. These problems are exacerbated by a range of systems constraints, including data and information gaps, weak systems management and the absence of national institutions to guide the development of primary care.

The Commonwealth and the states need to develop a comprehensive national primary care policy framework that is implemented through the National Health Reform Agreement. The framework should aim to reduce access barriers, prevent or at least reduce risk factors for chronic disease, and enhance the quality of care for people with chronic and complex conditions (see Box 4 on the next page).

### 11.2 Systems reforms

Systems reforms are also needed to improve the quality, outcomes and efficiency of primary care in Australia. Primary Health Networks should be strengthened, so they have the authority to plan, coordinate and manage regional primary care services jointly with the states and territories. This will require changes to their governance and accountability; it will require tripartite agreements between the Commonwealth and the relevant state or territory for each Primary Health Network.

Much better data and information on patient characteristics, service activity and service outcomes is needed. Primary care must have a national data set and performance framework.

In line with international trends, new types of service organisations, including accountable care organisations, should be considered to deliver better models of care for Australians. Payment and funding reform is needed, particularly for people with ongoing complex needs. And blended payment systems, along with pooled funding models to allow more flexibility between specialist and primary care services, should be investigated.

#### **Box 4: Priorities for primary care**

##### *Priority aims*

Reduce barriers to accessing services, including out-of-pocket costs, capacity constraints and geographic maldistribution of services

Increase emphasis on prevention and early intervention to reduce the incidence and prevalence of chronic disease

Improve the quality of care and support and the efficiency of services for people with chronic and complex conditions living in the community

##### *Priority systemic changes*

Establish Agreements between the Commonwealth and state governments and Primary Health Networks to improve system management

Review and strengthen Primary Health Networks to ensure they have the authority to develop and manage regional primary care systems

Establish a national data set and performance framework for primary care

Develop new funding, payment and organisational arrangements for integrated care, particularly for people with complex needs

Adopt the overarching principles of universality, comprehensiveness, localism, integration and patient-centred care.

Set clear objectives and measures for access, prevention, quality, outcomes and patient experience.

## Appendix A: Summary of previous recommendations for primary care reform

Report	Governance and organisation	Service delivery	Outcomes, monitoring and evaluation
<i>Productivity Commission – Shifting the Dial 2017</i>	<ul style="list-style-type: none"> <li>• Create a Prevention and Chronic Condition Management Fund for PHNs and LHNs</li> </ul>	<ul style="list-style-type: none"> <li>• Reconfigure the health care system around the principle of patient-centred care</li> <li>• Embrace technology to change the pharmacy model</li> </ul>	<ul style="list-style-type: none"> <li>• Enhance cooperation within Australian governments to remove duplication and inadequate presentation of information and data</li> </ul>
<i>Grattan Institute – Building better foundations for primary care 2017</i>	<ul style="list-style-type: none"> <li>• Sign primary care agreements between the Commonwealth, states and Primary Health Networks</li> <li>• Reform fee-for-service funding over the long term</li> </ul>	<ul style="list-style-type: none"> <li>• Increase investment and make PHNs accountable for delivering effective and efficient primary care</li> </ul>	<ul style="list-style-type: none"> <li>• Increase investment in data collection for primary care</li> </ul>
<i>Primary Health Care Advisory Group – Better outcomes for people with chronic and complex health needs 2015</i>	<ul style="list-style-type: none"> <li>• Enhance local planning and collaboration</li> <li>• Restructure the payment system; consider upfront and quarterly bundled payments</li> <li>• Pursue opportunities for a joint and pooled funding base for enrolled populations</li> <li>• Require patients to contribute to the extent they can</li> </ul>	<ul style="list-style-type: none"> <li>• Better target services, based on need, for patients with chronic/complex conditions</li> <li>• Encourage patients to be actively engaged in their care</li> <li>• Establish Health Care Homes, support team-based care, and improve coordination of care</li> <li>• Support cultural change across the health system</li> </ul>	<ul style="list-style-type: none"> <li>• Require accreditation for Health Care Homes</li> <li>• Establish a national minimum data set for patients with chronic and complex conditions</li> <li>• Ensure that performance reporting and evaluation flows throughout that system and that evaluation is integrated into all reforms</li> </ul>

Report	Governance and organisation	Service delivery	Outcomes, monitoring and evaluation
<i>Horvath – Review of Medicare Locals 2014</i>	<ul style="list-style-type: none"> <li>● Develop PHOs to replace Medicare Locals</li> <li>● Ensure flexibility to reflect regional variations</li> <li>● Engage with all elements of the health system for development (public, private, Indigenous, aged care and NGOs)</li> <li>● Establish strong skills-based regional boards</li> </ul>	<ul style="list-style-type: none"> <li>● Reinforce GPs as the cornerstone of integrated primary health care</li> <li>● Require PHOs to facilitate and purchase services, but not to actually deliver services unless there is demonstrable market failure, significant economies of scale or an absence of services.</li> </ul>	<ul style="list-style-type: none"> <li>● Align PHO performance indicators with national priorities and contribute to a broader primary health care data strategy</li> </ul>
<i>Grattan Institute – Chronic failure in primary care 2016</i>	<ul style="list-style-type: none"> <li>● Strengthen the role of PHNs. Create service agreements with PHNs, LHNs and the states.</li> <li>● Give PHNs responsibility and authority for managing regional systems</li> <li>● Increase the role of payments which encourage integrated care (e.g. risk adjustment for chronic disease items). Shift to a blended payment model</li> <li>● Strengthen innovation and development.</li> </ul>	<ul style="list-style-type: none"> <li>● Improve implementation of evidence-based care through use of care pathways</li> </ul>	<ul style="list-style-type: none"> <li>● Improve measurement and target-setting (e.g. by benchmarking for quality of care and outcomes of management of patients with chronic disease)</li> <li>● Agree on a set of national indicators to track progress on improving management of specific chronic conditions</li> </ul>

Report	Governance and organisation	Service delivery	Outcomes, monitoring and evaluation
<i>Grattan Institute – Access all areas 2013</i>		<ul style="list-style-type: none"> <li>● Build primary health care teams. Keep GPs at the centre but give them much better support.</li> <li>● Change the role of pharmacists: increase their capacity to give repeat prescriptions, administer vaccinations and help manage chronic care</li> <li>● Increase the use of physician assistants, who practice care under the direct supervision of doctors</li> </ul>	

## Bibliography

- ABS (2015). *National Health Survey: First Results, 2014-15*. Cat. No. 4364.0.55.001. Australian Bureau of Statistics. <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4364.0.55.001~2014-15~Main%20Features~Smoking~24>.
- \_\_\_\_\_ (2017). *Patient Experiences in Australia: Summary of Findings, 2016-17*. Cat. No. 4839.0. Australian Bureau of Statistics. <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4839.0>.
- ACFA (2017). *Fifth report on the Funding and Financing of the Aged Care Sector*. Aged Care Financing Authority. [https://agedcare.health.gov.au/sites/g/files/net1426/f/documents/08\\_2017/design\\_version\\_2017\\_acfa\\_annual\\_report.pdf](https://agedcare.health.gov.au/sites/g/files/net1426/f/documents/08_2017/design_version_2017_acfa_annual_report.pdf).
- AIHW (2013). *Allied health workforce 2012*. Australian Institute of Health and Welfare. <https://www.aihw.gov.au/getmedia/ceeac63a-1670-4e75-85d2-61225ffb4ca9/15993.pdf.aspx?inline=true>.
- \_\_\_\_\_ (2015). *Health expenditure Australia 2014-15*. Australian Institute of Health and Welfare. <https://www.aihw.gov.au/getmedia/a13427b8-d5de-495d-8b8f-4fd114f135d0/20279.pdf.aspx?inline=true>.
- \_\_\_\_\_ (2016a). *25 years of health expenditure in Australia: 1989-90 to 2013-14*. 56. Australian Institute of Health and Welfare. <https://www.aihw.gov.au/getmedia/bcfd0546-98d4-4111-bbfa-da46b8e583a8/18011.pdf.aspx?inline=true>.
- \_\_\_\_\_ (2016b). *Australia's health 2016*. Australian Institute of Health and Welfare. <https://www.aihw.gov.au/reports/australias-health/australias-health-2016/contents/summary>.
- \_\_\_\_\_ (2016c). *Oral health and dental care in Australia*. Australian Institute of Health and Welfare. <https://www.aihw.gov.au/getmedia/57922dca-62f3-4bf7-9ddc-6d8e550c7c58/19000.pdf.aspx?inline=true>.
- \_\_\_\_\_ (2016d). *Health expenditure Australia 2015-16*. Australian Institute of Health and Welfare. <https://www.aihw.gov.au/getmedia/3a34cf2c-c715-43a8-be44-0cf53349fd9d/20592.pdf.aspx?inline=true>.
- \_\_\_\_\_ (2016e). *Australia's mothers and babies 2014—in brief*. Australian Institute of Health and Welfare. <http://www.aihw.gov.au/publication-detail/?id=60129557656>.
- \_\_\_\_\_ (2017a). *Deaths*. Australian Institute of Health and Welfare. <https://www.aihw.gov.au/reports/life-expectancy-death/deaths-in-australia/contents/life-expectancy>.
- \_\_\_\_\_ (2017b). *Health expenditure 2015-16*. Australian Institute for Health and Welfare. <https://www.aihw.gov.au/getmedia/3a34cf2c-c715-43a8-be44-0cf53349fd9d/20592.pdf.aspx?inline=true>.
- \_\_\_\_\_ (2017c). *Admitted patient care 2015-16: Australian hospital statistics*. Australian Institute of Health and Welfare. <https://www.aihw.gov.au/reports/hospitals/admitted-patient-care-ahs-2015-16/contents/table-of-contents>.
- \_\_\_\_\_ (2017d). *Aboriginal and Torres Strait Islander health organisations*. Australian Institute for Health and Welfare. <https://www.aihw.gov.au/getmedia/3d8f3435-4fe4-4580-ab32-e1608bbb6b9c/20797.pdf.aspx?inline=true>.
- \_\_\_\_\_ (2017e). *National Key Performance Indicators for Aboriginal and Torres Strait Islander primary health care: results from June 2016*. Australian Institute for Health and Welfare. <https://www.aihw.gov.au/reports/indigenous-health-welfare-services/nkpi-indigenous-australians-health-care-2016/contents/table-of-contents>.
- \_\_\_\_\_ (2017f). *Aboriginal and Torres Strait Islander Health Performance Framework (HPF)*. Australian Institute of Health and Welfare. <https://www.aihw.gov.au/reports/indigenous-health-welfare/health-performance-framework/contents/tier-3/expenditure-on-aboriginal-and-torres-strait-islander-health-compared-to-need-measure-3-21>.

- AIHW (2017g). *Alcohol and other drug treatment services in Australia 2015–16*. Australian Institute of Health and Welfare. <https://www.aihw.gov.au/getmedia/bf851ed5-673c-4f5a-8ff6-49f3a85bd95a/20799.pdf.aspx?inline=true>.
- \_\_\_\_\_ (2017h). *Mental health services 2017*. Australian Institute of Health and Welfare. <https://www.aihw.gov.au/getmedia/3ac11554-817d-4563-ad97-46bc6a90bee5/20502.pdf.aspx?inline=true>.
- \_\_\_\_\_ (2017i). *Australia's welfare 2017*. Australian Institute of Health and Welfare. <https://www.aihw.gov.au/reports/australias-welfare/australias-welfare-2017/contents/table-of-contents>.
- \_\_\_\_\_ (2017j). *Access to health services by Australians with disability*. Australian Institute of Health and Welfare. <https://www.aihw.gov.au/reports/disability/access-health-services-disability/related-material>.
- Alderwick et al. (2018). Alderwick, H., Shortell, S., Briggs, A. and Fisher, E. “NHS policy makers should not copy US ACOs but they can learn from their experience”. *BMJ*. DOI: 10.1136/bmj.k921. <http://www.bmj.com/content/360/bmj.k921.full>.
- AMA (2014). *AMA Position Statement: Geographic Allocation of Provider Numbers - 2002. (Revised 2014)*. Australian Medical Association. <https://ama.com.au/position-statement/geographic-allocation-medicare-provider-numbers-2002-revised-2014>.
- Anastasy et al. (2018). Anastasy, C. et al. *Opinion on Tools and Methodologies for Assessing the Performance of Primary Care*. European Commission. DOI: 10.2875/459903.
- APRA (2017). *Private health insurance*. Australia Prudential Regulation Authority. <https://www.apra.gov.au/private-health-insurance>.
- BEACH (2017). *Bettering the evaluation and care of health*. <http://sydney.edu.au/medicine/fmrc/beach/>.
- Birrell, B. (2016). *GP oversupply – ignoring the evidence*. Australian Population Research Institute. <http://tapri.org.au/wp-content/uploads/2016/04/GP-oversupply-ignoring-the-evidence-12-Dec-2016.pdf>.
- Blanch et al. (2014). Blanch, B., Pearson, S.-A. and Haber, P. “An overview of the patterns of prescription opioid use, costs and related harms in Australia”. *British Journal of Clinical Pharmacology* 78.5, pp. 1159–1166. DOI: 10.1111/bcp.12446.
- Britt et al. (2016). Britt, H. et al. *General practice activity in Australia 2015-16*. Family Medicine Research Centre. <http://purl.library.usyd.edu.au/sup/9781743325131>.
- Cathcart, G. (2007). “Primary care in the driver’s seat? Organizational reform in European primary care”. *International Journal of Dental Hygiene* 5.4, pp. 250–252. DOI: 10.1111/j.1601-5037.2007.00273.x. <https://doi.org/10.1111/j.1601-5037.2007.00273.x>.
- COAG (2011). *National Health Reform Agreement*. Council of Australian Governments. [http://www.federalfinancialrelations.gov.au/content/npa/health/\\_archive/national-agreement.pdf](http://www.federalfinancialrelations.gov.au/content/npa/health/_archive/national-agreement.pdf).
- \_\_\_\_\_ (2015). *Health Mouths, Healthy Lives. Australia's National Oral Health Plan 2015-2024*. Council of Australian Governments.
- \_\_\_\_\_ (2017). *National Health Reform Agreement: Schedule 1 (Revised public hospital arrangements)*. Council of Australian Governments. [http://www.federalfinancialrelations.gov.au/content/npa/health/other/Addendum\\_to\\_the\\_National\\_Health\\_Reform.pdf](http://www.federalfinancialrelations.gov.au/content/npa/health/other/Addendum_to_the_National_Health_Reform.pdf).
- Conrady, D. von and Bonney, A. (2017). “Patterns of complementary and alternative medicine use and health literacy in general practice patients in urban and regional Australia”. *Australian Family Physician* 46.5, pp. 316–320. <https://www.racgp.org.au/afp/2017/may/patterns-of-complementary-and-alternative-medicine-use-and-health-literacy-in-general-practice-patients-in-urban-and-regional-australia/>.

- Daley et al. (2013). Daley, J., McGannon, C. and Savage, J. *Budget Pressures on Australian Governments*. Grattan Institute.  
<http://grattan.edu.au/report/budget-pressures-on-australian-governments/>.
- Dawson, A. (2018). "FactCheck: do women in Tasmania have access to safe abortions?" *The Conversation*. <https://theconversation.com/factcheck-do-women-in-tasmania-have-access-to-safe-abortions-92173>.
- De Maeseneer et al. (2007). De Maeseneer, J., Willems, S., De Sutter, A., Van de Geuchte, I. and Billings, M. *Primary health care as a strategy for achieving equitable care: a literature review commissioned by the Health Systems Knowledge Network*. WHO Commission on the Social Determinants of Health. Health Systems Knowledge Network.  
[http://www.who.int/social\\_determinants/resources/csdh\\_media/primary\\_health\\_care\\_2007\\_en.pdf](http://www.who.int/social_determinants/resources/csdh_media/primary_health_care_2007_en.pdf).
- Deloitte Access Economics (2015). *The economic value of informal care in Australia in 2015*. Report prepared for Carers Australia.  
<http://www.carersaustralia.com.au/storage/access-economics-report-2015.pdf>.
- DHS (2018a). *Becoming an approved PBS supplier - for pharmacists*. Department of Human Services.  
<https://www.humanservices.gov.au/health-professionals/enablers/becoming-approved-pbs-supplier-pharmacists>.
- \_\_\_\_\_ (2018b). *Indigenous Access Program*. Department of Human Services. <https://www.humanservices.gov.au/individuals/services/medicare/indigenous-access-program>.
- \_\_\_\_\_ (2018c). *Referring and requesting Medicare services*. Department of Human Services.  
<https://www.humanservices.gov.au/organisations/health-professionals/subjects/referring-and-requesting-medicare-services>.
- DoH (2011). *Provision of maternity care*. Department of Health.  
<http://www.health.gov.au/internet/publications/publishing.nsf/Content/pacd-maternitieservicesplan-toc~pacd-maternitieservicesplan-chapter3#Funding%20of%20maternity%20services>.
- \_\_\_\_\_ (2012a). *Nurse Practitioners*. Department of Health.  
<http://www.health.gov.au/internet/main/publishing.nsf/Content/work-nurse-prac>.
- \_\_\_\_\_ (2012b). *GP Mental Health Treatment Medicare Items: FAQ*. Department of Health.  
<http://www.health.gov.au/internet/main/publishing.nsf/content/pacd-gp-mental-health-care-pdf-qa>.
- \_\_\_\_\_ (2013a). *Primary Health Care in Australia*.  
<http://www.health.gov.au/internet/publications/publishing.nsf/Content/NPHC-Strategic-Framework~phc-australia>.
- \_\_\_\_\_ (2013b). *Allied health workforce*. <http://www.health.gov.au/internet/publications/publishing.nsf/Content/work-review-australian-government-health-workforce-programs-toc~chapter-8-developing-dental-allied-health-workforce~chapter-8-allied-health-workforce>.
- \_\_\_\_\_ (2016a). *Pathology Questions and Answers*. Department of Health.  
<http://www.health.gov.au/internet/main/publishing.nsf/Content/pathqa>.
- \_\_\_\_\_ (2016b). *Redesigning the practice incentives program: consultation paper*. Department of Health.  
[https://consultations.health.gov.au/primary-healthcare-branch-phb/redesigning-the-practice-incentives-program/supporting\\_documents/11670\\_Practice%20Incentive%20Program%20Consultation%20Paper%20print%20ready%20%20crop%20marks%20removed%20v14%20as%20at%2020%20Oct%202016%20D161158930.PDF](https://consultations.health.gov.au/primary-healthcare-branch-phb/redesigning-the-practice-incentives-program/supporting_documents/11670_Practice%20Incentive%20Program%20Consultation%20Paper%20print%20ready%20%20crop%20marks%20removed%20v14%20as%20at%2020%20Oct%202016%20D161158930.PDF).
- \_\_\_\_\_ (2017a). *National Health Workforce Dataset*. Department of Health.  
<http://hwd.health.gov.au/datasets.html>.
- \_\_\_\_\_ (2017b). *Health Workforce Data*. Department of Health.  
<http://hwd.health.gov.au/>.

- DoH (2017c). *MBS annual statistics*. Department of Health. <http://www.health.gov.au/internet/main/publishing.nsf/content/annual-medicare-statistics>.
- \_\_\_\_\_ (2017d). *2017 Medicare item reports*. Department of Health. [http://medicarestatistics.humanservices.gov.au/statistics/mbs\\_item.jsp](http://medicarestatistics.humanservices.gov.au/statistics/mbs_item.jsp).
- \_\_\_\_\_ (2017e). *PHN Programme Guidelines*. Department of Health. [http://www.health.gov.au/internet/main/publishing.nsf/Content/PHN-Program\\_Guidelines](http://www.health.gov.au/internet/main/publishing.nsf/Content/PHN-Program_Guidelines).
- \_\_\_\_\_ (2017f). *Medicare Benefits Schedule Review*. Department of Health. <http://www.health.gov.au/internet/main/publishing.nsf/content/mbsreviewtaskforce>.
- \_\_\_\_\_ (2017g). *Average premium increases by insurer by year*. Department of Health. <http://health.gov.au/internet/main/publishing.nsf/content/privatehealth-average-premium-round>.
- \_\_\_\_\_ (2018a). *GP Workforce Statistics – 2001-02 to 2016-17*. Department of Health. <http://www.health.gov.au/internet/main/publishing.nsf/content/general+practice+statistics-1>.
- \_\_\_\_\_ (2018b). *MBS Online*. Department of Health. <http://www.mbsonline.gov.au/internet/mbsonline/publishing.nsf/Content/Home>.
- \_\_\_\_\_ (2018c). *Indigenous Australians' Health Programme: programme guidelines*. Department of Health. [http://www.health.gov.au/internet/main/publishing.nsf/Content/09AEEA5F377AE5B5CA257F1C00159135/\\$File/Indigenous%20Australians%20Health%20Programme%20Guidelines.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/09AEEA5F377AE5B5CA257F1C00159135/$File/Indigenous%20Australians%20Health%20Programme%20Guidelines.pdf).
- \_\_\_\_\_ (2018d). *Health Care Homes*. Department of Health. <http://www.health.gov.au/internet/main/publishing.nsf/Content/health-care-homes>.
- DoHA (2012). *State of Corporatisation*. Department of Health and Ageing. [http://www.health.gov.au/internet/main/publishing.nsf/Content/foi-disc-log-2012-13/\\$File/222-1213%20Doc%206%20State%20of%20Corporatisation%20Report%20-%20February%202012.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/foi-disc-log-2012-13/$File/222-1213%20Doc%206%20State%20of%20Corporatisation%20Report%20-%20February%202012.pdf).
- Duckett, S. (2013). *Access all areas: new solutions for GP shortages in rural Australia*. Grattan Institute. <https://grattan.edu.au/report/access-all-areas-new-solutions-for-gp-shortages-in-rural-australia/>.
- Duckett, S. and Romanes, D. (2016). *Submission to Review of Pharmacy Remuneration and Regulation*. Grattan Institute.
- Duckett et al. (2016). Duckett, S., Romanes, D., Moloney, J. and Griffiths, K. *Blood Money: paying for pathology services*. Report No. 2016-1. Grattan Institute. <https://grattan.edu.au/report/blood-money-paying-for-pathology-services/>.
- Duckett et al. (2017). Duckett, S., Swerissen, H. and Moran, G. *Building better foundations for primary care*. Report No. 2017-06. Grattan Institute. <https://grattan.edu.au/report/building-better-foundations/>.
- Duckett, S. and Banerjee, P. (2017). *Cutting a better drug deal*. Report No. 2017-03. Grattan Institute. <https://grattan.edu.au/report/cutting-a-better-drug-deal/>.
- Erny-Albrecht, K. and Bywood, P. (2016). *Corporatisation of general practice – impact and implications*. Primary Health Care Research and Information Service. DOI: 10.13140/RG.2.2.24652.00647.
- Family Planning Alliance Australia (2016). *Access to Abortion Services in Australia*. [http://familyplanningallianceaustralia.org.au/wp-content/uploads/2016/02/ENDORSED-160216-Position-Statement\\_Access-to-Abortion\\_Final.pdf](http://familyplanningallianceaustralia.org.au/wp-content/uploads/2016/02/ENDORSED-160216-Position-Statement_Access-to-Abortion_Final.pdf).
- Goff et al. (2017). Goff, D. et al. "A global call from five countries to collaborate in antibiotic stewardship: united we succeed, divided we might fail". *The Lancet Infectious Diseases* 17.2, e56–e63. DOI: 10.1016/s1473-3099(16)30386-3.
- Greenfield et al. (2016). Greenfield, G., Foley, K. and Majeed, A. "Rethinking primary care's gatekeeper role". *BMJ*, p. i4803. DOI: 10.1136/bmj.i4803. <https://doi.org/10.1136/bmj.i4803>.

- Ham, C. (2018). *Making sense of integrated care systems, integrated care partnerships and accountable care organisations in the NHS in England*. The Kings Fund. <https://www.kingsfund.org.uk/publications/making-sense-integrated-care-systems>.
- Hambleton, S. (2016). *Better outcomes for people with chronic and complex health conditions*. Primary Health Care Advisory Group. [http://www.health.gov.au/internet/main/publishing.nsf/Content/76B2BDC12AE54540CA257F72001102B9/%24File/Primary-Health-Care-Advisory-Group\\_Final-Report.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/76B2BDC12AE54540CA257F72001102B9/%24File/Primary-Health-Care-Advisory-Group_Final-Report.pdf).
- Herman et al. (2005). Herman, P. M., Craig, B. M. and Caspi, O. "Is complementary and alternative medicine (CAM) cost-effective? a systematic review". *BMC Complementary and Alternative Medicine* 5.1. DOI: 10.1186/1472-6882-5-11. <https://doi.org/10.1186/1472-6882-5-11>.
- Horvath, J. (2014). *Review of Medicare Locals*. Report to the Minister for Health and Minister for Sport. [http://www.health.gov.au/internet/main/publishing.nsf/Content/A69978FAABB1225ECA257CD3001810B7/\\$File/Review-of-Medicare-Locals-may2014.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/A69978FAABB1225ECA257CD3001810B7/$File/Review-of-Medicare-Locals-may2014.pdf).
- IBISWorld (2018a). *General Practice Medical Services - Australia Market Research Report*. <https://www.ibisworld.com.au/industry-trends/market-research-reports/health-care-social-assistance/general-practice-medical-services.html>.
- \_\_\_\_\_ (2018b). *Diagnostic Imaging Services - Australia Market Research Report*. <https://www.ibisworld.com.au/industry-trends/market-research-reports/health-care-social-assistance/diagnostic-imaging-services.html>.
- Joyce et al. (2016). Joyce, C., McDonald, H. and Lawlor-Smith, L. "General practitioners' perceptions of different practice models: a qualitative study". *Australian Journal of Primary Health* 22.5, p. 388. DOI: 10.1071/py15025. <https://doi.org/10.1071/py15025>.
- King et al. (2016). King, S., Scott, B. and Watson, J. *Review of Pharmacy Remuneration and Regulation: Discussion paper*. Department of Health. <http://www.health.gov.au/pharmacyreview>.
- King et al. (2017) \_\_\_\_\_. *Review of Pharmacy Remuneration and Regulation*. Department of Health. <http://www.health.gov.au/pharmacyreview>.
- Klapdor, M. and Arthur, D. (2016). "Welfare—what does it cost?" *Parliamentary Library Briefing Book – 45th Parliament*. Ed. by D. Heriot. Parliament of Australia. [https://www.aph.gov.au/About\\_Parliament/Parliamentary\\_Department\\_s/Parliamentary\\_Library/pubs/BriefingBook45p/WelfareCost](https://www.aph.gov.au/About_Parliament/Parliamentary_Department_s/Parliamentary_Library/pubs/BriefingBook45p/WelfareCost).
- KordaMentha (2014). *Pharmacy: A challenging and changing outlook*. Publication No. 14-01. <https://www.kordamentha.com/News-and-Insights/Pharmacy-A-challenging-and-changing-outlook>.
- Kringos et al. (2015). Kringos, D., Boerma, W., Hutchinson, A. and Saltman, R. *Building primary care in a changing Europe*. World Health Organization. ISBN: 978-92-890-50-319.
- Lord Patel et al. (2017). Lord Patel et al. *The Long-term Sustainability of the NHS and Adult Social Care*. The House of Lords. <https://publications.parliament.uk/pa/ld201617/ldselect/ldnhssus/151/151.pdf>.
- Mabbott, V. and Storey, P. (2016). *Australian Statistics on Medicines 2015*. Department of Human Services. <http://www.pbs.gov.au/statistics/asm/2015/australian-statistics-on-medicines-2015.pdf>.
- Medical Board of Australia (2017). *Registrant data: 1 October 2017 to 31 December 2017*.
- Medpac (2016). *Accountable Care Organization Payment systems*. [http://medpac.gov/docs/default-source/payment-basics/medpac\\_payment\\_basics\\_16\\_aco\\_final.pdf?sfvrsn=0](http://medpac.gov/docs/default-source/payment-basics/medpac_payment_basics_16_aco_final.pdf?sfvrsn=0).

- Muldoon et al. (2005). Muldoon, L., Hogg, W. and Levitt, M. "Primary care (PC) and Primary health Care (PHC). What is the difference?" *Canadian journal of public health. Revue canadienne de santé publique* 97, pp. 409–11.
- OECD (2015). *Health at a Glance 2015: How does Australia compare?* Organisation for Economic Co-operation and Development. <http://www.oecd.org/australia/Health-at-a-Glance-2015-Key-Findings-AUSTRALIA.pdf>.
- Osborn et al. (2017). Osborn, R., Doty, M., Moulds, D., Sarnak, D. and Shah, A. "Older Americans Were Sicker And Faced More Financial Barriers To Health Care Than Counterparts In Other Countries". *Health Affairs* 36.12. PMID: 29140737, pp. 2123–2132. DOI: 10.1377/hlthaff.2017.1048.
- PC (2016). "Volume E: Health". *Report on Government Services*. Productivity Commission. ISBN: 978-1-74037-575-7. <https://www.pc.gov.au/research/ongoing/report-on-government-services/2016/health/rogs-2016-volumee-health.pdf>.
- (2017a). "Volume E: Health". *Report on Government Services*. Productivity Commission. ISBN: 978-1-74037-611-2. <http://www.pc.gov.au/research/ongoing/report-on-government-services/2017/health/rogs-2017-volumee.pdf>.
- (2017b). *Shifting the dial: 5 year productivity review*. Inquiry Report No. 84. Productivity Commission. <http://www.pc.gov.au/inquiries/completed/productivity-review/report/productivity-review.pdf>.
- Peckham et al. (2015). Peckham, S., Falconer, J., Gillam, S., Hann, A., Kendall, S., Nanchahal, K., Ritchie, B., Rogers, R. and Wallace, A. "The organisation and delivery of health improvement in general practice and primary care: a scoping study". *Health Services and Delivery Research* 3.29. ISSN: 2050-4349.
- Piterman, L. and Koritsas, S. (2005). "Part II. General practitioner-specialist referral process". *Internal medicine journal* 35.8, pp. 491–6. ISSN: 1444-0903. DOI: 10.1111/j.1445-5994.2005.00860.x. eprint: 16176475.
- RACGP (2017a). *Becoming a GP in Australia*. Royal Australian College of General Practitioners. <https://www.racgp.org.au/becomingagp/what-is-a-gp/what-is-general-practice/>.
- (2017b). *Standards for general practices*. 4th ed. Royal Australian College of General Practitioners.
- (2017c). *General Practice: Health of the nation*. Royal Australian College of General Practitioners. <https://www.racgp.org.au/download/Documents/Publications/Health-of-the-nation-2017-report.PDF>.
- Raven, M. (2014). "Allied health practitioners in Australian primary health care". *PHCRIS Research Roundup* (38). ISSN: 1839-6348.
- Rechel, B. and McKee, M. (2009). "Health reform in central and eastern Europe and the former Soviet Union". *The Lancet* 374.9696, pp. 1186–1195. DOI: 10.1016/s0140-6736(09)61334-9. [https://doi.org/10.1016/s0140-6736\(09\)61334-9](https://doi.org/10.1016/s0140-6736(09)61334-9).
- Reid et al. (2016). Reid, R., Steel, A., Wardle, J., Trubody, A. and Adams, J. "Complementary medicine use by the Australian population: a critical mixed studies systematic review of utilisation, perceptions and factors associated with use". *BMC Complementary and Alternative Medicine* 16.1. DOI: 10.1186/s12906-016-1143-8.
- Richardson, A. (2018). *Pharmacies in Australia*. G4271a. IBISWorld.
- Ritter et al. (2015). Ritter, A., Chalmers, J. and Berends, L. "Health expenditure on alcohol and other drug treatment in Australia". *Drug and Alcohol Review*. DOI: 10.1111/dar.12248.
- Senate Community Affairs Committee 2017 (2017). *Answers to estimates questions on notice*. Supplementary Budget Estimates 2017-2018, 26 October 2017. Ref No. SQ17-001439.

- Sorenson et al. (2013). Sorenson, C., Drummond, M. and Khan, B. B. "Medical technology as a key driver of rising health expenditure: disentangling the relationship". eng. *ClinicoEconomics and outcomes research : CEOR* 5, pp. 223–34. ISSN: 1178-6981. DOI: 10.2147/CEOR.S39634. eprint: 23807855.
- Standing Council on Health (2013). *National Primary Health Care Strategic Framework*. [http://www.health.gov.au/internet/main/publishing.nsf/content/6084A04118674329CA257BF0001A349E/\\$File/NPHCframe.pdf](http://www.health.gov.au/internet/main/publishing.nsf/content/6084A04118674329CA257BF0001A349E/$File/NPHCframe.pdf).
- Starfield, B. (2012). "Primary care: an increasingly important contributor to effectiveness, equity, and efficiency of health services. SESPAS report 2012". *Gaceta Sanitaria* 26, pp. 20–26. DOI: 10.1016/j.gaceta.2011.10.009. <https://doi.org/10.1016/j.gaceta.2011.10.009>.
- Swerissen et al. (2016). Swerissen, H., Duckett, S. and Wright, J. *Chronic failure in primary care*. Report No. 2016-2. Grattan Institute. <https://grattan.edu.au/report/chronic-failure-in-primary-care/>.
- Tapper, A. and Phillimore, J. (2014). "Trends in Australian government health expenditure by age: a fiscal incidence analysis". *Australian Health Review*. DOI: 10.1071/AH14043. <http://www.publish.csiro.au/AH/AH14043>.
- The Medical Home (2012). *What is a Medical Home?* <http://medicalhome.org.au/what-is-a-medical-home/>.
- The Pharmacy Guild of Australia (2017). *Pharmacy and Wholesaler Remuneration*. <https://www.guild.org.au/resources/6cpa/6cpa-pharmacy-and-wholesaler-remuneration>.
- Vic DHHS (2018). *Community health services*. Victorian Department of Health and Human Services. <https://www2.health.vic.gov.au/primary-and-community-health/community-health/community-health-services>.
- Vision 2020 Australia (2015). *Better Outcomes for People with Chronic and Complex Health Conditions through Primary Health Care*. <http://www.vision2020australia.org.au/uploads/resource/153/V2020A-submission-to-PHCAG-Chronic-and-complex-primary-health-care-FINAL.pdf>.
- Wallace et al. (2011). Wallace, A., Hill, W. and Cupitt, A. *Survey of the pathology workforce*. Prepared for the Department of Health and Ageing. RFQ 345/0809. Urbis. <https://www.aims.org.au/documents/item/197%20p.%2011>.
- Weisfeld, V. and Lustig, T. (2015). *The Future of Home Health Care*. National Research Council. ISBN: 978-0-309-36753-0. <https://www.ncbi.nlm.nih.gov/books/NBK315926/>.
- WHO (2010). *Primary Care Evaluation Tool*. [http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0004/107851/PrimaryCareEvalTool.pdf](http://www.euro.who.int/__data/assets/pdf_file/0004/107851/PrimaryCareEvalTool.pdf).