

ANZ – Melbourne Institute Health Sector Report

Specialists

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SUMMARY AND KEY FINDINGS

This report sets out the current state of the medical specialist sector in Australia. The aim is to examine key trends, the challenges faced by the sector and the future implications of these challenges in the context of continued growth in health expenditures, and the drive for better value healthcare. Reviewing the latest data on the sector, several key findings emerge.

Trends in the sector

- The size and funding of the specialist sector are growing, outstripping population growth and inflation. The growth in the number of specialists is five times that of General Practitioners, and total expenditure in the sector grew by 4 per cent in real terms between 2014-15 and 2015-16 to \$21.2 billion.
- The doubling of the number of medical graduates is increasing competition for specialist training, though bottlenecks are preventing this from fully feeding through to the numbers of trained specialists. If these trends continue, increased competition is likely to have an impact on the sector in the future.
- The volume of Medicare services provided by specialists grew by 4.3 per cent per year over the 10 years up to 2015-16. This growth accounted entirely for the growth in total fee revenue. Prices (average fee charged per service, including Medicare rebate plus out-of-pocket payment) fell in real terms by 0.15 per cent per year. The median hourly earnings of specialists, from both the public and private sector, increased by just over 1 per cent per year. This is less than real wage growth in the economy.
- Bulk-billing rates overall, and for broad specialty groups, have continued to rise but there is much variation between specialties. For services which are not bulk billed, out-of-pocket payments continue to grow at 5.5 per cent above inflation each year, which is a similar rate to that for GPs. There is substantial variation in out-of-pocket payments and hourly earnings within and between specialties, with the largest variation for surgical and procedural specialties. These variations are likely to prompt continued debate around fee disclosure.
- The public-private mix of hospital activity and the share of hours spent by specialists in the private sector has remained relatively stable over the past 10 years. However, there is evidence that older specialists have reduced their share of hours spent in the private sector. This intergenerational shift may indicate that private sector opportunities for younger specialists are growing.
- Hourly earnings, work-life balance and job satisfaction are highest for specialists working solely in the private sector, followed by those in mixed practice, and then those in public hospitals only. These differences are relatively stable over time.

Key challenges in the sector

Continued expenditure growth will increasingly require evidence of commensurate increases in the delivery of high-value healthcare, as well as increased transparency and accountability. Lack of routine data collection on health outcomes means it is difficult to tell if the sector is providing increased value for money. Pressures on the sector reflect international trends. These include public reporting of performance and quality, reducing the level of low-value care, increasing the transparency of fees, changes to the Medicare Benefits Schedule, and the linking of hospital funding to quality. Increased pressure for better value healthcare coupled with a growing supply of specialists could increase competition and put pressure on existing private sector business models. Yet the drive for value should also be focused on improving health outcomes. These pressures present opportunities to grow the sector in a strategic way so as to improve health outcomes of the population with greater efficiency at lower cost.

BACKGROUND

In 2015-16 health expenditure in Australia was \$170.4 billion and exceeded 10 per cent of GDP for the first time, having grown by 4.7 per cent per year above inflation during the previous 10 years (AIHW, 2017a). Healthcare is now the largest sector of the economy.

Specialists¹ are at the heart of providing diagnostic and treatment services in and out of public and private hospitals in Australia. The care they provide plays a major role in restoring health and wellbeing.

Technology continues to transform the specialist sector, including innovations in diagnostics, medical devices, pharmaceuticals, surgical procedures, and digital technologies. These developments manifest themselves in less invasive and faster procedures, which are also less costly in the longer term, evidenced by the long-term growth in the proportion of day-only admissions and in private day hospitals.

Yet there are significant pressures on both public and private healthcare providers, along with private health insurers, to provide more value to consumers, especially in the context of increasing health expenditures. The overall burden of disease is also growing as the population ages, especially chronic disease. This requires a different mix of medical skills and expertise.

After surveying trends and challenges in connection to the size and funding of the specialist sector this report looks at issues around the drive for value, out-of-pocket payments and earnings, work-life balance and job satisfaction.

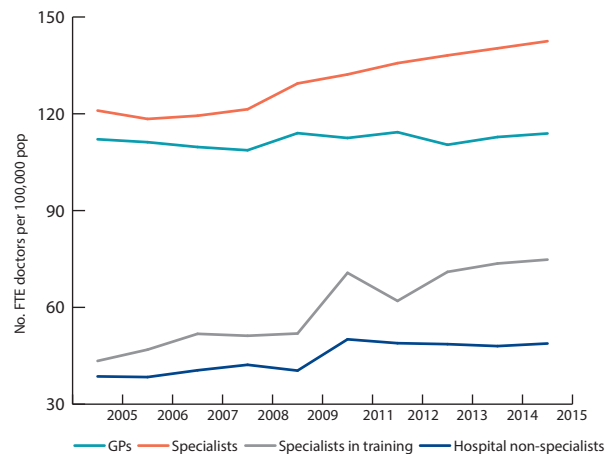
THE SIZE AND FUNDING OF THE SECTOR

Growth in the specialist workforce

There are over 30,000 specialists and 15,000 specialists-in-training in Australia. Between 2011 and 2015 there were 4,541 new specialists working in Australia (an extra 10 full-time-equivalent (FTE) specialists per 100,000 of the population), compared with 2,538 new GPs (an extra 1.4 FTE GPs per 100,000 of the population) (Figure 1).

This higher growth in specialists is likely to persist given the doubling in the number of medical graduates coming through the training pipeline since the early 2000s.

Figure 1. Number of full-time equivalent doctors per 100,000 population, 2005-2015



Source: Australian Institute of Health and Welfare, 2016
Notes: No data are available for 2010. There is a discontinuity in the data due to the introduction of National Registration in 2010.

Growth in spending on specialists

Total expenditure on specialist services in 2015-16 (the latest data available) is estimated at \$21.2 billion, and includes \$5.35 billion in public hospital salaries for specialists and payments to Visiting Medical Officers² (AIHW, 2017b) and \$15.8 billion in private fees (Medicare Australia, 2018). This overall amount flows through a complex set of payments and subsidies (Figure 2).

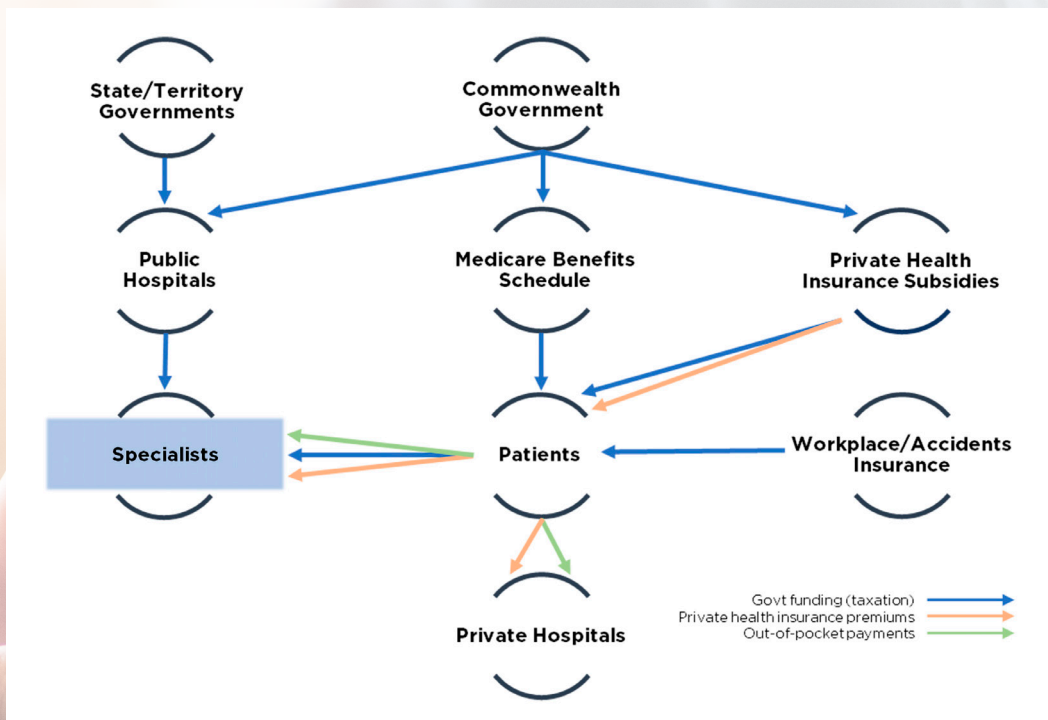
Challenges arising from growth in the specialist workforce and expenditure

An increasing supply of doctors due to a medical graduate expansion is a key issue facing the market for specialists – now and into the future. How this growth is dealt with has several implications.

There are a number of immediate challenges related to how the system can train (and pay for) this relatively rapid growth, and the resulting increase in competition and bottlenecks in the training pipeline. Continuing problems with access to specialist care in non-metropolitan areas remains a concern, as does access for patients without private health insurance. In addition, increased supply could have implications for business models in the private specialist sector in a context of increased competition.

A further key policy question is whether the sector is providing value for money while making a difference to population health. Though life expectancy continues to increase in Australia, how much of this increase is due to changes in lifestyles and education levels? Another aspect is health-related quality of life, which is relevant for many chronic diseases but unfortunately not routinely measured.

Figure 2. Flow of funds to specialists



Commonwealth government funding raised through taxation flows through Medicare, public hospital funding agreements with the states and territories, and subsidies to the private health insurance sector. States and territories also provide direct funding to public hospitals. Revenue from Medicare rebates and private health insurance subsidies flow through patients to specialists and to private hospitals. The 50 per cent of specialists who work in both the public and private sectors receive their earnings through their public hospital salaries and benefits, as well as private fees for services provided in their own rooms or in private hospitals. Specialists' earnings are also determined by the out-of-pocket payments they charge to patients, as well as coverage of some out-of-pocket payments by private health insurers through 'gap cover' for some specialists.

THE DRIVE FOR VALUE

There is significant pressure from governments for increases in expenditures to reflect better value from each extra dollar invested. These pressures are manifesting themselves in several ways, as discussed below. Each of these are focussed on providing better information about what works and does not work in healthcare and what it costs, which can in turn be used by patients to improve their decision-making and by specialists to change their clinical practice.

Reducing low value care

In Australia, as elsewhere, some variations in clinical practice cannot be explained by differences in patient complexity or severity, which suggests differences in the preferences of specialists about what treatments to recommend (Australian Commission on Healthcare Safety and Quality, 2017; Royal Australian College of Surgeons and Medibank Private, 2017). The drive for increased value is being prompted by the existence and persistence of low-value care, or care that does not improve patient health and may even cause harm, which adds to unnecessary costs and waste. This includes not only over-treatment but also over-diagnosis (Saini et al, 2017).

Around one-fifth of world health expenditure has been estimated to make minimal or no contribution to good health outcomes (OECD, 2017). Awareness of these issues is being raised in many fora, including the international 'Choosing Wisely' campaign, which is publishing lists of tests and treatments that both patients and doctors should question. These lists are being compiled by most, but not all, medical colleges based on the best evidence. This focus on reducing low-value care represents a significant opportunity to change the allocation of resources such as to improve the health of the population.

Medicare Benefits Schedule Review Taskforce

The Medicare Benefits Schedule (MBS) Review Taskforce is currently reviewing all 5,700 items on the MBS. The motivation is to align the schedule with the latest evidence on what works to improve patient outcomes. Many changes have already been implemented and many more are to come.

The changes include removing outdated items, introducing some new items, bundling and unbundling items, and changing eligibility rules and the level of rebates. In some areas, these changes are about keeping up with changes in technology and care processes, while also addressing mismatches between outdated items and actual practice. Whether these changes will simplify or further complicate the schedule remains to be seen, as is the impact on fee revenue, the mix of care provided, and patient health outcomes.

Public reporting of quality and performance

In theory information and choice should help foster greater competition, which can help drive better value healthcare. Yet in the healthcare sector increased competition may not always work as simple economic models predict. Information is costly to produce and disseminate. We know that simply publishing information or creating a website does not necessarily lead to the use of that information, since there are costs in accessing and interpreting such information in specific contexts.

Nevertheless, if you are a surgeon working in the National Health Service (NHS) in the United Kingdom, you would be listed on the NHS Choices website, along with your risk-adjusted mortality rates, waiting times, and volume of procedures. GPs in the United Kingdom are legally required to offer patients a choice of specialists to be referred to, alongside the above information.

In the United States publishing information to enable consumers to choose health insurers does not lead to more people switching or making 'better' choices (Gruber, 2017). Publishing information on surgeons' mortality rates may be beneficial but can also lead to higher costs and worse health outcomes as providers choose to treat only more healthy patients (Dranove et al, 2003).

Australia is still a long way from the NHS or the United States in terms of public reporting at the level of the doctor or even the hospital. Regardless, increasing public pressure for greater transparency of data at this level of granularity could still become a reality and so increase the amount of competition in the sector.

A key recommendation of the Productivity Commission's (2017) report on competition in Human Services was that greater information on quality of service, waiting times and fees charged would lead to better choices for patients.

Linking funding to performance

Changing funding and remuneration arrangements to support high-value healthcare is another approach being adopted in Australia. The current method of case-mix funding for public hospitals is being changed by the Independent Hospital Pricing Authority (IHPA) to a form

of pay-for-performance, which includes reducing funding for hospitals reporting hospital-acquired complications, 'never events' and re-admissions (IHPA, 2017). Some states are implementing similar schemes for their share of the case-mix payments to public hospitals.

There is also a similar and more advanced program targeted at private hospitals, where some large private health insurers such as Medibank Private are trying to obtain better value for money by not paying for episodes of hospital-acquired complications and never events.

Though this trend towards paying for performance is significant, evidence from other countries that such pay-for-performance schemes work is at best weak, partly due to the poor design of such schemes and poor-quality evaluations (Scott et al, 2018).

As the IHPA and private health insurers continue to implement such schemes, targeted at public and private hospitals, the impact on decisions made by specialists remains to be determined. If the aim of these schemes is to support improvements in health outcomes and concordance to evidence-based clinical guidelines, then better measures of quality and low-value care will be needed, and need to be accepted, before positive behavioural change can occur.



FEES, OUT-OF-POCKET PAYMENTS AND SPECIALISTS' EARNINGS

There has been considerable pressure and public debate about variations in specialists' fees (including out-of-pocket payments). Some private health insurers are now publishing lists of specialists' fees and fee variation, sometimes in collaboration with medical colleges (Royal Australian College of Surgeons and Medibank Private, 2017). A Ministerial Committee was established in early 2018 to examine the issue of consumers being able to make more informed choices about the costs of their care, with transparency of fees for consumers a priority for the committee.

Whether fee transparency will lead to a reduction in fee variation, including a reduction in some very high fees being charged, is yet to be determined. This will depend on whether GPs and patients are able to use these data at the point of referral, and how specialists themselves react.

Fees (and earnings) variation

The public debate has been focused on within-specialty variation of fees at one point in time. For example, national Medicare data for neurology in 2016 showed a 125 per cent difference between the consultation attendance fee in the lowest 10 per cent of the distribution of fees (\$151) compared to the highest 10 per cent of the distribution (\$340) (Freed and Allen, 2017). Data from the surgical variance reports published by the Royal Australian College of Surgeons and Medibank similarly reflect significant variation in average out-of-pocket payments across states and specialties.

Fee variation is also evident in the data on hourly earnings of specialists from the Medicine in Australia: Balancing Employment and Life (MABEL) longitudinal survey of doctors. This hourly earnings data include all earnings from working as a doctor, after practice costs but before tax. Figure 3 shows that variation both within and between specialties is substantial after controlling for differences in hours worked. Median hourly earnings for the highest earning specialty (orthopaedic surgery) is 2.4 times higher than the

lowest (endocrinology). Within orthopaedic surgery, hourly earnings at the top quartile are 2.3 times as high as those at the bottom quartile.

Drivers of fees (and earnings) variation

Variation in fees and earnings can be due to a number of factors. There may be differences in private practice costs (e.g. reflecting geographic location and equipment) and the time it takes to provide, and the complexity of, each service. There is also evidence showing that, on average, specialists price-discriminate: they charge higher fees to patients with higher incomes or with specific characteristics (Johar et al, 2017).

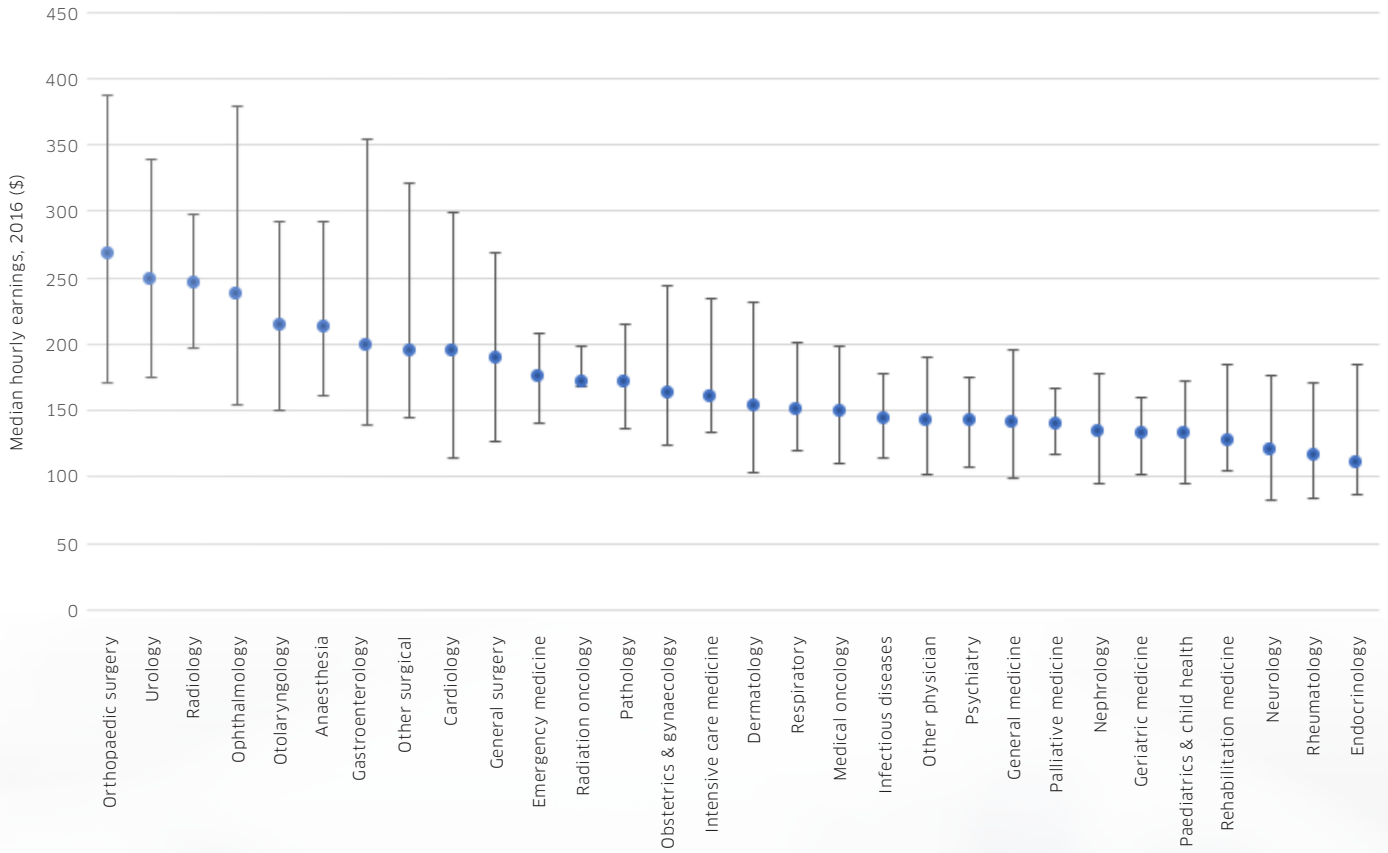
Fee variation could also reflect differences in reputation, skill, ability and the quality of care provided. This would be the case in a well-functioning market in which GPs and patients have extensive information and choice and where the 'best' specialists enjoy the highest demand. However, this is an empirical question that has not yet been tested; the fact that GPs and patients have little information on quality and costs suggests that other factors are likely playing a role. Further research is required on the drivers of fee variation.

Variation in out-of-pocket payments over time

A key question of interest is whether out-of-pocket payments and earnings have been increasing over time.

Total revenue earned by specialists from private fees grew by 7.1 per cent, or 4.1 per cent per year in real terms, over the 10-year period between 2007-08 and 2016-17 (Medicare Australia, 2018). This does not, however, mean that prices (total fee charged per service or out-of-pocket payments) have grown by this amount, as fee revenue is equal to the fee charged per service multiplied by the volume of services provided. Breaking these down, the volume of services provided grew by 4.3 per cent per year over the period. The change in fee revenue per service provided was negative at -0.15 per cent per year in real terms.

Figure 3. Variation in median hourly earnings 2016, by speciality



Source: MABEL, 2016.

Notes: Graph shows median, 75th percentile and 25th percentile. Figures are after practice costs but before tax.

Growth in the volume of services provided reflects both growth in demand and growth in the supply of specialists. These aggregate figures on fee revenue, however, suggest that growth in volume has driven the growth in fee revenue, not growth in prices charged.

When examining out-of-pocket payments there are two components which are at the discretion of specialists and influence fee and earnings variation: the first is the decision to bulk bill or not; and if not, the second is about the level of the out-of-pocket cost for each service.

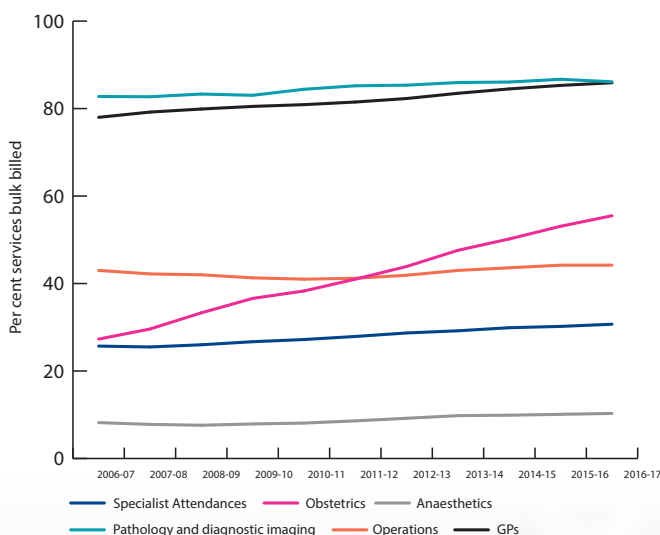
Out-of-pocket payments and bulk billing rates

Bulk-billing rates for all specialist services increased by an average of 0.12 percentage points per year between 2007-08 and 2015-16 (Medicare Australia, 2018). The

number of bulk-billed services increased by an average of 5.2 per cent per year, faster than the number of non-bulk-billed services which grew at 2.3 per cent per year. The 10-year growth in bulk-billing rates for broad groups of specialist medical services is shown in Figure 4, and includes GPs for comparison.

For specialist services that are not bulk billed, the average out-of-pocket cost per non-bulk-billed service has grown by an average of 5.5 per cent per year, after adjusting for inflation. This is only slightly lower than that for GPs, at 5.6 per cent growth per year, but this overall comparison masks differences in growth for different specialty groups, as shown in Figure 5.

Figure 4. Percentage of services bulk billed, by broad specialty group, 2006-07 to 2016-17

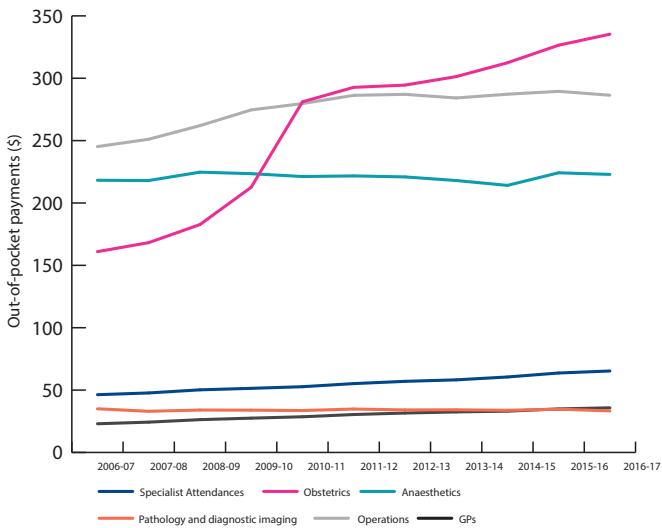


For pathology, diagnostics and GP services, between 80 per cent and 90 per cent of services are bulk billed and this continues to grow. The bulk-billing rate for obstetrics has increased substantially from 27.3 per cent in 2006-07 to 55.5 per cent in 2016-17. The bulk-billing rate for anaesthetics remains the lowest at around 10 per cent. Bulk-billing rates for specialist attendances have grown from 25.7 per cent to 30.7 per cent over 10 years, while that for operations has grown more slowly from 43 per cent to 44.2 per cent over 10 years.

Notes: Includes broad types of services: specialist attendances, obstetrics, anaesthetics, total pathology, diagnostic imaging, operations and assistance at operations, radiotherapy and therapeutic nuclear medicine.

Source: Medicare Australia, 2018.

Figure 5. Out-of-pocket payments (\$) for non-bulk-billed services by broad specialty group, 2006-7 to 2016-17



The more than doubling of the out-of-pocket cost for obstetrics over 10 years (11 per cent per year) is related to the introduction of the Extended Medicare Safety Net in 2008. This led to a substantial increase in fees and helped obstetricians to capture a significant amount of the increased Medicare subsidy to patients as income (Centre for Health Economics Research and Evaluation, 2009). As noted in Figure 4, bulk-billing rates for obstetrics were also increasing relatively quickly over this period, indicating that obstetricians were bulk-billing more services while at the same time increasing out-of-pocket charges for non-bulk-billed services, presumably to their more affluent patients. The next highest growth in out-of-pocket costs shown in Figure 5 is for specialist attendances, at 4.1 per cent per year, followed by operations (1.7 per cent per year) and anaesthetics (0.2 per cent per year). Out-of-pocket costs for non-bulk-billed services for pathology and diagnostics fell in real terms by 0.5 per cent per year over the 10-year period.

Notes: Includes broad types of services: specialist attendances, obstetrics, anaesthetics, total pathology, diagnostic imaging, operations and assistance at operations, radiotherapy and therapeutic nuclear medicine.

Source: Medicare Australia, 2018.



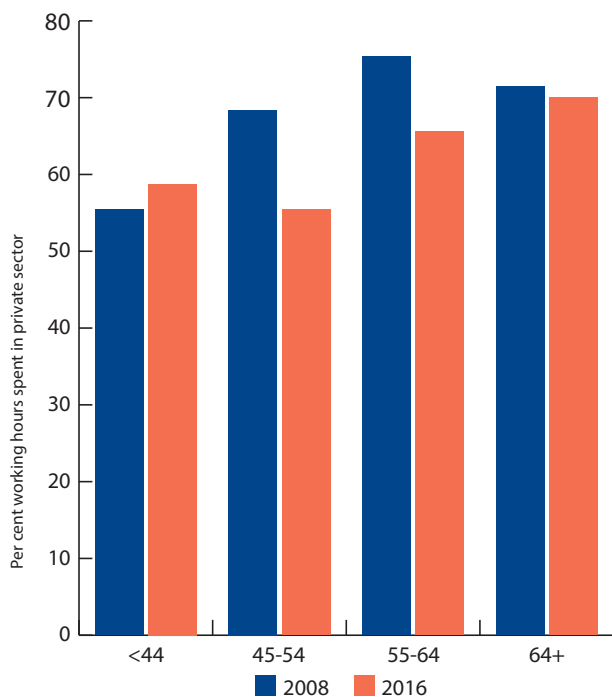
MABEL evidence on earnings

These trends in bulk billing and out-of-pocket payments are also reflected in the growth in specialists' total earnings from all sources: that is, combining earnings from public and private work. Data from the MABEL survey show that median hourly earnings (after practice costs and before tax) increased from \$125 in 2008 to \$166 in 2016, an increase of 1.03 per cent per year, after adjusting for inflation. This is slightly lower than general wage growth in the economy.

Specialists are largely salaried in public hospitals but can also undertake private practice, and just under 70 per cent of specialists do some private practice (Cheng et al, 2013). MABEL research has shown that the relative earnings in each sector influences the number of hours spent in that sector (Cheng et al, 2018). The balance of specialists' hours between the public and private sectors also drives access to care and waiting times for patients in the public and private sectors.

MABEL data show that the proportion of specialists doing any private sector work has remained relatively stable since 2008 at between 62 and 65 per cent, though it is lower in the last part of the decade. Similarly, the proportion of hours spent in private work has remained stable during this period at between 39 and 41 per cent of total hours worked.

Figure 6. Percentage of total working hours spent in the private sector by age, 2008 and 2016



Source: MABEL

Figure 6 shows data on the percentage of hours spent in private work settings by age in 2008 and 2016. Overall, younger specialists spent slightly less time in private settings than older specialists. Specialists aged less than 44 years increased their share of working hours in the private sector slightly by 3.3 percentage points between 2008 and 2016. However, the proportion of hours spent in private work fell by 13 percentage points for those aged between 45 and 54 years, and by 9.8 percentage points for those aged between 55 and 64.

The increasing proportion of private patients in public sector hospitals will also have an influence on the sector choices of specialists, and will depend partly on how public hospitals remunerate specialists for private sector work undertaken in public hospitals.

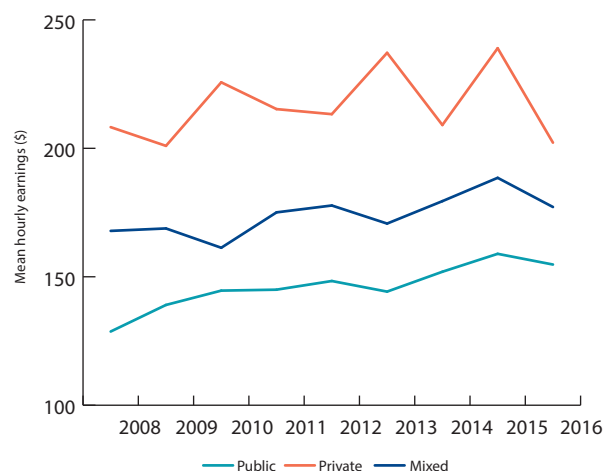
Public versus private sector earnings

Decisions by specialists about which sector to work in are influenced by relative earnings (Cheng et al, 2018). Figure 7 shows how inflation-adjusted hourly earnings differ across the sectors over time.

Specialists who work solely in the private sector earned an average of \$257 per hour in 2016, compared to \$164 for those working in the public sector only and \$211 for those working in both sectors.

However, between 2008 and 2016 the average annual percentage growth in hourly earnings was higher in the public sector at 2 per cent per year in real terms, compared with only 0.56 per cent for those in the private sector and 0.51 per cent for those working in both sectors. By comparison, the average salary per FTE of all salaried medical officers in public hospitals (including specialists and doctors in training) grew by 1.5 per cent a year in real terms between 2011-12 and 2015-16 (AIHW, 2017b).

Figure 7. Mean hourly earnings of specialists (\$) by sector, 2008-2016 (adjusted for CPI)



Source: MABEL

Note: Figures are after practice costs but before tax.

SECTOR CHOICE, WORK-LIFE BALANCE AND JOB SATISFACTION

Choice of sector to work in can also be influenced by job quality issues such as job satisfaction and work-life balance.

Specialists' work-life balance (Figure 8) tends to be higher for those who do private sector work only, compared with those in the public sector only or those working in both. The gap between sectors appears to have narrowed slightly over time and there has generally been an upward trend across all sectors, which has flattened out in more recent years.

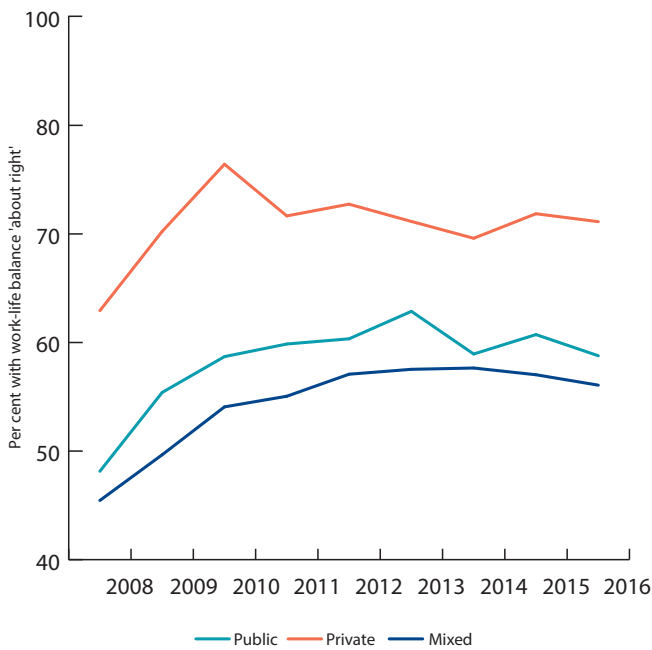
A similar trend exists for job satisfaction (Figure 9). Specialists doing solely private sector work are on average more likely to be satisfied than others. While job satisfaction in the public sector has remained relatively stable, there appears to have been a slight decline in the job satisfaction of those in the private

sector and those working in both sectors since 2012.

There may be several reasons for the differences in work-life balance and job satisfaction across sectors. These include greater autonomy in the private sector, access to more and higher quality resources and equipment, greater control over workload and on-call and, in some procedural specialties, the ability to undertake more high-volume and relatively straightforward work.

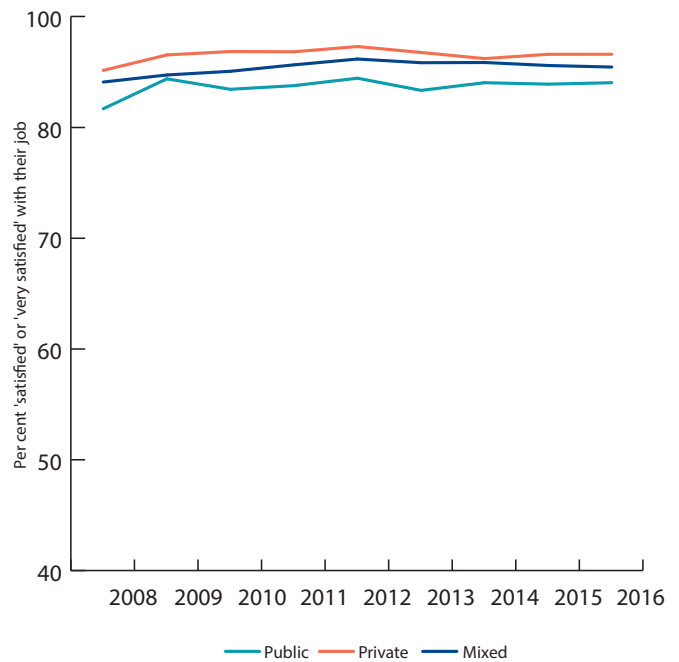
Nevertheless, there remains a high proportion of specialists who undertake both public and private work, since working in the public sector, especially in large teaching hospitals, can increase opportunities for academic work and research, which can also enhance reputation and in turn increase demand to be seen privately.

Figure 8. Percentage reporting work-life balance to be 'about right', by sector and year



Source: MABEL

Figure 9. Percentage of specialists who are satisfied or very satisfied with their job, by sector



Source: MABEL

CONCLUSIONS

Medical specialists are a vital part of the healthcare system. As the sector continues to grow in terms of both size and expenditure there is increasing pressure from governments, insurers and patients for better value healthcare, greater transparency of performance and fees, and additional evidence that the increased spending is delivering better healthcare outcomes for all.

There is a lack of accessible information on costs, fees and health outcomes at the point of GP referral. These are issues for both the public and private sectors.

Increasing competition resulting from the growth in the number of medical graduates and specialists has several implications. Those currently training to be specialists face increased competition for coveted specialist training places and consultant positions once qualified. It is likely to take much longer for these doctors to achieve Fellowship, on top of the 15 years it takes already for some specialties. Some of these doctors could end up under-employed and working part time when they would prefer to work full time; or in jobs that do not fully utilise their training; or leaving clinical practice altogether. Arguably medical training has always been competitive, as evidenced by the very long hours worked by doctors in training and the bullying and harassment that the RACS and others have acknowledged; these aspects could be expected to increase as competition intensifies.

More broadly, a usual economic analysis would

predict that prices, fees and profit margins would begin to fall as supply continues to increase faster than demand, but what might happen in practice is unclear. Competitive pressure could manifest itself in increasingly corporate business models in private specialist practice, where larger medical groups with more-efficient business practices seek to exploit economies of scale. How specialists manage their private sector work could become a key issue. However, the increase in the number of specialists has been occurring for some time and there is no sign that the sector overall is losing steam in terms of earnings and revenue growth.

Though the need for healthcare services sometimes seems limitless, governments, insurers and patients need to make choices about how to best use the 10 per cent of GDP currently spent on healthcare. The value of private health insurance is currently being questioned, which also leads private health insurers to question the value of the care being provided in private hospitals, and therefore that of specialists.

Broader access to information about what works in healthcare and increased transparency on fees and costs, with a view to reducing low-value care, might be perceived as reducing the autonomy of medical specialists in Australia. However, better information and using resources more wisely will ultimately improve patient outcomes and lead to a more sustainable healthcare system.

1. Specialists here are defined as medical practitioners who have completed an accredited specialist medical education program, excluding General Practitioners.
2. This may be an overestimate if the income from private patients in public hospitals is used to top up salaries or to pay Visiting Medical Officers.

About the data

This report uses publicly available data from the Australian Government Department of Health's Medicare Statistics and the Australian Institute of Health and Welfare. Additional data come from the Medicine in Australia: Balancing Employment and Life (MABEL) longitudinal survey of doctors (<http://mabel.org.au/>). MABEL has been collecting data from about 20 per cent of all Australian doctors since 2008. The sample is broadly representative of the population of specialists in terms of age, gender, location, and hours worked. All analyses of MABEL data in this report use cross-sectional weights to ensure data for each year represent the broader specialist population in terms of key variables. Details of the construction of weights are included in the MABEL User Manual.



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