Submission to Productivity Commission Issues Paper. Human Services: identifying issues for reform[1]

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Introduction

The aim of this submission is to examine some of the issues surrounding the role and impact of competition and choice in the health care sector. The submission first outlines some key trends and issues about markets and choice in health care. The reminder of the submission focuses on two specific markets that, in our view, warrant more attention: medical labour markets and the market for private health insurance. This is followed by a summary of specific issues that should be the focus of the inquiry.

Key points are:

- In deciding the scope of sectors for reform, the Commission should include those areas where competition seems to exist, but where competition may not encourage efficiency.

- Information is the basis of any well-functioning market. At the core of achieving the desirable outcomes of competition and choice in health care is improved information on costs, quality and health outcomes across the sector, specifically in the market for medical specialist services and in the market for private health insurance.

Context

Inefficiency in health care is persistent and it means that as a nation we are less healthy, more likely to suffer from ill health and to die younger, and more likely to pay more for health care than should be the case. Evidence from the United States, where arguably competition and choice are more prevalent, shows that up to 40% of total health care expenditure does not improve health, suggesting that there are large opportunity costs of inefficient health spending which lead to preventable morbidity and mortality (1). The existence of under-treatment for chronic disease, and at the same time over-treatment, over-diagnosis, waste and the provision of ineffective and low value care, suggests an inefficient allocation of resources. These issues are gaining more prominence through the Choosing Wisely campaign where doctors are, for the first time, producing lists on treatments and test that should not be provided because they are ineffective and harmful (2).

Many countries have implemented pro-competitive reforms in healthcare in the hope that they will reduce costs and improve quality/health outcomes. These range from public reporting of information on the costs and quality of health care providers (3) to help patients make more informed choices between health care providers, to the regulation of market structure, regulation of pricing and behaviours, and other pro-competitive policies (4-6).

In Australia the health sector has a rich mix of public and private provision and financing that has evolved from a largely private and charitable setting, to a system of universal health care with a mix of public and private financing and provision, but retains key features of the fully private model. The structure and regulation of the industry is relatively stable and has not changed substantially since Medicare began in 1984. It is the largest industry in the economy in terms of employment and expenditure as a share of GDP (at almost 10%). It is also a complex industry that has made substantive economic reform difficult and politically unappealing.

Market failure and the consequences for competition

A key issue in health care is the presence of market failure, such that most of the assumptions of economic theory that are necessary for competition to work, fail to hold (7). Though this happens in other markets, in health care it occurs across most of these assumptions and its consequences are potentially severe for population health. There is a high chance that competition might not have the desirable effects, or even have undesirable effects, without substantial regulation and government

involvement. The key question is how much regulation should there be. Although some health care markets may appear 'competitive' this does not mean that such a market structure is causing good health outcomes at low cost – in fact the opposite may be occurring.

Health care markets suffer from information asymmetry. Patients rely on doctors to provide both information and services, and doctors do not always know patients values and preferences. A conflict of interest arises when patients cannot evaluate the quality of the goods they are consuming and when providers have limited incentives (or monitoring) to increase quality. If low-quality providers could be identified, they may have to reduce prices or leave the market. A response to this source of market failure is the heavy requirements of licensing of doctors and other health professionals, as well as very long periods of training. Though this serves to 'protect' patients, it also limits supply and labour market flexibility.

Markets are often characterised by a limited number of competitors because of high barriers of entry that are attributed to the presence of highly differentiated goods and of industries with high fixed cost of production (R&D intensive industries). For example, markets for specific diseases or patients require increasingly highly specialised doctors; there is extensive brand loyalty in the pharmaceutical industry; GP referral networks may limit competition between specialists; and strategic location decisions of medical practitioners lead to geographically dispersed providers having more market power, i.e. they can increase prices or lower quality without losing patients.

Furthermore, uncertainty about the onset of illness and cost of treatment results in the necessity for health insurance, but insurance breaks the relationship between price and cost. In general, insured patients may be discouraged to invest in healthy behaviours and encouraged to overconsume services because they pay only a fraction of the cost. Indirectly, insurance limits patients' responsiveness to differences in prices, such that competition based alone on prices might not have the desired results. At the same time, providers might select their patients strategically, so that they may see less severe cases or charge higher fees/order more than necessary procedures to patients that are more generously covered.

The automatic response of the unthinking economist is to introduce or increase price signals for patients. This has been shown to reduce demand but also to reduce health, since patients generally do not have the information (see above) to judge whether their medical condition is serious or not when deciding to visit a doctor. Those who reduce their demand are often the most price sensitive (on low incomes) and in the worst health (8). Insurance also limits price signals for doctors - they do not have appropriate incentives to be cost conscious even though they recommend and make decisions to treat, refer, prescribe and order diagnostics tests of limited value (9).

Finally, fully competitive markets are optimal when providers act as profit-maximizers, but not all doctors care solely about profits, they also care about their patients' well-being. To the extent that they are intrinsically motivated and altruistic also limits the impact of financial incentives as an instrument of regulation. The ability of Australian doctors to charge any price to any patient (a rare relic of fully functioning private markets) also limits the effectiveness of government financial incentives and subsidies through Medicare.

Regulation plays a key role in protecting patients, ensuring access, promoting quality, and curbing cost. However, too much regulation can restrict competition and can result in increasing market power of health care providers. Though market failure leads to substantial government regulation of health services, this regulation may not be optimal. At the margins, the effects of reducing and increasing regulation across health care markets are unknown and require careful design and

evaluation. Carefully designed changes to regulation can increase competition and lead to improved health outcomes and lower costs (6).

Medical labour markets

There has been a sharp increase in the number of medical practitioners in Australia because of the establishment of new medical schools and liberalisation of entry for doctors qualified overseas. Nine new medical schools have been established since 2000 (and more are promised), more than doubling the number of medical graduates from 1,503 in 2004 to 3,723 in 2013, an annual growth of almost 12%. Full-time equivalent (FTE) numbers have been increasing faster than the population, from 323 per 100,000 in 2008 to 387 per 100,000 in 2014 (10). This is one of the highest levels of supply in the OECD.

The increased supply of doctors will intensify competition in medical labour markets over a long period, which can affect the geographical distribution of doctors, the price of medical care provided by doctors, healthcare expenditures and population health. However, the automatic assumption that increased supply will lead to a fall in prices and earnings and better health outcomes is premature. Little is known about the effects of an increase in medical workforce supply on costs or population health in a context of market failure, distorted price signals, and very slow and inflexible policy responses. Health workforce planners are tasked with recommending the 'need' for doctors in the absence of essential information of the effect on costs, health outcomes and access to care, and a lack of understanding of the interactions between demand and supply. Since it takes up to 15 years to become a qualified doctor, rapid expansions and contractions in supply have largely failed to prevent, and may even exacerbate, long-term cycles of perceived surplus and shortage (11). Too many or too few doctors and/or doctors in the wrong locations or specialties can exacerbate unwarranted practice variations and the provision of 'low-value' care, over-diagnosis and under/over-treatment in health care (2). Increasing supply, without other changes to regulation will be very costly with negligible impact on population health.

Medical Specialists

Most empirical research in health economics has focussed on the effect of competition between hospitals on the quality of care measured by mortality rates for acute myocardial infarction (AMI). Recent results are mixed, with some studies showing mixed results (12), and others showing positive (13-16) or negative (17, 18) effects on quality and costs. Though hospitals are a key organisation, they are heterogeneous and comprise many sub-markets. In Australia, there is a rich public-private mix of hospital ownership characterised by dual practice of medical specialists.

There is little evidence on the role of competition and patient choice for specialist services. It is clear that for emergencies and more complex and serious procedures the role of competition and choice is very limited. But for many acute, high volume and one-off simple procedures that can be scheduled in advance (eg orthopaedic surgery, cataract surgery) and which are already dominated by private sector provision, the scope for more competition and choice is greater. Most of the increase in the number of medical practitioners in recent years can be attributed to specialisation of the medical workforce. Australia had over 24,000 specialists in 2015. Seven years before, in 2008, there were only approximately 16,500. This is an increase of more than 45% which is significantly larger than the increase in the number of GPs (28%) during the same time period. But despite this sharp increase, the market for specialists remains highly concentrated. Over 87% of all specialists locate their practices in major cities and only 3% decide to provide their services in outer regional, remote and very remote areas. Although, in general, geographical concentration should increase local competition and lead to a reduction of prices, bulk billing rates for services provided by

specialists have remained very low (only 30%) and the gap between the specialist's fee and the Medicare rebate is considerably higher than the out-of-pocket cost patients face for GP services (19).

Additionally, strategic location decisions have an effect on access to healthcare and health outcomes across geographical areas. The limited number of specialists in rural areas combined with their freedom to set prices has a great impact on equity of access, in particular for vulnerable communities.

The demand for specialist services comes from GPs as well as other specialists who decide on which specialist to refer to. There is little evidence about the drivers of GP referral behaviour which could be dominated by referral networks and preferred specialists rather than factors important to patients such as the lowest price, waiting time, or quality of care. More importantly, referrals are specific to a person and this is, if used strategically, an anti-competitive tool that can increase entry barriers for new specialists.

A market where prices are unregulated is not necessarily a problem if consumers can evaluate the quality of the products they are buying. In the case of GPs, repeated visits allow the patient to learn the quality of their services, but visits to specialists are less frequent. With complex treatments it is not possible for the patient to distinguish high from low-value care.

Again, a central issue is the lack of information about specialist's fees and quality of care provided to GPs and patients. When a GP decides to refer a patient, they should be able to inform their patients of the relative waiting times, fees, and quality of care of available alternatives and jointly decide the best option. Some private insurers have begun to publish variations in surgeon's fees and quality of care[2], and Medicare should follow suit.

General practitioners.

The market for GP services is more competitive compared to specialist services, as prices are much lower and bulk-billing rates higher at around 80% of all Medicare GP services. Recent empirical evidence using MABEL data has shown that more competition in metropolitan areas helps to reduce prices and increase bulk-billing rates (20), and unpublished work-in-progress suggests that competition does not reduce quality, and in some cases may increase quality of care provided. It is widely recognised that long-term relationships between GPs and patients, for example through enrolment or registration, help reduce informational asymmetries and can improve outcomes and reduce costs. The proposed new Health Care Homes model plans to introduce voluntary registration for patients with chronic disease. This could reduce patient choice of general practice but the intention is that this would be outweighed by the benefits of longer term relationships. In practice, this may not matter too much given that many patients see a regular GP anyway. Electronic health records would also reduce informational asymmetries between multiple providers seeing the same patients.

There is much less competition in rural areas, but also very different population needs and issues with the financial viability of practices to maintain services where demand is low and fee-for-service problematic. There are a range of government incentive schemes to encourage GPs to locate to and stay in non-metropolitan areas that help make private practice viable although there is little evidence about the effects of such incentives on recruitment and retention(21-23).

Nevertheless, there is increasing consolidation in the GP market. The proportion of practices with 10 or more GPs has increased from 15.5% in 2008 to 24% in 2014, and the proportion of solo practices

[2] http://www.surgeons.org/news/surgical-variance-reports/

has fallen from 11.5% to 6% over the same period[3]. This also reflects a shift in more part time working by an increasingly female GP workforce. Though practices can be owned by corporations, reported trends of increasing corporatisation are largely anecdotal. Corporate practice ownership is more strongly for-profit than when owned by GP partnerships, and they are more efficient at claiming Medicare items and implementing more profitable business models.

Private Health Insurance

Australia's private health insurance industry is unique in that it exists within a system of universal coverage that is Medicare. The industry offers supplementary insurance but the products are sometimes complementary and sometimes substitute to Medicare. The industry appears to be competitive, since there are many competing insurance funds and consumers are free to choose from an array of different insurance products. However, the private health insurance industry is in fact an instance of market failure due to several factors.

First, consumers face enormous information costs when evaluating different insurance products. There is not only the cost of acquiring information so as to understand and compare insurance products, the sheer number of products itself presents a hurdle. There are similar issues to the mobile phone market. At present there are over 20,000 different health insurance products in the market (24). Second, the lack of standardisation across policies offered by different insurers on critical information such as excess, co-payments and exclusions makes comparison of policies difficult (25). Third, the common practice of bundling of hospital and ancillary or extra services further increases the information burden for consumers.

The large number of products, lack of standardisation, and high information costs represent huge barriers for consumers to be able to make informed choices when choosing private health insurance products. In addition, government interventions in the form of regulations and subsidies also affect the working of the competitive markets. Regulations such as Life-time Health Cover and Medicare Levy Surcharge influence the incentive of consumers to purchase health insurance and insurers to create and offer insurance products. Government subsidies to insurance premiums drive a wedge between the prices paid by consumers and prices received by insurers, such that insurers have greater incentives to raise prices than if there were no subsidies.

We recommend that the Commission investigate the following changes which, if incorporated into a reform on private health insurance policy, will to a large extent enhance the competitiveness of the private health insurance market:

1. **Forbidding the bundling of hospital insurance and ancillary or extra coverage.**
   It is well-known that product bundling or tying reduces competition since through bundling large firms are able to gain an unfair advantage by leveraging on their market power. Bundling in this context also allows cross subsidisation which favours large insurers with strong market presence in both hospital and extra insurance, while at the same time it obscures the link between prices and costs thereby reducing transparency.

2. **Removing subsidies and regulations distorting the market for ancillary insurance.**
   By forbidding bundling, the government will also be able to look into removing subsidies on ancillary insurance which consists of many recurring services (e.g., optometry and dental check-ups) and for which there has never been any justification for subsidies. Removing subsidies and regulations such as Lifetime Health Cover for ancillary insurance will help to ensure the ancillary insurance market functions as a free market much like other insurance services such as motor and home insurance.

[3] Unpublished data from the MABEL Survey

3. **Specifying standard coverage for basic insurance product(s)**
   A major hurdle in ensuring the competitive working of the market is the complexity and sheer number of products. While separating the hospital insurance and ancillary coverage markets will to some degree reduce the complexity, a more fundamental approach is for a regulatory agency to specify a basic hospital insurance product which all insurers must offer and no insurers are allowed to offer a lesser product. The advantages are numerous. It reduces complexity of the market, it also reduces search and information costs for consumers. It removes incentives for insurers to offer products purely for tax avoidance purposes. Note that insurers are still free to offer premium products offering greater coverage than the basic product(s).

While there are many details yet to be discussed, a reform incorporating the main elements of the above will to a great extent address the key competitive concerns of the private health insurance market in Australia. . Lastly, it should be noted that research into competition of the private health insurance industry is scant due to the lack of data on insurance products and pricing. A detailed study of changes in competition of the industry over time and across geographic regions, for example, should be a priority for establishing the baseline scenario by the Commission.

Conclusions

In deciding the scope of sectors for reform, the Commission should include those areas where competition seems to exist, but where competition may not encourage efficiency. Just because competition appears to 'exists' does not mean that it works or could not be made to work much better at a small regulatory cost.

A major problem with the health industry to date has been the lack of routine information and data on quality, health outcomes, costs and fees. This is essential in a market where patients are unable to judge the quality and value of care they are receiving, do not know the fees they will be charged, and where providers, acting as agents for patients, need incentives to reduce costs whilst providing more appropriate and high value health care.

A key issue that is common throughout the above is that information is the basis of any well-functioning market. At the core of achieving the desirable outcomes of competition and choice in health care is improved information on costs, quality and health outcomes across the sector. This should occur across most markets within the health industry. The current push for the better use and analysis of large government datasets should be focussed on this purpose, along with careful evaluation of its effects.

At the level of the doctor-patient relationship, doctors should be trained in communication skills and shared decision making. Health literacy programs should be supported (26). Doctors and the general public should have easy access to information on low and high value health care, and better information on referral alternatives (specialist's fees, waiting times, quality). This information should be summarised at the level of the health care provider, such as the hospital, general practice, or health professional. The products offered by private health insurance markets which are dominated by several large insurers should be simplified and standardised to an extent to enable easier and more effective consumer choice.

We would also like to highlight the general lack of robust empirical evidence. Most research has been on hospitals in the US and UK, with less research on medical labour markets and on insurance

markets outside of the US. Only a handful of researchers in Australia are currently working on issues around competition and choice in health care.

References

1. Berwick DM, Hackbarth AD. Eliminating waste in US health care. Journal of the American Medical Association. 2012;307(14):1513-6.
2. Morgan DJ, Brownlee S, Leppin AL, Kressin N, Dhruva SS, Levin L, et al. Setting a research agenda for medical overuse. BMJ. 2015;351.
3. Campanella P, Vukovic V, Parente P, Sulejmani A, Ricciardi W, Specchia ML. The impact of Public Reporting on clinical outcomes: a systematic review and meta-analysis. BMC Health Services Research. 2016;16(1):1-14.
4. Bevan G, Skellern M, editors. Does competition between hospitals improve clinical quality?: a review of evidence from two eras of competition in the English NHS. BMC; 2011: BMJ Publishing Group Ltd.
5. Gaynor M, Town R. Competition in health care markets. In: Pauly M, McGuire T, Barros PP, editors. Handbook of Health Economics. 2. Amsterdam: Elsevier; 2012.
6. Gaynor M, Moreno-Serra R, Propper C. Can competition improve outcomes in UK health care? Lessons from the past two decades. Journal of Health Services Research & Policy. 2012;17(suppl 1):49-54.
7. Arrow KJ. Uncertainty and the Welfare Economics of Medical Care. The American Economic Review. 1963;53(5):941-73.
8. Schokkaert E, van de Voorde C. User Charges. In: Smith P, Glied S, editors. The Oxford Handbook of Health Economics. Oxford: Oxford University Press; 2011.
9. Elshaug AG, Watt AM, Mundy L, Willis CD. Over 150 potentially low-value health care practices: an Australian study. Med J Aust. 2012;197(10):556-60.
10. AIHW. Medical Practitoner Workforce 2014. AIHW Catalogue number: WEB 90.: Australian Institute of Health and Welfare; 2015 [
11. Scott A, Sivey P, Joyce C, Schofield D, Davies P. Alternative Approahces to Health Workforce Planning. Adelaide: National Health Workforce Research and Planning Collaboration, Health Workforce Australia, 2011.
12. Gowrisankaran G, Town RJ. Competition, payers, and hospital quality. Health Services Research. 2003;38(6p1):1403-22.
13. Bloom N, Propper C, Seiler S, Van Reenen J. The impact of competition on management quality: evidence from public hospitals. The Review of Economic Studies. 2015:rdu045.
14. Cooper Z, Gibbons S, Jones S, McGuire A. Does hospital competition save lives? Evidence from the English NHS patient choice reforms. The Economic Journal. 2011;121(554):F228-F60.
15. Gaynor M, Moreno-Serra R, Propper C. Death by market power: reform, competition, and patient outcomes in the National Health Service. American Economic Journal: Economic Policy. 2013;5(4):134-66.
16. Palangkaraya A, Yong J. Effects of competition on hospital quality: an examination using hospital administrative data. Eur J Health Econ. 2013;14(3):415-29.
17. Katz ML. Provider competition and healthcare quality: More bang for the buck? International Journal of Industrial Organization. 2013;31(5):612-25.
18. Propper C, Burgess S, Green K. Does competition between hospitals improve the quality of care?: Hospital death rates and the NHS internal market. Journal of Public Economics. 2004;88(7–8):1247-72.

19. Johar M, Mu C, Van Gool K, Wong CY. Bleeding hearts, profiteers, or both: specialist physician fees in an unregulated market. Health economics. 2016.
20. Gravelle H, Scott A, Sivey P, Yong J. Competition, prices and quality in the market for physician consultations. The Journal of Industrial Economics. 2016;64(1):135-69.
21. Buykx P, Humphreys J, Wakerman J, Pashen D. Systematic review of effective retention incentives for health workers in rural and remote areas: towards evidence-based policy. The Australian Journal Of Rural Health. 2010;18(3):102-9.
22. Li J, Scott A, McGrail M, Humphreys J, Witt J. Retaining rural doctors: Doctors' preferences for rural medical workforce incentives. Social Science & Medicine. 2014;121:56-64.
23. Scott A, Witt J, Humphreys J, Joyce C, Kalb G, Jeon SH, et al. Getting doctors into the bush: General Practitioners' preferences for rural location. Social Science & Medicine. 2013;96:33-44.
24. Private Health Insurance Administration Council. Competition in The Australian Private Health Insurance Market. 2013.
25. Australian Competition and Consumer Commission. Information and informed decision-making in private health insurance. A report to the Australian Senate on anti-competitive and other practices by health insurers and providers in relation to private health insurance. Canberra: 2015.
26. Barber MN, Staples M, Osborne RH, Clerehan R, Elder C, Buchbinder R. Up to a quarter of the Australian population may have suboptimal health literacy depending upon the measurement tool: results from a population-based survey. Health Promotion International. 2009;24(3):252-61.