Dental reform: an overview of universal dental schemes

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Introduction

Access to affordable dental care remains out of reach for many Australians. Recent reports have highlighted the extent of ongoing problems with access to affordable dental care. The Australian Institute of Health and Welfare has recently reported that among Australian children, nearly half have dental decay.\(^1\) Meanwhile, a report commissioned by the Brotherhood of St Laurence has pointed to the high cost borne by individuals and the community from the consequences of untreated dental problems.\(^2\) This finding echoes that of a National Health and Hospitals Reform Commission report, which found that financial barriers prevented or delayed 31 per cent of Australians from seeking basic dental treatment.\(^3\) These reports have added weight to calls for the Government to urgently address barriers to affordable dental care.

A succession of governments including the Gillard Government, have engaged in dental reform efforts, albeit following different paths.\(^4\) The Keating Government introduced a Commonwealth Dental Health Program in 1994 which provided additional funding to states and territories for public dental services for those on low incomes. The Howard Government abolished this but introduced the Chronic Disease Dental Scheme (CDDS) which provides capped Medicare benefits for dental treatment to patients with chronic illnesses. The Rudd Government introduced the Teen Dental Plan—a means tested voucher entitling eligible teenagers to an annual dental health check-up—and promised a revamped Commonwealth Dental Health Program (CDHP) that would deliver an expanded range of public dental services. This was on the proviso that the CDDS be closed down and funding from it redirected to the CDHP.\(^5\)

Meanwhile, other proposals to address problems with access to affordable dental care have been suggested. The Greens propose a universal scheme called Denticare, phased in over five years, and funded through Medicare which would give priority in the first instance to certain vulnerable groups.\(^6\) The Opposition Leader, Tony Abbott, has indicated that if elected, his aspiration is to extend

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5. Efforts to close down the scheme via Ministerial Determination have been blocked in the Senate.
6. Children and teens, the elderly, low income earners and those with chronic diseases. Senator B Brown, *Greens announce vision for 'Denticare*', media release, 7 November 2011, viewed 15 February 2012, [http://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;query=Id%3A%22media%2Fpressrel%2F1211722%22](http://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;query=Id%3A%22media%2Fpressrel%2F1211722%22)
the CDDS arrangements to fund more dental benefits through Medicare, if the budget allowed.\(^7\) Other advocates for dental reform have argued that dental funding should be directed to the financially disadvantaged and other vulnerable groups, where the greatest need exists.\(^8\) The National Health and Hospitals Reform Commission recommended a subsidised universal dental insurance scheme providing a basic package of dental services.\(^9\) Underscoring all these proposals is evidence linking poor dental health with more serious conditions, such as cardiovascular disease.\(^10\)

In the last budget the Government committed itself to a dental reform process, which included funding to support 150 dental internships and the establishment of an expert advisory council to advise it on priorities for dental reforms.\(^11\) Late in 2011, this council presented its interim report to the Government. Although the contents have not been released publicly, media sources have indicated that its main recommendation is for the establishment of a $9 billion universal dental scheme.\(^12\) According to these reports, the scheme would be developed in stages, with priority given to funding dental care for those on low incomes and young people. Meanwhile, the Government has indicated it is leaning towards a means tested scheme, but will await the final report of the expert body before announcing its policy.\(^13\)

As some form of a universal scheme is now at the centre of the debate around dental reform, it is timely to look more closely at the international experience of universal dental schemes. Very few countries offer universal dental care, but some offer some form of subsidised dental benefits. This paper first presents a brief overview of universal and selective schemes. It then identifies jurisdictions in which some form of universal dental scheme operates and describes these. It goes on to compare the dental health outcomes of 12 year olds in these jurisdictions, as well as drawing comparisons to some other jurisdictions where universal schemes are not operating.

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13. Transcript of interview with Hon. Tanya Plibersek, Minister for Health and Ageing, ABC AM radio program, 9 February 2012, viewed 9 February 2012, [http://www.abc.net.au/am/content/2012/s3426390.htm](http://www.abc.net.au/am/content/2012/s3426390.htm)
Defining universal systems

Universalism in welfare systems refers to services and benefits that are available to all, or to whole categories of people (such as the aged), as a right. Universalism may be contrasted with selectivism, which focuses services and benefits on those people who are in most need and who typically cannot afford to pay, hence the use of the means testing mechanism.\(^\text{14}\)

In terms of developed nations, thirteen countries including Australia provide some form of universal coverage for a range of health services, although there is some variability in the nature of the coverage. In some cases, these services are heavily subsidised by government, so that there is no point of delivery cost to the user (although income earners might have to contribute to the cost through income tax). A number of OECD countries may also require citizens to take out some form of compulsory social insurance (sometimes subsidised by government) to fund health care costs.\(^\text{15}\)

However, few publicly funded schemes make all health services available to all-comers—that is, few provide truly universal coverage. Some target their services to particular groups such as the disadvantaged, children, the elderly or those on low incomes, or apply a means test to determine eligibility for services. Some limit the range of services provided free or apply co-payments.

It is beyond the scope of this paper to debate the merits of universal versus selective schemes, but it is useful to highlight some of their perceived limitations. One criticism levelled at universal schemes is that they are poorly targeted, ‘because they do not focus assistance to those most in need’.\(^\text{16}\) The capacity of universal schemes to provide benefits to all can also be hampered by capacity constraints (such as the limits of the available workforce) and/or geographic barriers (such as services only being available in major centres where doctors choose to work). However, targeted or selective schemes can be administratively complex and expensive to run. Means tested systems have been criticised for leading to the institutionalisation of a two tiered system of care.\(^\text{17}\)

Australia’s national health insurance scheme, Medicare, is characterised as being universal in coverage, that is, Medicare is available to all. While this is true in principle, in practical terms the universalism of Medicare has limits. One of its defining characteristics, bulk billing—where patients


\(^{15}\) Automatic health coverage is provided to the entire population and financed from taxes in 13 OECD countries: Australia, Canada, Denmark, Finland, Iceland, Ireland, Italy, New Zealand, Norway, Portugal, Spain, Sweden and the United Kingdom. Many other OECD countries have mandated compulsory social health insurance, financed through income-related social or employer contributions, though often supplemented out of general tax-financed government revenues. See V Paris, M Devaux and L Wei, ‘Health Systems Institutional Characteristics: a survey of 29 OECD countries’, *OECD Health Working Papers* no. 50, OECD Publishing, Paris, 2010, viewed 6 January 2012, http://www.oecd.org/document/25/0,3746,en_2649_33929_2380441_1_1_1_1,00.html


\(^{17}\) L Buckmaster citing McAuley and Mendaue, op. cit, p. 39.
pay nothing for health services—is neither guaranteed nor universal. Instead, patients have an entitlement to a set Medicare rebate for clinically relevant, and defined, medical services.\textsuperscript{18} If the doctor/provider of a Medicare-rebatable service chooses to bulk bill, Medicare does meet the cost of the service (each service has a set Medicare schedule fee), and the patient pays nothing. Around 76 per cent of Medicare rebatable services are currently bulk billed.\textsuperscript{19} However, doctors are not obliged to bulk bill and can charge above the Medicare Schedule Fee, resulting in some patients facing out-of-pocket costs, even when a Medicare rebate is claimed.

Arguably, a number of policy initiatives have further tested claims of Medicare’s universalism. These include the arrangements under the CDDS which cap Medicare dental benefits to a set amount and the means testing of vouchers that provide eligible teenagers with an annual dental check-up.

**Which countries operate universal dental schemes?**

Identifying countries that extend universal coverage or benefits to dental services is not straightforward. This is in part due to a lack of consensus around precisely what constitutes a universal scheme, as noted above. Making it harder to identify truly universal schemes across developed countries is the fact that different financing arrangements for health care costs are in operation. Nevertheless, some recent reports have identified a small number of countries that would appear to provide some level of subsidised dental benefits to the broader population.

A recent OECD publication which surveyed 29 OECD countries identified five that it classified as providing 100 per cent cover for the cost of dental health services. The countries it identified were: Austria, Mexico, Poland, Spain and Turkey.\textsuperscript{20}

A Council of European Dentists manual on dental practice in the EU compared dentistry practices across the EU. It found a number of countries with dental schemes which it described as being ‘universal’ in scope.\textsuperscript{21} These were: Denmark, Finland, Greece, Italy and the United Kingdom—notably a different list to those named in the OECD survey.

Details of the dental systems of those countries identified both in the OECD survey and in the Council of European Dentists manual are provided below. Dental schemes in two other countries, Sweden and Germany, are also briefly described for comparison.

\textsuperscript{18} See A Elliot, op. cit.
\textsuperscript{20} See Paris, Devaux and Wei, op. cit. There are 34 member countries. The United States did not respond to the survey.
Austria

In Austria, compulsory health insurance schemes provide health cover to around 99 per cent of the population. The schemes are mainly financed through member contributions, with a proportion of the contribution also being met by employers. Membership of these schemes is generally linked to occupational status. The cost of basic restorative and conserving dental treatments are generally covered by these schemes, although benefits vary across schemes. Crowns and bridges, implants, fixed orthodontic appliances and other complex or cosmetic treatments are not covered and have to be paid for by patients. Children are covered by the same scheme as their parents. About 5 per cent of the population also purchase private insurance to help meet additional dental care costs.

Denmark

Denmark has a National Health Service (NHS) which is funded through general taxation. Children up to the age of 18 receive free dental care through their school, including free orthodontics. Private dental care for children is also available, but 35 per cent of the cost of such private dental services is met by the patient. Generally, there is no free dental care for adults. Instead, a system of subsidies operates whereby around 80 per cent of the cost of privately provided dental care is met by the patient, with the state meeting the balance. Around 30 per cent of the adult population have private health insurance. Some disadvantaged groups—the disabled, the elderly and those on low incomes—have their dental care costs met by the state.

Finland

In Finland health care is financed through general taxation. Although it is centrally planned, delivery of state-funded services (including dental services) is via municipal authorities. Dental services are delivered either through a network of public health centres, or by private dentists, denturists (a type of dental technician) and dental laboratories. Public health centres are relatively autonomous and each determines who can access their subsidised public dental services, although children and special groups are usually given priority. Co-payments often apply. Overall, the cost of dental services in Finland is broadly shared between households (around 56 per cent of the cost), the state (around 36 per cent), and the social insurance scheme, KELA (around 7 per cent). Around half the adult population also has private health insurance.

Germany

Germany has a statutory health insurance system, in which some 87.5 per cent of the population are members of not-for-profit 'sick funds' which must provide a legally sanctioned package of health

care. Premiums for membership of these funds are shared between employees and employers. Membership of a sick fund entitles the member to a package of free basic dental care, with advanced treatment options such as crowns and bridges and orthodontics sometimes requiring significant patient co-payments. Those not entitled to sick fund membership (the self-employed and those on high incomes) can opt to join a private health insurance fund. Supplementing these arrangements is a public dental service but the type of care provided is restricted to examination, diagnosis and prevention.\textsuperscript{26}

\section*{Greece}

In Greece healthcare is provided by a mixture of private practitioners, social security organisations and, since 1983, a basic state-funded national health service (NHS). Dental care is nominally offered free by NHS clinics to all, but services are generally targeted at children and towards prevention. Most other patients contribute to the cost of dental care, which is also subsidised to varying amounts by social security organisations that have contracts with dentists and clinics. However, one third of total private healthcare spending in Greece is spent on dental health services. Very few people use private health insurance to cover dental costs.\textsuperscript{27}

\section*{Italy}

In Italy, most health care is publicly funded through general taxation, although small co-payments may apply. Comprehensive dental care is meant to be provided through the National Health Service (NHS), although dental implants are excluded. However, in practice, the comprehensiveness of the service depends on local priorities and thus varies considerably even within a region. In many areas, only emergency dental treatment is provided by the NHS. As a consequence, publicly provided dental treatment mainly comprises extractions and rarely, restorations. Waiting lists are often long. Consequently, most people seek treatment in the private sector. Although some private health insurance is available, comprehensive dental coverage is often excluded from such plans.\textsuperscript{28}

\section*{Mexico}

In Mexico, more than half of the population has all its health care costs, including dental care, met through the social security system. Another 20 per cent of the population is covered through a publicly-subsidised voluntary health programme, Seguro Popular, while a very small percentage purchase private cover. In principle, social security covers all types of medical services, including dentistry, but in practice what is offered is limited by budget constraints.\textsuperscript{29}

\begin{thebibliography}{9}
\bibitem{26} Ibid, pp. 154–160.
\bibitem{27} Ibid, pp. 169–171.
\bibitem{28} Ibid, pp. 207–209.
\bibitem{29} Paris, Devaux, Wei, op. cit., pp. 8–9, 11, 20.
\end{thebibliography}
Poland

Since 2003, the Polish health care system has been financed through a common health insurance fund, the Narodowy Fundusz Zdrowia (NFZ). Citizens pay an obligatory premium of 9 per cent of their income to finance the NFZ. As well as paying for their health services, membership of the NFZ entitles citizens to a limited range of dental services from either publicly funded clinics or dentists under contract to the NFZ. At a minimum, this includes a once a year dental check up, but children under 18 and pregnant women are able to obtain a wider range of services more frequently. Not all dentists work in the state system; around two thirds work outside the public system in private practice, although some provide dental services under contract to NFZ. Basic services provided under NFZ are free, although some services also attract a co-payment and the availability of services is limited. The cost of dental services provided in private practice is met by the patient.30

Spain

Spain provides universal access to health care for all citizens, however, some services such as dentistry are not comprehensively covered. Health services provided by the government (or the regions) are funded mainly through compulsory social security deductions from income, supplemented by other sources. These deductions are aggregated into a national social security pool. Although most dental care is provided by private practitioners and is paid for by patients, each regional health care organisation operates a small public dental service. Generally, these are delivered through clinics which provide free emergency care or antibiotic treatment. Some of these are also able to offer supplementary services, such as free paediatric dentistry (including fillings, extractions and cleaning) and prevention services.31

Sweden

Most health care in Sweden, including dentistry, is financed through a national social insurance system. A resident of Sweden must be registered with a social insurance office when they reach the age of 16. Most dental care is provided in one of two ways: the Public Dental Service which provides free dental care to children up to the age of 19, or a subsidised dental scheme for adults who are not entitled to free care. A voucher system was introduced in 2008. This provides most adults with a biennial voucher to a set value, which can then be used to help pay for dental treatment. A high cost protection scheme was also introduced, to help adult patients with particularly costly dental needs, although the patient must also make a contribution.32

Turkey

Turkey is described as being on the way to offering universal coverage for health care, including for dental services. Currently Turkey is considered a mixed system with mandatory, subsidised coverage for some of the population with around a third of the population still uninsured. More detailed information is not publicly available.

United Kingdom (UK)

Since 1948 dental care has been included under the National Health Service (NHS). The NHS is largely funded through general taxation. Three types of oral health care services are funded: General Dental Service (GDS), Community Dental Service (CDS) and Hospital Dental Service (HDS). Most patients contribute to the cost of GDS dental care through co-payments. Specific groups receive general dental care without any patient charge, for example children under 18 years old, pregnant or nursing mothers, those on welfare benefits, and those under 19 years old who are also in full-time education. As treatment is on a first-come-first-served basis, waiting times apply. While in theory access to a general dental practitioner (GDP) is available to all through the GDS, in practice dentists pick and choose who they opt to treat under the NHS. The CDS provides dental services to special groups (such as special needs children) or where access to the GDS is poor. Access to hospital-based acute dental services (such as dental surgery) is free.

Dental health status where universal schemes operate

Measuring dental health outcomes across countries can be problematic, not least because comparable and comprehensive data on dental health is not routinely available and there is considerable variation in what different dental systems provide. However, a number of OECD countries regularly survey the average number of decayed, missing or filled teeth (DMFT) in their children. Although these surveys do not reveal the dental health status of the whole population, they can be used to make broad comparisons about the dental health status of one particular group—children.

The table below shows the average number of DMFT for 12 year olds in selected OECD countries, including Australia. As there is variability in the frequency of the surveys, a number of survey years are presented for each country.

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35. Ibid.
Table 1: Decayed, missing, filled teeth (DMFT) 12 year olds, selected OECD countries, various years

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Source: OECD

In countries which the OECD identified as having 100 per cent dental coverage—that is, Austria, Mexico, Poland Spain and Turkey—the average number of DMFT in 12 year olds varied, from 1.4 in Austria, to 3.2 in Poland. Of those countries operating universal schemes (as identified in the report by the European Council of Dentists) Denmark, Finland, Greece, Italy and the United Kingdom all showed variation in the average number of DMFT. Denmark and the UK shared the lowest average (along with Germany) at 0.7, while in Greece the number of DMFT was 2.0. Australia ranks slightly better than the EU average, at 1.1 DMFT. In comparison, Sweden and Germany, countries without universal dental schemes, have low rates of DMFT at 0.9 and 0.7 respectively.

It is notable that the variation in DMFT occurs across countries that purportedly offer some level of public funding for dental services. Although this data only compares DMFT among children, a range of factors could be contributing to these variations in dental health outcomes.

Key factors in good dental health outcomes

The World Health Organisation (WHO) has identified several areas where action needs to be focused to improve oral health globally. These are: effective use of fluoride (including affordable fluoride treatments); promoting a healthy diet; tobacco control; focusing on the oral health of children and the elderly; improving general health and quality of life including access to clean water; improving

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37. Note: comparable data for Mexico was not available.
oral health systems; addressing HIV/AIDS; and improving oral health information systems and oral health research.\textsuperscript{38}

In Australia, the National Oral Health Plan 2004–2013 was developed as a national framework to guide action on dental health across all levels of government and the private sector. The Plan identified a number of interrelated priority areas. These are: promoting oral health across the whole population (including allocating resources equitably and efficiently); focusing services on specific groups including children (because establishing good oral health early will reap benefits in later life), the elderly (so they can maintain their health), those on low incomes or who are socially disadvantaged (where a high burden of disease exists), people with special needs (who are at risk of poor oral and general health), and Aboriginal and Torres Strait Islander peoples (where changing lifestyles are impacting on oral health). As well the Plan recommends addressing dental workforce shortages and maldistribution, particularly in public dentistry.\textsuperscript{39} Although the Plan does focus on the needs of specific groups, this is not to the exclusion of population-based approaches to dental care. Among these, the Plan highlights the important role of improving the availability of water fluoridation\textsuperscript{40}:

\begin{quote}
For each $1 invested in water fluoridation, estimates of the savings in dental treatment costs alone range from $12.60 to $80, with the greatest health benefits accruing to those who are most disadvantaged.\textsuperscript{41}
\end{quote}

It is notable that those countries reporting the lowest rates of DMFT, that is, the UK, Germany and Denmark, only offer free dental health care to specific groups. For example, in Denmark only children, the disadvantaged and the elderly are guaranteed free access to comprehensive dental care. The UK system which also targets children and the vulnerable, offers free general dental care to these groups. In comparison, Austria, which mandates universal dental coverage, albeit with variations in benefits and services, has double the rate of DMFT among 12 year olds (1.14) of the UK, Denmark and Germany.

\section*{Concluding comments}

This paper found that there are relatively few countries which operate some form of universal or fully government subsidised dental health schemes for the whole population. Schemes that are...
nominally identified as being universal, aren't always so in practice, and what constitutes a universal scheme remains unclear. The subsidised dental schemes that have been identified vary considerably in scope, funding sources, resources, services and dental benefits. Some offer dental cover to the broader population but resource constraints limit the range of services, timeliness and availability of services. Others require certain categories of users to contribute to the cost of care, while some restrict eligibility to specific groups, but offer more services to these groups.

These variations substantially limit our ability to make meaningful comparisons about the effect of these funding arrangements on dental health outcomes. However, the available evidence suggests that those countries which direct dental funding and services to children tend to have lower rates of DMFT among 12 year olds. But the extent to which these dental outcomes can be attributed to the operation of a particular dental funding model is not clear. A range of factors, including for example, overall health status, socio-economic and demographic factors, nutrition, affordability and accessibility of services, and the availability of fluoridation, are also likely to be influencing dental health outcomes.
Dental reform: an overview of universal dental schemes