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Select Committee into the Provision of and Access to Dental Services in Australia
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To whom it may concern.

Deakin University is the leading institution in Australia, which hosts within Deakin Health Economics, the only dedicated oral health economics research group in the Southern Hemisphere. Deakin Health Economics, a founding member of the Institute of Health Transformation, has industry knowledge and experience relevant to public health issues including those articulated in the Terms of Reference of the Select Committee into the Provision of and Access to Dental Services in Australia.

Deakin Health Economics undertakes work that spans prevention and treatment across the community and health sectors to ensure efficient and equitable allocation of health resources. Our expertise ranges from the design and implementation of economic evaluation and health technology assessment to economic modelling and priority setting. We also undertake methodological research to ensure our approach is informed by best practice in economic evaluation. As one of Australia's largest teams of health economists, Deakin Health Economics considers it important to understand both health economics and its application in a particular topic area or setting.

The Oral Health Economics Research Stream (OHERS) is led by Hon. Prof. Hanny Calache, a registered paediatric dentist who worked as Director of Clinical Leadership and Director of Clinical Leadership Education and Research at Dental Health Services Victoria. Hon. Prof. Calache established and is the Chair for the Disability and Oral Health Collaboration, and a founding member and executive member of the Australian Network for the Integration of Oral Health. The OHERS research team members, who have a dentistry background, includes Hon. Prof. Hanny Calache (Head, OHERS), Dr Utsana Tonmukayakul (Research Fellow), Mr Tan Nguyen (Casual Research Fellow) who is also the Spokesperson for the National Oral Health Alliance, and Dr Katy Theodore (Honorary Fellow) and Policy and Research Manager for the Australian Dental Association Victorian Branch.

Respectfully, the term Aboriginal has been used respectfully used to refer to Aboriginal and/or Torres Strait Islander People. Deakin Health Economics appreciates the opportunity to respond:

a) the experience of children and adults in accessing and affording dental and related services

Overall, only 48% of Australians reported seeing a dental practitioner in the last 12 months.[1] Although a large proportion of Australian children have good access to dental services, only one fifth of children aged 5-14 years have an irregular dental visiting (i.e. having a dental check-up at least once every two years).[1] Only 57% of Australian children have had a first dental visit before age 5 years,[2] and children under 9 years old experience the highest rate of potentially preventable hospitalisations, from the total of 83,000 annually.[1] Timely access and affordability to general anaesthesia for dental conditions is also significantly costly, particularly for young children, people with disabilities and people living in rural and remote areas.

It is important to note that there are subpopulations who are the least likely to access and afford dental services but are at greater risk for oral diseases. This includes:

1) people who are socially disadvantaged or on low incomes,
2) Aboriginal People,
3) people living in regional and remote areas,
4) people with additional or specialised health care needs.[3]

The long wait lists for public oral healthcare for adults up to three years,[4] preclude them from accessing timely dental services in a timely fashion. Constrained resources allocated to public oral healthcare has meant that eligible adults are unable to receive regular care based on their oral health needs and risks. Once general care is completed (a full course of dental treatment), eligible adults typically have to add their name on the waiting list again before they are able to receive follow-up appointments for ongoing oral health maintenance.

Children with disabilities have difficulty accessing dental services. Although the Victorian Government has invested in the implementation of mobile dental services (Smile Squad), they are unable to reach all Special and Special Development Schools in a timely and regular fashion, largely because of an insufficient available oral health workforce. i.e., children with disabilities are at higher risk for oral diseases and should have their oral health reviewed at least once every 12 months. Similarly, adults with disabilities have difficulty accessing public oral healthcare due to the long wait lists, and dental practitioners lack confidence in providing care to people with disabilities.

Even those groups that are from 'priority population(s)' are supposed to receive the next available appointment, may have to wait for up to six months before they can receive an appointment foir general care. Priority populations in Victoria includes those with severe mental illness, adults with complex medical health conditions (e.g., cancer therapy), migrants and asylum seekers, and Aboriginal People. Older adults living in residential aged care facilities have very poor oral health,[5] which affects their overall health and wellbeing including at increased risk to aspiration pneumonia,[6] a potentially life threatening.

Out-of-pocket expenses for dental services ($240) is the second highest household expenditure on health, which follows non-subsidised medications ($429).[7] About a quarter of Australians would have difficulty in paying a $200 dental bill for dental services. Aboriginal people experience unique barriers to service access, due to scarcity of culturally safe care and the costs of dental services, which are available. The most recent National Oral Health Survey found that in Australia, Aboriginal people reported almost double (40%) the instances of being unable to pay for oral healthcare, and 39% of people who are eligible for public dental services had difficulty to pay for dental services.[8]

Currently oral healthcare available to Aboriginal people is severely inadequate, with ongoing institutional racism and a significant lack of culturally safe healthcare services.[9] Aboriginal Community Controlled Organisations are leaders in providing holistic, comprehensive, and culturally appropriate healthcare to Aboriginal people[1]. Aboriginal Community Controlled Organisations have demonstrated practical solutions to addressing oral health[10,11] and have demonstrated successes that are pivotal in achieving the objectives of National Agreement on Closing the Gap.[12] Greater investment in Aboriginal Community Controlled Organisations and Aboriginal led initiatives is critical to demonstrate self-determination and to improve oral health outcomes of Aboriginal people.

b) the adequacy and availability of public dental services in Australia, including in outer-metropolitan, rural, regional and remote areas

Public dental services, delivered by the state and territory jurisdictions, is significantly underfunded in all geographic areas, particularly in regional and remote areas. The 2017 Productivity Commission report, which included a review of public dental services, noted that approximately, 36% of the eligible population (children and adults) were eligible for public dental services.[4] However, up to one-third of the eligible population receive public dental services at any given year, based on reports of utilisation rates by the states and territories.[4]

It is evident that oral health status declines as remoteness increases. This is contributed by fewer number of dental practitioners in rural and remote areas compared to major cities, and longer travel

[1] National Aboriginal Community Controlled Organisation. Aboriginal Community Controlled Health Organisations (ACCHOs). 2022. Accessed May 12, 2023. https://www.naccho.org.au/acchos/

times and limited transport options to services to get the dental care that they need.[3,13,14] Retention of dental practitioners in rural and remote areas is also a continuous problem.[15] In addition, public dental specialist access are largely provided in centralised locations, meaning local access to public dental specialists are limited. Telehealth models of care provides can address these barriers to public dental services, but not all treatments can be delivered via digital technology.

c) the interaction between Commonwealth, state and territory government legislation, strategies and programs in meeting community need for dental services

It is recognised that oral health is a joint responsibility of the Commonwealth and the state/territory governments. However, the absence of national clinical leadership with an appointed Commonwealth Chief Dental Officer, has meant that oral healthcare has remained a low priority by successive governments. Efforts to improve community need for public dental services is poorly co-ordinated, particularly for young children who currently experience the highest rates of potentially preventable hospitalisation.[16] At present, oral healthcare is largely excluded from Medicare.

Currently, the Child Dental Benefits Schedule is implemented under a separate legislation, the Dental Benefits Act 2008. Although there is a statutory requirement for its three-yearly reviews, the stand-alone legislation is often subject to political risk of defunding when there is an appetite for fiscal decisions on the Commonwealth budget. Ideally, dental services that are effective and cost-effective should be funded under Medicare's Health Insurance Act 1973 and should be subject to review in accordance with the Medical Services Advisory Committee. This will integrate oral health within primary healthcare, and the goal towards universal access to affordable oral healthcare.

d) the provision of dental services under Medicare, including the Child Dental Benefits Schedule

The Child Dental Benefits Schedule provides an important safety net for the provision of dental services for eligible children. However, the utilisation rate of the scheme is lower than expected, which has not exceeded and currently at 38%.[17] Public marketing media campaigns to promote the scheme may improve these utilisation rates as recommended by previous government reviews, but it is yet to be implemented. Increasing the efficiency of the oral healthcare workforce would need to consider the increasing role of oral health therapists.[18] It is also possible there is a small economic incentive for dental practitioners, particularly private sectors. About 85% of dental services are provided in private practice.[19] There is a worse economic trade-off to provide dental services for children compared to adults who have needs for more costly complex care and demand for cosmetic dentistry. These are unresolved utilisation barriers under the Child Dental Benefits Schedule. Furthermore, recommendations from previous reviews of the dental program have not been fully implemented in systematic and comprehensive manner.

e) the social and economic impact of improved dental healthcare

Good oral health is essential for overall health and wellbeing. It enables essential functions including 'eating, speaking, smiling, and socialising, without discomfort, pain, or embarrassment'.[20] The social and economic impact of improved oral healthcare in Australia has not yet been quantified. An estimation from the US, comparable oral health profile, found that USD$136 billion could be saved if all oral diseases are prevented. This figure is estimated from the over 34 million hours lost from school each year due to unplanned/emergency dental care, over US$D45 billion productivity lost because of untreated oral disease, 2.1 million emergency visits for dental emergencies, USD$26.5 billion expenditure on dental care for children and adolescents. Around 18% of American adults also reported that the appearance of their mouth and teeth affects their ability to interview for a job, with greater inequities for those on low income, affecting 29% in this subpopulation.[21] Similar research undertaken in the Australian context is recommended, but this may be challenging without specific research priorities direct for oral health by research funding agencies.[22]

f) the impact of the COVID-19 pandemic and cost-of-living crisis on access to dental and related services

Early in the COVID-19 pandemic, Australia implemented significant public health measures including the restrictions on routine dental practice, which resulted in deferred oral healthcare. Our research team published a perspective article,[27] indicating that these restrictions may have been overly cautious, and those most likely to be negatively impacted would be populations accessing public dental services, who have higher oral health needs. In addition, the negative economic impacts on individuals and families have meant that discretionary healthcare spending is likely to result in delayed access to essential oral healthcare. The impact of the Covid-19 pandemic restricted access to remote Indigenous communities which can make the disproportionately oral health status more prominent. The cost-of-living crisis is likely to have a had a significant negative impact on the current low population access to oral healthcare and affordability for dental services.

g) pathways to improve oral health outcomes in Australia, including a path to universal access to dental services

Universal access to affordable to oral healthcare is an essential component of the healthcare system. This is currently a major gap under Australia's Medicare public health insurance system. A fundamental driver will be the need to appoint a Commonwealth Chief Dental Officer with public health expertise, who is adequately skilled to provide national clinical leadership for oral health. This is still an outstanding recommendation from Australia's National Oral Health Plan 2015-24,[3] which is re-emphasised in our 2023 perspective paper,[28] and is supported by peak consumer and health professional associations of the National Oral Health Alliance (NOHA).[29]

Deakin Health Economics supports the four recommendations made the NOHA,[29] which articulates actions with a proposed roadmap towards universal access to affordable oral healthcare[29]:

- Appoint a Commonwealth Chief Dental Officer,
- Implement the oral health recommendations by the Royal Commission into Aged Care Quality and Safety,[30] including the establishment of the Seniors Dental Benefits Scheme,
- Commit to increased funding by the Commonwealth government for public dental services initially $500 million annually), and
- Engage NOHA with Australia's National Oral Health Plan 2025-2034.

Although previous reviews on a pathway to universal access to dental services have provided some guidance,[31,32] they are largely driven by 'experts' without critical consumer consultation and input. Deakin Health Economics recommends that funding needs to be directed to genuinely engage with consumers and other key stakeholders in this dialogue and provide input to develop the subsequent Australia's National Oral Health Plan 2025-2034. Without national clinical leadership for oral health by appointing Australia's first Commonwealth Chief Dental Officer, it remains difficult to progress oral healthcare reform.

h) the adequacy of data collection, including access to dental care and oral health outcomes

Nation-wide data collection regarding access to dental care and oral health outcomes is largely limited and narrow in scope. Most relevant oral health data is collected through the various public dental services delivered by the state and territories jurisdictions. However, it is a relatively skewed dataset because it largely provides dental services to the most socioeconomic disadvantaged. Moreover, public oral healthcare only provides around 15% of the overall dental services provided in Australia. Currently, access to this data is subject to formal requests to the local authority and are not publicly available. In addition, data on oral health outcomes are predominately based on traditional clinical-based measures such as numbers of decayed teeth, missing teeth due to decay, and filled teeth. We recently published a perspective paper that indicates the shortfalls of traditional

measures in resource allocation and policy planning. Patient-reported outcome measures and patient-reported experience measures should also be collected.[33]

Data on access to dental care is typically reported through the work of the Australian Bureau of Statistics and the Australian Institute of Health and Welfare. These can be derived from 10-yearly National Oral Health Survey conducted by the Australian Research Centre for Population Oral Health, based at the University of Adelaide. There is also a dearth of data focused on the oral health of children aged under 6 years old. Lastly, aggregate data on the type and number of dental services provided under the Child Dental Benefits Schedule is publicly available through Medicare Statistics, or annually updated by Private Healthcare Australia for the private sector under private health insurance.[34] Data on the utilisation of dental services does not always reflect consumer needs, nor clinically appropriate.

At present, there is no evidence that the public oral healthcare that are currently provided are effective and cost-effective. Deakin Health Economics supports that work is needed to improve the publicly available oral health data, including the need to include oral health outcome measures, to inform resource allocation and evaluation. Value-based healthcare approaches to service delivery shows promise to increase efficiency and improve oral health outcomes in Victoria.[35]

i) workforce and training matters relevant to the provision of dental services

Currently, the oral health workforce is not optimising the efficient delivery of dental services. Dentists consist of 81% of the dental workforce to provide dental services, who have the broadest scope of practice in dentistry and the costliest to train.[18] However, common oral diseases such as tooth decay (dental caries) and gum disease (periodontal disease) can be managed by other dental practitioners, where their core training is focused on oral disease prevention and health promotion. These include dental therapists, dental hygienists, and oral health therapists.

There is very limited recognition of the critical role of dental therapists, dental hygienists, and oral health therapists in the discourse for achieving universal access to affordable oral healthcare. Many tertiary institutions are government funded and continue to train significant numbers of dental graduates relative to oral health therapy graduates, without the consideration for community needs and the financial implications in producing an inefficient oral health workforce.[18] Furthermore, efficiency gains can be realised for specialist care by supporting the professional development of dentists to 'upskill' in providing specialist dental services, that would otherwise normally be referred. Additionally, training and feedback systems would help support a focus on oral disease.[36–38]

With an oral health workforce shortage and limited workforce production, training non-dental health professionals to perform preventive oral health services should be considered. For example, clinical leadership from the US by the American Academy of Pediatrics championed the training of non-dental practitioners by supporting guidelines for early assessment, anticipatory guidance, and the application of fluoride varnish on young children to prevent tooth decay.[39]

Deakin Health Economics recommends the following actions to develop health workforce capacity to promote oral health and deliver oral healthcare:

1. Capacity building of dental practitioners in the management of children and adults with disabilities and people with complex treatment needs (including diabetes, obesity, cardiovascular disease, people who use illicit drugs etc), and cultural safety training,
2. Capacity building of non-dental health professionals (including Aboriginal and Torres Strait Islander health practitioners, general practitioners, nurse practitioners, midwives, pharmacists diabetes educators, speech pathologists, occupational therapists, etc), in the importance of oral health management in the management of their clients with complex health needs and provide anticipatory guidance for the prevention of oral diseases and the provision of non-invasive preventive interventions such as the application of fluoride

varnish[40] and silver diamine fluoride[41] for individuals and populations are greater risk for tooth decay, and

3. Capacity building of support workers (including nurse practitioners and personal care assistants) in the provision of oral health care to people with disabilities and those living supported care and in residential aged care facilities.

There are opportunities to support the integration of oral health through appropriately designed and adequately funded services in relation to oral health under the Medicare Benefits Scheme.

j) international best practice for, and consideration of the economic benefit of, access to dental services

The World Health Organization (WHO) acknowledge that prioritisation is needed for oral health and launched the 2021 WHO Global Oral Health Strategy. Deakin Health Economics endorses the WHO Oral Health Action Plan 2023-2030, which includes the provision of population access to essential oral healthcare. The WHO defines essential oral healthcare as:

> 'Essential oral health care covers a defined set of safe, cost-effective interventions at individual and community levels that promote oral health and prevent and treat the most prevalent and/or severe oral diseases and conditions, including appropriate rehabilitative services and referral.[42]

Our research identified that global oral healthcare systems are highly variable. Governments of Scandinavian countries, Japan, South Korea, Thailand, Taiwan, for example, have funded universal oral healthcare.[35] Many governments provide funding to private providers to deliver dental services. In the UK, the NHS also funds the private sector to deliver health services includes oral healthcare, but there are consistent concerns regarding the willingness of dental practitioners to participate.

Generally, the extent to which government funded universal dental scheme improves oral health outcomes remains unknown because there is a gap in evidence and the existing issue about service access in priority populations. Evidence from US shows potential benefits of an initiation to remove cost barriers. Under the implementation of the Patient Protection and Affordable Care Act, there is an increase in private insurance for young adults and increase dental service for low income adults.[43] Studies have shown significant reductions in dental-related emergency department visits for jurisdictions that expanded the coverage of public dental services for low income households.[44]

k) any related matters

Dental tourism can be another area to monitor, a term used to describe people who travel overseas to seek oral healthcare. Each year, around 15,00 Australians travel overseas for cosmetic surgery including dental procedures with a total cost up to AUD$300 million a year.[45] This practice of seeking oral healthcare overseas is risk averse is fraught with risks, especially if the services provided overseas do not meet high-quality standards, and can lead to complications related to infection and treatment failure, which then need to be managed by Australian dental practitioners . Treatment of complications and failures are often associated with high cost of care. Given the numbers of Australians seeking oral healthcare overseas, this could potentially pose a financial burden and health workforce pressure in Australia.

Deakin Health Economics would like to emphasise that the achievement of universal access to affordable oral healthcare needs to be complemented with a suite of other oral health policy initiatives to promote population health. This includes interventions that work at a population level,[46] which have been shown to be more cost-effective than the direct provision of dental services. These include the expansion of community water fluoridation, a health levy on sugar sweetened beverages,[47] and targeted outreach programs within school-settings[48–50] and residential aged care settings. There is an urgency to increase the delivery of cost-effective clinical interventions, which can include those delivered by non-dental professionals, such as fluoride varnish[40] and silver diamine fluoride,[41] and minimally invasive treatment interventions.[51]

But fundamentally, a co-ordinated response to provide and increase access to public oral healthcare to improve the health of all Australians would need national clinical leadership for oral health by appointing Australia's first Commonwealth Chief Dental Officer.

On behalf of Deakin Health Economics, we appreciate the invitation to make a submission for this public consultation and look forward to further developments in these important areas of public health policy. Please do get in touch if you would like to discuss our submission.

Yours sincerely,

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Hon. Prof. Hanny Calache
Head, Oral Health Economics Research Stream

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(Authorship by Deakin Health Economics members in bold)

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