COVID-19 and the Dental Profession: Professional Tensions and Ethical Quandaries

A COVID-19 Sydney Policy Paper In Depth, authored by University of Sydney experts Dr Alexander C. L. Holden, Professor Ramon Z. Shaban and Professor Heiko Spallek.
Table of Contents

Executive Summary 2
Introduction 3
The Role of Dentistry and Reduced Access in Times of Pandemic 4
The Economic Conundrum of Oral Healthcare 6
Dental Education During COVID-19 7
Policy Recommendations 8
Conclusion: Changing Attitudes? 8
References 9

About the Sydney Policy Lab

The Sydney Policy Lab is a major multidisciplinary initiative of the University of Sydney which aims to find new solutions for the biggest challenges of our age. We develop original, collaborative and far-reaching research projects that serve the public good, each with global resonance and practical recommendations. We believe that the best new knowledge emerges from new relationships and not from isolated scholarship restricted to library or laboratory.

Our COVID-19 Sydney Policy Papers provide expert guidance to decisionmakers and the broader public about the key principles, perspectives and themes to keep front of mind as they grapple with pressing, deeply complicated and high stakes policy challenges on a daily basis. In Depth Papers provide sustained and specialised analysis and policy recommendations in individual policy domains. Access all the COVID-19 Sydney Policy Papers here.
Executive Summary

For the dental profession, the COVID-19 pandemic presents many more questions than it does answers.

The Sydney Policy Lab’s COVID-19 Policy Papers In Depth focus on what we must attend to now, to ensure that the society we live is one where everyone can flourish. This paper brings together a group of internationally respected experts to provide specialised analysis and policy recommendations for the future of the dental profession.

It details the impacts of COVID-19 upon oral healthcare in Australia; how the dental profession has acted to reduce COVID-19 transmission, and how services have been restricted during the crisis. The potential impacts of the restriction of services are discussed, especially in the context of how service closures may inadvertently contribute to accentuating oral health inequities and preventing the provision of dental care to those who need it most.

Oral health is a key component of health, with poor oral health having significant impacts upon physical function, general health and social integration. Despite being an essential part of holistic wellbeing, dental healthcare is separated from the rest of the health system, both financially through exclusion from Medicare, and through the lack of integration of dental services with other healthcare providers.

This paper explores pertinent questions about dentistry, the dental profession and the nature of oral health that have been raised by the pandemic. Being able to consider these questions proactively, with an interprofessional and collaborative approach to the practice of dentistry, will be key challenges for the dental profession moving forward. As with the Lab’s previous contributions, we put these experts’ views and analysis forward not in the sense of offering a single prescription but rather in the hope that they can both guide the reflection of those confronted with the need to make immediate decisions and stimulate widespread discussion about the best way in which to take Australia forward in the longer term.

Key points:

- **Questions surrounding the future trajectory of the dental profession and its role within our communities need to be addressed.** Dentists and other dental professionals need to be more closely engaged in interprofessional health activities. Since dentistry is mainly based in primary care settings and involves routine oral healthcare for patients who are predominantly well, dental teams are in a unique position within the community to engage in health surveillance. Dental practices could identify high-risk or symptomatic patients and test them at the practice or refer them to another service.

- **It is time for investment in oral healthcare in Australia that will ensure that all Australians have equitable access to dental care.** Dentistry is financially and structurally separated from the rest of the healthcare system in Australia. The COVID-19 crisis reveals and entrenches the inequities in Australian society. Oral health inequities will worsen for the most vulnerable in our society without a commitment to state investment in publicly funded dentistry based on existing services in the public and private dental systems. Teledentistry can also play a key role in the reduction of oral health inequities and structural barriers to dental care. Beyond investment in dental care, further research is required to answer essential questions about oral health and its impact on the social, physical and mental wellbeing.
The role of dentists and the oral health team lacks definition within the broader healthcare workforce. Dental education can help address this. Dentists have largely not been redeployed or reutilised during the COVID-19 health crisis leading to lost opportunity for the dental workforce to contribute to efforts to manage the pandemic. Curricula that train future dentists and other dental professionals need to develop competencies for dental practitioners in interprofessional health practice.

Introduction

What does the COVID-19 pandemic reveal about the place of dentistry within health systems and the trajectory of the dental profession in the 21st Century? How does this global event impact the practice of dentistry in Australia and what does it reveal about the nature of dentistry and oral healthcare?

The 2020 global outbreak of COVID-19 has seen huge disruptions to all facets of life and work, with a wide range of global responses. Some responses, including in Australia, Taiwan and South Korea, have been extraordinarily successful. Others such as in Iran, Italy, the UK and the US have been less so, with serious consequences attending a lack of preparedness and response. The lack of an appropriate national stockpile of personal protective equipment in many jurisdictions should never have happened in the years after SARS and H1N1 and the use of N95 masks has long been mandated by healthcare professionals exposed to the risk of respiratory infections, at least during the regular flu season.

Dentistry, too, has had to adapt to the varied challenges raised by the pandemic. Since the COVID-19 outbreak began, dentistry has been through many changes to both public and private practice. Restrictions and adaptations in the dental profession have evolved with the changing risk of COVID-19 spread in Australia. The majority of dental care in Australia, around 85%, is provided by private practices in primary care and community-based settings. The Australian Health Protection Principal Committee (AHPPC) has recommended that dental practices operate within a framework of practice restrictions and guidance produced by the Australian Dental Association (ADA Inc.). These restrictions have undergone an initial imposition and subsequent relaxation as the threat of COVID-19 infection transmission has been better understood in Australia. At the time of publication of this paper, the restrictions on dental practice remain at Level 1. The timeline of the restrictions in Australia can be found in Box 1.

The ADA Inc.’s guidance has been adopted rather more strictly by the public sector workforce, with many services adopting Level 4 restrictions at the initial introduction of infection spread measures. Many public dental services are still operating at a much higher restriction level than private dental services. There has been a lack of clear consensus for public sector dental services, who have implemented AHPPC advice based upon their circumstances. This leads to a wide range of service availability, with some able to offer care and others greatly limited.

The Dental Board of Australia requires all practitioners to follow the ADA Inc. guidelines, stating that: “The Board expects all dental practitioners, including oral health therapists, dental therapists, dental hygienists, dental prosthetists and dentists, to follow the AHPPC’s recommendation and apply it in their practice setting.” The Board has also stated that due to local responses in reaction to COVID-19 hotspots, practitioners must check with state or territory health departments for directives applying to dental practice, implementing
appropriate screening procedures and infection control procedures that address the particular contextual risk of infection transmission.

The authors call for the development of evidence-based national guidelines for how to perform dentistry established through the collaboration of specialist groups including infectious disease experts, practicing dentists and academicians.

Box 1: Timeline of Australian restrictions on dental services based on ADA Inc. guidance

<table>
<thead>
<tr>
<th>Date</th>
<th>Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 25th</td>
<td>Level 3 Restrictions introduced to practice. These restrictions prevent the provision of dentistry that produce aerosols, with exceptions being made only in the case of defined circumstances where patients: are suffering acute pain needing management through root canal treatment or extraction; have significantly traumatised front teeth; have soft tissue pathology, such as ulcers; who are medically complex require management of dental concerns which may exacerbate systemic medical conditions; require urgent management due to socioeconomic or cultural factors that risk rapid progress of dental conditions; have been referred by a medical practitioners for management of medically-necessary dental care.</td>
</tr>
<tr>
<td>April 23rd</td>
<td>Level 3 Restrictions on dental services relaxed to Level 2. Under these restrictions, dental treatments may be provided that are unlikely to generate aerosols, or where rubber dam may be used to minimise the presence of blood and saliva in aerosols produced by treatments.</td>
</tr>
<tr>
<td>May 7th</td>
<td>Level 2 Restrictions further relaxed to Level 1. These restrictions allow for dental services to provide care for patients who do not have epidemiological or clinical risk factors for COVID-19 infection transmission.</td>
</tr>
</tbody>
</table>

The Role of Dentistry and Reduced Access in Times of Pandemic

With practice restrictions easing and most dental practitioners returning to work, it would be easy for the profession to forget that for a short period, dental clinicians were without role or purpose in the pandemic. Practices were largely shut or operating at significantly reduced capacity, seeing only emergency patients. The profession must reflect upon its trajectory and its position in the healthcare workforce.

What could the role of the dentist and the dental team during the COVID-19 crisis have been and what should it be during future public health emergencies?

While the practice of dentistry is restricted, the supply of dental services is therefore reduced, but not completely diminished. The need for dentists to be available and able to provide care in primary practice is essential not only to ensure access, but also to reduce costs to the public sector of patients requiring hospital care for infections with a dental origin. A recent study examining the economic burden of managing acute odontogenic infections found that the average cost of these incidences being managed in a hospital setting was over $12,000, while management in a primary care setting averages under $200. The relative expense of private dentistry combined with reduced supply of dental services will increase this burden on hospital care more than in usual times. Similarly, an increased presentation at Accident and Emergency (A&E) departments of patients with acute symptoms caused by dental infections is not a solution to managing dental issues. A&E departments are not equipped with the correct resources or workforce to manage dentally-derived issues in the same way that a dental service is; painkillers and antibiotics are not an appropriate treatment for conditions which require surgical management. At a time where it is preferable to avoid bringing patients into secondary-care facilities who do
not need to be there, increasing risk to themselves and others of transmitting of contracting COVID-19, efforts to keep dentistry in primary care within patients’ communities should be encouraged. Dentistry does not stand alone in suffering access issues during the COVID-19 crisis; reports from Australia and overseas find that the public are avoiding healthcare services, with some experiencing worse health outcomes as a result.

**Dental practices may act as hubs of health surveillance, where patterns of disease are noted, patients who present with respiratory or other symptoms are identified and either tested at the practice or referred to another service.**

Given that dental practitioners are highly skilled in diagnosing and managing oral and dental issues, how could dental professionals contribute as first responders to tracking and tracing infected patients? Dentistry, unlike many other health services, deals predominantly with patients who are well. Even the majority those who have acute dental issues are not prevented from accessing ambulatory primary care because of their dental condition. The potential contribution of the dental profession to community health beyond the immediate the boundaries of oral and dental wellbeing has not been well defined. Despite this, it is clear that the role of the dental profession extends beyond the mouth. The COVID-19 pandemic has starkly demonstrated the isolation of the dental profession which has not met its full potential through not being engaged with the wider health system.

In April 2020, the ADA Inc. developed and issued a new teledentistry item number for dentists to use when conducting remote consultations. While this new development is welcome, it is not supported by Medicare and patients will be left to either fund this themselves or through insurance. There has also been no development of a triaging scheme examining dental treatment needs via teledentistry consultation to determine who needs hospital care for a severe infection, who is identified as needing urgent dental care in primary care and who needs to stay home do to having non-urgent dental care needs. The huge difference in cost between providing care in primary and secondary care settings has been illustrated above; teledentistry could have been used to engage in triaging patients to ensure that they are seen by the right service at the right time. Dentists are also poorly supported to engage in teledentistry; video technology packages can be used on personal mobile devices without exposing clinicians’ personal contact details, but given the relative novelty of teledentistry, most practitioners do not have access to these services.

Teledentistry must not be forgotten or considered redundant once the immediate impacts of COVID-19 are over and restrictions are lifted. The potential that teledentistry may be used to access second opinions for routine treatment or enable those with impaired access, such as rural and remote communities, to get timely oral health advice.

As COVID-19 becomes better understood and epidemiological patterns emerge, perhaps similar to the way we understand and experience flu season, teledentistry could be used to triage and prevent those who has respiratory symptoms from needing to attend dental clinics, therefore reducing transmission risk.
The Economic Conundrum of Oral Healthcare

Whilst restrictions on dental services have been and still are a necessary course of action to protect the public, they have placed many dental practices and the professionals and the allied health support staff who practise within them into a position of financial hardship. This is tragic, as are the financial ramifications for all in society who are impacted by business closures and unemployment. Dentistry has a complex history regarding the provision of oral health services to those experiencing the most disadvantage in our societies. In analysing the now revised document from the American Dental Association, 'The Principles of Ethics and the Code of Professional Conduct'6 Welie states:

“In the article on patient selection, the Code reiterates that “dentists shall not refuse to accept patients into their practice or deny dental service to patients because of the patient’s race, creed, color, gender, sexual orientation, gender identity, national origin.” Note that the patient’s financial status is not included in the list. Apparently, dentists may refuse to accept patients into their practice when and because the patients are poor.”7

More recently, the American Dental Association has released a document orienting the principles and code of ethics of the association towards the COVID-19 crisis. It is perhaps a cynical perspective that led the inclusion of the final section in the guidance: “This is also not a time to be looking for ways to expand business. It is never, and especially now, ethical to: Waive co-payments; Overbill; Provide unnecessary services.”8

The potential of dentists to fully contribute to the management of the COVID-19 outbreak is scuppered by the lack of support for dental services from both the Commonwealth and State governments that provide dental services in Australia to those who are eligible.

Roughly a third of the Australian population has eligibility to access public dental care, however there is only capacity to treat 20% of those who qualify9 10. In NSW, public patients may be issued with vouchers to enable them to be seen by a participating dentist in private practice. However, this scheme still relies on patients having attended and been assessed at a public dental clinic first. Holden and Quiñonez11 argue that dental professional associations have a role in promoting and furthering public investment in oral healthcare systems; in some jurisdictions this is in evidence, whereas in others, the profession actively disengages from publicly funded dentistry. The social symbolism and currency of a white, bright and straight smile12 13 14 has driven dentistry further towards a market-based paradigm of privately-funded care15. The profession increasingly identifies with dentistry being provided in this context; dentistry being framed as a non-essential and luxury item that justifies the lack of public investment in oral healthcare services.
Dental Education During COVID-19

The COVID-19 crisis has seen healthcare profession students be recruited to assist in the healthcare system. In other jurisdictions, medical students have been offered early graduation to allow them to assist with providing care to those afflicted with the virus. Dental education is faced with a choice; to either shutdown all operations, recommencing at some stage in the future, or to actively contribute in the same way as other health courses. Students who do not have any medical preclusion to their involvement and who refuse to participate in learning activities during this crisis must evaluate their motivations for engaging in dental education and for joining the dental profession. Dentistry is a healing pursuit; those who are unwilling to engage in altruistic activities that contribute to the management of the COVID-19 pandemic may not be the type of individuals the future of the dental profession should rely upon. It is not just student motivations that are questionable; those participating in dental school are taught a large amount of general medicine, engage in interprofessional learning activities and have considerable teaching on effective infection control. However, during this crisis, many dental students have been willing contribute, only to be excluded from the system as if their skills are not relevant.

A recently published commentary on personal protective equipment (PPE) suggests that more attention should be paid in dental education to learning mastery of different types of PPE:

“Recommendations for education and training in donning and doffing are particularly important for dental teams who may not be familiar with the processes involved in using more extensive types of PPE. Face-to-face training opportunities may reduce the likelihood of errors alongside computer simulation or videos to support these skills. Space and time for donning and particularly doffing of PPE must also be considered as part of dental surgery design and management.”

The authors of this commentary for the Cochrane Oral Health concede current evidence is not definitive in which PPE provides most effective protection:

“Research is urgently required to build evidence on what type(s) of PPE, and which modifications provide most appropriate, manageable protection for members of the dental team in delivering care safely.”

Dental curricula need to evolve, not only to consider interprofessional practice as a mandatory competency, but also to meet the new requirements for dental professionals and their teams to be able to utilise different PPE equipment as circumstances dictate.

Dental professionals are required in many contexts to complete regular training in managing medical emergencies. Would similar approaches to using PPE equipment help to ensure dental practitioners are able to effectively and safely use equipment that is beyond the standard required for day-to-day practice? The World Health Organisation (WHO) has stated that the virus is likely to be with society for a long time. Our training of future dental practitioners needs to account for their role in future pandemics, and courses need to have this incorporated within their accreditation requirements.
Policy Recommendations

Based on the issues discussed within this paper, we recommend action on four policy areas:

1. Dental clinics should become community hubs for health surveillance, helping to support appropriate and timely testing and triage within primary care settings;
2. Teledentistry must continue and develop after the pandemic, and there should be significant investment and research into how technology can facilitate and broaden access to dental services for remote communities who often lack high quality care;
3. Public access to dental services must be expanded through increased investment in dentistry; and
4. Curricula for students studying dentistry and oral health should be evolved to develop competency in interprofessional practice, with infection control and PPE requirements drawing more focus within both pre-qualification learning and post-qualification continuing professional development activities.

Conclusion: Changing Attitudes?

Across political lines, there has been a reassertion of the importance of state intervention in upholding the welfare of all citizens in moments of crisis. It is at this time that the dental profession should be advocating the need for an expanded public dental system offering universal access, such as that laid out by the Grattan Institute’s document, ‘Filling the Gap’\textsuperscript{19}. The economic and social impacts of COVID-19 will be felt long after the immediate danger of COVID-19 has passed. If dentistry is viewed as an elective, aesthetically-driven service rather than one that is an integral component of the healthcare sector, then the provision of funding towards dental services will not be a priority and will push dentistry further towards an existence characterised by exclusive access for those who can afford care, and unjust outcomes for those who cannot. The La Cascada Declaration\textsuperscript{20} discusses the future of dentistry. If dentistry does not further integrate within the health system, with dentists and other dental professions being viewed as essential health workers who contribute to the whole of health, then the profession is likely to be faced with reduced professional role and purpose, haunted by economic injustice and oral health disparities.

Applying these recommendations

This document has been prepared by Dr Alexander C L Holden, Professor Heiko Spallek and Professor Ramon Z Shaban with the support of the Sydney Policy Lab. These experts are available to assist policymakers, industry and community leaders and others with these discussions and eager to play a part. Please contact us at policy.lab@sydney.edu.au for more information.
References


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