# A policy option towards improving skill-mix efficiencies in Victorian public oral healthcare.

Tan Minh Nguyen<sup>1</sup> and Martin Hall<sup>1</sup>

<sup>1</sup>Dental Health Services Victoria

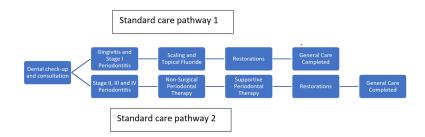
April 25, 2024

#### Abstract

Background: International oral health policy directions led by the World Health Organization call for the inclusion of oral health within universal health coverage. The aim of this study is to perform a budget impact analysis of a policy option for a more cost-efficient oral health workforce skill-mix (dentists and oral health therapists) to provide public oral healthcare in Victoria, Australia. Methods: Two hypothetical standard care pathways were developed. A dynamic population Markov model was generated in TreeAge software, with a time horizon of six years. Two scenarios were modelled to determine: 1) base-case scenario: the threshold the dentist workforce could reduce per year, while achieving the same service delivery outputs, and 2) alternative scenario: the potential cost-savings for utilising an optimally cost-efficient oral health workforce skill-mix. Results: The threshold analysis showed a minimum reduction of 13% of the dentist workforce being replaced with oral health therapists can occur without having any impact on the same service delivery outputs. Under the alternative scenario, the potential cost-savings would be AUD\$1,425,037 (SD 58,954). Conclusions: Governments and policy-decision makers should consider strategies in training, attracting, and retaining oral health therapists to achieve an optimally cost-efficient oral health workforce skill-mix when delivering public oral healthcare.

## Hosted file

Manuscript - Health Policy and Planning V2.docx available at https://authorea.com/users/ 774397/articles/869376-a-policy-option-towards-improving-skill-mix-efficiencies-invictorian-public-oral-healthcare



### Hosted file

Table 1.docx available at https://authorea.com/users/774397/articles/869376-a-policy-option-towards-improving-skill-mix-efficiencies-in-victorian-public-oral-healthcare

# Hosted file

Table 2.docx available at https://authorea.com/users/774397/articles/869376-a-policy-option-towards-improving-skill-mix-efficiencies-in-victorian-public-oral-healthcare

### Hosted file

Table 3.docx available at https://authorea.com/users/774397/articles/869376-a-policy-option-towards-improving-skill-mix-efficiencies-in-victorian-public-oral-healthcare