

1 Introduction

1.1 Purpose of this report

This report is intended to inform policy makers and service provision planning by providing current estimates and projections of demand and supply of dental visits in Australia. It also assesses and revises earlier projections of demand and supply for dental visits published by ARCPOH in Population Oral Health Series No. 2. The revised supply projection was based on known circumstances at the time of report writing and therefore does not include the new regional dental schools announced at the end of 2007.

In addition, this report attempts to assess the impact on supply and demand of various policy directions or changes in existing social and professional trends. This is achieved by altering key inputs and assumptions in projections and producing a range of 'what if' scenarios. The supply projection scenarios assessed were selected on the basis of their plausibility as a policy direction that would aim to narrow the gap between supply and demand. Those demand projection scenarios selected aim to assess potential shifts in patterns of accessing dental care as a result of policy initiatives aimed at improving access to dental care.

The projections of demand and supply of dental visits presented in this publication treat demand and supply as separate models; however, it must be acknowledged that a dynamic relationship exists between supply and demand.

For example, there is anecdotal evidence of supplier-induced demand, where actual supply is extended by dentists, increasing consumption beyond what the community might normally want or desire in order to meet various practice goals. Alternatively, insufficient capacity to supply could potentially cap growth in demand; hence, the level of demand would be influenced by supply.

While each model employs different methods and draws on different data sets, they project in a common unit – dental visits – thus allowing reconciliation of supply and demand. Reconciliation of the two projection models is useful in this context as a means to understanding trends and assessing the impact of various policies to close the projected future gap between supply and demand.

The focus of this publication is policy analysis, hence data sources and detailed methodology are provided in the appendices.

1.2 Overview of previous supply and demand projections

ARCPOH has previously published supply and demand projections from 2000 to 2010 (Spencer et al. 2003; Teusner & Spencer 2003). These publications indicated that a gap could exist between demand and supply that was conservatively estimated to be 3.8 million visits in 2010. This was approximated to be a shortfall of 1,500 dental providers.

This publication tracks the course of those original projections against actual estimates and examines the inputs used in those models against updated data. This process of revisiting the previous projection provided directions for refinement of the projections. These refinements, along with updated inputs, were applied to the supply and demand projections for the years 2003 to 2020.

1.3 Policy directions or shift in trends

In order to assess the impact of various policy directions, the sensitivity of the supply and demand projections to changes in their underlying assumptions and inputs was examined. Identifying those inputs and assumptions that have the greatest impact on the supply and demand projections can indicate what type of policy initiatives will have the greatest potential influence on dental supply and demand in Australia.

The sensitivity of the supply model was examined according to:

- increases in the numbers of Australian university graduates, dentists or allied dental practitioners
- increases/decreases in the number of migrant and ADC certified dentists
- variations in existing productivity trends
- alterations in wastage/attrition rates of dentists.

The sensitivity of the demand model was examined according to:

- alterations in patterns of accessing dental care
- increases/decreases in health insurance policy coverage.