Dental Caries Risk Assessment Tools: The Evidence

**DATE:** Tuesday, 24th November, 2015  
**TIME:** 3pm - 4pm  
**WHERE:** Seminar Room 515, Level 5, 207 Bouverie St, Carlton

**BIO:**
Bradley Christian is a public health dentist and oral epidemiologist. In 2008, he graduated with Honours, from the Master in Dental Science program (Community Oral Health and Epidemiology) at The University of Sydney. He also undertook dental public health training at the National Institutes of Health in the USA. He is a firm believer in evidence-informed public health and clinical practice. His research and public health interests are focused on dental caries and health services, particularly for disadvantaged and vulnerable populations. He is involved in several research studies in this space and actively publishes in peer-reviewed journals.

**ABSTRACT:**
In contemporary times, there is an advanced understanding of the caries disease process in areas such as diagnosis, lesion incidence and progression rates, biology and chemistry of lesions, and the social determinants of health. This has led to a paradigm shift in models of oral healthcare (MoC) from the traditional surgical intervention model to a minimal intervention model which has at its core risk-based disease management. Disease risk is assigned using caries risk assessment (CRA) tools, which are instruments to determine an individual's risk for developing caries. There are numerous caries risk assessment tools currently in use and the lack of consensus on which of these are the best has made choosing a tool challenging. Existing CRA tools differ in their content and quality, which leads to lack of study comparability and the potential for biased results. If new models of oral healthcare are founded on risk-based management, then as a first step we need to: ensure the evidence to support the caries risk assessment process is strong; use evidence-based methods to select a CRA tool; and where required, generate the evidence to support an existing CRA tool. Without this step, risk-based models of oral healthcare run the risk of not delivering the intended positive outcomes.

The aim of this research is to study the existing evidence and generate new evidence to support the use of CRA tools in the prevention and management of dental caries.

**SUPERVISORS:**

A/Prof Lisa Gibbs  
Jack Brockhoff Child Health and Wellbeing Program. MSPGH, University of Melbourne

Adjunct Prof Hanny Calache  
Dental School, La Trobe University

Dr Amit Chattopadhyay  
Epidemiologist, NIH/NIDCR, Bethesda, USA (Formerly)

child-health.mspgh.unimelb.edu.au/