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SUBMISSION
Dental Board Public Consultation Paper
Scope of practice registration standard

I refer to the Draft Scope of practice registration standard and guidelines dated 8 May 2013 and wish to make the following submission:

The draft makes references to a statement that dental practitioners must only perform those dental procedures for which they have been 'formally educated and trained in programs of study approved by the National Board'. A significant part of my clinical practice is devoted to the treatment of patients with dental implants and I have a number of concerns in relation to this requirement as follows:

- a) Education for dental implants has only been introduced into formal training programs in the late 1990's. Traditionally, training in the field of dental implants was undertaken in private settings that were NOT formal university programs or specifically approved by the National Board. In the past there has been no National Board - just state boards.
- b) Formal post-graduate training today is still limited in a number of ways:
 - i. Only the surgical aspect of this treatment is being taught within the specialities of Periodontics and Oral Surgery and only the restorative aspect of the treatment is being taught within the speciality of Prosthodontics. That is, a specialist prosthodontist is not being trained to place implants and a specialist periodontist is not being trained the restorative aspects of treatment, whereas both the restorative and the surgical aspects of this treatment modality are intimately inter-related and an intricate appreciation of the overall technical and clinical parameters are a crucial part of attaining success.

- ii. In ANY of the specialities that currently cover dental implants within their curricula there is NO specific emphasis on Dental Implants.
 - iii. There is currently NO speciality that is concerned exclusively or predominately with Dental Implants, here in Australia or the Western World.
- c) The requirement has the potential to mislead the public into believing that those who had dental implants covered within their formal training, regardless of the extent of their clinical exposure /expertise, are better trained to work within this field of practice than others who received their training in other ways. In addition there are many practicing specialists in Oral Surgery, Periodontics and prosthodontics who themselves have never been formally educated in implant dentistry by Board approved programs
- d) Any restriction on practitioners to place or restore dental implants, regardless of their experience or success rates, has the potential to be anti-competitive.
- e) Any restriction on practitioners to place or restore dental implants, regardless of their experience or success rates, has the potential to disadvantage the public in terms of convenience and cost and potentially the end result, because a patient would be unable to undertake both the surgical and restorative aspects of implant treatment in the one place / clinical setting.

Dental Implants Overview and Training Paths

1. Dental implant work has been undertaken for over 40 years. In Australia, the first patients to receive implants were during the early 1980s. Implant placement has two components: the **surgical** component whereby the implants are placed into the bone and permitted to integrate into the bone, and the **restorative** component whereby the supra-structure are fitted to the integrated implants. The connection of the supra-structure is described as the “loading” of the implant. However apart from the installation of the surgical and restorative components of dental implants, there are numerous other factors that come into play both in the planning as well as the execution of treatment. Thus, whilst Implant Dentistry, or oral implantology, is not a recognized specialty Australia, and in most parts

of the world, it is certainly a specialised field that requires cross-disciplinary understanding and skills.

2. Dental Implants offer success rates that compare favorably to almost any other day-to-day procedures dentists perform. In 2004 the American Dental Association has reported “the average survival rates of multiple implant designs placed in various clinical situations are more than 90%”. They also reported findings that implants may provide a “more predictable outcome” than alternative therapies [12].
3. In today’s day and age osseointegration alone is not necessarily a measure of success. We know that implants osseointegrate, the challenge is making this treatment successful by today’s aesthetic and functional standards and for today’s patient of high expectations. Ensuring such success today requires cross-disciplinary understanding, and the type of training and education that leads to a gradual attainment of skill that is based on clinical experience.
4. There has been a push by certain individuals, particularly within the specialist disciplines of periodontics and oral surgery, to restrict the practice of oral implantology to those specialties and to prevent dentists from placing implants. It is fair to suspect that this push is commercially driven because dental implants are more lucrative than the other services within the scope of work of those specialties. Nevertheless, when it comes to dental implants the specialist is quite likely to be disadvantaged by a lack of cross-disciplinary skill and experience, when compared to a practitioner who relies on their own surgeries for the eventual restorative and aesthetic success of their cases.
5. General Dentists with adequate cross-disciplinary training and experience are favorably positioned to undertake surgical implant placement, due to not only having a firsthand appreciation of the aesthetic, functional and general requirements of their patients, but importantly the laboratory and technical constraints that may apply in the course of treatment that could result from inadequate placement. Being armed with this sort of insight can only be advantageous to any decisions made during planning or judgment calls at the time of surgery. Perhaps consider citing Patrick Henry’s ADJ paper from 1990s (I can get if for you) on education of suitably skilled GPs to perform both surgical and restorative phases of treatment.

6. Of note, according to the American National Institute Of Health [6] the number of dental implants placed increased fourfold between 1983 and 1987 in the United States and an addition 73% between 1986 and 1990 [13]. By 1996, a reported 65% of general dentists were using implants in their routine practices [15,16]. In 2002, the percentage of general practitioners who surgically place implants increased 50% in just 1 year [11].
7. Bone or soft tissue augmentation procedures often go hand-in-hand with implant surgery. In the past, bone grafting techniques involved autogenous bone that was harvested from a distant donor site, such as the hip, and was certainly outside the scope of general dentists. However, with advances in technology and clinical research, the surgical techniques have evolved to the utilization of non-autogenous material for bone augmentation. Apart from lower incidence and severity of complications, these techniques can be quite predictably performed simultaneously with implant placement [8,1,7,2,9,19,14,10]. Thus, advances in technology provide today's dentists with a wider spectrum of safe alternatives to overcome certain challenges in different clinical circumstances in their own office.
Acquaintance with evolving or new technologies can only be relied upon with continued professional education that is outside the formal or university settings.
8. In oral implantology, specific advanced techniques are generally learnt through separate hands-on courses taught by experts on these techniques.
9. Whilst some aspects of implant dentistry have been gradually introduced into the curricula of specialties such as periodontics, OMFS and prosthodontics, this has only been the case in more recent times. To my knowledge exposure to dental implants and associated procedures remains very limited. Oral implantology is not regarded a major part of any specialist training. For example, I am aware that in the OMFS residency program in Melbourne a resident may perform as few as 3 sinus augmentation procedures for implant placement throughout the 4 years of the postgraduate training course.
10. Formal training pathways for the discipline of oral implantology are yet to be defined.
Implant education for either dentists or specialists has traditionally been provided through conferences, lectures, hands on courses using artificial bone analogs, cadaver surgical courses and in the case of my surgical training.....'hands on' supervised surgery of a patient from my own clinic under the guise of the internationally respected Australian University Professor, Dr. Patrick Henry who conducted implant training programs from

the “Branemark Center” in Perth WA, a renowned centre of clinical excellence, research and clinician training.

11. There are a number of associations that provide and offer training that is in some cases assessment-based. The International Congress of Oral Implantologists (ICOI), Australian Society of Implant Dentistry (ASID), Implant Team Academy (ITA), Australian Osseointegration Society (AOS), and International Team for Implantology (ITI) are all such associations.
12. In a 2001 survey of clinical members of the Association of Dental Implantology in the United Kingdom, under 3% of respondents revealed academic qualification in oral implantology. 44% of respondents had a basic dental degree alone, and 3.3% had an additional ICOI diploma [17]. With respect to experience, 47.8% of the entire member pool (including dentists, oral surgeons, prosthodontists, periodontists) had inserted under 100 implants. Of those members who utilised simultaneous grafting technique, two thirds performed under 10 procedures [18].
13. Whilst there is little published data on the positive correlation of experience on implant success, it is likely that success rates improve with experience. Cumulative implant survival rates have been reported to increase from 94% to 97% after the operator has completed 9 cases [4]. In the same study, surgeons who placed 50 individual implants or more were considered ‘experienced surgeons’, and with that level of experience, the failure rate was as low as 1.8% [4].
14. In a separate study on the survival of implants placed by first year residents in a general dentistry residency program, residents performed a variety of simple and complex procedures. With respect to the more complex procedures, 29% of the patients had undergone bone grafting, 12% of patients had sinus lifts, and 12% of patients received 5 or more implants. The cumulative implant survival was 98.2%. This was unexpected in light of the residents’ limited clinical experience [5]. This compared favorably to another study where a cumulative implant survival rate of 96% was reported for implants placed by periodontic, prosthodontic, and oral surgical resident-faculty teams [3].
15. The practice of dentistry, and particularly technique-sensitive procedures such as dental implants and associated augmentation procedures, requires a certain degree of manual dexterity. Manual dexterity relies to a degree on ‘natural skill’. Natural skill varies from

person to person in the same way that talent does. It can be said that a diligent clinician with a certain focus of interest and a high level of 'natural skill' can more readily achieve clinical competence within his field of interest.

16. The type of procedures that clinicians undertake must be commensurate not only with their level or type of training, but also their level of skill and experience. An academic achievement alone cannot substitute skill or experience. As most registered dental providers in Australia practice in a private setting it is the individual clinicians responsibility to ascertain the types of procedures that they can safely perform, whether a specialist or general dentist.

My Own Background

17. I am a dentist registered since 1991. I graduated from the University of Melbourne in the same year.
18. At the time of my graduation there were no university or board-approved post-graduate training programs or that were specific to dental implants, or which could provide adequate cross-disciplinary training. I pursued my interest in a manner that would gradually build my knowledge and skills in ALL aspects of implant therapy.
19. Early in my dental career, I became interested in dental implant treatment from a personal perspective, having suffered trauma to my 2 front teeth, knowing that one day I would be a candidate for dental implant treatment. I attended numerous 1 and 2 day courses in which the restorative aspects of dental implant treatment were taught in conjunction with surgical treatment planning.
20. I attended a prosthetic and treatment planning program held in Perth, WA at the "Branemark Center" under the tuition of Professor Patrick Henry (University of WA), and I was fortunate to be invited back there with a patient from my practice to complete my surgical training and place my first implant under his supervision. (An article of Professor Henry's was published in the peer reviewed Australian Dental Journal in 1991, in which he discusses the need to educate and train highly skilled general dentist to perform all aspects of implant dentistry in order to provide a better and equitable service to the community at large).

21. I was invited back again to the Branemark Center in Perth, WA for 2 further advanced surgical workshops in the following years, one of which was held at the University of WA where we performed advanced surgical implant procedures on cadavers.
22. Over the past 16 years I have attended countless lectures, conferences, workshops etc. all over the world from UK, Hong Kong, Switzerland, Austria, USA, Israel, and Sweden.
23. I have had lecture and training contracts with the world's largest and most popular Dental Implant Companies to provide training and education to dentist on their behalf (Nobel Biocare, Straumann, 3I, and 3M).
24. I have acted for Guild Insurance as an expert witness, writing reports on dental implant cases as well as writing reports for AHPRA on cases that have come before it.

Despite all the above and my own training, skill, experience, success rates and contributions to the advancement of oral implantology in Australia, the wording of the proposed amendment could potentially place me, and others like me, in a predicament where we are unable to carry on with the surgical placement or restoration of dental implants because we were not formally educated and trained in the field 'in programs of study approved by the National Board'.

Finally, the proposed changes to the requirement for University based training may have implications for the profession that reach far beyond that of implant treatment.

For example:

1. Which root canal procedures are considered too difficult and on what grounds for a general dentist to perform.
2. Which crown and bridge procedure should performed only by specialist
3. How does one decide and under what criteria is a tooth ONLY to be extracted by an Oral Surgeon.
4. Which paedodontic procedures should be carried out on children in the general dental setting and which ones by a children's dentistry specialist.

Yours Sincerely,

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BDS Sc (Melb)

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