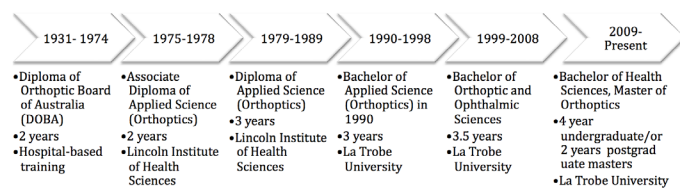


## Editorial

### Orthoptics at the Crossroads: Matching Future Workforce Needs

Orthoptics is a relatively young discipline, compared to many allied health professions. It originated in London in 1928 with the first ever orthoptist being Mary Maddox who was trained by her father, ophthalmologist Ernest Maddox.<sup>1</sup> In Australia, the training of orthoptists began in 1931 at the Alfred Hospital in Melbourne and by 1990 a bachelor level degree was conferred within the university sector in Victoria. Australia was the first country to offer a bachelor degree in orthoptics and is now well regarded as having the highest educational standards for orthoptists on an international basis. Figure 1 shows the advancement of the delivery of orthoptic education within Victoria, Australia.



**Figure 1.** Timeline of orthoptic education in Victoria, Australia  
(L Santamaria, personal communication, May 30, 2013).

The Australian orthoptic profession has also experienced several academic milestones in the last few decades, with Elaine Cornell being appointed as the first Associate Professor of Orthoptics in 1991 at the Cumberland College of Health Sciences at the University of Sydney<sup>2</sup> and Dr Julie Green being awarded the first Doctor of Philosophy (PhD) at La Trobe University in 1994 (J Pollock, personal communication, June 6, 2013).

Whilst the Australian programs in orthoptics have undergone significant reforms it is noteworthy that the delivery of orthoptic education varies widely across the world. Some countries continue to offer hospital-based training courses whilst others offer bachelor or master level programs within the university sector. In Australia, orthoptists receive training in a wide range of clinical skills which enables them to practise not only in the traditional areas of orthoptics such as ocular motility but also within the field of general ophthalmology.

When the orthoptic profession initially commenced, orthoptists were primarily involved in the diagnosis and management of eye movement disorders such as strabismus and amblyopia. More recently, in the last few decades, the role has expanded into diagnostics within general

ophthalmology and the screening and monitoring of stable low-acuity eye disease. This includes the diagnosis and management of patients with the five major eye disorders causing vision impairment including glaucoma, age-related macular degeneration, diabetic retinopathy, cataract and refractive error.<sup>3</sup> For instance, it is common for orthoptists in Australia to assess cataract patients and determine the intraocular lens required for surgical implantation. This breadth of clinical expertise sets Australian orthoptists apart from some international graduates where training focuses primarily on ocular motility and to a lesser degree general ophthalmic support services.

The need for additional general ophthalmic support services within Australia is becoming more prevalent as our population continues to age. Whilst Australia has one of the best performing health systems in the world, over recent years our Government has progressed health reforms as our ageing population becomes more disproportionate and chronic diseases become more prevalent.<sup>4</sup> In addition, the higher life expectancies and large numbers of baby boomers who are ageing is causing substantial pressure on the current health workforce which is not expanding at a proportionate rate.<sup>5</sup>

Eye health care workforce shortages are expected to increase in the future with over 480,000 older Australians in 2004 having vision impairment or blindness.<sup>6</sup> This is set to almost double by 2024 causing a considerable imbalance between the relative number of eye health care professionals in the workforce and the number of people requiring treatment.<sup>6</sup> This data includes individuals with chronic diseases such as glaucoma and diabetic retinopathy who require lifelong monitoring.

There is a need to review the scope of practice of orthoptists to assist in meeting the increasing demand for services. Nevertheless to date very little research has been conducted in areas designed to specifically look at orthoptists who are undertaking advanced scope of practice roles. Indeed in response to increasing demand, many hospitals, such as the Royal Victorian Eye and Ear Hospital, Northern Health, Alfred Health and Royal Children's Hospital in Victoria have up-skilled the orthoptic workforce to deliver various new services such as front-end triage clinics, diabetic screening, glaucoma monitoring and cataract assessment clinics. The orthoptists currently working in these programs do so

within a specialist setting and support of ophthalmologists and follow specially designed guidelines. The use of these guidelines can be seen in this issue's paper by Debra Gleeson who describes the interdisciplinary Glaucoma Monitoring Clinic (EGMON) at the Royal Victorian Eye and Ear Hospital and notes that the hospital has adopted the National Health and Medical Research Council (NHMRC) and American Academy of Ophthalmology guidelines to support current best practice.<sup>7</sup> Despite this, the peer-reviewed scientific evidence to support the effectiveness, efficiency and safety of extended scope of practice of orthoptists remains limited. This lack of scientific evidence could potentially be traced back to the size of the profession, which is relatively small, and the number of academics who are undertaking research specifically in a research field dedicated to orthoptics.

The broadening of the scope of practice of a health professional should only occur if specific needs for change can be identified.<sup>8</sup> Factors such as long waiting lists and patient needs which cannot be overcome with the current health workforce are for instance often the driving forces behind change. Introducing the role on the basis of simply allowing someone to further their career will most likely lead to an unsuccessful outcome.<sup>8</sup> Given that patients with chronic conditions such as glaucoma require lifelong treatment and that new referrals for eye care services are continually being received, a large number of patients are increasingly being reviewed within outpatient departments adding to the demand for qualified staff.<sup>9</sup> Between the years of 1998-99 and 2002-03 there was a 7% increase in Victorian Ambulatory Classification and Funding System (VACS) outpatient encounters for ophthalmology.<sup>10</sup> This saw ophthalmology become the third largest provider with 89,364 encounters in 2002-03.<sup>10</sup> When looking at ways to alleviate these pressures on the health service we need to look at workforce capacity. Census data from 2006 indicated that there were 769 ophthalmologists practising within Australia<sup>11</sup> and 678 orthoptists.<sup>12</sup> Making better use of the current eye health care workforce and increasing the scope of practice of orthoptists could potentially, in part, address the ever increasing public hospital outpatient waiting lists.

With the increased demand and a finite number of appointments available, patient care can be compromised as the waiting list is further extended. As this issue reaches a crisis point it results in an opportunity to reflect on service delivery models and to finding ways to provide a more efficient service which maintains quality and safety.<sup>9</sup> Despite the varied challenges in expanding the role of a practitioner, its introduction may have the potential to improve access to care, lead to greater efficiencies and can benefit rural and remote communities where a traditional health care provider is not available.<sup>13</sup> In addition, it is also often more cost-effective to utilise the skills of allied health professionals.<sup>13</sup> The task of our profession, at this cross-road, is to now build the evidence for innovation within eye health care that safely addresses the increased needs of

patients and to foster science-led practice to address future workforce challenges.

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