Optometry 2040
taking control of our future

Key findings and priority commitments
Introduction

Increasingly rapid change, associated with technological, economic, political and demographic influences, is disrupting tried and true optometry practice models, working conditions, patient eye care, and clinician training requirements and communication. Change isn’t always positive, yet it brings opportunity if it can be embraced and channelled.

The Optometry 2040 project, launched in early 2018, aimed to identify likely and preferred futures for optometry, optometrists, and community eye health. Using proven techniques and in partnership with futures studies experts, Optometry Australia consulted optometrists across the country, and key stakeholders who influence the sector, to identify plausible and preferred futures and the pathways to realising them. The following overview describes plausible futures for Australian primary eye care, the preferred future, and key steps to realising it.
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What could optometry look like in 2040?

On consideration of the key trends shaping optometry and eye health, three key scenarios were identified as most likely.

Scenario one: Optometry fails to adapt

In this scenario, the current scope and practice of optometry remains largely unchanged. In the face of significant advancement in clinical and communication technologies the profession becomes redundant and the practice of optometry as a discipline ends. Technological and clinical advancements, such as non-spectacle remedies for refractive error, and progression in clinical artificial intelligence (AI), such as automated detection of eye disease and non-human advice on optimising vision, replace much of the diagnostic work of optometry and eliminate retail opportunity from dispensing.

Concurrent with the decreasing need for optometrists, increasing numbers of optometry schools see ongoing growth in the optometry workforce. As workforce supply significantly outstrips demand, there is significant underemployment amongst the highly skilled workforce, increased competition, decreased salaries and shorter careers. In the longer term, the academic calibre of students pursuing optometry careers decreases.

For patients, AI provides ready access to diagnosis of common conditions and clinical advancements offer opportunity for long-term vision correction for many. However, most consumers can no longer access primary eye care practitioners that remain necessary in addressing complex presentations and care needs, and guiding patients through their eye care journey.

Scenario two: The eye care you want – as well as the eye care you need

Scenario two sees the growth of ‘partici-patients’, prompting a role transformation across health care and pushing clinicians towards ‘knowledge translators.’ Optometrists become the trusted guide through the eye care system. This is supported through collaborative professional-patient relationships facilitated by technologies such as app-based disease monitoring, wearable technology providing continual monitoring on key health indicators and ‘smart’ clinical contact lenses.

In order to facilitate this, services provided by optometry will no longer be solely offered through face-to-face interaction, but instead facilitated by technology and available to consumers in a range of different ways, including via virtual consultations and digital health monitoring via wearables. Consumers will be able to access the eye care they both want and need, in the way that they prefer to do so and at the time they need it.

Less complex eye care is offered through automated, tech-enabled examinations available in the home, via health kiosks, and in primary care clinics. Patients requiring direct engagement with optometrists would typically have more complex care or support needs.

To meet these complex and changing population eye care needs, individual optometrists and practices become further specialised in varied areas of practice, facilitated by formal recognition of specialties and new education pathways.
Increased collaboration with other clinicians is common and care models are diverse. Optometrists are integrated within primary health care ‘super clinics’; work through mobile and virtual practices; and are a fundamental part of the tertiary eye-care team. Bespoke patient care is a reality. Optometrists are able to work in highly flexible arrangements that meet their needs and that of their communities, including facilitating improved access to care for vulnerable population groups.

Simultaneously, a limited number of ‘traditional’ optometry practices remain to service population groups seeking a face-to-face care experience. Their practice incorporates technology that enables shorter diagnostic consult time and more comprehensive patient engagement.

The scope of services offered by optometrists has expanded to most effectively and efficiently meet the prevention, early detection and health management needs of the community. While the focus remains on eye care, optometrists are working collaboratively with other health practitioners, and offering broader health care services such as early detection of neurological conditions with the use of technologies such as OCT.

The traditional retail arm of many practices no longer exists. The digital marketplace and clinical options to address refractive error have seen demand to purchase prescription glasses virtually disappear. Practices have adopted new funding and business strategies. Patient care is funded by a mix of patient payment, government subsidisation and private health insurance cover, depending on the patient and their needs. While most practices derive the vast majority of their income from their clinical services, some practices retain a retail presence, selling eye health apps and augmented reality products.

**Scenario three: Optometry beyond the dark room and out of the box**

Optometrists are early adopters of the innovation and opportunities presented by a fully-tech-enabled future. Driven by the desire to not just correct vision, but to improve it beyond the currently accepted ‘baseline’, they lead further technological innovation.

Optometrists become ‘optical scientists’ in a future where vision is a commodity. Increased understanding of neural pathways and the link between vision and the brain enables vision to be enhanced depending on consumer preferences (e.g. microscopic vision for scientists, improved visual field/peripheral vision for athletes).

Leaps forward in genetics research enables other research and development opportunities for preventable eye care, such as determining which genetic markers at birth predict likelihood of future vision loss or eye disease and supporting early intervention to prevent vision loss or development of pathology.

Optometry is integrated with a broad range of other disciplines to optimise health care for consumers – including potentially animals and household pets.
What should optometry look like in the future?

Scenario two was consistently recognised as the preferred future for optometry and community eye health, offering broad, timely access to quality and efficient eye care. The benefits of further evolution to realise scenario three in a ‘further future’ were also acknowledged.
Key trends shaping the future of optometry

1- Consistently-evolving technology

Almost all of the trends driving optometry to its futures are influenced by emerging technology. The enabling potential of innovative clinical and communicative technologies can seem limitless.

New technology, including AI applications, will continue to improve the services available for prevention, detection and management in eye health. Embedding new technologies in practices will increase efficiency with patients, reducing consult times and enabling the optometrist to see more patients, or spend more time with patients with complex needs. Increased availability and high utilisation of new technology could redirect the focus of the consult away from clinical testing and towards developing personalised, tailored care plans for each patient.

Reliance on optometry may also reduce as technologies increasingly enable other health practitioners to provide greater eye health assessment and patients to self-diagnose/manage aided by AI and ‘non-human’ advice. Conversely, technology may facilitate optometrists to extend their contemporary scope of practice and the range of presentations they are able to manage.

The use of mobile interfaces will mean optometrists are less tied to their clinical settings. Wearable technology monitoring individual’s health will continue to evolve, empowering consumers to lead their own health care and, potentially, driving a move toward remote eye health care management.

Online sales of optical product will likely increase as the consumer’s reliance on virtual health care models grows. 3-D printing also appears likely to disrupt the optical retail space. Optometry practices are expected to need to move away from a reliance on optical sales to subsidise clinical care.

2- Enlarged scope of practice

Looking to the future, there is an opportunity for optometry to play an increased role in both eye care and broader health care, establishing the profession as ‘ocular health practitioners’ who are leaders in multiple areas of eye health with a concrete role as part of a primary health care team. In some international contexts scope of practice for optometrists has broadened to support them in playing a greater role in treating a broader scope of ocular disease.

There are a range of areas in which optometry’s current scope may evolve to support them to best meet community need, including oral therapeutics, minor surgery, prescription of and treatment with injectables, and diabetic education.

The future is expected to increasingly see integrated models of care, where optometry is working collaboratively (and potentially co-located) with ophthalmologists, GPs, the public health system and other disciplines in order to offer patients multi-disciplinary, holistic health care and thereby, improve health outcomes.

The trend toward two-tiers of optometric practice - a narrower, more traditional scope of practice, and a broader ocular health practice – is expected to continue, and ‘specialisations’ may become more prominent.

3- Consumer centric care with high consumer participation

Health care is increasingly becoming more consumer centric. Principles of consumer-led decision-making are broadly supported across health care and numerous approaches have been introduced to facilitate consumer-directed approaches to care and consumer-centric health pathways.
This trend is being facilitated by digital communication. Technological change in optometry is resulting in opportunities for consumers to purchase more products and services online. Digital tools will be a key enabler of consumer driven care, including AI and wearables.

Shifts towards consumer-centred care would support those towards more integrated and holistic care and enable more direct and appropriate referral pathways.

Greater consumer-led care, linked with the rise of digital tools, may see consumers choose to bypass optometry – self treating and managing their eye care, and only entering secondary or tertiary care as required. Associated risk factors include misdiagnosis and confusion in medico-legal liability.

4- Big data driving decision making

‘Big data’ has fast become a trending phrase. In health care, data driven decision making can improve efficiency and productivity at system and practice level. It can also enable a greater focus on performance management and quality improvement at system, practice and practitioner level, while providing better clarity on cost-benefit analysis in decisions relating to patient management.

In the retail space, data driven decision making is expected to sharpen retail strategy to support profit maximisation and customer retention. Smaller practices may find it increasingly challenging to compete with larger entities with sophisticated data analytics.

In Australia, there is currently a crisis of trust in data and privacy, particularly as it relates to individual health information. As more technology is embedded into optometry practice, there is a need to balance increased capacity for data collection and analysis as well as the potential benefits for eye health research with trust between the clinician and patient.

5- Alternative models of funding

Whilst there is a strong community commitment to the Medicare system, there is increasing recognition that there is a general lack of sustainability of the Medicare funding approach which also in some contexts creates perverse incentives through its fee for service funding model. Future systems of remuneration for the prevention and management of chronic disease will be different, with direct impacts on optometry and eye care.

There is an expectation of greater consumer input to their own health care costs in the medium term, and recognition that changing models of practice may enable alternate options to fund patient care. There is the potential for a growing population of ‘health have-nots’ if government subsidisation of primary eye care access reduces.

6- Changing demographics of the workforce

The Australian optometry workforce is growing, becoming more female and younger. In general, younger workforces have different attitudes to their work: they want more flexible employment, work that is meaningful, and opportunities to continually learn and develop.

There is broad concern that the supply of optometrist will outstrip community demand for their services.

Conversely, there are recognised regional shortages in the ophthalmology workforce that are expected to worsen in some areas, and lengthy waiting lists for public tertiary eye care services.

Optometrists are likely to become less tied to a single clinical setting while consumers may expect to be able to engage with optometrists online or in multiple settings.

7- Changing social demographics

There are unprecedented demographic shifts taking place in health care and well-being across the globe. Commonly understood trends include population ageing and escalating rates of mental health and chronic disease, however less well-researched factors such as climate change, urbanisation and increased human mobility will also have an impact.

In order for optometry to respond to these, alternatives to traditional eye care provision models will be required which are anticipated to involve a focus on community-based collaborative care models.
How do we create our preferred future?

No future is guaranteed, but our consultations emphasised that by implementing applied research, education, regulatory changes and advocacy strategies now, we can work towards creating the preferred future.

**Applied research**

New models of care and new funding models need to be developed and trialled, to demonstrate relative effectiveness, efficiency, safety and acceptability in their capacity to service the health burden arising from the ageing population. As early priorities, applied research should consider:

- expanding scope of optometric practice to support broader, timely access to eye health management, and enable maximal use of the skilled ophthalmic workforce in light of looming ophthalmological workforce shortages and lengthy public waiting lists

- integrating optometry within multidisciplinary primary and primary/tertiary care teams to support ready patient access to comprehensive preventative care and efficiency in treatment approaches

- Work more closely with audiologists and speech pathologists to create a new discipline of neurosensory specialists

- funding models that enable the role of optometry in prevention and maintaining visual function to be maximised.

Further, discovery research on aetiology, diagnosis, treatment and prevention must continue; and regular horizon scanning and synthesis of evidence will be necessary to ensure that the profession is responsive to technological developments.

**Priority commitment**

Optometry Australia to assess the feasibility of establishing and sourcing funding for a national collaborative applied research program to explore how to optimise the scope of optometric practice and fund care provision to improve the effectiveness and efficiency of eye health prevention and care.

**Professional education**

Current trends in entry-level optometry courses are supporting the evolution of the profession to most effectively meet community need but need to be built upon to:

- support the ongoing evolution of scope of practice

- complement foundational education with specialisation opportunities, that become increasingly diverse with time

- integrate training on health care and health practice innovation, to prepare students to prosper in environments of fast-paced change

- ensure effective partnerships with consumers and patients that facilitate their empowerment as the leader in their eye health care journey.

A continuing professional education strategy for established clinicians is needed to support extension of scope and adaption skills.
The sector’s approach to professional education must evolve to support flexible access to education, aligned with good practice in adult education and clinical learning, on a great diversity of topics, to support greater specialisation within optometry. Additionally, undergraduate and CPD efforts should be linked to applied research/innovation strategies, so that students and existing practices have the opportunity to work on or host and be a part of new models of care being trialled.

**Priority commitment**

Optometry Australia will work with the profession and key stakeholders to review and revise the competency standards for entry to the profession to ensure they support education that will enable optometrists to work to a broader scope of practice.

**Priority commitment**

Optometry Australia will seek to partner with universities and other key stakeholders to consider opportunity to map how current entry-level optometric training can be built upon to support the ongoing evolution of the profession’s scope of practice.

**Priority commitment**

Optometry Australia will provide the profession with an online CPD institute to support optometrists to develop well-considered self-learning plans, and flexible access to a diversity of quality CPD. We will ensure our CPD program is directed at supporting the existing workforce to adopt innovations and approaches that improve the effectiveness and efficiency of eye health prevention and care.

**Advocacy and partnership**

Advocacy within the profession will be fundamental to gaining and maintaining support across the profession for the changes necessary to achieve the preferred future.

The preferred future sees optometry more fully integrated as a part of the health care team. This requires partnerships which aim to understand the attitudes of other professions and to collaboratively explore new models of care that promote prevention and consumer access to comprehensive care.
The success of the transformation strategy will be determined by the extent to which it adds value to the eye health of the community, and is perceived and demonstrated to do so. Likewise, garnering the necessary commitment to change will require evidence that change will benefit patient access and outcomes, the community, the health system and the profession.

Consumers must be important partners in this journey.

Ongoing advocacy to ensure policy contexts and funding models facilitate changes will be necessary at state/territory and federal government levels. Partnering with the Optometry Board of Australia, as the regulator of the profession, and with private health insurers will also be necessary to enable innovation.

**Priority commitment**

Optometry Australia will draw together key stakeholders to consider optimisation of scope of optometric practice and funding of optometric care to improve the effectiveness and efficiency of the delivery of eye health prevention and care. We will consider opportunities to fund independent advice on new models of care and funding.

**Regulation**

Change in the regulatory environment is fundamental to support transformation, particularly to enable change in the CPD environment, scope of practice and development of specialisations. Realising change will require a strong case as to the consumer benefit and community need to secure necessary support early from the Optometry Board of Australia and state/territory and federal governments.

**Priority commitment**

Optometry Australia will engage with the Optometry Board of Australia to discuss priorities in broadening scope of practice to benefit consumers, and opportunity to pursue them.