

Canadian Optometry Schools Tele-Optometry Collaboration

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The Canadian Association of Optometrists (CAO) convenes an annual meeting of optometric leaders to review and discuss key opportunities for the profession. In January 2023, the topic was tele-optometry and artificial intelligence. A discussion paper provided background and context for the topics, with the in-person meeting consisting of presentations and breakout groups moderated by volunteer optometrists.¹ Patient and health care provider experience during the COVID pandemic has accelerated the adoption and acceptance of virtual care to enhance access to services.¹

For the purposes of this editorial, we focus on the topic of tele-optometry and the perspective of the two Schools – École d'optométrie de l'Université de Montréal (ÉOUM) and the University of Waterloo School of Optometry & Vision Science (UWOVS).

Tele-optometry is defined by the Federation of Optometric Regulatory Authorities of Canada (FORAC) as “the provision of vision and eye health services that are delivered within the scope of practice of optometry using electronic health information, medical and communication technologies, and in the absence of physical contact between the provider and the patient.”² The key differentiator of tele-optometry from the broader overarching umbrella of telehealth is the use of technology as a tool to deliver eye care services.

The value proposition for tele-optometry is improved access and convenience at a lower cost. With a special emphasis for rural, remote, Northern and First Nations, Inuit and Métis communities, the technology has the potential to provide an effective complement to established in-person eye care services. Optometry is particularly well positioned as the primary eye care providers to elevate the expectations and access to the standard of care.

Work needs to be done to establish patient acceptance, assess health outcomes, and cost:benefit and value to the health system. Similarly, there are many concerns amongst providers including privacy, security, remuneration, and liability. Technical challenges like access to internet bandwidth have implications for remote operation of equipment, such as the digital phoropter, for the synchronous/real-time communications between patient, provider, optometric assistant. Regulation will need to strike the right balance between ensuring the protection of the public without inhibiting the potential of tele-optometry to increase access to care.

The workflow for synchronous tele-optometry largely parallels the experience and expectations of an in-person exam. The patient, optometric assistant, and optometrist operate in real time to take the history, gather clinical information, assess, interpret, diagnose, and ultimately counsel and educate.

In contrast, an asynchronous/store-and-forward model relies on the optometric assistant to gather all the clinical data without the presence of the optometrist in real time. The data is stored and forwarded to the database (clinic server or cloud) for review by the optometrist at a later time. While providing flexibility for the clinician, one critical challenge

with an asynchronous model is the inability to retest or to improve the quality of the data once the patient is no longer in the chair.

Dr. Alexander Jobe and Ryan Jobe (Remote Optometry, Inc. <https://www.remoteoptometry.ca/>) and Dr. Lauren White from Salus University shared a compelling framework at the Optometric Leaders Forum meeting with tele-optometry as a tool to enable optometrists to deliver eye and vision care services through synchronous ocular telemedicine (SOT).³ They champion the notion that regulation should emphasize the responsibility and rights of the clinician to choose the appropriate tool to deliver care rather than regulating the tool per se.

ÉOUM and UWOVs both recognize an important role to support the ethical and effective evaluation and deployment of tele-optometry supported by peer-reviewed academic research. Equally important is the education mission to prepare new graduates to incorporate technology to improve access and health outcomes and to accelerate the adoption of best practice through continuing professional development.

The Schools support the Canadian Association of Optometrists (CAO) position that the ideal situation is to leverage tele-optometry as a complement to an in-person eye examination with a hybrid option of both in-person and remote delivery in the same office. Tele-optometry, like any technology, can serve as a tool to deliver comprehensive remote eye examinations and follow-up care to match the existing standard of care. We are in the early days of adoption of the technology, and it is critical for optometry to take a leadership role in supporting the development of sound public policy and regulation with an evidence-informed research approach. The two Schools look forward to working with the associations and colleges to identify the key questions and areas of research to help inform public policy development and implementation. ●

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