Alberta College of Optometrists

Proposal to Amend the Optometrists Profession Regulation

December 21, 2020

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Introduction

The Alberta College of Optometrists (the College) is pleased to submit this Proposal Paper to amend the *Optometrists Profession Regulation* and modernize the scope of practice that governs our work which will ultimately assist in improving health care outcomes for Albertans.

As the licensing and regulatory body for the profession of optometry, our mandate is to govern our members in a manner that protects and serves the public interest. This scope expansion Proposal Paper supports that mandate.

Doctors of Optometry provide the most broad-based, easily accessible, and cost-effective health services in the field of eye care. Our members practice in 100+ different cities and towns in Alberta. They are committed to public safety, the preservation of sight and mitigation of vision loss for all Albertans. Improving patient health outcomes and ensuring patient safety are two of the most important commitments of our profession.

This commitment is evidenced in the life-long trusting relationship our doctors maintain with their patients.

The College is advocating for appropriate optometric scope expansion in the spirit of this commitment, and in pursuit of increased access to primary vision care for Albertans in all corners of the province.

The College also understands the provincial government's imperative to ensure cost-effective, reliable delivery of high-quality health care to all Albertans. Reasoned, informed and responsible expansion of the *Optometrists Profession Regulation* serves that end.

The proposals in this submission represent an effective way to limit and guard against vision impairment and loss, and to improve and safeguard the health of all Albertans - all in the context of a current and post-COVID-19 culture and economy.

Updating the *Optometry Profession Regulation* to maintain a closer pace with modern optometric education and training offers more accessible and highly competent care to Albertans while defraying costs to the government and continuing to protect the public interest. It also builds on the value of private sector optometry clinics offering new services in urban and rural settings outside of Alberta Health Services facilities, with a private co-pay option to decrease pressure on the public health system.

The proposals included in this Proposal Paper are supported by a fulsome series of appendices and literature search references.

Executive Summary

Advances in the education and training of Alberta optometrists have outpaced the limits of permissible practices within the regulated scope of the profession. Although, optometrists possess the skills, knowledge and competencies to provide these advanced procedures in a safe and competent manner, they do not have the legislative authority to do so. As such, Albertans must seek, and obtain, day-to-day eye health services from increasingly specialized professions such as ophthalmology.

This bottlenecks the demand for ophthalmology specialists working in the public health system and contributes to increased surgical wait times and the accrual of health care operational costs. Timely access to ophthalmologists for specialized surgical and consultative care can be improved by authorizing Doctors of Optometry to provide the procedures requested in this proposal.

Doctors of Optometry practice in privately operated clinics and do not rely on Alberta Health Services facilities to provide eye care. All of the requested new procedures will be provided in their private clinics. As such, Doctors of Optometry are not requesting access to AHS facilities.

Doctors of Optometry are also mandated to follow a rigorously enforced series of evidence-based Clinical Practice Guidelines to ensure patient safety. These Guidelines are based on the most current optometric and medical clinical evidence and research that aims to protect and improve a patient's vision and quality of life.

Expanding the legislated scope of practice for optometrists, and educating the public about this capacity, will help relieve stress on other areas of the health care system while improving eye and general health outcomes for Albertans.

At the same time, an updated scope will continue to maintain appropriate safety and regulation of the profession and respect the government's commitment to providing high-quality public health services by alternative providers at a more controlled and predictable cost.

The college is specifically requesting that Doctors of Optometry be authorized to provide:

a) Three specific laser treatment procedures – Peripheral Iridotomy (PI), Selective Laser Trabeculoplaasty (SLT) and Nd-YAG Capsulotomy. All are performed in-office. Details of all three procedures are listed in the Laser Treatment Clinical Practice Guideline attachment.
b) Minor surgical procedures to remove minor skin lesions such as skin tags, papilloma, verrucae, etc. performed in-office under local anesthesia. Again, full details on these procedures are listed in the Optometric Treatment Procedures Clinical Practice Guideline attachment.

Only those optometrists who have successfully completed a rigorous certification course/final exam or a program of study accepted by the College would be granted an Advanced Procedures designation on their Practice Permit and be authorized to provide any of the proposed new activities.

Approval of this proposal would not cause any potential labor mobility issues since Doctors of Optometry who do not have the Advanced Procedures designation would still be able to:

- Remain as a Regulated Member of the ACO to continue to practice in Alberta at their current level of practice.
- Transfer from another province to practice in Alberta since the Advanced Procedures designation would not be considered one of the mandatory registration requirements for transfer applicants. These inter-provincial applicants will be able to transfer to Alberta and begin practice immediately.

The College has carefully researched and thoroughly considered all of the proposed amendments to the *Optometrists Profession Regulation* presented in this Proposal Paper. We are confident that these proposed amendments will continue to protect the public interest while controlling and predicting health care costs offered by an alternative provider. Approval of the proposal will result in all Albertans benefitting from evidence-based, outcome-focused, cost-effective health care in a timely manner.

This proposal is aligned with the Government of Alberta agenda as laid out in the United Conservative Party Election Platform commitment to expand the scope of practice of optometrists, the objectives set out in the 2019 Report and Recommendations of the Blue Ribbon Panel on Alberta's Finances (MacKinnon Panel on Alberta Finances), the 2019 Ernst & Young AHS Performance Review, the current Alberta Budget 2020 Business Plan and Health Ministry Outcomes, and the objectives of government's Red Tape Reduction legislation.

Section 1 - Emerging Vision Care Crisis

Today, 1.5 million Canadians suffer from vision loss, and an additional 5.59 million have an eye disease that could cause vision loss.[1] More than 750,000 Albertans have vision loss or eye disease that could cause vision loss. This is expected to double within the next 15 years.[2]

By 2031, it is estimated that 20% of Albertans will be greater than 65 years of age. Unfortunately, the incidence of eye disease (such as glaucoma and cataracts) that contributes to blindness typically increases with age. Complicating matters further is the diminishing availability of specialized health providers currently authorized to treat this growing need.

Various factors are contributing to an emerging crisis:

- Vision loss costs Canada billions.
    - Estimated $15.8B in 2007 and is expected to rise to $30.3B by 2032.[3]
- Alberta Emergency Department wait times are high.
    - In the 2018-19 year, Alberta had a higher Emergency Department utilization rate than other provinces.[4]
    - Ophthalmologists wait times for non-urgent interventions of the eye proposed in this document range between 50-90 weeks to attend 50% to 90% of need requests across the province. Wait times for urgent surgeries average 10-12 weeks.[5]
- Alberta is missing recommended benchmarks for wait times for cataract surgery.
    - Canadian Institute for Health Information (CIHI) reported that only 49% of Albertans received cataract surgery within the benchmark of 112 days. 90% received cataract surgery within 320 days in the 2018 year. These percentages have also been increasing over the past five years.[6]
- Ophthalmologists are retiring faster than they are joining the workforce.
    - The number of ophthalmologists per 100,000 population has steadily dropped over the last 25 years. Nearly 50% of ophthalmologists in Canada are currently over the age of 55 and are expected to retire within the next 10 years.[7]

1 https://cnib.ca/en/sight-loss-info/blindness/blindness-canada?region=ab accessed April 28, 2020

2 http://www.vision2020canada.ca/en/resources/Study/COVL%20Summary%20Report%20EN.PDF, accessed April 28, 2020

3 National Coalition for Vision Health.https://bit.ly/2PjetHA

4 10 CIHI, NACRS Emergency Department Visits and Length of Stay, 2018-2019

5 http://waittimes.alberta.ca/

6 Canadian Institute for Health Information. http://waittimes.cihi.ca/AB/cataract#year

7 Canadian Medical Association Practitioner Profile. https://www.cma.ca/sites/default/files/2019-01/ophthalmology-e.pdf

- The Indigenous community population in Canada is increasing at a rate six times faster than non-Indigenous people. Additional indigenous health issues include:
    - Increasing incidence of diabetes.
    - Indigenous persons with diabetes are 25 times more likely to experience vision loss and blindness than other populations.
        - Permanent blindness is one of the tragic consequences of undiagnosed and untreated diabetes for these remotely located populations.
    - Indigenous children have a significantly higher incidence of refractive error.
    - Population health data show the use of eye and health services is lowest in rural and remote areas, most likely related to the challenge of recruiting eye health and vision care providers to rural and remote communities.[8]
    - Inuit populations have much higher rates of primary open-angle glaucoma.[9]
- Currently, 25% of school-age children have some form of vision condition or disease.
    - If left undiagnosed and untreated, this can cause academic challenges, increased education costs and increased dropout rates for young Albertans.
- Fighting Blindness Canada reports that over 400,000 Canadians have glaucoma.[10]
- Nearly 90% of people who use a computer at least three hours per day suffer vision problems associated with digital eye strain.[11]

The Case for Change

Doctors of Optometry are educated and trained to provide these services in a safe and competent manner (as referenced in Appendix D). Approval of all proposed revisions to the *Optometry Profession Regulation* would help address some of the factors precipitating an emerging vision crisis while improving health care outcomes for Albertans and driving efficiency in the public health system.

In addition, updating the *Optometrists Profession Regulation* to maintain a closer pace with modern education and optometry training offers better, faster care to Albertans while defraying costs to the government and continuing to protect the public interest. It also builds on the benefit of private sector optometry clinics offering new services in urban and rural settings outside of Alberta Health Services facilities. A recent study showed that Americans would save at least $4.6 billion annually if US States modernized their optometric scope of practice acts to a level commensurate with optometry's advanced education and training - that the researchers state is also supported overwhelmingly by the public.[12]

8 Meeting the Eye Health and Vision Care needs of Canadians, April 2018, CAO: https://bit.ly/33vbumX

9 The cost of vision loss in Canada: summary report. CNIB and the Canadian Ophthalmological Society (COS); 2009: https://bit.ly/30k02ch

10 Fighting Blindness Canada: https://www.fightingblindness.ca/eye-diseases-pathways/glaucoma/

11 Computer Vision Syndrome - American Optometric Association: https://bit.ly/319bwPg

12 https://www.aoa.org/news/advocacy/state-advocacy/scope-expansion-to-save-americans-billions-annually?sso=y

Section 2 - Patient Care and Competency Assurances

The Alberta College of Optometrists has a long history of guiding our regulated members and protecting the public in an appropriate manner. The College values and respects the privilege of self-regulation granted to us by the Alberta government and the people of Alberta.

Expanding the legislated scope of practice for Doctors of Optometry supports government health initiatives to enhance access to patient-centered care across Alberta and expands access to eye health services currently limited to a smaller segment of medical specialists to a greater population of skilled, competent and safe practitioners.

Doctors of Optometry share the same goals as the Government of Alberta, and all Albertans:

- Improving patient-focused outcomes.
- Improving access to safe, skilled and competent health services across Alberta.
- Reducing pressure on other primary care practitioners and Emergency Departments.
- Realizing immediate cost savings and predicting future costs.

Doctors of Optometry are mandated to follow regularly updated Clinical Practice Guidelines that regulate and ensure the safe and competent use of therapies such as those included in this scope expansion proposal. These Guidelines are based on the best available and most current optometric and medical clinical evidence and research:

- The Alberta College of Optometrists will mandate that any Regulated Member who wishes to perform any new scope expansion activity complete a rigorous Advanced Procedures certification course with a final exam or pass a similar program of study. Members who do not achieve this advanced designation will continue to be allowed to practice at their current level. This approach will not trigger any Labor Mobility issues (details in the Executive Summary).
- The Alberta College of Optometrists follows best practices by mandating the successful completion of these certification courses before allowing their members to perform any newly authorized activity.
- The ACO Continuing Competence Program will add assessment of the Advanced Procedures competencies to our already robust Performance Assessment Program. This program utilizes an on-site assessment of facilities as well as a patient chart review process that assesses whether a member conducted the appropriate tests (for that patient at that point in time), whether the treatment or management plan was appropriate to the diagnosis and whether the final health outcome was beneficial to the patient.

- The ACO Standards of Practice mandate that all Regulated Members:
    - Must recognize their own limitations in the delivery of patient care and refer those patients to ensure appropriate, competent, safe and skilled services are provided to their patients.
    - Must always act in the best interests of the patient.
- The ACO Clinical Practice Guidelines are not intended to replace professional discretion and judgment; nor are they intended to be used as an all-encompassing clinical manual. Doctors of Optometry must base their assessment, diagnostic, management and treatment regimens on the specific needs of the patient at that specific point in time.
- Specific Clinical Practice Guidelines on Laser Procedures and Optometric Treatment Procedures have been included as an attachment to this consultation. The reason for inclusion of these specific guidelines is to provide:
    - Appropriate specific background information on the conditions and limitations for Doctors of Optometry to follow when providing these newly authorized services.
    - Appropriate background information for stakeholders to review to assist them in commenting on this scope expansion proposal.

As previously stated in the Executive Summary, no Labor Mobility Issues will ensue from the approval of these scope expansion proposals as all Regulated Members and all potential transfer applicants from other provinces will be able to continue to practice at the current Alberta scope of practice level.

The impeccable safety record of Doctors of Optometry providing these exact same procedures in other jurisdictions (in the United States) for the past 44 years is outlined in Appendix A.

Section 3 - Proposed Changes to the *Optometrists Profession Regulation*

The College is proposing to update the scope of practice of Doctors of Optometry to include limited surgical procedures, laser procedures and to administer injections (e.g. local anesthetic, triamcinolone, etc.). This update will align Alberta's Doctors of Optometry scope of practice with their education and training and will join them with colleagues in other jurisdictions who have been practicing at this same level in a safe, skilled, and competent manner for many decades. (Please see Appendix C for locations)

All recently graduated Doctors of Optometry receive appropriate education and training to perform the updated scope activities during their optometry degree program and are required to pass all applicable National Board examinations to be certified and registered with the College. All other Doctors of Optometry who graduated before the Advanced Procedures education and training was offered will be mandated to complete a comprehensive Advanced Procedures certification course and final exam before being certified to perform the updated scope activities. As has been the case with all previous scope expansions for Doctors of Optometry in Alberta, the College will not allow any Regulated Member to provide these procedures without being appropriately certified and registered. This direction is consistent with the College mandate to protect and serve the public interest.

The College Standards of Practice meet acceptable standards for the performance of these procedures and are similar to those currently used by other health care governing organizations. Procedural restrictions are clearly articulated in the College's Standards of Practice and Clinical Practice Guidelines.

Limited injections, surgical and laser procedures

The college is requesting authorization for appropriately certified and registered Doctors of Optometry to perform injections and limited surgical and therapeutic laser procedures, on the human eye and adnexa:

- Minor surgical procedures performed with scissors, blade or Radio Frequency (in-office) under local anesthesia (topical and injectable) for the removal of benign minor skin lesions such as: skin tags, papilloma, verrucae, seborrheic keratosis, cyst of moll, cyst of Zeiss, sebaceous cyst, epidermal inclusion cyst and incision/curettage of chalazion. Full details are listed in the attached Optometric Treatment Procedures Clinical Practice Guideline.
    - The preferred surgical technique is left to the professional judgment of the practitioner based on the patient's condition and potential for a positive health outcome.
    - All suspicious lesions must be biopsied and sent to a lab for analysis. All malignant lesions must be referred to a physician.

- Doctors of Optometry in twenty (20) U.S. states have been performing these same minor surgical procedures safely and competently for 44 years (see Appendix C).
- Approval of this authorization would prevent patients from potentially harming themselves with over-the-counter products that contain flammable and combustible dimethyl ether and propane (e.g. Dr. Scholl's Skin Tag and Wart Removal). Applied incorrectly, these products can damage healthy peri-ocular and ocular tissue.
- All proposed minor surgical procedures are for superficial, non-intraocular conditions that would be performed under local anesthesia (topical and injectable). None of these procedures require general anesthesia.
- Doctors of Optometry would be specifically prohibited from performing any major ocular surgery as listed in Section 4 of this proposal.

- Therapeutic laser procedures performed in-office for ocular conditions would only include peripheral iridotomy, selective laser trabeculoplasty, and Nd:YAG capsulotomy. Full details on all three procedures are listed in the Optometric Laser Procedures Clinical Practice Guideline.
  - Doctors of Optometry in five American states and in all Veterans Affairs hospitals across the U.S. have been performing these same laser procedures safely and competently for the past 22 years. No incident of incompetent or incorrect care has been documented in these jurisdictions by Doctors of Optometry performing these laser procedures. (Please see Appendix A and C for additional details.)
  - Doctors of Optometry would perform these laser procedures in their community clinics. The use of a topical anesthetic is left to the professional discretion of the practitioner.
  - Doctors of Optometry would be specifically prohibited from performing other ocular laser procedures such as refractive laser vision correction and retinal laser procedures as listed in Section 4 of this proposal.
  - Below are summarized descriptions of these three common ophthalmic laser procedures currently performed by Doctors of Optometry in other jurisdictions.

Peripheral iridotomy (PI)	
Purpose	Preventative pre-glaucoma and acute angle closure treatment to preserve vision. Enhances outflow and reduces eye pressure to prevent damage to the optic nerve, which can contribute to glaucomatous vision and visual field loss.
Description	This is the standard first-line treatment in closed-angle glaucoma and in eyes at risk for this condition. It preserves vision and prevents glaucoma damage by creating an opening in the iris to enhance fluid outflow. This laser treatment has been performed since the early 1980's and takes between 5 and 10 minutes to complete.

Selective Laser Trabeculoplasty (SLT)	
Purpose	Preventative pre-glaucoma and current open angle glaucoma treatment to preserve vision and to limit glaucoma-induced vision loss. The application of a low-energy laser stimulates biochemical changes to eye tissue to improve the outflow of fluid from the eye. This procedure is most commonly used when medications are not lowering the eye pressure enough, are causing significant side effects, when patients cannot afford medications or when patient non-compliance is a factor.
Description	A low-energy laser is applied to the drainage angle tissues of the eye to cause a biochemical reaction that results in increased fluid outflow from the eye. This laser procedure has been successfully used since the mid-1990's and is now being considered as a possible first treatment of choice for some types of glaucoma. The procedure takes between 10 and 15 minutes to complete.

Nd-YAG Capsulotomy	
Purpose	To reduce glare and improve vision by treating cloudy areas of the eye lens capsule that can develop after cataract surgery.
Description	This treatment addresses the most common complication of cataract surgery, which is the clouding of parts of the eye lens capsule after surgery. This is called posterior capsule opacification. It can occur months or years after cataract surgery and can impair vision more significantly than the initial cataract. YAG laser capsulotomy helps patients see clearly again by using a laser to create an opening in the clouded area of the lens capsule to allow light to pass through to the retina and restore clear vision. The procedure takes approximately 5 minutes to complete. Nd-YAG describes the elemental makeup of the specialized crystal used to create the laser (neodymium-doped yttrium aluminum garnet).

- Authorization for appropriately certified and registered Doctors of Optometry to prescribe or administer all diagnostic or therapeutic pharmaceutical agents for the human eye and adnexa through any route of administration, including injectables.
    - Injectable pharmaceutical agents include local anesthetic (Lidocaine HCL 0.5% with or without epinephrine), therapeutics injected into the subconjunctival space, sub-tenon's space, and eyelids (e.g. injection of triamcinolone to reduce inflammation and cause regression of a chalazion), and the use of an EpiPen (epinephrine) to the patient's outer thigh for treatment of anaphylaxis.
    - Currently, Doctors of Optometry in thirty-nine (39) U.S. states are authorized to prescribe and administer injectable diagnostic and therapeutic pharmaceutical agents.
    - Doctors of Optometry would be specifically prohibited from performing intravitreal injections as listed in Section 4 of this proposal.

Summary

Albertans will require an increasing number of skilled and competent eye care providers in the coming decades that are authorized to diagnose and treat a wide range of conditions that impair vision. This becomes more important with each passing year as our population ages and the possibility for eye disease and permanent vision loss increases with increasing age.

Expanding the Scope of Practice for optometrists as outlined in this Proposal Paper will ensure this need is met by knowledgeable, skilled and competent professionals who provide procedures in a safe and skilled manner. Approval of this proposal will improve vision and eye health for all Albertans, especially those living in rural or small urban centers where access to ophthalmological or hospital eye care is limited.

As a general rule, no blood work or general physical exam is required before any of these requested minor surgical and laser procedures are provided as Doctors of Optometry will have performed an assessment to determine any other risk factors. As such, authorization for Doctors of Optometry to provide these procedures will not add additional costs to the health care system for additional blood work or general physical exams by family physicians.

The specifics for post-operative follow-ups will be left to the professional discretion of the practitioner based on the patient's presenting condition, procedure performed and the patient's response to the procedure; however, the ophthalmic literature generally recommends a short-term (1 day to 1 week) and a long-term (4 to 6 weeks) follow-up for most minor surgical and laser procedures.

Section 4 - Summary of Excluded Procedures

The following ophthalmic procedures would be specifically excluded, except for the preoperative and postoperative care of patients undergoing these procedures:

a) Retina laser procedures.
b) Penetrating keratoplasty or corneal transplant.
c) Administration of general anesthesia.
d) Surgery done with general anesthesia
e) Laser or non-laser procedure into the vitreous chamber of the eye to treat any retinal or macular disease.
f) Intravitreal injections.

The following non-laser surgical procedures would be specifically excluded:

a) Surgery related to removal of the eye from a living human being.
b) Surgery requiring full-thickness incision or excision of the cornea or sclera other than paracentesis in an emergency requiring immediate reduction of the pressure inside the eye.
c) Surgery requiring incision of the iris and ciliary body, including diathermy or cryotherapy.
d) Surgery requiring incision of the vitreous.
e) Surgery requiring incision of the retina.
f) Surgical extraction of the crystalline lens.
g) Surgical intraocular implants.
h) Incisional or excisional surgery of the extraocular muscles.
i) Surgery of the eyelid for suspect malignancies or incisional cosmetic or mechanical repair of blepharochalasis, ptosis, and tarsorrhaphy.
j) Surgery of the bony orbit, including orbital implants.
k) Incisional or excisional surgery of the lacrimal system other than probing or related procedures.
l) Surgery requiring full-thickness conjunctivoplasty with graft or flap.
m) Pterygium surgery.

Section 5 - Potential Benefits

Doctors of Optometry are the primary provider of vision care services in Alberta. They are geographically accessible in over 100+ communities across the entire province; and, have the requisite education and training to examine, diagnose, treat, and manage ocular diseases, disorders, and injuries in a safe, cost-effective, and competent manner.

The proposed revisions to the *Optometrist Profession Regulation* provide a multitude of potential benefits to Albertans, Alberta Health, Alberta Health Services, family physicians, ophthalmologists, and emergency department physicians.

The proposed changes to the *Optometrists Profession Regulation* would:

a. Provide Albertans across the entire province, including Indigenous and rural populations, access to safe, skilled, and competent eye care in their home communities and address the issue of limited access to ophthalmology services outside of major urban centers.
    i. Doctors of Optometry currently practice in 106 Alberta communities.

b. Improve health outcomes, reduce regulatory red tape, and reduce overall health care costs for government and patients by:
    i. Offering a single point of access for a wider range of day-to-day eye health services that would otherwise require multiple appointments at several locations with different - and often more costly - health professionals. This would eliminate the need for a referral to another health care practitioner and subsequent additional billing to Alberta Health.
    ii. Minimizing delays between diagnosis and treatment. Quicker diagnosis and treatment leads to improved health care outcomes.
    iii. Reducing travel time and time away from work for patients and their caregivers by having procedures performed on the same day by the same practitioner.
    iv. Removing any potential additional facility costs to the Alberta Health Services budget by authorizing Doctors of Optometry to conduct eye procedures in their private community care clinics.
    v. Leveraging the ability of private optometry clinics to absorb wait-list backlogs from acute care Emergency Departments for eye and vision care services which will improve the Health Quality Council of Alberta Emergency Department Wait Time metrics. In addition to regular Monday-Friday hours, Doctors of Optometry in Alberta are open:

- 60% on late weekday evenings
- 77% on Saturdays
- 16% on Sundays.

c. Although, family physicians do not provide ophthalmic laser procedures, they do provide some minor surgical and injection procedures. Approval of the requested authorizations for Doctors of Optometry will reduce pressures on family physicians and walk-in clinics by diverting patients who require vision care services to optometrists that are trained and technologically equipped to diagnose and treat eye disorders, diseases, and injuries. This will then allow family physicians to concentrate on other patient health issues that they have been thoroughly and expertly trained to treat.

d. Research (see Appendix B) demonstrates that three in every four patients seen in the Emergency Department for eye-related complaints could alternatively be diagnosed and treated by an optometrist and that diversion to private optometry clinics can save the public health system hundreds of millions of dollars. A recent study from the University of Calgary showed that approximately 76% of patient emergency room visits for eye care could be easily handled by an optometrist in their community clinic; and, at a much lower cost than at the hospital emergency department.

e. Better-position the provincial health care and post-secondary education systems to evaluate and address the receding supply of ophthalmology services associated with retirement demographics.

Doctors of Optometry have been diagnosing, managing and treating glaucoma and other vision conditions on an independent basis for many years without incident. Approval of these requested authorizations will allow patients to be able to continue their vision care services with the same practitioner in their local communities – which is extremely important for rural and indigenous populations. In addition, this also greatly improves consistent care regimens that greatly reduce the possibility of patients getting lost from multiple referrals.

Section 6 - Non-use of AHS Facilities

The Alberta College of Optometrists and Doctors of Optometry are not requesting access to use any Alberta Health Services facility in the province for the provision of any of the newly proposed injections and minor surgical or laser activities.

Doctors of Optometry operate their own community care clinics. All injections and minor surgical and laser procedures that are requested in this Proposal Paper on the expansion of the optometry scope of practice will be provided in privately-operated optometry clinics around the province.

All of the requested minor surgical, injection and laser procedures are currently being provided by ophthalmologists in their private offices as well as in Alberta Health Services facilities.

Appendixes

A. Doctor of Optometry Safety Record

No incident of inappropriate or incompetent care relating to any of the requested minor surgical or laser activities listed in this proposal paper has occurred in the 44 years since the first optometrist was authorized to perform these activities.

To assist in keeping this record intact, the Alberta College of Optometrists will:

- Mandate that all optometrists wishing to provide any of the newly legislated authorizations complete an Advanced Procedures validated program or certification course and pass a final exam before being allowed to perform any of the newly authorized procedures or activities. These members will have a special Advanced Procedures designation on their Practice Permit.
- Continue to evolve the ACO Continuing Competence Program to:
    - Add additional criteria for specific facility certifications, procedure assessment protocols, and internal processes for all newly legislated authorizations that are based on best practices and clinical evidence.
    - Ensure that all Regulated Members maintain their competence throughout their careers via an evolution of the College's Continuing Competence Program to a Performance Assessment Program that would identify and target potential risk factors.

Malpractice and liability insurance premiums for health care professionals are not specifically based on the legislated scope of practice or prescriptive authority; but rather, they are based on the number of misdiagnoses (or lack of diagnosis) and poor treatment outcomes for each specific profession. The Canadian optometry liability insurance premium has not changed over the past 10 years with each additional scope of practice change previously approved in all provinces.

- A review of the *Lockton Historical Optometry Malpractice Insurance Rates* from 2011 to 2019 shows no increase in the malpractice insurance cost over these eight (8) years in the U.S. During this time, several states received an increased scope of practice to include the surgical and laser activities requested in this proposal. Flatlined premiums indicate optometrists provide safe and competent care.
- None of the average 20-30 complaints received annually by the Alberta College of Optometrists have ever been related to the previous Advanced Scope expansions granted to our profession in Alberta in 1995 or 2015.[13]

13 Alberta College of Optometrists website Annual Reports. www.collegeofoptometrists.ab.ca

- Doctors of Optometry in the U.S. (who practice at a level above what is being proposed here) have the lowest premiums of all other similar doctoral level, prescribing practitioners. In the United States:
    - No malpractice claims against Doctors of Optometry performing minor surgical procedures have occurred since Doctors of Optometry first began providing these treatment procedures in 1976.
    - No malpractice claims against Doctors of Optometry performing laser procedures have occurred since Doctors of Optometry first began providing these treatment procedures in 1998.

B. Empirical Evidence

A wide body of historic and recent research conducted over the past 40+ years supports the fact that these activities can be performed by Doctors of Optometry in a safe, skilled, and competent manner.

Patient Complaints

Between the Alberta College of Optometrists scope expansion of 1995 (topical pharmaceutical agents) and the last scope expansion in 2015 (all oral and topical scheduled drugs, independent treatment and management of glaucoma, lab testing and ultrasound), the College has not received any patient complaints against a Doctor of Optometry for incompetent or inappropriate care related to any of the newly authorized scope expansion activities.[14]

Minor Surgical and Laser Procedures

- Sabbagh (1999) found that in the 10 years following the granting of the authorization for Doctors of Optometry to provide laser procedures, optometrists were found to provide laser procedures in a safe, skilled, and competent manner. This research also documented that no complaints and no lawsuits related to Doctors of Optometry providing laser procedures could be located.[15]
- Kekevian (2018) detailed many years of solid evidence of positive results to support optometrist-performed laser procedures. The number of US States granting authorization to Doctors of Optometry to perform laser procedures is now up to five states.[16]
- Stein et al (2016) attempted to prove optometrists had more patients return for trabeculoplasty procedures than ophthalmologists based on a review of billings. Peer review of the article determined a flawed methodology: standards of care at the time mandated that optometrists perform treatment on half the eye at a time, and thus take two billing session to treat the entire eye, while ophthalmologists were allowed to perform the treatment in a single billing session. The end result was similar outcomes for patients of either discipline.[17]
    - Fingeret (2016) found Doctors of Optometry used the best practice of spreading the laser treatment over two sessions to limit potential inflammatory reactions.[18]

14 Alberta College of Optometrists website Annual Reports. www.collegeofoptometrists.ab.ca

15 Oklahoma Optometrists Focus on Laser Surgery. Leslie B Sabbagh. Journal of Refractive Surgery. 1999;15(4):485-488. https://bit.ly/3hXPxkX

16 Expanding Scope of Practice: Lessons and Leverage. Bill Kekevian, Review of Optometry. October 2018. (Vol. 155, Issue 10) https://bit.ly/2Dqa3vO

17 Comparison of Outcomes of Laser Trabeculoplasty Performed by Optometrists vs Ophthalmologists in Oklahoma. Stein JD et al JAMA Ophthalmology 134(10)(2016):1095–1101. https://bit.ly/2EI19ub

18.Laser Trabeculoplasty Use Patterns Among Optometrists and Ophthalmologists in Oklahoma. Fingeret, Murray JAMA Ophthalmology 134.10 (2016): 1101–1102. https://bit.ly/2PhmgWo

- Moorfields (2014) offers evidence on how enabling optometrists to be trained to perform Nd: YAG laser capsulotomy will contribute to the efficient delivery of the ophthalmology clinic services within Moorfields Eye Hospital NHS Foundation Trust in England. The result was enhanced patient care by enabling optometrists to perform functions previously only performed by medical staff.[19]
- Kabat et al (2014) supports Doctors of Optometry providing minor surgical procedures.[20]

Emergency Department Use and Cost Savings

- Adler et al (2019) found a cost savings of $152M in a New England region by directing patients with potential urgent, critical and emergency vision care issues to optometry clinics and away from emergency departments. The article also describes best practice protocols for Emergency Department avoidance.[21]
- Phillips et al (2018) found that approximately three in four patients seen in the Emergency Department for eye complaints could have been diagnosed and treated by an optometrist.[22]

Potential Savings Realized in Other Jurisdictions

- A recent study showed that the United States would save at least $4.6 billion annually if all US States modernized their optometric scope of practice acts to a level commensurate with optometry's advanced education and training that the researchers state is also supported overwhelmingly by the public.[23]

19 Moorfields Eye Hospital. NdYag Policy and Procedure. https://bit.ly/3k2qyip

20 Kill 'em With Chemicals. Alan G. Kabat, OD, and Joseph W. Sowka, OD. Review of Optometry (Vol. 151, Issue 1). 2014. https://bit.ly/30h1NHo

21 Annals of Family Medicine. Ann Fam Med. 2019 Aug 12;17(Suppl 1):S33-S39. doi: 10.1370/afm.2423

22 https://www.cambridge.org/core/journals/canadian-journal-of-emergency-medicine/article/lo13-eye-care-in-the-emergency-department-what-proportion-of-patients-presenting-to-the-emergency-department-with-isolated-eye-related-complaints-could-alternatively-be-seen-by-an-optometrist/C9CE56C5909C3CADBEE1C2C19FDFE928

23 https://www.aoa.org/news/advocacy/state-advocacy/scope-expansion-to-save-americans-billions-annually?sso=y

Exposure to Eye Health in Family Medicine Training

Although, family physicians do not perform ophthalmic laser procedures, some of the minor surgical and injection procedures in this proposed scope expansion (such as removal of skin tags and other benign skin lesions) are currently being performed by family physicians.

Doctors of Optometry have a positive and collaborative relationship with family physicians, which respectfully recognizes the limits of family physician training in eye health, and their limited access to specialized eye health diagnostic and treatment equipment that is standard in optometry and ophthalmology clinics.

Education and training of family physicians is dedicated to the treatment of the body as a whole, and to address primary general health concerns in a skilled, safe and competent manner.

Unfortunately, family physician training in eye disease offers minimal exposure to didactic training and clinical experience:

- Augenheilkd (2005) reported the International Council of Ophthalmology (ICO) suggests that the core clinical competencies involving eye care are typically taught over 5-8 days in medical school.[24]
- Noble (2009) revealed that 76% of first-year residents who had recently graduated from a Canadian medical school had one week or less of overall eye care training, including two schools with no training.[25]
- Chan et al (2011) revealed more than 80% of family medicine residents at the University of Western Ontario were uncomfortable managing ophthalmology cases.

As such, approval of the authorizations requested in this Proposal Paper will free up family physicians to concentrate on other patient health issues that they have been thoroughly and expertly trained to treat.

24 Klin Monbl Augenheilkd. 2006 Nov;223 Suppl 5:S1-19. Principles and guidelines of a curriculum for ophthalmic education of medical students. International Task Force on Ophthalmic Education of Medical Students; International Council of Ophthalmology

25 Canadian Journal of Ophthalmology. “An analysis of undergraduate ophthalmology training in Canada. Jason Noble, BSc, MD. Volume 44, Issue 5 , Pages 513-518, October 2009.

C. Jurisdictional Scan

Doctors of Optometry practicing in the United States have been performing the same injections and minor surgical and laser procedures requested by the College in a safe and skilled manner for many decades now.

Injections and Minor Surgical:

- Currently twenty (20) States authorize Doctors of Optometry to treat “lumps and bumps” via minor surgical procedures such as scissors, blade or Radio Frequency.
- Currently, thirty-nine (39) States authorize Doctors of Optometry to provide injections.
- The first State that authorized Doctors of Optometry to perform these procedures occurred approximately forty-four (44) years ago.

Laser Procedures:

- Currently, five (5) States (Alaska, Arkansas, Kentucky, Louisiana, and Oklahoma) authorize Doctors of Optometry to perform laser procedures.
- In addition, Veterans Affairs Hospitals in the United States now permit optometrists to provide minor surgical and laser procedures in all their facilities throughout the entire United States.
- The first State that authorized Doctors of Optometry to perform laser procedures occurred approximately twenty-two (22) years ago.

D. Optometric Education & Clinical Training

According to Section 25 of Alberta's *Health Professions Act,* professions who are granted an increase in their legislated scope of practice must have the necessary didactic education and clinical training to be able to perform the newly authorized activities in a safe, skilled and competent manner.

Profession Program Requirements for Optometry, Dentistry and Medicine

	Optometry	Dentistry	Medicine
Program Training	4 years	4 years	4 years
Post-Graduate Training	Optional 1-year Residency after graduation in a variety of subspecialties.	Optional Residency in nine Dental Subspecialty Programs	Mandatory 2-year Residency in Family Medicine or 5-year Residency in Ophthalmology or other specialty.
Total Undergraduate and Graduate Training	7 -8 years	6 – 8 years	9 – 11 years for family medicine 11 – 14 years for ophthalmology
Accreditation Process for Programs of Study and Residency Programs	Accreditation Council on Optometric Education (ACOE)	Commission on Dental Accreditation of Canada (CDAC)	Committee on Accreditation of Canadian Medical Schools (CACMS)

The 4-year Doctor of Optometry professional program is divided as follows:

- Years 1 and 2: Lectures and wet-labs on optics, anatomy, physiology, pharmacology, etc. Students are placed in clinical settings (with final year students) as observers.
- Years 3 and 4: Thousands of hours of live patient experiences and simulators on a wide assortment of vision conditions and diseases.
- Students are also required to complete clerkship placements under direct supervision of a Doctor of Optometry or ophthalmologist, outside of the university optometry clinic. Placements offer clinical exposure to live patients in the areas of expanded scope proposed here.

Optometry Degree Program Accreditation

The Accreditation Council on Optometric Education (ACOE) performs an in-depth accreditation review of all optometry degree programs, optometry residency programs, and optometric technician programs in Canada and the U.S. regularly.

The accreditation process ensures educational programs meet or exceed predetermined standards. The ACOE is recognized by the U.S. Department of Education as an authority on the quality of the educational programs it accredits.

The ACOE uses the following steps in the accreditation process:[26]

- Development and publication of educational standards
- Self-Study analysis
- Invitation for comments
- Evaluation visit
- Report of visit
- Determination of accreditation status
- Publishing accreditation status

The accreditation protocols and processes used by ACOE are very similar in breadth and depth to the protocols and processes used by the Committee on Accreditation of Canadian Medical Schools (medical schools) and the Commission on Dental Accreditation of Canada (dental schools).

26 ACOE protocols and processes. https://bit.ly/2XzTO6H

National Board Exam for Optometry, Dentistry, and Medicine

The proposed changes to the *Optometrists Profession Regulation* are assessed on the Optometry Examining Board of Canada Exam (OEBC). This exam incorporates a written exam and a clinical OSCE (Objective Structured Clinical Examination) exam.

Before being licensed in Alberta, all applicants have to pass the entire OEBC exam. Candidates may challenge the Optometry Examining Board of Canada Exam a maximum of 4 times. This is similar to the professions of medicine and dentistry.[27,28,29]

The written exam for all three professions assesses a candidate's knowledge base. The Objective Structured Clinical Examination (OSCE) assesses a candidate's ability to demonstrate their clinical skills, analyze clinical information, apply knowledge and develop appropriate treatment plans at a level required for entry to practice in that profession in Canada.

	Optometry Exam	Dentistry Exam	Medicine Exam
Written Exam	232 questions, 7.5 hour time limit	300 questions, 5-hour time limit.	248 questions, 7.5 hour time limit.
Clinical OSCE	12 stations.	50-60 stations.	2-day clinical stations.
All also include: ID upon check-in, Exam Blueprint and Competency Profile, Confidentiality and NDA, Accommodation Policy, Rules of Conduct			

27 National Dental Examining Board of Canada. https://bit.ly/3i4oCnT

28 Medical Council of Canada.https://bit.ly/3hZMwkd

29 Optometry Examining Board of Canada. http://www.oebc.ca

Additional Certification

The College will mandate that any currently registered Doctor of Optometry who wishes to provide any newly authorized activity participate in and successfully complete a program of study or a rigorous, validated certification course and final exam. No "grandfathering" of any Regulated Member will occur. This is consistent with what our College did for previously granted scope expansions in 1995 and 2015.

New graduate applicants to the ACO will have completed the Advanced Procedures certification course syllabus during their optometry program and must successfully pass the national board exam before a Practice Permit is issued.

Nationally accredited Advanced Procedures certification courses are the same courses that are used by U.S. State Boards of Optometry and Canadian Optometric Regulatory Colleges, following optometric scope expansion in their jurisdiction. They have been proven to be effective and appropriate for certifying optometrists to provide these requested activities in a safe and skilled manner.

Advanced Procedures certification courses:

- Are created, accredited, and administered by accredited universities. Currently, the University of Waterloo School of Optometry and Vision Science and the Northeastern State University Oklahoma College of Optometry offer these post-graduate certification courses.
- Are taught by ophthalmologists and optometrists.
- Augment what students and practitioners have learned during their professional degree program, clerkship placements, previous Advanced Scope certification courses and previously completed Continuing Education courses/wetlabs.
- Refresh the clinical knowledge and skill sets while updating the Doctor of Optometry on new best practice modalities and protocols for treating any potential complications following the provision of these procedures.

The 32.5-hour Advanced Procedures certification course content is split between injections, minor surgical and laser modules. It incorporates both didactic lectures and hands-on clinical wet labs with an emphasis on the hands-on components.

- The final written exam consists of a 50-question closed book, multiple-choice final exam.
- The final clinical exam consists of a hands-on clinical examination on all clinical procedures.
- The pass mark has been set at 70%.

E. Where Optometrists & Ophthalmologists Practice

As of March 9, 2020, a total of 833 optometrists were actively registered with the Alberta College of Optometrists and a total of 141 ophthalmologists were actively registered with the College of Physicians and Surgeons of Alberta. This data was pulled from the Alberta College of Physicians and Surgeons website and the Alberta College of Optometrists database.

Optometrists work in 106 Alberta municipalities. Ophthalmologists work in 6 Alberta municipalities.

Region	Percentage of Alberta Optometrists	Percentage of Alberta Ophthalmologists
Calgary and Edmonton	66%	87%
Fort McMurray and Wood Buffalo Region	1%	0%
Grande Prairie	2%	2%
Red Deer	3%	3%
Lethbridge	3%	4%
Medicine Hat	1%	3%
Rural and Indigenous areas	24%	0%