HPRAC

HEALTH PROFESSIONS REGULATORY ADVISORY COUNCIL

ADVICE TO THE MINISTER OF HEALTH AND LONG-TERM CARE

Optometry – Use of Therapeutic Pharmaceutical Agents (TPAs)

April 2000

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Executive summary

Introduction

On July 24, 1998, the Minister of Health and Long-Term Care (MOHTLC) re-activated a 1994 referral to HPRAC requesting advice on whether optometrists should be given the authority to use therapeutic pharmaceutical agents (TPAs) within their scope of practice. Specifically, HPRAC was asked for advice with respect to the situation in Ontario today and how the proposed expansion in the scope of practice of optometry relates to the public interest and the needs of Ontarians.

Process

HPRAC reviewed the situation in other Canadian and American jurisdictions as well as the work of the Health Professions Legislative Review (HPLR) and the 1991 proceedings of the Standing Committee on Social Development that held hearings on the proposed *RHPA*. HPRAC met with the applicant, the Ontario Association of Optometrists, and sought the views of various stakeholders via two sets of written submissions.

HPRAC also undertook to determine how the public interest would be advanced through the proposed change in scope of practice by carefully examining need and cost implications. This examination included reviewing the results of the 1996 Ontario Health Survey/National Population Health Survey and the survey from the College of Optometrists of Ontario entitled "Delivery of Primary Eye Care by Optometrists in Ontario". Additionally, HPRAC obtained OHIP data from the MOHLTC and contacted District Health Councils across the province to determine whether they had any information relevant to the review. HPRAC also conducted a search of the literature for relevant research or evaluations on the use of TPAs by optometrists and commissioned questions on a province-wide survey.

Findings

All 50 U.S. states allow some form of TPA use by optometrists. The extent of TPA use varies considerably by state, with approximately 50% allowing optometrists to use only topical forms of TPAs.

TPA use by optometrists in Canada is a relatively recent experience and is restricted to three provinces (Alberta, Saskatchewan and New Brunswick) that represent approximately 16% of the Canadian population. As a result, there has not been sufficient opportunity for evaluations of the expanded scope of practice in Canada to be carried out and reported.

None of the Canadian jurisdictions that authorize TPA use by optometrists has had any reported patient complaints or formal investigations concerning the expanded scope of practice of optometry. However, HPRAC recognizes that a lack of complaints or formal investigations may not necessarily be an indication of safe or effective prescribing. HPRAC is concerned that mishaps that may have occurred would have been treated by another health care professional and not identified as the result of inappropriate treatment or reported to the appropriate regulatory body.

The request from the Ontario Association of Optometrists is much broader than what is permitted in any other Canadian jurisdiction. For example, with respect to glaucoma treatment, Saskatchewan does not allow optometrists to treat glaucoma, Alberta allows treatment by optometrists only in a co-management relationship with an ophthalmologist and New Brunswick only allows treatment by optometrists in an emergency situation. No Canadian province allows optometrists to prescribe oral medications or to order laboratory tests, as requested by the Ontario Association of Optometrists.

The proponents of an expanded scope of practice for optometry stated that unmet need for eye care exists in Ontario. In particular, the requirement that optometrists refer patients requiring TPAs to physicians causes delays in treatment. With the proposed expansion in scope, such referrals would be avoided and morbidity would decrease as delays in receiving appropriate treatment would be minimized. Hence, costs to the health care system would decrease. Specifically, it was estimated that approximately 75,000 referrals to physicians (both family physicians and ophthalmologists) would be avoided annually, and that the average wait time to see the physician was 34 days. The cost saving to the system was estimated at $4.5 million per year.

It is important to note that the proposed expansion in the scope of practice of optometry is concerned with an expansion of the primary care responsibilities of the optometrist. Therefore, the potential level of activity that this change might affect is likely limited to referrals to family physicians. Less than one percent (0.55%) of all optometry patients are referred to family physicians. In contrast to the position of proponents, HPRAC estimates that the annual number of referrals that might be avoided may be fewer than 15,000. These referrals would be to family physicians for which the average wait time is seven days.

HPRAC also determined that the annual cost saving from avoided referrals would not likely be $4.5 million, as argued by the proponents; it may in fact be less than $300,000. Furthermore, with respect to laboratory tests (for which cost coverage was requested by the applicant), HPRAC found that the number of laboratory procedures being performed for anterior segment eye diseases (the conditions for which TPAs would be used) might double with the expanded scope of practice. This would lead to an increase in costs to the health system. A detailed cost-benefit analysis should be undertaken to determine the true cost implications.

Public survey research indicates that overall, the public is satisfied with the quality and access to eye care services in Ontario, even services for conditions requiring medication.

HPRAC is therefore of the view that, at this time in Ontario, there is little evidence to demonstrate a compelling need for expanding the scope of practice of optometry to include the use of TPAs. Given the lack of evidence of significant need and potentially higher costs, HPRAC did not pursue a rigorous examination of the other public interest issues related to an expanded scope of practice for optometry. However, HPRAC has outlined the views of stakeholders regarding the education and training of optometrists in relation to protection from harm and quality of care and HPRAC's inability to draw conclusions without further information.

Given the strong public interest principles underlying the regulatory system in Ontario, and given the inherent risk of harm in prescribing drugs, HPRAC is of the view that there must be demonstrable public benefit in order to expand the scope of practice of a profession. We have been unable to find evidence of significant public benefit at this time.

Recommendation

HPRAC does not recommend that the scope of practice of optometry be expanded to include the use of therapeutic pharmaceutical agents (TPAs).

1. INTRODUCTION & BACKGROUND

Introduction

This report is in response to the Ministerial referral dated July 24, 1998 regarding a proposed expansion in the scope of practice of optometry to include the use of therapeutic pharmaceutical agents (TPAs) (see Appendix A).

The report is divided into five sections. This section provides an introduction and background on the current scope of practice of optometry. Section 2 outlines the request made by the Ontario Association of Optometrists (OAO) for an expansion in the scope of practice of optometry to include the use of TPAs.

Section 3 outlines the approach taken by the Health Professions Regulatory Advisory Council (HPRAC) to analyze this issue. This includes reviewing the scope of practice of optometry in other jurisdictions, reviewing the work of the Health Professions Legislative Review (HPLR) and the Standing Committee on Social Development, seeking input from interested parties, analyzing the evidence on the 'need' for an expansion in scope of practice for optometry, and considering the impact on access, cost and quality.

Section 4 provides HPRAC's observations and positions resulting from its analysis. Also included is a discussion of the public interest objectives of the *Regulated Health Professions Act, 1991* (RHPA) that HPRAC has taken into consideration in drafting its recommendation on this matter.

Section 5 outlines HPRAC's recommendation regarding the proposed expansion in scope of practice of optometry.

Background

According to the *Optometry Act, 1991*, the following is the scope of practice of optometry in Ontario:

The practice of optometry is the assessment of the eye and vision system and the diagnosis, treatment and prevention of:

a) *disorders of refraction;*
b) *sensory and oculomotor disorders and dysfunctions of the eye and vision system; and*
c) *prescribed diseases.*

In the course of engaging in the practice of optometry, a member is authorized, subject to the terms, conditions and limitations imposed on his or her certificate of registration, to perform the following:

1. *Communicating a diagnosis identifying, as the cause of a person's symptoms, a disorder of refraction, a sensory or oculomotor disorder of the eye or vision system, or a prescribed disease.*
2. *Applying a prescribed form of energy.*
3. *Prescribing or dispensing, for vision or eye problems, subnormal vision devices, contact lenses or eye glasses.*

In January 1994, as a result of the substantial debate that occurred during the passage of the *RHPA* and the *Optometry Act*, the Minister of Health referred the "prescribed diseases" regulation to HPRAC to advise on its form and content. In addition, in March 1994, the issue of the use of therapeutic pharmaceutical agents (TPAs) by optometrists was referred to HPRAC as a result of the Social Contract negotiations between the Government of Ontario and the Ontario Association of Optometrists. The TPA issue was deferred in September 1995 at HPRAC's request pending the outcome of the prescribed diseases referral.

In March 1995, after a six-month review process, HPRAC provided recommendations on the form and content of a prescribed diseases regulation. In April 1997, Ontario Regulation 119/94 (Optometry – General) was amended by Ontario Regulation 152/97 to include the following:

21. *For the purposes of clause 3 (c) of the Optometry Act, 1991, the following are prescribed diseases:*

    1. *In relation to diagnosis and prevention, diseases of the eye and vision system that can be determined by the findings from an oculo-visual assessment.*

    2. *In relation to treatment, diseases of the eye and vision system that can be treated by other than the prescribing of drugs or the application of surgery.*

22. *For the purposes of paragraph 1 of Section 4 of the Optometry Act, 1991, a "prescribed disease" is any disease limited to and manifested in the eye and vision system that was determined by the findings from an oculo-visual assessment.*

With the issue of prescribed diseases having been resolved, on July 24, 1998, the referral pertaining to the expansion of scope of practice to include TPAs was re-activated. Specifically, HPRAC was asked to advise with respect to the situation in Ontario today and how the proposed expansion in the scope of practice relates to the public interest and the needs of Ontarians.

To provide the historical context, the referral included a copy of the former Minister's original referral letter dated March 10, 1994 (see Appendix B). The terms of reference as outlined in this 1994 letter are:

> *Considering the protection of the public interest, the statutory language within the Optometry Act, 1991 and the regulations thereunder, the education and clinical training of optometrists with respect to the use of relevant drugs, as well as the historical context and current professional practice respecting the diseases, disorders, and/or dysfunctions that optometrists now diagnose, treat and prevent, should optometrists be given the privilege of using therapeutic pharmaceutical agents in their scope of practice?*
>
> *Further, I am asking you to provide me with your advice on what, if any, restrictions should be placed on the use of therapeutic pharmaceutical agents by optometrists, if you do recommend that it is in the public interest to give optometrists this privilege. This would include a recommendation on what therapeutic agents should be permitted, as well as any necessary conditions that should apply to their use by optometrists.*

In addition, in the original TPA referral, HPRAC was asked to consider the following sources of information:

i. Appendix A to the Memorandum of Understanding on the Social Contract, Optometry Local Agreement: "Review of Use of Therapeutic Pharmaceutical Agents by Optometrists", as provided by the Ontario Association of Optometrists.

ii. The context of the Association's request, as reflected in the Memorandum of Understanding on the Social Contract, Optometry Local Agreement.

iii. What constitutes "prescribed diseases" for the purposes of sections 3 and 4 of the *Optometry Act, 1991*?

iv. The practice respecting the use of therapeutic pharmaceutical agents within the profession in other jurisdictions across Canada and the U.S.

v. The work of the Health Professions Legislative Review with respect to the scope of practice of optometry and in particular any submissions to the Review on the public record with respect to the use of therapeutic pharmaceutical agents.

vi. Records of debate (if any) of the Standing Committee on Social Development prior to the passage of the *Regulated Health Professions Act* (*RHPA*) and the *Optometry Act, 1991* and any relevant submissions (if any) made to the Standing Committee on Social Development in 1991.

vii. Consumer needs.

viii. The views of other regulated or unregulated professions, with particular attention to the views of the Ontario College of Optometrists, the other "eye care" professions, and the profession of pharmacy.

ix. The possible impact of this proposal and of any recommendations you may make on access to eye care services in Ontario, the cost of eye care services, and the quality of eye care services.

x. Other *directly* relevant research/opinions available to the Council.

Given the time that has elapsed since the Social Contract negotiations and subsequent agreement in 1991 and given that the current referral specifically asks for advice on the extension of scope of practice to include the use of therapeutic pharmaceutical agents (TPAs), this report is organized around items iv) through x).

2. THE APPLICANT'S REQUEST

The application for an expansion in the scope of practice of optometry to include the use of TPAs was submitted to HPRAC by the Ontario Association of Optometrists (OAO) on September 15, 1998. The OAO requested that the *Optometry Act, 1991* be amended to include the additional authorized act of prescribing a drug as designated in the regulations. They indicated that new regulations to support this change would need to be developed and that the current regulation governing optometrists' scope of practice would need to be amended to allow treatment with pharmaceutical agents.

The OAO requested that optometrists be authorized to use the following categories of drugs:

Pharmaceutical Category	Pharmaceutical Sub-category
Anti-infectives	topical antibacterials, topical antivirals, topical antifungals, oral antibiotics
Anti-inflammatories	topical steroids, topical non-steroidal anti-inflammatories
Anti-allergy	topical antihistamines, mast cell stabilizers
Anti-glaucoma medications	adrenergic agents, cholinergic agents, carbonic anhydrase inhibitors, prostaglandin analogs, hyperosmotic agents
Cycloplegics	
Other new and investigational topical pharmaceutical agents rational to the treatment of ocular disease	
Analgesics	

In addition, the OAO indicated that a change would be required to the Medical Laboratory Technology Act to include members of the College of Optometrists among those allowed to order laboratory tests. It was further stated that there would need to be a change to the Health Insurance Act to allow laboratories to be paid with public funds for the laboratory tests that optometrists would order.

Coverage of the following list of laboratory tests was requested by the OAO:

L622 – Chlamydia culture isolation or non-cultural essays L626 – Fungus, including KOH (potassium hydroxide) preparation and smear L628 – Other swabs or pus-culture and smear (includes screening) L714 – Smear for inclusion bodies L715 – Smear for eosinophils (nasal, sputum, ocular, etc.)

Rationale for the expansion in scope of practice

The OAO's rationale for an expansion in scope of practice of optometry centers on the issues of need, accessibility/availability, quality of care, risk of harm, equality of professions and costs.

The OAO claimed that 1) there is unmet need for eye care services in Ontario and that optometrists being able to prescribe TPAs would meet this need 2) there are distribution problems with physicians (both family physicians and ophthalmologists) and shortages of ophthalmologists throughout the province. As a result, waiting times for patients to see specialists for eye care are lengthy and patients are suffering due to delays in treatment.

The OAO argued that the expansion in scope of practice would improve access by eliminating unnecessary referrals to physicians, ensuring timely treatment and reducing or eliminating travel time for many patients. They also argued that consumers should have a choice of safe health care options for their eye care needs.

With respect to quality of care, the OAO indicated that expanding the scope of practice of optometry would enhance the quality of eye care to patients given that optometrists have access to instruments and procedures specific to the eye and can therefore make more accurate diagnoses than many family physicians.

The OAO claimed that there would be no increased risk of harm to the public; this would be ensured through a variety of mechanisms to be established by the College of Optometrists. They also indicated that the education and clinical training of optometrists is sufficient to allow optometrists to safely and effectively use TPAs.

The OAO also claimed that there are benefits to the profession of optometry in that expanding their scope of practice to include TPAs would allow optometrists to practice to their full potential. They also maintained that treatment is the logical next step after diagnosis.

With respect to costs, the OAO argued that costs to the health care system would decrease due to a reduction in the number of referrals to family physicians and ophthalmologists for patients requiring TPAs.

3. HPRAC'S APPROACH

HPRAC approached this referral by considering factors (iv) to (x) identified in the March 10th, 1994 referral letter (see page 3 above). In addition, HPRAC noted the Minister's request for advice with respect to the situation in Ontario today and how the proposed expansion in the scope of practice relates to the public interest and the needs of Ontarians.

HPRAC acknowledges that the Ontario Association of Optometrists' request for an expansion in scope of practice relates only to the provision of primary eye care services in Ontario. Therefore, HPRAC's analysis of this issue is also being guided by a recognition of the distinction between primary versus secondary/tertiary eye care and the importance of appropriate use of health care services.

3.1 "The practice respecting the use of therapeutic pharmaceutical agents within the profession in other jurisdictions across Canada and the U.S."

In November 1998, HPRAC contacted all Canadian provincial ministries of health[1] to determine the scope of practice of optometry in each jurisdiction (see Appendix C). For those provinces that have authorized optometrists to use TPAs, HPRAC also inquired about: the process undertaken to achieve TPA use by optometrists, the regulatory limitations on practice, the range of drugs used by optometrists, the education and training requirements with respect to TPAs, the impact of optometrists' use of TPAs on other health professions, on health care costs (drugs and insurance plans) and on consumers. In addition, HPRAC requested information on relevant research or evaluations undertaken on the use of TPAs by optometrists within their jurisdictions.

HPRAC researched the status of TPA usage in the United States through contact with three Schools of Optometry and through Internet searches.

3.2 "The work of the Health Professions Legislative Review with respect to the scope of practice of optometry and in particular any submissions to the Review on the public record with respect to the use of therapeutic pharmaceutical agents."

Pursuant to the Minister's request, HPRAC reviewed the work of the Health Professions Legislative Review (HPLR) with respect to the scope of practice of optometry including the relevant files, working documents and submissions to the Review that were at HPRAC's disposal. HPRAC also contacted two people who were closely involved with the HPLR and the Ministry of Health to obtain their account of the situation with respect to optometry and the use of TPAs at the time of the HPLR.

HPRAC reviewed the recommendations of the Review as outlined in the document "*Striking a New Balance: a Blueprint for the Regulation of Ontario's Health Professions*".

3.3 "Records of debate (if any) of the Standing Committee on Social Development prior to the passage of the *Regulated Health Professions Act* (*RHPA*) and the

[1] Alberta Labour was contacted in Alberta.

***Optometry Act, 1991* and any relevant submissions (if any) made to the Standing Committee on Social Development in 1991."**

HPRAC reviewed the Hansard transcripts of the public hearings held by the Standing Committee on Social Development (SCSD) during the passage of the RHPA in 1991 with particular attention to the discussions surrounding Bill 60, the *Optometry Act*.

3.4 "Consumer needs."

HPRAC reviewed the results of the 1996 Ontario Health Survey/National Population Health Survey with respect to eye care utilization. HPRAC also obtained data on eye care service utilization from the Ministry of Health and Long-Term Care's OHIP database. In addition, HPRAC reviewed and analyzed the data from the College of Optometrists' 1998 survey of its members entitled "Delivery of Primary Eye Care by Optometrists in Ontario". HPRAC also sent a letter to all District Health Councils (DHCs) in the province to inquire whether they had any information relevant to the review of the scope of practice of optometry. (see Appendix D)

In addition, stakeholders (described below) were asked to speak to "public need" in terms of:

- the number of referrals to ophthalmologists and family physicians that could be avoided
- the waiting times for ophthalmologists and/or family physicians
- the geographic distribution and population coverage of ophthalmologists and/or family physicians
- the use of emergency rooms for eye care
- the availability of appropriate instrumentation in family physicians' offices

In order to help determine the level of public satisfaction with eye care services in Ontario, HPRAC commissioned a number of survey questions from Environics Research Group.

3.5 "The views of other regulated or unregulated professions, with particular attention to the views of the Ontario College of Optometrists, the other "eye care" professions, and the profession of pharmacy."

HPRAC offered a wide range of groups and individuals an opportunity to express their views on the matter of whether optometrists should be authorized to prescribe TPAs.

HPRAC met with the applicant in this referral, the Ontario Association of Optometrists (OAO) to discuss the application.

HPRAC circulated an invitation letter to its mailing list of over 750 individuals and organizations and posted information on its website. The letter included a set of questions for participants based on the public interest objectives of the RHPA (see Appendix E). These questions focused on:

1) the risk of harm from optometrists using TPAs
2) the effect on quality of care from optometrists using TPAs
3) optometrists' clinical education and training
4) the effect on access to appropriate care
5) the benefits/costs to the public and the profession from optometrists using TPAs

6) the types of drugs that should be permitted, for which diseases (if optometrists were permitted to use TPAs)
7) the conditions that should be placed on the use of TPAs by optometrists (if they were permitted to use TPAs)

A hard copy of each reply received was provided to all other participants, including the applicant.

A second round of submissions allowed participants to comment on any issues raised in the original submissions (Appendix F). In addition, HPRAC requested that participants provide information and comments on the following:

1) The public's need for an expansion in the scope of practice of optometry
2) The drug categories being requested by the OAO
3) The laboratory tests being requested by the OAO

3.6 "The possible impact of this proposal and of any recommendations you may make on access to eye care services in Ontario, the cost of eye care services, and the quality of eye care services."

Information was drawn from the proceedings described in section 3.4.

3.7 "Other *directly* relevant research/opinions available to the Council."

HPRAC conducted a search of the literature in order to identify relevant research or evaluations on the use of TPAs by optometrists. HPRAC requested a literature search from the University of Toronto Gerstein Science Library for studies/reports on: the use of TPAs by optometrists, including any information on costs, benefits, review of use by, and implementation of use in any jurisdiction. Keywords used in the search were: optometry, optometrists, health professional regulation, therapeutic pharmaceutical agents, prescription drugs, therapeutic medications, prescribing, scope of practice – optometry.

HPRAC inquired, via e-mail to three U.S. Schools of Optometry, about the availability of studies or research evaluating TPA use by optometrists. In addition, HPRAC requested information on the cost-effectiveness of TPA use by optometrists as well as the impact on consumers (especially with regards to access to eye care services and quality of care issues).

HPRAC also consulted with the former Project Coordinator of the Ministry's 1996 Primary Eye Care Review.

The following chart summarizes the process HPRAC followed for this referral:

Date	Activity
July 24, 1998	The Optometry – TPA referral is re-activated by the Minister of Health and Long-Term Care, Elizabeth Witmer.
October 1998	HPRAC met with the Ontario Association of Optometrists, the applicant in this referral.

November 1998	HPRAC wrote to all Canadian provinces to determine the scope of practice of optometry within their jurisdiction. HPRAC contacted various U.S. Schools of Optometry and conducted Internet searches to determine the status of TPA use by optometrists in the U.S. HPRAC requested a literature search to identify any relevant research or evaluations on TPA use by optometrists.
January 1999	HPRAC reviewed the transcripts of the hearings of the Standing Committee on Social Development that occurred during the passage of the RHPA.
February 1999	HPRAC sent out an invitation letter to its mailing list requesting participation in this referral.
March 1999	HPRAC requested a first round of submissions based on the questions outlined in the February 1999 invitation letter.
April 1999	HPRAC requested OHIP and Ontario Health Survey/NPHS data from the Ministry of Health and Long-Term Care.
May 1999	HPRAC reviewed the recommendations of the Health Professions Legislative Review (HPLR)
June 1999	HPRAC received the first set of submissions.
October 1999	HPRAC requested a second round of submissions to allow all participants to support/refute the arguments of other participants as well as to answer additional questions developed by HPRAC.
November 1999	HPRAC sent a letter to all District Health Councils requesting information relevant to the review of the scope of practice of optometry (particularly eye care service needs in their jurisdiction).
November 1999	HPRAC received the second set of submissions.
December 1999	HPRAC commissioned questions on the Environics omnibus survey to determine the level of public satisfaction with eye care services in Ontario by region of the province.
January 2000	HPRAC received the results of the Environics survey.
January 2000	HPRAC advised the participants that public presentations would not be required for this referral.
February to April 2000	HPRAC analyzed all the information received.

4. HPRAC'S ANALYSIS

4.1 The Health Professions Legislative Review

The original submissions from the College of Optometrists and the Ontario Association of Optometrists to the HPLR in 1984 indicated that the scope of practice of optometry within the Health Disciplines Act was suitably defined. However, by 1988, the submissions to the HPLR concerning the scope of practice of optometry had evolved and included a reference to "prescribing drugs as defined in the regulation".

At the time of the HPLR, the Ministry of Health was in the process of reviewing a request for the use of diagnostic drugs by optometrists. In fact, the HPLR team was not involved in the decisions around the use of diagnostic or therapeutic drugs; these issues were deferred to the Ministry. The HPLR team suggested that the Advisory Council (HPRAC) being recommended by the HPLR would be the appropriate mechanism to provide a hearing of the request for an expansion in the scope of practice of optometry. The Ministry's own archived records may describe the discussion and considerations in more detail.

In its 1989 report "Striking a New Balance: a Blueprint for the Regulation of Ontario's Health Professions", the HPLR recommended the following scope of practice for optometry:

The practice of optometry is the assessment of the eye and visual system and the diagnosis, treatment and prevention of visual and oculomotor dysfunctions of the eye.

In the course of practising as an optometrist, a member may perform the following licensed acts:

(1) Diagnosis of visual and oculomotor dysfunctions of the eye.
(2) Using drugs as specified by regulation.[2]
(3) Prescribing ophthalmic appliances.
(4) *Dispensing ophthalmic applicance. (HPLR, p. 282)*

4.2 The Standing Committee on Social Development

The recommendations of the HPLR pertaining to the scope of practice of optometry became the basis for Bill 60, the *Optometry Act*. During the hearings of the Standing Committee on Social Development in 1991, the OAO, among others, expressed concerns about the proposed scope of practice as outlined in Bill 60. The OAO claimed that this scope of practice was too narrow and would unduly restrict the ability of optometrists to treat their patients. The issue of TPA use was raised but was not given full consideration at that time. The profession was assured that the issue would go forward in due course to the newly created Health Professions Regulatory Advisory Council.

After considerable debate during the hearings, the scope of practice of optometry was revised to its current wording in the *Optometry Act, 1991* (see Section 1 – Background).

[2] The use of these drugs was for diagnostic purposes only.

4.3 The views of stakeholders

While 27 individuals and groups expressed a desire to participate in this referral, a total of 18 written submissions were received in the first round (see Appendix G for a full list of participants). To ensure a fair and transparent process, all participants were required to circulate their submissions to each other. Nine submissions were received in the second round. Below you will find a summary of the arguments in favor of, and opposed to, the expansion in the scope of practice of optometry to include the use of TPAs.

Arguments presented by participants in favor of an expanded scope of practice for optometry

These centered on the issues of need, access to care, quality of care, risk of harm, equality of the profession, and costs.

Need and access to care

- unmet need for eye care services exists in Ontario
- the requirement that optometrists refer patients requiring TPAs causes delays in treatment and duplication of services
- shortages of physicians (both family physicians and ophthalmologists) in Ontario cause long waiting times for treatment.

Quality of care

- optometrists are better equipped to provide primary eye care than family physicians and can therefore make more accurate diagnoses

Risk of harm

- the risk of harm is minimal given that optometrists are accountable to a self-regulating College
- optometrists are sufficiently trained and educated to use TPAs safely and effectively
- several other Canadian provinces and all U.S. states allow TPA use by optometrists
- the experience in these jurisdictions has been positive

Equality of health professions

- optometrists should be authorized to use TPAs to bring them in line with other professions
- the use of TPAs is the next logical step in the evolution of the profession of optometry

Costs

- referrals would be avoided and morbidity would decrease as delays in receiving appropriate treatment would be minimized. Hence, costs to the health care system would decrease.

Arguments presented by participants opposed to an expanded scope of practice for optometry

These centered on the issues of risk of harm, the adequacy of the education and training of optometrists, the potential for duplication of existing services, the lack of "need" for an expanded scope of practice and the potential for increased health care costs.

Risk of harm

- optometrists' education and clinical training is not sufficient in length and content to ensure the safe and effective use of TPAs

Potential duplication of services

- expanding the scope of practice of optometry would duplicate services provided by family physicians and ophthalmologists
- most referrals to ophthalmologists would continue because they involve secondary and tertiary care which is outside the scope of practice of optometry

Lack of need

- there is no public need for an expansion in the scope of practice of optometry
- there is no public demand for an expanded scope of practice for optometry
- the expansion in scope of practice is a matter of professional interest

Costs

- adding providers to the system will increase costs, especially for OHIP, laboratory services and the Ontario Drug Benefit Program

A summary of each of the participant's respective positions can be found in Appendix H.

4.4 Review of Other Jurisdictions

Based on HPRAC's review of other jurisdictions, it is noted that three[3] of ten Canadian provinces allow TPA use by optometrists. In each case, limits are imposed on the types of drugs to be prescribed by optometrists and on an optometrist's practice to ensure the public's safety.

The following is a brief outline of the situation for those provinces that allow TPA use by optometrists including: when the legislation was passed, which optometrists can use TPAs, the types of drugs optometrists are authorized to use, the restrictions on their practice and the requirements for registration.

[3] In 1999, the British Columbia Health Professions Council reviewed the scope of practice of optometry in order to recommend a legislative definition for the new *Health Professions Act*. The Council recommended a relatively narrow scope of practice for optometry that did not include the ability to diagnose or treat eye disease, or use TPAs.

Alberta

Legislation allowing TPA use by optometrists was passed in October 1996. The range of TPAs is restricted to topical therapeutic medications in the treatment of ocular anterior segment disorders[4]. The use of this restricted range of TPAs is limited to "designated registered optometrists" who are those optometrists registered with the College and meeting the College's requirements for certification to administer and prescribe topical therapeutic medications.

The *Optometry Profession General Regulation* sets out the requirements for registration as a "designated registered optometrist" in Alberta. The Alberta College of Optometrists requires optometrists to successfully complete a post-graduate course in therapeutic medications that is composed of 100 hours of instruction, of which at least 40 hours are in a clinical setting using therapeutic medications. Optometrists must also pass an examination administered by the College of Optometrists or the Canadian Examiners in Optometry.

Designated registered optometrists are authorized to use the following categories of topical therapeutic medications: mydriatics, cycloplegics, miotics, non-steroidal, anti-allergy medications, non-steroidal, anti-inflammatory medications, corticosteroids, anti-infective medications, steroidal, anti-infective medications and anti-glaucoma medications. However, the *Optometry Professions Standards of Practice Regulation*, states that a designated registered optometrist may administer and prescribe topical anti-glaucoma medications only in a consultative, co-management arrangement with an ophthalmologist who is licensed to practise in Canada.

New Brunswick

The legislation authorizing optometrists to use TPAs in New Brunswick came into effect in December 1997. Only "Certified Therapeutic Optometrists" can administer pharmaceutical agents in New Brunswick. Certified therapeutic optometrists are those who have been certified by the *Pharmaceutical Certification Board* (PCB) to administer pharmaceutical agents.

The PCB by-laws require that members be graduates from an approved Canadian school of optometry and have successfully completed a Board approved post-graduate course in therapeutic medications of not less than 100 hours duration. Members must also successfully pass an examination approved by the Board. In order to renew their certification, optometrists must provide written proof of successful completion of a minimum of ten hours of approved continuing education in the use of pharmaceutical agents, all of which have been completed within the three year term of the expiring certificate.

Certified Therapeutic Optometrists are authorized to use topical medications in the following categories: mydriatics/cycloplegics, miotics, non-steroidal anti-allergy medications, corticosteroids, anti-infective medications, steroid/anti-infective combination medications, anti-glaucoma medications. However, there are certain regulatory limitations on their practice as outlined in the PCB by-laws and the "Guidelines for Prescribing Medications". For example, anti-glaucoma medications are restricted to providing emergency treatment for angle closure glaucoma and any conditions that require laboratory testing to assist in the management of disease must be referred to a physician.

[4] Ocular anterior segment disorders include a variety of conditions that affect the anterior segment of the eye, including the conjunctiva, cornea and eyelid.

Saskatchewan

The legislation authorizing optometrists to use TPAs in Saskatchewan came into effect in January 1998. Only optometrists that hold a current "Therapeutic Pharmaceutical Agents Certificate" can use TPAs in Saskatchewan.

Certification involves successfully completing a course of at least 60 hours of academic instruction and 40 hours of clinical instruction, delivered by an approved school of optometry. In addition, members must possess a current certificate in cardiopulmonary resuscitation. TPA certification must be renewed every three years. Renewal requires that a member provide written evidence of having completed ten hours of continuing education, acceptable to the Board of Examiner, in the use of TPAs within the preceding three years.

Members holding a TPA certificate can only prescribe and use topical TPAs for the treatment of ocular diseases and abnormal conditions. The categories of drugs authorized are: anesthetics, cycloplegics, miotics and mydriatics. In addition, any member is allowed to topically apply the following dyes or agents: sodium fluorescein, rose bengal, methyl cellulose, hypertonic solutions, mild silver protein and solutions for the fitting and maintenance of contact lenses. However, there are regulatory limitations on their scope of practice. For example, they cannot treat glaucoma or posterior uveitis and members who use and prescribe topical corticosteroid agents for the treatment of anterior uveitis must arrange for the patient to be examined by an ophthalmologist if no improvement is noted.

United States

All 50 U.S. states allow some form of TPA use by optometrists. The extent of TPA use varies considerably by state, with approximately 50% allowing optometrists to use only topical forms of TPAs. Similar to Alberta, Saskatchewan and New Brunswick, many U.S. jurisdictions provide explicit limits on the types of drugs to be prescribed by optometrists and some jurisdictions impose reporting requirements on optometrists to ensure the public's safety. For example, in Pennsylvania, optometrists are required to consult with an ophthalmologist if patients treated with therapeutic pharmaceutical agents (TPAs) do not improve in 6 weeks. In New York optometrists are required to fill out an evaluation form each time they write a prescription; the State University of New York is undertaking an evaluation of the results.

Discussion

The request from the Ontario Association of Optometrists is much broader than what is permitted in any other Canadian jurisdiction. For example, with respect to glaucoma treatment, Saskatchewan does not allow optometrists to treat glaucoma, Alberta allows treatment by optometrists only in a co-management relationship with an ophthalmologist, and New Brunswick only allows treatment by optometrists in an emergency situation. No Canadian province allows optometrists to prescribe oral medications or to order laboratory tests, as requested by the Ontario Association of Optometrists.

None of the Canadian jurisdictions that authorize TPA use by optometrists has had any reported patient complaints or formal investigations concerning the expanded scope of practice of optometry. However, HPRAC recognizes that a lack of complaints or formal investigations may not necessarily be an indication of safe or effective prescribing. HPRAC is concerned that mishaps that may have occurred would have been treated by another health care professional and

not identified as being the result of inappropriate treatment or reported to the appropriate regulatory body.

TPA use by optometrists in Canada is a relatively recent experience and is restricted to three provinces that represent approximately 16 percent [5] of the Canadian population. As a result, there has not been sufficient opportunity for evaluations of the expanded scope of practice to be carried out and reported.

HPRAC notes that the regulation on prescribed diseases in Ontario allows optometrists to "diagnose and prevent diseases of the eye and vision system that can be determined by the findings from an oculo-visual assessment" [6]. This scope of practice is among the broadest of all provinces with respect to diagnosis.

Given the strong public interest principles underlying the regulatory system in Ontario and given the inherent risk of harm in prescribing drugs, HPRAC is of the opinion that there must be demonstrable public benefit in order to expand the scope of practice of a profession. The fact that optometrists in other jurisdictions are authorized to use TPAs is not in itself sufficient justification to expand the scope of practice in Ontario.

4.5 Consumer needs

Proponents of an expansion in the scope of practice of optometry argued that there is unmet need for eye care services in the province and that expanding the scope of practice of optometrists would help meet this unmet need. Furthermore, they claimed that the shortages of physicians and long waiting lists hamper the public's access to quality eye care services.

HPRAC set out to determine the public "need" for an expansion in scope of practice for optometry. Despite a specific request from HPRAC, most participants provided their opinion on "need" without providing substantiating evidence to support their claims. The OAO and the College of Optometrists provided information from a College-commissioned survey of optometrists. HPRAC carefully reviewed this survey, considered the results of the 1996 Ontario Health Survey/National Population Health Survey and commissioned Environics Research Group to collect information from the general public concerning access to and quality of eye care services in Ontario. HPRAC also reviewed several reports dealing with physician human resources issues and contacted District Health Councils (DHCs) across the province to determine if they had information on unmet eye care service needs in their jurisdictions.

The College of Optometrists' Survey of Optometrists

The College of Optometrists of Ontario commissioned a survey of optometrists to determine the need for an expansion in the scope of practice of optometry to include the use of TPAs (see Appendix I).

Between September 1997 and January 1998, 147 randomly selected Ontario Optometrists collected information on all patients seen during a two-week period. The information included: the date seen, the patient's profile, the history of administration of over-the-counter (OTC) or

[5] Adapted from: http://www.statcan.ca, http://www.statcan.ca/english/Pgdb/People/Population/demo02.htm, April 11, 2000.
[6] Ontario Regulation 152/97 made under the *Optometry Act, 1991*

prescription medication, the diagnosis arrived at, all medications and procedures required to optimally treat the patient, and whether a referral to another health care professional was warranted. The data collected were then used to project annual estimates of utilization and conditions for all of Ontario.

Number of visits

The survey indicated that 28,322 patients were seen by the optometrists surveyed during the two-week period. Projecting this number to a full working year and all optometrists produced an estimated annual 3.28 million patient visits. However, the validity of the projections depends on the representativeness of the surveyed optometrists and the survey periods. The authors do not report on the resulting representativeness of their sample, nor do they report confidence intervals for the estimate. Moreover, the estimated number of patient visits is 33% higher than the OAO's own data on the number of patients seen [7], and 20% higher than the number of patient visits paid by OHIP in 1997/98 [8]. It is also worth noting that the MOHLTC implemented a change to the Schedule of Benefits as of April 1998. Vision exams are now paid for every two years (not every year) for adults between the ages of 19 and 65. It is expected that the number of patients visiting optometrists will decline as a result of this change. In light of these observations, HPRAC is concerned that the number of patient visits may be substantially overestimated by this survey.

Conditions seen

Data from the survey indicate that 14.6 % of all patients seen (or an estimated 480,500 per year) were diagnosed with an anterior segment disease [9]. The breakdown of the anterior segment diseases for these patients was: 51% corneal disorders, 21% conjunctivitis, 18% glaucoma and 10% "other" diseases (such as lid disease, foreign body, blocked duct and iritis).

Need for TPAs

An estimated 11.9% of all patients required treatment with non-prescription or prescription medications. Non prescription medications were required in 6.8% of patients and 5.1% (or an estimated 19,880) required some form of prescription medication. In the case of those requiring prescription medication, 2% required anti-infective medications; 1.3% required anti-glaucoma medications; 1% required anti-inflammatory medications and 0.8% required prescription anti-allergy medications.

Referrals

2.4% of all patients were referred to another practitioner for treatment of their anterior segment disease. The majority, 73% of referrals, were to ophthalmologists and 23% were to general practitioners (GPs) [10]. This means that of all optometry patients in Ontario, 1.75% (2.4 x 0.73) are referred to ophthalmologists, and 0.55% (2.4 x 0.23) are referred to general practitioners.

The largest group of referrals, 35% of the total, was referred for glaucoma, with 15% being for conjunctivitis and 11% for corneal disorders. The distribution of referrals by physician-type

[7] Ontario Association of Optometrists' submission #1 dated January 1998, p. 3
[8] Ministry of Health, Ontario Licensed Physician/Practitioner Activity Report, 1997/98
[9] Anterior segment diseases are a variety of conditions that affect the anterior segment of the eye. These include: conjunctivitis or pink eye, keratitis (injury, trauma or inflammation of the cornea) and blepharitis (inflammation, swelling or scaling of the eyelid).
[10] Note the survey does not account for the remaining 4% of referrals.

differed across diagnoses. For example, almost all glaucoma conditions were referred to ophthalmologists while about half of the lid diseases were referred to GPs.

Waiting time for appointments with referred physicians differed by specialty and condition. For all conditions, patients waited an average of 34 days to see a medical practitioner – 42 days for ophthalmologists and 7 days for general practitioners. Glaucoma patients waited an average of 49 days for an appointment with an ophthalmologist and 34 days for a GP appointment; while patients with conjunctivitis waited an average of 21 days to see an ophthalmologist and 5 days to see a GP.

The travel time of patients was also measured. Patients traveled an average of 25 km to see an ophthalmologist and 8 km to see a general practitioner.

Commentary

It is important to note that the proposed expansion in the scope of practice of optometry is concerned with an expansion of the primary care responsibilities of the optometrist. Therefore, HPRAC does not see this expansion of scope affecting the delivery of secondary or tertiary eye care.

Moreover, in so far as the accessibility of ophthalmologists is less than that for general practitioners, as indicated by distance to travel and waiting time for referrals, it is expected that optometrists would, under normal circumstances, only refer to ophthalmologists for conditions requiring secondary/tertiary level care. (HPRAC notes that this view was also held by some of the participants in this review process.) Therefore, the potential level of activity that an expansion in scope of practice of optometry might affect is likely limited to referrals to general practitioners. Less than one percent (0.55%) of all optometry patients are referred to general practitioners.

The College estimated from their survey that the proposed expansion in scope of practice would result in 75,000 referrals (to both GPs and ophthalmologists) being avoided annually, and that the average wait time on these referrals is 34 days. Taking only the GP referrals, this number becomes 18,040 (0.55% of the 3.28 million patient visits). Since as indicated above, the total number of patient visits may be 20% to 33% overestimated, the avoided referrals may therefore be between 13,564 and 15,033 (eg. 18,040 / 1.33). Noting further the effect of the change to the Schedule of Benefits, the actual number of referrals potentially avoided would be less than 15,000. These referrals would be to GPs for which the average wait time is seven days and the average distance traveled is eight kilometers. Thus, HPRAC is of the view that the need for expanding the scope of practice of optometry to include the use of TPAs is much less than suggested by the proponents.

Ontario Health Survey and Environics "Focus Ontario" Survey

The 1996 Ontario Health Survey/National Population Health Survey (OHS/NPHS) found that with respect to utilization, about 40% of those individuals surveyed had seen an eye specialist (optometrist/ophthalmologist) within the last year. They also found that 63% (of the 40%) did not have problems obtaining an eye examination, 0.6% reported having a problem and 35.3% did not respond to the question. HPRAC acknowledges that this information is of limited use due to the fact that the questions asked of participants did not distinguish between optometrists and

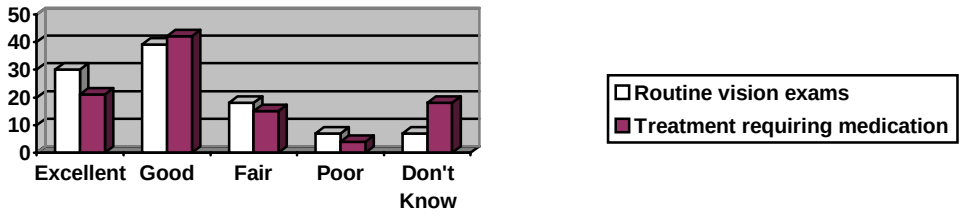
ophthalmologists. More importantly, it did not distinguish between routine vision correction and treatment of eye conditions requiring medication.

Given that the OHS/NPHS data were not specific enough, HPRAC attempted to determine the level of "need" for an expansion in the scope of practice of optometry by gauging the public's level of satisfaction with the current system of eye care service delivery in Ontario. In December 1999, HPRAC commissioned several questions on the "Focus Ontario" omnibus survey conducted monthly by Environics Research Group. The questions revolved around the public's level of satisfaction with the quality and accessibility of eye care services in Ontario, both for routine vision exams/vision correction and for the diagnosis and treatment of eye conditions requiring medication. A total of 1,018 Ontario adults were interviewed by telephone between December 15th – 21st, 1999. The results of the survey indicate that the public is generally quite satisfied with the quality and accessibility of eye care services in Ontario.

In fact, 63% of respondents rated access to eye care services for diagnosis and treatment of conditions requiring medication as "excellent" or "good", 15% rated it as "fair", while only 4% rated it as "poor".

Please see Figure 1 below for an overall picture of the results of the Environics Survey with respect to access.

Figure 1 - Environics - Focus Ontario Survey
Results regarding access to eye care services in Ontario



For those individuals that rated access to eye care for conditions requiring medication as only "fair" or "poor" (19% of the total 1,018 surveyed), an additional question "why did you say that access to eye care for conditions requiring medication was fair or poor?" was asked. Many reasons were given, for example the length of waiting lists for family physicians/optometrists was mentioned in 26% of responses, the lack of coverage by OHIP/other plans was mentioned in 14% of responses and the cost of medication was mentioned in 13% of responses. The lack of access to specialists was mentioned in 11% of responses and difficulty being referred to specialists was mentioned in only 6% of responses. It is worth noting that "difficulty being referred" was one of the least common reasons provided for fair/poor access.

The Environics Research Group also provided a regional breakdown of the survey results. (Figures 2-6) Despite the assertions from the Ontario Association of Optometrists that northern and rural Ontarians were poorly served with respect to eye care services, the Environics survey results do not show a proportionately higher rating of "poor" by northern residents. The proportion of northern residents that rated access to services for treatment requiring medications as "poor" was comparable to that for residents in Hamilton, Toronto and the Greater Toronto Area (GTA) (see Figure 5). In fact, the survey indicates that a large number of Ontarians in all regions of the province are satisfied with the quality of, and access to, eye care services. For the complete results of the Environics survey as well as the list of questions, please see Appendix J.

Figure 2 - Percentage of Respondents that rated access to eye care services as "Excellent"

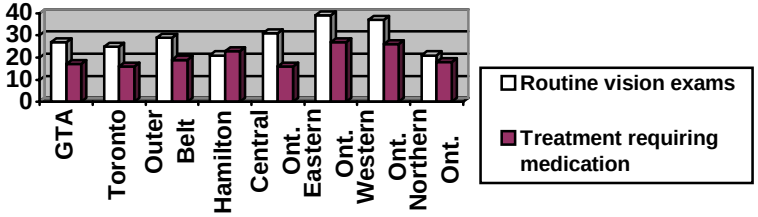


Figure 3 - Percentage of Respondents that rated access to eye care services as "Good"

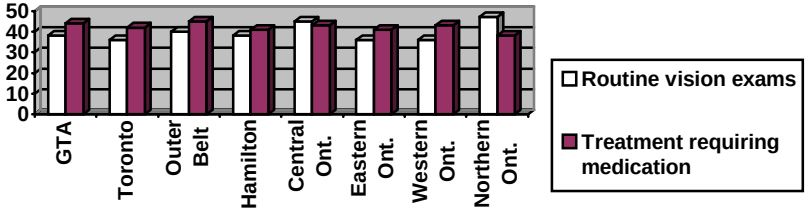


Figure 4 - Percentage of Respondents that rated access to eye care services as "Fair"

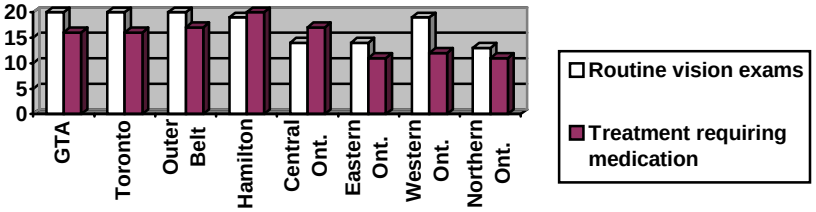


Figure 5 - Percentage of Respondents that rated access to eye care services as "Poor"

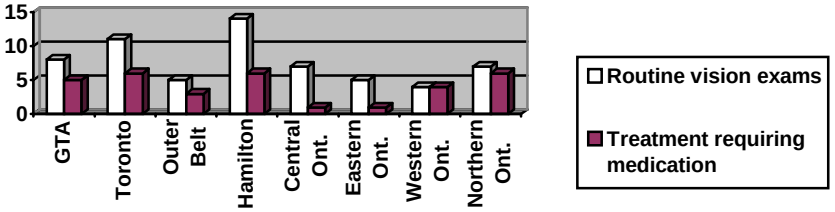
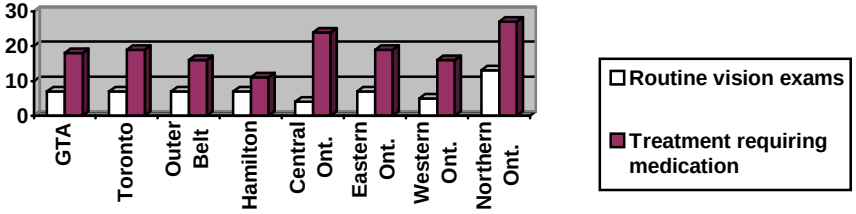


Figure 6 - Percentage of Respondents that replied "Don't Know/Not Available"



Physician Human Resources

An argument in favor of the expansion in scope of practice of optometry is that there are physician shortages and mal-distribution problems (both for ophthalmologists and family physicians) in the province. Greater utilization of optometrists would reduce demand for physician services to some extent.

HPRAC understands that determining appropriate physician human resources is a complex issue with a long history in Ontario. There have been numerous reports over several decades that have attempted to find solutions to the issue of appropriate health human resource supply, mix and distribution. Two reports addressing this issue have been published during the period of HPRAC's review:

- The ICES report "*Supply of Physicians' Services in Ontario*" by Dr. Ben Chan. Dr. Chan found that the supply of active physicians in Ontario increased steadily from 1991/92 to 1997/98 commensurate with the population growth. However, wide regional variations in physician supply were noted. The districts with the least GP/FP supply per 10,000 population were Essex, Kent and Lambton, Niagara Region, and Waterloo Region-Wellington-Dufferin. This report lends support to the contention that the distribution of physicians around the province is problematic. With respect to ophthalmology, Dr. Chan found that there had been a 2% increase in the number of ophthalmology specialists in Ontario from 1991/92 to 1997/98.

- In December 1999, Dr. Robert McKendry, a government-appointed Fact Finder released the report "Physicians in Ontario Too Many? Too Few? For 2000 and Beyond". Dr. McKendry determined that there are problems with the supply, mix and distribution of physicians in Ontario. He concluded that the current supply of physician services is not sufficient to fully meet the needs of Ontarians. Given the aging of the current physician workforce, the decrease in the number of new graduates and the continued out-migration of Ontario physicians, Dr. McKendry predicted that the current relative undersupply will become more severe in the future. In addition, he projected that Ontario is likely to experience significant shortages in several surgical subspecialties, including ophthalmology. Dr. McKendry also found that Ontario is currently facing a significant shortage in family medicine. One of the solutions he proposes is making more effective use of technology and other health care professionals to help ease the physician human resource problems. However, for the most part, he focuses on nurse practitioners and their role in helping ease the physician resource difficulties Ontario is currently experiencing. (McKendry, p. 73)

The findings of the McKendry Report seem to lend support to the argument in favor of an expansion in the scope of practice of optometry. However, as noted above, less than one percent of all optometrists' patients are referred to family physicians for TPAs. Thus, expanding the scope of practice for optometrists to prescribe TPAs would not likely affect the demand for family physicians' services. Furthermore, with respect to the anticipated shortages of ophthalmologists and the waiting times for treatment, HPRAC maintains that authorizing TPAs to optometry, a primary eye care profession, will not necessarily improve the situation with respect to the demand for ophthalmology.

District Health Councils (DHCs)

Thirteen out of sixteen DHCs responded to HPRAC's letter regarding the availability of eye care services in Ontario. Ten indicated that they were not aware of any concerns with respect to eye care services in their district. Three DHCs mentioned that they were aware of some concerns about waiting times for cataract surgery. However, giving optometrists the authority to use TPAs would not impact upon these concerns, given that these services would still not be within the scope of practice of optometry.

Primary Eye Care Review

HPRAC discussed the Ministry's 1996 Primary Eye Care Review with the former Project Coordinator of the review to determine if there was any information available relevant to the review of optometry's use of TPAs. The information HPRAC received indicates that the Primary Eye Care Review did not consider specific scope of practice issues of eye care providers. Therefore, HPRAC has determined that there is no relevant information to be drawn from that project.

Conclusion

Based on the information collected and received from several different sources, HPRAC is of the view that there is little evidence of a significant need for, or potential public benefit from, an expansion in the scope of practice of optometry to include the use of TPAs in Ontario.

4.6 Potential Impact on cost

An important consideration in a change in the scope of practice of any profession is the potential cost implications of that change to the health care system and to patients. A review of the literature failed to uncover any relevant research that would assist HPRAC in its determination of the costs associated with expanding the scope of practice of optometry. However, HPRAC identifies the following issues that could have significant cost implications on the health care system.

Reduced referrals

The College of Optometrists estimated a $4.5 million annual saving to OHIP based on an estimated reduction in referrals of 75,000 per year. However, the survey did not indicate the basis for this cost figure. Currently, family physicians are paid $16.25 for a minor assessment, ophthalmologists are paid $38.80 for a consultation and optometrists $39.15 for an oculo-visual assessment (OHIP Schedule of Benefits). With the assumption that optometrists' fees remain the same, applying OHIP fees to these data indicates that, based on the College's own estimates of avoided referrals, the saving to OHIP would be more likely $2.5 million [11].

[11] According to the College's survey, a total of 78,720 referrals are made annually by optometrists (2.4% of 3.28 million patients). Of these, 73% are to ophthalmologists and 23% are to GPs.

Furthermore, assuming that most of the referrals to ophthalmologists are an appropriate use of secondary/tertiary care, then the referrals to be avoided by expanding the scope of practice of optometry are those to family physicians, which occur in 0.55% of optometry patients. As a result, the cost savings from "referral avoidance" would be substantially more modest : less than $300,000 (3.28 million x 0.0055 x $16.25).

Frequency of TPA Use and Laboratory Tests

The OAO argued that the prevalence of eye disease is independent of who provides the treatment and that therefore there should be no cost increase. However, current restrictions on which providers are authorized to prescribe TPAs and order laboratory tests limits the potential number of optometry patients receiving these services to those referred to family physicians or ophthalmologists. Expanding the scope of practice of optometry would increase the number of potential patients receiving these services. Currently only 2.4% of optometrists' patients are being referred to family physicians or ophthalmologists for additional diagnostic assessment and/or therapeutic treatment. However, optometrists claim that 5.1% of their patients require TPAs for optimal treatment. Therefore, expanding the scope of practice of optometry may mean that the number of optometrists' patients receiving drugs or undergoing laboratory tests could more than double. Clearly, this would increase costs to the system.

Unmet need

The OAO argued that there was unmet need for eye care services in Ontario that would be met with an expansion in the scope of practice to include the use of TPAs. HPRAC was unable to find evidence of substantial unmet need. However, if needs are currently going unmet – that is, services are not currently being provided – then meeting these needs would likely imply an increase in utilization and costs.

Costs to the Profession

The College of Optometrists estimates that the cost to the profession would be more than $25 million. This includes the direct cost of education and certification of members, estimated at $3,500 per member and the indirect costs for travel, time away from work, etc., which is estimated at $20,000 each. It is not clear how this would be funded within the profession. HPRAC acknowledges that this cost would represent a significant commitment on the part of optometrists given that the expansion in scope of practice is likely to benefit at most about 5 % of their patients (the proportion that optometrists' claimed required TPAs for optimal treatment).

Based on the information collected in the jurisdictional review conducted by HPRAC, it can be assumed that not all optometrists would seek the additional educational requirements necessary to use TPAs. For example, three years after the passage of legislation in New Brunswick, 89% of optometrists are certified to use TPAs; four years after the passage of legislation in Alberta, 88% of optometrists are certified to use TPAs and two years after the passage of legislation in Saskatchewan, 89% of optometrists are certified to use TPAs. Therefore, the potential benefit to the public could be less than originally predicted by the proponents.

Conclusion

The impact of a change in scope of practice on the cost of delivering eye care services involves a number of factors including the propensity to intervene, prescribe medication and/or order

laboratory tests, among optometrists, general practitioners and ophthalmologists. Only some of these factors were considered by the OAO in their submission. Moreover, HPRAC is not convinced that those factors that were considered by the OAO would necessarily lead to the conclusion that expanding the scope of practice of optometry would decrease costs.

On the contrary, there may be significant increased costs involved in expanding the scope of practice of optometry to include the use of TPAs and ordering laboratory tests. Although there is insufficient evidence to determine the extent of these increased costs, HPRAC is compelled to raise this issue for further review. A detailed cost-benefit analysis should be undertaken to determine the true cost implications before an expanded scope of practice is contemplated for optometry.

4.7 Public interest

Given the lack of evidence of need and concern over potentially higher costs, HPRAC has not pursued a rigorous examination of the public interest issues related to an expansion in the scope of practice of optometry to include TPAs. However, outlined below are HPRAC's initial observations about protection from harm, quality of care and accessibility.

Protection from harm

HPRAC acknowledges that the educational facility that trains Ontario optometrists is accredited by the Council on Optometric Education and its curriculum meets internationally accepted standards. HPRAC also recognizes that the school prepares optometrists to practice in many North American jurisdictions, including those that authorize optometrists to use TPAs. It is also noted that there were concerns expressed by six of the 18 stakeholders regarding the adequacy of the education and training of optometrists, particularly in relation to their clinical experience in the use of TPAs.

However, given the conclusion regarding the lack of need for an expansion in the scope of practice of optometry, HPRAC did not undertake a detailed examination of the adequacy of the curriculum and other aspects of optometrists' education with respect to the use of TPAs. As a result, HPRAC is unable to conclude whether or not there is cause to be concerned about the risk of harm to the public from expanding the scope of practice of optometry.

To determine the nature and extent of potential risk of harm, an in-depth consideration of the length and content of the didactic and clinical preparation of optometrists in relation to the proposed TPAs should be undertaken. Furthermore, in consideration of the lack of history of TPA evaluations and the fact that complaints processes in other jurisdictions cannot necessarily be relied upon on as an indication of safety, it would appear evident that there is a need for a more rigorous evaluation of the impact of TPA use by optometrists on the quality, access and cost of eye care services.

Quality Care

The College of Optometrists of Ontario articulated its position with respect to the entry to practice and continuing education requirements as well as the quality assurance mechanisms that it would put into place to ensure that the public receives the best care possible from its members.

The OAO claimed that, given optometrists' education and training and their knowledge and use of appropriate equipment, the care provided by optometrists would be of an equal quality to that provided by any other regulated health professional with a similar scope of practice. Moreover, they argued that optometrists are better equipped to provide primary eye care than many family physicians are. However, other stakeholders felt that optometrists lacked the clinical experience obtained through a medical education and therefore, the care they provide would be of a lesser quality than that provided by family physicians and/or ophthalmologists.

HPRAC is of the view that there is insufficient evidence before it to determine whether or not the care provided by optometrists would be of equal quality to that provided by family physicians and/or ophthalmologists in relation to the limited TPA use requested.

Accessibility

The Ontario Association of Optometrists claimed that the lack of access to eye care services as evidenced by the length of waiting times and the shortages of family physicians and specialists is a compelling reason to expand the scope of practice of optometry to include the use of TPAs. The College of Optometrists of Ontario claimed that access to care would increase, wait times would decrease and duplication of services would be eliminated if optometrists were authorized to use TPAs.

Given the number of optometrists in Ontario, as well as their distribution across the province, HPRAC acknowledges that there could be some improvement in access to some primary eye care services if optometrists could use TPAs. However, based on HPRAC's analysis, there is no clear evidence of significant need for increased accessibility. Furthermore, there is the potential for increased costs to the health care system.

5. RECOMMENDATION

HPRAC does not recommend that the scope of practice of optometry be expanded to include the use of therapeutic pharmaceutical agents (TPAs).

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McKendry, Robert Physicians for Ontario Too Many? Too Few? For 2000 and Beyond Report of the Fact Finder on Physician Resources in Ontario, Toronto:

Recommendations of the Health Professions Legislative Review. *Striking a New Balance: a Blueprint for the Regulation of Ontario's Health Professions*. Ministry of Health. January 1989.

APPENDICES

Appendix A: Minister's July 1998 Referral Letter

Appendix B: Minister's March 1994 Referral letter

Appendix C: Correspondence to Provincial Ministries of Health

Appendix D: Correspondence to District Health Councils (DHCs)

Appendix E: Invitation letter to HPRAC's mailing list

Appendix F: Letter Requesting A Second Round of Submissions

Appendix G: List of participants

Appendix H: Summary of Participants' submissions

Appendix I: College of Optometrists' survey

Appendix J: Environics Survey Results