College of Opticians of Ontario

BRIEFING NOTE

TO: Council

FROM: Registration Committee

DATE: May 28, 2018

SUBJECT: NAIT Refracting Course

Purpose:

Council is asked to consider the Registration Committee's recommendation that the NAIT refracting course, as presented, meets the current refracting competencies.

Background:

On April 25, 2018, the College received a request from the National Association of Canadidan Optician Regulators (NACOR) to either accept or reject its decision to accredit the Northern Alberta Institute of Technology (NAIT) refracting course. At its meeting on May 2, 2018, the Registration Committee reviewed NACOR's decision to accredit the NAIT refracting course.

NACOR Accreditation Process

The goal of NACOR's accreditation process is to assist regulatory agencies in the evaluation and recognition of optician programs and assessment processes in Canada in order to register well-trained, competent applicants who provide services to the public. NACOR, in consultation with the members of the Canadian Association of Optician Educators (CAOE), and with accreditation experts brought in by both groups, has developed an accreditation process for opticianry programs, as follows:

- Both NACOR and the CAOE appoint members to the National Board of Opticianry Accreditation (NBOA).
- When an accreditation application is received, the NBOA appoints a three-person NACOR Survey Team.
- The NACOR Survey Team reviews all of the self-study documents provided by each program, and attends a site visit at the institution.
- At the conclusion of the NACOR Survey Team's site visit, a report is prepared and

presented to the educational program for their review and comment.

- A final report is then sent to the NBOA, which makes the final decision on a program's accreditation. The NBOA then reports its decision to NACOR.

- When NACOR makes an accreditation decision, each provincial regulatory board must review the decision and make a formal resolution to accept or not accept the accreditation decision.

Refracting in Ontario

Currently, only registered opticians with a refracting designation are entitled to perform refraction in Ontario. In response to a letter from the Minister of Health and Long-Term Care dated July 16, 2009, the College has neither accepted nor approved applications for refracting designation since July 16, 2009.

Several provinces, including British Columbia and Alberta, currently have refraction as part of their scope of practice. In order to maintain a unified set of competencies, NACOR introduced the refraction competencies to the *National Competencies for Canadian Opticians* in 2013. The current *National Competencies for Canadian Opticians* therefore outlines competencies related to eyeglasses, contact lenses and refracting.

At its meeting on June 3, 2013, Council approved the current *National Competencies for Canadian Opticians*.

National Strategy

At a national level, the regulators, educators and associations, under the banner of the Opticians Council of Canada (OCC) all agreed that it was strategically important to their individual mandates to keep the profession relevant. For the schools and associations, the viability of the profession would ensure enrollment and membership. For the regulators, the concern is always ensuring the public has adequate access to well trained and regulated health care professionals.

It was decided that one such way to keep the profession relevant was to ensure that opticians expand their knowledge base in the area of eye health diagnostic skills, refraction being one of the foremost skills. With an increasing number of opticians working in a collaborative practice setting, this expanded skill set would be invaluable. The strategy includes that all future graduates of accredited opticianry programs are trained in entry to practice refraction skills.

In May, 2017, a group of subject matter experts and educators from across Canada met to refine the refracting competencies for opticians to develop a detailed list of refracting skills that an educational program would be required to teach in order to meet accreditation

requirements for the next round of accreditation in 2021.

Please see the attached document titled 'Session Summary Document from May 2017 Refracting Competencies Meeting' for a summary of the development of the list of refracting competencies and skills at the May 2017 refracting competencies meeting.

At the conclusion of the May 2017 refracting competencies meeting, a detailed list of competencies and skills was finalized to provide to educational programs. Please see the attached document titled 'Agreed Upon Refracting Competencies and Skills from May 2017 Refracting Competencies Meeting' to review the list of refracting competencies and skills. At a November, 2017 board of directors meeting, NACOR accepted the detailed list of competencies and skills.

In February 2018, NACOR received a request from NAIT to review their refracting course to determine whether or not the course sufficiently taught all of the agreed upon refracting competencies. The course submitted is a stand-alone refracting course and consists of a 15-week theory portion and a 6-month clinical portion. The course is a bridging program for licensed contact lens fitters to upgrade their skills to include refracting.

On February 21, 2018, a NACOR Survey Team met at NAIT to review the NAIT refracting course. The team consisted of two subject matter experts, Jim Thompson and Rick Miller, and a member of the NACOR Accreditation Survey Team, Lisa Bannerman. A detailed review of both the theory and clinical component of the NAIT refracting course was performed. It was unanimously agreed by the NACOR Survey Team that the course taught all of the agreed upon refracting competencies and skills.

For Consideration:

NACOR is recommending that the NAIT refracting course be accepted by the provincial regulatory boards. Graduates of the course would be eligible to sit the National Refracting Examination upon its development. Please see the attached document titled 'Letter to Registrars re. NAIT Refracting Course' for details regarding NACOR's recommendation.

At its meeting on May 2, 2018, the Registration Committee reviewed NACOR's decision to accredit the NAIT refracting course and agreed that the course, as presented, meets the current refracting competencies. The Committee acknowledged that completing the NAIT refracting course would not entitle an optician to refract in Ontario.

Recommendation:

The Registration Committee recommends that Council agree the NAIT refracting course, as presented, meets the current refracting competencies. The Registration Committee

recommends that Council acknowledge that completing the NAIT refracting course would not entitle an optician to refract in Ontario.

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Recap on 9 May 2017 Refraction Requirements Session

10 May 2017

Location: Sheraton Hotel, Montreal, QC

Participants:

- Chris Lee – BC refracting expert (SME)
- Jeannie Barr – Program head, NAIT (educator)
- Maureen Hussey – AB regulator
- Rick Miller – AB refracting expert (SME)
- Jim Thompson – AB refracting expert (SME)
- Fazal Khan – ON regulator
- Lorne Kashin – ON refracting expert (SME)
- Linda Wren – Program head, Seneca College (educator)
- Tim Schmidt – Program head, Georgian College (educator)
- Justin Lewis – NB refracting expert (SME)
- Erik Hahn – NS refracting expert (SME)
- Korosh Nikeghbal – ON refracting expert (SME)
- Darquise Tardiff – Instructor, Cegep Garneau (educator)
- Cynthia Fortier – Program head, Cegep Garneau (educator)
- Angela Oulton – Instructor, Oulton College (educator)
- Robert Grimard – Chair, Opticians Council of Canada
- Jodi Dodds – NACOR

Facilitated by John Wickett (Wickett Measurement Systems)

Session

The purpose and structure of the meeting were explained, with the following purpose being agreed to: **Agree on minimum requirements to sufficiently train students to safely and effectively perform manual refraction.**

In terms of how the requirements would be structured, the following was agreed to after discussion and modification by the group:

- Theory (rated in terms of the number of classroom hours required at the competency statement level, excluding observation or practice time).
- Observation (rated in terms of the number of times the student should observe an expert performing the skill with an actual patient; could be in an actual clinical setting or through video; does not include the instructor demonstrating the skill in class unless done with an actual patient).

- Simulation (rated in terms of the number of times a student would need to practise the skill with a classmate, family member, or other comparable simulated activity). Students may replace any of their simulations with real-life demonstrations (but not the other way around), as long as there is no risk to the safety of the patient.
- Real life (rated in terms of the number of times a student would need to perform the skill on an actual patient). (Note: Early in the process the group clearly indicated when a real-life demonstration was optional, not appropriate or required, but later it was not always clearly stated and sometimes an "X" was used to indicate when real-life demonstration was optional. This irregularity was cleaned up after the session, as shown in the requirements grid. It would be advisable to review all skills to ensure that the "optional" designation and the "X" is appropriate throughout.)

An observation of multiple skills at the same time counts as an observation of each of those skills; i.e., there is no requirement for each observation to be independent of every other observation.

The following are some of the important outcomes of the discussions:

- The requirements are a minimum, and programs could go beyond them as they see fit.
- The requirements are meant to denote the added time and practice required over and above what is already included to cover EG and CL.
- Any given student may need to practise a skill more times than the minimum to attain sufficient proficiency.
- The assessment of student skill and proficiency is up to educators, as has always been the case, and it is the educators who determine which students progress and which do not.
- The order in which the competencies are taught, and how they integrate into existing teaching, is up to the educators.
- Skills noted as "optional" in the skills list are to be included as part of education, but are not necessarily going to be included for the purposes of future regulation. They are optional in the sense that opticians may or may not use that skill or technique in practice (because suitable alternatives exist), but it is expected that students would be trained on the skill or technique regardless to fully educate them.

The following changes to the content of the draft skills document were made:

- Removed from 11.1.3 (Optional) Assess the accommodative function using the crossed cylinder test
- Added to 11.2.6 Perform Jackson-Cross cylinder test
- Added 11.3.5 Understand the elements of a plan of care stemming from refraction

Some concern was voiced around the layout and categorization of the document, but it was decided to hold that for future review. Further, Wickett adjusted some of the categorization, resulting in the labels at the competency level not lining up perfectly with those in the *National Competencies*. The performance indicators in the new refraction skills list also do not align, and it is suggested that the refraction competencies as a set be revisited when next the *National Competencies* are reviewed.

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Questions were also raised as to how this work would translate into regulation at the provincial level, and that discussion was put aside for the future.

Summary

The table below shows the aggregated values across all skills.

	Theory	Observation	Simulation	Real life
11.1 Demonstrate an understanding of binocular function and ocular motility.	9 hours	46 skill observations	55 skill demonstrations	0 mandatory real-life demonstrations
11.2 Demonstrate an ability to use subjective and objective techniques to identify and quantify ametropia.	27 hours	74 skill observations	280 skill demonstrations	215 mandatory real-life demonstrations
11.3 Recognize significant signs and symptoms in relation to the patient's/client's eye and general health found incidental to the refraction.	15 hours	1 skill observation	10 skill demonstrations	0 mandatory real-life demonstrations
TOTALS	51	121	345	215

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The post-session survey results and comments are provided below.

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	I had enough training to participate in the setting of the refraction requirements.			3	5	5
2.	I understand the training needs of opticianry students.				5	8
3.	The group had sufficient time to discuss and agree on requirements.			4	5	4
4.	The group discussions were useful.				7	6
5.	I am confident in my input regarding refraction requirements.				8	5
6.	I am confident in the final set of requirements established by the group.			1	7	5

	Acquisition Mode				
	Theory	Observation	Simulation	Real life	Notes
11.1 Demonstrate an understanding of binocular function and ocular motility.					
11.1.1 Perform muscle balance testing	3				
Test versions by assessing the nine (9) positions of gaze to detect weakness of extraocular muscles		5	5	optional	At least some variations across the 9 positions
Use the Hirshberg corneal reflex test to assess for eye alignment deviations		5	5	optional	
(Optional) Use the Krimsky corneal reflex test to measure for eye alignment deviations		X	X	X	
Assess for a heterotropia (tropia) using the unilateral cover test		5	5	optional	
Use the alternating cover test to assess for a heterophoria (phoria)		5	5	optional	
(Optional) Measure a tropia or phoria using the alternating cover test with prisms.		X	X	X	
(Optional) Use the Worth Four-Dot test to assess suppression of either eye		X	X	X	
11.1.2 Perform testing for lateral and vertical phorias	1				
(Optional) Set up Risley prisms		5	5	optional	
(Optional) Perform testing for lateral and vertical phorias using the alignment method with Risley prisms		5	5	optional	
11.1.3 Perform vergence testing	1				
(Optional) Set up Risley prisms for vergence testing		5	5	optional	
(Optional) Perform lateral vergence testing		5	5	optional	

	Acquisition Mode				
	Theory	**Observation**	**Simulation**	**Real life**	**Notes**
11.1.4 Pupils, colour vision and stereoacuity testing	3				
Conduct pupillary assessment for direct and consensual responses		5	5	optional	
(Optional) Conduct colour vision testing using pseudoisochromatic plates		X	5	optional	
(Optional) Conduct a test for gross stereopsis using the Fly test		X	X	X	
11.1.5 Perform confrontation field testing	1	1	5	optional	

	Acquisition Mode				
	Theory	Observation	Simulation	Real life	Notes
11.2 Demonstrate an ability to use subjective and objective techniques to identify and quantify ametropia.					
11.2.1 Compile patient history (including charting)	5	5	10	optional	
11.2.2 Perform visual acuity testing	2				
Conduct visual acuity testing for distance, near, with and without correction		5	5	optional	
Conduct pinhole acuity testing at distance without or with correction		5	5	optional	
11.2.3 Use the retinoscope and autorefractor	10				
Demonstrate the use of a schematic eye and determine your working distance		1	20	X	
Use streak retinoscopy with the schematic eye to determine neutrality, refine neutrality then neutralize and find sphere power		1	20	X	
Use streak retinoscopy with the schematic eye to develop spherical estimation techniques for hyperopia and myopia		1	10	20	
Use the retinoscope with the schematic eye to perform minus or plus cylinder retinoscopy for simple hyperopic astigmatism, compound hyperopic astigmatism, simple myopic astigmatism, compound myopic astigmatism, and mixed astigmatism		1	10	20	

	Acquisition Mode				
	Theory	Observation	Simulation	Real life	Notes
Use the retinoscope in conjunction with a phoropter or trial lens set to perform minus or plus cylinder retinoscopy for patients with simple hyperopic astigmatism, compound hyperopic astigmatism, simple myopic astigmatism, compound myopic astigmatism, and mixed astigmatism		1	10	20	
Use an autorefractor to perform objective refraction for patients with spherical or astigmatic refractive errors		1	X	X	
11.2.4 Use the projector (or other distance vision test), trial frame, and trial lens set	2				
View distance charts and describe the function of each		X	X	X	
View and describe the parts of a trial frame		X	X	X	
Identify each group of trial lenses, including accessory lenses, and describe their uses		X	X	X	
Place lenses in a trial frame		1	5	X	
11.2.5 Use the phoropter (refractor)	2				
Identify and demonstrate the uses of the parts and controls of a phoropter, including accessory lenses		X	X	X	
Adjust a phoropter and provide reasons why it might be used		1	5	5	
Perform objective assessments of refractive error using a retinoscope and the phoropter		1	10	20	

	Acquisition Mode				
	Theory	Observation	Simulation	Real life	Notes
11.2.6 Perform subjective refraction (refinement)	3				
Perform fogging monocularly to determine most plus/least minus		5	20	10	
Perform the bichrome (red-green) test monocularly		5	20	10	
Perform Jackson-Cross cylinder test		5	20	10	
Perform astigmatic chart testing monocularly		5	20	10	
Perform bracketing as a test for axis monocularly		5	20	10	
Perform binocular balance testing using prism dissociation		5	20	10	
Perform the bichrome test as a binocular balance test with prism dissociation for patients with unequal visual acuity between the two eyes		5	20	10	
11.2.7 Assess accommodation and presbyopia	3				
Measure the amplitude of accommodation using the Donders/push-up/proximity method and the minus lens to blur method		5	10	20	
Determine the range of accommodation for five (5) patients from 40 to 65 years of age with a minimum of 2 myopes and 2 hyperopes		5	10	20	
Determine the reading addition power at the distance(s) required by the patient for near activities for five (5) patients requiring a reading addition		5	10	20	

11.3 Recognize significant signs and symptoms in relation to the patient's/client's eye and general health found incidental to the refraction.

	Acquisition Mode				
	Theory	Observation	Simulation	Real life	Notes
11.3.1 Symptomology assessment of medical considerations needing more thorough coverage (such as MS, diabetes, chemotherapy, corneal disease, cataracts)	3	X	X	X	
11.3.2 Use an ophthalmoscope to view the red reflex and the retina	3				
Identify abnormalities		X	X	X	
11.3.3 Perform intraocular pressure testing	2				
(Optional) Use tonometry to test intraocular pressure for screening purposes		X	X	X	
11.3.4 Demonstrate an understanding of medication use and the implications on ocular health.	2				
Pharmacology		X	X	X	
Systemic drug interaction		X	X	X	
11.3.5 Understand the elements of a plan of care stemming from refraction	2	1	10	X	
11.3.6 Develop effective referral system	3	X	X	X	

NACOR
National Association of Canadian Optician Regulators

Subject: NAIT stand-alone refracting course
Date: March 13, 2018
To: Registrar's Provincial Regulatory Boards

In May 2017 a group of subject matter experts and educators from across Canada met in Montreal to develop a set of refracting competencies for opticians. The session was facilitated by Dr. John Wickett of Wickett Measurements. The purpose of the session was to develop a detailed list of refracting competencies and skills that a program would be required to teach in order to be accredited during the next round of program accreditation. If a program received accreditation then graduates of the program would be eligible to sit the national refracting examination. The national refracting examination has not currently been developed but the blueprint for the examination will be developed based on this same set of competencies. These agreed upon competencies were presented to the NACOR board at the November 2017 meetings. Attached is a session summary of this meeting and a copy of the agreed upon list of refracting competencies.

In February 2018, NACOR received a request from the Northern Alberta Institute of Technology (NAIT) to review a stand-alone refracting course to determine whether or not the course sufficiently taught all of the agreed upon refracting competencies. The course submitted is a stand-alone refracting course and consists of a 15 week theory portion and a 6 month clinical portion. The course is a bridging program for licensed contact lens fitters to upgrade their skills to include refracting.

On February 21st an accreditation team from NACOR met at NAIT to review the NAIT refracting course. The team consisted of two subject matter experts, Jim Thompson and Rick Miller, and a member of the NACOR Accreditation Survey Team, Lisa Bannerman. I also attended the meeting as an observer from NACOR to oversee the process. A detailed review of both the theory and clinical component was performed. It was unanimously agreed by the accreditation team that the course taught all of the agreed upon competencies and skills from the May meeting.

When NACOR makes an accreditation decision each provincial regulatory board must review the decision and make a formal resolution to accept or not accept the accreditation decision. Provincial legislation awards the authority to accredit educational programs to the provincial regulatory bodies.

The NACOR accreditation team unanimously agreed that the program taught all of the refracting competencies and skills agreed upon at the May 2017 meeting. Based on the findings of the accreditation team NACOR is recommending that the NAIT stand-alone refracting bridging course be accepted by the provincial regulatory boards. Graduates of the program would be eligible to sit the national refracting examination upon its development.

Please present this accreditation decision to your Board for their review and notify the NACOR office as soon as possible of your Boards decision to either accept or reject this accreditation decision.

NACOR will notify NAIT of the final accreditation decision once we hear back from all of the provincial regulatory boards. There is some urgency in this decision as NAIT would like to start offering this program to licensed contact lens fitters this spring. NAIT has been notified of the accreditation recommendation of the Survey team and is aware that this recommendation must be reviewed and either accepted or rejected by the provincial regulatory boards.

If you have any questions or require further information please contact me.

Sincerely,

Jodi Dodds
Executive Director
National Association of Canadian Optician Regulators

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