NDEB Report to the College of Dental Surgeons

September 30, 2017

I am pleased to provide this report of the National Dental Examining Board to the College of Dental Surgeons of Saskatchewan. I have enclosed an up to date summary of the activities ongoing at the NDEB.

I look forward to any discussion of the enclosed information. I would also like to take this opportunity to thank all of the CDSS members who have participated in all aspects of the examinations and equivalency processes.

Respectfully submitted,

Dennis G Fuchs D.M.D.

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The National Dental Examining Board of Canada

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Introduction

The National Dental Examination Board of Canada (NDEB) was established by an Act of Parliament in 1952. The Act makes the NDEB responsible for the establishment of qualifying conditions for a national standard of dental competence for general practitioners, for establishing and maintaining an examination facility to test for this national standard of dental competence, and for issuing certificates to dentists who successfully meet this national standard.

The following report highlights the NDEB's key activities relating to the certification of dentists in Canada and summarizes the NDEB's accomplishments.

Governance

Executive Director and Registrar Search Update

In May 2017, the NDEB announced that Dr. Marie Dagenais been appointed as the new Executive Director and Registrar of the NDEB. Dr. Dagenais will succeed Dr. Jack Gerrow who has served as Executive Director and Registrar since 1994.

Dr. Dagenais has been involved in organized dentistry for many years. She has served as President of the Association of Canadian Faculties of Dentistry, as Chair of the Documentation Committee of the Commission on Dental Accreditation of Canada, and as the President of the Canadian Association of Oral and Maxillofacial Radiology. Dr. Dagenais holds a DMD from the Université de Montréal and a Diploma in Oral Radiology from the University of Toronto. She was Associate Dean-Academic Affairs at McGill University from 2000 - 2013. Dr. Dagenais continues to practice part-time in Montreal.

Dr. Dagenais will assume the role of Executive Director and Registrar on December 31, 2017.Dr. Gerrow will remain with the Board throughout this transitional period.

Strategic Plan

In 2016, the NDEB adopted a three-year strategic plan. The plancalls for enhanced transparency, improved communications, increased security for and improved efficiency of all examination and assessment processes, strengthened relationships with stakeholders, increased dialogue with provincial and federal governments, and heightened visibility of the NDEB internationally.

Communications

A key objective in the NDEB's strategic plan is to improve stakeholder communications. As part of the creation of an NDEB communication strategy, the NDEB is currently gather stakeholder feedback on its current communication tools and content. Part of this survey includes gathering feedback regarding the content and functionality of the website. Feedback gathered from the website usability survey, staff, and stakeholder surveys, will be used to help the NDEB develop strategies to improve and enhance its internal and external communications. As part of the long term communication strategy, the NDEB will be developing communication plans for each of its stakeholder groups, including the DRAs, to ensure they havethe required in depth knowledge of the NDEB's processes and are engaged with NDEB issues.

Legal

In June 2017, the NDEB attended a Judicial Review hearing for the Assessment of Clinical Skills (ACS). The claim for review was that the NDEB failed to provide sufficient details in the reasons for failure, that the grading criteria for the ACS are vague and ambiguous, and that the participant should have been entitled to a second oral hearing. The court ruled in favour of the NDEB stating that: "the respondent [NDEB] is entitled to deference, both in the development of the standards to be met in the clinical assessment and the evaluation process. Similarly, the decision of the Appeals Committee is entitled to deference in the assessment of clinical skills in accordance with those standards and process."

The NDEB was served with a second Judicial Review in August 2017 from a participant who failed the ACS three time. The NDEB expects to see an increase in litigation over the coming years as the number of three time failures in the Equivalency Process increases.

Finance

The NDEB held its Interim Board meeting in Ottawa on May 13, 2017. During the meeting, the Board reviewed the proposed fees for each of the assessment and examinations offered by the NDEB and approved the 2018 fee schedules.

Examinations and Assessments

Examination Integrity and Misconduct

In 2017, the NDEB implemented several changes to the rules around the use of washroom facilities, the consumption of beverages, and electronic items in the examination/assessment room. Beginning in 2017, participants/candidates can use the washroom facilities during the examinations/assessments without requiring medical documentation and can bring bottled water into the examination/assessment room. In addition, the NDEB implemented stricter rules and enforcement for anyone found to have an electronic device on their person during an examination/assessment.

Since March 2017, the NDEB has investigated 35 cases of misconduct during examinations and assessments. During the investigation process, the NDEB determined that it needs to provide more information about misconduct to examinees including possible sanctions and that procedures taken when misconduct is suspected or reported. The NDEB By-laws Committee has also proposed changes to the 2018 By-laws regarding misconduct. The revised By-laws will be presented to the Board for approval at the Annual Meeting in October 2018.

In 2016, as part of the NDEB's proactive examination security measures, all Test/Assessment Administrators, invigilators, and Presiding Examiners were asked to sign a non-disclosure agreement prior to administering or invigilating an assessment or examination. Starting in 2017, all candidates and participants were also required to sign a confidentiality and non-disclosure agreement before beginning the examination/assessment.

The NDEB takes examination security and copyright seriously. To protect its copyright and trademarks, the NDEB must pursue all unauthorized use and distribution of its name and materials. Consequently, NDEB staff continues to monitor online forums for copyrighted material and cease and desist notices are sent to individuals linked with the sale of copyrighted materials or unauthorized use of NDEB trademarks.

Certification Process

The Written Examination and OSCE were administered in March and May 2017.

As seen in Table 1, the pass rates for the Written Examination and OSCE have remained consistent over the last three years.

Historical Pass Rates – Certification Process OSCE Written # of candidates % pass # of candidates % pass 99 89 1073 2014 1126 95 88 1165 2015 1209 93 87 1229 2016 1262

Table 1

In 2016, the NDEB certified 1008 individuals. Table 2 shows a breakdown of certified candidates by stream for the last two years. This information is made available to the public through the NDEB website.

Certified Dentists in Canada			
Stream	2015	2016	
Canadian DDS	431	462	
Canadian QP/DCP	96	83	
US/Aus/NZ/Ire	244	212	
Equivalency Process	250	251	
Total	1021	983	

Table 2

Equivalency Process

Graduates of non-accredited dental programs who want to be certified as general dentists in Canada must successfully complete the NDEB Equivalency Process or an accredited Qualifying/Degree Completion Program prior to being eligible for participation in the Certification Process. The Equivalency Process includes three assessments: the Assessment of Fundamental Knowledge (AFK), Assessment of Clinical Judgement (ACJ), and Assessment of Clinical Skills (ACS). Details of each of the assessments can be found on the NDEB website under Non-Accredited Programs.

The NDEB continues to facilitate access to its assessments by offering the AFK in centres outside North America. The number of participants taking the AFK in February decreased slightly with a total of 640 participants taking the assessment at centres across Canada and in the United Kingdom. A summary of the Equivalency Process results can be in Table 3.

The ACJ and the ACS were administered at locations across the country in June 2017. The pass percentage for the June ACJ was significantly lower than in previous years. Reasons for this include a different participant pool, minor adjustments to the question frameworks, and the adoption of a new passing standard based on standard setting that took place earlier this year.

Table 3 below is a summary of the pass rates for the AFK, ACS, and ACJ since 2014.

Historical Pass Rates - Equivalency Process						
	AFK		AFK ACS		ACJ	
	# of participants	% pass	# of participants	% pass	# of participants	% pass
2014	1277	48	709	39	652	70
2015	1498	50	718	32	899	60
2016	1238	51	732	37	754	75
2017*	640	44	422	40	342	38

^{*} February and June administration only

Dental Specialty Core Knowledge Examination

Graduates of non-accredited dental specialty programs who are interested in becoming licensed specialists in Canada may apply to take the Dental Specialty Core Knowledge Examination (DSCKE). The DSCKE is a tool used by accredited specialty programs to evaluate individuals for admission to the Dental Specialty Assessment and Training Programs.

To participate in the DSCKE, applicants must show that they have graduated from a dental specialty program in a university that is sanctioned by the government of the country in which it is located to award such degrees. The dental specialty must be one of the nine dental specialty programs recognized in Canada.

Since 2015, the Dental Specialty Core Knowledge Examination (DSCKE) is administered at the NDEB office annually in February and September. The DSCKE has been administered four times in its revised format. Tables 4a and 4b show the results of the DSCKE and the distribution of DSCKE participants by specialty.

	SCKE Results	
MERINAGES SEASON CONTRACTOR CONTR	Range	Mean
Sept 2015	65 - 86	67.91
Feb 2016	52 - 91	78.85
Sept 2016	65 - 86	73.5
Feb 2017	51 - 92	82.62

Table 4a

Distribution	of DSCKE Part	icipants	
Specialty	2015	2016	2017*
Endodontics	3	4	1
Oral Medicine/Oral Pathology		1	
Oral Radiology	0	1	
Oral Surgery	0	2	1
Orthodontics	9	12	2
Pediatrics	3	3	2
Periodontics	1	3	1
Prosthodontics	2	0	1
Dental Public Health	1	0	
Total	20	26	8

^{*} Feb 2017 only

Table 4b

Virtual OSCE

The NDEB continues to work towards the development and implementation of the Virtual OSCE. The Virtual OSCE will not only address the limitations and sustainability of the Written Examination and OSCE, but will also have the capacity to mitigate increasingly sophisticated cheating strategies and question reconstruction. The Virtual OSCE will perform a more authentic assessment of a candidate's ability to synthesize information across multiple disciplines and make judgements in patient care settings.

The Virtual OSCE will use three types of questions: frameworks, single answer multiple choice questions that are cloneable, and constructed response. These question types are all resistant to reconstruction. Question development for the Virtual OSCE is underway with workshops scheduled regularly over the next year.

The Virtual OSCE is projected to be administered for the first time in 2020.

Electronic Examination Implementation

The NDEB has developed a rollout plan that has all current paper and pencil examinations and assessments being administered electronically by 2021 beginning with the DSCKE as early as 2018. Electronic delivery, among other things, will increase access and security. The NDEB has signed a contract with Zoomorphix for exam banking and is in the final stages of negotiations with Prometric to deliver the examinations.

Program Services

Online Portal

The NDEB adopted its current online registration system in 2009. Since that time, the NDEB's requirements have evolved considerably. The NDEB is now working with BrightLink Technologies to move the NDEB's online portals to a new platform. The new platform will combine all the examinations and assessments into one portal. As the NDEB migrates to a new online application and registration portal, applicants can expect to see changes to application requirements.

Later this year, the NDEB will be incorporating a new section into its website. This section has been designed to assist applicants to the Equivalency Process by providing detailed information about the documents required from specific countries. Potential new applicants will be able to select the country from which they graduated and view specific criteria for the required documents from that country.

Equivalency Process Applications and Credential Verification

Applications for the Equivalency Process remain consistent with previous years (Table5). The NDEB strives to complete its credential verification process within 12 weeks of receipt of all required documents.

Equivalency Proce	ss applicants by year
2010	1378
2011	1289

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2012	1223
2013	1116
2014	1018
2015	1086
2016	1167
2017 (As of July)	703

Table 5

The NDEB is currently in discussions with CDRAF to establish an agreement for a central document repository. Creation of the repository would mean that DRAs would accept the NDEB's credential verification for individuals seeking licensure. This would facilitate licensure for individuals and help to achieve a one point of entry system for dentists seeking licensure in Canada.

Appeals

The Assessment of Clinical Skills (ACS)requires participants to perform procedures on a typodont; therefore, an appeal involves reviewing the procedures performed. The appeal process for the ACS usually takes place over three days, six times per year, and often includes five panels of three experienced dentists with previous experience as ACS examiners. Table 6 provides a summary of the Appeals Committee decisions for the December 2015, June 2016, and December 2016 ACS.

Assessment Date	Total	Results
December 2015	136	26 upheld
		110 dismissed
June 2016	121	9 upheld
1	; ; ;	112 dismissed
December 2016	118	22 upheld
	h h	96 dismissed

Table 6

Research

The NDEB Research Committee met on April 18 - 19, 2017 in Ottawa. The five person Committee continues to provide valuable support to the NDEB by identifying innovative research topics with respect to teaching and learning, reviewing technical documents, and developing requests for proposals.

The NDEB recently circulated a Request for Proposal to Canadian Faculties of Dentistry for a study on the integration into practice of dentists who obtain licensure through different streams: graduation from an accredited Canadian program, graduation from an accredited Canadian qualifying or degree completion program, graduation from an accredited dental program outside of Canada, or successful completion of the Equivalency Process.

Post Examination/Assessment Survey

In 2014, the NDEB Research Committee began development of a post-examination/assessment survey. The survey includes questions about examination administration, content, and registration related communication. The survey is in the final review stages and the NDEB plans to begin administering the survey following the November 2016 Written Examination and OSCE.

Publications

In 2012, the NDEB performed a task analysis to determine a set of knowledge, skills, and abilities required of a new graduate. An article about the practice analysis of dentists in Canada has been written and submitted to the Journal of Dental Education.

Dr. Jack Gerrow and Dr. Chad Buckendahl article, *Evaluating the Impact of Releasing An Item Pool On A Test's Empirical Characteristics*, was accepted for publication in the Journal of Dental Education in March 2016.

Dr. Jack Gerrow, Amanda A. Wolkowitz from Alpine Testing Solutions, and Susan L. Davis-Becker from 2ACS Ventures wrote a paperon *Releasing Content to Deter Cheating: An Analysis of the Impact on Candidate Performance*. The paperwas published in the Journal of Applied Testing Technology in 2016.