



Scott Walker, Governor
Dave Ross, Secretary

DENTISTRY EXAMINING BOARD
Room 121A, 1400 E. Washington Avenue, Madison
Contact: Brittany Lewin (608) 266-2112
March 2, 2016

The following agenda describes the issues that the Board plans to consider at the meeting. At the time of the meeting, items may be removed from the agenda. Please consult the meeting minutes for a description of the actions of the Board.

AGENDA

8:30 A.M.

OPEN SESSION – CALL TO ORDER – ROLL CALL

A. Pledge of Allegiance

B. Adoption of Agenda (1-3)

C. Approval of Minutes – January 6, 2016 (4-8)

D. Administrative Updates (9)

- 1) Staff Updates
- 2) Monitoring Liaison Delegated Authority

E. Legislative/Administrative Rule Matters – Discussion and Consideration (10)

- 1) Update on Assembly Bill 368 and Senate Bill 327 Relating to Regulation of Persons that Own or Operate Dental Practices
- 2) Update on DE 10 Relating to Mobile Dentistry
- 3) Update on Legislation and Pending and Possible Rulemaking Projects

F. APPEARANCE – Dr. Jack Gerrow, Presentation on Examinations (11-55)

- 1) Comments from Marquette University and Wisconsin Dental Association

G. Speaking Engagements, Travel, or Public Relation Requests (56-57)

- 1) CRDTS Report
- 2) CRDTS Steering Committee

H. Items Added After Preparation of Agenda

- 1) Introductions, Announcements and Recognition
- 2) Election of Board Officers
- 3) Appointment of Board Liaison(s)
- 4) Administrative Updates

- 5) Education and Examination Matters
- 6) Credentialing Matters
- 7) Practice Matters
- 8) Legislative/Administrative Rule Matters
- 9) Liaison Report(s)
- 10) Informational Item(s)
- 11) Disciplinary Matters
- 12) Presentations of Petition(s) for Summary Suspension
- 13) Petitions for Designation of Hearing Examiner
- 14) Presentation of Proposed Stipulation(s), Final Decision(s) and Order(s)
- 15) Presentation of Proposed Final Decision(s) and Order(s)
- 16) Presentation of Interim Orders
- 17) Petitions for Re-Hearing
- 18) Petitions for Assessments
- 19) Petitions to Vacate Orders
- 20) Requests for Disciplinary Proceeding Presentations
- 21) Motions
- 22) Petitions
- 23) Appearances from Requests Received or Renewed
- 24) Speaking Engagement(s), Travel, or Public Relation Request(s)

I. Public Comments

CONVENE TO CLOSED SESSION to deliberate on cases following hearing (Wis. Stat. s. 19.85(1)(a),); to consider licensure or certification of individuals (Wis. Stat s. 19.85(1)(b), Stats.; to consider closing disciplinary investigations with administrative warnings (Wis. Stat. s. 19.85 (1)(b), and 440.205,); to consider individual histories or disciplinary data (Wis. Stat. s. 19.85 (1)(f),); and to confer with legal counsel (Wis. Stat. s. 19.85(1)(g),).

J. Credentialing Matters

- 1) Application Review – A.R. **(58-82)**

K. Deliberation on Division of Legal Services and Compliance (DLSC) Matters

- 1) **Monitoring**
 - a) Daniel Humiston, D.D.S. **(83-105)**
 - b) Edward McGrath, D.D.S. **(106-137)**
- 2) **Administrative Warnings**
 - a) 15 DEN 031 – P.J.C. **(138-139)**
- 3) **Proposed Stipulations, Final Decisions and Orders**
 - a) 15 DEN 054 – Kristine M. Blumm **(140-146)**
- 4) **Case Closures**
 - a) 13 DEN 111 **(147-150)**
 - b) 14 DEN 105 **(151-153)**
 - c) 14 DEN 106 **(154-156)**
 - d) 15 DEB 007 **(157-159)**

- e) 15 DEN 025 **(160-162)**
- f) 15 DEN 053 **(163-166)**
- g) 15 DEN 067 **(167-169)**
- h) 15 DEN 083 **(170-172)**

L. Consulting with Legal Counsel

M. Deliberation of Items Received After Preparation of the Agenda

- 1) Education and Examination Matters
- 2) Credentialing Matters
- 3) Disciplinary Matters
- 4) Monitoring Matters
- 5) Professional Assistance Procedure (PAP)
- 6) Petition(s) for Summary Suspensions
- 7) Petitions for Designation of Hearing Examiner
- 8) Proposed Stipulations, Final Decisions and Orders
- 9) Administrative Warnings
- 10) Review of Administrative Warning
- 11) Proposed Final Decisions and Orders
- 12) Matters Relating to Costs/Orders Fixing Costs
- 13) Case Closings
- 14) Proposed Interim Orders
- 15) Petitions for Assessments and Evaluations
- 16) Petitions to Vacate Orders
- 17) Remedial Education Cases
- 18) Motions
- 19) Petitions for Re-Hearing
- 20) Appearances from Requests Received or Renewed

RECONVENE TO OPEN SESSION IMMEDIATELY FOLLOWING CLOSED SESSION

N. Vote on Items Considered or Deliberated Upon in Closed Session, if Voting is Appropriate

O. Open Session Items Noticed Above not Completed in the Initial Open Session

ADJOURNMENT

NEXT MEETING DATE MAY 5, 2016

**DENTISTRY EXAMINING BOARD
MEETING MINUTES
January 6, 2016**

PRESENT: Debra Beres, RDH; Mark Braden, DDS; Eileen Donohoo, RDH; Leonardo Huck, DDS; Lyndsay Knoell, DDS; Wendy Pietz, DDS; Carrie Stempski, RDH

EXCUSED: Timothy McConville, DDS; Beth Welter, DDS

STAFF: Brittany Lewin, Executive Director; Sharon Henes, Rules Coordinator; Nifty Lynn Dio, Bureau Assistant

CALL TO ORDER

Lyndsay Knoell, Chair, called the meeting to order at 8:30 a.m. A quorum of seven (7) members was confirmed.

ADOPTION OF AGENDA

MOTION: Eileen Donohoo moved, seconded by Wendy Pietz, to adopt the agenda as published. Motion carried unanimously.

APPROVAL OF MINUTES

MOTION: Mark Braden moved, seconded by Debra Beres, to approve the minutes of November 4, 2015 as published. Motion carried unanimously.

ELECTION OF OFFICERS

BOARD CHAIR

NOMINATION: Mark Braden nominated Lyndsay Knoell for the Office of Board Chair.

Brittany Lewin called for nominations three (3) times.

Lyndsay Knoell was elected as Chair by unanimous consent.

VICE CHAIR

NOMINATION: Lyndsay Knoell nominated Mark Braden for the Office of Vice Chair.

Brittany Lewin called for nominations three (3) times.

Mark Braden was elected as Vice Chair by unanimous consent.

SECRETARY

NOMINATION: Lyndsay Knoell nominated Debra Beres for the Office of Secretary.

Brittany Lewin called for nominations three (3) times.

Debra Beres was elected as Secretary by unanimous consent.

2016 ELECTION RESULTS	
Board Chair	Lyndsay Knoell
Vice Chair	Mark Braden
Secretary	Debra Beres

LIAISON APPOINTMENTS

2016 LIAISON APPOINTMENTS	
Practice Questions Liaisons	Board Officers
Screening Panel Members	Lyndsay Knoell, Debra Beres
DLSC & Monitoring Liaison	Mark Braden
Credentialing Liaisons	Debra Beres, Wendy Pietz
Office of Education and Exams Liaison	Eileen Donohoo
Legislative Liaison	Mark Braden
Travel Liaison	Lyndsay Knoell
PDMP Liaison	Wendy Pietz

MOTION: Debra Beres moved, seconded by Wendy Pietz, to affirm the Chair’s appointment of liaisons for 2016. Motion carried unanimously.

DELEGATION MOTIONS

Delegated Authority for Urgent Matters

MOTION: Eileen Donohoo moved, seconded by Debra Beres, that, in order to facilitate the completion of assignments between meetings, the Board delegates its authority by order of succession to the Chair, highest ranking officer, or longest serving member of the Board, to appoint liaisons to the Department to act in urgent matters, make appointments to vacant liaison, panel and committee positions, and to act when knowledge or experience in the profession is required to carry out the duties of the Board in accordance with the law. Motion carried unanimously.

Delegated Authority for Application Denial Reviews

MOTION: Eileen Donohoo moved, seconded by Wendy Pietz, that the Board counsel or another department attorney is formally authorized to serve as the Board's designee for purposes of Wis. Admin Code § SPS 1.08(1). Motion carried unanimously.

Document Signature Delegation

MOTION: Carrie Stempski moved, seconded by Debra Beres, to delegate authority to the Chair or chief presiding officer, or longest serving member of the Board, by order of succession, to sign documents on behalf of the Board. In order to carry out duties of the Board, the Chair, chief presiding officer, or longest serving member of the Board, has the ability to delegate this signature authority for purposes of facilitating the completion of assignments during or between meetings. The Chair, chief presiding officer, or longest serving member of the Board delegates the authority to Executive Director or designee to sign the name of any Board member on documents as necessary and appropriate. Motion carried unanimously.

Credentialing Authority Delegations

MOTION: Mark Braden moved, seconded by Eileen Donohoo, to delegate authority to the Credentialing Liaisons to make all credentialing decisions. Motion carried unanimously.

MOTION: Eileen Donohoo moved, seconded by Debra Beres, to delegate credentialing authority to DSPS for those submitted applications that meet the criteria of Rule and Statute and thereby would not need further Board or Board liaison review. Motion carried unanimously.

MOTION: Debra Beres moved, seconded by Eileen Donohoo, to delegate authority to DSPS staff to review and approve applicants with one OWI or underage drinking violation. Motion carried unanimously.

MOTION: Eileen Donohoo moved, seconded by Debra Beres, to delegate all faculty license credentialing decisions to the Board's credentialing liaison(s). Motion carried unanimously.

Monitoring Delegations

MOTION: Eileen Donohoo moved, seconded by Carrie Stempski, to affirm the Chair's appointment of Mark Braden as the Monitoring Liaison, to adopt the 'Roles and Authorities Delegated to the Monitoring Liaison and Department Monitor; document as presented. Motion carried unanimously.

Travel Delegation

MOTION: Carrie Stempski moved, seconded by Debra Beres, to delegate authority to approve any Board Member travel to the Travel Liaison. Motion carried unanimously.

Legislative Liaison Delegation

MOTION: Leonardo Huck moved, seconded by Eileen Donohoo, to authorize the Legislative Liaison to speak to members of the Legislature on behalf of the Board. Motion carried unanimously.

8:30 A.M. PUBLIC HEARING ON CLEARINGHOUSE RULE 15-095 RELATING TO MOBILE DENTISTRY

MOTION: Eileen Donohoo moved, seconded by Debra Beres, to reject Clearinghouse comment number(s) 2c and 5c, and to accept all remaining Clearinghouse comments for Clearinghouse Rule 15-095 relating to mobile dentistry. Motion carried unanimously.

MOTION: Mark Braden moved, seconded by Debra Beres, to authorize the Chair to approve the Legislative Report and Draft for Clearinghouse Rule 15-095 relating to mobile dentistry for submission to the Governor's Office and Legislature. Motion carried unanimously.

LEGISLATIVE/ADMINISTRATIVE RULE MATTERS

Adoption of CR 15-056 Relating to Dental Hygienists Administering Nitrous Oxide

MOTION: Debra Beres moved, seconded by Carrie Stempski, to approve the Adoption Order for Clearinghouse Rule 15-056 relating to dental hygienists administering nitrous oxide. Motion carried unanimously.

Adoption of CR 15-057 Relating to Informed Consent

MOTION: Mark Braden moved, seconded by Debra Beres, to approve the Adoption Order for Clearinghouse Rule 15-057 relating to informed consent. Motion carried unanimously.

EXAMINATION MATTERS

Exam Presentation Request

MOTION: Lyndsay Knoell moved, seconded by Eileen Donohoo, to invite Dr. Jack Gerrow to make a presentation at the March 2, 2016 Dentistry Examining Board meeting. Motion carried unanimously.

CLOSED SESSION

MOTION: Mark Braden moved, seconded by Debra Beres, to convene to closed session to deliberate on cases following hearing (s. 19.85(1)(a), Stats.); to consider licensure or certification of individuals (s. 19.85(1)(b), Stats.); to consider closing disciplinary investigations with administrative warnings (ss. 19.85 (1)(b), and 440.205, Stats.); to consider individual histories or disciplinary data (s. 19.85 (1)(f), Stats.); and to confer with legal counsel (s. 19.85(1)(g), Stats.). Lyndsay Knoell, Chair, read the language of the motion. The vote of each member was ascertained by voice vote. Roll Call Vote: Debra Beres – yes; Mark Braden – yes; Eileen Donohoo – yes; Leonardo Huck – yes; Lyndsay Knoell – yes; Wendy Pietz – yes; Carrie Stempski – yes. Motion carried unanimously.

The Board convened into Closed Session at 11:56 a.m.

RECONVENE TO OPEN SESSION

MOTION: Debra Beres moved, seconded by Eileen Donohoo, to reconvene to Open Session. Motion carried unanimously.

The Board reconvened into Open Session at 12:12 p.m.

VOTE ON ITEMS CONSIDERED OR DELIBERATED UPON IN CLOSED SESSION

MOTION: Lyndsay Knoell moved, seconded by Eileen Donohoo, to affirm all motions made and votes taken in Closed Session. Motion carried unanimously.

DELIBERATION DIVISION OF LEGAL SERVICES AND COMPLIANCE (DLSC) MATTERS

Presentation and/or Deliberation on Proposed Stipulations, Final Decisions and Orders

14 DEN 049 – Thomas Hughes, D.D.S.

MOTION: Wendy Pietz moved, seconded by Debra Beres, to **adopt** the Findings of Fact, Conclusions of Law and Order in the matter of disciplinary proceedings against Thomas Hughes, D.D.S., DLSC case number 14 DEN 049. Motion carried.

(Mark Braden recused himself and left the room for deliberation and voting in the matter of Thomas Hughes, D.D.S., DLSC case number 14 DEN 049.)

14 DEN 086 – Farshad Rouhani, D.M.D.

MOTION: Debra Beres moved, seconded by Eileen Donohoo, to **adopt** the Findings of Fact, Conclusions of Law and Order in the matter of disciplinary proceedings against Farshad Rouhani, D.M.D., DLSC case number 14 DEN 086. Motion carried unanimously.

Case Closures

14 DEN 037 – H.L.R.

MOTION: Eileen Donohoo moved, seconded by Wendy Pietz, to close DLSC case number 14 DEN 037, against H.L.R., for **Prosecutorial Discretion (P5)**. Motion carried unanimously.

14 DEN 060 – M.D.S.

MOTION: Eileen Donohoo moved, seconded by Debra Beres, to close DLSC case number 14 DEN 060, against M.D.S., for **No Violation**. Motion carried unanimously.

ADJOURNMENT

MOTION: Eileen Donohoo, seconded by Debra Beres, to adjourn the meeting. Motion carried unanimously.

The meeting adjourned at 12:30 p.m.

**State of Wisconsin
Department of Safety & Professional Services**

AGENDA REQUEST FORM

1) Name and Title of Person Submitting the Request: Brittany Lewin Executive Director		2) Date When Request Submitted: Items will be considered late if submitted after 12:00 p.m. on the deadline date which is 8 business days before the meeting	
3) Name of Board, Committee, Council, Sections: Dentistry Examining Board			
4) Meeting Date: 03/02/16	5) Attachments: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6) How should the item be titled on the agenda page? Administrative Matters Monitoring Liaison Delegated Authority	
7) Place Item in: <input checked="" type="checkbox"/> Open Session <input type="checkbox"/> Closed Session	8) Is an appearance before the Board being scheduled? <input checked="" type="checkbox"/> Yes (Fill out Board Appearance Request) <input type="checkbox"/> No	9) Name of Case Advisor(s), if required: N/A	
10) Describe the issue and action that should be addressed: Staff will discuss with the Board possible changes to the delegated authority given to the monitoring liaison to more efficiently respond to requests. The Board may delegate additional authority to the monitoring liaison.			
11) Authorization			
Signature of person making this request		Date	
Supervisor (if required)		Date	
Executive Director signature (indicates approval to add post agenda deadline item to agenda)		Date	
Directions for including supporting documents: 1. This form should be attached to any documents submitted to the agenda. 2. Post Agenda Deadline items must be authorized by a Supervisor and the Policy Development Executive Director. 3. If necessary, provide original documents needing Board Chairperson signature to the Bureau Assistant prior to the start of a meeting.			

**State of Wisconsin
Department of Safety & Professional Services**

AGENDA REQUEST FORM

1) Name and Title of Person Submitting the Request: Dale Kleven Administrative Rules Coordinator		2) Date When Request Submitted: 2/19/16 Items will be considered late if submitted after 12:00 p.m. on the deadline date: ▪ 8 business days before the meeting	
3) Name of Board, Committee, Council, Sections: Dentistry Examining Board			
4) Meeting Date: 3/2/16	5) Attachments: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6) How should the item be titled on the agenda page? Legislation and Rule Matters – Discussion and Consideration 1. Update on Assembly Bill 368 and Senate Bill 327 Relating to Regulation of Persons That Own Or Operate Dental Practices 2. Update on DE 10 Relating to Mobile Dentistry 3. Update on Pending Legislation and Pending and Possible Rulemaking Projects	
7) Place Item in: <input checked="" type="checkbox"/> Open Session <input type="checkbox"/> Closed Session <input type="checkbox"/> Both		8) Is an appearance before the Board being scheduled? <input type="checkbox"/> Yes (Fill out Board Appearance Request) <input checked="" type="checkbox"/> No	9) Name of Case Advisor(s), if required:
10) Describe the issue and action that should be addressed:			
11) Authorization			
<i>Dale Kleven</i>		<i>February 19, 2016</i>	
Signature of person making this request		Date	
Supervisor (if required)		Date	
Executive Director signature (indicates approval to add post agenda deadline item to agenda)		Date	
Directions for including supporting documents: 1. This form should be attached to any documents submitted to the agenda. 2. Post Agenda Deadline items must be authorized by a Supervisor and the Policy Development Executive Director. 3. If necessary, Provide original documents needing Board Chairperson signature to the Bureau Assistant prior to the start of a meeting.			

**State of Wisconsin
Department of Safety & Professional Services**

AGENDA REQUEST FORM

1) Name and Title of Person Submitting the Request: Nifty Lynn Dio, Bureau Assistant on behalf of Brittany Lewin, Executive Director		2) Date When Request Submitted: 02/22/2016 Items will be considered late if submitted after 12:00 p.m. on the deadline date which is 8 business days before the meeting	
3) Name of Board, Committee, Council, Sections: Dentistry Examining Board			
4) Meeting Date: 03/02/16	5) Attachments: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6) How should the item be titled on the agenda page? Dr. Jack Gerrow, Presentation on Examinations	
7) Place Item in: <input checked="" type="checkbox"/> Open Session <input type="checkbox"/> Closed Session	8) Is an appearance before the Board being scheduled? <input checked="" type="checkbox"/> Yes (Fill out Board Appearance Request) <input type="checkbox"/> No	9) Name of Case Advisor(s), if required: N/A	
10) Describe the issue and action that should be addressed: See attached			
11) Authorization			
Nifty Lynn Dio		02/22/2016	
Signature of person making this request		Date	
Supervisor (if required)		Date	
Executive Director signature (indicates approval to add post agenda deadline item to agenda)		Date	
Directions for including supporting documents: 1. This form should be attached to any documents submitted to the agenda. 2. Post Agenda Deadline items must be authorized by a Supervisor and the Policy Development Executive Director. 3. If necessary, provide original documents needing Board Chairperson signature to the Bureau Assistant prior to the start of a meeting.			

Technical Manual

Written Examination, Objective Structured Clinical Examination, Assessment of Fundamental Knowledge, and Assessment of Clinical Judgment - 2014

Public

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Introduction

The NDEB was established by an Act of Parliament in 1952 (Appendix A) with a mandate to establish the qualifying conditions for a national standard of competence for general dentists and to issue certificates to dentists who successfully meet this standard. The Act was supported by all ten provincial licensing authorities and by the Canadian Dental Association (CDA). Since that time, the NDEB certificate has been accepted by provincial licensing authorities as evidence of having met the national standard.

High-stakes examinations such as those conducted by the NDEB should be concerned with reliability and validity because these measures are required in making pass/fail decisions affecting candidates for licensure or certification. Protection of the public is of foremost concern and the NDEB has the obligation to inform its ten provincial constituents that it is doing its best to provide the highest quality examination program possible. Examination policies and procedures provide a guide for the examination program. Such policies and procedures assist with establishing and improving reliability and validity. The *Standards for Educational and Psychological Testing* {American Educational Research Association (AERA), American Psychological Association (APA), and the National Council on Measurement in Education (NCME)} provides national standards for testing organizations. This Technical Manual provides a comprehensive summary of information pertaining to the examinations/assessments developed and administered by the NDEB and demonstrates the NDEB's compliance with accepted international standards.



Part A – Policies and Procedures for the Examinations and Assessments

Background and Overview

History

In 1906, under the auspices of The Canadian Dental Association (CDA), the Dominion Dental Council was formed to conduct national written examinations, the successful completion of which would grant the candidate a Dominion Dental Council certificate. The National Certificate could then be presented to the Provincial Dental Regulatory Authorities (DRAs) as evidence of the candidate's ability to meet a basic national standard of competence. Some DRAs were prepared to grant licenses to practice on the basis of the certificate; however, others chose to accept the certificate as an academic base only and required the candidate to pass additional provincial practical tests.

The Dominion Dental Council proved to be rather ineffective. A name change to The Dental Council of Canada in 1950 along with attempts to improve the efficiency of the examination mechanism still failed to attract strong support from the DRAs. This was in spite of the fact that the DRAs agreed with the general concept. They had indicated a desire to be free of provincial licensing examinations, providing a reliable national examination system could be established.

The following year, 1951, the CDA encouraged the ten DRAs to develop a satisfactory plan for a National Examining Board. Its purpose was to provide a facility by which members of the profession could become eligible, on a national basis, to apply for practice privileges in the province of their choice. The result was the incorporation of The National Dental Examining Board of Canada (NDEB) in 1952 by an Act of Parliament of Canada. The Act was supported by all ten DRAs and by the CDA and this support continues today.

Purpose

According to the Act of Parliament, the NDEB is 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.



Structure

The NDEB is composed of twelve members. Each DRA appoints one member and two members are appointed by the Commission on Dental Accreditation of Canada (CDAC). In 1994, the Board designated representatives from the Royal College of Dentists of Canada (RCDC) and the CDA. In 2004, the Board designated a representative from the Canadian Dental Regulatory Authorities Federation (CDRAF) as an official observer and appointed a Public Representative. The full Board meets annually. The NDEB also has standing committees dealing with examinations, appeals, finances and By-laws. The NDEB is a non-profit organization supported by fees charged to candidates and participants for examinations and assessments and certification.

Certification

The NDEB grants certification to candidates from the following groups:

Graduates of dental programs accredited by the Commission on Dental Accreditation of Canada and by the American Dental Association Commission on Dental Accreditation

Prior to 1971, a graduate of an undergraduate dental program in Canada was required to successfully complete the NDEB examination (written essay-type) in order to be certified. This policy was changed in 1971, when the NDEB decided to recognize the examinations and evaluation administered by Canadian faculties of dentistry and issue certificates to current graduates of these faculties without further examination. The condition for certification established at this time was graduation from an undergraduate dental program approved by the Commission on Dental Accreditation of Canada.

In 1988 concern was expressed by several DRAs about the validity of establishing clinical competence solely by accreditation. This concern was further intensified by the extension of the accreditation cycle from five to seven years. Therefore, in 1989, the NDEB established a committee "to explore whether the granting of a certificate on the basis of accreditation alone continues to be acceptable." This committee (Certification Review Committee or CRC) presented its report at the 1990 NDEB Annual Meeting. The report stated that certification based on accreditation alone was no longer acceptable, a finding which was further supported in the Parker Report.

In 1994, the NDEB certification process was modified so that graduates of accredited Canadian dental programs were required to pass the Written Examination and Objective Structured Clinical Examination (OSCE).



As a result of formal reciprocal agreements between accrediting organizations, graduates of US, Irish, Australian and New Zealand accredited undergraduate dental programs are considered “accredited graduates”. To be certified, these graduates must pass the Written Examination and the OSCE within a specified period of time.

The NDEB, through its representatives on the Commission on Dental Accreditation of Canada and through an appointee on each undergraduate program survey team, actively participates in the accreditation process. In addition, the NDEB gives an annual grant to the Commission to be applied to accreditation costs of undergraduate dental programs in Canada, the United States, Australia, New Zealand, and Ireland.

Graduates of non-accredited dental programs

Until December 31, 1999, graduates of non-accredited dental programs were certified by passing a certification examination that consisted of the Written Examination and a three part Clinical Examination or by successfully completing an accredited Qualifying or Degree Completion Program at an accredited university and then successfully completing the Written Examination and the OSCE.

Starting January 1, 2000, graduates of non-accredited dental programs have been required to successfully complete a Qualifying or Degree Completion Program prior to being eligible to take the NDEB examinations.

With the adoption of the Agreement on Internal Trade in 2009, all professions and trades essentially have labour mobility (portability) in Canada. In dentistry, after numerous meetings and intense and lengthy negotiations, the CDRAF unanimously requested that the NDEB implement a new process based on the previous ODQ Equivalency Process and be integrated with the admission process for Qualifying/Degree Completion Programs. The NDEB Equivalency Process was implemented in 2011.

Competencies for a Beginning Dental Practitioner in Canada

In 1993, the NDEB, in cooperation with the ACFD, CDA and CDAC, conducted a process to establish “Competencies for the Beginning Dental Practitioner in Canada”. These competencies, which were the first nationally accepted competencies, were used to establish examination blueprints, guide educational programs, and were included in accreditation standards. They have also been used as a resource for many national and international processes in dentistry and other professions.

In 2004, the NDEB initiated a review process that resulted in the revision of the competency document (Appendix B). This document, which has been accepted by the NDEB, the ACFD, CDA and CDAC, is used in the establishment of blueprints for all NDEB examinations and assessments.

Assistance to Other Organizations

The NDEB provides consultation and existing examination related material to the DRAs on request. Beginning in 1998, at the request of the DRAs, the NDEB assisted the ACFD in the administration of the ACFD Eligibility Examination which was required to apply for Qualifying/Degree Completion Programs. In 2001, formal agreements between the NDEB and the ACFD were signed. These agreements related to the



administration of the ACFD Eligibility Examination and to administrative services provided by the NDEB for the ACFD. With the implementation of the NDEB Equivalency Process the final ACFD Eligibility Examination was held in February 2010.

The NDEB also provides examination services on request to any DRA and has formal agreements for provision of services with l'Ordre des dentistes du Québec.

As directed by the CDRAF, ACFD and NDEB (in collaboration with RCDC) developed the Dental Specialty Core Knowledge Examination (DSCKE). The DSCKE was administered for the first time in the fall of 2009.

Summary

The NDEB is conscious of its responsibility to certify only candidates who meet the national standard for the purpose of public protection. The Board has proposed and followed a series of strategic plans.

Each year, the NDEB assesses its certification, examination, and assessment procedures and the responses of the candidates and participants, making adjustments where indicated to improve the validity and reliability of examinations and assessments. The Examinations Committee annually reviews the standards and procedures of the respective examinations and assessments and makes recommendations to the Board.

In addition to this ongoing internal review, the NDEB has initiated several external evaluation procedures over the years.

Current Examinations for Graduates of Accredited Programs

Written Examination

The Written Examination consists of 2 papers, each with 150 multiple choice type questions. Each paper is given in a 2.5 hour (150) minute) examination session. The sessions are held in the morning and afternoon of one day at established examination centres.

The examination tests basic science knowledge and applied clinical science knowledge and judgement including diagnosis, treatment planning, prognosis, treatment methods, and clinical decision making.

The NDEB website displays the examination blueprint, a list of reference texts commonly used in Canadian dental programs, and all necessary logistical details. Questions used on past examinations are released yearly on the NDEB website at www.ndeb-bned.ca .

Objective Structured Clinical Examination (OSCE)

The OSCE is a one day station type examination administered the day after the Written Examination, designed to test aspects of clinical judgement. The majority of the stations have two questions and require the candidate to review the information supplied (e.g. patient history, photographs, radiographic images, casts, models) and answer extended match type questions. Each question has up to 15 answer options and



one or more correct answer(s). A few stations may require the candidate to review the information supplied and write an acceptable prescription for a medication commonly prescribed by general dentists in Canada.

Candidates have five minutes at each station to answer the questions. After five minutes the candidates move to the next station. Detailed examination information is available on the NDEB website at www.ndeb-bned.ca.

The list of competencies from which examination items are developed, examination regulations, a list of reference texts commonly used in Canadian dental programs, and all necessary logistical details are available to candidates online prior to the examination.

Current Assessments for Graduates of Non-Accredited Programs (NDEB Equivalency Process)

Assessment of Fundamental Knowledge (AFK)

The AFK consists of 2 books, each with 150 multiple choice type questions. Each book is given in a three hour session. The sessions are held in the morning and afternoon of one day.

The AFK tests biomedical science knowledge and applied clinical science knowledge. Prior to the Assessment, participants are advised to go on the NDEB website to look at the blueprint and a list of reference texts commonly used in Canadian dental programs along with all necessary logistical details. Participants may also take a web based self assessment <http://www.ndeb-bned.ca/nonaccredited/self-assessment-quiz>. Questions used on past assessments are released at regular intervals on the NDEB website at www.ndeb-bned.ca.

Assessment of Clinical Skills (ACS)

During the two day ACS, participants perform simulated dental procedures on manikins in a clinical setting.

Each day participants will receive a

- typodont mounted in a manikin on a dental chair. The typodont will be labelled with the participant's ID number.
- detailed list of required procedures specifying tooth numbers and surfaces.

As the ACS is an assessment that involves participants performing requirements on a simulated patient, the NDEB prepares a separate Technical Manual.



Assessment of Clinical Judgment (ACJ)

The ACJ consists of three books given in a single day.

Books 1A and 1B

Diagnosis, Treatment Planning and Clinical Decision Making

This Assessment will evaluate the participant's ability to formulate a diagnosis and to make clinical decisions. Patient histories, dental charts, and photographs may be provided for patients of all ages, including those with special needs.

Book 2

Radiographic Interpretation

Using radiographic images, the Assessment will evaluate the participant's knowledge in oral radiology and ability to make a radiographic interpretation and diagnosis.

Dental Specialty Core Knowledge Examination (DSCKE)

As directed by the CDRAF, ACFD and NDEB (in collaboration with RCDC) developed the DSCKE. The DSCKE was administered for the first time in the fall of 2009.



Test Construction Process and Validity Procedure

Personnel and Committee Structure

Examinations Committee

The Examinations Committee of the Board shall consist of nine members appointed by the Board. One of these members may be the Public Representative. No more than two persons can be recommended to be members by each of the Ordre des Dentistes du Québec and the Association of Canadian Faculties of Dentistry. Staff support for the Committee includes the Executive Director, the Managers, Examinations, Managers, Assessments, the Examinations Coordinators and the Chief Examiners for the Written Examination, OSCE, AFK, ACS, and, ACJ.

The Examinations Committee shall ensure that its recommendations will provide for the conducting of examinations and assessments in a manner fair and equitable for all concerned. Each year the Examinations Committee of the Board shall:

- Review the standards and procedures of all examinations and assessments and make recommendations to the Board on all matters concerning the examinations and assessments.
- Review the passing standard for each Examination and Assessment and make a recommendation to the Board.
- Review a roster of possible Examiners suggested by representatives of accredited programs located in Canada and by the Provincial Dental Regulatory Authorities. The Committee shall recommend a list of Examiners to permit the Board to appoint a sufficient number of Examiners to develop, construct, validate, administer and evaluate all of the examinations and assessments offered to candidates and participants by the Board.
- Recommend to the Board, Chief Examiners for each of the Board's examinations and assessments.
- Review the protocols for each of the Board's examinations and assessments and submit the protocols to the Board for approval.
- Make decisions regarding voiding the results of a person's examination or assessment and whether the person has the privilege of repeating the examination or assessment.

Suggestions for protocol changes are initiated by staff and Chief Examiners from experience during the administration of the examination/assessment and from changes in the structure or format of the examination/assessment made by the NDEB Examinations Committee.

Examiner's Manuals are used as a reference by examiners when developing questions for the Written Examination, OSCE, AFK, and ACJ.

Examination and assessment dates are published by policy, well in advance, to permit the staff, candidates and participants to plan appropriately. Normally, the Written Examination and OSCE are offered in March,



May and November of each year. The AFK is offered in February and the ACS and ACJ are offered in June of each year.

Individuals recommended for appointment as examiners by the DRAs, the Deans and Directors of the dental programs in Canada and the Canadian Forces Dental Services are reviewed by the Examinations Committee and nominations are forwarded to the Board for appointment.

In addition to appointing examiners, on recommendation of the Examinations Committee, the Board appoints consultants who are recognized for their expertise and/or experience in examination and assessment development.

The results of the examinations and assessments are reported to the Examinations Committee so it can ensure consistency of the examinations and assessments over a period of time. This is to ensure all candidates and participants are treated equally independent of the particular examination or assessment taken.

Examination and assessment integrity is maintained by the Committee through the review of Test Administrator; Presiding Examiner and Assessment Supervisor reports on irregularities identified during an examination or assessment session. If a candidate or participant is reported to have compromised the examination or assessment by cheating or violating the regulations, the Committee has the authority to void the results of that candidate's or participant's examination and to prohibit the candidate/participant from taking the examination or assessment in the future.

Staff Support

The Executive Director and Registrar is responsible for staff supervision and the implementation of all policies approved by the Board to ensure the process operates efficiently and effectively.

The Chief Written, Chief AFK, Chief ACJ and Chief OSCE Examiners are responsible for the development of the respective examinations and assessments including coordination of question development, question selection, monitoring the item bank, and results.

The Examinations/Assessments Managers, in consultation with the Executive Director/Registrar, prepares and administers all NDEB examinations and assessments including arrangements with hosting institutions and staff, preparing protocols, identification cards, correspondence with examiners and production and translation of examination and assessment material. The Examinations/Assessments Managers are supported by an Examinations Coordinator, and Assessments Coordinator and Examinations Clerks. The Examinations/Assessments Project Manager contracts with a specific person who has been trained to administer the Written Examination, the OSCE, the AFK, and the ACJ at test centres.

All staff are responsible for carrying out directives from the Examinations Committee as approved by the Board.



Item Development and Selection

The purpose of the Written Examination and the OSCE is to assess those aspects of the “Competencies for a Beginning Dental Practitioner in Canada” that can be evaluated through multiple choice or station formats. The purpose of the AFK and ACJ is to determine if a non-accredited graduate has the equivalent knowledge, skills and judgement of a graduate of an accredited dental program (accredited graduate). The ACS evaluates the participant’s ability through the completion of simulated dental procedures on a mannikin. The 47 competencies give rise to the major content categories that form the blueprint for the examinations and assessments. Guided by the competencies, item writers create questions that are aligned to content categories.

Examiners who are dental specialists/content experts at Canadian Faculties of Dentistry are sent copies of the Examiner’s Manual and other preparatory material for review prior to a question development workshop. During the workshop, examiners are trained in question construction and then construct and criticize potential new items in their discipline. All new items are reviewed and, if required, edited by staff. A second group of examiners reviews and revises new items prior to their being eligible for use on an examination. Required images are imported and, if necessary, enhanced using PhotoShop. Eventually an image is approved as more than adequate for examination/assessment purposes. The image is then stored in the question bank. For radiographic images, a hard copy of the print of the radiograph is initialed by a designated examiner and filed with the hard copy of the question.

Examiners who are practicing general dentists recommended by the Provincial Dental Regulatory Authorities select all of the items for every examination in accordance with a blueprint. The results of item analysis are used as a guide in the item selection process.

Using the “Competencies for a Beginning Dental Practitioner in Canada” the evaluation is done through multiple choice, extended match and case based questions. The 47 competencies give rise to the major content categories that form the blueprint for the Written Examination, OSCE??, AFK and ACJ.

Item, Translation, Review and Verification

After items have been selected for an examination or assessment, they are reviewed again and identified for translation. In some cases, the French translation may identify difficulties in the English version of the question and this will lead to the English wording being revised.

Following selection and translation, questions are subjected to intensive review to verify the wording and the correct answer. Should a question need to be reworded, it is either revised for the selected examination or assessment or replaced. Changes to the French translation for any existing question initiates a similar verification process.

After selection, translation and review, a printed version of the examination or assessment is produced. The purpose of this step is to verify that all the changes have been made to the questions and that the French translation is accurate. At this point, the review committee will sign off that the examination or assessment is accurate.



Test Validity and Reliability

The primary basis for establishing validity for certification examinations is to show that the process for examination development is a valid reflection of that part of the professional domain that the examinations purport to assess. That is, construct validity is about the relationships between the construct (professional competence) and the instruments. As noted above, the Written Examination, the OSCE, the AFK, and the ACJ are built to be consistent with the “Competencies for a Beginning Dental Practitioner in Canada”. The content categories reflect both the educational programs and the demands of practice, and the examinations and assessments are vetted by practitioners.

In addition to the logical basis for asserting construct validity, the NDEB has carried out several studies, both internal and published, that support validity claims (Appendix D).

Examination Production and Security

The Selection Committee for each of the multiple choice and extended match type examinations and assessments provides a hard copy of the questions to be used from the NDEB item bank. One examiner is always a representative from l’Ordre des dentistes du Québec (ODQ). Translation of questions into French, if required, does not occur until after a question has been selected for a specific examination or assessment. During review meetings, there is always a team of French examiners who are delegated the task of translation of questions as the examination or assessment is processed by the Committee. An examination or assessment is created in a customized question bank and examination databases relevant to each examination using the list of questions provided by the Selection Committee. After the documents have been approved at the Committee level a final document is “built” and printed in the appropriate format.

Written Examination and AFK

In order to limit potential cheating 2 – 4 versions of each of the two books are created. Each book must be copied, re-sorted in a random computer generated pattern and then re-built. Each book is reviewed and revised to correct any formatting or numbering errors caused by the migration of the questions into the final document. Prior to printing, the appropriate cover page and instruction pages are added to the documents. Computer generated labels indicating candidate/participant names, NDEB identification numbers and assigned seat numbers are affixed to the front of each examination book.



OSCE

For the OSCE, the questions need to be organized according to the sequence within each section that the Committee has determined best facilitates the timing of the examination and/or the materials required for the question. The examination is then “built” as a final document.

Assessment of Clinical Judgement

For the ACJ the questions are organized according to the sequence within each case with the cases being collated into one book. The Assessment is then “built” as a final document.

Printing

All printing is done on site. Documents that have been finalized are saved as .pdf files in a specific directory and are forwarded electronically to a specific on-site printer, depending upon which document is being printed. For the OSCE, once the examination document has been printed, staff assembles the required number of copies of the complete examination. Each page of the document must be inserted into a plastic sleeve and collated within the correct station which is then inserted into the station sequence; rest stations are inserted at pre-determined locations; and, “Post-it”TM notes are placed on pages that have questions requiring other materials, e.g. casts, models, Boley gauge, etc.

Quality Control – Written Examination and AFK

A Final Review Committee meeting is set up after approval of the content and translation of the Written Examination and AFK by the Review Committee that includes the French translators. At this time, all versions that will be used for the examination or assessment are created and an original copy of each is printed. The Committee reviews the document in order to verify that there are no errors in numbering of questions and distractors. After printing the batches of examination or assessment books, a random check of documents is performed by two staff members in order to verify that no errors have been made during the printing process.



Quality Control – OSCE and ACJ

During the Examination Review Committee meetings, staff provides any materials that are required to the Committee along with the examination/assessment documents. At this time the Committee is asked to provide feedback with regard to changes that might be required to either the material being used or a change to the answer key to more accurately reflect the findings from the material provided.

The quality of the images being printed is verified by random check by numerous examiners who are dentists. During these random checks, the examiners compare the produced images of the radiographs to the hard copy of the print of the radiograph initialed by the designated examiner during the question development and review process. Examiners also verify the accuracy of the final assembly of all material used in the examination/assessment.

Locations and Procedures

The Written Examination and the OSCE are presented three times annually (March, May and November) as established by NDEB policy.

The March examination session is held across Canada with a centre being established in each of the ten dental schools and two US centres. May and November examination sessions may be established in Canada in several locations, provided that a minimum of ten candidates apply in a location. Written Examination and OSCE centres may be established outside of Canada with an expectation that a minimum of 50 participants will apply for a centre and that an acceptable examination location with acceptable security can be established.

The NDEB tries to accommodate location preferences but may have to offer alternative locations due to space limitation at some examination sites. Candidates are assigned to the centre closest to them whenever possible.

The AFK is presented once annually in February as established by NDEB policy.

The February AFK session is held across Canada with a centre being established in each of the ten dental schools provided that a minimum of ten candidates apply in a location. Assessment centres may be established outside of Canada with an expectation that a minimum of 50 participants will apply for a centre and that an acceptable examination location with acceptable security can be established.

The ACJ is presented once annually in June as established by NDEB policy. Centres may be established in Canada in several locations, provided that a minimum of 30 participants apply in a location.



On-site Security

The Test Administrator is responsible for reserving rooms appropriate for each type of examination or assessment and for handling and training invigilators for the Written Examination, OSCE, the AFK and the ACJ. Examination material is shipped by courier to the Test Administrator at each test centre one to two weeks in advance of the examination date. The Test Administrator confirms receipt of materials by fax and stores materials in a secure, locked area. After the completion of the examination all materials are returned to the NDEB office by courier. NDEB staff verifies the return of all materials including individually labelled books, identification cards and badges, rough notes sheets, answer score sheets, and examination and assessment materials.

Scoring and Re-scaling

Scoring – Written Examination

Each of the three hundred multiple choice items is scored correct (1) or incorrect (0-zero). Item analyses are carried out as an aid to detecting weak items. Such items are eliminated and a percent correct test score is calculated for each candidate.

Scoring – OSCE

As noted earlier, the OSCE items (except for prescription items) are of the extended matching format with up to 15 different options. The items are scored using a weighted template that yields an item score between 0 and 1. Prescription items are scored on a scale of 0 to 4. After discarding weak items a percent correct score is calculated by dividing the sum of the achieved item scores by the total possible score.

Scoring – Assessment of Fundamental Knowledge

Each of the three hundred multiple choice items is scored correct (1) or incorrect (0-zero). Item analyses are carried out as an aid to detecting weak items. Such items are eliminated and a percent correct test score is calculated for each candidate.

Scoring – Assessment of Clinical Judgement

The ACJ items have up to 15 different options. The items are scored using a weighted template that yields an item score between 0 and 1. After discarding weak items a percent correct score is calculated by dividing the sum of the achieved item scores by the total possible score.

Equating and Re-scaling

To provide consistent standards over time, scores for each March administration of the Written and OSCE are test equated to the 2012 metric for the Written Examination and re-scaled to a 65 passing score; and, the 2011 metric for the OSCE and re-scaled to a 65 passing score. Scores for the AFK are test equated to the 2008 ODQ AFK and rescaled to a 75 passing score. Scores for the ACJ are test equated to the 2011 ACJ



and re-scaled to a 65 passing score. The equating process, described in detail in Maguire (2004) is taken from Angoff (1971). Test equating and re-scaling functions are calculated separately for the Written Examination and the OSCE.

Standards for Pass/Fail

The Written Examination is scored as percent correct. The passing standard set in 2012 was 72.5. The OSCE is also scored as a percentage (total score achieved divided by total score possible). The OSCE standard is 57.1 on the 2011 scale. These passing standards were established through an in depth standard setting process which utilized both the Angoff and Bookmarking methods of recommending a passing standard. (Buckendahl 2007, 2008)

Reporting

The results of the Written Examination, OSCE, AFK, and ACJ are posted on a secure website. Posting of results will normally be done within 6 weeks. An email notification of the posting will be sent to candidates/participants informing them that the results have been posted. Successful candidates/participants are given a pass result. Failing candidates/participants receive their test equated, re-scaled score on the failed examination or assessment.

School reports are sent to each of the Canadian Faculties of Dentistry and, on request, to U.S. dental programs that have a sufficient number of candidates (more than 10) participating in a session. For each of the Written Examination and OSCE, three kinds of information are provided:

- A list of candidates who are students at the school and their Pass/Fail results.
- National (Canadian) level means and standard deviations of scores broken down by blueprint category.
- School level means and standard deviations of scores broken down by major blueprint category.

A general statistical performance report for each examination and assessment is prepared for the Board and other interested parties.

Statistical Analyses

Item Level Analyses

All computer scored NDEB examinations, assessments, candidate/participant, and item statistics are calculated using a customized question bank management system named "Live Bank". The item level statistics produced are: item means (difficulties), item test correlations (point), the number of candidates/participants choosing each distractor, and the performance on the item and each distractor for the upper 50% of the candidates/participants and the lower 50% of the candidates/participants.

After each administration all items are reviewed for statistical or procedural abnormalities. Reports generated from the system provide colour triggers to highlight areas of concern. As a result of the review, some items may be rejected. All item and test statistics are calculated using only items that contribute to the final score.



Test level Analyses

The following test statistics are calculated for all administrations: means of raw scores and equated scores, standard deviations of raw scores and equated scores, ranges of raw and equated scores, Cronbach's alpha, KR20, standard errors of measurement for raw scores and equated scores. In addition, the passing rates are calculated for all examinees, for writers from Canadian universities, and for writers from US universities.

Security Analysis

The test analysis program Scrutiny[®] can be applied to the item results of all candidates/participants. Those with extreme values are flagged for attention.

Appeals

Appeals

Within three months of the release of results of the Written Examination, OSCE, AFK, and ACJ , candidates or participants who have failed may apply to the Board to have their answer score sheets manually checked against the answer key. Application for review must be accompanied by a filing fee. The mark for the candidate or participant will be produced by the manual check and verified by the Chief Examiner or the Executive Director/Registrar, or both. This mark will determine whether a candidate or participant passed or failed.

Petitions from Candidates and Participants

Within a specified timeframe, candidates and participants may petition the Board or Executive Committee in writing, with an accompanying filing fee, in regard to the following:

- examination or assessment results have been voided
- candidate or participant has been denied the privilege of repeating an examination or assessment
- compassionate grounds



Part B – Outcomes Summaries

Outcomes Summary for the Written Examination

Introduction

This report provides summary information on the structure of selected exams, as well as statistical summaries at the item and test levels. The yearly results are based on the March administration only since May and November administrations use instruments from other years.

Examination Results

Table of Examination Items by Category

RootCategory	WMarch2012	WMarch2013	WMarch2014
Dental Anatomy/Occlusion/Operative	16	17	17
Endodontics/Dental Emergencies	24	25	25
Foundation Science	59	59	59
Oral Medicine/Pathology/Oral Facial Pain	35	38	38
Oral Surgery/Trauma	22	22	22
Orthodontics/Pediatrics	24	22	23
Periodontics	29	29	29
Pharmacology/Therapeutics/Local Anesthesia	18	19	19
Prosthodontics/Implants	33	33	32
Miscellaneous**	34	30	31
Total Scored	294	294	295
Rejected	6	6	5
Total	300	300	300



**Miscellaneous: "Abuse and Neglect", "Anxious Patient", "Ethics and Jurisprudence", "Geriatrics", "Infection Control", "Informed Consent", "Needs Conversion", "Occupational Hazards", "Prevention", "Radiology", "Records", "Relationship general/oral health", "Scientific Literature", "Special Needs"

Table of Item Difficulties

Difficulty	WMarch2012	WMarch2013	WMarch2014
Easy (.90+)	126	75	82
Medium (.40 to .89)	162	210	202
Difficult (0 to .39)	6	9	11
Total	294	294	295

Table of Item Discriminations

Item Test Correlation	WMarch2012	WMarch2013	WMarch2014
High (.26+)	47	56	68
Medium (.10 to .25)	182	185	163
Low (0 to .09)	65	53	64
Total	294	294	295



Test Level Results for the Examination

	WMarch2012	WMarch2013	WMarch2014
Number Of Candidates	659	672	802
Number Of 1st Try Candidates	648	658	783
Number Of 2nd Try Candidates	9	13	16
Number Of 3rd Try Candidates	2	1	3
Number Of Scored Items	294	294	295
Number of Passes	628	615	729
Percent Pass	95.30%	91.50%	90.90%
Number of 1st Try Passes	618	604	716
1st Try Percent Pass	95.37%	91.79%	91.44%
Number of 2nd Try Passes	8	10	11
2nd Try Percent Pass	88.89%	76.92%	68.75%
Number of 3rd Try Passes			2
3rd Try Percent Pass			66.67%
Mean Score (Raw)	83.33%	78.51%	78.34%
Standard Deviation (Raw)	5.74%	6.89%	6.85%
Mean score (Adjusted)	77.51%	73.16%	74.42%
Standard Deviation (Adjusted)	6.89%	5.74%	6.89%
Alpha	0.88	0.9	0.9
Standard Error (Raw)	1.97%	2.19%	2.17%
Standard Error (Adjusted)	2.36%	1.82%	2.19%
Passing Score (Raw)	72.50%	68.12%	68.49%
Passing Score (Adjusted)	64.50%	64.50%	64.50%
Source Exam	WMarch2008	WMarch2012	WMarch2013
Adjustment	Equated/Rescaled	Equated/Rescaled	Equated/Rescaled
Alpha (Adjusted)	-22.5642	7.7351	-4.4283
Beta (Adjusted)	1.2009	0.8334	1.0064
R	0.8183	0.9105	0.9006
R-Squared	0.6696	0.8291	0.8111
Decision Consistency	96.50%	93.80%	93.80%

NOTE: Adjusted Score = Beta (Adjusted) x Raw Score + Alpha (Adjusted)



Outcomes Summary for the OSCE

Introduction

This report provides summary information on the structure of selected exams, as well as statistical summaries at the item and test levels. The yearly results are based on the March administration only since May and November administrations use instruments from other years.

Examination Results

Table of Examination Items By Category

RootCategory	OMarch2012	OMarch2013	OMarch2014
Dental Anatomy/Occlusion/Operative	21	18	21
Endodontics/Dental Emergencies	14	14	12
Multi-Disciplinary			2
Oral Medicine/Oral Pathology/Oral Facial Pain	18	17	13
Oral Surgery/Trauma	2	3	3
Orthodontics/Pediatric Dentistry	15	16	14
Periodontics	5	8	8
Pharmacology/Therapeutics/Local Anesthesia	13	13	13
Prosthodontics/Implants	4	4	4
Miscellaneous**	12	13	14
Total Scored	104	106	104
Rejected	3	1	3
Total	107	107	107

**Miscellaneous: "Abuse and Neglect", "Anxious Patient", "Ethics and Jurisprudence", "Geriatric Dentistry", "Infection Control", "Informed Consent", "Needs Conversion", "Occupational Hazards", "Prevention", "Radiology", "Records", "Relationship of general/oral health", "Scientific Literature", "Special Needs Patient"



Table of Item Difficulties

Difficulty	OMarch2012	OMarch2013	OMarch2014
Easy (.90+)	32	20	19
Medium (.40 to .89)	67	82	79
Difficult (0 to .39)	5	4	6
Total	104	106	104

Table of Item Discriminations

Item Test Correlation	OMarch2012	OMarch2013	OMarch2014
High (.26+)	16	24	22
Medium (.10 to .25)	74	72	77
Low (0 to .09)	14	10	5
Total	104	106	104



Test Level Results for the Examination

	OMarch2012	OMarch2013	OMarch2014
Number Of Candidates	654	675	795
Number Of 1st Try Candidates	653	669	783
Number Of 2nd Try Candidates	1	6	10
Number Of 3rd Try Candidates			2
Number Of Scored Items	104	106	104
Number of Passes	651	667	788
Percent Pass	99.50%	98.80%	99.10%
Number of 1st Try Passes	650	661	778
1st Try Percent Pass	99.54%	98.80%	99.36%
Number of 2nd Try Passes			8
2nd Try Percent Pass			80.00%
Number of 3rd Try Passes			
3rd Try Percent Pass			
Mean Score (Raw)	76.39%	76.38%	73.82%
Standard Deviation (Raw)	6.31%	7.42%	7.51%
Mean score (Adjusted)	87.25%	87.38%	86.38%
Standard Deviation (Adjusted)	7.94%	7.94%	7.42%
Alpha	0.71	0.78	0.78
Standard Error (Raw)	3.39%	3.50%	3.55%
Standard Error (Adjusted)	4.26%	3.74%	3.50%
Passing Score (Raw)	58.29%	55.01%	51.68%
Passing Score (Adjusted)	64.50%	64.50%	64.50%
Source Exam	OMarch2011	OMarch2011	OMarch2013
Adjustment	Equated/Rescaled	Equated/Rescaled	Equated/Rescaled
Alpha (Adjusted)	-8.7994	5.5929	13.4402
Beta (Adjusted)	1.2574	1.0708	0.9881
R	0.6817	0.7863	0.8501
R-Squared	0.4647	0.6182	0.7227
Decision Consistency	96.50%	96.50%	96.50%

NOTE: Adjusted Score = Beta (Adjusted) x Raw Score + Alpha (Adjusted)



Outcomes Summary for the Assessments of Fundamental Knowledge (AFK)

Introduction

This report provides summary information on the structure of selected assessments, as well as statistical summaries at the item and test levels. Assessments prefixed with "AFK" are associated with the "Assessment of Fundamental Knowledge" and those prefixed with "ACJ" represent the "Assessment of Clinical Judgment"

Assessment Results

Table of Assessment Items By Category

RootCategory	AFKFeb2012	AFKFeb2013	AFKFeb2014
Dental Anatomy/Occlusion/Operative	35	35	36
Endodontics/Dental Emergencies	27	24	22
Foundation Science	80	75	68
Multi-Disciplinary	1		1
Oral Medicine/Pathology/Oral Facial Pain	18	14	14
Oral Surgery/Trauma	16	19	19
Orthodontics/Pediatrics	35	34	33
Periodontics	18	18	18
Pharmacology/Therapeutics/Local Anesthesia	25	31	44
Prosthodontics/Implants	22	23	15
Miscellaneous**	17	16	24
Total Scored	294	289	294
Rejected	6	11	6
Total	300	300	300

**Miscellaneous: "Abuse and Neglect", "Anxious Patient", "Ethics and Jurisprudence", "Geriatrics", "Infection Control", "Informed Consent", "Needs Conversion", "Occupational Hazards", "Prevention", "Radiology", "Records", "Relationship general/oral health", "Scientific Literature", "Special Needs"



Table of Item Difficulties

Difficulty	AFKFeb2012	AFKFeb2013	AFKFeb2014
Easy (.90+)	19	17	17
Medium (.40 to .89)	249	251	250
Difficult (0 to .39)	26	21	27
Total	294	289	294

Table of Item Discriminations

Item Test Correlation	AFKFeb2012	AFKFeb2013	AFKFeb2014
High (.26+)	176	179	178
Medium (.10 to .25)	91	80	98
Low (0 to .09)	27	30	18
Total	294	289	294



Test Level Results for the Assessment

	AFKFeb2012	AFKFeb2013	AFKFeb2014
Number Of Participants	1125	1187	1277
Number Of 1st Try Participants	866	753	872
Number Of 2nd Try Participants	257	370	316
Number Of 3rd Try Participants	2	64	89
Number Of Scored Items	294	289	294
Number of Passes	403	499	619
Percent Pass	35.80%	42.00%	48.50%
Number of 1st Try Passes	301	288	394
1st Try Percent Pass	34.76%	38.25%	45.18%
Number of 2nd Try Passes	102	177	167
2nd Try Percent Pass	39.69%	47.84%	52.85%
Number of 3rd Try Passes	0	34	58
3rd Try Percent Pass		53.13%	65.17%
Mean Score (Raw)	66.65%	66.89%	66.79%
Standard Deviation (Raw)	12.15%	12.31%	12.34%
Mean score (Adjusted)	68.00%	69.18%	72.38%
Standard Deviation (Adjusted)	13.58%	13.20%	12.31%
Alpha	0.96	0.96	0.96
Standard Error (Raw)	2.46%	2.49%	2.44%
Standard Error (Adjusted)	2.75%	2.67%	2.43%
Passing Score (Raw)	72.46%	71.86%	68.92%
Passing Score (Adjusted)	74.50%	74.50%	74.50%
Source Exam	ODQApril2008	ODQApril2008	AFKFeb2013
Adjustment	Equated	Equated	Equated/Rescaled
Alpha (Adjusted)	-6.5286	-2.5665	5.7471
Beta (Adjusted)	1.1182	1.0725	0.9975
R	0.928	0.9201	0.9605
R-Squared	0.8612	0.8465	0.9225
Decision Consistency	87.20%	86.80%	86.60%

NOTE: Adjusted Score = Beta (Adjusted) x Raw Score + Alpha (Adjusted)



Outcomes Summary for the Assessment of Clinical Judgment (ACJ)

Introduction

This report provides summary information on the structure of selected assessments, as well as statistical summaries at the item and test levels. Assessments prefixed with "AFK" are associated with the "Assessment of Fundamental Knowledge" and those prefixed with "ACJ" represent the "Assessment of Clinical Judgment"

Assessment Results

Table of Assessment Items By Category

RootCategory	ACJJune2012	ACJJune2013	ACJJune2014
Endodontics/Dental Emergencies	14	9	13
Multi-Disciplinary	34	48	42
Oral Medicine/Pathology/Oral Facial Pain	6	3	6
Oral Surgery/Trauma	2		1
Orthodontics/Pediatrics	5	7	6
Periodontics	8	6	8
Pharmacology/Therapeutics/Local Anesthesia	11	6	10
Miscellaneous**	38	33	34
Total Scored	118	112	120
Rejected	2	8	
Total	120	120	120

**Miscellaneous: "Abuse and Neglect", "Anxious Patient", "Ethics and Jurisprudence", "Geriatric", "Infection Control", "Informed Consent", "Needs Conversion", "Occupational Hazards", "Prevention", "Radiology", "Records", "Relationship general/oral health", "Scientific Literature", "Special Needs"



Table of Item Difficulties

Difficulty	ACJJune2012	ACJJune2013	ACJJune2014
Easy (.90+)	9	5	9
Medium (.40 to .89)	100	101	106
Difficult (0 to .39)	9	6	5
Total	118	112	120

Table of Item Discriminations

Item Test Correlation	ACJJune2012	ACJJune2013	ACJJune2014
High (.26+)	19	25	26
Medium (.10 to .25)	77	69	80
Low (0 to .09)	22	18	14
Total	118	112	120



Test Level Results for the Assessment

	ACJJune2012	ACJJune2013	ACJJune2014
Number Of Participants	373	493	654
Number Of 1st Try Participants	294	398	502
Number Of 2nd Try Participants	79	87	129
Number Of 3rd Try Participants		8	23
Number Of Scored Items	118	112	120
Number of Passes	242	292	460
Percent Pass	64.90%	59.20%	70.30%
Number of 1st Try Passes	179	234	355
1st Try Percent Pass	60.88%	58.79%	70.72%
Number of 2nd Try Passes	63	52	88
2nd Try Percent Pass	79.75%	59.77%	68.22%
Number of 3rd Try Passes		6	17
3rd Try Percent Pass		75.00%	73.91%
Mean Score (Raw)	67.88%	67.71%	69.27%
Standard Deviation (Raw)	6.71%	7.46%	7.31%
Mean score (Adjusted)	67.10%	65.71%	68.10%
Standard Deviation (Adjusted)	7.73%	7.73%	7.73%
Alpha	0.75	0.78	0.78
Standard Error (Raw)	3.39%	3.53%	3.39%
Standard Error (Adjusted)	3.90%	3.66%	3.59%
Passing Score (Raw)	65.63%	66.55%	65.87%
Passing Score (Adjusted)	64.50%	64.50%	64.50%
Source Exam	CJJune2011	CJJune2011	ACJJune2011
Adjustment	Equated/Rescaled	Equated/Rescaled	Equated/Rescaled
Alpha (Adjusted)	-11.1269	-4.502	-5.2046
Beta (Adjusted)	1.1524	1.0368	1.0582
R	0.9133	0.8664	0.8407
R-Squared	0.8342	0.7506	0.7068
Decision Consistency	63.90%	77.40%	85.00%

NOTE: Adjusted Score = Beta (Adjusted) x Raw Score + Alpha (Adjusted)



Glossary

AADE	American Association of Dental Examinations
ACFD	Association of Canadian Faculties of Dentistry
ADA	American Dental Association
ADAC	American Dental Association Commission on Dental Accreditation
ADC	Australian Dental Council
AERA	American Educational Research Association
APA	American Psychological Association
CDA	Canadian Dental Association
CDAC	Commission on Dental Accreditation of Canada
CDRAF	Canadian Dental Regulatory Authorities Federation
DRA	Provincial Dental Regulatory Authorities
NCME	National Council on Measurement in Education
NDEB	National Dental Examining Board of Canada
ODQ	Ordre des dentistes du Québec
RCDC	Royal College of Dentists of Canada



Appendix A – Summary of the Act relating to The National Dental Examining Board of Canada originally established in 1952 and revised in 1973.

Preamble to 1952 Act

Whereas the persons hereinafter named have by their petition prayed that it be enacted as hereinafter set forth and it is expedient to grant the prayer of the petition: Therefore Her Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows :

Preamble to 1973 Revision

Whereas The National Dental Examining Board of Canada, hereinafter called "the Board", has by its petition prayed that it be enacted as hereinafter set forth, and it is expedient to grant the prayer of the petition: Therefore Her Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:

1973 Section 1: Name in French

The Board may use, in the transaction of its business, either the name The National Dental Examining Board of Canada or the name Le Bureau national d'examen dentaire du Canada, or both of such names as and when it so elects. It may sue or be sued in either or both of such names, and any transaction, contract or obligation entered into or incurred by the Board in either or both of the said names shall be valid and binding on the Board.

1973 Section 2: Existing rights saved

Nothing contained in section 1 shall in any way alter or affect the rights or liabilities of the Board, except as therein expressly provided, or in any way affect any proceeding or judgment now pending, either by or in favour of or against the Board, which, notwithstanding the provisions of section 1, may be prosecuted, continued, completed and enforced as if this Act had not been passed.

Incorporation and Composition (in the 1952 Act)

1. Harold M. Cline, doctor of dental surgery, of the city of Vancouver in the province of British Columbia, Gustave Ratte, doctor of dental surgery, of the city of Quebec in the province of Quebec, and Don W. Gullett, doctor of dental surgery, of the city of Toronto, in the province of Ontario, together with such persons as may hereafter become members of the Board as hereinafter provided, are incorporated under the name of "The National Dental Examining Board of Canada", hereinafter called "the Board".



2. The persons named in section one of this Act shall be provisional members of the Board with power to organize the Board as in this Act provided.
3. The head office of the Board shall be at the city of Toronto, in the province of Ontario, or at such other place as the Board may determine by by-law from time to time.

4. (1) The Board shall be composed of

- a. one member appointed as its representative by the appropriate licensing body of each province in Canada;

and

- b. (b) two members appointed by the Council on Dental Education of the Canadian Dental Association.

(2) The term of office for each member of the Board shall be three years, except in respect of the members appointed to constitute the first Board.

(3) The term of office for one-half of the members of the first Board shall be two years and for the other one-half shall be four years; the members constituting each such one-half shall be chosen by lot in such manner as the Board may determine.

(4) A member of the Board on the expiration of his term of office, if properly qualified, shall be eligible for reappointment.

(5) If the appropriate licensing body of any province fails to appoint a member of the Board within a reasonable time a vacancy occurs, the Secretary of the Board shall notify such licensing body and require such licensing body to make such appointment and certify the result to the Board within one month of the date of service of the notice.

(6) All members of the Board shall continue in office until their successors are appointed or until expiration of their term of office if their successors are appointed before the expiration of such term of office.

5. (1) The appropriate licensing body of any province may at any time upon twelve month's notice to the Board, withdraw from participation in and recognition of the activities of the Board, and such licensing body shall not thereafter, so long as such withdrawal continues, be entitled to appoint any representative to the Board.

(2) The Board may upon the application of any licensing body which has so withdrawn, restore the participation and representation of such licensing body.



Purposes of the Board (revised by 1973 Act)

6. The purposes of the Board shall be
 - (a) to establish qualifying conditions for a single national standard certificate of qualification for general practitioner dentists;
 - (b) to establish qualifying conditions for national standard certificates of qualification for dental specialists subject to the approval of The Royal College of Dentists of Canada;
 - (c) to ensure that the rules and regulations governing examinations will be acceptable to all participating licensing bodies and provide for the conducting of examinations in a manner fair and equitable for all concerned; and
 - (d) to promote enactment, with the consent and at the instance of the provincial licensing bodies, of provincial legislation necessary or desirable to supplement the provisions of this Act."

Powers of the Board (revised by 1973 Act)

7. The Board shall have power to
 - (a) establish qualifications for general practitioner dentists to ensure that the qualifications may be recognized by the appropriate licensing bodies in all provinces of Canada;
 - (b) establish, subject to the approval of the Royal College of Dentists of Canada, qualifications for dental specialists, to ensure that, in each case the qualifications may be recognized by the appropriate licensing bodies in all provinces of Canada;
 - (c) establish the conditions under which a general practitioner dentist may obtain and hold a certificate of qualification;
 - (d) establish subject to the approval of The Royal College of Dentists of Canada, the conditions under which a dental specialist may obtain and hold a certificate of qualification;
 - (e) prescribe compulsory examinations as evidence of qualifications for registration, subject to the rights of The Royal College of Dentists of Canada as hereinafter set forth;
 - (f) establish and maintain a body of examiners to hold examinations and to recommend the granting of certificates of qualification to general practitioner dentists;
 - (g) establish and maintain a body of examiners appointed by The Royal College of Dentists of Canada to hold examinations and make recommendations concerning the granting of certificates of qualification of properly trained dental specialists;
 - (h) issue certificates of qualification to general practitioner dentists and dental specialists in accordance with the recommendation of the examiners;
 - (i) establish a register for Canada of general practitioner dentists and dental specialists who have been granted certificates of qualification by the Board;



(j) delete from the register the name of any person whose provincial registration has been cancelled or suspended and to restore such name to the register if and when such cancellation or suspension is reversed, or the period of suspension is terminated; and (k) publish and revise the register from time to time."

Bylaws (1952 Act)

8. (1) The Board may make such by-laws and regulations, not contrary to law or the provisions of this Act, as it may deem necessary or advisable for
 - (a) the government and management of its business and affairs;
 - (b) the selection and election or appointment and remuneration of officers and employees and prescription of their respective powers and duties;
 - (c) the imposition and collection of dues or fees; and
 - (d) the carrying into effect of the purposes of the Board and its powers under this Act.

- (2) The Board may, from time to time alter or repeal all or any of such by-laws or regulations as it may see fit.

- (3) No such by-law or regulation shall be enacted, altered or repealed except with the concurrence of two-thirds of the representatives on the Board of the provincial licensing bodies then represented on the Board.

Property (1952 Act)

9. The Board may acquire, own, hold, deal with and dispose of, subject to the provisions of applicable provincial laws, any real and personal estate and property rights and privileges necessary or expedient for the purposes of the Board.

Ability to borrow money (1952 Act)

10. The Board shall have power to
 - (a) borrow money on the credit of the Board when required for the purposes of the Board and to give security for any sum or sums of money so borrowed;and
 - (b) draw, make, accept and endorse all bills of exchange and promissory notes necessary for the purposes of the Board under the hands of such officers as may be designated by the by-laws and in no case shall it be necessary that the seal of the Board be affixed thereto nor shall the signing officers be individually responsible therefore, provided that nothing herein shall be construed to



authorize the Board to issue notes or bills of exchange payable to bearer or intended to be circulated as money or as notes or bills of a bank.

Certificate of Qualification for Specialists (revised 1973 Act)

"11. (1) The Board shall issue its certificate of qualification to all Fellows of The Royal College of Dentists of Canada who are dental specialists, and whose specialties are recognized by the Canadian Dental Association and who make application for such a certificate within five years from the date on which this Act comes into force.

(2) In the event of the dissolution of The Royal College of Dentists of Canada, all powers conferred upon it herein shall become vested in The National Dental Examining Board. Any reference in this Act to The Royal College of Dentists of Canada or The National Dental Examining Board shall include their successors or assigns."



Appendix B – Competencies for a Beginning Dental Practitioner in Canada

A competent beginning dental practitioner in Canada must be able to provide oral health care for the benefit of individual patients and communities in a culturally sensitive manner.

Competency assumes that all behaviours are supported by foundation knowledge and skills in biomedical, behavioural and clinical dental science and by professional behaviour. Beginning dental practitioners in Canada must be able to apply foundation knowledge and skills to justify their decisions and actions and to evaluate outcomes. Therefore, foundation knowledge, skills and professional behaviour are understood to be a part of every competency.

Competency also assumes that all behaviours are performed to an acceptable level and that the practitioner can evaluate their quality and effectiveness. Competency cannot be achieved without the ability to self-evaluate. Moreover, there are no degrees of competence: a dentist is either competent or not competent. The competencies below refer to general dental practice and include the management of patients of all ages including those with special needs. It is assumed that all oral health care is provided in an ethical manner, in accordance with legal requirements at the national and provincial level.

A beginning dental practitioner in Canada must be competent to:

1. recognize the determinants of oral health in individuals and populations and the role of dentists in health promotion, including the disadvantaged.
2. recognize the relationship between general health and oral health.
3. evaluate the scientific literature and justify management recommendations based on the level of evidence available.
4. communicate effectively with patients, parents or guardians, staff, peers, other health professionals and the public.
5. identify the patient's chief complaint/concern and obtain the associated history.
6. obtain and interpret a medical, dental and psychosocial history, including a review of systems as necessary, and evaluate physical or psychosocial conditions that may affect dental management.
7. maintain accurate and complete patient records in a confidential manner.
8. prevent the transmission of infectious diseases by following current infection control guidelines.
9. perform a clinical examination.
10. differentiate between normal and abnormal hard and soft tissues of the maxillofacial complex.
11. prescribe and obtain the required diagnostic tests, considering their risks and benefits.
12. perform a radiographic examination.
13. interpret the findings from a patient's history, clinical examination, radiographic examination and from other diagnostic tests and procedures.
14. recognize and manage the anxious or fearful dental patient.



15. recognize signs of abuse and/or neglect and make appropriate reports.
16. assess patient risk (including, but not limited to, diet and tobacco use) for oral disease or injuries.
17. develop a problem list and establish diagnoses.
18. determine the level of expertise required for treatment and formulate a written request for consultation and/or referral when appropriate.
19. develop treatment options based on the evaluation of all relevant data.
20. discuss the findings, diagnoses, etiology, risks, benefits and prognoses of the treatment options, with a view to patient participation in oral health management.
21. develop an appropriate comprehensive, prioritized and sequenced treatment plan.
22. present and discuss the sequence of treatment, estimated fees, payment arrangements, time requirements and the patient's responsibilities for treatment.
23. obtain informed consent including the patient's written acceptance of the treatment plan and any modifications.
24. modify the treatment plan as required during the course of treatment.
25. provide education regarding the risks and prevention of oral disease and injury to encourage the adoption of healthy behaviors.
26. provide therapies for the prevention of oral disease and injury.
27. recognize and institute procedures to minimize occupational hazards related to the practice of dentistry.
28. achieve local anesthesia for dental procedures and manage related complications.
29. determine the indications and contraindications for the use of drugs used in dental practice, their dosages and routes of administration and write prescriptions for drugs used in dentistry.
30. manage dental emergencies.
31. recognize and manage systemic emergencies which may occur in dental practice.
32. manage conditions and diseases of the periodontium, provide periodontal treatment when indicated and monitor treatment outcomes.
33. assess the risk, extent and activity of caries and recommend appropriate non-surgical and surgical therapy.
34. manage dental caries, tooth defects and esthetic problems and, when restoration is warranted, use techniques that conserve tooth structure and preserve pulp vitality to restore form and function.
35. manage patients with orofacial pain and/or dysfunction.
36. manage surgical procedures related to oral soft and hard tissues and their complications
37. manage trauma to the orofacial complex.
38. manage conditions and pathology of the pulp and provide endodontic treatment when indicated.
39. manage abnormalities of orofacial growth and development and treat minor orthodontic problems.
40. recognize and manage functional and non-functional occlusion.
41. select and, where indicated, prescribe appropriate biomaterials for patient treatment.



42. manage partially and completely edentulous patients with prosthodontic needs including the provision of fixed, removable and implant prostheses.
43. make records required for use in the laboratory fabrication of dental prostheses and appliances.
44. design a dental prosthesis or appliance, write a laboratory prescription and evaluate laboratory products.
45. apply accepted principles of ethics and jurisprudence to maintain standards and advance knowledge and skills.
46. apply basic principles of practice administration, financial and personnel management to a dental practice.
47. demonstrate professional behaviour that is ethical, supercedes self-interest, strives for excellence, is committed to continued professional development and is accountable to individual patients, society and the profession.

Definition

To “manage” the oral health care needs of a patient is assumed to include all actions performed by a health care provider that are designed to alter the course of a patient’s condition. Such actions may include providing education, advice, treatment by the dentist, treatment by the dentist after consultation with another health care professional, referral of a patient to another health care professional, monitoring treatment provided, but also may include providing no treatment or observation. “Manage” assumes the use of the least invasive therapy necessary to gain a successful outcome in accordance with patient wishes



Appendix C – External Evaluation Procedures

A Report by the Commissioner of Examinations. Malcolm G. Taylor, Ph.D.-1966

A Study of the Accreditation Mechanism - 1983

Workshop on Preclinical and Clinical Examinations - 1985

1989/90 Certification Review Committee (CRC) to explore whether the granting of a certificate on the basis of accreditation alone continues to be acceptable

A Report of NDEB by-laws and policies by the Honourable W.D. Parker - 1990

A psychometric analysis of examination evaluation methods by Dr. A. Rothman - 1991

Symposium - 1992

A Workshop on Clinical Competencies - 1993

A Consensus Conference on Certification of Graduates of Dental Programs accredited by the ADA Commission of Dental Accreditation - 1995

Conference on Competency in Oral Health Care, Education & Practice – 2000

NDEB Program Evaluation – André Boulais – 2001

Strategic Plan for 2006 – 2010

Review and Validation of Statistical Procedures – Mr. Thomas Maguire – 2004

CDA/DCF Teaching Conference: Review of Competencies for a Beginning Dental Practitioner in Canada - 2004

Written Examination Standard Setting Study - Chad W. Buckendahl – July 2007

OSCE Examination Standard Setting Study - Chad W. Buckendahl – February 2008

Evaluating the impact of releasing the item pool of NDEB's written examination – Chad W. Buckendahl, Scott Russell, Myisha Stokes, Kristina Hallowell – May 2014



Appendix D – Publications

Chambers DW, Gerrow JD. Manual for Developing and Formatting Competency Statements. *J Dent Educ*, 58(5): 361, May 1994.

Gerrow JD, Boyd MB, Doyle MG, Scott D. Clinical Evaluation in Prosthodontics: Practical Methods to Improve Validity and Reliability, *J Prosthet Dent* 75(6):675, June 1996.

Boyd MA, Gerrow JD, Chambers DW, Henderson BJ. Competencies for Dental Licensure in Canada. *J Dent Educ*, 60(10):842, October 1996.

Boyd MA, Gerrow JD. Certification of Competence: A National Standard for Dentistry in Canada. *J Can Dent Assoc*, 62(12):928, December 1996.

Gerrow JD, Boyd MA, Duquette P, Bentley KA. Results of the National Dental Examining Board of Canada's Written Examination and Implications for Licensure. *J Dent Educ* 6 (12): 921, December 1997.

Gerrow JD, Chambers DW, Henderson BJ, Boyd MA. Competencies for a Beginning Dental Practitioner in Canada. *J Can Dent Assoc*, 64(2):94, February 1998.

Gerrow JD, Boyd MA, Donaldson D, Watson PA, Henderson BJ. Modifications to the National Dental Examining Board of Canada's Certification Process. *J Can Dent Assoc*, 64(2):98, February 1998.

Gerrow JD, Boyd MB, Scott D, Boulais AP. Use of Discriminant and Regression Analysis to Improve Certification Board Examinations. *J Dent Educ*, 63(6):459, June 1999.

Gerrow JD, Boyd MA, Scott D. Portability of licensure in Canada based on accreditation and certification. *J Am Coll Dent*, 70(1): 8, May 2003.

Gerrow JD, Murphy HJ, Boyd MA, Scott D. Concurrent validity of written and OSCE components of the Canadian dental certification examinations. *J Dent Educ*, 67(8): 896, August 2003.

Gerrow JD, Murphy HJ, Boyd MA, Scott D. An Analysis of the Contribution of a Patient-Based Component to a Clinical Licensure Examination. *JADA* 137:1434, October 2006.

Gerrow JD, Murphy HJ, Boyd MA. A Validity Survey of Competencies for the Beginning Dental Practitioner in Canada. *J Dent Educ* 70(10):1076, October 2006.

Gerrow JD, Murphy HJ, Boyd MA. Review and Revision of the Competencies for a Beginning Dental Practitioner in Canada. *J Can Dent Assoc* 73(2):157, 2007.

Chad W. Buckendahl, Ferdous, A., Gerrow, J. Recommending cut scores with a subset of items: An empirical illustration. *Practical Assessment Research & Evaluation* V15: 6, 2010.



Susan L. Davis-Becker, Buckendahl, C.W., Gerrow, J. Evaluating the Bookmark Standard Setting Method: The Impact of Random Ordering. *International Journal of Testing*, 11:24-37, 2011

Chad W. Buckendahl, Smith, R.W., Gerrow, J. Evaluating the impact of releasing an item bank on a test's empirical characteristics

Abstracts and Minor Publications

Gerrow JD, Boyd MA, Duquette P. The Development and Implementation Process for a New National Certification Examination in Canada. *J Dent Educ* 61(2):185, Abstract #9, February 1997

Boyd, MA, Gerrow JD. An Analysis of the 1994 to 1996 Results of the National Dental Examining Board of Canada Written Examination. *J Dent Res* 76 (Special Issue): 43, Abstract #239, March 1997

Gerrow JD, Boyd MB, Scott D, Boulais AP. Use of Discriminant and Regression Analysis to Improve Certification Board Examinations *J Dent Educ*, 62(1):110, Abstract #106, January 1998

Murphy J, Gerrow JD, Boyd MA, Scott D. Validity Evidence for the Canadian National Dental Examining Board (NDEB) Examinations. *J Dent Educ* 66(2):319, February 2002

Boyd MA, Gerrow JD, Duquette P. Rethinking the OSCE as a Tool for National Competency Evaluation. Proceedings Association of Dental Educators of Europe, Annual Meeting, Dresden, Germany, September 2003

Boyd MA, Gerrow JD, Haas DA, Loney RW. National Dental Certification in Canada: An "improved" OSCE format. *J Dent Educ* 68(2): 229, Abstract #73, February 2004

Ferdous, A., Smith, R., Gerrow, J. Considerations for using subsets of items for standard setting. Paper presented at the annual meeting of the National Council on Measurement in Education. New York, NY, March 2008

Buckendahl, C., Ferdous, A., Gerrow, J. Setting cut scores with a subset of items: An empirical illustration. Paper presented at the annual meeting of the National Council on Measurement in Education. New York, NY, March 2008

Davis, S., Buckendahl, C., & Gerrow, J. (Comparing the Angoff and Bookmark methods for an international licensure examination. Paper presented at the annual meeting of the National Council on Measurement in Education. New York, NY, March, 2008



**State of Wisconsin
Department of Safety & Professional Services**

AGENDA REQUEST FORM

1) Name and Title of Person Submitting the Request: Brittany Lewin Executive Director		2) Date When Request Submitted: Items will be considered late if submitted after 12:00 p.m. on the deadline date which is 8 business days before the meeting	
3) Name of Board, Committee, Council, Sections: Dentistry Examining Board			
4) Meeting Date: 03/02/16	5) Attachments: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6) How should the item be titled on the agenda page? CRDTS Report	
7) Place Item in: <input checked="" type="checkbox"/> Open Session <input type="checkbox"/> Closed Session	8) Is an appearance before the Board being scheduled? <input checked="" type="checkbox"/> Yes (Fill out Board Appearance Request) <input type="checkbox"/> No	9) Name of Case Advisor(s), if required: N/A	
10) Describe the issue and action that should be addressed: Eileen Donohoo will provide a report from the recent CRDTS Steering Committee meeting. Dr. Beth Welter also attended. The Board may consider a motion to authorize Eileen Donohoo to serve on the CRDTS Hygiene Exam Review Committee. Any board member may provide additional CRDTS information.			
11) Authorization			
Signature of person making this request		Date	
Supervisor (if required)		Date	
Executive Director signature (indicates approval to add post agenda deadline item to agenda) Date			
Directions for including supporting documents: 1. This form should be attached to any documents submitted to the agenda. 2. Post Agenda Deadline items must be authorized by a Supervisor and the Policy Development Executive Director. 3. If necessary, provide original documents needing Board Chairperson signature to the Bureau Assistant prior to the start of a meeting.			

**State of Wisconsin
Department of Safety & Professional Services**

AGENDA REQUEST FORM

1) Name and Title of Person Submitting the Request: Brittany Lewin Executive Director		2) Date When Request Submitted: Items will be considered late if submitted after 12:00 p.m. on the deadline date which is 8 business days before the meeting	
3) Name of Board, Committee, Council, Sections: Dentistry Examining Board			
4) Meeting Date: 03/02/16	5) Attachments: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6) How should the item be titled on the agenda page? CRDTS Steering Committee	
7) Place Item in: <input checked="" type="checkbox"/> Open Session <input type="checkbox"/> Closed Session	8) Is an appearance before the Board being scheduled? <input type="checkbox"/> Yes (Fill out Board Appearance Request) <input checked="" type="checkbox"/> No	9) Name of Case Advisor(s), if required: N/A	
10) Describe the issue and action that should be addressed: The Board may consider a motion to authorize Dr. Beth Welter to serve on the CRDTS Steering Committee.			
11) Authorization			
Signature of person making this request			Date
Supervisor (if required)			Date
Executive Director signature (indicates approval to add post agenda deadline item to agenda)			Date
Directions for including supporting documents: 1. This form should be attached to any documents submitted to the agenda. 2. Post Agenda Deadline items must be authorized by a Supervisor and the Policy Development Executive Director. 3. If necessary, provide original documents needing Board Chairperson signature to the Bureau Assistant prior to the start of a meeting.			