

DENTAL EDUCATION



Competencies For a Beginning Dental Practitioner In Canada

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Background

Canada's 10 provincial licensing authorities recently requested extensive changes in the process used to certify the graduates of accredited faculties of dentistry in Canada. In response, the National Dental Examining Board of Canada (NDEB) began to formulate a new examination process, which involves a Written Examination and an Objective Structured Clinical Examination (OSCE). The Association of Canadian Faculties of Dentistry (ACFD), the Commission on Dental Accreditation of Canada (CDAC), and the Canadian Dental Association's Council on Education (CDA Council) were invited to participate in the development of the new examination process.

Following meetings of the NDEB/ACFD ad hoc advisory committee, it was agreed that the first step should be the identification of the competencies required for licensure as a general dentist in Canada. A national workshop was held to identify and develop these competencies. The 25 workshop participants included the 12 members of the advisory committee, the NDEB executive, and members of the NDEB Written and Clinical Examination committees, as well as representatives from the ACFD management committee,

the CDAC and the CDA Council. The names and affiliations of the attendees are listed in **Table I**.

Workshop participants, assisted by both the distributed resource material and facilitators, worked in small groups to develop the competency statements. Consistency in the format and level of the statements was ensured by the calibration of the working-group chairs, and by reviewing the statements at plenary sessions.¹ Participants approved the draft competency statements at the final plenary session, and charged a small group with editing the final document. The resulting draft document was reviewed by all participants, and circulated to a broad community of interested stakeholders for comment prior to its final revision and acceptance by NDEB.

This document was developed primarily to assist NDEB in developing the Written and OSCE Examinations. Competencies are therefore at a level that will guide the examination process, but not direct curriculum development in Canadian faculties of dentistry. The competencies were also distributed to ACFD's management committee, CDAC and the CDA Council for information. These organizations have further refined the competencies to make them more useful for the purposes of

curriculum planning and accreditation. "Competencies For a Beginning Dental Practitioner In Canada," is the first national consensus document on dental competency statements that has been developed and published.² It has been widely used as a resource document and reference by many national and international institutions and associations.

Definitions and Assumptions

1. Competence is behavior characterized by independent performance in realistic circumstances. The competencies identified in this document are required of all beginning dental practitioners in Canada. Higher levels of practice, including proficiency and mastery, may be attained with additional experience and education.
2. Competency assumes that all behaviors are supported by foundation knowledge and skills and by appropriate values. Foundation knowledge includes the biomedical, behavioral and clinical dental sciences. Beginning dental practitioners in Canada must be capable of applying foundation knowledge and skills and must be capable of using it to justify all of their decisions and actions. Therefore,

Table 1
ACFD/NDEB Workshop On Clinical Competencies In General Dental Practice

Attendees	
1.	Dr. David W. Chambers — guest speaker and workshop facilitator
2.	NDEB/ACFD Ad Hoc Advisory Committee
	Drs. J.D. Gerrow Dalhousie and workshop facilitator
	D. Donaldson UBC and ACFD
	P.D. Schuller Alberta
	R.W. Loney Saskatchewan
	R.C. Baker Manitoba and NDEB
	D.W. Banting UWO
	N. Levine Toronto
	P. Duquette Montreal
	K.C. Bentley McGill
	D. Robert Laval
	G. Albert ACFD
	G.S. Beagrie NDEB
3.	ACFD — Dr. H. Lyttle
4.	NDEB — Drs. A.F. LaBounty, R.G. Canning, R. Salois, D.A. Scott, P.A. Watson, B.L. Pedlar, L.H. Harder
5.	CDAC — Mr. B. Henderson, Dr. R.I. Brooke
6.	CDA Council On Education — Dr. G. Thompson

foundation knowledge and skills are understood to be a part of every competency.

- Competency assumes that all behaviors are performed to an acceptable level and that the practitioner can evaluate the quality and effectiveness of all behaviors performed.
- To "manage" the identified oral health needs of a patient means that the dentist may provide no treatment, observation, treatment by the dentist, treatment by the dentist following consultation with another health care professional, referral of a patient to another health care professional for management of identified oral health needs and monitoring any treatment provided. Treatment is assumed to include all actions (including preventive proce-

dures and instructions) by a health care provider that are designed to alter the course of a patient's condition. A dental practitioner must always provide oral health care for patients in an ethical manner in accordance with legal requirements as stipulated at the national and provincial level.

- For the purpose of this document, the word "appropriate," when used as a modifier, implies modification or adjustment according to the specific circumstances (e.g. medical, financial, biomechanical, psychological) of a patient.

A Global Competency For a Beginning Dental Practitioner In Canada²

A beginning dental practitioner in Canada must be able to provide effective and appropriate oral health care for all patients. Oral

health care includes examination, diagnosis, risk assessment, development of a treatment plan and/or treatment plan options, obtaining informed consent and management of the patient's oral health needs in an ethical manner in accordance with the legal requirements of the national and provincial jurisdictions. In addition, a general dentist must be able to justify the diagnosis, risk assessment and treatment plan based on the etiology, epidemiology and pathogenesis of the conditions and the biological rationale involved. A general dentist must be able to determine the prognosis and to evaluate the success of the management modalities utilized for individual patients.

Competencies For Beginning Dental Practitioners In Canada²

A beginning dental practitioner in Canada must be competent to:

- communicate effectively with patients, peers and the public with respect to ethical issues and standards of care;
- identify the chief complaint or reason for a patient's visit;
- make a general evaluation of a patient's appearance and attitude including the identification of any abnormal physical, emotional, or mental development;
- obtain and interpret a medical history, social history, review of systems and dental history;
- conduct an appropriate clinical and radiographic examination, and distinguish between normal and pathological hard and soft tissue abnormalities of the orofacial area;
- assess the risks of radiation exposure and the diagnostic benefits of radiographic procedures, and select appropriate radiographs required for a diagnosis, taking cognizance of patient concerns and informed decisions;

7. take and process periapical, bitewing, occlusal and panoramic radiographs;
8. prescribe clinical, laboratory and other diagnostic procedures and tests in consultation with other health care providers as may be required for the proper dental and medical management of the patient;
9. interpret the findings from a patient's history, clinical examination, radiographic examination and from other diagnostic tests and procedures in order to identify the etiology and pathogenesis of oral conditions and growth disorders;
10. establish a diagnosis and develop a problem list of conditions and disorders requiring management;
11. determine the influence of the pathologic physiology of a systemic disease on oral health and management;
12. recognize the limitations of dental treatment in a general practice setting and formulate a written request for a consultation or referral when appropriate;
13. maintain accurate and complete patient records in a confidential manner;
14. develop an appropriate comprehensive, prioritized and sequenced treatment plan based on the evaluation of all relevant diagnostic data;
15. discuss the findings, diagnosis and treatment options with a patient and inform the patient or guardian of potential modifications and the consequences that could occur during the course of treatment;
16. present to a patient the sequence of treatment, the estimated fees, the payment arrangements, time requirements and the patient's responsibilities for treatment;
17. modify treatment plans for the medically, mentally or physically compromised or challenged patient;
18. select and use appropriate barrier techniques to prevent the transmission of infectious diseases;
19. select and use sterilization and disinfection procedures to prevent the transmission of infectious diseases;
20. explain and demonstrate infection control procedures to staff and patients, and respond to questions related to infection control;
21. recognize and institute procedures to prevent occupational hazards related to the profession of dentistry;
22. achieve local anesthesia for dental procedures;
23. prevent, recognize and manage potential complications related to local anesthesia;
24. determine the indications and contraindications for the use of drugs, the drug dosages and routes of administration for drugs used in general practice, and write appropriate prescriptions for drugs used in general dental practice;
25. recognize the common signs, symptoms and etiologies of anxiety and apprehension in dental patients;
26. implement appropriate management of the anxious or apprehensive dental patient;
27. prevent and manage dental emergencies;
28. recognize and manage systemic emergencies related to dental treatment;
29. manage patients with acute and chronic orofacial pain or discomfort including the provision of treatment normally provided in general dental practice;
30. manage surgical procedures related to oral soft and hard tissues including the provision of treatment normally provided in general dental practice;
31. manage trauma to the dentofacial complex;
32. manage complications associated with oral surgical procedures normally provided in general dental practice;
33. treat early and moderate forms of periodontal diseases and manage advanced periodontal diseases and monitor the effectiveness of treatment;
34. restore single tooth defects and esthetic problems, including the selection of materials and techniques;
35. manage partially and completely edentulous patients, including providing fixed, removable or implant prostheses normally provided in general dental practice;
36. manage pulpal pathology of primary and permanent teeth including the provision of endodontic treatment normally provided in general dental practice;
37. assess the dietary intake and oral hygiene status of a patient, in order to promote oral health and evaluate the effectiveness of a patient's self-care;
38. assess the need for and provide appropriate preventive procedures including topical and systemic therapeutic agents and modalities as well as instruction in mechanical oral health methods;
39. manage growth and developmental abnormalities and treat dental abnormalities normally treated in general dental practice;
40. recognize signs of physical or emotional neglect and/or abuse (including but not limited to child, spouse or elder abuse) and make appropriate reports and follow up the outcomes;
41. determine malocclusion treatment objectives and identify the treatment required to obtain these objectives;
42. explain the benefits of removable and fixed appliances in

- orthodontic treatment to patients and guardians;
43. make acceptable casts and other records that are required for use in the laboratory fabrication of dental prostheses and appliances;
 44. design a dental prosthesis or appliance, write a laboratory work authorization, and evaluate laboratory products;
 45. determine the level of expertise required in the treatment of a patient and recognize the practitioner limitations so that the medical and dental well-being of the patient will not be compromised;
 46. obtain informed consent and obtain the patient's written acceptance of the treatment plan and any modifications;
 47. locate, read, understand and critically evaluate the published dental and related literature and apply such informa-

- tion when evaluating new materials and procedures;
48. discharge obligations incumbent upon every professional including personal contributions to and support for the profession's collective initiatives in self-regulation, maintenance of standards and advancement of professional knowledge and expertise;
 49. apply the basic principles of business administration, financial and personnel management to a dental practice. ■

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