

Review and Revision of the Competencies for a Beginning Dental Practitioner in Canada

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ABSTRACT

In 1994, the first dental competency document developed at a national level was adopted in Canada by all stakeholders. As a result of a recommendation made by the consensus workshop involved in the original process, a 10-year review and revision of the competencies for a beginning dental practitioner in Canada was undertaken and completed. As of November 2005, the revised competencies have been adopted by all stakeholders and are being used as a reference for curriculum management, program accreditation and the development of certification examinations.

MeSH Key Words: clinical competence; general practice, dental/education; licensure, dental

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In 1994, as a result of an initiative by the National Dental Examining Board of Canada (NDEB), a national consensus document specifying competencies for a beginning dental practitioner in Canada was adopted.¹ This Canadian undertaking resulted in the development and adoption of the first dental competency document developed at a national level.

The development and acceptance of the 46 competency statements has been particularly valuable for the stakeholder groups. The Canadian Dental Association Council on Education, which represented dental practitioners during the original development process, continues to act as a conduit between practitioners and other groups. The NDEB, which administers certification examinations for graduates of accredited programs in Canada and the United States to determine their eligibility for licensure in Canada, has cross-referenced its examinations against the

competency statements. This action has enabled the establishment of an examination blueprint that represents the breadth of the competencies that can be tested.

The Commission on Dental Accreditation in Canada (CDAC) referenced the competency document in their accreditation documents for their Requirements for a DDS/DMD Program. As part of an accreditation site survey, a dental program must provide evidence that the curriculum is competency-based. The program must also demonstrate where, when and how the competencies are taught and evaluated.

The majority of Canadian dental programs have adopted the 1994 competency statements. These programs have used the competencies to guide curriculum content and to provide evidence of curriculum outcomes. Some programs have also customized the competencies to reflect their individual curricula. This Canadian competency document has also

been used by international organizations and institutions as a resource for the development of their own competency statements.

In 2003, an organizing committee consisting of 1 representative from each of the 4 stakeholder groups (NDEB, Association of Canadian Faculties of Dentistry, CDAC and Canadian Dental Association) was formed to review and revise the competencies. Formation of this committee was based on the recommendation for periodic review and revision of competencies made by those involved in the original consensus workshop. The organizing committee established a consensus-workshop format to accomplish the revision and worked with the stakeholder organizations to identify appropriate participants. Participants were empowered to act on behalf of their stakeholder organizations.

The organizing committee engaged 2 facilitators and developed resource materials that were forwarded to participants in preparation for the workshop. The resources included the existing competency document, background information on competencies, examples of other dental competency documents and the results of a validity survey² of the existing 46 competencies.

This validity survey² asked 731 dentists to provide demographic information and rate the 46 competencies on a 5-point scale. The respondents were representative of a large sample of the dental community in Canada (the survey response rate was 43.1%). Although survey participants rated all the competencies as “important” to “most important,” some competencies were identified as having a lower level of importance to general dental practice in Canada.

During the workshop, participants reached consensus on a draft document and agreed on a procedure to finalize and approve the revised competencies. The resultant document (see **Appendix 1**, p. 159) reflects the

47 competencies currently deemed to be essential to the practice of general dentistry in Canada. As of November 2005, all stakeholder groups have formally adopted the document and are using it as a reference for curriculum management, program accreditation and development of certification examinations in Canada.

This process demonstrates the importance of ongoing review and revision of national competency statements. ♦

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Appendix 1 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 behaviours.
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 nonsurgical 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 nonfunctional 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. ➤