Commission on Dental Accreditation

At its Summer 2016 meeting, the Commission directed that the proposed revisions to Prosthodontics Standard 4 be distributed to the appropriate communities of interest for review and comment, with comment due June 1, 2017, for review at the Summer 2017 Commission meeting.

Written comments can be directed to baumannc@ada.org or mailed to:

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Proposed Revised Standards Additions are Underlined; Deletions are Stricken

Standard 4 of the Accreditation Standards for Advanced Specialty Education Programs in Prosthodontics
STANDARD 4 – CURRICULUM AND PROGRAM DURATION

The advanced specialty education program must be designed to provide special knowledge and skills beyond the D.D.S. or D.M.D. training and be oriented to the accepted standards of specialty practice as set forth in specific standards contained in this document.

Intent: The intent is to ensure that the didactic rigor and extent of clinical experience exceeds pre-doctoral, entry level dental training or continuing education requirements and the material and experience satisfies standards for the specialty.

Advanced specialty education programs must include instruction or learning experiences in evidence-based practice. Evidence-based dentistry is an approach to oral health care that requires the judicious integration of systematic assessments of clinically relevant scientific evidence, relating to the patient’s oral and medical condition and history, with the dentist’s clinical expertise and the patient’s treatment needs and preferences.

Examples of Evidence to demonstrate compliance may include:
- Formal instruction (a module/lecture materials or course syllabi) in evidence-based practice
- Didactic Program course syllabi, course content outlines, or lecture materials that integrate aspects of evidence-based practice
- Literature review seminar(s)
- Multidisciplinary Grand Rounds to illustrate evidence-based practice
- Projects/portfolios that include critical reviews of the literature using evidence-based practice principles (or “searching publication databases and appraisal of the evidence”)
- Assignments that include publication database searches and literature appraisal for best evidence to answer patient-focused clinical questions.

The level of specialty area instruction in certificate and degree-granting programs must be comparable.

Intent: The intent is to ensure that the students/residents of these programs receive the same educational requirements as set forth in these Standards.

Documentation of all program activities must be ensured by the program director and available for review.

If an institution and/or program enrolls part-time students/residents, the institution/program must have guidelines regarding enrollment of part-time students/residents. Part-time students/residents must start and complete the program within a single institution, except when the program is discontinued. The director of an accredited program who enrolls students/residents on a part-time basis must ensure that: (1) the educational experiences, including the clinical experiences and responsibilities, are the same as required by full-time students/residents; and (2) there are an equivalent number of months spent in the program.
PROGRAM DURATION

4-1  A postdoctoral program in prosthodontics must encompass a minimum of 34 months.

4-2  A postdoctoral program in prosthodontics that includes integrated maxillofacial training must encompass a minimum of 45 months.

4-3  A 12-month postdoctoral program in maxillofacial prosthetics must be preceded by successful completion of an accredited prosthodontics program.

CURRICULUM

4-4  Students/Residents must have the didactic/clinical background that supports successful completion of the prosthodontic specialty board examination and fosters life-long learning.

**Intent:** Program directors should promote prosthodontic board certification. It is expected that students/residents should continue their life-long professional development by employing the didactic and clinical knowledge acquired during the program.

4-5  Written goals and objectives, including course outlines for didactic courses, must be developed for all instruction included in this curriculum.

**Intent:** The curriculum should be designed to enable the student/resident to attain skills representative of a clinician competent in the theoretical and practical aspects at the specialty level of prosthodontics. Advanced level instruction may be provided through the following: formal courses, seminars, lectures, self-instructional modules, clinical assignments and laboratory.

4-6  Students/Residents must prepare and present diagnostic data, treatment plans and the results of patient treatment.

4-7  The amount of time devoted to didactic instruction and research must be at least 30% of the total educational experience.

4-8  A minimum of 60% of the total program time must be devoted to providing patient services, including direct patient care and laboratory procedures.

4-9  Time devoted to organized teaching experiences must not compromise the didactic and clinical goals and objectives of the overall program.

**Intent:** If time is devoted to teaching experiences for the student/resident, it should be evaluated in relation to the goals and objectives of the overall program and the benefit of the individual student/resident.

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DIDACTIC PROGRAM

4-10 Instruction **must** be provided at the in-depth level for the diagnosis of diseases affecting prosthodontic treatment, including caries risk assessment and intervention.

**Intent:** Students/Residents should receive instruction regarding diagnosis, etiology, pathogenesis and prevention of diseases that directly affect treatment outcomes. Risk assessment and prognosis should be included. It is expected that such foundational learning would be directly supportive of requisite clinical curriculum competencies.

4-11 Instruction **must** be provided at the in-depth level in each of the following areas as both separate entities and integrated treatment approaches used to address patient needs and expectations.

a. Fixed prosthodontics;
b. Removable prosthodontics;
c. Implants and implant therapy;
d. Occlusion;
e. Esthetics;
f. Biomaterials;
g. Digital technology
   g.h. Wound healing;
h. i. Surgical principles;
i. j. Infection Control;
j. k. Craniofacial anatomy and physiology related to prosthodontic therapy including dental implant placement;
k.l. Diagnostic Imaging, including three dimensional imaging related to prosthodontic therapy including dental implant placement; and
l. m. Prosthodontic diagnosis and treatment planning.

**Intent:** Students/Residents should receive in-depth didactic instruction that supports prosthodontic treatment outcomes. This should include digital dentistry as it relates to assessment and diagnosis for patients. Students/Residents should be able to plan, design, provide restorations, and replace missing teeth and the associated structures applying digital technologies. Didactic learning should directly support clinical decision making and requisite clinical curriculum competencies toward achieving patient esthetics and function. This includes foundational knowledge of surgical principles, procedures, and complications, as they relate to implant placement, as well as biomaterial properties including biocompatibility, biomechanics and biotechnology as they apply to prosthodontic treatment plans.

4-12 Instruction **must** be provided at the understanding level in each of the following biomedical areas:

a. Oral pathology;

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b. Applied pharmacology; and

c. Oral microbiology

4-13 Instruction **must** be provided at the understanding level in each of the following clinical areas:

a. Temporomandibular disorders and orofacial pain;

b. Evidence-based health care principles including identifying, appraising and applying available evidence;

c. **Emerging science and technology;**

d. Ethics and professionalism;

e. Preprosthetic surgery;

f. Geriatric considerations in prosthodontic care;

g. Maxillofacial prosthetics;

h. Medical emergencies;

i. Research methodology; and

j. Pain control and sedation.

4-14 Instruction **must** be provided at the understanding level in diagnostic and treatment planning aspects of other recognized dental specialties as they relate to referral, patient treatment and prosthodontic outcomes.

**Intent:** Students/Residents should receive instruction in diagnosis and treatment planning and as a member of interdisciplinary teams in order to develop, implement and assess treatment approaches that optimize therapeutic outcomes. Students/Residents should receive instruction in relating proposed treatments to survival, physiologic, psychological and economic outcomes. Instruction should be provided in risk assessment and prognosis prediction based upon considered treatment options and individual patient needs.

4-15 Students/Residents **must** receive didactic specialty instruction including but not limited to:

a. Craniofacial growth and development;

b. Biostatistics;

c. Intraoral photography;

d. Practice management;

e. Scientific writing;

f. Sleep disorders;

g. Teaching methodology including public speaking; and

h. Behavioral science.

**CLINICAL PROGRAM**

Prosthodontics is the dental specialty pertaining to the diagnosis, treatment planning, rehabilitation and maintenance of the oral function, comfort, appearance and health of patients with clinical conditions associated with missing or deficient teeth and/or oral and maxillofacial tissues using biocompatible substitutes (CDEL Approved 2003). At the specialty level, Prosthodontics embraces Prosthodontics Standards
its role as part of a therapy team. To support this definition and vision, programs will provide appropriate clinical experiences for students/residents to develop the following competencies:

4-16 **Students/Residents must** be competent at the prosthodontic specialty level in the treatment of clinical conditions associated with missing or deficient teeth and/or oral and maxillofacial tissues using biocompatible substitutes by achieving clinical competence in the following areas:

a. Patient assessment, including medical history, dental history, temporomandibular assessment, extraoral and intraoral examination, radiologic assessment and occlusal analysis;

b. Systemic, infectious and neoplastic disease screening, including patient education for prevention;

c. Diagnosis;

d. Risk assessment and prognosis;

e. Treatment planning;

f. Adjunct referral;

g. Patient Care;

h. Outcomes assessment; and

i. Maintenance.

**Intent:** Students/Residents should use advanced methods including existing and emerging technologies for diagnosis, treatment planning, referral, and prosthodontic treatment to optimize occlusion, masticatory function and esthetics.

4-17 **Students/Residents must** be competent in the application of principles related to caries risk assessment and intervention.

4-178 Students/Residents **must** be competent in managing and treating a wide scope of complex clinical conditions for edentulous, partially edentulous and dentate patients.

**Intent:** Students/Residents should manage and treat patients with clinical conditions at a level beyond experiences at the predoctoral dental education level. Students/Residents should provide prosthodontic therapy for a wide scope of patients with esthetic and functional needs above the level of general dentistry, including patients with varying degrees of cognitive and physical impairment.

4-189 Students/Residents **must** be competent in the application of principles associated with fixed prosthodontics, removable prosthodontics and implants, and as members of a treatment team.

**Intent:** Students/Residents should evaluate and use existing and appropriate newly introduced technologies to replace teeth and their associated structures using biologically active and passive therapies for fixed and removable prosthodontic treatment. These experiences should be beyond those learned at the predoctoral level and use natural teeth and dental implants as part of the treatment.
4-20 Students/Residents must be competent in the application of evidence-based health care principles.

**Intent:** Students/Residents should be able to identify, appraise, apply and communicate best evidence as it relates to health care and clinical and translational research, including how such research is conducted, evaluated, applied and communicated to patients and health care providers.

4-201 Students/Residents must be competent regarding principles of ethical decision making pertaining to academic, research, patient care and practice environments.

**Intent:** Students/Residents should be able to draw on a range of resources such as professional codes, regulatory law, and ethical theories to guide judgment and action for issues that are complex, novel, ethically arguable, divisive or of public concern.

4-21 Students/Residents must be competent in the application of principles of esthetic dentistry.

**Intent:** Students/Residents should use existing and newly introduced technologies and apply principles of esthetic dentistry to restore existing teeth and replace missing teeth and their associated structures. These experiences should be beyond those learned at the predoctoral level supported by natural teeth and dental implants as part of the treatment.

4-22 Students/Residents must be competent in the placement and restoration of dental implants, including referral.

**Intent:** Replacement of missing teeth and the associated oral and maxillofacial tissues using biocompatible substitutes is a core component of Prosthodontics and its definition. Students/Residents should perform surgical placement of dental implants in healed edentulous sites with adequate vertical and horizontal osseous tissue as a part of prosthodontic treatment for patients. These experiences should demonstrate the student’s/resident’s role in the process of assessment, diagnosis, treatment planning, implementation of prosthetic rehabilitation, and referral.

4-23 Students/Residents must be competent in leading and coordinating oral health care with other members of the health care team.

**Intent:** Students/Residents should be able to plan, evaluate and provide direction for patient treatment in consultation with other health care providers in a multi-disciplinary team. Students/Residents should be able to direct laboratory technicians supporting treatment at the prosthodontic specialty level.

4-24 Students/Residents must be competent in selection and application of biomaterials recognizing esthetic, biomechanical and biocompatibility implications of prosthodontic therapies.

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Intent: Students/Residents should be able to treatment plan for clinical predictability based on patient and restoration factors.

4-26 Students/Residents must be competent in the application of digital dentistry and its principles.

Intent: Students/Residents should be able to apply digital technologies in the assessment and diagnosis of patients. Students/Residents should be able to plan, design, provide restorations, and replace missing teeth and the associated structure applying digital technologies.

4-257 Student/Residents must be competent in laboratory procedures used in the treatment of edentulous, partially edentulous and dentate patients.

Intent: Students/Residents should be able to use existing technologies to plan, design and fabricate prostheses. They should be capable of directing dental technicians in prosthodontic laboratory procedures. They should be able to evaluate newly introduced technologies and apply these as appropriate.

4-267 Students/Residents must be competent in the prosthodontic management of patients with temporomandibular disorders and/or orofacial pain.

Intent: Students/Residents should recognize signs and symptoms associated with temporomandibular disorders and/or orofacial pain. Students/Residents should either provide appropriate treatment or refer, consistent with contemporary practice and the best interest of the patient.

4-279 Students/Residents must have experience with patients requiring maxillofacial prosthetic care.

Intent: Students/Residents should have clinical patient experiences screening, diagnosing, assessing risk, treatment planning, referring and following-up patients requiring maxillofacial services.