



**Academy**  
*of General Dentistry*

# **Educational Objectives for the Provision of Dental Implant Therapy by Dentists**

“advancing the value and excellence of general dentistry”



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## INTRODUCTION

In February 2009, the Academy of General Dentistry (AGD) created an Implantology Task Force (ITF) comprised of nine general practitioners with substantial dental implant experience.

The purpose of the ITF was to review the current state of dental implant training in the United States and formulate guidelines. These guidelines would delineate the objectives that are recommended in coursework for educating dentists about safe and appropriate dental implant therapy.

Various dental implant reference materials were reviewed, and pertinent information gleaned from these sources aided in the construction of this document.

Additionally, the observations and experiences of the members of the ITF, many of whom are educators in implant dentistry, were used to develop these training objectives.

It is not the purpose of these Educational Objectives to define a curriculum for dental implant therapy. Rather, these objectives are to be used as guidelines for educational providers to develop curricula that will adequately prepare dentists for providing safe and appropriate dental implant therapy.

There are a variety of educational outlets available to provide dentists with the necessary training in dental implant therapy. These outlets include, but are not limited to, university-based sources, hospital-based sources, dental organizations, manufacturer-sponsored courses, private individuals, and commercial training centers.

All providers of dental implant continuing education (CE) should be AGD PACE- or American Dental Association (ADA) CERP-approved.

Dental implant therapy can be accomplished successfully by all licensed dentists who have received adequate training. No manufacturer, university, hospital, or provider of CE should limit any licensed dentist from having access to the specific knowledge base or materials needed to

provide quality care through the provision of dental implant therapy.

As a “prosthetic discipline with a surgical component,” the placement of dental implants is part of the practice of general dentists and specialists alike who have attained the appropriate education.<sup>1</sup>

Dentists performing the surgical placement of dental implants should have an understanding of the final prosthetic goal of each case and the various elements of the restorative process.

Dental implants provide support for restorations that substitute for missing dentition. Dental implant therapy restores the patient’s function, form, and esthetics, as well as comfort and longevity, and has become the tooth replacement methodology of choice for many patients. Additionally, dental implant therapy facilitates the health and preservation of the remaining oral structures.

In anticipation of untoward circumstances that may occur during the treatment process or after the restorative phase has been completed, dentists should have attained the education necessary to be familiar with interventions needed to manage those circumstances.

## GLOSSARY

### Autogenous graft

Hard or soft tissue harvested from one or more sites and transplanted to another site or other sites in the same individual.<sup>2</sup>

### CERP

“Recognizing the need to offer its members and the dental community a way to select continuing education (CE) with confidence, to assist regulatory agencies and other organizations responsible for approving credit, and to promote the continuous improvement of CE, the American Dental Association Continuing Education Recognition Program (ADA CERP) was established in 1993. Through an application and review process, the ADA CERP

evaluates and recognizes institutions and organizations that provide continuing education (CE).”<sup>3</sup>

### **Dental implant**

A dental implant is an alloplastic material or device that is surgically placed into or onto orofacial tissues and used for anchorage, functional, therapeutic, and/or esthetic purposes.<sup>2</sup>

### **Dental implant prosthesis**

*Syn: Dental implant restoration.* “Any prosthesis (fixed, removable, or maxillofacial) that utilizes dental implants in part or whole for retention, support, and stability.”<sup>2</sup>

### **Dental implant therapy**

*Syn: Implant dentistry, oral implantology.* The field of dentistry dealing with the diagnosis, surgical placement, prosthetic reconstruction, and maintenance of dental implants.<sup>2</sup>

### **Exogenous graft**

Hard or soft tissue derived from outside the patient’s body.<sup>2</sup>

### **Familiarity**

“A simplified knowledge for the purposes of orientation and recognition of general principles.”<sup>4</sup>

### **PACE**

“The Academy of General Dentistry (AGD) Program Approval for Continuing Education (PACE) was created to assist members of the AGD and the dental profession in identifying and participating in quality continuing dental education (CDE). The program provider approval mechanism is an evaluation of the educational processes used in designing, planning, and implementing continuing education.”<sup>5</sup>

## **DENTAL IMPLANT VARIATIONS**

Dentists involved in the practice of implant dentistry should have a familiarity with the various dental implants and dental implant restorations that are presently available, even though the dentists may be placing and/or restoring only one brand or modality.

This familiarity may aid in the recognition of a dental implant device either clinically or radiographically and allow for maintenance protocols. Additionally, familiarity with the various dental implants and dental implant restorations will aid the dentist in exercising his or her professional judgment to treat the patient or make an appropriate referral.

## **DENTAL IMPLANT CASE TYPES<sup>6</sup>**

Current literature indicates that surgery may be divided into two case types: straightforward and complex.

The type of case is not an absolute measure. After completion of adequate coursework in dental implant therapy, the dentist should be able to assess the case type and make treatment or referral decisions accordingly.

Dental implant therapy, regardless of case type, may be performed safely by an appropriately trained dentist, and these case types are not determinative of need for referral.<sup>7</sup>

The following attributes of straightforward and complex cases are indicative but not singularly determinative of the respective case types, and are presented below by interpretation of and/or citation of current literature:<sup>6</sup>

### **Straightforward case:**

*Perception of Case:* The end prosthetic result and treatment protocols are readily understood.

*Tooth Position:* Adequate identifiable anatomical landmarks exist to determine optimal tooth position.

*Dental Implant Surgery:* The dental implant surgery procedure has minimal anatomical risks and can be carried out without the need for significant hard or soft tissue grafting.

*Occlusion:* The teeth can be replaced without significant alteration to the patient’s existing anatomic structures.

### **Complex case:**

*Perception of Case:* The end prosthetic result and treatment protocols cannot be readily determined without extensive diagnostic and planning techniques and may include multiple stages to achieve the desired outcome.

*Tooth Position:* Minimal identifiable anatomical landmarks require more extensive diagnostic procedures to determine the optimal tooth position for esthetics and function.

*Dental Implant Surgery:* The dental implant surgery is a more challenging procedure with notable anatomical risks and may require significant hard or soft tissue grafting.

*Occlusion:* A deterioration of the patient’s anatomic structures requires significant treatment planning to adequately restore the occlusion.

## EDUCATIONAL OBJECTIVES

### Educational objectives for the straightforward placement of dental implants:

A dentist who intends to engage in the straightforward placement of dental implants should have attained education that includes the educational objectives listed below. The dentist should be familiar with the procedures involved in the assessment, planning, placement, restoration, and maintenance of dental implants.<sup>6</sup>

1. Anatomy of the maxilla and mandible.
  2. Pathological processes that occur in the maxilla and mandible.
  3. Healing processes that occur following surgery and how to manage postoperative untoward circumstances.
  4. Diagnostic imaging of the mandible and maxilla, and how to interpret the findings from these examinations.
  5. Clinical assessment of a patient's suitability for dental implants and the medical conditions that could preclude a patient from dental implant therapy or complicate surgery.
  6. Infection control and aseptic techniques as applied to dental implant surgery.
  7. Techniques involved in harvesting autogenous bone from oral sites for augmentation during dental implant placement.
  8. The use of exogenous bone, bone substitutes, and/or soft tissue for augmentation in the placement of dental implants.
  9. The use of appropriate pharmaceutical agents in relation to implant dentistry.
  10. The dental implant options available and their indications and contraindications.
  11. Patient informed consent and how to obtain it prior to dental implant placement.
  12. Clinical and laboratory protocols for dental implant therapy, including:
    - a. An understanding of the clinical techniques for conventional dental implant restorative procedures.
    - b. An understanding of the pre-surgical laboratory procedures and techniques used to provide dental implant therapy.
    - c. An understanding of the laboratory techniques used to construct implant-supported prostheses.
  - d. An understanding of the clinical restorative procedures involved in straightforward dental implant-supported restorations.
  - e. A recognition of technical and cosmetic limitations of implant dentistry.
13. Long-term maintenance of dental implants and dental implant restorations.
  14. Proper documentation of all clinical activity.<sup>6</sup>
  15. Assessment of the occlusion and its relevance in relation to the proposed treatment and longevity of the prosthesis.<sup>8</sup>
  16. Interventions and approaches to manage potential complications.

### Additional guidelines for complex dental implant therapy:6

Experience in the straightforward placement and/or restoration is a prerequisite for complex dental implant therapy.

A dentist should have attained an adequate level of surgical experience and the ability to provide follow-up care to patients who require the placement of dental implants with hard and soft tissue augmentation.

Before complex placement is attempted, a dentist also should have attained the knowledge of the prosthetics necessary for the substantial occlusal alterations that are often needed in restoring and maintaining complex cases.

As dentists advance through the developmental stages of skill acquisition, it would be advantageous for them to seek the assistance and guidance of more experienced dentists to serve as mentors.

## DISCLAIMERS

Dental implant therapy may be performed safely by an appropriately trained dentist. These Educational Objectives are not intended to limit the training or practice of dentists in dental implant therapy, nor are they intended to make any representations regarding the qualifications or abilities of any individual dentist or dental specialty.

The AGD expressly disclaims any and all liability arising out of or in any way related to the use, transmission, reliance, or interpretation of these Educational Objectives or any part thereof.

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The AAID's *Guidelines for MaxiCourses*® (2008) also served as a resource for this document.

### Respectfully submitted by:

John P. DiPonziano, DDS, MAGD (Chair)  
Russell A. Baer, DDS  
Walter C. Chitwood, Jr., DDS  
Richard W. Dycus, DDS, MAGD  
Leonard R. Machi, DDS, FAGD  
Emile Martin, DDS, MAGD  
Richard J. Ringrose, DDS, MAGD  
Berry Stahl, DMD  
Roger D. Winland, DDS, MS, MAGD

### Staff Support:

Daniel Buksa, JD,  
Associate Executive Director, Public Affairs  
Srini Varadarajan, Esq.,  
Director, Dental Care Advocacy