# UNIVERSITY OF DETROIT MERCY'S ADVANCED EDUCATION IN GENERAL DENTISTRY PROGRAM: COMPETENCY STATEMENTS

The following statements describe the graduates of University of Detroit Mercy's AEGD program. They are intended to communicate the expectations of the faculty to the resident and serve as the basis for evaluation of resident's satisfactory completion of the program.

### **Definitions**

In order to facilitate reading this list of statements, certain terms have been predefined so they could be used in the document without repetitive definition. These definitions are listed in the next section of this document. In general, the definitions proposed by Chambers and Gerrow¹ have been followed, although some new definitions have been added and some definitions modified. In situations where it is expected that the PGD program graduate will be able to, and likely to, actually perform the necessary procedures, the terms "perform", "provide", "restore", or "treat" have been used. In circumstances where the graduate may perform some treatment but is more likely to oversee treatment or refer, the term "manage" is used. The term "appropriate" is not used in these statements to eliminate repetitive verbiage. It is assumed that all knowledge, skills, and procedures described will be performed for appropriate reasons, in appropriate circumstances, and in an appropriate manner. In this manual each statement is designated as an area of competency in which graduates are expected to have little experience at the beginning of their programs and are expected to gain further experience, skill, and judgment as the program progresses.

Where appropriate, each competency statement is linked to the corresponding overall program goals as outlined in Standard 1-8.

Standard	Goal	Competency Statement
		In regard to planning and providing comprehensive multidisciplinary oral health care:
2-1	1	Function as a patient's primary and comprehensive, oral health care provider.
2-1	1	Obtain patients' or legal guardians' consent for the proposed treatment (informed consent).
2-1	1,2,3	Integrate multiple disciplines into an individualized, comprehensive, sequenced treatment plan using
		diagnostic and prognostic information for patients with complex needs.
2-1, 2-5	1, 3	Treat uncomplicated diseases and abnormalities of the pediatric patient.
2-1	2	Evaluate scientific literature and other sources of information to determine the safety and effectiveness
		of medications and diagnostic, preventive and treatment modalities.
		In regard to health care delivery:
2-7	1,2,3	Use and implement accepted sterilization, disinfection, universal precautions and occupational hazard
		prevention procedures in the practice of dentistry.
1-10, 2-7	4	Practice and promote ethical principles in the practice of dentistry and in relationships with patients,
		personnel, and colleagues.

Standard	Goal	Competency Statement
		In regard to oral disease detection and diagnosis:
2-1	1	Obtain and interpret the patient's chief complaint, medical, dental, and social history, and review of
<u> </u>		systems.
2-1	1, 3	Obtain and interpret clinical and radiographic data and additional diagnostic information from other health
		care providers or other diagnostic resources.
2-4	1,2,3	Diagnose and manage oral manifestations of systemic disease.
2-4	1,2,3	Diagnose and manage common oral pathological abnormalities.
		In regard to promoting oral and systemic health and disease prevention:
2-1	1, 4	Participate in community programs to prevent and reduce the incidence of oral disease.
2-1	1,2,3,4	Use accepted prevention strategies such as oral hygiene instruction, nutritional education, and
		pharmacologic intervention to help patients maintain and improve their oral health.
		In regard to assessment of medical risk:
2-1	1,2,3	Treat patients with a broad variety of acute and chronic systemic disorders and social difficulties including
2-1	1,2,3	patients with special needs.
2-4, 2-6	1,3,4	Request and interpret medical consultations from other health care providers.
2 1, 2 0	1,5,1	request and meet proc medical consultations from other neutrin care providers.
		In regard to pain and anxiety control:
2-2	1, 3	Use pharmacologic and non-pharmacologic behavior management skills with the pediatric patient.
2-2	1, 3	Provide control of pain and anxiety in the conscious patient through the use of psychological interventions,
		behavior management techniques, local anesthesia, or other pharmacological agents.
		In regard to operative dentistry:
2-2	1	Restore single teeth with a wide range of materials and methods.
2-2	1	Place restorations and perform techniques to enhance patient's facial esthetics.
2-2	1	Restore endodontically treated teeth.
2-2	1, 3	Restore intra and extra-coronal defects in the primary dentition.
2.2	4	In regard to replacement of teeth using fixed and removable appliances:
2-2	1	Treat patients with missing teeth requiring removable restorations.
2-2	1	Treat patients with missing teeth requiring uncomplicated fixed restorations.
		In regard to implants:
2-4	1 7	Treatment plan patients requiring implants to restore missing teeth.
2-4	1, 3	Complete diagnostic preparation for implant surgery and planned restorations.
<b>∠</b> -≒	1, 5	Complete diagnostic preparation for implant surgery and planned restorations.

Standard	Goal	Competency Statement
2-4	1	Restoration of single and/or multiple endosseous implant units.
2-4	1	Fabrication of overdentures and/or over-partials using locator abutments.
2-4	1	Establish and monitor an implant maintenance program.
		In regard to periodontal therapy:
2-2	1	Diagnose and treat periodontal disease which may include surgical procedures.
2-2	1, 3	Evaluate the results of periodontal treatment and establish and monitor a periodontal maintenance program.
		In regard to endodontic therapy:
2-2	1	Diagnose and treat pain of pulpal origin.
2-2	1	Perform uncomplicated non-surgical anterior endodontic therapy.
2-2	1	Perform uncomplicated non-surgical posterior endodontic therapy.
2-2	1, 3	Perform pediatric pulpal therapy.
		In regard to oral surgery:
2-2, 2-5	1, 3	Perform uncomplicated surgical procedures on pediatric patients.
2-2, 2-5	1, 3	Perform surgical and nonsurgical extraction of teeth.
2-2, 2-5	1, 3	Perform uncomplicated pre-prosthetic surgery.
		In regard to temporomandibular disorders and orofacial pain:
2-4	1	Diagnose and manage temporomandibular disorders through conservative treatment.
2-4	1	Diagnose and manage a patient's orofacial pain.
2-4	1	Recognize when referral is appropriate for management of temporomandibular disorder and orofacial pain.
		In regard to treatment of dental and medical emergencies:
2-4	1	Diagnose and treat patients with intra-oral dental emergencies and infections.
2-4	1, 3	Anticipate, diagnose and provide initial treatment and follow-up management for medical emergencies that may occur during dental treatment.
		and may occar daring defical deadments
		In regard to Community Service:
2-1	1,3,4	Participate in community programs to prevent and reduce the incidence of oral disease.

## **Second Year Competency Statements**

The following are competency statements that describe the additional areas, beyond those of the first year program, that apply to residents completing the second year program.

Standard	Goal	Competency Statement
2-4	1,2	Treatment plan, perform and maintain complicated endosseous implant restorations, including multi-unit restorations.
2-6	1,2,3,4	
2-1	1,4	Participate in community programs to prevent and reduce the incidence of oral disease.
2-7	4	Participate in the administration of an Advanced Education in General Dentistry Program.
1-7	4	Teach undergraduate dental students in selected clinical and didactic disciplines.
2-9	1,2	Perform in-depth analyses of medical and dental articles in peer-reviewed publications.

### **Definitions**

Adapted from Chambers and Gerrow 1

**Assess**. Evaluation of physical, written, and psychological data in a systematic and comprehensive fashion to detect entities or patterns that would initiate or modify **treatment**, **referral**, or additional assessment. Assessment entails **understanding** of relevant theory, and may also entail **skill** in using specialized equipment or techniques. But assessment is always controlled by an **understanding** of the purpose for which it is made and its appropriateness under the present circumstances. **Recognition** is a more limited term that does not subsume the notion of evaluating findings. **Diagnosis** is a more inclusive term which relates evaluated findings to treatment alternatives.

**Competency**. Behavior expected of the beginning practitioner. This behavior incorporates **understanding**, **skill**, and **values** in an integrated response to the full range of requirements presenting in practice. The level of performance requires some degree of speed and accuracy consistent with patient well-being but not performance at the highest level possible. It also requires an awareness of what constitutes acceptable performance under the circumstances and desire for self-improvement.

**Diagnose**. Diagnosing means systematically comparing a comprehensive database on the patient with an **understanding** of dental and related medical theory to identify recognized disease entities or treatable conditions. The concept of diagnosis subsumes an **understanding** of disease etiology and natural history.

**Discuss** (**communicate**, **consult**, **explain**, **present**). A two-way exchange that serves both the practitioner's needs and those of patients, staff, colleagues, and others with whom the practitioner communicates. The conversation, writing, or other means of exchange must be free of emotional or other distorting factors and the practitioner must be capable of expressing and listening in terms the other party understands. [Caution should be exercised with using these verbs to ensure that the communication is between the practitioner and the patient. Communication between the student and faculty is language reminiscent of the old instructional objectives and is not evidence of competency.]

**Document**. Making, organizing, and preserving information in standardized, usable, and legally required format.

**Manage.** Management refers to the selection of treatment-including: no intervention; choice of specific care providers-including hygienists, and medical and dental specialists; timing and evaluation of treatment success; proper handling of sequela; and insurance of patient comprehension of and appropriate participation in the process. In circumstances where the graduate may perform some treatment but is more likely to oversee treatment or refer, the term "manage" is used. In situations where it is expected that practitioners will be capable of and likely to provide treatment as well as oversee it, the terms "treat", "provide", or "perform", will be used.

**Monitor**. Systematic vigilance to potentially important conditions with an intention to intervene should critical changes occur. Normally monitoring is part of the process of **management**.

**Obtain** (**collect**, **acquire**). Making data available through inspection, questioning (patients, physicians, and relatives), review of records etc., or capturing data by **using** diagnostic procedures. Health histories, radiographs, casts, and consults are **obtained**. It is always assumed that the procedures for obtaining data are performed accurately so that no bias is introduced, are appropriate to the circumstances, and no more invasive than necessary, and are legal.

**Patients with Special Needs.** Those patients whose medical, physical, psychological, or social situations make it necessary to modify normal dental routines in order to provide dental treatment for that individual. These individuals include, but are not limited to, people with developmental disabilities, complex medical problems, and significant physical limitations.

**Perform** (**conduct**, **restore**, **treat**). When a procedure is performed, it is assumed that it will be done with reasonable speed and without negative unforeseen consequences. Quality will be such that the function for which the procedure was undertaken is satisfied consistent with the prevailing standard of care and that the practitioner accurately **evaluates** the results and takes needed corrective action. All preparatory and collateral procedures are assumed to be a part of the performance.

**Practice**. Used to describe a general habit of practice, such as "practice consistent with applicable laws and regulations."

Prepare (see perform).

Present (see discuss).

**Prevent** [the effects of]. The negative effects of known or anticipated risks can be prevented through reasonable precautions. This includes **understanding** and being able to **discuss** the risk and necessary precautions and **skill** in carrying out the precaution. Because preventing future damage is of necessity a response to an internalized stimulus rather than a present one, additional emphasis is placed on supportive **values**.

**Provide care** (see **perform**).

**Recognize** (**differentiate**, **identify**). Identify the presence of an entity or pattern that appears to have significance for patient **management**. Recognition is not as broad as **assessment** -- assessment requires systematic collection and evaluation of data. Recognition does not involve the degree of judgment entailed by **diagnosis**. [Caution is necessary with these terms. They are often use in the old instructional objectives literature to refer to behavior students perform for instructors. They can only be used for competencies when practitioners recognize, differentiate, or identify for patients or staff.]

**Refer.** A referral includes determination that **assessment**, **diagnosis**, or **treatment** is required which is beyond the practitioner's **competency**. It also includes **discussion** of the necessity for the referral and of alternatives with the patient, **discussion** and cooperation with the professionals to whom the patient is referred, and follow-up **evaluation**.

Restore (see perform).

**Skill**. The residual performance patterns of **foundation skills** that is incorporated into **competency**. The importance of the skill is more than speed and accuracy: it is the coordination of performance patterns into an organized **competency** whole.

Treat (see perform).

**Use**. This term refers to a collateral **performance**. In the course of **providing care**, precautions and specialized routines may be required. For example, infection control and rapport building communication are used. **Understanding** the collateral procedure and its relation to overall care is assumed. It is often the case that supporting **values** are especially important for procedures

that are needed -- they are usually mentioned specifically because their value requires reinforcement. ["Utilize" is a stylistic affectation that should be avoided.]

**Understanding**. The residual cognitive **foundation knowledge** that is incorporated into **competency**. Understanding is more than broad knowledge of details: it is organized knowledge that is useful in performing the **competency**. [Caution should be used with this term. Understanding alone is not a competency; it must be blended with skill and values.]

**Values**. Preferences for professional appropriate behavior in the absence of compelling or constraining forces. Values can only be inferred from practitioner's behavior when alternatives are available. "Talking about" values reflects a **foundation knowledge**; valuing can be inferred by observing the practitioner's attempts to persuade others. [Caution should be used with this term. Valuing alone is not a competency; it must be blended with skill and understanding.]

### References

1. Chambers DW, Gerrow JD, Manual for developing and formatting competency statements. J Dent Educ 1994;58:361-6.