

Lutheran Medical Center
Advanced Specialty Education in Endodontics
Competency and Proficiency Statements

The following statements describe the graduates of the LMC Endodontic program. These statements 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 clinical program.

Definitions

In order to facilitate reading this list of statements, certain terms have been defined so they could be used in the manual without repetitive definition. These definitions are listed in the next section of this manual. In general, the definitions proposed by Chambers and Gerrow have been followed, although some new definitions have been added and some definitions modified. In situations where it is expected that the Endodontic 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 either an area of competency (C) in which graduates are expected to have little experience at the beginning of their programs, or as an area of proficiency (P) in which graduates are expected to be competent at the beginning of their programs and gain further experience, skill and judgment as the program progresses.

Regarding Statements 1 through 13, it is expected that the endodontic resident will be ***proficient*** upon graduation to:

1. Collect, organize, analyze and interpret data from the medical and dental histories and clinical evaluation to determine their relationship to the patient's endodontic treatment.
2. Perform tests and clinical examinations and interpret the significance of the data in the differential diagnosis of clinical conditions arising from injury to and pathosis of pulp and periradicular tissues.
3. Expose, process and interpret radiographs and/or take and interpret digital images.
4. Establish differential interpretation of lesions and normal anatomic structures through radiographs or digital images.
5. Formulate a diagnosis, prognosis, and treatment plan for conditions that require endodontic treatment in support of the total oral health of the patient, requesting information/consultation from other healthcare professionals as needed.
6. Provide appropriate emergency treatment to relieve pain and resolve infections of endodontic origin.
7. Recognize and manage, or prevent, endodontic pain and associated anxiety using physical, chemical and psychological modalities.
8. Provide nonsurgical and surgical endodontic treatment.

9. Retreat endodontically-treated teeth using both non-surgical and surgical techniques.
10. Evaluate the results of endodontic treatment and determine whether additional evaluation/treatment is required.
11. Provide space for intraradicular restorations and cores in endodontically treated teeth.
12. Communicate to patients the nature of their endodontic conditions and the value of treatment to their overall oral health.
13. Communicate with other health care professionals, interpreting their assessments and integrating this information into the treatment of the patient.
14. Provide vital pulp therapy.
15. Perform root-end closure procedures.
16. Evaluate, diagnose and manage traumatic injuries to teeth and their supporting structures.
17. Provide endodontic treatment for the medically compromised patient.
18. Maintains comprehensive records of history, diagnosis and treatment of each patient.
19. Follow the protocols established for follow-up evaluation of patients.

Regarding following statements, it is expected that the endodontic resident will be **competent** upon graduation to:

20. Develop a differential diagnosis of orofacial pain.
21. Diagnose and treat periodontal disease and defects in conjunction with the treatment of the specific tooth undergoing endodontic therapy; treatment should be provided in consultation with individuals who will assume the responsibility for the completion or supervision of any additional periodontal maintenance of treatment.
22. Place intraradicular restorations and cores in endodontically treated teeth.
23. Perform non-surgical and surgical endodontic procedures using microscopy.
24. Perform intracoronal bleaching procedures.
25. Perform endodontic care using a variety of techniques.
26. Teach postdoctoral general dentistry residents in selected endodontic clinical and didactic disciplines.

Definitions – adapted from Chambers and Gerrow

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 evaluation findings. **Diagnosis** is a more inclusive term that 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 and **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 hygienist, and medical and dental specialists; timing and evaluation of treatment success; proper handling of sequelae; 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 some situations where it is expected that the 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, 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 the results and takes needed corrective action. All preparatory and collateral procedures are assumed to be 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**.

Proficiency

A level practice that exceeds competency. Proficiency entails slightly greater speed and accuracy of performance, ability to handle more complicated and unusual problems, and problems presenting under less than ideal circumstances, and greater internalization and integration of professional standards.

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 a 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 used in 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 this 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 on 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

Chambers DW, Gerrow JD, Manual for Developing and Formatting Competency Statements.

J. Dent Educ 1994: 58:361-6