SELF-STUDY FOR ADVANCED
SPECIALTY EDUCATION PROGRAMS IN ENDODONTICS

Sponsoring Organization: University of Texas Health Science Center at San Antonio
(Dental School/Hospital, Other, e.g., Consortium)

Street Address: 7703 Floyd Curl Drive MSC 7892

City, State & Zip Code: San Antonio, Texas 78229-3900

Chief Executive Officer
(University President/Chancellor)
or Hospital Administrator: William L. Henrich, M.D., MACP

Telephone Number: (210) 567-2000
Fax Number: (210) 567-2025
E-Mail Address: henrich@uthscsa.edu

Dental School Dean or
Chief of Dental Service: Kenneth L. Kalkwarf, D.D.S., M.S., Dean

Telephone Number: (210) 567-3160
Fax Number: (210) 567-6721
E-Mail Address: kalkwarf@uthscsa.edu

Program Director: Fabricio B. Teixeira, D.D.S., M.S., Ph.D.

Telephone Number: (210) 567-3396
Fax Number: (210) 567-3389
E-Mail Address: teixeira@uthscsa.edu

I have seen and reviewed the completed Self-Study Guide (and required appendix information) that will be used in an upcoming site visit to this institution.

Signature of person listed above: ____________________________

Date: ____________________________
# Table of Contents

General Information Sheets ........................................................................................................ 3

Previous Site Visit Recommendations ......................................................................................... 5

Compliance with Commission Policies ....................................................................................... 6

Standard 1 – INSTITUTIONAL COMMITMENT/PROGRAM EFFECTIVENESS/AFFILIATIONS ......................................................................................................................... 8

Standard 2 – PROGRAM DIRECTOR AND TEACHING STAFF .......................................................................................................................... 13

Standard 3 – FACILITIES AND RESOURCES ......................................................................... 16

Standard 4 – CURRICULUM AND PROGRAM DURATION ......................................................... 24
  BIOMEDICAL SCIENCES
  CLINICAL SCIENCES
  TEACHING

Standard 5 – ADVANCED EDUCATION STUDENTS ................................................................. 37
  ELIGIBILITY AND SELECTION
  EVALUATION
  DUE PROCESS
  RIGHTS AND RESPONSIBILITIES

Standard 6 – RESEARCH ........................................................................................................... 44

Summary of Self-Study Report .................................................................................................. 45

List of Appendices .................................................................................................................... 58
GENERAL INFORMATION

a. What is the length of the program? 26 months.

b. How many full-time students/residents are currently enrolled in the program per year? 6

c. How many part-time students/residents are currently enrolled in the program per year? 0

d. What is the program’s CODA-authorized base number enrollment? 6

e. The program offers a certificate degree or X both

f. What other programs does the organization sponsor? Indicate whether each program is accredited. Indicate which programs are accredited by the Commission on Dental Accreditation.

Besides Endodontics, UTHSCSA sponsors advanced education programs in AEGD, GPR, Oral and Maxillofacial Surgery, Orthodontics, Periodontics, Prosthodontics, Pediatric Dentistry, Oral and Maxillofacial Radiology and Dental Public Health. All of these programs are accredited by the Commission on Dental Accreditation.

g. What is the percentage of the students’/residents’ total program time devoted to each segment of the program?

<table>
<thead>
<tr>
<th>Segment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>biomedical sciences</td>
<td>32.8 %</td>
</tr>
<tr>
<td>clinical Sciences</td>
<td>59.5 %</td>
</tr>
<tr>
<td>teaching</td>
<td>3.4 %</td>
</tr>
<tr>
<td>research</td>
<td>4.3 %</td>
</tr>
<tr>
<td>other (specify)</td>
<td>0 %</td>
</tr>
<tr>
<td>Total</td>
<td>100.0 = 100%</td>
</tr>
</tbody>
</table>

h. What is the total faculty/student/resident ratio of the program?

Considering all full and part-time faculty within the Department of Endodontics at UTHSCSA, the Advanced Specialty Education Program in Endodontics currently has 5 FTE’s involved with the residency program with a faculty/student ratio of 1/1.2. This includes 4 Diplomates of the American Board of Endodontics and 1 Diplomate of American Board of Orofacial Pain. Of course, many faculty outside the Endodontic Department are also involved in the resident’s academic experience, including faculty from the Departments of Dental Diagnostic Sciences (Radiology and Medically
Compromised Patient courses); Prosthodontics (Implant Dentistry and Dental Photography courses); General Dentistry (Pain and Sedation course); Pathology (Oral Pathology course); Orthodontics (Research Methodology course); and several faculty involved in the Biomedical Core Course. Both the Program Director and Assistant Program Director of the Wilford Hall Medical Center Endodontic Residency Program also interact with the residents at weekly literature reviews and monthly joint case presentations.

i. What is the number of endodontic cases per student/resident?

Each student is required to complete a total of 200 cases over the course of the program; however, most students far surpass that number. For example, over the past two years, the average numbers of cases per resident were:

Non-surgical: 416
Initial treatment: 328
Retreatment: 88
Pulp Regeneration: 5

Surgical: 15
PREVIOUS SITE VISIT RECOMMENDATIONS

Using the program’s previous site visit report, please demonstrate that the recommendations included in the report have been remedied.

The suggested format for demonstrating compliance is to state the recommendation and then provide a narrative response and/or reference documentation within the remainder of this self-study document.

* Please note if the last site visit was conducted prior to the implementation of the revised Accreditation Standards for Advanced Specialty Education Programs (January 1, 2000), some recommendations may no longer apply. Should further guidance be required, please contact Commission on Dental Accreditation staff.

There were no recommendations at the last site visit.
COMPLIANCE WITH COMMISSION POLICIES

Identify all changes which have occurred within the program since the program’s previous site visit, in accordance with the Commission’s policy on Reporting Program Changes in Accredited Programs.

Changes have a direct and significant impact on the program’s potential ability to comply with the accreditation standards. These changes tend to occur in the areas of finances, program administration, enrollment, curriculum and clinical/laboratory facilities, but may also occur in other areas. Failure to report in advance any increase in enrollment or other change, using the Guidelines for Reporting Program Changes, may result in review by the Commission, a special site visit, and may jeopardize the program’s accreditation status. The program must report changes to the Commission in writing at least thirty (30) days prior to the anticipated implementation of the change. The Commission recognizes that unexpected changes may occur. If an unexpected change occurs, it must be reported no more than 30 days following the occurrence. Unexpected changes may be the result of sudden changes in institutional commitment, affiliated agreements between institutions, faculty support, or facility compromise resulting from natural disaster. Failure to proactively plan for change will not be considered unexpected change. Depending upon the timing and nature of the change, appropriate investigative procedures including a site visit may be warranted. For enrollment increases in advanced specialty programs the program must submit a request to the Commission one (1) month prior to a regularly scheduled semiannual Review Committee/Commission meeting. For the addition of off-campus sites, the program must report in writing to the Commission at least six (6) months prior to the anticipated initiation of educational experiences at the off-campus site. See the Policy on Enrollment Increases In Advanced Specialty Programs and the Policy on Accreditation Of Off-campus Sites for specific information on these types of changes.

Documentary Evidence:

- Dr. Fabricio B. Teixeira was appointed Program Director of the Advanced Education Program in Endodontics effective June 6, 2011. Dr. Catherine Horan, ADA Manager of Advanced Specialty Education was notified by letter dated May 1, 2011. This letter, along with a copy of Dr. Teixeira’s CV and Letter of Diplomate Status from the American Board of Endodontists were mailed May 1, 2011.
- Dr. Karl Keiser resigned as Program Director of the Advanced Education Program in Endodontics effective June 30, 2008 and
- Dr. Kenneth M. Hargreaves was appointed Program Director of the Advanced Education Program in Endodontics effective July 1, 2008. Dr. Catherine Horan, ADA Manager of Advanced Specialty Education was notified by letter dated May 28, 2008. This letter along with a copy of Dr. Hargreaves’s CV and Certificate of Diplomate Status from the American Board of Endodontists was mailed May 28, 2008.
- Dr. Karl Keiser was appointed Program Director of the Advanced Education Program in Endodontics effective July 1, 2007. This letter along with a copy of Dr. Keiser’s CV and Certificate of Diplomate status from the American Board of Endodontists was mailed July 12, 2007.
- Dr. Scott Schwartz resigned as program director June 30, 2007. Dr. Scott A. Schwartz was appointed Program Director of the Advanced Education Program in Endodontics
effective September 1, 2004. Dr. Catherine Horan, ADA Manager of Advanced Specialty Education was notified by letter dated August 29, 2004. This letter, along with a copy of Dr. Schwartz’ CV and Certificate of Diplomate status from the American Board of Endodontics were mailed August 29, 2004.

- Copies of documents involving these major changes are available on site.

Provide documentation and/or indicate what evidence will be available during the site visit to demonstrate compliance with the Commission’s policy on “Third Party Comments.”

The program is responsible for soliciting third party comments from students/residents and patients that pertain to the Standards or policies and procedures used in the Commission’s accreditation process. An announcement for soliciting third party comments is to be published at least ninety (90) days prior to the site visit. The notice should indicate that third party comments are due in the Commission’s office no later than sixty (60) days prior to the site visit. Please review the entire policy on “Third Party Comments” in the Commission’s EOPP Evaluation and Operational Policies and Procedures manual.

Official notice soliciting third party comments from students and patients that pertain to the standards or policies and procedures used in the Commission’s accreditation process was published on November 1, 2011. This notice was passed out to all endodontic residents and posted on bulletin boards in all sections of the UTHSCSA Dental School Clinic on November 1, 2011 (more than 90 days before the February 2012 visit). Copies of the official notice will be available for review during the site visit.

Provide documentation and/or indicate what evidence will be available during the site visit to demonstrate compliance with the Commission’s policy on “Complaints.”

The program is responsible for developing and implementing a procedure demonstrating that students/residents are notified, at least annually, of the opportunity and the procedures to file complaints with the Commission. Additionally, the program must maintain a record of student/resident complaints related to the Commission’s accreditation standards and/or policy received since the Commission’s last comprehensive review of the program. Please review the entire policy on “Complaints” in the Commission’s EOPP: Evaluation and Operational Policies and Procedures manual.

Residents are notified annually during departmental orientation of the opportunity and the procedures to file complaints with the Commission on Dental Accreditation. At the start of their residency (on or about July 1st) they sign the “ADA Accreditation Policy on Complaints” form acknowledging that they have read and understood the policy. A signed copy of this document is placed in each student’s file and they are given a copy for their personal records. This document is included in Appendix X.
STANDARD 1 – INSTITUTIONAL COMMITMENT/PROGRAM EFFECTIVENESS

(Complete each question by inserting an “x” in the appropriate box and identifying documentation in support of your answer. Appendices A-F are also required for this section. Note: required appendix information may serve as “documentary evidence” where appropriate.)

1. Has the program developed clearly stated goals and objectives appropriate to advanced specialty education, addressing education, patient care, research and service? YES NO

Documentary Evidence:
The goals and objectives of the UTHSCSA Advanced Specialty Education Program in Endodontics are stated in a formal document distributed to all students and faculty. This document is included in Appendix A.

2. Are planning for, evaluation of and improvement of educational quality for the program broad-based, systematic, continuous and designed to promote achievement of program goals related to education, patient care, research and service? YES NO

Documentary Evidence:
The UTHSCSA Advanced Specialty Education Program in Endodontics undergoes continuous, broad-based, systematic evaluation, review and improvement processes for all aspects of the program including education, patient care, research and service. The specifics of the process are outlined in Appendix B.

3. Does the program document its effectiveness using a formal and ongoing outcomes assessment process to include measures of advanced education student/resident achievement? YES NO

Intent: The Commission on Dental Accreditation expects each program to define its own goals and objectives for preparing individuals for the practice of endodontics and that one of the program goals is to comprehensively prepare competent individuals to initially practice endodontics. The outcomes process includes steps to: (a) develop clear, measurable goals and objectives consistent with the program’s purpose/mission; (b) develop procedures for evaluating the extent to which the goals and objectives are met; (c) collect and maintain data in an ongoing and systematic manner; (d) analyze the data collected and share the results with appropriate audiences; (e) identify and implement corrective actions to strengthen the program; and (f) review the assessment plan, revise as appropriate, and continue the cyclical process.

Documentary Evidence: The UTHSCSA Advanced Specialty Education Program in Endodontics uses an ongoing outcomes assessment process which includes measures of student achievement. This
4. Are the financial resources sufficient to support the program’s stated goals and objectives? (1)  

**YES**  **NO**

**Intent:** The institution should have the financial resources required to develop and sustain the program on a continuing basis. The program should have the ability to employ an adequate number of full-time faculty, purchase and maintain equipment, procure supplies, reference material and teaching aids as reflected in annual budget appropriations. Financial allocations should ensure that the program will be in a competitive position to recruit and retain qualified faculty. Annual appropriations should provide for innovations and changes necessary to reflect current concepts of education in the advanced specialty discipline. The Commission will assess the adequacy of financial support on the basis of current appropriations and the stability of sources of funding for the program.

**Documentary Evidence:**
The University of Texas Health Science Center at San Antonio is committed to the Advanced Specialty Education Program in Endodontics. The clinics are well equipped and there is excellent staffing and necessary financial support for the postgraduate programs. Dental assistants and secretaries are assigned to facilitate the smooth operation of the program. The Endodontic Department has enough funds for the purchase of materials, supplies and essential services.

5. Does the sponsoring institution ensure that support from entities outside of the institution does not compromise the teaching, clinical and research components of the program? (1)  

**YES**  **NO**

**Documentary Evidence:**
The University of Texas Health Science Center at San Antonio Residency Program does not receive financial support from entities outside of the institution and complies with UT policies for control of any potential conflicts of interest with outside entities. Affiliation information is included in Appendix E.

6. Is the advanced specialty education program sponsored by an institution, which is properly chartered, and licensed to operate and offers instruction leading to degrees, diplomas or certificates with recognized education validity? (1)  

**YES**  **NO**

**Documentary Evidence:**
The institutional sponsor is the University of Texas Health Science Center at San Antonio. All dental post-graduate programs are currently accredited by the ADA Commission on Dental Accreditation.

7. If a hospital is the sponsor, is the hospital accredited by The Joint Commission or its equivalent? (1)  

**YES**  **NO**  **N/A**
8. If an educational institution is the sponsor, is the educational institution Accredited by an agency recognized by the United States Department of Education?  

**YES**  **NO**  **N/A**

**Documentary Evidence:**
The University of Texas Health Science Center at San Antonio is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS), which is recognized by the US Dept of Education. The institution was initially accredited in 1973, and was last reviewed and reaffirmed in 2008. The institution is scheduled to receive its next reaffirmation of accreditation review in 2012.

9. If applicable, do the bylaws, rules and regulations of the hospital that sponsors or provides a substantial portion of the advanced specialty education program ensure that dentists are eligible for medical staff membership and privileges including the right to vote, hold office, serve on medical staff committees and admit, manage and discharge patients?  

**YES**  **NO**  **N/A**

**Documentary Evidence:**
N/A

10. Does the authority and final responsibility for curriculum development and approval, student/resident selection, faculty selection and administrative matters rest within the sponsoring institution?  

**YES**  **NO**

**Documentary Evidence:**
The Program Director in Endodontics has the authority, responsibility and privileges necessary to manage the Endodontic Residency program. The current Director of the program is the past Chair of the Advanced Education Committee at UTHSCSA, and participates as a full voting member. The didactic and clinical educational programs and all resident activities are managed by the Program Director. The Endodontic Residency Program Director actively participates in resident selection as the Chair of a committee composed of 4 faculty members including the Program Director. The Administrative Organizational Chart is included in Appendix C.
11. Is the position of the program in the administrative structure consistent with that of other parallel programs within the institution? (1) **YES**  **NO**

Documentary Evidence:
All programs exist at an equal organizational, administrative and operational level to other parallel Advanced Educational Programs at the University of Texas Health Science Center at San Antonio Dental School. All Program Directors are assigned to membership on the Advanced Education Committee (AEC) where they sit as equal voting members. Program Directors are appointed to this committee by letter by the Dean of the Dental School. The committee considers all non-clinical matters that affect Advanced Education Programs and makes their recommendations to the Dean of the Dental School and the Dean of the Graduate School of Biomedical Sciences. The committee meets monthly and publishes minutes documenting AEC activities.

12. Does the program director have the authority, responsibility and privileges necessary to manage the program? (1) **YES**  **NO**

Documentary Evidence:
The Program Director in Endodontics has the authority, responsibility and privileges necessary to manage the Endodontic Residency program. The director of the program participates as a full, voting member of the University of Texas Health Science Center at San Antonio Dental School Advanced Education Committee. The didactic and clinical educational programs and all postgraduate student activities are managed by the Program Director. The Administrative Organizational Chart is included in Appendix C.
AFFILIATIONS

(If the program is not affiliated with other institutions, please skip to Standard 2.)

13. Does the primary sponsor of the educational program accept full responsibility for the quality of education provided in all affiliated institutions? (1) YES NO

Documentary Evidence:

14. Is documentary evidence of agreements, approved by the sponsoring and relevant affiliated institutions, available? (1) YES NO

Documentary Evidence:

15. Are the following items covered in such inter-institutional agreements:

   a) Designation of a single program director? YES NO
   b) The teaching staff? YES NO
   c) The educational objectives of the program? YES NO
   d) The period of assignment of students/residents? YES NO

   And

   e) Each institution's financial commitment? (1) YES NO

Intent: The items that are covered in inter-institutional agreements do not have to be contained in a single document. They may be included in multiple agreements, both formal and informal (e.g., addenda and letters of mutual understanding).

Documentary Evidence:
STANDARD 2 - PROGRAM DIRECTOR AND TEACHING STAFF

(Complete each question by inserting an “x” in the appropriate box and identifying documentation in support of your answer. Appendices G-K are also required for this section. Note: required appendix information may serve as “documentary evidence” where appropriate.)

16. Is the program administered by a director who is board certified in the respective specialty of the program, or if appointed after January 1, 1997, has previously served as a program director? (2)

YES  NO

**Intent:** The director of an advanced specialty education program is to be certified by an ADA-recognized certifying board in the specialty. Board certification is to be active. The board certification requirement of Standard 2 is also applicable to an interim/acting program director. A program with a director who is not board certified but who has previous experience as an interim/acting program director in a Commission-accredited program prior to 1997 is not considered in compliance with Standard 2.

**Documentary Evidence:**
The Program Director is board certified. A copy of the certificate is available on site and his Curriculum Vitae is included in Appendix I.

17. Is the program director appointed to the sponsoring institution and have sufficient authority and time to achieve the educational goals of the program and assess the program’s effectiveness in meeting its goals? (2)

YES  NO

**Documentary Evidence:**
The Program Director is a full-time faculty member who devotes 36 hours per week to the program. See the program director's Curriculum Vitae in Appendix I and the program director's time commitments in Appendix G.

18. Does the sponsoring institution appoint a program director:

a) who is a full-time faculty member?  YES  NO

b) whose time commitment is no less than twenty-four hours per week to the advanced education program in endodontics?  (2-1)

**Intent:** The intent is to ensure that the program director has sufficient time to participate in all aspects of the program including direct student/resident contact in didactic and clinical activities.

**Documentary Evidence:**
The Program Director is a full-time faculty member who devotes 36 hours per week to the program. See the program director's Curriculum Vitae in Appendix I and the program director's time commitments in Appendix G.

19. Do the responsibilities of the program director include:

a) Development of mission, goals, and objectives for the program?  YES NO
b) Development and implementation of a curriculum plan?  YES NO
c) Planning for and operation of the facilities used in the endodontic program?  YES NO
d) Student/Resident selection unless the program is sponsored by a federal service utilizing a centralized student/resident selection process?  YES NO
e) Ensuring ongoing evaluation of student/resident performance and faculty teaching performance?  YES NO
f) Evaluation of teaching program and faculty supervision in affiliated institutions?  YES NO
g) Maintenance of records related to the educational program, including written instructional objectives and course outlines?  YES NO
h) Overall continuity and quality of patient care as it relates to program?  YES NO
i) Ongoing planning, evaluation and improvement of the quality of the program?  YES NO
j) Preparation of graduates for certification by the American Board of Endodontics? And  YES NO

k) Ensuring formal (written) evaluation of faculty members at least annually to assess their performance in the educational program? (2-2)  YES NO

**Intent:** The intent is to ensure that the program director has complete authority to administer all aspects of the advanced education program and that all administrative records are maintained within the institution and available for the site visitor.

**Documentary Evidence:**
The Advanced Education in Endodontics Program Director actively participates in student selection. The selection committee is composed of the Program Director and three other faculty members from the Department of Endodontics, including the Department Chair. Student selection is ultimately the responsibility of the Program Director. The Program Director is responsible for all other duties listed above. A copy of the faculty staffing schedule is included in Appendix J. All records, evaluations and documents specified are available for review on site.
20. Are the number of faculty and the professional education and development of faculty sufficient to meet the program’s objectives and outcomes?  

YES  NO  

Documentary Evidence:  
The Residents clinical experience at UTHSCSA takes place with a faculty/student ratio of 1/1.2 with four dedicated full-time endodontic faculty members whose primary mission is teaching. The program director and full-time faculty are board certified. The entire full-time faculty is funded to attend the AAE Annual session each year and additionally attend other meetings, which incorporate continuing education courses targeted to dental educators into the agenda.

21. Is there attending faculty responsible for all clinical activities?  

YES  NO  

Documentary Evidence:  
A faculty member is assigned to clinic coverage according to the schedule provided in Appendix J. The faculty reviews the procedures being performed by each student in that clinic period and provides the appropriate level of supervision.

22. Do attending faculty have specific and regularly scheduled clinic assignments to provide direct supervision appropriate to a student’s/resident’s level of training in all patient care?  

YES  NO  

Documentary Evidence:  
A faculty member is assigned to clinic coverage according to the schedule provided in Appendix J. The faculty reviews the procedures being performed by each student in that clinic period and provides the appropriate level of supervision.

23. Are program directors and full time faculty provided time and resources to engage in scholarly pursuits?  

YES  NO  

Documentary Evidence:  
The Advanced Education in Endodontics Program Director and other faculty members are committed to the educational process and actively engage in scholarly pursuits. Teaching staff information is included in Appendix H. The Curriculum Vitae of the Program Director and other faculty are included in Appendix I.
STANDARD 3 – FACILITIES AND RESOURCES

(Complete each question by inserting an “x” in the appropriate box and identifying documentation in support of your answer. Appendices L-M are also required for this section. Note: required appendix information may serve as “documentary evidence” where appropriate.)

24. Are institutional facilities and resources adequate to provide the educational experiences and opportunities required to fulfill the needs of the educational program as specified in the Accreditation Standards for Advanced Specialty Education Programs? (3)

YES NO

Documentary Evidence:
Each resident has one operatory dedicated to their personal use for the duration of the program. The Endodontic Clinic was recently renovated and is kept in optimal condition with constant plans for upgrades and modifications. Each endodontic postgraduate operatory has a wall-mounted Gendex 770 x-ray unit, MiPACs Digital Radiology system utilizing Schick Sensors, a Dell laptop computer, a wall mounted television monitor, an electronic apex locator, a Zeiss Surgical operating microscope with attached digital camera, an Analytic Technology electric pulp tester, a Root ZX apex locator, an endodontic ultrasonic unit, a System B heat source, a Hot-Shot thermoplasticized gutta-percha system, an Obtura thermoplasticized system and an Aseptico electric handpiece system readily available for patient care. A rapid radiograph processing unit is also available in the clinic as a back-up to the Schick Digital Radiographic system. Also, a Cone-Beam CT Kodak 9000 has been installed for the exclusive use of the Endodontic Residents. The Endodontic Clinic is well maintained by dental school equipment repair technicians. All necessary instruments, supplies and equipment are available and are more than adequate for use in four-handed endodontic therapy.

25. Are equipment and supplies for use in managing medical emergencies readily accessible and functional? (3)

YES NO

Intent: The facilities and resources (e.g.; support/secretarial staff, allied personnel and/or technical staff) should permit the attainment of program goals and objectives. To ensure health and safety for patients, students/residents, faculty and staff, the physical facilities and equipment should effectively accommodate the clinic and/or laboratory schedule.

Documentary Evidence:
The Dental School protocol for management of medical emergencies is available in the Patient Care Policies section of the Dental Outpatient Clinic Operations Manual (http://dserver.uthscsa.edu/OPC%20Manuals/OPCManual.html). A step-by-step emergency protocol is posted in the Endodontic Advanced Education Clinic and emergency medical equipment is available just outside the clinic. The area is easily located in the hallway under the sign “Emergency Medical Equipment.” This equipment includes positive pressure oxygen and mask, an automated electronic defibrillator and an emergency drug kit. In the event of an emergency, the assigned faculty, residents and support staff will manage the emergency with the faculty assuming ultimate responsibility of care. If deemed necessary, 911 is called and, through the University Police, EMS is contacted.
26. Does the program document its compliance with the institution’s policy and applicable regulations of local, state and federal agencies, including but not limited to radiation hygiene and protection, ionizing radiation, hazardous materials, and bloodborne and infectious diseases?  (3)

YES  NO

**DOCUMENTARY EVIDENCE:**

The Dental School operates under the rules and regulations of the Institutional Safety Office at UTHSCSA. The Environmental Health and Safety Office includes an Institutional Safety Officer, a Radiology Safety Officer, a Chemical Safety Officer and a Biological Safety Officer. This office ensures that the students, faculty and staff, as employees of the University, are protected from any hazards in the environment in accordance with the Occupational Safety and Health Administration regulations. The Environmental Health and Safety Officer (Environmental Health and Safety Office, 1.343T, Dental School, x7-2955) is responsible for maintaining and documenting fire inspections, radiation surveys, and all biological, chemical and radiation waste materials. Fire prevention and safety inspections take place on a regular monthly schedule. The Radiation Safety Officer is responsible for the Radiology Program for UTHSCSA. Annual compliance surveys are performed by a board-certified and Texas-licensed medical physicist. The above noted plans can be found at [http://research.uthscsa.edu/safety/](http://research.uthscsa.edu/safety/).

27. Are the above policies provided to all students/residents, faculty and appropriate support staff and continuously monitored for compliance?  (3)

YES  NO

**DOCUMENTARY EVIDENCE:**

All students, faculty and staff receive documented in-processing briefings and training through the Orientation Program. Annual updates are completed as required. Continuous monitoring occurs and is documented in appropriate minutes and incident reports as needed.

28. Are policies on bloodborne and infectious diseases made available to applicants for admission and patients?  (3)

YES  NO

**INTENT:** The program may document compliance by including the applicable program policies. The program demonstrates how the policies are provided to the students/residents, faculty and appropriate support staff and who is responsible for monitoring compliance. Applicable policy states how it is made available to applicants for admission and patients should a request to review the policy be made.

**DOCUMENTARY EVIDENCE:**

Policies on bloodborne and infectious diseases are stated in the Clinic Operations Manual Infection Control Policy ([http://dserver.uthscsa.edu](http://dserver.uthscsa.edu)). These policies are made available to students, faculty and staff as part of their Orientation. The policies are available for review at all clinics and computer terminals through the UTHSCSA intranet system. Applicants for admission and patients can ask to review these public policies at anytime.
29. Are students/residents, faculty and appropriate support staff encouraged to be immunized against and/or tested for infectious diseases, such as mumps, measles, rubella and hepatitis B, prior to contact with patients and/or infectious objects or materials, in an effort to minimize the risk to patients and dental personnel?  

**YES  NO**

**Intent:** The program should have written policy that encourages (e.g., delineates the advantages of) immunization for students/residents, faculty and appropriate support staff.

**Documentary Evidence:**  
Several overlapping policies state requirements for immunization and testing for infectious diseases prior to contact with patients and on routine follow-up for faculty and support staff. Prior to registration all UTHSCSA students are required to have completed or show proof of the following immunizations: Hepatitis B, Tetanus-Diphtheria, Measles, Rubella, Mumps, and Chicken Pox (Varicella). A skin test for tuberculosis is required 12 months prior to registration. Documents attesting proof of immunizations within the required time frame require the signature of a physician. The Board of Regents may require additional immunizations in times of emergency or epidemic (Student Catalog p. 106). Guidelines for screening, prevention, and management of Tuberculosis require that students be screened on a yearly basis at no cost to the student. UTHSCSA has adopted policies and procedures regarding AIDS, HIV, HBV Infection, and Needlesticks (Student Catalog, pp. 97-105, http://studentservices.uthscsa.edu/PDF/catalog2010-2011.PDF).

30. Are all students/residents, faculty and support staff involved in the direct provision of patient care continuously recognized/certified in basic life support procedures, including cardiopulmonary resuscitation?  

**YES  NO**

**Intent:** Continuously recognized/certified in basic life support procedures means the appropriate individuals are currently recognized/certified.

**Documentary Evidence:**  
All students/residents, faculty and support staff involved in direct patient care are required to have current Basic Life Support certification provided through an AHA approved course. Records are kept for faculty and residents in the Endodontic Department, and for supporting staff in the Outpatient Clinic Office.

31. Are private office facilities used as a means of providing clinical experiences in advanced specialty education?  

**YES  NO**

**Intent:** Required endodontic clinical experiences do not occur in private office facilities. Practice management and elective experiences may be undertaken in private office facilities.

**Documentary Evidence:**  
Not applicable
32. Are the clinical facilities for students/residents in endodontics specifically identified and readily available?  (3-1)

**YES**  **NO**

**Documentary Evidence:**
The three first year and three second year endodontic residents each have an operatory totally dedicated to their clinical education. These operatories are only used by the endodontic residents. The operatories are approximately 9 feet x 10 feet providing the space necessary to perform all endodontic procedures including periradicular surgery. These dental treatment rooms are large enough to allow for patient comfort, access and space for auxiliary support, and student/faculty maneuverability. All of these treatment rooms have the equipment and supplies necessary to conduct the clinical phase of the program. Each endodontic postgraduate operator has a wall-mounted Gendex 770 x-ray unit, MiPACs Digital Radiology system utilizing Schick Sensors, a Dell laptop computer, a wall mounted television monitor, an electronic apex locator, a Zeiss Surgical operating microscope with attached digital camera, an Analytic Technology electric pulp tester, a Root ZX apex locator, an endodontic ultrasonic unit, a System B heat source, a Hot-Shot thermoplasticized gutta-percha system, an Obtura thermoplasticized system and an Aseptico electric handpiece system readily available for patient care. A rapid radiograph processing unit is also available in the clinic as a back-up to the Schick Digital Radiographic system. Also, a Cone-Beam CT Kodak 9000 has been installed for the exclusive use of the Endodontic Residents.

33. Is the design of units suitable for all endodontic clinical procedures, including four-handed dentistry?  (3-1.1)

**YES**  **NO**

**Intent:** The intent is to ensure that students/residents, faculty, and clinical support personnel have the facilities/resources necessary to conduct the clinical phase of the program; that clinical operatories and surrounding space are sufficient to perform all endodontic procedures, including surgery, and to allow for patient comfort, access and space for clinical support personnel and student/resident/faculty maneuverability.

**Documentary Evidence:**
The operatories in the Endodontic Clinic are approximately 9 feet x 10 feet providing the necessary space to perform all endodontic procedures including surgery. These dental treatment rooms provide easy access and ample room for efficient 4-handed dentistry. Each operatory has an Adec Dental Chair with a traditional style (chair-mounted) handpiece control delivery system and a ceiling mounted dental light. These treatment rooms are also equipped with contoured doctor’s stools and assistant's chairs. The endodontic operatories have built in cabinets and a mobile cart for storage of instruments and supplies. A built-in counter serves as a workspace to the side of the patient and bracket tables attached to the dental unit provide additional work areas. Residents have a built-in desk in the operatory as well as a locked cabinet for the storage of the personal equipment and supplies. Each treatment room has a chair mounted laptop computer coordinated with the MiPACs Digital Radiology system utilizing Schick Sensors for diagnostic images and patient education.
34. Is radiographic or imaging equipment and equipment specific for endodontic procedures readily available?  \( \text{YES} \quad \text{NO} \) (3-2)

**Intent:** The intent is to ensure that necessary equipment is available in the same clinic area to image teeth and their surrounding structures to aid in diagnosis and treatment.

**Documentary Evidence:**
The comprehensive radiographic services of UTHSCSA are readily available to the Endodontic Postgraduate Clinic and are more than adequate to support the program. The program has added a Cone Beam CT Kodak 9000 machine for the exclusive use by the endodontic residents, which allows access to real-time Focus computed-tomography (small volume) and Panoramic images. Cephalometric and occlusal radiographs are also readily available within the Dental School radiographic support areas. Computerized tomographic (CT) and Linear tomographic studies are readily available at UTHSCSA. Radiographic equipment is immediately available in every operatory in the Endodontic Postgraduate Clinic. Each of the six endodontic treatment rooms has a wall mounted Gendex 770 x-ray unit. Each operatory has the MiPACs Digital Radiology system utilizing Schick Sensors. In addition, each operatory has a Schick Digital Radiographic system utilizing a laptop computer readily available in the event of a disruption of the computer network. All necessary radiographic instruments, supplies and equipment are available and more than adequate.

35. Are lecture and seminar rooms as well as audiovisual aids available?  \( \text{YES} \quad \text{NO} \) (3-3)

**Documentary Evidence:**
Several large amphitheater lecture rooms with state of the art audiovisual aids are available throughout the Dental School and UTHSCSA. The Endodontic Department Library/ Conference Room (Rm. 4.534U) is the primary lecture room available for seminars, conferences, case presentations and lectures. This room has a ceiling mounted digital projector with a dedicated laptop computer. Additionally, the laptop computer is connected to the Endodontic Department’s server for network access to the Schick radiographic clinical images and files for case presentations and lectures. This server also houses the residency program’s literature seminars in electronic format (pdf, Word, Powerpoint slide sets, etc). The seminar room also has a 30 inch color monitor. Additional lecture rooms 4.670U & 4.663U are available upon request. Room 4.670U has a ceiling mounted digital projector and screens. Room 4.663U has a ceiling mounted dual 35mm slide projector and screens available. The Endodontic Department has several desktop and laptop computers available for resident use.
36. Are appropriate information resources available, including access to biomedical textbooks, dental journals and other sources pertinent to the area of endodontic practice and research? (3-4)

YES NO

Documentary Evidence:
Library resources are exceptional at UTHSCSA and in the Endodontic Department. These resources are general and comprehensive and are also specific pertaining to the area of endodontic practice and research. The Dolph Briscoe, Jr. Library (the main library on campus) is located adjacent to the Dental School. In addition to this large library, the Endodontic Department has a large collection of dental books and bound journals within the department. Through reciprocal agreements, UTHSCSA staff and residents also have access to the complete libraries at Wilford Hall USAF Medical Center. An electronic search using various search engines is available at virtually any computer terminal in the UTHSCSA. Copy machines are available in all libraries.

Briscoe Library (UTHSCSA): Briscoe Library at the UT Health Science Center at San Antonio: The library’s collection includes more than 218,000 book and journal volumes. Additionally, the library provides access to more than 23,000 journal titles, including more than 3,800 titles in the health sciences. Electronic resources: More than 97% of journal titles are available electronically; the library provides access to more than 13,000 ebook titles. MEDLINE, EBSCO CINAHL, PsycINFO, Web of Science, Micromedex and other databases are available. The library’s website allows residents to access electronic databases/journals from their operatories, the Endodontic Department Library or even from home. The Briscoe Library hours are 7am-12am, Monday-Thursday; 7am-10pm Friday; 9am-10pm Saturday and 10am-12am Sunday. The library Circulation Desk is staffed at all times that the library is open and librarians are available for consultation during business hours and from 1pm-5pm Saturday. During Orientation, new students are registered for library services and provided with information about library services and resources available in the library and electronically. In addition, the library has an excellent web page for information at: http://www.library.uthscsa.edu.

Endodontic Department Library: This library (Rm. 4.534U) contains over 500 books and all of the endodontically pertinent journals and is open for access to the residents and faculty 24 hours a day. Computer terminals are available in an adjacent room for access to the UTHSCSA Library webpage and for other online based journal searches.

Wilford Hall Medical Center Library, Dunn Dental Clinic Library (Lackland AFB), MacKown Dental Clinic Library (Lackland AFB):

Physical library holdings are still available, but as a whole, the library is moving toward a virtual environment. Access to core dental titles in each specialty is through the AFMS Virtual Library. The online collection is supplemented with local purchases. Online dental journals are available through EBSCO's Dentistry and Oral Sciences Source, Elsevier's Journals Consult, and OVID's Your Journals at OVID. 4,123 full-text journal titles are in the AFMS Virtual Library and cover all medical, nursing, and dental specialties. Dentistry and Oral Sciences Source has 118 full-text dental journals, plus abstracts to 166 dental journals. Online dental books are in MD Consult and Dentistry and Oral Sciences Source. Drug information is available through Lexi-Comp, another AFMS Virtual Library asset. The AFMS Virtual Library is accessible 24/7 with remote access through installation of a CAC reader. Dental books and 42 current subscriptions are in hard copy in the 2 clinics. Literature search capability is available through OVID and PubMed. A full-service library is on site.
The library staff assists with literature searches and interlibrary loans. Other databases are also available to extend literature searching beyond MEDLINE (DIALOG, Agricola, DTIC, etc). For items unavailable in the library, interlibrary loan services are available with hundreds of libraries throughout the U.S. through OCLC and DOCLINE. The Medical Library is open M-F 0730-1700. After-hours access requires a 59 MDW badge. The Medical Library has all the online resources on a local intranet site and accepts and sends requests from customers via email. Through affiliation with The University of Texas System, WHMC staff and residents also have access to the complete library facilities at UTHSCSA whose holdings include 112,735 serial (journal) volumes, 5,753 unique active journals, access to 19,855 ejournals, 129 Databases, 105,427 total book volumes 93,704 unique book titles, and 9,331 unique electronic book titles.

37. Is clinical support personnel sufficient to ensure efficient operation of the clinical program and to provide students/residents with the opportunity to practice four-handed dentistry techniques? (3-5)

YES  NO

**Intent:** The intent is to facilitate efficient delivery of dental care; to enhance the normal operation of endodontic practice; and to provide a simulated clinical practice environment; (Clinical support personnel is needed to keep from placing an undue burden of additional duties and responsibilities on the student/resident, potentially compromising the overall educational objectives of the program.)

**Documentary Evidence:**
The support staff is very adequate to meet the endodontic program’s objectives and accreditation standards. Three fully trained dental assistants are assigned to the Endodontic Clinic. Although students do not have an assigned assistant, they are readily available. The Clinical Manager who is also fully trained dental assistant supervises the Endodontic department assistants. Their responsibilities include coordinating the clinical assisting coverage, scheduling patients and additionally give secretarial and clerical assistance to the Program Director and Residency Training Officer when needed. Support staff information is included in Appendix M.
38. Is secretarial and clerical support personnel sufficient to permit efficient operation of the program?  

   YES  NO  (3-6)

**Intent:** The intent is to ensure operations of the program are managed in an efficient and expeditious manner without placing undue hardship on the faculty and students/residents in the program.

**Documentary Evidence:**

The Endodontic Program has adequate secretarial support to permit efficient operation of the program. The Endodontic Department has three full-time administrative staff persons with one, the academic program coordinator, dedicated to the Endodontic Postgraduate Program exclusively. Each faculty member within the Department of Endodontics has a personal computer networked to a laser printer, the most current software programs, the Department server, e-mail capability and internet communication access. Each resident has a dedicated laptop computer with similar capability in his/her operatory. The Endodontic Department has two additional networked desktop computers with current software programs designated exclusively for resident use. A patient scheduler manages patient phone calls, appointments and chart retrieval. This system has minimized the students' time spent on clerical duties. Support staff information is included in Appendix M.

39. Do program resources exist to support the number of students/residents enrolled?  

   YES  NO  (3-7)

**Documentary Evidence:**

The available resources are more than sufficient to support the residents enrolled in the program. Each resident is assigned a fully equipped treatment room. Including our Clinic Manager, there are Four full-time dental assistants who work exclusively in the Postgraduate clinic. Supplies are readily obtained and funding for attendance at APICES, a Board Review course and the AAE Annual Session is budgeted through the Department's resources.
STANDARD 4 - CURRICULUM AND PROGRAM DURATION

(Complete each question by inserting an “x” in the appropriate box and identifying documentation in support of your answer. Appendices N-T are also required for this section. Note: required appendix information may serve as “documentary evidence” where appropriate.)

40. Is the advanced specialty education program designed to provide special knowledge and skills beyond the D.D.S. or D.M.D. training and oriented to the accepted standards of specialty practice as set forth in the Accreditation Standards for Advanced Specialty Education Programs? (4)

   YES  NO

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.

Documentary Evidence:
None of the courses in the curriculum are shared by pre-doctoral students. Courses in the Advanced Specialty Education Program in Endodontics are designed to provide special knowledge and skills beyond the D.D.S. or D.M.D. level of training and meet the accepted standards of specialty practice as set forth in the Accreditation Standards for Advanced Endodontic Specialty Education Programs. The Biomedical Science curriculum and courses are detailed in Appendix P and the Clinical Instruction is detailed in Appendix T.

41. Is the level of specialty area instruction in certificate and degree-granting programs comparable? (4)

   YES  NO  N/A

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

Documentary Evidence:
The Certificate and Master of Science programs are identical during the 26 months of the Certificate program. The final 6 months of the Master of Science program focuses on research and thesis development.

42. Is documentation of all program activities ensured by the program director and available for review? (4)

   YES  NO

Documentary Evidence:
All records are maintained by the Program Director and are available for review.
43. If the institution/program enrolls part-time students/residents, does the institution have guidelines regarding enrollment of part-time students/residents?  

**YES**  **NO**  **N/A**

*Documentary Evidence:*
*The UTHSCSA Endodontic Residency does not enroll part-time students.*

44. If the institution/program enrolls part-time students/residents, do they start and complete the program within a single institution, except when the program is discontinued?  

**YES**  **NO**  **N/A**

*Documentary Evidence:*
*The UTHSCSA Endodontic Residency does not enroll part-time students.*

45. If the institution/program enrolls students/residents on a part-time basis, does the director of the accredited program ensure that:

   a) The educational experiences, including the clinical experiences and responsibilities, are the same as required by full-time students/residents? and  

   **YES**  **NO**  **N/A**

   b) There is an equivalent number of months spent in the program?  

   **YES**  **NO**  **N/A**

*Documentary Evidence:*
*The UTHSCSA Endodontic Residency does not enroll part-time students.*

46. Does the advanced specialty education program in endodontics encompass a minimum duration of 24 months (104 weeks) of full-time study?  

**YES**  **NO**

*Intent: The intent is to ensure that during the 104 weeks it is expected that endodontic students/residents will have a maximum of 8 weeks available for vacations, legal holidays, sick leave and personal time.*

*Documentary Evidence:*
*The Advanced Specialty Education Program in Endodontics at the University of Texas Health Science Center at San Antonio encompasses 26 months of full-time study. The program officially runs from July 1 through August 30 of the second year. The resident schedules for each year of the residency document the length of the program (see Appendix O/Appendix J).*
47. Is the content of all didactic instruction included in the program curriculum documented?  

**YES**  NO

*Documentary Evidence:*
*All courses at the University of Texas Health Science Center at San Antonio are required to have a course outline that lists objectives. The course outlines for departmental courses are included in Appendix Q. The course outlines for other courses are available on site.*

48. Is a formal (written) annual review of the program curriculum conducted?  

**YES**  NO

**Intent:** The intent is to ensure that the instructional content continues to meet the program goals and objectives.

*Documentary Evidence:*
*A review of the program curriculum and content is conducted annually. The Program Director is responsible for coordinating annual program reviews, making decisions on revisions and insuring timely implementation. The program review encompasses a critical evaluation of program goals and objectives as well as specific didactic, clinical and research requirements.*
BIOMEDICAL SCIENCES

49. Does instruction in the biomedical sciences provide information emphasizing principles and recent developments in order to meet the advanced program’s objectives? (4-4)

**YES**  **NO**

**Intent:** The intent is to ensure that developing new theories and techniques of endodontic treatment are included in the advanced program curriculum. Instruction should include the biologic and technical aspects of maintaining, replacing, and enhancing the natural dentition, including mechanisms for enhanced tissue healing and tissue regeneration.

**Documentary Evidence:**
Advanced courses are provided in all areas of instruction. These courses are separate courses from those of the pre-doctoral dental curriculum and emphasize relevant recent developments. The Introduction to Advanced Endodontics Course (Endo 5020) includes a detailed review of the pathobiology of apical periodontitis, stem cell biology, statistics and microbiology. The Pulp Biology/Pain Pharmacology Course (ENDO 6060) provides a solid foundation in the biology of the dental pulp and periradicular tissues necessary for appropriate clinical decision-making. A list of all courses in the Biomedical Sciences is presented in Exhibit 8 in Appendix P. Course outlines are available on site.

50. Does instruction emphasize the interrelationships among the biomedical sciences and their application to clinical practice? (4-5)

**YES**  **NO**

**Documentary Evidence:**
In all areas of training, advanced courses accentuate the biologic basis of appropriate clinical decision making in endodontic and restorative diagnosis and treatment, including the Introduction to Advanced Endodontics (ENDO 5020) and the Pulp Biology/Pain Pharmacology Course (ENDO 6060). In addition, the Dental Biomedical Core Course (INTD 5022, INTD 5021) provides a core of basic science instruction that is presented in an interdisciplinary manner to promote the clinical relevance of this material. Basic science principles in the field of clinical dentistry.

51. Is instruction provided in: (4-6)

   c) Anatomy (gross and micro) of soft and hard tissues of the head and neck?  **YES**  **NO**

   d) Embryology?  **YES**  **NO**
### Endodontics

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>c) Infectious and immunologic processes in oral health and disease?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>d) Pathophysiology of the pulpal/periradicular?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>e) Wound healing?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>f) Oral medicine and oral pathology?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>g) Pharmacotherapeutics?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>h) Research methodology and statistics?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>i) Neurosciences? and</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>j) Biomaterials?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

**Documentary Evidence:**

A complete list of courses in the Biomedical Sciences is provided in Exhibit 8 in Appendix P. The course outlines for these courses are available on site. Most of this instruction occurs in the first year of the program. The scheduling of these courses in the curriculum is given in the yearly schedule in Appendix O/Appendix J.
CLINICAL SCIENCES

52. Are a minimum of 40% and a maximum of 60% of the total clock hours in a two-year (24 months) program devoted to clinical care?  (4-7)

YES   NO

Documentary Evidence:
The Advanced Specialty Education Program in Endodontics averages 59.5% clinical care based on total clock hours calculated during the 26-month program. See Appendix N for percentages of the students’ total program time and Appendix O/Appendix J for residents’ schedules for each year of the program.

53. Is endodontic treatment evidence-based?  (4-8)(EBE is the integration of the best research evidence with clinician expertise and patient values).

YES   NO

Documentary Evidence:
Evidence-based treatment is emphasized throughout the 26 months of the program. Early on in the program with Literature Review course, the residents are taught to critically evaluate the manuscripts based on levels of evidence and to incorporate the best available evidence into their clinical treatment decisions. The residents assign a level of evidence to all literature abstracts they write during the residency and this concept is further emphasized during their presentations in the Case Presentations course, during Clinical Seminar and during the mock oral board exams when treatment decisions are justified through appropriate literature citations.
54. Does the educational program provide in-depth instruction and clinical training to achieve proficiency in the following areas: (4-9)

a) Diagnosis, treatment planning and prognosis? **YES** NO

b) Non-surgical and surgical endodontic treatment and retreatment? **YES** NO

**Intent:** The intent of instruction and training in surgical endodontic treatment and retreatment is to ensure that students/residents are trained to provide comprehensive treatment, which may include the removal of teeth as part of an endodontic treatment plan, e.g., extractions/replantations or extractions of teeth with vertical root fractures or other pathosis for which extraction is the preferred treatment.

c) Outcome evaluation? **YES** NO

d) Radiography and other diagnostic imaging technologies? **YES** NO

e) Management of endodontic treatment of medically compromised patients? **YES** NO

f) Emergency treatment for endodontic conditions? **YES** NO

g) Management of patients with orofacial pain and anxiety? **YES** NO

h) Preparation of space for intraradicular restorations and coresin endodontically treated teeth? **YES** NO

i) Communication with patients and health care professionals? and **YES** NO

j) Use of magnification technologies? **YES** NO

**Intent:** The intent is to ensure that students/residents are trained in the use of instruments that provide magnification and illumination of the operative field beyond that of magnifying eyewear. In addition to the operating microscope, these instruments may include, but are not limited to, the endoscope, orascope or other developing magnification.

**Documentary Evidence:**
The program provides in-depth didactic instruction and clinical training to the level of Proficiency in areas a) through m) listed above. Each area is documented by Exhibit 11 in Appendix T. Departmental course outlines are provided in Appendix Q.
55. Does the educational program provide in-depth instruction and clinical training to achieve competency in the following areas: (4-10)

a) Vital pulp management?  **YES**  **NO**
b) Endodontic management of developing permanent teeth?  **YES**  **NO**
c) Endodontic management of traumatic dental injuries?  **YES**  **NO**

And

d) A variety of endodontic techniques?  **YES**  **NO**

**INTENT:** the intent is to ensure that students/residents are trained to manage all aspects of the endodontic care of teeth with traumatic injuries

**Documentary Evidence:**
The program provides in-depth didactic instruction and clinical training to the level of Competency in areas a) through d) listed above. Each area is documented by Exhibit 11 in Appendix T. Departmental course outlines are provided in Appendix Q.

56. Does the educational program provide instruction at the level of understanding and clinical training to the level of exposure in the following areas: (4-11)

a) Diagnosis and treatment of periodontal disease and defects in conjunction with the treatment of the specific tooth undergoing endodontic therapy; treatment should be provided in consultation with the individuals who will assume the responsibility for the completion or supervision of any additional periodontal maintenance or treatment?  **YES**  **NO**

b) Placement of intraradicular restorations and cores in endodontically treated teeth; when the patient is referred, this treatment is accomplished in consultation with the restorative dentist?  **YES**  **NO**

c) Intracoronal bleaching procedures?  **YES**  **NO**

d) Implant dentistry? and  **YES**  **NO**

e) Extrusion procedures?  **YES**  **NO**

**Documentary Evidence:**
The program provides didactic instruction at the Understanding level and clinical training at the Competency level in areas a) through e) listed above. Each area is documented by Exhibit 11 in Appendix T. Departmental course outlines are provided in Appendix Q.
57. Does the educational program provide formal instruction in the following areas:

- a. The history of endodontics? YES NO
- b. Teaching methodology? YES NO
- c. Ethics and jurisprudence? YES NO
- d. Practice management? YES NO
- e. Risk management? and YES NO
- f. Medical emergencies? YES NO

**Documentary Evidence:**

Formal instruction is provided in all of these areas. The Literature Review Course provides four hours of instruction related to historical eras of endodontics. Continued review of the Endodontic literature includes a variety of historical review articles related to the specific topic being discussed. This effectively gives the student a historical basis for the modern concepts learned during the program.

Instruction in teaching methodology is incorporated into the supervised teaching courses during both years of the program. The Supervised Teaching course enables the student to gain valuable experience as an undergraduate preclinical and laboratory instructor under the guidance and supervision of the Endodontic Department staff. Residents learn to teach dental students through hands-on instruction in the preclinical lab, direct supervision in the clinic and evaluation of student's clinical cases under the guidance and supervision of the UTHSCSA Endodontic Department staff.

Ethics and jurisprudence instruction is included in the first year of the program during the Clinical Seminar course and continues throughout the residency as clinical cases are discussed from both biological and medicolegal perspectives.

Practice management is covered in the following courses: ENDO 5017 Clinical Seminar and ENDO 6073 Literature Review. Instruction in this subject area covers all aspects of establishing and maintaining an endodontic practice in the private setting. The Clinical Seminar course includes sessions entitled “Managing a Practice Limited to Endodontics” which are presented by a full-time private practitioner and cover a wide range of topics related to practice management in an endodontic private practice. This is supplemented by additional instruction during Literature Review covering the topics of referrals, practice management and litigation. This total didactic instruction gives the student an outstanding overview of the management of an endodontic practice.
Endodontic endosseous implants are covered in the Literature Review course. The student receives several hours of literature review on the subject. Osseointegrated implants and techniques for placement of implants are covered in the PROS 5050 Endosseous Implants course. This course provides excellent instruction on osseointegration principles, indications and contraindications, patient selection, surgical procedures, placement of implants and restorative concepts.

Orthodontic extrusion procedures are covered in the Literature Review course, and reviewed during the interdisciplinary seminars that are held weekly with Endodontic, Prosthodontic, Periodontic and Orthodontic residents and faculty (resident attendance mandatory). When potential root extrusion cases are referred to the Endodontic Department, students are able to evaluate, treatment plan and accomplish orthodontic extrusion procedures with guidance from the Orthodontic Department faculty. The students expand their clinical experience in orthodontic extrusion and many other areas by formal reviews and evaluations during Case Presentations and as part of the interdisciplinary seminars course held weekly. This allows the student to review and discuss two to three times the number of patients he or she would normally treat.

58. Do students/residents actively participate in seminars or conferences involving literature and textbook reviews?  (4-13)

YES  NO

Documentary Evidence:
A large segment of the didactic portion of the postgraduate program is devoted to the study, evaluation and application of all aspects of endodontic diagnosis and therapy. Students participate in Endodontic Literature Review over the 26-month course of the program. These seminars include an in-depth analysis of the biologic principles and provide a firm scientific foundation for the various phases of endodontic diagnosis and therapy. The students’ understanding of the biologic basis for endodontic diagnosis and treatment is further enhanced by weekly participation in the Interdisciplinary and Endodontic Clinical Seminars. In the Case Presentations course, residents and staff critically analyze and discuss endodontic diagnosis and treatment concepts during the weekly review of a wide variety of resident clinical cases. Current Literature Review sessions throughout both years of the program complement these seminars by enabling the students to integrate new information and concepts with previously published ideas and principles relating to the pulpal-periradicular complex. Students are expected to critically review and abstract assigned articles and then discuss each article during literature review seminars. Emphasis is placed on the critical evaluation of all articles reviewed. The Introduction to Advanced Endodontics course, Clinical Seminar course and Endodontic Literature Review course also includes a review of relevant chapters/sections from the latest editions of Cohen’s Pathways of the Pulp (Hargreaves/Cohen), Endodontics (Ingle/Bakland), Endodontic Therapy (Weine), Seltzer and Bender’s Dental Pulp (Hargreaves/Goodis), Essential Endodontontology (Orstavik/Pitt Ford), Inflammation – A Review of the Process (Trowbridge/Emling), Problem Solving in Endodontics (Gutmann), Textbook and Color Atlas of Traumatic Injuries to the Teeth (Andreasen/Andreasen), Surgical Endodontics (Gutmann/Harrison), Practical Lessons in Endodontic Surgery (Arens/Torabinejad/Chivian/Rubinstein) and other endodontic texts.
59. Do students/residents actively participate in endodontic and interdisciplinary seminars and conferences evaluating diagnostic data, treatment plans, treatment procedures, and outcomes assessment?  (4-14)  

**YES**  **NO**

**Documentary Evidence:**
During the first year of the program, endodontic residents are exposed to a wide variety of interesting and challenging cases in the weekly Clinical Seminar Course, ENDO 5017/5018. These cases encompass a broad spectrum of difficult clinical situations that the resident will be called upon to treat as a specialist. The seminar format promotes active student participation and is aimed at stimulating the resident to develop a logical approach to making a diagnosis and treatment plan. In the weekly Case Presentations Course (ENDO 5080/5081/5082) that runs through 26 months of the program, endodontic postgraduate students present cases that they have treated in the previous week. The seminar format requires active student participation aimed at stimulating the resident to develop a logical approach to making a diagnosis and treatment plan. Both first and second year students and all available full-time and part-time endodontic faculty members attend this course. Students present and participate in the evaluation of diagnostic data, treatment planning, treatment procedures and outcomes assessment in each case. In addition, the residents participate in the Perio/Pros/Endo/Orth Seminar, INT 5013 that emphasizes the relationship between the disciplines of Periodontics, Orthodontics, Prosthodontics and Endodontics in the overall treatment of the multidisciplinary patient. The course includes presentations and discussion of treatment planning with the guidance of Periodontic, Orthodontic, Prosthodontic and Endodontic staff members at UTHSCSA. Postgraduate residents in the four departments are responsible for coordinating and presenting cases, discussing treatment considerations and explaining the treatment plan and rationale for treatment.

60. Does the program include a system for follow-up evaluation of patients to enable students/residents to assess the outcome of their treatment?  (4-15)  

**YES**  **NO**

**Documentary Evidence:**
The program has a system for follow-up evaluation of patients. Following the completion of treatment, the student fills out a post card reminder of the need to schedule a recall appointment for each patient. These cards are kept in a recall filing system categorized by month, and mailed to patients 6 months after completion of treatment. Also, the dental school uses Axium, which allows the staff to schedule patients easily during selected months (6-month and 12-month recalls). The residents provide specific dates to the staff member who adds the patient on their schedule. We are able to print them an electronic recall list from Axium for each resident. Students are encouraged to try to recall all patients, but must perform recall evaluations on a minimum of 30 cases treated during the program. Selected patients receive continued recall evaluation by the Endodontic Program Director, endodontic staff or residents as needed for up to two years. Clinical findings from these recall evaluations, as well as any photos and radiographs taken, are forwarded to the former student so that he/she may observe the long range results of treatment.
61. Are comprehensive records of history, diagnosis, and treatment maintained for each patient?  

**YES**  **NO**  

**Documentary Evidence:**
*Endodontic diagnostic and treatment procedures, as well as any follow-up visits, are recorded in the UTHSCSA Dental School record for each patient visit in the Endodontic Graduate Clinic. Patient records are kept electronically using Axium to include digital radiographs. These are maintained (with daily back-up) on a UTHSCSA Dental School computer server. Copies of the pre- and post-operative radiographs are maintained in the patient’s dental record electronically in Axium.*
TEACHING

62. Do students/residents participate in teaching endodontics to predoctoral and/or postdoctoral students/residents? (4-17)

YES  NO

**Documentary Evidence:**
During the spring semesters of both the first and second years of the program, students gain valuable experience teaching in the sophomore dental student laboratory course. The resident is actively involved in the laboratory supervision of a small group of sophomore dental students as they perform specific endodontic procedures on extracted teeth. The resident functions as an instructor side by side with endodontic faculty members who observe and critique the student’s performance. In addition, endodontic residents have the opportunity to teach junior and senior dental students in the undergraduate clinic under the direct supervision of the endodontic staff during the Fall and Spring Terms of their second year. These teaching experiences are documented in Appendix O /Appendix J.

63. In a two-year (24 months) program, does this participation exceed 10% of the total clock hours? (4-17-1)

YES  NO

**Intent:** The intent is to enhance a student’s/resident’s ability to organize and evaluate teaching material, to communicate information to others, and/or to mentor others. Teaching is to be in the specialty of endodontics or other related disciplines, at the discretion of the program director.

**Documentary Evidence:**
Overall, students spend 3.4% of their time in the program participating in teaching activities. This is documented in Appendix N and Appendix O/ Appendix J.

*Answer YES if a statement is true, answer NO if a statement is false*
STANDARD 5 - ADVANCED EDUCATION STUDENTS/RESIDENTS

ELIGIBILITY AND SELECTION

(Complete each question by inserting an “x” in the appropriate box and identifying documentation in support of your answer. Appendices U-X are also required for this section. Note: required appendix information may serve as “documentary evidence” where appropriate.)

64. Are dentists with the following qualifications eligible to enter the advanced specialty education program accredited by the Commission on Dental Accreditation:

   a) Graduates from institutions in the U.S. accredited by the Commission on Dental Accreditation?  
      YES  NO

   b) Graduates from institutions in Canada accredited by the Commission on Dental Accreditation of Canada?  and
      YES  NO

   c) Graduates of international dental schools who possess equivalent educational background and standing as determined by the institution program? (5)
      YES  NO  N/A

*Documentary Evidence:*

An individual who is eligible for a state dental license within the United States qualifies in terms of dental education. The UTHSCSA residency program accepts individuals graduated of international dental schools that have equivalent educational background and standing as determined by the program.

65. Are specific written criteria, policies and procedures followed when admitting students/residents? (5)

*Intent:* Written non-discriminatory policies are to be followed in selecting students/residents. These policies should make clear the methods and criteria used in recruiting and selecting students/residents and how applicants are informed of their status throughout the selection process.
Documentary Evidence:
Resident selection is conducted annually by the resident selection committee of the Department of Endodontics. Each application is reviewed and ranked based upon the following criteria:
1. Grade point average and class standing in dental school.
3. Letters of recommendation.
4. Endodontic postgraduate application which includes the personal statement, and which is evaluated for evidence of:
   - Effort and hard work
   - Intellectual capacity
   - Enthusiasm and curiosity for endodontics
   - Teamwork and leadership
   - Clinical experience
   - Research interest
   - Awareness of social contract

From the initial applicant pool, typically 12-14 applicants are invited to interview with the selection committee. Following the interview process (which includes individual interviews with each committee member, tours of the facility, a chance to observe the clinical operations, the committee meets to rank the interviewees. When a consensus is reached, selected applicants are invited to join the program. Resident selection is ultimately the responsibility of the Program Director.

66. Is the admission of students/residents with advanced standing based on the same standards of achievement required by students/residents regularly enrolled in the program? YES  NO  N/A

Documentary Evidence:
Dr. Fabricio B. Teixeira was admitted to the program with advanced standing as per follows:

Policies:
   a) The applicant must demonstrate the same standards of achievement required by residents regularly enrolled in the UTHSCSA Advanced Education Program in Endodontics.
   b) A letter from the applicant’s former director must describe the competencies and proficiencies achieved by the applicant for advanced standing admission. A copy of the relevant portion of the curriculum must be provided to verify equivalency to the UTHCSA curriculum.

Methods:
   a) A formal plan was developed and signed by both the UTHSCSA program director and the applicant describing the additional educational competencies that must be achieved to meet the policies listed above. This plan will include an examination process to demonstrate equal scope and level of knowledge.
67. Do transfer students/residents with advanced standing receive an appropriate curriculum that results in the same standards of competence required by students/residents regularly enrolled in the program? (5)  

**YES**  **NO**  **N/A**

**Documentary Evidence:** (If yes, as part of the documentary evidence, describe the policies and methods for awarding advanced standing credit. Indicate the type of courses for which advanced standing is granted and the maximum number of credits that can be awarded).

The UTHSCSA Residency Program does not accept transfers.
EVALUATION

68. Does a system of ongoing evaluation and advancement ensure that, through the director and faculty, each program:

   a) Periodically, but at least semiannually, evaluates the knowledge, skills, ethical conduct and professional growth of its students/residents, using appropriate written criteria and procedures?  

   b) Provides to students/residents an assessment of their performance, at least semiannually?  

   c) Advances students/residents to positions of higher responsibility only on the basis of an evaluation of their readiness for advancement?  And  

   d) Maintains a personal record of evaluation for each student/resident which is accessible to the student/resident and available for review during site visits?  (5)

   YES  NO

Intent:  (b) Student/Resident evaluations should be recorded and available in written form.  
(c) Deficiencies should be identified in order to institute corrective measures.  
(d) Student/Resident evaluation is documented in writing and is shared with the student/resident.

Documentary Evidence:  
The process for evaluation of the student’s didactic and clinical performance and advancement in the program is continuous and closely monitored. During the first and second year of their residency, the student’s didactic, clinical and research progress is monitored weekly by both the Program Director and the Department faculty. The Program Director receives the didactic semester grades, and both the Program Director and Department faculty observe resident participation and progress in literature reviews, case presentation and clinical seminars, and monitor research protocol development and research progress. Each resident is also required to complete an Endodontic case portfolio per the specifications of the American Board of Endodontics. Three cases are required by the end of the first year, and the entire portfolio (10 cases) must be satisfactorily completed before graduation.

At the end of the Fall semester of the first year, a counseling session between the student and the Program Director is conducted and the results documented by a written report. This session is based upon written feedback from each faculty member that is in contact with the students. At the end of the first year of the residency, a second counseling session takes place between the Program Director and the student. This session evaluates the extent of the didactic and biologic knowledge of the student. Additionally, the course content and skills of the didactic and clinical faculty are evaluated by the student. This session evaluates the student’s progress and potential for advancement to the second year of the residency.

The quantitative clinical exposure of the student is monitored through the Report of Clinical Procedures, which is closely monitored by the Program Director. These monthly Clinical Procedure Reports are summarized in a cumulative clinical performance log which is reviewed at the semi-annual counseling sessions. These cumulative reports are used to identify deficiencies in clinical exposure and identify areas of needed additional experience.

During both years of the Endodontic Residency, the clinical performance of each student is evaluated by close clinical supervision on a daily basis. Additionally, there is a weekly case presentation session on Friday afternoons at which the student’s clinical performance is evaluated, reviewed and discussed. The student’s biologic basis for endodontic treatment and didactic knowledge is evaluated during a Mock Oral Board examination given in Spring term of the second year. Board-Certified Endodontic staffs of the UTHSCSA and WHMC programs participate in the Spring Oral Board evaluation, which is designed to mimic the American Board of Endodontics Oral Examination procedures.

The results of the semiannual counseling evaluations during the first and second year of the residency are documented in writing. The student reviews the summary of the evaluation and signs the review. If the student has concerns or disagrees with the evaluation, he/she has ample opportunity to discuss the points of concern with the staff. The student’s perceptions of his/her progress, areas of concern or difficulty have normally already been discussed prior to the formal evaluation session. The results of the Mock Oral Boards are documented in writing. Students review all completed evaluations with one-to-one sessions with the Program Director.

Informally, during the program a continuous dialogue between the student and staff takes place within the clinical area regarding patient care. Immediate feedback is available. During weekly clinical treatment seminars, student cases are reviewed which allows suitable evaluation and direction.

Copies of the student evaluation forms are included in Appendix V. Resident training folders which include completed student evaluation forms are available on site for review.
DUE PROCESS

69. Are there specific written due process policies and procedures for adjudication of academic and disciplinary complaints, which parallel those established by the sponsoring institution? YES NO (5)

Documentary Evidence:
This information is briefed as part of the resident orientation, and each resident is given a written copy of these policies. The residents sign a form acknowledging receipt of the briefing and written materials. Students also receive information on salary, leave, practice policies, professional liability and accreditation status of the program during orientation with written documentation included in the Resident Manual. Specific written due process and grievance policies are included in Appendix W.
RIGHTS AND RESPONSIBILITIES

70. At the time of enrollment are the advanced specialty education students/residents appraised in writing of the educational experience to be provided, including the nature of assignments to other departments or institutions and teaching commitments? (5)  

**YES**  **NO**

Documentary Evidence:  
At the time of enrollment, each student receives a Resident Manual that outlines the UTHSCSA Advanced Specialty Education Program in Endodontics and all of the requirements of the program. Excerpts from the UTHSCSA Endodontic Resident Manual are included in Appendix X.

71. Are all advanced specialty education students/residents provided with written information which affirms their obligations and responsibilities to the institution, the program and program faculty? (5)  

**YES**  **NO**

Intent: Adjudication procedures should include institutional policy which provides due process for all individuals who may potentially be involved when actions are contemplated or initiated which could result in disciplinary actions, including dismissal of a student/resident (for academic or disciplinary reasons). In addition to information on the program, students/residents should also be provided with written information, which affirms their obligations and responsibilities to the institution, the program, and the faculty. The program information provided to the students/residents should include, but not necessarily be limited to, information about tuition, stipend or other compensation; vacation and sick leave; practice privileges and other activity outside the educational program; professional liability coverage; and due process policy and current accreditation status of the program.

Documentary Evidence:  
During the Department of Endodontics orientation prior to the start of the residency, students receive a copy of the Endodontic Department Resident Manual which describes their obligations and responsibilities to the program and the faculty. Program information provided to the residents includes goals and objectives of the residency as well as a detailed description of the program, including schedules, curriculum, evaluation methods, costs and requirements for completion of the entire 26 month program. The Endodontic Resident Manual also contains specific student responsibilities and obligations, information about vacation and sick leave, practice privileges and other activities outside the educational program, professional liability coverage, due process policy, professionalism, and current accreditation status of the program. Additionally, students receive a copy of the ADA Accreditation Standards for Advanced Specialty Education Programs in Endodontics. Appendix W and Appendix X contain copies of written information provided to each student. Signed acknowledgment of their receipt and understanding of this material is kept on file.
STANDARD 6 – RESEARCH

(Complete each question by inserting an “x” in the appropriate box and identifying documentation in support of your answer.)

72. Do advanced specialty education students/residents engage in scholarly activity? (6)  

YES  NO

Documentary Evidence:
All students read, abstract and discuss original research articles in the topical Endodontic Literature Review and Current Literature Review seminars during the first and second year of the program. Residents are taught to critically review the literature with an emphasis on finding the best available evidence, assessing its validity and then using the best evidence to make decisions regarding patient care. Throughout the program emphasis is placed on how to define, plan, write, revise and critique papers. Copies of literature abstracts and research manuscripts are available on site. Students also develop and write a research protocol, conduct the research and write a scientific paper suitable for publication. Residents are encouraged to present their research at the annual meeting of the AAE and during the annual Department Research Day, which is held on the day of graduation and includes a seminar from an outside invited endodontic scholar.

73. Do students/residents participate in research? (6-1)  

YES  NO

Intent: The intent is to ensure that each student/resident is capable of developing a research protocol and has an active role in conducting a research project.

Documentary Evidence:
The Research Methodology course during the summer session of the first year introduces the student to the application of research methods and the evaluation of investigative data. Through the research experience of questioning, gathering data, observation, obtaining results, making conclusions based upon such data, and then ultimately developing a publishable paper, the student is able to enhance intellectual growth and develop creative attitudes and a better interpretation of the scientific literature. During the first year of the program, the student formulates a protocol for the purpose of conducting an original investigation. Following critical evaluation and acceptance of the protocol by the Endodontic Department Research Committee, the student actively conducts a research project, under the guidance of a faculty research mentor. A copy of proposals of current students and manuscripts of former students are available on site.

74. Are the research experience and results compiled into a document in publishable format? (6-2)  

YES  NO

Documentary Evidence:
All students are required to prepare and submit a research manuscript that is suitable for publication. Manuscripts are reviewed and approved by the Program Director. Residents are strongly encouraged to submit the results of their research to a refereed professional scientific journal for consideration for publication. Students also typically present their research project as an Oral or Poster Research Presentation at the American Association of Endodontists Annual Session.

ENDODONTICS

SUMMARY OF SELF-STUDY REPORT

Summarize in a qualitative appraisal and analysis the program’s strengths and weakness.

Note: This summary culminates the self-study report in a qualitative appraisal and analysis of the program’s strengths and weakness.

INSTITUTION-RELATED

1. Assess the adequacy of institutional support for the program.

The institutional support provided to the Endodontic Program at UTHSCSA is outstanding. For example, since the last site visit, clinics have been renovated, a CBCT (Kodak 9000) has been acquired for exclusive use by the residents, and 7 Global microscopes were replaced with Zeiss microscopes. The clinics are well equipped and there is satisfactory staff and financial support for the postgraduate program. Dental assistants and secretaries are accessible for the professional operation of the postgraduate program. The department is supplied with enough resources for the constant acquisition of materials, supplies, and essential services.

The endodontic clinic is composed of six dental treatment rooms dedicated to the Endodontic Program. Each resident is assigned a fully equipped operatory for that resident’s exclusive use. The dental treatment rooms in the Endodontic Department are located adjacent to each other for ease of consultation among students and with faculty. In addition, a faculty consultation room is part of this clinic, permitting private conversations with residents when appropriate. The clinic is well organized and situated adjacent to the Prosthodontic postgraduate clinic. The equipment is excellent and in good repair. There are four full-time assistants dedicated to the program. The faculty staffing of the clinic is very strong with National/International reputation and totally dedicated to the Endodontic Program.

The fulfillment of the program objectives and accreditation requirements are being absolutely met on a continuing basis. All required items necessary to maintain accreditation have historically been readily attainable and maintainable. Funding for non-essential but desired items, such as state-of-the-art equipment, is reviewed and funded as budget constraints allow.

2. Assess whether the program is achieving goals through training beyond pre-doctoral level.

The UTHSCSA Endodontic Residency program is accomplishing goals by providing training beyond the pre-doctoral level. All the courses are designed and taught to the post-doctoral level and include critical appraisal of the primary literature as well as training in evidence-based decision making. The determination of how these goals are being met is accomplished in a number of ways. Resident performance is assessed in all required didactic and clinical courses. There is ongoing evaluation of student performance.
achievement based on daily, weekly and monthly reviews of their clinical and didactic performance. Semiannual counseling sessions assess student performance in didactic and research endeavors. Quarterly counseling sessions during the second year enable the Program Director and faculty to evaluate overall clinical and didactic performance. Student feedback is encouraged at all resident counseling sessions. In addition, the outcomes measures (Appendix B) are closely monitored by the Program Director and post-graduate faculty to assess whether these goals are being met.

3. **Assess whether the program is achieving goals through stated competencies.**

A copy of the ADA Commission on Dental Accreditation Standards for Advanced Specialty Education Programs in Endodontics is given to all residents during the Orientation (beginning of the program). The Program Director uses these standards as a basis for the goals and objectives and as a guide to evaluate that areas of training are being presented at the appropriate level. The major assessment method for determining the effectiveness of teaching to levels of competencies is through outcomes assessments. This includes using resident evaluations of all courses and faculty evaluations of resident clinical performance particularly during Clinical Seminar and Case Presentation sessions. If there are any questions about the adequacy of training, the topic is discussed in a departmental meeting to determine how the instruction can best be improved. When there is a question of student performance, faculty members discuss remedies and work with the student in achieving the proper solution. When deficiencies are noted in didactic instruction, the program director meets with the appropriate course director to initiate the proper revisions of, or additions to, the course.

4. **Assess whether the program is achieving goals through stated proficiencies.**

To determine achieving the goals through stated proficiencies, the curriculum and the students’ performance are evaluated with emphasis on assuring a higher expertise level shown in knowledge and clinical skills.

5. **Assess whether the program is achieving goals through outcomes.**

The program is achieving goals based on results of formal outcomes assessment evaluations (see Appendix B). In addition to scheduled routine assessments associated with grade reports, daily case reviews, weekly case presentations, quarterly and semiannual counseling sessions, board case portfolios, mock oral boards, etc., the entire program is analyzed in a self-study on a yearly basis. At this annual program review, all available outcomes are used including end-of-year evaluations from all residents. Proposed changes in the program, additions and/or deletions, are discussed by the Endodontics faculty and staff (when appropriate) prior to implementation. Re-assessment of these changes is accomplished formally at the next yearly self-study. The program has the additional capability to obtain feedback from graduate alumni. Surveys are sent out one year after graduation to all of our graduates. This survey provides valuable information on the effectiveness of the program in training residents to meet their goals. This program is aimed at identification of areas of potential improvement and setting goals to achieve these improvements.
6. **Assess calibration among program directors and faculty in the student/resident evaluation process to ensure consistency of the evaluation process.**

The program has five full-time, two part-time and four volunteer faculty members. The calibration among the full-time and part-time faculties is easily accomplished primarily through monthly meetings. There are monthly departmental meetings where the program director express concerns, changes and discuss with faculty possible improvements. Also the program director meets on a regular basis with the Chairman of the Department providing reports and asking for feedback. The volunteer faculty are composed of former residents of the UTHSCSA Endodontic program and the Program Director establishes good communication and discusses possible changes every time they present for clinical coverage. Students present cases in the weekly Case Presentation Course that faculty and other residents evaluate for appropriate diagnosis, treatment plan including alternate treatments, quality of treatment, and evaluation of recalls for success/failure. During these student presentations, faculty and students evaluate and discuss all of the above aspects of clinical endodontics. In this format, faculty members discuss the criteria for evaluation and clinical acceptability of cases. Finally, the Department has an annual half-day retreat of all faculty (FT and PT) to discuss programmatic issues, policies and procedures to ensure calibration.

7. **Assess the faculty evaluation process to ensure consistency of the evaluation process.**

Residents and the Program Director complete a formal evaluation of each faculty member annually. The Program Director is evaluated in the same manner. In addition, graduating residents are asked to complete an Endodontic Residency evaluation form (Exit Interview) at the end of the program. When appropriate, faculty members are given this information to expedite correction of course and/or instructional deficiencies.

8. **Assess the institution’s policies on advanced education students/residents.**

Resident’s rights and responsibilities are clearly defined in documents reviewed by the program director during orientation. All residents are given a copy of their rights, obligations and responsibilities as residents in this program. This document fully delineates specific requirements governing training, military and off-duty requirements, and benefits and services available to them during training. Residents are also provided written copies of the ADA Policy on Complaints. Residents acknowledge receipt of these documents in writing every year of the residency. These policies are also maintained on the Department server for access at all times. The UTHSCSA residency program does not accepts transfer or students on part-time status.
9. **Assess the institution’s policies on eligibility and selection.**

The UTHSCSA residency program ensures elimination of any personal bias and removes all possible prejudices toward candidates. The criteria used by the Resident Selection Committee of the Department of Endodontics are:

1. Grade point average and class standing in dental school.
3. Letters of recommendation.
4. Endodontic postgraduate application which includes the personal statement, and which is evaluated for evidence of:
   - Effort and hard work
   - Intellectual capacity
   - Enthusiasm and curiosity for endodontics
   - Teamwork and leadership
   - Clinical experience
   - Research interest
   - Awareness of social contract

From the initial applicant pool, typically 12-14 applicants are invited to interview with the selection committee. Following the interview process (which includes individual interviews with each committee member, tours of the facility, a chance to observe the clinical operations, the committee meets to rank the interviewees. When a consensus is reached, selected applicants are invited to join the program. Resident selection is ultimately the responsibility of the Program Director.

10. **Assess the institution’s policies on due process.**

The student evaluation system is designed to provide adequate opportunity for due process. Emphasis is positioned on giving the student ample opportunity to rectify his/her deficiencies before administrative action is taken. The UTHSCSA faculty has a clearly defined process for management of dental residents who encounter academic, technical, and/or professional conduct problems. Verbal counseling and open discussions always precede any formal action that might lead to probation, extension of training or termination. By intention, students will be apprised of unsatisfactory performance of progress as soon as the Program Director recognizes a significant pattern in this respect. Due Process procedures will be administered in accordance with the UTHSCSA Handbook for Operating Procedures (see Appendix W).

11. **Assess the institution’s policies on student/resident rights and responsibilities.**

The institution and program’s policies with regard to student rights and responsibilities are fair and appropriate. During the orientation period that precedes the start of the UTHSCSA Endodontic Residency program, each student reviews the electronic Endodontic Resident Manual, which includes guidelines describing their rights and responsibilities. The manual includes overall program goals and objectives and describes program requirements and curriculum structure. This resident manual also contains specific information on student due process and procedures for addressing resident...
12. **Assess the adequacy and accessibility, hours of operation and scope of holdings of the sponsoring institution’s library resources.**

The adequacy and accessibility, hours of operation and scope of holdings of the library resources at UTHSCSA and in the Endodontic Department available to students are all outstanding. These resources are comprehensive and are also specific pertaining to the area of endodontic practice and research. The Dolph Briscoe, Jr. Library (the main library on campus) is located adjacent to the Dental School. In addition to this large library, the Endodontic Department has a large collection of dental books and bound journals within the department. Through reciprocal agreements, UTHSCSA staff and residents also have access to the complete libraries at Wilford Hall USAF Medical Center. An electronic search using various search engines is available at virtually any computer terminal in the UTHSCSA. Copy machines are available in all libraries. The Briscoe Library at the UT Health Science Center at San Antonio collection includes more than 218,000 book and journal volumes. Additionally, the library provides access to more than 23,000 journal titles, including more than 3,800 titles in the health sciences. Electronic resources: More than 97% of journal titles are available electronically; the library provides access to more than 13,000 ebook titles. MEDLINE, EBSCO CINAHL, PsycINFO, Web of Science, Micromedex and other databases are available. The library’s website allows residents to access electronic databases/journals from their operatories, the Endodontic Department Library or even from home. The Briscoe Library hours are 7am-12am, Monday-Thursday; 7am-10pm Friday; 9am-10pm Saturday and 10am-12am Sunday and can be accessed electronically on a 24/7 basis. The library Circulation Desk is staffed at all times that the library is open and librarians are available for consultation during business hours and from 1pm-5pm Saturday. In addition, the library has an excellent web page. The Endodontic Department Library (Rm. 4.534U) contains over 500 books and all of the endodontically pertinent journals and is open for access to the residents and faculty 24 hours a day. Also, the Wilford Hall Medical Center Library, Dunn Dental Clinic Library (Lackland AFB), MacKown Dental Clinic Library (Lackland AFB) physical library holdings are still available, but as a whole, the library is moving toward a virtual environment. Access to core dental titles in each specialty is through the AFMS Virtual Library. The online collection is supplemented with local purchases. Online dental journals are available through EBSCO's Dentistry and Oral Sciences Source, Elsevier's Journals Consult, and OVID's Your Journals at OVID. 4,123 full-text journal titles are in the AFMS Virtual Library and cover all medical, nursing, and dental specialties. Dentistry and Oral Sciences Source has 118 full-text dental journals, plus abstracts to 166 dental journals. Online dental books are in MD Consult and Dentistry and Oral Sciences Source. Drug information is available through Lexi-Comp. The AFMS Virtual Library is accessible 24/7 with remote access through installation of a CAC reader. Dental books and 42 current subscriptions available. Literature search capability is available through OVID and PubMed. Other databases are also available to extend literature searching beyond MEDLINE (DIALOG, Agricola, DTIC, etc). For items unavailable in the library, interlibrary loan services are available with hundreds of libraries throughout the U.S. through OCLC and DOCLINE.

13. **Assess the institutional oversight of the quality of training at affiliated institutions.**
The Endodontic Residency Program at the University of Texas Health Science Center at San Antonio does not provide any training at affiliated institutions.
PATIENT CARE

1. **Assess the institution’s/program’s preparedness to manage medical emergencies.**

   Endodontic residents, as well as all dental personnel, are required to maintain currency in Basic Life Support. The residents also complete a course given by the medical center Advanced Cardiac Life Support. A standardized crash cart is available right outside of the Endodontic Clinic within easy reach of any treatment area. The crash cart is inspected daily, equipment is checked for proper function and medications are replenished or replaced as needed. UTHSCSA maintains a rapid 911-response protocol with the medical emergency room within minutes of the dental clinic. Oxygen is available in each treatment suite of the dental clinic. Periodic training to assess clinic responses is held annually for faculty and students.

2. **Assess the adequacy of radiographic services and protection for patients, advanced education students/residents and staff.**

   The radiographic capabilities at Endodontic Clinic are excellent and very carefully monitored through the UTHSCSA Radiation Safety Program. Radiographic equipment is available in every operatory in the Endodontic Department. Each of the six endodontic treatment rooms has a wall mounted Gendex 770 x-ray unit. All wall-mounted units are routinely inspected. Each operatory has a networked desktop computer with MiPACs software and utilizing Schick Sensors. Cone-Beam Computed Tomography and Digital Panoramic radiographs (Kodak 9000) are also available in the Endodontic Clinic for exclusive use by the residents.

   The Dental School operates under the rules and regulations of the Institutional Safety Office at UTHSCSA. The Environmental Health and Safety Office includes an Institutional Safety Officer, a Radiology Safety Officer, a Chemical Safety Officer and a Biological Safety Officer. This office ensures that the students, faculty and staff, as employees of the University, are protected from any hazards in the environment in accordance with the Occupational Safety and Health Administration regulations. The Environmental Health and Safety Officer (Environmental Health and Safety Office, 1.343T, Dental School, 567-2955) is responsible for maintaining and documenting fire inspections, radiation surveys, and all biological, chemical and radiation waste materials. Fire prevention and safety inspections take place on a regular monthly schedule. The Radiation Safety Officer is responsible for the Radiology Program for UTHSCSA. A board-certified and Texas-licensed medical physicist performs annual compliance surveys. The above noted plans can be found at [http://research.uthscsa.edu/safety/](http://research.uthscsa.edu/safety/).

   All dental personnel are kept current on required radiation safety briefing, using the “As Low As Reasonable Achievable” (ALARA) concept. Besides the briefings, residents receive instruction and literature review at UTHSCA in radiographic safety, theory, film development and digital technologies. Patient exposure is kept to a minimum by taking radiographs only for diagnostic or treatment verification reasons after the initial diagnostic series. Each x-ray unit has a lead apron for patient’s protections. All x-ray exposure is recorded in the patient’s chart. All equipment is maintained and routinely inspected by UTHSCSA personnel. In addition, the principles of ALARA are reinforced.
3. **Assess the program’s capacity for four-handed dentistry.**

The program’s capacity for four-handed dentistry is appropriate. The operatories in the Endodontic clinic are approximately 9 x10 feet providing space necessary to provide easy access and ample room for efficient 4-handed dentistry. In total, three full time dental assistants are assigned to assist six residents and accomplish clinical duties.

4. **Assess the institution’s policies and procedures on hazardous materials, and bloodborne and infectious diseases for patients, advanced education students/residents and staff.**

Policies and procedures on hazardous materials, and bloodborne and infectious diseases for patients, advanced education students and staff are appropriate. Policies on bloodborne and infectious diseases are stated in the Clinic Operations Manual Infection Control Policy. These policies are made available to students, faculty and staff as part of their Orientation. The policies are available for review at all clinics and computer terminals through the UTHSCSA intranet system. Applicants for admission and patients can ask to review these public policies at anytime.

The Dental School operates under the rules and regulations of the Institutional Safety Office at UTHSCSA. The Environmental Health and Safety Office includes an Institutional Safety Officer, a Radiology Safety Officer, a Chemical Safety Officer and a Biological Safety Officer. This office ensures that the students, faculty and staff, as employees of the University, are protected from any hazards in the environment in accordance with the Occupational Safety and Health Administration regulations. The Environmental Health and Safety Officer (Environmental Health and Safety Office, 1.343T, Dental School, 567-2955) is responsible for maintaining and documenting fire inspections, radiation surveys, and all biological, chemical and radiation waste materials. Fire prevention and safety inspections take place on a regular monthly schedule. The Radiation Safety Officer is responsible for the Radiology Program for UTHSCSA. A board-certified and Texas-licensed medical physicist performs annual compliance surveys.

5. **Assess how students/residents may be able to apply ethical, legal and regulatory concepts in the provision, prevention and/or support of oral health care.**

In order to practice dentistry the resident must have a current and unrestricted license from a valid state within the United States which typically requires passing a jurisprudence examination, covering the laws of that state and the rules and regulations of the board of dentistry for that state.

During an orientation session for new students in the Endodontic Department at UTHSCSA, the responsibilities of students in the program, including their ethical and legal responsibilities as a resident health care provide, are reviewed. This session also
includes a review of the American Association of Endodontists “Guide to Clinical Endodontics”.

Ethical, legal and regulatory concepts are covered during the clinical Seminars course and in the Literature review course at UTHSCSA. During Case presentations the ethical and legal considerations of cases presented are discussed. As stated in the Endodontic Resident Manual, unethical or legal infractions are considered important enough to warrant dismissal from the program. Through the above seminars and presentations, the students are well versed in their ethical and legal responsibilities to themselves, their patients, and their profession.
PROGRAM-RELATED

1. **Assess the student’s/resident’s time distribution among each program activity (e.g., didactic, clinical, teaching, research) and how well it is working**

The student’s time distribution among each program activity fulfills the Accreditation Standards for Advanced Specialty Education Program in Endodontics and is working very well at the UTHSCSA program. The current time distribution provides residents with an excellent balance of clinical and didactic learning experiences. The time spent on laboratory activities very effectively exposes the students to nonsurgical and surgical endodontic concepts and techniques. The teaching experience enhances the student’s ability to organize and evaluate materials and communicate information to others. The research component of training enables the student to develop intellectual growth, creative attitudes and a better interpretation of the scientific literature. The time distribution is continually monitored by the program director to assure that program goals and objectives are met.

The students initiate the program with an intense immersion in all aspects of Endodontic history, philosophy, review of biological principles of therapy and an intense lab-based sequence of clinical techniques on extracted teeth during the Intro Advanced Endodontic Course. Once the residents, with satisfactory accomplishments, complete this course they begin treating patients at UTHSCSA. During the following fall and spring semesters they continue to attend courses such as Clinical Seminar, Literature review, interdisciplinary Seminar, and Case presentation courses weekly. When the students begin their second year, they transition into a very clinically intensive program. By seeing up to six half days of scheduled patients per week, residents, quickly begin to learn time management, and build up their clinical speed while maintaining their emphasis quality treatment. They graduate with essentially all of the skills required to immediately integrate into a clinical position and manage a full patient load. Having a significant amount of their didactic load completed during the first year of training, students also have an excellent knowledge base on which to make treatment decisions immediately upon the initiation of their clinical experience. Because of a reduced clinic time during the first year, great care is taken by the program director to assure clinic time is maintained between the minimum required of 40% and maximum of 60% all through the entire residency.

Overall, the availability of a wide range of patients in large numbers within the UTHSCSA setting has allowed the residents to historically finish the program with very strong clinical skills and excellent breadth of treatment situations and types. Outcome assessments from graduate have all been very positive about their experience and have not identified any specific area of weakness in their training. Past accreditation visits to the University of Texas Health Science Center at San Antonio have been extremely positive in the comments on the structure of the program, and the last visit in 2005 resulted in no recommendations or even suggestions.

2. **Assess the volume and variety of the program’s patient pool.**

The patient population at UTHSCSA is large and more than adequate in the number and
variety of cases that is provides for the Endodontic advanced education students. Residents acquire patients from the undergraduate and graduate clinics of the Dental School and from several practices in the area. Patients are referred from the Comprehensive Dentistry Department, the emergency care clinic, OMS and all the other postgraduate programs at UTHSCSA, the pediatric dentistry department and general dentists in the San Antonio area. Historically the residents at UTHSCSA have been extremely busy and have stayed fully booked for at least one to two weeks in advance. The Program Director has conscientiously screened patients to improve the variety and breadth of cases each resident treats. Every month residents provide the Program Director with a list of all treatment rendered on the Report of Monthly Clinical procedures form. Deficiencies identified in any area trigger an effort by the program director to divert those particular cases toward the resident requiring additional experience in any given area. The program director monitors the types of cases and diversity necessary for completion of the program. Monitoring of the clinical activity and productivity is accomplished on a monthly basis in the Endodontic Department.

3. **Assess the program’s student/resident/faculty ratio.**

The program’s student/faculty ratio at UTHSCSA is outstanding. During both years of the Endodontic Residency Program, the resident’s clinical experience takes place with a resident/faculty ratio of 1 to 1.2 with four dedicated full-time Endodontists staff members (all board certified) whose primary mission is teaching. During the first year of the program, literature review, clinical seminars, case presentations and research experiences expose the students to Endodontic staff members who possess substantial teaching and clinical expertise as well as the necessary time commitment and dedication to the program. The first year basic science didactic courses are taught by very highly qualified instructors at UTHSCA. In addition, staffs at both UTHSCSA and WHMC institutions freely exchange information during weekly literature reviews and monthly joint case presentation sessions.

4. **Assess the program’s student/resident pool.**

The student pool for the UTHSCSA endodontics program has enjoyed the largest pool of applicants compared to any other UTHSCSA dental specialty for the past decade. In the last few years the average number is been between 67 and 75 applicants for three available positions. The competitive nature still attracts very highly qualified applicants. The demographic mix of race and sex of applicants mirrors the demographics of the dentist population.

5. **Assess rotations, electives and extramural experiences of the program.**

There are no specific rotations or extramural experiences for this residency. Historically, the UTHSCSA program has not had any formal elective courses or areas of study, but encourages students to pursue a wide range of treatment techniques and alternatives to non-surgical treatment and retreatment.

6. **Assess the program’s record keeping and retention practices.**

The programs record keeping and retention practices are very good. Residents maintain
an electronic record for each patient receiving endodontic care. This consists of an electronic folder for each patient containing relevant detailed information on the medical history, dental history, chief complaint, diagnostic procedures, treatment and post-operative evaluations. Endodontic diagnostic and treatment procedures, as well as any follow-up visits, are recorded in the UTHSCSA Dental School record for each patient visit in the Endodontic Graduate Clinic. Patient records are kept electronically using Axium to include digital radiographs. These are maintained (with daily back-up) on a UTHSCSA Dental School computer server. Digital radiographic documentation is also kept along with any clinical photos if applicable. All of this documentation is maintained in the patient’s dental record electronically in Axium.

Residents place Endodontic Treatment Records forms of patients requiring follow-up into a recall filing system categorized by month. On a monthly basis, residents pull the Endodontic Treatment Records of patients to be recalled and submit these records to scheduler in the department to contact the patient for a follow-up appointment. Students are encouraged to try to recall all patients, but must perform recall evaluations on a minimum of 30 of the cases treated during the program. Selected patients receive continued recall evaluation by the endodontic program director as needed. Clinical finding from these recall evaluations, as well as any photos and radiographs taken, are forwarded to the former resident so that he/she may observe the long range results of treatment.

7. **Assess the research activities of the program.**

The research activities are outstanding and yet still appropriate for a 26-month certificate or optional Master programs. For example, the Department of Endodontics has five full time faculty members with a PhD degree, four of whom are DDS, PhD trained. In addition, the Department has a full time research nurse to assist clinical research, three full time research technicians and more than 4,000 square feet of dedicated research labs, including a dedicated laser confocal microscope. The Research Methodology course during the summer session of the first year introduces the student to the application of research methods and the evaluation of investigative data. Through the research experience of questioning, gathering data, observation, obtaining results, making conclusions based upon such data, and then ultimately developing a publishable paper, the resident is able to enhance intellectual growth and develop creative attitudes and a better interpretation of the scientific literature. During the first year of the program, the student formulates a protocol for the purpose of conducting an original investigation. Following critical evaluation and acceptance of the protocol by the Advanced Education in Endodontic Research Committee, the student actively conducts the research, collects, analyzes, and evaluates the data under the guidance of a faculty research mentor. Subsequently, a manuscript suitable for publication is turned in to the UTHSCSA Endodontic Department. Residents are strongly encouraged to submit the completed manuscript to a referred professional scientific journal to be considered for publication. Since the last site visit, 14 out of 19 graduates of the UTHSCSA Endodontic Program have had their manuscripts published in a referred journal, primarily the Journal of Endodontics. Residents also present their completed research project in a 10-15 minute oral research presentation to the UTHSCA Endodontic Department staffs at a joint research presentation seminar held annually. In addition, students present their findings in an Oral research presentation at the Annual Session of the AAE. Copies of proposals
of current students and manuscripts of former students are available on site.