

### **Program-Level Assessment: Annual Report**

| Program Name (no acronyms): Graduate Endodontics                               | Department: N/A      |
|--|----------------------|
| Degree or Certificate Level: MS  | College/School: CADE |
| Date (Month/Year): August 2021   | Assessment Contact:  |
| In what year was the data upon which this report is based collected?           |                      |
| In what year was the program's assessment plan most recently reviewed/updated? |                      |

#### 1. Student Learning Outcomes

Which of the program's student learning outcomes were assessed in this annual assessment cycle? (Please list the full, complete learning outcome statements and not just numbers, e.g., Outcomes 1 and 2.)

We assess student performance via tests that are required for passing required coursework and via assessment of clinical treatment on patients. These items were assessed: conducting a clinical examination, listing endodontic problems, prioritizing endodontic problems, recognizing and listing pathology, formulating a diagnosis, formulating a treatment plan, and performing treatment.

We conduct various exit interviews with residents.

We evaluate resident performance on standardized examinations.

We conduct mock American Board of Endodontics oral examinations.

#### 2. Assessment Methods: Artifacts of Student Learning

Which artifacts of student learning were used to determine if students achieved the outcome(s)? Please describe and identify the course(s) in which these artifacts were collected. Clarify if any such courses were offered a) online, b) at the Madrid campus, or c) at any other off-campus location.

The learning objectives were evaluated through the various test results, clinical treatment outcomes, ongoing assessments from the individual faculty members and the American Board of Endodontics written examination test results.

#### 3. Assessment Methods: Evaluation Process

What process was used to evaluate the artifacts of student learning, and by whom? Please identify the tools(s) (e.g., a rubric) used in the process and **include them in/with this report document** (do not just refer to the assessment plan).

The CADE Graduate Endodontics faculty meet periodically and evaluate resident performance including both their didactic and clinical courses. The outcome assessment from the American Board of Endodontics written examination taken by senior residents is tabulated annually, in May-June. For proficiency in clinical endodontics skills, an informal formative assessment occurs with daily verbal feedback in the clinic, monthly group case

presentations/review/grading, and a formalized summative assessment each semester. The assessment data is reviewed once a year by the endodontic faculty.

#### 4. Data/Results

What were the results of the assessment of the learning outcome(s)? Please be specific. Does achievement differ by teaching modality (e.g., online vs. face-to-face) or on-ground location (e.g., STL campus, Madrid campus, other off-campus site)?

As part of our program learning outcomes, all of the endodontics residents will be able to pass the written portion of the American Board of Endodontics certifying examination. The residents must maintain a B average for all didactic and clinical courses. This was achieved.

- All 3 senior residents successfully passed the American Board of Endodontics written examination.
- All 6 residents demonstrated proficiency in clinical skills consistent with those exhibited by experienced endodontists. This was demonstrated by formal faculty reviews of each resident's clinical performance.

All 3 senior residents developed and completed an original Master's thesis research project and conducted a successful oral defense, partially qualifying them to be awarded a M.S. degree.

#### 5. Findings: Interpretations & Conclusions

What have you learned from these results? What does the data tell you?

Based on the American Board of Endodontics written exam and clinical examination results, our residents have demonstrated improvement in terms of their test scores and ongoing pursuit of eventual board certification.

#### 6. Closing the Loop: Dissemination and Use of Current Assessment Findings

A. When and how did your program faculty share and discuss these results and findings from this cycle of assessment?

The Graduate Endodontic faculty meets periodically and continuously evaluates resident performance. Once the American Board of Endodontics Written Exam and Clinical Board Examinations results are made available, the Graduate Endodontic faculty analyses and discusses the individual results annually.

**B.** How specifically have you decided to use these findings to improve teaching and learning in your program? For example, perhaps you've initiated one or more of the following:

| Changes to the | 2 |
|----------------|---|
| Curriculum or  |   |
| Pedagogies     |   |

- Course content
- Teaching techniques
- Improvements in technology
- Prerequisites

Changes to the Assessment Plan

- Student learning outcomesArtifacts of student learning
- Evaluation process

- Course sequence
- New courses
- Deletion of courses
- Changes in frequency or scheduling of course offerings
- Evaluation tools (e.g., rubrics)
- Data collection methods
- Frequency of data collection

Please describe the actions you are taking as a result of these findings.

If no changes are being made, please explain why.

The Graduate Endodontic faculty uses measures of student performance on the subject areas covered in the American Board of Endodontics written examination to alter the curriculum and faculty.

• Subject areas include anatomy, biochemistry, embryology, general and oral pathology, microanatomy, immunology, inflammation, microbiology, pharmacology, vascular and neurophysiology, pulpal and periradicular pathophysiology, radiology, oral medicine, biostatistics, clinical endodontics, dental materials related to endodontics, related dental disciplines, and classic and current literature).

Clinical Case Analysis: residents submit all of their clinical cases for review in a format that can be used in the American Board of Endodontics Case Examination portfolio.

#### 7. Closing the Loop: Review of <u>Previous</u> Assessment Findings and Changes

A. What is at least one change your program has implemented in recent years as a result of assessment data?
We have added a human cadaver exercise to the endodontic surgery course in order to more closely mimic the actual clinical environment.

B. How has this change/have these changes been assessed?Formal course feedback provided by the residents.

# C. What were the findings of the assessment? The residents universally thought the exercise was most beneficial and provided a more practical and realistic simulation of the clinical environment.

D. How do you plan to (continue to) use this information moving forward?
The human cadaver exercise, via support provided from the SLU School of Medicine, will be made a permanent part of the endodontic surgery course and will be evaluated annually.

## IMPORTANT: Please submit any assessment tools (e.g., rubrics) with this report as separate attachments or copied and pasted into this Word document. Please do not just refer to the assessment plan; the report should serve as a standalone document.