Resident selection, assessment, and management: Proceedings of the 2022 ADEA Advanced Dental Education Summit

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Abstract
The fifth biennial Advanced Dental Education Summit was organized by the ADEA Council on Advanced Education Programs. With a focus on “Resident selection, assessment, and management,” the summit aimed to discuss best practices for selecting, assessing, and managing advanced education residents. Expert presentations covered the resident’s journey from interview to graduation, emphasizing strategies for supporting resident wellness, success, and evaluation. The summit provided recommendations, including the incorporation of psychosocial assessments in the selection process, early recognition of behavioral issues, clearly defining clinical competencies, and creating a culture of wellness through supportive policies and structures.

KEYWORDS
admissions/selection, advanced dental education, clinical skills/topics, evaluation of clinical performance, interest, professional, professional interest

1 | INTRODUCTION

The 2022 ADEA Advanced Dental Education Summit is the fifth biennial meeting organized by the ADEA Council on Advanced Education Programs (COAEP). The summit was held during the fall ADEA annual meeting (October 27 and 28, 2022) in St. Louis, Missouri.

The theme of the meeting was “Resident selection, assessment, and management.” The objective of the summit was to discuss best practices for selecting, assessing, and managing advanced education residents while highlighting emerging issues in advanced dental education. Thought-provoking presentations were given by content experts as we tracked the lifecycle of a resident from the
interview process until graduation. Renowned speakers shared best practices on implementing strategic interview methodologies for resident selection into advanced education program, explored strategies for supporting resident success and wellness, discussed emerging technologies for resident assessment and evaluation, and developed recommendations for the participants to consider. Attendance was from a broad range of faculty, including deans, department chairs, program directors, hospital administrators and faculty involved in advanced dental education, along with members from other ADEA Councils.

### 1.1 Part I: Resident selection

The summit began with keynote speaker Londa Wilder, BS, CC. A renowned presenter and former educator at Texas A&M College of Dentistry delivered her talk “The best laid plans… Emotional intelligence is the answer.” To become a competent health care provider, residents must have attributes that go beyond their academic abilities. They require personal and communication skills, as well as empathy and emotional maturity. Thus, in her presentation, Ms. Wilder discussed the importance of incorporating psychosocial assessments that capture “soft skills,” such as emotional intelligence, in the selection of advanced education residents. Emotional intelligence is the ability of individuals to manage and express their feelings and is considered an important predictor of success in a learning environment. Ms. Wilder then focused on identifying the four ability areas that comprise emotional intelligence according to the Goleman theory of emotional intelligence (a trait-based model): self-awareness (e.g., self-confidence), social awareness (e.g., empathy), self-management (e.g., self-control), and social skills (e.g., interpersonal skills). The Goleman theory can guide the resident selection process and predict their success in a program.

Furthermore, Ms. Wilder described an example of a current psychosocial assessment that has been applied to the interview process in one program: structured behavior objective (SBO) questions, which comprise a multifaceted set of questions that assess emotional intelligence. In this set, candidates are asked to give a nondental example in response to a question, and the interviewer then makes observations (e.g., “vague answer,” “too long of an answer,” or “answer too detailed”). The question types are behavioral, such as “tell me about a time when you influenced someone else’s career path,” or situational, such as “tell me how you would handle conflict with future office staff” (see Appendix 1 for additional examples of behavioral and situational interview questions). The SBO scores are then used to calculate a maturity scale for each candidate. In her presentation, Ms. Wilder also explored the difference between (1) temperament as opposed to personality and (2) self-awareness as opposed to social awareness.

The second session was co-presented by Kelly Dore, PhD, adjunct Associate Professor in the Department of Medicine at McMaster University and co-founder of Altus Assessments, and Pinelopi Xenoudi, DDS, MSc, associate dean of admissions, student affairs, and diversity, equity, and inclusion at California North State University College of Dental Medicine. Their focus was resident selection, presenting “Selecting residents—existing and new tools to select the ‘best’ trainees more holistically.”

The speakers took a deep dive into the admission interview process and discussed the limited information available for programs to inform their decision-making during the selection process. The speakers also elucidated the limited ability to assess key attributes, such as “fit” (program–applicant alignment) and constructs such as professionalism and communication, which programs have difficulty measuring early in the selection cycle. Then, they discussed assessment innovations to overcome interview process limitations. One specific tool they discussed was situational judgment tests (SJTs). The speakers summarized the psychometrics and predictive validity evidence of SJTs, as well as their impact on underrepresented populations. Additionally, they discussed different use cases of selection metrics and tools to maximize applicants’ holistic perspectives while minimizing resources. The speakers also explained how diverse metrics seen during selection processes can be combined to gain a more comprehensive understanding of applicants. Their presentation also explored the concept of how fit involves bias. To overcome this bias, they suggested considering value-alignment assessment that can be completed by both the applicant and the program to compare what the applicant values in a program with what the program offers. As such, this assessment measures fit. Finally, the speakers described how this information could be used to support trainees.

### 1.2 Part II: Resident management

In this section, Mark Wong, DDS, FACD, FACS, professor and the Bernard and Gloria Katz Chairman of the Katz Department of Oral and Maxillofacial Surgery, University of Texas School of Dentistry at Houston, gave a presentation titled “Managing residents—resident problems and solutions,” describing the most common types of problems that can affect residents. Domains under which problems can be categorized included clinical judgment, medical knowledge, clinical skills, humanistic qualities,
professional attitude and behavior, patient care, and moral and ethical behavior. Dr. Wong presented solutions to mitigate these problems, including program-specific training guidelines with due process.

The next presenter was Bailey Andersen, LMSW, director of Student Health and Wellness Services at University Detroit Mercy School of Dentistry. “Managing residents—empty cups and oxygen masks: prioritizing the health of health care workers” provided insights into why and how resident wellness can be supported at the institutional level. Ms. Andersen discussed the importance of the health of the healer from an integrated health care approach. The cost to an educational system that does not incorporate “cup-filling” components into its curriculum was also underscored. Finally, she engaged the audience in a brainstorming session to identify areas, policies, or protocols in their programs that can be altered.

1.3 Part III: Resident assessment

Ahmed Sabbah, DDS, PhD, clinical assistant professor and AEGD program director at University of Texas Health San Antonio School of Dentistry, presented “Assessing residents—electronic app clinical assessment for AEGD.” He demonstrated an electronic assessment application that he developed and implemented at the University of Texas Health San Antonio School of Dentistry for the global assessment of residents. Examples of competencies were shared, outlining how different time periods can demonstrate current and aggregate data based on resident assessment. These “big data” have the potential to not only ensure residents are aware of their milestones and assessments and in tracking their progress throughout the shorter enrollment periods for post-graduate general dentistry programs. The benefits to the system were also presented as an aid in developing competency-based curriculum assessment and in faculty calibration.

The final portion of the summit included three short rapid-fire presentations on the current challenges facing advanced dental education when it comes to resident assessment. The presentations were proceeded by an interactive breakout round-table discussion led by each presenter. In these discussions, the presenters delved deeply into the presented topics and followed a blue-sky approach to explore potential resolutions.

The first presentation was by Greg Ness, DDS, FACS, former program director of Oral and Maxillofacial Surgery, The Ohio State University College of Dentistry, titled “The science of benchmarks and how to make them work for you.” Benchmarks, or rather milestones, in medical education have been a part of assessing resident readiness and progress for over a decade. In his presentation, Dr. Ness reviewed the origins and initial implementation of benchmarking in advanced medical and dental education, explored data- and experience-driven innovations. He outlined the key steps to develop benchmarking for new disciplines in advanced dental education. During the round-table discussion following his presentation, participants engaged in conversations about the administrative and educational benefits as well as the challenges of developing discipline-specific benchmarks.

The second presentation was titled “What impact has the pandemic had on resident expectations?” by Thikriat Al-Jewair, DDS, MS, MSc, FRDGC, associate professor and graduate program director in the Department of Orthodontics at the University at Buffalo School of Dental Medicine. This presentation highlighted the profound changes the novel COVID-19 pandemic brought to advanced dental education programs. The rapidly changing learning environment challenged residents as they acclimatized themselves to a rapidly changing learning environment. Defining and managing residents’ expectations are important to ensure successful educational outcomes. This presentation described residents’ priorities, needs, and satisfaction; reviewed approaches for gauging resident expectations in advanced education programs; and discussed the best practices for managing resident expectations in clinical and classroom settings. During the round-table discussion, the participants engaged in a conversation about intergenerational changes in the perception of wellness, the impact of remote learning during the pandemic on resident confidence, especially during the first year of their residency program and the financial constraints in many programs that negatively impacted the availability of faculty for clinical teaching and consequently affected resident expectations.

Sherman House, DDS, General Practice Residency program director at Meharry Medical College School of Dentistry presented “MyEvaluations: a primer and an app for luddite program directors.” Dr. House outlined his utilization of technology to track and document resident progress and evaluations. As an expert user of MyEvaluations (myevaluations.com), he shared a simple framework for its application in residency programs for tracking and evaluating resident progress in clinical rotations. He described the history of MyEvaluations and the evaluation rubric and demonstrated its application and functionality in one hospital-based residency program. The breakout round-table discussion following his presentation included a conversation about the specific questions that were asked in MyEvaluations, modifications made to the software, average time to complete an evaluation (approximately 15 min), and methods to store the evaluations (online via the
MyEvaluations site and printed copies in each resident’s binder).

1.4 Summary and action items

Adam Lloyd, BDS, MS delivered concluding remarks. He spoke about the necessity of creating frameworks for assessments that are broadly applicable to all disciplines, while still being able to be adapted for each discipline. Members of COAEP are uniquely positioned to drive curricular reform in an organized manner and come to agreement on whether to model principles presented by our colleagues in medicine or forge our own path toward developing measurable outcome measures for the New Thinking for the New Century.

The final intent for this summit with the support of ADEA and all the dedicated educators serving on councils and special interest groups would be to create a document of best practices. Succession planning far too often falls by the wayside and newly appointed directors in advanced education programs are expected to know all aspects of running a program, often from tacit information alone. This document is one small piece of that puzzle that could be formed into a comprehensive body of work that would outline everything from pedagogy and curricular reform to managing residents, to ensuring financial viability of your organizational cost center. We shall continue the work to bring this to our membership, so please step forward and be counted in helping us write the other chapters to accompany the excellent information presented at this summit.

The 2022 ADEA Advanced Dental Education Summit highlighted the following action items for program administrators:

- Incorporating psychosocial assessments in the selection of advanced dental education residents’ interviews is key to the success of residents in a program and improves the provision of healthcare. Such assessments include measures of emotional intelligence, maturity, and SJTs.
- Recognizing the early signs of behavioral problems among residents and developing a comprehensive longitudinal track record is crucial. Being prepared to resolve them or make difficult decisions is essential.
- Defining clinical competencies and domains and collecting multiple datapoints are necessary to generate comprehensive assessments of resident performance.
- Creating a culture of wellness is critical for the educational experience of residents. This can be achieved through policies and setting up structures that support and uplift the residents.

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Dr. Heather Conrad, University of Minnesota School of Dentistry
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APPENDIX 1: EXAMPLE OF BEHAVIORAL AND SITUATIONAL INTERVIEW QUESTIONS

A. Behavioral: Questions can be about how someone has performed in the past, by asking someone to share a story or describe a situation they experienced before you can get a good sense of their traits.

- Describe a situation where you had a conflict with a classmate, how you resolved it, and what self-reflection arose that adjusted your perspectives?
- Tell me about a time when you have been told that your performance didn’t meet standards, and how you reacted or responded to it.
- Describe a time when you realized the diagnosis and treatment plan that your faculty suggested was not complete or missing facts or wrong. How would you proceed?
• Describe a time when you misspoke or were misunderstood in a conversation. How did you manage it or correct the situation?
• How would you as a resident intervene with a co-resident who doesn’t pull their weight.
• Tell me about an instance when you made a poor choice/decision and what you learned from that experience.
• Describe a challenging experience you had with a faculty or staff at your dental school and how you handled it.
• Describe a conflict you had with a peer.
• Describe an experience that you were proud of.
• Describe a time when you influenced someone on their career path.
• Describe an ethical issue that you experienced while in dental school.
• Describe a time when you failed.
• How have you influenced a friend or classmate to not give up on their dreams?
• Tell me about your most challenging and rewarding patient. How were you able to educate them about their oral health and improve their care?
• Describe a time when you mentored or coached someone.
• Describe a situation in which you disagreed with authority (faculty or program director). What would you do?
• Describe an ethical issue that you witnessed while in dental school. Tell me what you took away from a meaningful community service event?
• Describe a time you encountered an adversarial situation and how you overcame it.
• Describe a time your nerves or anxiety changed your performance. How would you handle that in the future?
• Describe a time you made a mistake that affected another person. What did you do when you discovered the mistake and how you reconciled the situation?
• Describe a time when you missed a step and how you fixed it.
• Describe a leadership experience and what you did to make it effective.
• Describe a time you failed at a project. What did you learn from that experience? How would you avoid that failure in the future?
• What is your greatest achievement in life so far? What are you proudest of that you’ve been able to accomplish?
• What is the greatest obstacle you have been able to overcome?
• Describe a situation where you worked together with someone to solve a nondental problem?
• How do you manage an anxious patient?
• What role do you usually have in a group project?

B. **Situational:** Questions that can draw out analytical or problem-solving skills, situational questions are most effective when you ask the candidate to walk through their problem-solving process.

• When reviewing an existing treatment plan, you find that you disagree with the plan. How would you handle that?
• In your new job, you encounter a situation you know well and you have a plan to manage it. Your supervisor tells you to handle it differently. Describe your thoughts and actions to take.
• How do you handle or approach completing a task you’ve never attempted before?
• What role do you usually have in a group project?
• How do you develop rapport with an anxious patient?
• How would you as a resident intervene with a co-resident who doesn’t pull their weight?
• How would you solve a situation of a staff member that is missing too many days or work, and when at work is not focused?
• How would you respond to preferential treatment?
• You created a treatment plan and discussed your findings with the patient. Your faculty disagreed when you presented. How do you talk to the patient about the change in what you just discussed?
• Your patient insists on having dental implants but is not a good candidate. How would you discuss this with them?
• Describe how you would approach a task for which you were given instructions, you weren’t quite clear on certain aspects of those instructions, and now your director is out of the office for a week.
• Describe how you would handle a situation where you disagree with a faculty member’s recommendation of a treatment plan.
• Describe what you would do if a co-resident was not pulling their weight.
• Should all providers be required to do community service?
• Someone in your class has apparently gained access to the midterm exam. The course director has noticed an unusual trend in high scores among students who have previously struggled and has decided to deduct 10 points off scores across-the-board unless someone comes forward. You know who the culprit is. What do you do?
• How would you handle a situation where you must care for a child who arrives with a parent who insists
on being present while the child is treated, but is disrupted?
- How do you resolve conflict when working as part of a team?
- How do you advise a junior resident who wants to avoid the duty hour rules to participate in an unusual case?
- You have three residents to choose from. How do you decide who is on call during holidays?