

WREB Dental and Dental Hygiene Licensing Examination COVID-19 Options for 2020

WREB is an independent testing agency that develops, administers, and reports the outcome of practical clinical examinations administered to candidates for licensing in dentistry and dental hygiene. While aware of the needs of students and dental education programs, WREB's sole purpose is to provide state boards with examinations that have high reliability and are supported by a strong validity argument—examinations state boards can rely on to inform licensing decisions. For this reason, WREB is highly responsive to the needs and wishes of state boards that recognize its examinations.

- WREB Dental Examination options are described below (pp. 1-4).
- WREB Dental Hygiene Examination options are described on pp. 5-6.

WREB Dental Licensing Examination COVID-19 Options for 2020

Following are options state boards could consider in response to COVID-19:

Dental Examination without Change

WREB's standard dental examination which includes two simulations (Endodontics and Prosthodontics) and two patient-based sections (Operative Dentistry and Periodontics) in addition to the Comprehensive Treatment Planning (CTP) section will continue to be offered as soon as test sites again are able to schedule this type of examination. This option may not address the needs of state boards attempting to respond to the concerns of dental candidates and schools who wish to complete the licensure process within the next several months. Even when re-established, examination administration may be subject to interim restrictions. States that specifically require two patient-based restorative procedures and wish to reduce the burden on licensure candidates imposed by COVID-19 could safely accept WREB's Operative Section as it is scored and validated, which has demonstrated that candidate competency can be reliably assessed with more than 40% fewer patient-based procedures.ⁱ

CTP Only

WREB's CTP (Comprehensive Treatment Planning) Sectionⁱⁱ is an ASCE (Authentic Simulated Clinical Examination) which requires the candidate to construct responses (as opposed to an OSCE in which the candidate selects responses from options, locations, or choices provided). The CTP ASCE is open-ended and graded by independent, anonymous examiners. It reveals candidate thinking and requires candidates to perform tasks that dentists perform and to make decisions that dentists make, all without choices they can select or cues of any kind. If acceptance of only an OSCE examination is being considered, then acceptance of WREB's CTP ASCE which is an even more authentic demonstration of relevant candidate knowledge, skill, and ability, should be considered.

COVID-19 Alternative Performance-based Simulation

Patient-based assessment has high fidelity. WREB is not abandoning patient-based assessment but continues to evaluate the validity and viability of assessment alternatives, including simulation. WREB has been developing simulations that soon may be able to replace patient-based assessment for Operative Dentistry and Periodontics, the last two patient-based sections of its current dental examination. These simulations are in development and undergoing review.

In the meantime, the advent of COVID-19 has placed students and their education programs in a difficult and frustrating position. Students need to graduate, move on, obtain employment, or begin their advanced dental education residencies; their education programs need them to graduate and move on in order accept a new entering class and appropriately advance the classes below them. COVID-19 associated risk and social distancing currently completely obstruct student ability to challenge the traditional, patient-based examination. While WREB understands that COVID-19 is creating a crisis for students, for dental education programs, and even for the profession, its singular purpose is to support the needs of state boards in their regulatory role and charge to protect the public.

Students and program directors recently have appealed to state boards and, not knowing exactly how long COVID-19 risk and need for social distancing might continue, state boards in a few states now have appealed to WREB for potential solutions they might consider along with suggestions they've received that include waiving clinical examination requirements altogether, waiving the patient-based sections of the clinical examination, granting a provisional license until the applicant is able to complete the full examination, acceptance of the DLOSCE in lieu of a practical demonstration of clinical skills, and variations of these.

In response and in addition, WREB has field-tested an alternative, performance-based simulation that could be required in lieu of its traditional patient-based Operative Section. This alternative included the field-testing of social distancing for both candidates and examiners.

In the simulation, each candidate is required to successfully perform both preparation and finish of a conventional Class II restoration on a molar and a Class III restoration on a central incisor. All procedures are performed, like they are for the Endodontics and Prosthodontics sections, in full simulation and with rubber-dam isolation. Results are assessed using established Operative Section criteria. Certain critical errors are preserved, and the passing cut-point remains unchanged. The simulation involves social distancing for both candidates and examiners and uses materials (simulation teeth and arches) which are readily available and with which candidates and their programs already are familiar.

This alternative for the Operative Section is intended to be a provisional solution for 2020 (COVID-19) only and is intended neither to replace WREB's patient-based Operative Section in 2020 for states that continue to require it nor to be the simulation WREB intends to offer in the future

when social distancing is not a concern and the validity of a more realistic and involved simulation can be demonstrated.

The second patient-based section of the current WREB dental examination is the Periodontics Section. This section assesses a candidate's understanding of periodontal diagnosis and ability to physically perform initial periodontal therapy (periodontal scaling and root-planing). However, this section already is elective, is not required for licensing in some states, and tests a physical skill that, increasingly, dentists do not themselves perform.ⁱⁱⁱ The Periodontics Section, while valued by many states, is, by far, the least discriminating section of the entire examination.^{iv} Also, important aspects of periodontal diagnosis and treatment decision-making (things dentists do and are expected to know how to do) already are well covered in the unique CTP Section of WREB's dental examination. State boards may decide to waive or postpone the patient-based Periodontics section until such time as it again may become available to applicants.

These are dental examination options that WREB currently is making available for state board consideration in this highly unusual year. It is assumed that any waiver or exception a state grants due to COVID-19 might be restricted to matriculated students of CODA accredited dental education programs graduating in the spring of 2020 and would not necessarily set a precedent for future years or apply to any other group of applicants. WREB recognizes that all these and related decisions reside with the state and depend on the Board or on the Board's advice to the state authority empowered to grant a variance due to current, emergent COVID-19 circumstances.

Logistic detail regarding the implementation of WREB's dental examination or any of the described alternatives depends on the capacity, limitations, and COVID-19 restrictions imposed by or on any host site where an examination is conducted.

WREB's standard dental examination which includes the fidelity associated with two simulations (Endodontics and Prosthodontics) and two patient-based sections (Operative Dentistry and Periodontics) in addition to CTP will continue to be offered as soon as test sites again are able to host this type of examination.

ⁱ Fewer patient-based procedures were required to determine 4,457 candidate pass/fail outcomes for the Operative Section in 2018 (42.0% fewer) and 2019 (41.1% fewer). No significant difference was found between first and second procedure performance for candidates who scored at or above the cut-score on the first procedure. The second procedure added no significant contribution to the assessment of these candidates. Only four of these candidates failed the section despite demonstrating competence on the first procedure; all four scored close to the cut-score and three have already passed upon retake.

ⁱⁱ The CTP Section is the most comprehensive section of the WREB Dental Examination. It tests candidate knowledge, skills and abilities that cannot be readily sampled in other ways and includes assessment of meaningful aspects of every other section of the Examination. The CTP Section is designed to integrate the disciplines of dentistry in a practical, clinical way. The construction of appropriately sequenced treatment plans and item responses requires broad understanding of diagnostic, preventive and restorative dentistry, of endodontics, periodontics, and prosthodontics, as well as oral surgical, radiological, pediatric dentistry, and patient-management procedures, and understanding of the relationships between these procedures and their clinical application under various patient conditions.

The CTP Section is open-ended; it's an authentic simulated clinical examination (ASCE)—a practical, performance-based examination. It requires candidates to construct their responses unaided by cues, choices, or locations they can select. In many instances it requires candidates to perform the very tasks dentists perform and, for this reason, has extraordinary fidelity for a computer-based examination. Rigorous examiner training and calibration contributes to high outcome reliability for the CTP examination. And the large reservoir of examination cases, frequent case modification, and the permutation of cases in the forms used every year significantly enhance test security for the CTP examination. All combine to create a strong validity argument for using results of WREB's CTP examination to inform licensing decisions.

ⁱⁱⁱ In 2013 74.6% of general practitioners in solo practice employed one or more dental hygienists. For general practitioners in nonsolo practice (including various forms of group practice, "corporate" practice, etc.) 92.2% work in situations where dental hygienists perform scaling and root-planing services. -ADA, Science and Research – Health Policy Institute, Data Center, Dental Practice.

Authors Thomas Wall, M.A., M.B.A.; Albert H. Guay, D.M.D. in their article *Very Large Dental Practices Seeing Significant Growth in Market Share*. Health Policy Institute – Research Brief. August 2015. Point out that:

- From 2002 to 2012, market share increased for dental firms with 20 employees or more, while dental firms with fewer than five employees experienced a decline in market share.
- During the same period, very large dental firms – those with 500 employees or more – also saw increases in number of establishments, number of employees and annual receipts.

The national 2018 Dental Practice Analysis conducted jointly by WREB and CRDTS suggests that dentists, themselves, now are performing very few scaling and root-planing procedures compared to dental hygienists. The 2017 Dental Hygiene Practice Analysis survey specifically asked how often certain procedures were performed by the dentist and 84.6% of respondents said the dentist performed these tasks Rarely or Never.

The average of all general dentists employing dental hygienists in 2013 was 77.2%. From 1990 to 2013 the average number of dental hygienists per dentist in the primary practice (among dentists employing dental hygienists) steadily increased. This trend has been continuing. More and more dentists are having dental hygienists perform basic periodontal services and are using more dental hygienists per capita to do this. Dentists, themselves, are doing fewer and fewer of these tasks. Assessing these skills for dentists, now, may not be supported by the practice (task) analyses that underpin the design of a valid dental licensing examination.

^{iv} Evidence in favor of non-requirement includes exceptionally high proportions of candidates performing extremely well on the Periodontics section. Most of the candidates who do fail the Periodontics section multiple times have also failed at least one other section multiple times. Only four (4) out of almost 13,000 (i.e., 0.03%) candidates from 2011 to 2016 remained unsuccessful due to Periodontics Section failure.

WREB Dental Hygiene Licensing Examination COVID-19 Options for 2020

The following are options state boards could consider in response to COVID-19:

Dental Hygiene Clinical Examination (patient-based)

WREB's standard dental hygiene examination includes the following components:

- Patient Qualification
- Extraoral/Intraoral Examination
- Calculus detection and removal
- Tissue Management
- Periodontal Assessment
- Professional judgment

Many Candidates are still faced with completing educational requirements and CODA has approved alternative methods to have students complete their didactic and clinical requirements. The COVID-19 pandemic has touched everyone; however, some dental hygiene programs are seeing more restrictive state policies being implemented than similar programs in other states. Because of these inconsistencies, the time period for completion of dental hygiene requirements will vary by state; some programs are being postponed for several weeks and others for several months.

In the interim, and at the request of educators, WREB has rescheduled all Dental Hygiene, Local Anesthesia, and Restorative examinations. Taking a clinical examination is still a viable option, as WREB anticipates Candidates will still want an examination that allows them greater portability than licensure in a single state.

WREB is acutely aware of the risks associated with COVID-19 but is well prepared and capable of adjusting our exam protocol to adhere to national and state regulations without risking the integrity of the exam or the safety of the candidates, patient, and examiners.

Comprehensive Written Dental Hygiene OSCE Component

WREB understands that for many states, the current patient-based clinical examination may not fit the current needs of state boards seeking alternative pathways for dental hygiene licensure. COVID-19 associated risks along with social distancing, impede a student's ability to challenge the traditional, patient-based examination. WREB understands that COVID-19 is creating a crisis for students, for dental hygiene education programs, and even for the profession, and is prepared to serve as a resource for our member state boards and committees during this crisis and provide alternative testing methods while still maintaining the fidelity of our examinations.

WREB is developing a dental hygiene written OSCE that includes dental hygiene components that are essential for safe practice while testing a candidate's knowledge about dental hygiene care. This examination is an accumulation of beta-tested dental hygiene items that have been used in

other WREB examinations and are psychometrically sound. The examination may serve as an alternative to a patient-based examination for licensure. WREB is prepared to administer this examination on site at each school with our own equipment utilizing social distancing protocols. Utilizing testing centers will not be necessary.

The process of treating a patient's oral health not only requires good instrumentation skills, but also possessing an aptitude for making correct treatment decisions. Critical thinking skills are important in the assessment of the patient's needs and to accurately develop a care plan that reflects a patient's individualized care. These steps form the foundation for dental hygiene treatment which ultimately leads to healthy outcomes and improvement in health.

The WREB Dental Hygiene OSCE is a multiple-choice written component that assesses these multi-faceted components of dental hygiene care. This is a comprehensive overview of dental hygiene knowledge, radiographic interpretation, AAP staging and grading, extra and intra oral assessment and risk assessment, care plan development, and assessment and treatment of the periodontium. The exam is an avenue to test the skills of an entry-level student, either replacing the current clinical examination or in conjunction with a clinical licensure exam should a state board want an additional assessment examination.