

MANIKIN TREATMENT CLINICAL EXAMINATION (MTCE) MANUAL

2020 ADEX Dental Hygiene Examination

2 of 2 Candidate Manuals

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**There are two manuals for candidates to read.
This manual focuses on the ADEX MTCE and can be brought
into the clinic during the examination.**

EXAMINATION AND MANUAL OVERVIEW

The CDCA administers the ADEX clinical dental hygiene licensure examination. The ADEX dental hygiene exam consists of a computer-based exam (CSCE OSCE) as well as a non-patient or patient-based clinical procedure, the Patient Treatment Clinical Examination (PTCE) or Manikin Treatment Clinical Examination (MTCE). All examinations are based on specific performance criteria developed by ADEX and other content experts which will be used to measure the clinical competency of candidates.

All candidates who take any parts of the ADEX Dental Hygiene examination administered by the CDCA between January 1, 2020 and December 31, 2020 are responsible for reading and understanding the 2020 examination manual(s) published by the CDCA, any documented changes to the 2020 manual(s), and for reviewing and understanding all other material provided by the CDCA regarding the exams administered between January 1, 2020 and December 31, 2020. Candidates should periodically check the CDCA website for any changes and/or updates. If any questions arise during the registration process, candidates are responsible for communicating their questions to the CDCA staff **via email** (see contact information below). Questions **MUST** be submitted in writing.

The CDCA has a blanket Malpractice Insurance policy that covers all dental hygiene candidates for all ADEX examinations. Therefore, candidates are not required to obtain additional limited liability insurance.

The CDCA reserves the right to cancel or reschedule any examination in the event of an emergency or other unforeseen circumstance that is beyond the CDCA's control. The CDCA would either refund those candidates' application fees, reassign candidates to the next available examination site or reschedule the examination at the earliest possible date.

Every effort has been made to ensure that this manual is accurate, comprehensive, clear, and up-to-date. In the rare instances when examination related instructions need to be updated or clarified during the examination year those changes will be communicated to the candidates by the CDCA. There may also be other test related material sent to candidates. These materials will be available through their online candidate profiles and/or at registration on the day of the exam.

Prior to taking an examination through the CDCA, each candidate must review the manuals published by the CDCA as well as other material provided by the CDCA.

Please see the *Candidate Registration and CSCE OSCE Manual* for step-by-step instructions on how to register for the ADEX Dental Hygiene Examination through the CDCA, as well as guidance regarding the CSCE OSCE registration and content. All CDCA candidate manuals can be downloaded from the CDCA website: www.cdcaexams.org.



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The ADEX Dental Hygiene Examination: Manikin Treatment Clinical Examination

I. EXAMINATION OVERVIEW

- **ADEX Dental Hygiene Examination Parts**
- **Treatment Goals**
- **Examination Schedule/Timeline Guidelines**
- **Candidate Professional Conduct**
- **Infection Control**
- **Scoring System Overview (2020 ADEX Criteria)**
- **Instruments**



A. ADEX Dental Hygiene Examination Parts

The ADEX Dental Hygiene Examination is based on specific performance criteria used to measure clinical competence. The ADEX Dental Hygiene Examination Committee (DHEC), which is comprised of representatives from ADEX member districts, develops and revises the PTCE/MTCE Treatment Clinical Examinations. An additional committee of content experts contributes to the ongoing development of the CSCE OSCE. These committees combine their members' considerable content expertise and they also rely on practice and occupational analysis surveys, current curricula, standards of competency and the American Association of Dental Board's (AADB) "Guidance for Clinical Licensure Examinations in Dentistry." This ensures that the content and protocols of the examination are current and relevant to practice. Examination criteria, content, and evaluation methodologies are reviewed annually.

1. The **Manikin Treatment Clinical Examination (MTCE)** is performed on a typodont, provided by the CDCA. The candidate will be evaluated on calculus detection, calculus removal and probing measurements (see grading rubric on page 10).

MTCE REGISTRATION: In the candidate portal, you must register for the PTCE examination. CDCA will know based upon your site whether you will be taking a manikin or patient-based examination. The exam type (patient/manikin) is noted on the [Dental Hygiene Examination Calendar](#) in the "Additional Information column."

2. The **Computer Simulated Clinical Examination OSCE (CSCE OSCE)** is designed to assess various levels of diagnosis and treatment planning knowledge, skills, and abilities. Clinically-based questions are utilized through computer-enhanced photographs, radiographs, optical images of study and working models, laboratory data, and other clinical digitized reproductions.

Many states require a separate jurisprudence exam. The CDCA does not administer the jurisprudence examination for the participating boards of dentistry, except for the State of Florida. The respective boards of dentistry develop, administer, and score their own jurisprudence examinations. The CDCA does not have access to, nor can it provide, jurisprudence study materials. Candidates should contact the board of dentistry in the state in which licensure is sought to arrange to take the jurisprudence examination.

B. Treatment Goals

The clinical skills procedure of the ADEX Dental Hygiene Treatment Examination evaluates a candidate's ability to:

- **Detect** calculus
- **Remove** calculus
- **Measure** periodontal pocket depths accurately
- **Present** the case (for final evaluation)

The candidate will be assigned 1 quadrant for calculus removal, 4 teeth for calculus detection, 2 teeth for probing measurements. These assignments will be provided to the candidate at the time of the examination. Candidates will have 2 hours treatment time for this examination.

C. MTCE Schedule/Guidelines

1. *Dates and Sites*

Specific examination dates for a participating dental hygiene program can be found on the CDCA website. Dates are determined through collaboration between the Program Director or other official representative of the dental hygiene program and the CDCA. Please refer to the *Registration and CSCE OSCE Manual* for the CDCA's specific policies and administrative guidelines.

In the event there are extenuating circumstances such as weather, acts of God, or other unforeseen circumstances which may impact or alter the schedule and administration of the examination(s), the CDCA will make every attempt to contact candidates with updated information.

Note: The CDCA is not responsible for the malfunction of facility or candidate equipment and may or may not allot additional time due to the malfunction of any equipment. Equipment maintenance personnel are onsite during each examination to ensure the equipment and the water are in working order. At the site, should an equipment malfunction occur prior to or during the examination, the candidate must immediately notify the CFE or DSM so the appropriate personnel may be contacted.

2. Examination Timeline:

2 sessions	Group A	Group B
Exam Check-In, Typodont Distribution, Clinic Set-Up, CFE Check-In	7:00 - 8:00 AM	10:30 - 11:30 AM
Exam Start	8:00 AM	11:30 AM
Exam Finish	10:00 AM	1:30 PM
Enter Candidate Findings, Candidate Check-Out, Operatory Turn-over	10:00 - 10:30 AM	1:30 - 2:00 PM

3 sessions	Group A	Group B	Group C
Exam Check-In, Typodont Distribution, Clinic Set-Up, CFE Check- In	7:00 - 8:00 AM	10:30 - 11:30 AM	2:00 - 3:00 PM
Exam Start Time	8:00 AM	11:30 AM	3:00 PM
Exam Finish Time	10:00 AM	1:30 PM	5:00 PM
Enter Candidate Findings, Candidate Check-out, Operatory Turn-over	10:00 - 10:30 AM	1:30-2:00 PM	5:00 - 5:30 PM

3. Timely Arrival

Candidates are responsible for determining their travel and time schedules to ensure they can meet all of the CDCA's time requirements. All candidates are expected to arrive at the examination site at their designated time, which will be communicated to them via their online candidate profiles (under the "Apply" tab of the candidate profile). Failure to follow this guideline may result in not being permitted to start the examination. Candidates are encouraged to arrive 15 minutes before their appointed time to assure a timely start.

Candidates will be informed in their online candidate profiles as to the date and session on which they are assigned to challenge the MTCE. Examination schedules are not finalized until after the examination application deadline. Candidates should note the specific timelines for their assigned session, and the examination must be completed within the allotted time.

D. Candidate Professional Conduct

Integrity of the examination process depends on fairness, accuracy and consistency. Standards are required to ensure that these principles are adhered to by examiners and candidates. Penalties are imposed for violations of such examination guidelines and the penalties are proportional to the seriousness of the violation. Minor violations may result in a warning or reminder. Serious violations may result in a failure of the examination. Candidates are required to adhere to these standards of conduct while participating in the ADEX Dental Hygiene Examination.

1. **Submission of examination records:** All required examination records must be turned in to the CFE before the examination is considered complete. If all required documentation and materials are not turned in at the end of the examination, the examination will be considered incomplete, and the candidate may fail the examination.
2. **Registered/assigned procedures:** Only the treatment and/or procedures for which a candidate has registered, paid for, and been assigned to on the specified examination date may be performed. Performing other treatment and/or procedures may result in termination of the examination.
3. **Professional Misconduct:** Professional misconduct is a most serious violation of examination guidelines. Substantiated evidence of professional misconduct (see examples below) during the course of the examination will result in automatic failure of the entire examination series. In addition, there will be no refund of examination fees and the candidate will not be allowed to reapply for re-examination for one year from the time of the infraction.

Professional misconduct includes, but is not limited to:

- Falsification or intentional misrepresentation of registration requirements
- Cheating of any kind
- Demonstrating complete disregard for the oral structures
- Misappropriation of equipment (theft)
- Receiving unauthorized assistance
- Alteration of examination records
- Failure to follow instructions from examiners
- Rude, abusive, uncooperative or disruptive behavior toward, examiners, or other candidates
- Use of electronic equipment, to include recording devices, phones, and/or cameras (*candidates are prohibited from the use of any electronic devices during the course of the examination)

E. Infection Control

The current recommended infection control procedures for patient treatment as published by the Centers for Disease Control and Prevention must be followed. These procedures must begin with the initial setting up of the unit, continue throughout the course of the examination and include the final cleanup of the operatory.

- Clean long-sleeved uniforms, gowns, or laboratory coats are to be worn and must be changed if they become visibly soiled. Gowns must be closed at the neck. Gowns or laboratory coats are to be removed before leaving the clinic area.
- Face masks and protective eyewear with side shields must be worn during all procedures. Masks are to be discarded if the masks become damp or soiled.
- Footwear may not include sandals, perforated clogs or open-toed shoes (a safety issue rather than strictly infection control).
- Upon completion of the examination, it is the responsibility of the candidate to thoroughly clean the operatory by utilizing accepted infection control procedures.

Requirements for Personal Protective Equipment for the exam are site specific. Candidates are advised to check with the site to see what PPE is required and whether the site will be providing it for candidates. The CDCA will not provide PPE for candidates.

F. Scoring System Overview

Evaluations are made in a “double blind” manner at specified steps as a candidate progresses. Three examiners independently evaluate each presentation of candidate performance and enter their evaluations electronically. Each examiner is unable to see the evaluations of the other two examiners for any procedure presentation, and examiners are prohibited from discussing their evaluations during the examination.

Evaluations are made according to defined criteria, on a point accrual basis with the potential of earning 100 points. That is, for every successful fulfillment of the criterion, points are awarded. The candidate’s performance level is electronically computed for each item evaluated, based on the entries of the three examiners, and by this method, the candidate’s overall score is computed for each procedure. The candidate’s Calculus Detection performance is measured against a pre-determined key which has been verified by three or more examiners.

The full scoring rubric can be found on the next page. **Scores are released within two weeks.**

No scores will be rounded.

A score of 75 or greater is required for candidates to pass.

2020 ADEX MTCE SCORING RUBRIC

Skills Assessment	Criteria	Points Possible
Calculus Detection	<ul style="list-style-type: none"> • 4 assigned teeth • 4 surfaces evaluated on each assigned tooth • 16 surfaces will be evaluated for the presence or absence of subgingival calculus (1 point each) 	16
Calculus Removal	<ul style="list-style-type: none"> • One quadrant assigned for scaling • 12 selected surfaces of qualifying calculus will be evaluated for calculus removal (5.5 points each) • Surfaces will follow the 8-5-3 distribution (see page 14 for details) 	66
Periodontal Probing Measurement	<ul style="list-style-type: none"> • 2 assigned teeth • 6 measurements per tooth • 12 measurements will be evaluated (1 point each) 	12
Final Case Presentation	<ul style="list-style-type: none"> • Evaluation of calculus removal on all unselected surfaces within the assigned quadrant • Calculus remaining on 1 surface (-3 points) • Calculus remaining on 2 or more surfaces (-6 points) 	6
Total		100

G. Instrument Requirements

Instruments for use during treatment are the choice of the candidate, provided they are acceptable and taught at accredited dental hygiene programs and the candidate has been trained in their use. However, instruments utilized for Evaluation by Examiners are specified. Examiners are standardized using the 11/12 explorer and the recommended probe (below).

Candidates are encouraged to have an additional set of instruments on hand during the examination. Candidates will not be allowed additional time for instruments dropped or for autoclaving instruments.

Required Instruments for Evaluation (7 items):

- 1) Calculus Detection: 11/12 Explorer (e.g. the ODU 11/12)



- 2) Probing Exercise: Probe marked with 1mm increments from 1-10 mm (the UNC probe is strongly recommended)



- 3) Reflective front surface mirror, which may be one or two sided
- 4) A hand-piece compatible with the examination site's equipment

Other Instruments:

For information regarding ultrasonic/sonic or piezo electric scaling instruments, refer to the host site's Site Information Sheet for details on availability and types of ultrasonic devices. The CDCA does not assist with equipment rental for candidates.

Candidates are responsible for checking the Site Information Sheet and, if necessary, contacting the host site to verify that all hand pieces and sonic/ultrasonic scalers are authorized/compatible with school equipment.

The ADEX Dental Hygiene Examination: Manikin Treatment Clinical Examination

II. Virtual Q & A

III. Exam Day Administration

- Admission to Clinic Requirements on Exam Day
- Exam Flow
- Setting Up and Getting Started
- End of Examination Procedure



A. Virtual Q & A

Candidates will be notified of a Virtual Q & A that will take place at a scheduled time before the day of their examination. It is highly recommended that candidates take part in this opportunity. Important site-specific information will be given to candidates during this session and the overall exam process will be reviewed. The Chief and the Clinic Floor Examiners will be available to answer your exam questions.

B. Exam Day Administration

1. *Admission to Clinic Requirements on Exam Day*

To be granted entrance to the candidate clinic on exam day, you must bring the following:

- a. **Two** forms of identification: one ID must be a photo ID, and both IDs must have the candidate's signature. Acceptable forms of photo identification include such documents as current, valid driver's license, passport, military ID, or official school ID. A voter registration card (signed) or a credit card (signed) may be used as a second ID. If your name has recently changed, bring a copy of the marriage certificate or court document to the examination.
- b. Your 3-digit candidate sequential number which can be found on your registration confirmation (available in your online candidate profile). *You may either bring a printout of the registration confirmation or an electronic device that can display your identification information in your secure online profile. Please note that internet connectivity is not always available on-site, so you are strongly advised to print out your form.

Your candidate ID number (5-digits) and your candidate sequential number (3-digits) will be used throughout the examination process to identify you, your workspace, your forms, all electronic data entry pertaining to you, to track your progress through the examination, when scoring evaluations of your performance, and when reporting your score. The 3 digit # is used most often for identification purposes during the examination session.

Once candidate ID's have been verified, candidates will receive:

- Candidate labels and ID Badge
- Assignment and Candidate Findings Form
- Typodont

One of the candidate photo ID labels given upon entry to the clinic must be worn at all times on your outermost garment while on the clinic floor. If meeting with the CFE to enter Candidate Findings outside of the clinical area, Candidates must doff their PPE and have the second ID label on their scrubs.

Candidates should then proceed to their assigned operatory to set up for the exam.

2. Exam Flow

Examination Assignment:

Qualifying Subgingival Calculus Assignment

- One quadrant will be assigned for treatment which contains 12 selected surfaces of qualifying calculus
- The *Assignment and Candidate Findings Form* (ACF) will list 10 of the 12 selected surfaces. Candidates will not know the location of the 2 other selected surfaces
- Candidates will be evaluated on the removal of all calculus within the entire quadrant
- The 12-selected surfaces of qualifying calculus are each worth 5.5 points (66 total points)
- The removal of calculus on all other unselected surfaces will be evaluated in the Final Case Presentation (6 points)

Calculus Detection Findings

- 4 teeth will be assigned for calculus detection
- The candidate will evaluate 4 surfaces per tooth (MDFL) for the presence or absence of subgingival calculus
- There will be a total of 16 surfaces evaluated each worth 1 point (16 points)

Probing Measurement Findings

- 2 teeth (1 anterior and 1 posterior) will be assigned for probing measurements
- The candidate will record 6 periodontal measurements per tooth (DF,F,MF,DL,L and ML)
- There will be a total of 12 measurements each worth 1 point (12 points)

Note: The surfaces with qualifying calculus are distributed such that:

- **At least 8 of the surfaces are located on any surface of molar or premolar teeth**
- **At least 5 of the surfaces are located on mesial or distal surfaces of molars or premolars**
- **At least 3 of the surfaces are located on the mesial or distal of molars**

B. Setting Up and Getting Started

1. *Set-Up Period*

Candidates will proceed to their assigned workstation and perform the following:

- a. Place your candidate photo ID label on your outermost garment
- b. Place a candidate ID label on the *Assignment and Candidate Findings Form* in the designated area
- c. Place a candidate ID label on the provided plastic bag
- d. Reserve a candidate ID label for placement on the typodont before it is turned in. (instructions will be given the day of the exam)
- e. Mount the typodont in the provided manikin and shroud
- f. Set up instruments in preparation for the exam

2. *Check-in With CFE*

- CFEs must check the position of the mounted typodont for all candidates and will confirm the assignments before the exam can begin
- The Chief will inform all candidates when treatment can begin. Candidates may not start treatment until that time
- The Chief will also announce the group finish time.
- Candidates will have 2 hours to complete treatment (Calculus Detection, Calculus Removal, and Periodontal Probing)
- Candidates will receive two time notifications during the examination: a **ONE HOUR** warning and a **FIFTEEN MINUTE** warning before the end of their treatment time

C. End of Examination Procedure

1. Wipe down the typodont with soap and water or disposable wipe.
2. Remove the mandibular arch from the manikin
3. Place reserved candidate ID label on the mandibular arch
4. Place the mandibular arch in the plastic bag provided previously labeled with a candidate ID label per set up instructions
5. Fold the *Assignment and Candidate Findings (AFC) Form* and place in the plastic bag with the typodont
6. Take the plastic bag to the designated area
7. Meet with the CFE to electronically enter all candidate findings into the grading system
8. Discard unused candidate ID labels
9. Clean up your operatory
10. Exit the exam by checking out at the desk

The ADEX Dental Hygiene Examination: Manikin Treatment Clinical Examination

IV. Assignment and Candidate Findings Form (ACF)



Non-Patient DH Exam: Assignment and Candidate Findings Form

Candidate Sequential: _____
Candidate ID: _____
PLACE ID LABEL HERE
Test Site: _____

Quadrant Assignment: UL UR
LL LR
Version: A B C D E

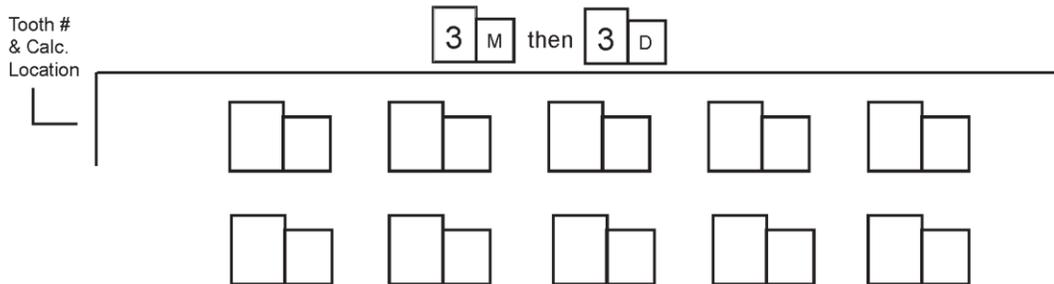
Typodont mounting approved

Examiner #

QUALIFYING SUBGINGIVAL CALCULUS REMOVAL ASSIGNMENT:

You have been assigned to treat a full quadrant to demonstrate your calculus removal skills. Contained within that quadrant are 12 selected surfaces which have been identified and assigned to you. The point value for the removal of calculus from the 12 selected surfaces is 5.5 pts each.

Below are listed 10 of the 12 selected surfaces that you have been assigned. You do not know the location of the other 2 assigned selected surfaces. You will be evaluated on the removal of all calculus within the quadrant with the 12 selected surfaces weighted more heavily than other unselected surfaces within the quadrant.



Subgingival Calculus Detection Findings: COMPLETE BEFORE STARTING TREATMENT

For the teeth assigned, indicate if subgingival calculus is present by placing an "X" in the box marked - "Yes" - present or - "No" - not present for each of the four surfaces on each tooth:
Mesial, Distal, Facial, And Lingual

Tooth #	M	D	F	L
<input type="checkbox"/>	Yes No	Yes No	Yes No	Yes No
<input type="checkbox"/>	Yes No	Yes No	Yes No	Yes No
<input type="checkbox"/>	Yes No	Yes No	Yes No	Yes No
<input type="checkbox"/>	Yes No	Yes No	Yes No	Yes No

Probing Measurement Findings

COMPLETE AFTER FINISHING TREATMENT

- Two teeth (one anterior, one posterior) assigned for periodontal probing
- After you complete treatment, measure and record in the appropriate boxes the depth of each sulcus/pocket on the indicated surfaces to the nearest mm

Anterior				Posterior			
Tooth #				Tooth #			
DF		DL		DF		DL	
F		L		F		L	
MF		ML		MF		ML	