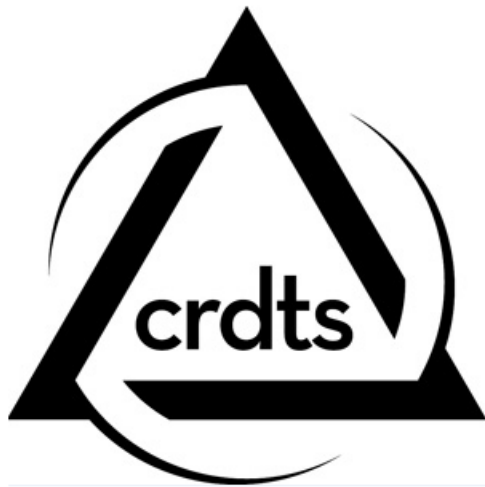
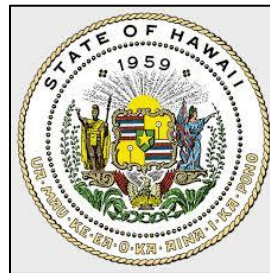


CRDTS 2021 HYGIENE SIMULATED PATIENT EXAMINATION

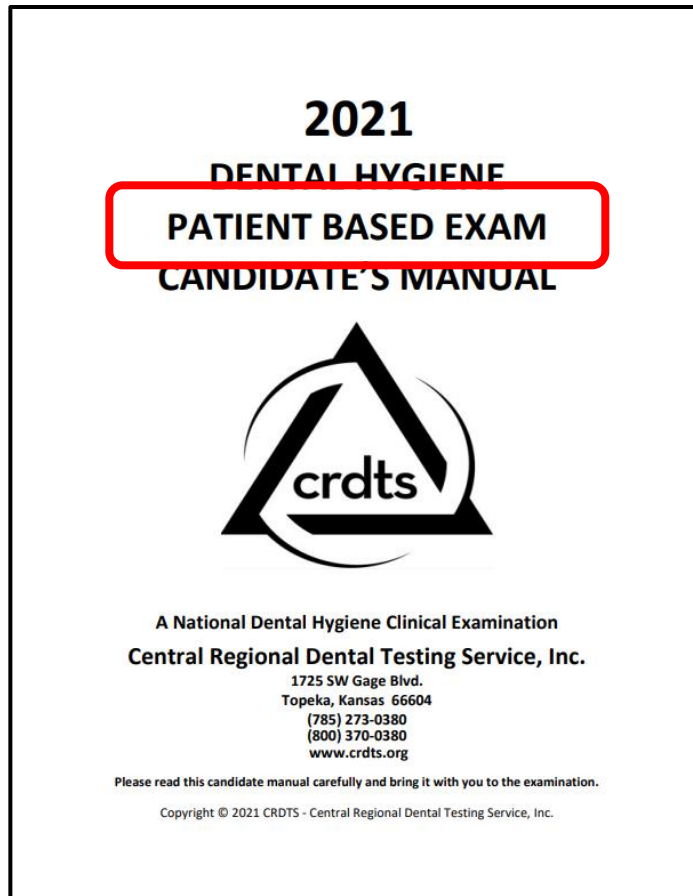


**Hawaii Dental Board Meeting
January 25, 2021**



Kim Laudenslager, RDH, MPA

Patient Based vs Simulated Patient ?



What's the Same?

- Same Cost ... \$1,025
- Same Scoring ... released after each testing group
- Same Complimentary weekend retake options
- Yes, Ultrasonics allowed on both
- Basically same content, scoring and criteria

SAME SAME BUT DIFFERENT

What's the Same? Content & Scoring

» Patient Based Exam

Clinical Skill	Scorable Items	x	Points scored per Item	=	Max Points
Extra/Intra Oral Assessment	8		2		16
Periodontal Probing	12		1		12
Scaling/Subgingival Calculus Removal	12		5		60
Supragingival Deposit Removal	6		2		12
TOTAL EXAM POINTS/ MAX SCORE					100

» Simulated Patient Exam

Clinical Skill	Scorable Items	x	Points scored per Item	=	Max Points
Extra/Intra Oral Assessment OSCE	16		1		16
Periodontal Probing	12		1		12
Scaling/Subgingival Calculus Removal	12		5		60
Calculus Detection	12		1		12
TOTAL EXAM POINTS/ MAX SCORE					100



Examining Validity, Fidelity, and Reliability of Human Patient Simulation

Deb Shelestak, PhD, RN   • Barbara Voshall, DNP, RN, CNS

- Simulation is increasingly being used in high-stakes performance evaluation.
- Given the significance of the decisions made, based on performance, it is essential that there is demonstrated:
 - **Validity** of content
 - **Reliability** of the scoring rubric
 - **Fidelity** of implementation

What's the Diff?

Exam Timing

Patient Based Exam Timing

Examination Timing

Once the first Treatment Selection has been evaluated by the examiners and deemed either acceptable or unacceptable, candidates will be given a 2½ hour Start/Finish Time.

2 ½ Hours

Simulated Patient Exam Timing

Examination Timing

Candidates will have fifteen (15) minutes to complete the written Oral Assessment OSCE section of the exam and will have two (2) hours to complete the calculus detection, scaling/subgingival calculus removal and periodontal probing sections of the exam.

2 ¼ Hours

Extra/Intra Oral Assessment

Patient Based Oral Assessment

- » Performed on-site with patient
- » Candidates usually take ~ 15 minutes
- » To complete 8 distinct sections
- » Worth 2 points each = Highest possible score = 16

Simulated-Patient Oral Assessment OSCE

- » OSCE Performed on-site via CRDTS computer tablet
- » Candidates have 15 minutes
- » To view and answer 16 multiple-choice questions
- » Worth 1 point each = Highest possible score = 16

Calculus Detection

- The candidate will be assigned 12 surfaces to explore
- The candidate must accurately indicate by recording the presence (yes) or absence (no) of calculus on each of the 12 assigned surfaces
- 12 surfaces worth 1 point each

Candidates: Explore each assigned surface and indicate the presence of subgingival calculus by recording a Y or N in the box below the assigned surface.

Calculus Detection: 12 surfaces assigned are listed below:

2 D	2 L	3 M	5 M	7 F	9 D	10 L	11 D	13 F	14 M	14 M	15 D
Y	Y	N	Y	Y	N	N	Y	Y	N	Y	N

Subgingival Calculus Removal

- The candidate will select either the right or left mandibular quadrant to scale
- The candidate is expected to scale all surfaces of all teeth in their selected quadrant
- Ultrasonics are allowed
- Instruments need to be clean but not necessarily sterile
- Examiners will select 12 surfaces in the treated quadrant for final evaluation
- 12 surfaces worth 5 points each

Periodontal Probing

- The candidate will be assigned two teeth to probe
- The candidate must accurately chart within ± 1 mm the depth of the gingival sulcus on six aspects of the two assigned teeth
- 12 probe readings worth 1 point each

CRDTS COORDINATOR:

Periodontal Measurements:

COORDINATOR assigns 2 TEETH for
Probing Depths:

Candidates: Measure and record the depth of each
sulcus on six aspects for the two assigned teeth

Note measurements in the shaded boxes ONLY

*ANY BOX LEFT BLANK WILL BE
RECORDED AS AN ERROR*

#	mm	#	mm
DF		DF	
F		F	
MF		MF	
DL		DL	
L		L	
ML		ML	

000010

Fidelity = How close to real ?

- Fidelity in simulation has traditionally been defined as **‘the degree to which the experience replicates reality’**.
- Fidelity is the word used to discuss the **realism** of the examination experience.
- All attempts have been made to increase the fidelity of the simulation so that the candidate will treat the experience as real as possible.
- Fidelity played an important role in the development and choice of an appropriate simulation for each skill task.

Infection Control

- **During all simulated patient treatment procedures the candidate must follow proper aseptic and infection techniques.**
- **Candidates must wear PPE as follows:**
 - **Gloves**
 - **Mask**
 - **Protective Eyewear**
 - **Lab Jacket**
- **The operatory and/or operating field must remain clean and organized in appearance.**

**CRDTS will provide
Acadental Typodont**



**Testing site will provide
Typodont Chair Mount**

**CRDTS will provide
Acadental Oral Cavity Cover**

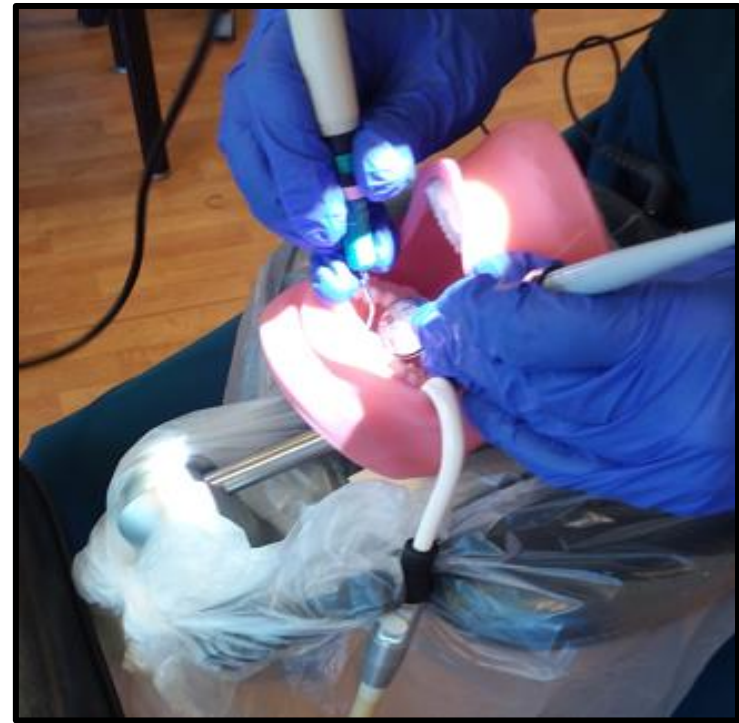


Examples of Mounted Typodonts



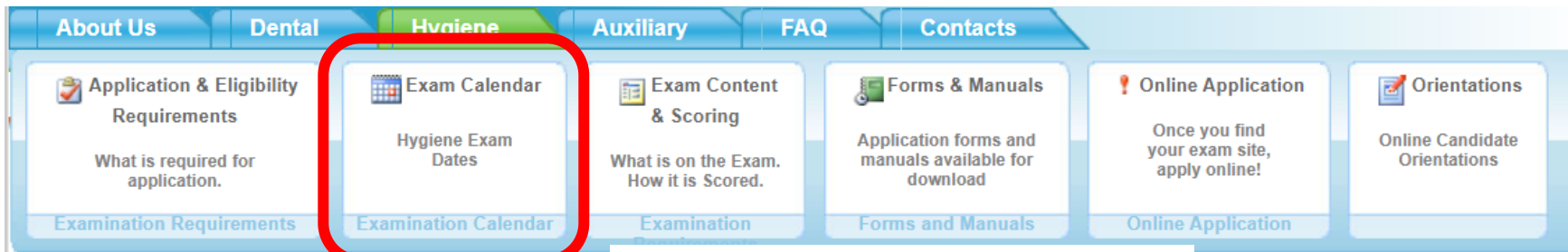
Candidates receive their typodont with the oral cavity cover (shroud) already attached.

Examples of Mounted Typodonts



The correct patient/operator position must be maintained while operating. The facial shroud may not be displaced other than with those retraction methods which would be reasonable for a patient's facial tissue.

CRDTS Website = www.CRDTS.org



2021 Dental Hygiene Exam Calendar

(Exams will be updated as soon as information becomes available)

Exam Calendar

Hygiene Exam Dates

S=SIMULATED
P=PATIENT
B=BOTH

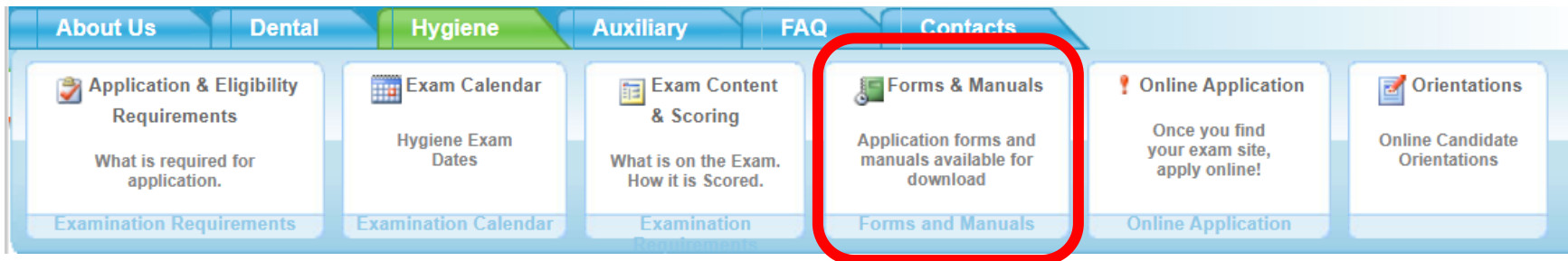
Date	S=SIMULATED P=PATIENT B=BOTH	Site	City	State	Deadline
February 19-21	B	Concorde Career College	San Bernardino	CA	January 15
March 19-21	P	Concorde Career College	Dallas	TX	February 5
March 19-21	P	Concorde Career College	San Antonio	TX	February 5
March 19-20	P	Oregon Institute of Technology	Klamath Falls	OR	February 5
March 26-28	B	Colorado Northwestern CC	Rangely	CO	February 12
March 26-28	B	Lewis & Clark Community College	Godfrey	IL	February 12
April 9-11	P	Harrington College	Sacramento	CA	February 26
April 9-11	P	Central Georgia Technical College	Macon	GA	February 26
April 9-11	P	Wayland State University	Marrow	GA	February 26
April 16-18	B	Wallace State Community College	Hanceville	AL	March 5
April 16-18	P	Atlanta Technical College	Atlanta	GA	March 5
April 16-18	P	University of Hawaii - Manoa	Honolulu	HI	March 5
April 16-18	P	Alma Medical Institute	Albuquerque	NM	March 5
April 16-18	S	Charleston Technical College	Charleston	SC	March 5

2021 Dental Hygiene Exam Calendar

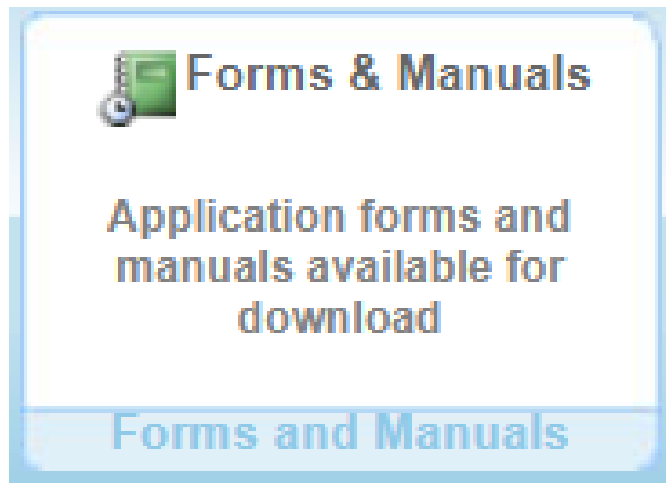
Date	Site	City	State	Deadline
January 19-21	Concorde Career College	San Bernardino	CA	January 15
March 19-21	Concorde Career College	Dallas	TX	February 5
March 19-21	Concorde Career College	San Antonio	TX	February 5
March 19-20	Oregon Institute of Technology	Klamath Falls	OR	February 5
March 26-28	Colorado Northwestern CC	Rangely	CO	February 12
March 26-28	Lewis & Clark Community College	Godfrey	IL	February 12
April 9-11	Harrington College	Sacramento	CA	February 26
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April 16-18	Atlanta Technical College	Atlanta	GA	March 5
April 16-18	University of Hawaii - Manoa	Honolulu	HI	March 5
April 16-18	Alma Medical Institute	Albuquerque	NM	March 5
April 16-18	Charleston Technical College	Charleston	SC	March 5

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CRDTS Website = www.CRDTS.org



Hygiene > Forms & Manuals

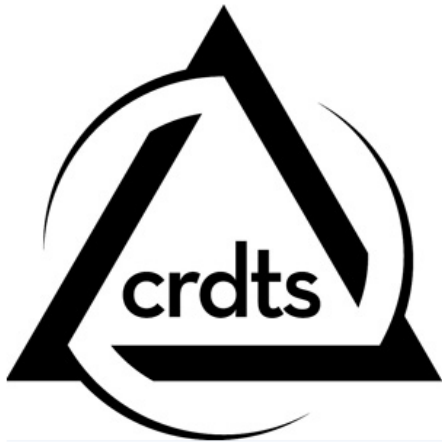


[2021 Patient Based Candidate Manual](#)
[2021 Patient Based Health History](#)
[2021 Patient Based Treatment Consent Form](#)
[2021 Patient Based Treatment Selection Worksheet](#)
[2021 Patient Based Full Mouth Screening Worksheet](#)
[2021 Patient Based Medical Clearance Form](#)
[2021 Patient Based Letter to Patients](#)
[2021 Letter of Certification](#)
[2021 Simulated Manikin Candidate Manual](#)
[2021 Oral Assessment OSCE Security Measures Form](#)
[2021 Sim Patient Hold Harmless Agreement](#)

**See Candidate Tab > Candidate Forms for Hygiene Manikin Candidate Manual
Please Note:

To view this content, you need Adobe Acrobat Reader

[Download Adobe Reader Here](#)



Thank you!

Email: Kim@crdts.org



THE COMMISSION ON
DENTAL COMPETENCY
ASSESSMENTS

Hawaii State Board of Dentistry
Dental Hygiene Examination

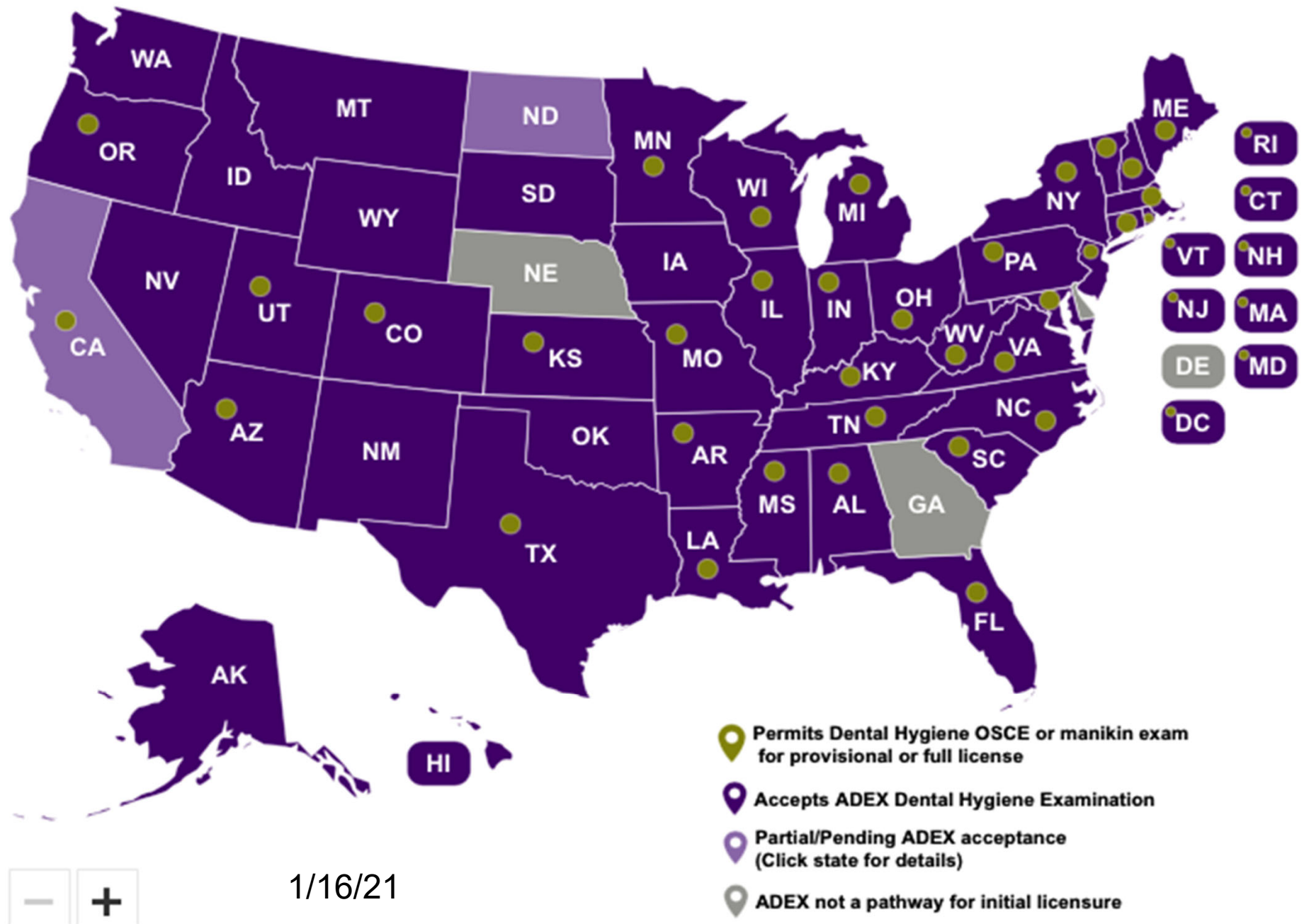
Pat Connolly-Atkins, RDH, MS
CDCA Senior Advisor

Kimber Cobb, RDH, BS
**CDCA National Director,
Licensure Acceptance and
Portability**

Dental Hygiene Licensure



1. ***ADEX PTCE Patient Examination:***
CSCE/OSCE + Patient Treatment Clinical Exam
2. ***ADEX MTCE Manikin Examination:***
3. CSCE/OSCE + Manikin Treatment Clinical Exam
4. ***ADEX Dental Hygiene CSCE OSCE:*** Dental Hygiene
CSCE/OSCE for provisional or full licensure



1/16/21

THE COMMISSION ON **DENTAL COMPETENCY** ASSESSMENTS

000003

ADEX Dental Hygiene 2021 Manikin Acceptance

(30 as of January 18, 2021)



-
- | | | |
|-----------------------|----------------------------------|-----------------|
| •Alabama | •Louisiana | •Ohio |
| •Arizona | •Maine | •Oregon |
| •Arkansas | •Maryland | •Pennsylvania |
| •California (3/31/21) | •Massachusetts | •Rhode Island |
| •Colorado | •Michigan | •South Carolina |
| •Connecticut | •New Jersey | •South Dakota |
| •District of Columbia | •New Hampshire | •Tennessee |
| •Florida (3/31/21) | •New Jersey | •Texas |
| •Iowa | •New York | •Utah |
| •Kansas | •North Carolina (until SoE ends) | •Vermont |
| •Kentucky | | •Virginia |

ADEX ONLY

CDCA Administered ADEX DH Exam By the Numbers



ADEX Dental Hygiene Acceptance

States Accepted PTCE: **45**

States Accepted MTCE: **32**

States Accepting CSCE OSCE without PTCE/MTCE for 2020: **3** (OR, MO, KS)

CDCA Total Exams since June 2020: 3,042 3699

CSCE OSCE + Manikin Based Exams (MTCE): **2680**

CSCE OSCE + Patient Based Exams (PTCE): **419**

CDCA Total Dental Hygiene schools served by the CDCA since June 2020: 257

Number of Dental Hygiene exam sites: **104**

Number of schools represented: **153**

ADEX Manikin Based Exam Criteria, Content & Scoring



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

Minor Tissue Trauma includes: A laceration/abrasions that is $\leq 3\text{mm}$; A laceration or injury that would not result in the need for suturing, perio packing, or further follow-up treatment if this were on a patient.

Major Tissue Trauma includes: A laceration/abrasions that is $> 3\text{mm}$ and that would require sutures, perio packing, or further follow-up treatment ; A laceration/injury that would result in exposure of alveolar bone, flap, or amputation of papilla if this were on a patient.

CSCE OSCE

Criteria, Content & Scoring



- ▲ All candidates with ADEX status will have taken the CSCE OSCE and either the PTCE or MTCE for licensure
- ▲ 100 Questions + 15 Pilot Questions administered at the Prometric Testing Center
- ▲ Comprehensive Intra and Extra Oral Examination

CSCE OSCE CONTENT	
Medical/Dental Assessment	12%
Intra and Extra Oral Assessment and Charting	27%
Intra and Extra Oral Examination	
Dental and Periodontal Charting and Assessment	
Soft Tissue, Bone, and Tooth Abnormalities	
Radiology/Imaging	15%
Dental Hygiene Care Planning	13%
Patient Care	19%
Periodontal Procedures	
Infection Control	
Medical Emergency Management	
Dental Specialties and Pharmacology	14%
Dental Specialties	
Applied Pharmacology	



What's New in 2021

2021 ADEX Manikin Exam

2nd Generation MTCE:



First Generation



- ✓ Teeth are manufactured with a harder surface that better simulates a patient
- ✓ Calculus is a natural shade
- ✓ Texture & quality of calculus more realistic
- ✓ Size of deposits on surfaces are larger

Second Generation



- ✓ More surfaces with calculus in each quadrant
- ✓ Manufacturing adjustment to address teeth loosening
- ✓ Tissue Management is evaluated



ADEX Changes 2021

CSCE OSCE

- Continued addition of Alternative Item Types

Patient Based (PTCE) Examination

- Medical History includes Intraoral and Extraoral findings
- Clarification:
 - The use of ultrasonics is site dependent
 - If the exam is limited to hand scaling
 - PTCE treatment time increases to 2½ hours
 - MTCE treatment time remains 2 hours



ADEX Changes 2021

Manikin Based (MTCE) Examination

- Product enhancement
- Soft and Hard Tissue Trauma will be evaluated and may result in penalty points being applied

<p>Minor Tissue Trauma includes: soft and/or hard tissue trauma that is inconsistent with the procedure. Hard tissue trauma may include root surface abrasion(s) that do(es) not require additional definitive treatment.</p>	
<p>Minor Tissue Trauma Penalties (soft tissue):</p> <p>1 site: -1 point 2 sites: -2 points 3 sites: -3 points 4 or more sites: -100 points</p>	<p>Minor Tissue Trauma Penalties (hard tissue):</p> <p>1 site: -1 point 2 sites: -2 points 3 sites: -3 points 4 or more sites: -100 points</p>
<p>Major Tissue Trauma includes: major damage to the soft and/or hard tissue that is inconsistent with the procedure and pre-existing condition; hard tissue trauma for root surface abrasions that would require additional definitive treatment</p>	
<p>Major Tissue Trauma Penalty (soft or hard tissue): -100 points</p>	

2020 Exam Results:

CSCE OSCE

PATIENT PTCE

MANIKIN MTCE





Dental Hygiene

Computer Simulated Clinical Examination (CSCE OSCE) Mean Scores

All candidates, as of December 31, 2020

Year	Score
2016	87
2017	87
2018	88
2019	89
2020	88

Dental Hygiene 2020



Dental Hygiene First and End of Year Pass Rate

2020 Graduates, as of December 31, 2020

Exam	First Time Pass Rate	End of Year Pass Rate
Computer Simulated Clinical Examination (CSCE OSCE)	96.87%	99.15%
Patient Treatment Clinical Examination	94.27%	95.47%
Manikin Treatment Clinical Examination	98.73%	99.81%

Dental Hygiene Clinical Exam Data 2018-2020



Patient Clinical Exam	2015	2016	2017	2018	2019	2020
First Time Pass Rate	96.0%	96.0%	92.0%	87.35%	90.67%	94.27%
Final Pass Rate	99.95%	99.86%	99.88%	99.65%	99.56%	95.47%
Manikin Clinical Exam						2020
First Time Pass Rate						96.73%
Final Pass Rate						99.81%

Exam Errors



Most Common Errors Contributing to Failure

Calculus Removal
Calculus Detection

In both the Patient & Manikin Treatment
Examinations

2020 Exam Feedback



"I am so thankful...this type of examination is a great way to give all candidates an even playing field. This was also a great exam if you have trouble tracking down a patient for the live patient exam, especially if you attend school not close to home." -Candidate, University of Mississippi

"Great organization and flow with the whole exam. CFE's were extremely helpful and answered all questions thoroughly." -Candidate, Penn Tech

"I found the CSCE questions very relevant." -Candidate, Middlesex C.C.

"The process was smooth and the personnel present during the clinical exam were great!" -Candidate, Pensacola State College

"I absolutely LOVED taking the manikin exam. I think it is an excellent test of a candidate's skills and experience. It was more realistic than I could have imagined. I struggled in exactly the same areas that I always struggle in a live human subject." -Candidate, UNLV



ADEX Manikin Exam: A Pathway Forward



-
- Selected typodont presents with all examination Case Selection clinical requirements fulfilled
 - Candidates not reliant on patients to complete the examination process
 - Need for Patient & Case Selection acceptance evaluation is eliminated
 - Candidates are taking the same exam under the same conditions
 - No potentially infectious aerosols from patients
 - Reduced size of examination teams
 - More efficient delivery in reduced availability
 - Modified administration time=less time in clinic for all participants
 - Flexibility to Evaluate Candidate performance on site or off site
 - Advanced PPE not required
 - Cavitron eligible

Thank-You

Your Questions and Comments are Welcomed



Dental Hygiene Manikin Exam



Kelly Reich, RDH

WREB Dental Hygiene Director

Field Testing

Prior to implementing the Manikin exam, WREB will have:

Conducted six field tests with students

Reviewed student feedback about their experience, the models, difficulty of exam

Completed an exam analysis and equating of the models by WREB psychometrician (results have not been released at this time)

Student performance results versus keyed models

Goal of Field Testing

Valid exam (discriminating)

All Candidates have a similar exam experience (standardized)

Level of challenge is acceptable for entry level practitioners

Administered the same, regardless of site

Develop Examiner Standardization and Calibration exercises

Manikin Exam Content

Administered as One Exam

Two Components:

Assessment and Detection Quadrant

Removable Calculus Quadrant

Assessment and Detection (AD) Maxillary Arch

Completed first

Arch is magnetic and placed in Carrier tray prior to exam

30 minutes to complete

Arch is removed when Candidate is finished

Examiners do not grade (pre-keyed prior to exam season)



Assessment and Detection (30 minutes)

Unique in design

Several versions (keys)

Record on assigned teeth:

- One furcation classification
- Gingival recession
- Probing depths (simulated sulcus)
- Presence or absence of calculus on key surfaces
- NC 11/12 explorer, UNC 1-12 mm probe (required instruments)
- [Extra and Intra Oral Assessment \(images of common oral conditions\)](#)



AD Calculus

- 3D printed, cannot be altered
- Located below the gumline

Removable Calculus (RC) Mandibular Arch

Placed in Carrier tray prior to exam

Several versions

90 minutes to complete

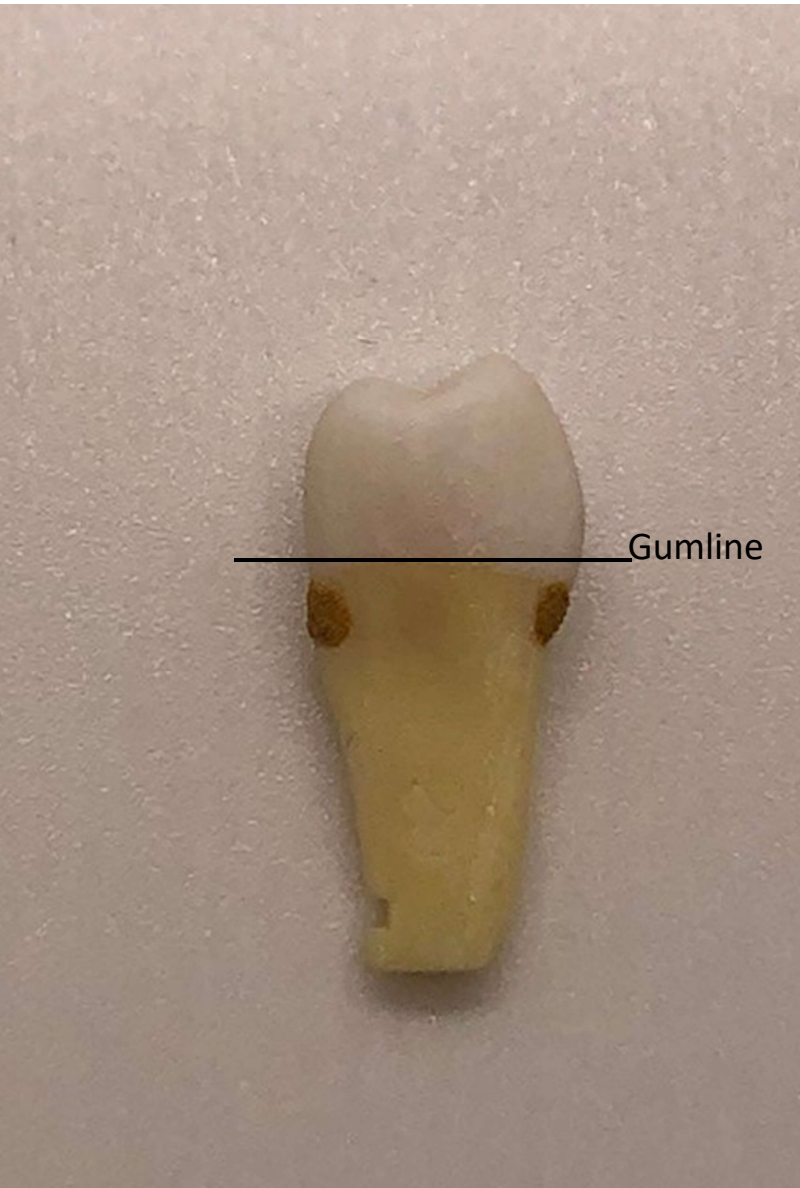
Arch is removed when Candidate is finished

Three Examiners independently grade

One time use

*Immediate exam results, ability to retake on site (no fee)





Removable Calculus (RC) Mandibular Arch

Hand instrumentation is similar (patient)

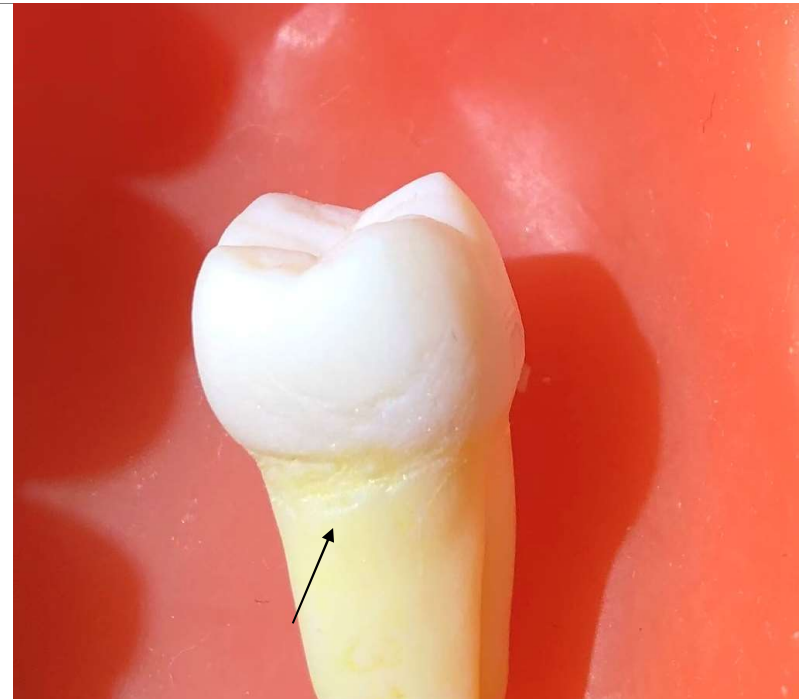
Can use ultrasonic instrumentation

Brown in color, avoid over instrumentation

Located at gumline and below tissue

Soft and Hard Tissue

Scuffing of tissue and some alteration of tooth surface is acceptable



WREB Manikin Candidate Guide



Grading criteria



Scoring

Thank you!