

2021

Assessment of Clinical Skills Protocol

Approved February 2021



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The Assessment of Clinical Skills (ACS) Protocol contains important information regarding the ACS. This document should be read carefully. In the event of any discrepancies between documents or the NDEB website, the information found in the ACS Protocol will prevail.

Purpose

The purpose of the Assessment of Clinical Skills (ACS) is to assess clinical competence. During the two-day ACS, you will perform 12 dental procedures on simulated patients (manikins) in a clinical setting. You must perform all procedures as if you were working with actual patients. You are required to use your judgment and follow accepted clinical care guidelines and standards.

Schedule

You must complete the online clinic and equipment orientation prior to check-in. You will be notified when the orientation is available.

Day 1	Time
Check-in	7:30 a.m.
Setup	8:30 a.m.
Clinical procedures on simulated patients	9:00 a.m. to 4:45 p.m.*

Day 2	Time
Check-in	7:00 a.m.
Setup	8:00 a.m.
Clinical procedures on simulated patients	8:30 a.m. to 4:45 p.m.*

* Examinees who are scheduled for their dental dam requirement will finish at 5:15 p.m.

You must exit the clinic and remove all your equipment and supplies no later than 5:45 p.m. each day.

Leaving and Re-entering the Clinic

You are encouraged to take breaks whenever needed. There is no scheduled lunch break due to physical distancing requirements and space limitations. However, 30 minutes have been included in the ACS to enable you to take a break when desired. You must be mindful of physical distancing while on your break. While food and beverages must not be consumed in the clinic, you may eat and drink in the designated area outside of the clinic. You may use the washroom facilities at any time during the ACS.

Check-in

During check in, you will be issued an NDEB ID badge. To receive the NDEB ID badge, you must show current government issued photo identification. Acceptable forms of government issued photo identification are:

- driver's licence,
- passport, or
- provincial photo identification card.

The identification must be in English or French.

Photo identification must show your name exactly as it appears in your NDEB online profile and must not be expired. If the photo identification does not have an expiry date, it must have been issued within the last 10 years. If you do not provide government photo identification you will not be admitted.

An NDEB ID card matching your NDEB ID badge will be posted in your operatory.

Requirements

Restorative and Endodontic Requirements

You will be required to perform the following nine restorative and endodontic procedures on supplied typodonts:

- Class II amalgam preparation
- Class II amalgam restoration on a supplied pre-prepared tooth
- Class II composite resin restoration on a supplied pre-prepared tooth
- Class III composite resin preparation
- Class IV composite resin restoration on a supplied pre-prepared tooth
- Endodontic access preparation
- Full metal crown preparation
- Metal-ceramic crown preparation
- Provisional crown restoration for a supplied pre-prepared tooth

Other Requirements

- Dental dam
- Infection control and safety
- Record of procedures

There may be some variation to this list of requirements. All requirements are selected to evaluate acceptable clinical skills and techniques relevant to current Canadian standards.

During the exam you will receive the following documentation:

- List of teeth for practice preparations.
- List of requirements, record of procedures and dental dam instructions, and scheduling information.
- Signs to indicate the "operating area" and "storage area".
- Communication Form. This may be used to provide comments and must be completed during examination time. All comments must be included on the Communication Form. Comments sent to the NDEB following the administration of the examination will not be addressed.

Equipment, Instruments, and Supplies

The dental clinic at the NDEB examination centre will provide the following items:

- a typodont mounted in a manikin on a dental chair (the typodont will be labeled with your ID number)
- an overhead dental operating light
- an operator stool
- saliva ejectors
- air/water syringe tips
- high volume suction tips
- amalgam waste and sharps disposal containers
- amalgamators (Due to COVID-19, you are strongly encouraged to provide your own amalgamator.)

You must supply all other equipment, instruments, and supplies needed to complete the required procedures, including but not limited to:

- handpieces and burs
- curing lights
- all restorative materials including amalgam, composite resin, and provisional crown materials
- gloves, masks, and protective eyewear
- dental hand instruments
- dental dam, frames, clamps, forceps, and dental floss
- materials to place and finish restorative materials (matrix bands, matrix holders, wedges, polishing supplies, etc.)
- hand sanitizer

You are responsible for your own instruments and supplies. The NDEB and examination centre will not be held responsible for instruments or personal supplies left unattended.

Invigilators will be present to ensure that the protocol is followed. If a problem occurs with the supplied equipment (including the typodonts and heads), you must inform an invigilator immediately. Time delays will be noted on your Time Delay Form posted in your operatory. A time extension will be given if you experience a cumulative delay of 5 minutes or more.

No time extensions are given for:

- problems with your personal equipment
- tightening or repositioning teeth

Information regarding handpiece configuration (connectors) and pre-set air pressure at each centre is available on the [NDEB website](#). The air pressure delivery to handpieces is set to that used in dental practice and university clinics in Canada and will not be altered.

Typodonts and Teeth

The NDEB uses the series 200 typodont (D95SDP-200-GSF-OCC) and simulated teeth from Kilgore International.

Website: [Kilgore International, Inc.](#)

Phone: 1-800-892-9999

Series A21-200 pre-prepared teeth will be provided for the:

- Class II amalgam restoration
- Class IV composite resin restoration
- Class II composite resin restoration
- Provisional crown restoration

Series S12-200 teeth with simulated enamel, dentin and pulp will be provided for the:

- Endodontic access preparation

Simulated enamel and dentin:

The simulated enamel and dentin in the crown of the teeth are white in colour and are made of a uniform composite resin material with no demarcation between the simulated enamel and dentin. The simulated dentin in the root of the teeth is made of clear resin. The teeth have been manufactured so that procedures may be performed using normal pressure with a dental bur and, if desired, finishing can be done using normal pressure with sharp hand instruments. Fractures may occur if an attempt is made to remove a large section of tooth structure, or if excessive force or dull instruments are used.

Simulated pulp chamber and canals:

The simulated dental pulp chamber and canals are hollow spaces lined with red colouring.

Series A5AN-200 permanent replacement teeth will be provided for the:

- Full metal crown preparation
- Metal-ceramic crown preparation

The permanent replacement teeth are white in colour and are made of a uniform melamine material.

Series A27-200 teeth with simulated enamel, dentin and caries will be provided for the:

- Class II amalgam preparation
- Class III composite resin preparation

Simulated enamel:

The simulated enamel is white in colour and is made of composite resin that is harder than the simulated dentin and simulated caries. The teeth have been manufactured so that procedures may be performed using normal pressure with a dental bur and, if desired, finishing can be done using normal pressure with sharp hand instruments. Fractures may occur if an attempt to remove a large section of enamel is made or if excessive force or dull instruments are used.

Simulated dentin:

The simulated dentin is yellow in color and is softer than the simulated enamel.

Simulated caries:

The NDEB uses custom caries teeth. The simulated caries in dentin is orange in colour. In anterior teeth, there is also a cavitation (hole) in the simulated enamel on the proximal surface. This cavitation extends through the simulated enamel into the simulated dentin and must be included as part of the preparation.

As a result of the manufacturing process, there is a small cement-filled space between the simulated enamel and the simulated dentin which may appear grey in colour. This is not simulated caries.

Information for Examinees

1. If you arrive late you will not be given extra time.
2. The list of requirements for each day will be distributed at the ACS start time.
3. You may perform the requirements for the day in any sequence, except for the Dental Dam, Provisional Crown, and the Record of Procedures requirements.
4. Grading criteria will be provided to you on Day 1 and Day 2. Protocols will be available onsite for consultation.
5. Your ability to read, interpret, and comply with instructions and other written material is part of the ACS.
6. ACS supervisors and invigilators will not answer questions involving ACS content.
7. ACS supervisors and invigilators may ask you questions related to the ACS.
8. Clinical attire (e.g. scrubs) is required but will not be assessed.
9. Open toed and perforated shoes must not be worn in clinics for safety reasons.
10. You may not share dental instruments and dental materials with other examinees due to COVID-19.
11. You are permitted to use any method to smooth or polish amalgam restorations, provided that this method is acceptable for actual patient treatment.
12. Magnification aids are permitted.
13. It is not necessary to use the dental dam to perform any of the restorative or endodontic requirements.
14. If not specified, the margin you choose must be one that meets the requirements of the restorative material used at the margin.
15. The use of metal hand instruments in cavity preparations will leave a grey stain.
16. If used with excessive force, mechanical tooth separators and interproximal wedges may loosen or cause fractures to the simulated teeth.
17. You are financially responsible for any damage caused to supplied equipment.
18. NDEB examiners use magnification and several methods of measuring such as periodontal probes (Hu-Friedy QOW6) with millimeter markings, flexible clearance tabs, convergence gauges, and surveyors.

The NDEB has made every effort to create a low-stress environment; however, minor delays are inevitable. It is recommended that you establish stress-management strategies prior to the examination.

Requirement Specific Information

Class III composite resin preparation:

- The evaluation of the preparations will consider the extent of the caries present.

Class II composite resin restoration:

- Shade matching is not part of the evaluation.

Class IV composite resin restoration:

- Shade matching is not part of the evaluation.

Class II amalgam preparation:

- The evaluation of the preparations will consider the extent of the caries present.

Provisional crown restoration:

- The provisional crown restoration is performed on Day 2 of the ACS. A series 200 study model with the unprepared tooth will be provided on Day 2.
- You may submit the provisional crown requirement prior to the submission deadline.
- Once submitted to an invigilator, the provisional crown will not be returned to you.
- You may work on other requirements before the submission deadline, whether you submitted your provisional or not.

Record of procedures:

- Abbreviations can be used provided they meet North American standards. Examples of abbreviations can be found at [ADA.org: Dental Abbreviations, Symbols and Acronyms](https://www.ada.org/2019/01/01/ada-abbreviations-symbols-and-acronyms).
- Draft notes can be made on the back of the Record of Procedures Form or the Requirements sheets.
- The date recorded on the Record of Procedures Form should be the date the record of procedures is completed.
- To preserve anonymity, you must enter your NDEB ID number instead of your signature.
- You may submit the record of procedures requirement prior to the submission deadline.
- Once submitted to an invigilator, the Record of Procedures Form will not be returned to you.
- You may work on other requirements before the submission deadline, whether you submitted your Record of Procedures or not.

Dental dam:

- You will have a designated 30-minute period, either on Day 1 or Day 2, to complete the dental dam requirement. You will find this information on your ID Card located in your assigned operator.
- Floss, small pieces of dental dam, wedges, Wedjets®, "O" rings or other similar materials can be used as ligatures for the dental dam requirement.
- The use of "Cushee" cushions is permitted.

Infection control and safety:

- Barriers must be applied during setup or examination time. Applying barriers to personal supplies and equipment prior to entering the clinic is not permitted.

Regulations

All examinees attending the ACS must comply with the following regulations. Failure to comply with any regulation may result in an accusation of misconduct.

Due to public health orders, the NDEB may find it necessary to introduce new regulations or modify existing regulations for specific examination administrations. Any new or modified regulations will supersede regulations published in the protocol.

1. Cell phones are prohibited in the clinic.
2. Smart watches are prohibited in the clinic. Only analog watches are permitted.
3. Devices with recording abilities such as radios, cameras, cell phones, smart watches, computers, or other electronic aids and devices are prohibited in the clinic.
4. Family or friends are not permitted in the examination centre.
5. You must have your NDEB ID card and ID badge visible at all times and must return them as directed at the end of each day of the ACS.
6. You are only permitted to use instruments, devices, products, techniques, and materials approved for and consistent with dental treatment on patients. For example, you should only use sterilizable or commonly disposable items intraorally.
7. You are not permitted to bring mobile carts to use in the operating area.
8. You are not permitted to:
 - a. remove teeth or alter the position of teeth in the typodont.
 - b. remove the typodont from the manikin.
 - c. move the torso of the manikin.
 - d. have extra typodonts or extra typodont teeth in the clinic.
 - e. work on any requirement teeth or use any material in the typodont during setup.
 - f. share impressions.
 - g. remove any ACS materials (including written documents) from the clinic.
9. Impressions, stents, crown forms, and templates made of any materials are prohibited except for items listed in the following section "Requirement Specific Regulations".
10. The following are prohibited in the clinic:
 - a. printed materials or hand-written notes
 - b. cheek retractors
 - c. endodontic drilling guides
11. You are not permitted to glue fractured teeth. All fractured teeth must be reported to invigilators. Intentionally damaging teeth is misconduct.
12. You must submit your record of procedures requirement by 9:00 a.m. on Day 2.
13. You must submit your provisional crown requirement by 11:30 a.m. on Day 2 unless you are performing the dental dam requirement on the morning of Day 2. In this case, you must submit your provisional crown requirement by 12:15 p.m.
14. You must stop working on the dental dam requirement at the indicated end time.
15. You must stop working at the indicated end times of the ACS.
16. You must leave the clinic when asked to by invigilators.
17. You must not discuss or share information about ACS requirements during or after the ACS.

Requirement Specific Regulations

Metal ceramic crown preparation:

- The use of reduction guides fabricated on site during the examination time is permitted.

Class II composite resin restoration:

- Freehand technique is the only acceptable technique. Impressions, stents, crown forms, and templates made of any materials are prohibited.

Endodontic access preparation:

- The use of acetone or other solvents is prohibited.

Class IV composite resin restoration:

- Freehand technique is the only acceptable technique. Impressions, stents, crown forms, and templates made of any materials are prohibited.

Full metal crown preparation:

- The use of reduction guides fabricated on site during the examination time is permitted.

Provisional crown restoration:

- The use of a putty impression, stent, or template fabricated on site during the examination time on Day 2 is permitted.

Misconduct

You must maintain the confidentiality of all NDEB content. You must not discuss your examination with others or communicate about questions or answers before, during or after an examination.

If at any time you are suspected of compromising the security of the examination, you will be subject to the NDEB's By-laws regarding misconduct. Additional information on [misconduct](#) can be found on the NDEB website.

Resources

The FDI two-digit tooth numbering system below is used for all examinations.

FDI / UNIVERSAL NUMBERING SYSTEM

PERMANENT DENTITION

FDI	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	FDI
Universal	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Universal
Universal	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	Universal
FDI	4.8	4.7	4.6	4.5	4.4	4.3	4.2	4.1	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	FDI
	RIGHT								LEFT								

PRIMARY DENTITION

FDI	5.5	5.4	5.3	5.2	5.1	6.1	6.2	6.3	6.4	6.5	FDI
Universal	A	B	C	D	E	F	G	H	I	J	Universal
Universal	T	S	R	Q	P	O	N	M	L	K	Universal
FDI	8.5	8.4	8.3	8.2	8.1	7.1	7.2	7.3	7.4	7.5	FDI
	RIGHT					LEFT					

Grading of Requirements

Restorative and Endodontic Requirement Grading Descriptions

The restorative and endodontic requirements are graded using the four-point grading system below.

Grade	Description	
A+	Excellent	<ul style="list-style-type: none">• Optimal.• No errors.
A	Acceptable	<ul style="list-style-type: none">• Improvements could be made but clinical outcome not affected.
D	Errors present	<ul style="list-style-type: none">• Errors must be corrected to achieve an acceptable clinical outcome.• Overpreparation, underpreparation, or tissue trauma as defined in the criteria.
E	Errors present	<ul style="list-style-type: none">• Errors are correctable but indicate significant lack of clinical skills or judgement.• Errors are not correctable and compromise clinical outcome.• Errors requiring alternative treatment (e.g. more extensive restoration, extraction, RCT).• Overpreparation, underpreparation, or tissue trauma as defined in the criteria.

Grading of Restorative and Endodontic Requirements

Each restorative and endodontic requirement is evaluated based on three criteria. Each criterion is assigned a grade. The requirement grade for the restorative and endodontic requirements is determined using the table below.

Criteria Grades	Requirement Grade
2 A+ and no D or E	A+
No more than 1 D and no E	A
2 D and no E	D
1 or more E or 3 D	E

Grading of the Dental Dam Requirement

The dental dam requirement grade is determined by the number of errors using the table below.

Number of Errors	Requirement Grade
No errors	A+
1 or more errors in the A section of the criteria	A
1 or 2 errors in the D section of the criteria	D
3 or more errors in the D section of the criteria or 1 or more errors in the E section of the criteria	E

Grading of the Infection Control and Safety Requirement

The infection control and safety requirement grade is determined by the number of infection control and safety violations using the table below.

Number of Violations	Requirement Grade
No infection control and safety violations	A+
1 infection control and safety violation	A
2 infection control and safety violations	D
3 or more infection control and safety violations	E

Grading of the Record of Procedures Requirement

The record of procedures requirement grade is determined by the number of errors using the table below.

Number of Errors	Requirement Grade
No errors	A+
1 error	A
2 or 3 errors	D
More than 3 errors or no entries	E

ACS Results

ACS results are determined by the 12 requirement grades using the table below.

Requirement Grades			ACS Result
A+/A	D	E	
12			Pass
11	1		Pass
11		1	Pass
10	2		Pass
10	1	1	Pass
9	3		Pass
9	2	1	Pass
8	4		Pass
Any other combination			Fail

Report of Results

You will receive a pass or fail result and a grade for each requirement.

The results of the ACS will normally be released according to the following schedule:

- June ACS – Minimum of 6 weeks following the ACS
- December ACS – Minimum of 10 weeks following the ACS

Email notification will be sent when results are available in your online profile. Results will not be released by telephone, mail, or fax.

Test Accommodations

Test accommodations are granted on an individual basis and are dependent on the nature and extent of the request, documentation provided, and requirements of the examination. Read the NDEB's policies and procedures for [test accommodations](#) on the NDEB website.

Appeals

If you have received a failing grade on the ACS, you have up to three months from the date the results are released to make a written submission to the Board requesting to have the results changed.

Additional details can be found on the [NDEB website](#).

Compassionate Appeals

Compassionate appeals must be submitted in writing within seven days of the examination to info@ndeb-bned.ca.

Information regarding [compassionate appeals](#) can be found on the NDEB website and in the [NDEB By-laws](#).

Repeats

The ACS can be taken a maximum of three times.

Criteria



Criteria

Critical Errors

Critical errors automatically result in an E grade for the associated requirement.

Metal-ceramic crown preparation

- Any error that prevents evaluation of the examination tooth
- No preparation performed
- Wrong tooth prepared

Class III composite resin preparation

- Any error that prevents evaluation of the examination tooth
- No preparation performed
- Wrong tooth prepared
- Incorrect surface prepared

Class II amalgam restoration

- Any error that prevents evaluation of the examination tooth
- No or incomplete restoration

Class II composite resin restoration

- Any error that prevents evaluation of the examination tooth
- No or incomplete restoration

Endodontic access preparation

- Any error that prevents evaluation of the examination tooth
- No access performed
- Wrong tooth accessed

Class IV composite resin restoration

- Any error that prevents evaluation of the examination tooth
- No or incomplete restoration

Class II amalgam preparation

- Any error that prevents evaluation of the examination tooth
- No preparation performed
- Wrong tooth prepared

Full metal crown preparation

- Any error that prevents evaluation of the examination tooth
- No preparation performed
- Wrong tooth prepared

Provisional crown restoration

- Any error that prevents evaluation of the examination tooth
- No provisional crown
- Restoration cannot be seated

Record of procedures

- No record of procedures

Dental dam application

- Dam not placed in allotted time

Metal-ceramic Crown Preparation for a Maxillary Anterior Tooth

Clearance for occlusion will be measured from opposing teeth in maximal intercuspation. The labial margin must be 90° (the angle is measured from the external surface of the tooth to the shoulder).

		Criteria		
		Path of Draw and Axial Convergence	Preservation of Tooth Vitality and Structural Durability	Finish and Margin
Grade	A+	<ul style="list-style-type: none"> Preparation allows the fabrication of a restoration with optimal retention and contour No undercuts Axial convergence: 6° - 10° 	<ul style="list-style-type: none"> Optimal preparation has been performed to permit the fabrication of an esthetic and functional restoration Axial reduction: <ul style="list-style-type: none"> Labial, mesial, and distal: 1.2 mm Lingual (gingival to cingulum): 0.5 mm Incisal reduction: 2.0 mm Clearance for occlusion (lingual concavity): 1.0 mm - 1.5 mm Preparation has no sharp line angles No damage to adjacent teeth 	<ul style="list-style-type: none"> Margin is optimally placed, defined, and identifiable Margin is smooth, continuous and has no steps Margin is positioned 0.5 mm supragingival Preparation walls are smooth No damage to soft tissue Preparation is free of debris
	A	<ul style="list-style-type: none"> Minor undercuts Axial convergence: 11° - 20° 	<ul style="list-style-type: none"> Axial reduction: <ul style="list-style-type: none"> Labial, mesial, and/or distal: > 1.2 mm - 1.5 mm Lingual (gingival to cingulum): > 0.5 mm - 0.8 mm Incisal reduction: > 2.0 mm - 2.5 mm Minor damage to adjacent tooth corrected by enameloplasty 	<ul style="list-style-type: none"> Margin is continuous with minor irregularity Located supragingival: < 0.5 mm or > 0.5 mm - 1.0 mm Located subgingival: < 0.5 mm Minor damage to soft tissue
	D	<ul style="list-style-type: none"> Will not draw, modification required Axial convergence: 21° - 25° 	<ul style="list-style-type: none"> Axial reduction: <ul style="list-style-type: none"> Labial, mesial, and/or distal: 0.5 mm - < 1.2 mm or > 1.5 mm - 2.5 mm Lingual (gingival to cingulum): > 0.8 mm - 1.1 mm Incisal reduction: 1.0 mm - < 2.0 mm or > 2.5 mm - 3.0 mm Clearance for occlusion (lingual concavity): 0.5 mm - < 1.0 mm or > 1.5 mm - 2.0 mm Sharp line angle Minor damage to adjacent tooth 	<ul style="list-style-type: none"> Indistinct Discontinuous Rough Incorrect margin type for material Unsupported enamel (lipping) Located supragingival: > 1.0 mm - 2.0 mm Located subgingival: > 0.5 mm - 1.0 mm Moderate roughness on axial walls Moderate damage to soft tissue Debris
	E	<ul style="list-style-type: none"> Will not draw, major modification required Axial convergence: > 25° 	<ul style="list-style-type: none"> Axial reduction: <ul style="list-style-type: none"> Labial, mesial, and/or distal: < 0.5 mm or > 2.5 mm Lingual (gingival to cingulum): < 0.5 mm or > 1.1 mm Incisal reduction: < 1.0 mm or > 3.0 mm Clearance for occlusion (lingual concavity): < 0.5 mm or > 2.0 mm Excessive damage to adjacent tooth Tooth structure rebuilt with composite resin Alternate preparation or RCT needed 	<ul style="list-style-type: none"> Excessively indistinct Excessively discontinuous Excessively rough No discernible margin Excessive unsupported enamel (lipping) Located supragingival: > 2.0 mm Located subgingival: > 1.0 mm Excessive damage to soft tissue Excessive debris

Metal-ceramic Crown Preparation for a Mandibular Canine Tooth

Clearance for occlusion will be measured from opposing teeth in maximal intercuspation. The labial margin must be 90° (the angle is measured from the external surface of the tooth to the shoulder).

		Criteria		
		Path of Draw and Axial Convergence	Preservation of Tooth Vitality and Structural Durability	Finish and Margin
Grade	A+	<ul style="list-style-type: none"> Preparation allows the fabrication of a restoration with optimal retention and contour No undercuts Axial convergence: 6° - 10° 	<ul style="list-style-type: none"> Optimal preparation has been performed to permit the fabrication of an esthetic and functional restoration Axial reduction: <ul style="list-style-type: none"> Labial, mesial, and distal: 1.2 mm Lingual (gingival to cingulum): 0.5 mm Lingual (incisal to cingulum): 0.6 mm - 1.2 mm Incisal reduction: 2.0 mm Preparation has no sharp line angles No damage to adjacent teeth 	<ul style="list-style-type: none"> Margin is optimally placed, defined, and identifiable Margin is smooth, continuous, and has no steps Margin is positioned 0.5 mm supragingival Preparation walls are smooth No damage to soft tissue Preparation is free of debris
	A	<ul style="list-style-type: none"> Minor undercuts Axial convergence: 11°- 20° 	<ul style="list-style-type: none"> Axial reduction: <ul style="list-style-type: none"> Labial, mesial, and/or distal: > 1.2 mm - 1.5 mm Lingual (gingival to cingulum): > 0.5 mm - 0.8 mm Incisal reduction: > 2.0 mm - 2.5 mm Minor damage to adjacent tooth corrected by enameloplasty 	<ul style="list-style-type: none"> Margin is continuous with minor irregularity Located supragingival: < 0.5 mm or > 0.5 mm - 1.0 mm Located subgingival: < 0.5 mm Minor damage to soft tissue
	D	<ul style="list-style-type: none"> Will not draw, modification required Axial convergence: 21°- 25° 	<ul style="list-style-type: none"> Axial reduction: <ul style="list-style-type: none"> Labial, mesial, and/or distal: 0.5 mm - < 1.2 mm or > 1.5 mm - 2.5 mm Lingual (gingival to cingulum): > 0.8 mm - 1.1 mm Incisal reduction: 1.0 mm - < 2.0 mm or > 2.5 mm - 3.0 mm Sharp line angle Minor damage to adjacent tooth 	<ul style="list-style-type: none"> Indistinct Discontinuous Rough Incorrect margin type for material Unsupported enamel (lipping) Located supragingival: > 1.0 mm - 2.0 mm Located subgingival: > 0.5 mm - 1.0 mm Moderate roughness on axial wall Moderate damage to soft tissue Debris
	E	<ul style="list-style-type: none"> Will not draw, major modification required Axial convergence: > 25° 	<ul style="list-style-type: none"> Axial reduction: <ul style="list-style-type: none"> Labial, mesial, and/or distal: < 0.5 mm or > 2.5 mm Lingual (gingival to cingulum): < 0.5 mm or > 1.1 mm Lingual (incisal to cingulum): < 0.6 mm or > 1.2 mm Incisal reduction: < 1.0 mm or > 3.0 mm Excessive damage to adjacent tooth Tooth structure rebuilt with composite resin Alternate preparation or RCT needed 	<ul style="list-style-type: none"> Excessively indistinct Excessively discontinuous Excessively rough No discernible margin Excessive unsupported enamel (lipping) Located supragingival: > 2.0 mm Located subgingival: > 1.0 mm Excessive damage to soft tissue Excessive debris

Metal-ceramic Crown Preparation for a Premolar or Molar Tooth

Clearance for occlusion will be measured from opposing teeth in maximal intercuspation. The labial margin must be 90° (the angle is measured from the external surface of the tooth to the shoulder).

		Criteria		
		Path of Draw and Axial Convergence	Preservation of Tooth Vitality and Structural Durability	Finish and Margin
Grade	A+	<ul style="list-style-type: none"> Preparation allows the fabrication of a restoration with optimal retention and contour No undercuts Axial convergence: 6° - 10° 	<ul style="list-style-type: none"> Optimal preparation has been performed to permit the fabrication of an esthetic and functional restoration Axial reduction: <ul style="list-style-type: none"> Labial, mesial, and distal: 1.2 mm Lingual: 0.5 mm Clearance for occlusion: 1.5 mm - 2.0 mm Preparation has no sharp line angles No damage to adjacent teeth 	<ul style="list-style-type: none"> Margin is optimally placed, defined, and identifiable Margin is smooth, continuous, and has no steps Margin is positioned 0.5 mm supragingival Preparation walls are smooth No damage to soft tissue Preparation is free of debris
	A	<ul style="list-style-type: none"> Minor undercuts Axial convergence: 11° - 20° 	<ul style="list-style-type: none"> Axial reduction: <ul style="list-style-type: none"> Labial, mesial, and/or distal: > 1.2 mm - 1.5 mm Lingual: 0.1 mm - < 0.5 mm or > 0.5 mm - 1.0 mm Minor damage to adjacent tooth corrected by enameloplasty 	<ul style="list-style-type: none"> Margin is continuous with minor irregularity Located supragingival: < 0.5 mm or > 0.5 mm - 1.0 mm Located subgingival: < 0.5 mm Minor damage to soft tissue
	D	<ul style="list-style-type: none"> Will not draw, modification required Axial convergence: 21° - 25° 	<ul style="list-style-type: none"> Axial reduction: <ul style="list-style-type: none"> Labial, mesial, and/or distal: 0.5 mm - < 1.2 mm or > 1.5 mm - 2.5 mm Lingual: > 1.0 mm - 1.2 mm Clearance for occlusion: 1.0 mm - < 1.5 mm or > 2.0 mm - 2.5 mm Sharp line angle Minor damage to adjacent tooth 	<ul style="list-style-type: none"> Indistinct Discontinuous Rough Incorrect margin type for material Unsupported enamel (lipping) Located supragingival: > 1.0 mm - 2.0 mm Located subgingival: > 0.5 mm - 1.0 mm Moderate roughness on axial wall Moderate damage to soft tissue Debris
	E	<ul style="list-style-type: none"> Will not draw, major modification required Axial convergence: > 25° 	<ul style="list-style-type: none"> Axial reduction: <ul style="list-style-type: none"> Labial, mesial, and/or distal: < 0.5 mm or > 2.5 mm Lingual: > 1.2 mm Clearance for occlusion: < 1.0 mm or > 2.5 mm Excessive damage to adjacent tooth Tooth structure rebuilt with composite resin Alternate preparation or RCT needed 	<ul style="list-style-type: none"> Excessively indistinct Excessively discontinuous Excessively rough No discernible margin Excessive unsupported enamel (lipping) Located supragingival: > 2.0 mm Located subgingival: > 1.0 mm Excessive damage to soft tissue Excessive debris

Class III Composite Resin Preparation

The criteria below describe a preparation for a tooth with minimal caries. Because the NDEB varies the size and location of caries for each examination, the evaluation of the preparation will consider the extent of caries present in the examination tooth.

		Criteria		
		External Outline Form	Internal Form	Finish
Grade	A+	<ul style="list-style-type: none"> Optimal extension based on location and extent of caries present Gingival margin is supragingival No damage to adjacent teeth, examination tooth beyond preparation, or soft tissue 	<ul style="list-style-type: none"> Optimal resistance and retention form based on location and extent of caries present with no unnecessary removal of internal tooth structure 	<ul style="list-style-type: none"> No debris or caries
	A	<ul style="list-style-type: none"> Minor overextension Minor underextension Minor damage to adjacent tooth corrected by enameloplasty Minor damage to examination tooth beyond preparation margin corrected by enameloplasty Minor damage to soft tissue 	<ul style="list-style-type: none"> Minor overpreparation Minor underpreparation 	
	D	<ul style="list-style-type: none"> Minor damage to adjacent tooth Minor damage to examination tooth beyond preparation margin Moderate damage to soft tissue 	<ul style="list-style-type: none"> Too deep: 2.0 mm - 3.0 mm Moderate underpreparation Unnecessary removal of internal tooth structure 	<ul style="list-style-type: none"> Debris
	E	<ul style="list-style-type: none"> Underextended: > 0.5 mm Overextended: > 0.5 mm Cavitation not included Excessive damage to adjacent tooth Excessive damage to examination tooth beyond preparation margin Excessive damage to soft tissue Tooth structure rebuilt with composite resin 	<ul style="list-style-type: none"> Too deep: > 3.0 mm Excessive underpreparation Excessive overpreparation, alternate design or RCT required Tooth structure rebuilt with composite resin 	<ul style="list-style-type: none"> Excessive debris Caries remaining on axial Caries remaining at dentinoenamel junction

Class II Amalgam Restoration

		Criteria		
		Surface Quality and Morphology	Margin	Contours and Function
Grade	A+	<ul style="list-style-type: none"> Optimal 	<ul style="list-style-type: none"> Junction of tooth or restoration not detectable No debris or loose amalgam in soft tissue No damage to adjacent teeth, examination tooth, or soft tissue 	<ul style="list-style-type: none"> Physiologic tooth contours of proximal surfaces optimally restored Optimal proximal contact restored Optimal occlusal contact
	A	<ul style="list-style-type: none"> Minor undercontour (occlusal surface only) Minor overcontour (occlusal surface only) 	<ul style="list-style-type: none"> Margin slightly detectable Minor damage to adjacent tooth corrected by enameloplasty Minor damage to examination tooth corrected by enameloplasty Minor damage to soft tissue 	<ul style="list-style-type: none"> Undercontoured: < 0.5 mm (axial surface only) Overcontoured: < 0.5 mm (axial surface only) Proximal contact slightly too occlusal Proximal contact slightly too gingival Proximal contact slightly too broad Marginal ridge disharmony: < 0.5 mm
	D	<ul style="list-style-type: none"> Moderate undercontour (occlusal surface only) Moderate overcontour (occlusal surface only) Roughness or scratches requiring correction Poor occlusal morphology 	<ul style="list-style-type: none"> Amalgam beyond preparation margin requiring correction: ≤ 0.5 mm Disharmony of amalgam-enamel margin: ≤ 0.5 mm Debris or loose amalgam in soft tissue Minor damage to adjacent tooth Minor damage to examination tooth Moderate damage to soft tissue 	<ul style="list-style-type: none"> Undercontoured: 0.5 mm - 1.0 mm (axial surface only) Overcontoured: 0.5 mm - 1.0 mm (axial surface only) Light proximal contact Proximal contact too occlusal Proximal contact too gingival Proximal contact too broad Proximal contact too concave Proximal contact too small Proximal contact too tight Proximal contact too rough Marginal ridge disharmony: 0.5 mm - 1.0 mm Excessive occlusal contact
	E	<ul style="list-style-type: none"> Excessive undercontour (occlusal surface only) Excessive overcontour (occlusal surface only) Excessive roughness or scratches Deep or excessive voids other than at margin Inappropriate material used 	<ul style="list-style-type: none"> Excess amalgam beyond preparation margin: > 0.5 mm Deficiency or void at margin requiring replacement of restoration Excessive debris or loose amalgam in soft tissue Excessive damage to adjacent tooth Excessive damage to examination tooth Tooth preparation altered Excessive damage to soft tissue 	<ul style="list-style-type: none"> Undercontoured: > 1.0 mm (axial surface only) Overcontoured: > 1.0 mm (axial surface only) No proximal contact Floss will not pass through proximal contact Marginal ridge disharmony: > 1.0 mm Restoration fractured or loose

Class II Composite Resin Restoration

These criteria do not include shade matching, which is NOT part of the evaluation.

		Criteria		
		Surface Quality, Finish and Morphology	Margin	Contours and Function
Grade	A+	<ul style="list-style-type: none"> Uniform polish matching tooth surface No contamination of resin (no stain or inclusions) No excess resin in or on soft tissue No excess resin on hard tissue 	<ul style="list-style-type: none"> Junction of tooth or restoration not detectable No excess resin past preparation margin No damage to adjacent teeth examination tooth, or soft tissue 	<ul style="list-style-type: none"> Physiologic tooth contours of proximal surfaces optimally restored Optimal proximal contact restored Optimal occlusal contact
	A	<ul style="list-style-type: none"> Minor undercontour (occlusal surface only) Minor overcontour (occlusal surface only) Areas needing more polish Minor contamination of resin not affecting durability or esthetics 	<ul style="list-style-type: none"> Junction of tooth or restoration slightly detectable Minor amount of resin beyond preparation margin Minor damage to adjacent tooth corrected by enameloplasty Minor damage to examination tooth corrected by enameloplasty Minor damage to soft tissue 	<ul style="list-style-type: none"> Undercontoured: < 0.5 mm (axial surface only) Overcontoured: < 0.5 mm (axial surface only) Proximal contact slightly too occlusal Proximal contact slightly too gingival Proximal contact slightly too broad Marginal ridge disharmony: < 0.5 mm
	D	<ul style="list-style-type: none"> Moderate undercontour (occlusal surface only) Moderate overcontour (occlusal surface only) Roughness or scratches requiring correction Voids or porosities Contamination of resin that needs correction Poor occlusal morphology Resin or debris in or on soft tissue Resin or debris on hard tissue 	<ul style="list-style-type: none"> Deficiency or void at margin: ≤ 0.5 mm Resin beyond preparation margin requiring correction Minor damage to adjacent tooth Minor damage to examination tooth Moderate damage to soft tissue 	<ul style="list-style-type: none"> Undercontoured: 0.5 mm – 1.0 mm (axial surface only) Overcontoured: 0.5 mm – 1.0 mm (axial surface only) Light proximal contact Proximal contact too occlusal Proximal contact too gingival Proximal contact too broad Proximal contact too concave Proximal contact too small Proximal contact too tight Proximal contact too rough Marginal ridge disharmony: 0.5 mm – 1.0 mm Excessive occlusal contact
	E	<ul style="list-style-type: none"> Excessive undercontour (occlusal surface only) Excessive overcontour (occlusal surface only) Excessive roughness or scratches Excessive voids or porosities Excessive contamination of resin requiring replacement of entire restoration Incomplete polymerization Inappropriate material used Excessive resin or debris in or on soft tissue Excessive resin or debris on hard tissue 	<ul style="list-style-type: none"> Deficiency or void at margin: > 0.5 mm Excessive resin beyond preparation margin Excessive damage to adjacent tooth Excessive damage to examination tooth Tooth preparation altered Excessive damage to soft tissue 	<ul style="list-style-type: none"> Undercontoured: > 1.0 mm (axial surface only) Overcontoured: > 1.0 mm (axial surface only) Lack of physiologic contour No proximal contact Floss will not pass through proximal contact Marginal ridge disharmony: > 1.0 mm Restoration fractured or loose

Endodontic Access Preparation

		Criteria		
		External Outline Form	Internal Form	Finish
Grade	A+	<ul style="list-style-type: none"> Optimal extension to obtain straight line access to all canals Optimal removal of any unsupported structures No overextension Adequate extension to permit removal of pulp horns 	<ul style="list-style-type: none"> Optimal internal tooth structure removed to allow straight line access to canals Canals accessed to a depth of 2.0 mm 	<ul style="list-style-type: none"> Optimal smoothness of walls and cavosurface No pulp material present on wall or floor of chamber No debris
	A	<ul style="list-style-type: none"> Minor underextension: < 1.0 mm Minor overextension: < 1.0 mm Minor damage to examination tooth corrected by enameloplasty 	<ul style="list-style-type: none"> Minor overpreparation Minor underpreparation 	<ul style="list-style-type: none"> Minor pulp material present on wall or floor of chamber Minor debris present
	D	<ul style="list-style-type: none"> Underextended, obstructed access to canals Moderate overextension: 1.0 mm – 2.0 mm Minor damage to examination tooth 	<ul style="list-style-type: none"> Moderate overpreparation Moderate underpreparation Gouging of pulp chamber walls Canals not accessed to a depth of 2.0 mm Moderate over-instrumentation of canals 	<ul style="list-style-type: none"> Moderate roughness Significant pulp material present on wall or floor of chamber Debris
	E	<ul style="list-style-type: none"> Chamber not accessed Excessive underextension: > 2.0 mm Excessive overextension: > 2.0 mm Tooth structure rebuilt with composite resin Excessive damage to examination tooth 	<ul style="list-style-type: none"> Excessive removal of internal tooth structure Perforation Roof of pulp chamber not removed Canals not accessed Excessive gouging of pulp chamber walls Excessive over-instrumentation of canals Separated instrument in canals Tooth structure rebuilt with composite resin 	<ul style="list-style-type: none"> Excessive roughness Excessive pulp material present on wall or floor of chamber Debris obstructing chamber or canals

Class IV Composite Resin Restoration

These criteria do not include shade matching, which is NOT part of the evaluation.

		Criteria		
		Surface Quality and Finish	Margin	Contours and Function
Grade	A+	<ul style="list-style-type: none"> Uniform polish matching tooth surface No contamination of resin (no stains or inclusions) No excess resin in or on soft tissue No excess resin on hard tissue 	<ul style="list-style-type: none"> Junction of tooth or restoration not detectable No excess beyond preparation margin No damage to adjacent teeth, examination tooth, or soft tissue 	<ul style="list-style-type: none"> Physiologic tooth contours restored Optimal proximal contact restored Appropriate occlusal contact
	A	<ul style="list-style-type: none"> Areas needing more polish Minor contamination of resin not affecting durability or esthetics 	<ul style="list-style-type: none"> Junction of tooth or restoration slightly detectable Minor excess resin beyond preparation margin Minor damage to adjacent tooth corrected by enameloplasty Minor damage to examination tooth corrected by enameloplasty Minor damage to soft tissue 	<ul style="list-style-type: none"> Undercontoured: < 0.5 mm Overcontoured: < 0.5 mm Proximal contact slightly too incisal Proximal contact slightly too gingival Proximal contact slightly too broad
	D	<ul style="list-style-type: none"> Roughness or scratches requiring correction Voids or porosities Contamination of resin that requires correction Resin or debris in or on soft tissue Resin or debris on hard tissue 	<ul style="list-style-type: none"> Deficiency or void at margin: ≤ 0.5 mm Resin beyond preparation margin requiring correction Minor damage to adjacent tooth Minor damage to examination tooth Moderate damage to soft tissue 	<ul style="list-style-type: none"> Undercontoured: 0.5 mm – 1.0 mm Overcontoured: 0.5 mm – 1.0 mm Light proximal contact Proximal contact too incisal Proximal contact too gingival Proximal contact too broad Proximal contact too concave Proximal contact too small Proximal contact too tight Proximal contact too rough Excessive occlusal contact
	E	<ul style="list-style-type: none"> Excessive roughness or scratches Excessive voids or porosities Excessive contamination of resin requiring replacement of entire restoration Incomplete polymerization Inappropriate material used Excessive resin or debris in or on soft tissue Excessive resin or debris on hard tissue 	<ul style="list-style-type: none"> Deficiency or void at margin: > 0.5 mm Excessive resin beyond preparation margin Excessive damage to adjacent tooth Excessive damage to examination tooth Tooth preparation altered Excessive damage to soft tissue 	<ul style="list-style-type: none"> Undercontoured: > 1.0 mm Overcontoured: > 1.0 mm Lack of physiologic contour No proximal contact Floss will not pass through proximal contact Restoration fractured or loose

Class II Amalgam Preparation

The criteria below describe a preparation for a tooth with minimal caries. Because the NDEB varies the size and location of caries for each examination, the evaluation of the preparation will consider the extent of caries present in the examination tooth.

		Criteria		
		External Outline Form	Internal Form	Finish
Grade	A+	<ul style="list-style-type: none"> Proximal and gingival margins clear adjacent teeth: 0.5 mm Optimal extension based on location and extent of caries present Cavosurface angle 90° No damage to adjacent teeth, examination tooth beyond preparation, or soft tissue 	<ul style="list-style-type: none"> Optimal resistance and retention form based on location and extent of caries present with no unnecessary removal of internal tooth structure Internal line angles rounded 	<ul style="list-style-type: none"> Smooth cavosurface margins All unsupported enamel removed No debris or caries
	A	<ul style="list-style-type: none"> Proximal and/or gingival margin clears adjacent tooth: < 0.5 mm or > 0.5 mm - 1.0 mm Minor occlusal overextension Minor damage to adjacent tooth corrected by enameloplasty Minor damage to examination tooth beyond preparation margin corrected by enameloplasty Minor damage to soft tissue 	<ul style="list-style-type: none"> Minor overpreparation occlusally Minor overpreparation axially 	
	D	<ul style="list-style-type: none"> Proximal and/or gingival margin does not clear adjacent tooth Proximal and/or gingival margin clears adjacent tooth: > 1.0 mm - 1.5 mm Proximal wall flared Unacceptable isthmus junction Buccal-lingual width too wide Buccal-lingual width too narrow Minor damage to adjacent tooth Minor damage to examination tooth beyond preparation margin Moderate damage to soft tissue 	<ul style="list-style-type: none"> Pulpal floor too deep: 2.5 mm - 3.0 mm Pulpal floor too shallow: 1.0 mm - 1.5 mm Axial wall too deep: 1.5 mm - 3.0 mm Axial wall too shallow: < 0.5 mm Divergent walls Sharp line angle Undefined line angle 	<ul style="list-style-type: none"> Moderate roughness Moderate unsupported enamel Debris
	E	<ul style="list-style-type: none"> Proximal and/or gingival margin clears adjacent tooth: > 1.5 mm Excessive occlusal overextension Excessive occlusal underextension Excessive damage to adjacent tooth Excessive damage to examination tooth beyond preparation margin Excessive damage to soft tissue Tooth structure rebuilt with composite resin 	<ul style="list-style-type: none"> Pulpal floor too deep: > 3.0 mm Pulpal floor too shallow: < 1.0 mm Axial wall too deep: > 3.0 mm Excessive overpreparation, alternate design or RCT required Tooth structure rebuilt with composite resin 	<ul style="list-style-type: none"> Excessive roughness Excessive unsupported enamel Excessive debris Caries remaining on axial or pulpal Caries remaining at dentinoenamel junction

Full Metal Crown Preparation

Clearance for occlusion will be measured from opposing teeth in maximal intercuspation and excursions.

		Criteria		
		Path of Draw and Axial Convergence	Preservation of Tooth Vitality and Structural Durability	Finish and Margin
Grade	A+	<ul style="list-style-type: none"> Preparation allows the fabrication of a restoration with optimal retention and contour No undercuts Axial convergence: 6° - 10° 	<ul style="list-style-type: none"> Optimal preparation has been performed to permit fabrication of a functional restoration Axial reduction: 0.5 mm - 1.5 mm Clearance for occlusion: 1.5 mm No damage to adjacent teeth 	<ul style="list-style-type: none"> Margin is optimally placed, defined, and identifiable Margin is smooth, continuous, and has no steps Margin is positioned 0.5 mm supragingival Preparation walls are smooth No damage to soft tissue Preparation is free of debris No sharp cusps or line angles
	A	<ul style="list-style-type: none"> Minor undercuts Axial convergence: 11° - 20° 	<ul style="list-style-type: none"> Clearance for occlusion: 1.0 mm - < 1.5 mm or > 1.5 mm - 2.0 mm Minor damage to adjacent tooth corrected by enameloplasty 	<ul style="list-style-type: none"> Margin is continuous with minor irregularity Located supragingival: < 0.5 mm or > 0.5 mm - 1.0 mm Located subgingival: < 0.5 mm Minor damage to soft tissue
	D	<ul style="list-style-type: none"> Will not draw, modification required Axial convergence: 21° - 25° 	<ul style="list-style-type: none"> Axial reduction: > 0.0 mm - < 0.5 mm or > 1.5 mm - 2.0 mm Clearance for occlusion: 0.5 mm - < 1.0 mm or > 2.0 mm - 3.0 mm Minor damage to adjacent tooth 	<ul style="list-style-type: none"> Indistinct Discontinuous Rough Located supragingival: > 1.0 mm - 2.0 mm Located subgingival: > 0.5 mm - 1.0 mm Incorrect margin type for metal crown Sharp cusps Sharp line angle Unsupported enamel (lipping) Moderate roughness on axial wall Moderate damage to soft tissue Debris
	E	<ul style="list-style-type: none"> Will not draw, major modification required Axial convergence: > 25° 	<ul style="list-style-type: none"> Axial reduction: no reduction or > 2.0 mm Clearance for occlusion: < 0.5 mm or > 3.0 mm Excessive damage to adjacent tooth Tooth structure rebuilt with composite resin Alternative preparation or RCT needed 	<ul style="list-style-type: none"> Excessively indistinct Excessively discontinuous Excessively rough No discernible margin Located supragingival: > 2.0 mm Located subgingival: > 1.0 mm Excessive unsupported enamel (lipping) Excessive damage to soft tissue Excessive debris

Provisional Crown Restoration

		Criteria		
		Margin Contour and Adaptation	Morphology and Occlusion	Finish
Grade	A+	<ul style="list-style-type: none"> Margin not over or underextended Margin not over or undercontoured Restoration is stable and retentive Preparation margin, adjacent teeth, and soft tissue intact 	<ul style="list-style-type: none"> Optimal contour for gingival health and esthetics Optimal interproximal contacts Optimal occlusal contact Optimal strength Restoration can be removed 	<ul style="list-style-type: none"> Optimal polish No roughness or porosities No excess material in or on soft tissue No excess material on hard tissue Restoration material is hard setting, tooth-coloured plastic resin
	A	<ul style="list-style-type: none"> Overextended: < 0.5 mm Underextended: < 0.5 mm Overcontoured: < 0.5 mm Undercontoured: < 0.5 mm Minor damage to adjacent tooth corrected by enameloplasty Minor damage to soft tissue 	<ul style="list-style-type: none"> Minor overcontour Minor undercontour Minor infraocclusion 	<ul style="list-style-type: none"> Polish not optimal
	D	<ul style="list-style-type: none"> Overextended: 0.5 mm - 1.0 mm Underextended: 0.5 mm - 1.0 mm Overcontoured: 0.5 mm - 1.0 mm Undercontoured: 0.5 mm - 1.0 mm Damage to preparation margin Minor damage to adjacent tooth Moderate damage to soft tissue 	<ul style="list-style-type: none"> Moderate overcontour Moderate undercontour Proximal contact too light Proximal contact too occlusal Proximal contact too gingival Proximal contact too tight No proximal contact (≤ 0.5 mm open) Supraocclusion: ≤ 1.0 mm Infraocclusion: ≤ 1.0 mm Too thin, modification required 	<ul style="list-style-type: none"> Moderate roughness Porosities Material in or on soft tissue Material on hard tissue
	E	<ul style="list-style-type: none"> Overextended: > 1.0 mm Underextended: > 1.0 mm Overcontoured: > 1.0 mm Undercontoured: > 1.0 mm Restoration is unstable or non-retentive Excessive damage to adjacent tooth Excessive damage to soft tissue Tooth preparation altered Needs major revision or new provisional 	<ul style="list-style-type: none"> Excessive overcontour Excessive undercontour No proximal contact (> 0.5 mm open) Supraocclusion: > 1.0 mm Infraocclusion: > 1.0 mm Too thin, replacement of restoration required Restoration cannot be removed Restoration submitted broken Restoration broken or cracked due to excessive occlusion or lack of structural integrity 	<ul style="list-style-type: none"> Excessive roughness Excessive porosity Excessive material in or on soft tissue Excessive material on hard tissue Inappropriate restorative material used

Record of Procedures

You will complete the record of procedures requirement during a designated 30-minute period on one of the examination days.

You will have to write two entries on the supplied Record of Procedures Form to describe the treatments rendered on different patients. These entries must reflect what a dentist records in their patients' charts, including the administration of local anesthesia for tooth preparations.

To preserve anonymity, do not sign the record of procedures. You must use your NDEB ID number in place of a signature.

Dental Dam Requirement

	Criteria
CRITICAL ERROR <input type="checkbox"/>	Dam not placed in allotted time
A+ <input type="checkbox"/>	Appropriate and stable clamp
	Clamp secured
	Orientation provides an unrestricted airway
	Dam inverted on all isolated teeth
	All punch holes in appropriate positions
	Dam and frame positioned for optimal access, safety, moisture control and patient comfort
	Appropriate number of teeth isolated
A <input type="checkbox"/>	<input type="checkbox"/> Dam through contacts in operative area only, not compromising moisture control
	<input type="checkbox"/> Dam not optimally positioned for patient comfort, or safety
	<input type="checkbox"/> Minor deviations in punch hole locations
	<input type="checkbox"/> Minor tears or holes not compromising moisture control
	<input type="checkbox"/> Clamp not optimally positioned for moisture control
	<input type="checkbox"/> Frame not optimally positioned for patient comfort, or safety
	<input type="checkbox"/> Floss not optimally positioned for patient comfort, or safety

	Criteria
D <input type="checkbox"/> 1 or 2 errors	<input type="checkbox"/> Too few teeth isolated compromising access
	<input type="checkbox"/> Inappropriate ligatures
	<input type="checkbox"/> Punch holes improperly positioned compromising access, moisture control, patient comfort, or safety
	<input type="checkbox"/> Tears or holes compromising moisture control
	<input type="checkbox"/> Dam caught on wings of clamp compromising moisture control
	<input type="checkbox"/> Dam not inverted in operative area compromising moisture control
	<input type="checkbox"/> Dam not through interproximal contact points compromising moisture control
	<input type="checkbox"/> Incorrect clamp selection compromising access, moisture control, or safety
	<input type="checkbox"/> Incorrect clamp placement compromising access, moisture control, patient comfort, or safety
	<input type="checkbox"/> Frame position compromises patient comfort or safety
<input type="checkbox"/> Floss position compromises patient comfort or safety	
E <input type="checkbox"/>	<input type="checkbox"/> 3 or more errors defined in the D category
	<input type="checkbox"/> Unsecured clamp compromising safety
	<input type="checkbox"/> Improper position of dam, frame, clamp, or floss not allowing access to the tooth or teeth to be restored
	<input type="checkbox"/> Use of dental dam adjuncts, such as Liquidam™
	<input type="checkbox"/> Use of ContacEZ®

Infection Control & Safety

Invigilators will observe infection control and safety procedures. You will not be informed of recorded violations during the ACS. You must maintain an anatomically correct operating position.

The NDEB is aware that personal protective equipment (PPE) requirements have changed because of COVID-19. For the ACS, it is assumed that your patients have been screened negative for COVID-19. There are no requirements for N95 masks or gowns to spare these items while there is a global shortage.

The ACS is completed assuming that each requirement is performed on a different patient. However, as there is no sterilization during the ACS, you do not need to clean and disinfect your chair when you begin working on a new requirement.

You will be provided two paper signs to designate a portion of your operatory as the “operating area” and another portion as the “storage area”. The bracket table is part of the operating area.

If you drop an instrument or material that you need to retrieve during a procedure, you must notify an invigilator. The invigilator will ask you to describe how the situation should be handled in actual patient treatment.

Operating Area

The “operating area” is where you can place the equipment and supplies needed for the requirement that you are working on. You must re-set between requirements. A re-set means you must move all instruments, supplies, and materials not needed for the next requirement to the storage area.

The “operating area” must be organized and reflect the dental operatory of a practicing dentist and can only contain:

- equipment and supplies needed for one requirement.
- instruments that can be sterilized. For the ACS, it is not necessary to sterilize instruments.
- items covered by barriers if they cannot be sterilized or disinfected.
- single-use items (e.g. wedges, polishing strips, compules, impression material applicators, etc.), consistent with the treatment of one patient, that will be discarded at the end of patient treatment.
- small amounts of unidentifiable materials, such as powders, liquids, or gels (e.g. Vaseline, alcohol, etc.), consistent with the treatment of one patient, that will be discarded at the end of patient treatment. The materials must be dispensed into small containers, such as dappen dishes or disposable medicine cups in the operating area. You may be asked to produce the original manufacturer's container.

Storage Area

The “storage area” is where you can place the equipment and supplies that you do not need for the requirement that you are working on, such as original containers or trays and cassettes for other requirements. Original containers are required for materials and supplies that cannot be identified when dispensed such as liquid and gels. For the ACS, it is assumed that the storage area is outside your operatory and you are permitted to access it with proper infection control measures. The storage area:

- cannot be accessed with treatment gloves.
- cannot contain items covered by barriers.

As there is no sterilization during the ACS, you will be permitted to take instruments and equipment from the storage area and place them in the operating area without treatment gloves. You will be required to wash your hands and re-glove before starting the next patient (next requirement).

You will be required to remove your treatment gloves to place your used instruments and equipment in the storage area after a requirement is performed. If you place a barrier on an item to perform a requirement, you will have to remove the barrier to place the item in the storage area. The instruments will be assumed to be sterilized once you place them in the storage area. Items that can be disinfected or sterilized do not require a barrier. Items that are not required for a requirement must be placed in the storage area without a barrier.

Any documents related to the assessment such as the Day 1 and Day 2 requirement forms and communication forms should be treated in the same way that a patient chart would be treated in a dental practice situation. Therefore, these items should be kept in the storage area.

Clear plastic overgloves worn over treatment gloves are permitted to retrieve items from the storage area while performing a requirement, provided standard infection control protocol is followed.

Dental Operatory and Operator Stool

Hoses, tubing, and suction switches must not be covered with barriers. Barriers are required on the following surfaces:

- Control pads
- Lamp handles
- Lamp switches
- Patient chair buttons
- Levers to adjust the operator stool
- Counter in the operating area and bracket table
- Air/water syringe

These barriers do not have to be changed between requirements.

All other surfaces of the provided dental operatory must not be covered with barriers and cannot be touched with treatment gloves while performing requirements.

You must leave your work areas clean at the end of each day. Barriers applied for Day 1 may be left in place for Day 2.

Before the end of the ACS on Day 2, you must remove all barriers (paper, sticky and non-sticky barriers, not including headrest covers) from the supplied equipment to prepare the operatory for the next patient. This must be completed during examination time.

Handwashing

You must follow proper handwashing protocol each time you leave your operatory, including when walking to and from the dental dam operatories or when using the shared amalgamators. The use of alcohol-based hand sanitizer is permitted. Hands must be washed thoroughly for 20 seconds.

Treatment Gloves

You must wear treatment gloves to perform all intraoral procedures. For the ACS, you are permitted to wear treatment gloves while:

- loosening the clamp that allows the manikin's head position to be adjusted.
- adjusting the head.
- using an amalgamator in your operatory.
- opening and closing the excursion hooks.

Infection Control and Safety Errors

Infection control and safety errors include:

- Hand hygiene not performed or not performed properly
- Contamination of equipment involving treatment gloves
- Wearing gloves outside of the operatory
- Use of shared amalgamator with gloves
- Face or mask touched with treatment gloves
- Mask not worn or not worn correctly
- Use of contaminated instruments or materials
- Inappropriate use or placement of barrier material
- No barrier on equipment that is difficult to disinfect and not sterilizable
- Items in the operating area belonging in the storage area
- Eye protection not used
- Hair not appropriately controlled
- Safety of patient or operator jeopardized by handling or placement of materials or instruments
- Unacceptable handling and disposal of amalgam, sharps, or needles
- No or insufficient cooling water used with high-speed handpiece
- Use of materials or devices not approved for intraoral use
- Materials in unlabelled manufacturer containers or labelled containers not produced
- Quantity of single-use items and materials in the "operating" area not consistent with treating a single patient
- Manikin head or neck positioned so that patient comfort is compromised
- Leaning on or inappropriately contacting the patient's torso or head
- Damage to the oral cavity cover
- Barriers not completely removed from supplied equipment during examination time on Day 2