33. **Posterior Superior Alveolar Injection: area anesthetized**

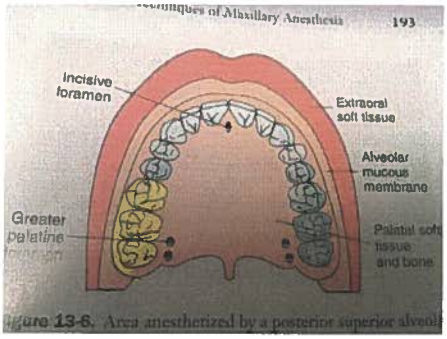


Figure 13-6. Area anesthetized by a posterior superior alveolar

1st-3rd molars (except MB root of 1st molar 28% of the time). Usually should do a PSA and ASA to make sure that you got everything.

34. **PSA possible complications**

hematoma that would be visible on the face for 10-14 days

35. **Supraperiosteal Injection: area anesthetized**

target tooth + 1/2 of the tooth on either side

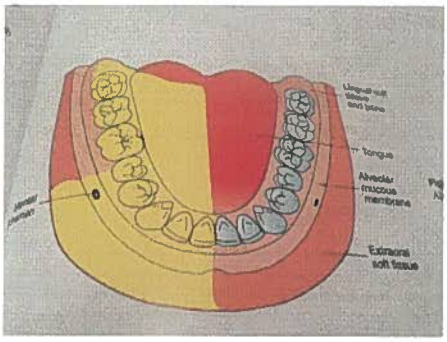
36. **Vazirani-Akinowsi Block is useful when...**

This is also known as the closed mouth technique and is good for if the pt has trismus.

37. **Vazirani-Akinowsi Block technique**

Barrel of the syringe is held parallel to the max occlusal plane with the needle inserting at the level of the mucogingival jctn of the 2nd or 3rd max molar. The needle is advance ~25mm, aspirate, then inject

38. **Vazirani-Akinowsi Block: areas anesthetized**



39. **What are the branches of the trigeminal?**

Opthalmic, Maxillary (sensory), Mandibular (sensory and motor)

40. **What are the major injection techniques?**

Supraperiosteal (infiltration), Blocks

41. **What are the other names for an IANB?**

Mandibular Block

42. **What are the other names for the Long Buccal Nerve Block?**

Buccal Nerve Block, buccinator nerve block

43. **What are the reasons for failure for the Inferior alveolar nerve block?**

Anatomic variations, too low, too medial, too posterior (give them bells palsy), too high into sigmoid notch

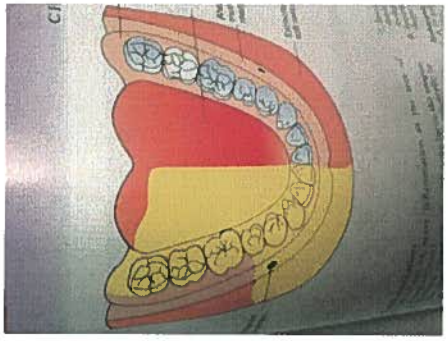
44. **What are the supplemental injection techniques?**

-Direct Pulpal
-Periodontal ligament
-Intraosseous
-Intraseptal

45. **What are the two approaches to the Maxillary Nerve Block?**

1. High Tuberosity Approach
2. Greater Palatine Canal Approach (more common)

46. **What areas do the IANB anesthetize?**



Mandibular teeth to the midline, body of the mandible and inferior portion of the ramus, buccal mucoperiosteum, mucous membrane anterior the the mand 1st molar, anterior 2/3 of the tongue and floor of the oral cavity,

47. **What is the most common location for the mandibular foramen?**

6-10mm above the occlusal plane (could be anywhere from 1-19mm though)

48. **What nerves are usually included in an IANB?**

Inferior alveolar, incisive, mental, and sometimes the lingual

49. **What operator preparation do you need before giving LA**

-Review medical history
-get CC
-clinical examination
-know the type of procedure
-decide the location and type of injection

Quizlet Anesthesia Injections

Study online at quizlet.com/_5y6ea

1. **Anterior Superior Alveolar (ASA) Nerve block is also known as...?** — Infraorbital nerve block
2. **ASA technique** — Palpate to find the infraorbital notch (usually lines up with the commisure of the lip and the pupil). With finger over the foramen, pull the lip taught and insert in the muccobucca fold over the max 1st PM (about 16mm)
3. **ASA: Area anesthesized**

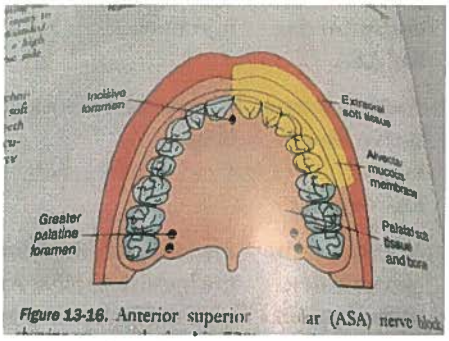
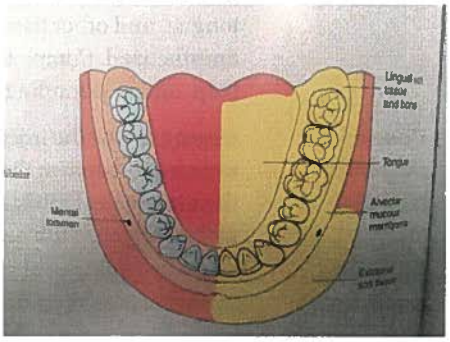


Figure 13-16. Anterior superior ... (ASA) nerve block

Max cent incisor to the max 2nd PM

4. **Branches of the Mandibular nerve** — Lingual nerve, Inferior alveolar nerve, mental nerve
5. **Direct Pulpal/Intrapulpal Injection** — Deposition of anesthetic directly into the pulp chamber. This is used to numb the pulp for pulpal extraction and instrumentation when everything else has failed.
6. **GGMNB technique** — Insert just below the ML cusp of the max 2nd molar just distal to the molar. Direct the syringe toward the tragus (be parallel with the line connecting the corner of the mouth with the tragus). Want the pt to open wide and extend the neck so the condyle is more frontal
7. **GGMNB: area anesthetized**



...pretty much everything for 1/2 of the mandible

8. **Gow-Gates Mandibular Nerve Block (GGMNB)** — This is a true mandibular nerve block because it provides sensory anesthesia is ALL of V3 (inferior alveolar, lingual, mylohyoid, mental, incisive, auriculotemporal, and buccal).
9. **Greater Palatine Nerve Block technique** — Location of the foramen is between the 2nd and 3rd molars. Want to find the foramen with a swab and apply pressure just lateral to the injection site.
10. **Greater Palatine Nerve Block: area anesthetized**

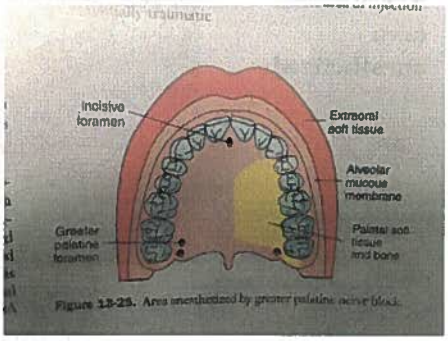
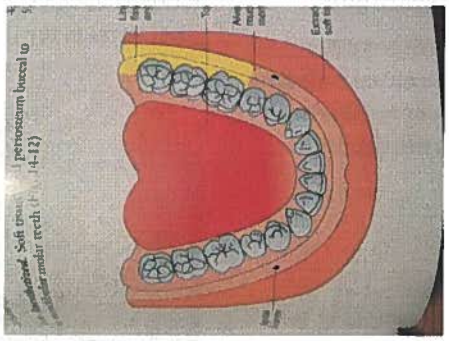


Figure 13-25. Area anesthetized by greater palatine nerve block.

11. **How do you prepare the tissue for injection?** — Dry with gauze, apply topical anesthetic, pull tissue taut (this decreases the depth of the tissue and allows for a more comfortable injection)
12. **Inferior alveolar nerve block Landmarks** — Coronoid notch, posterior border of ramus, occlusal plane, pterygomandibular raphe
13. **Inferior Alveolar Nerve Block Technique** — Position pt so that the occlusal plane is parallel to the floor, place thumb in the coronoid notch so the inferior border of your thumb is parallel to the occlusal plane, other fingers are placed extra-orally on the posterior border of the the ramus of the mandible. Direct the syringe from the PM of the opposite side so that you approach the bone at a right angle. Bisect you thumb, then go a bit higher (follow the path of the MB cusp of the max first molar). Once you hit bone, swing the syringe toward the mand lat incisors and insert to a depth of 2/3 or 3/4 of the needle. Aspirate, then inject slowly
14. **Infiltration (supraperiosteal) Injection** — This is a local infiltration. Aim for the apex of the target tooth (make sure you are parallel to the long access of the tooth). Most common Max injection but not good for large areas
15. **Interseptal Injection** — Similar to the PDL injection. Inject into the center of the interdental papilla. Numbs bone, soft tissue, and root structure in the area of the injection
16. **Intraosseous Injection** — Incision into soft tissue, drill hole into bone with round bur, and inject local anesthetic into the hole. Can use an INTRAFLOW IO system for this
17. **Lingual Nerve Block** — usually anesthetized when doing an IANB, but can also be given to the lingual and at the apex of the last molar

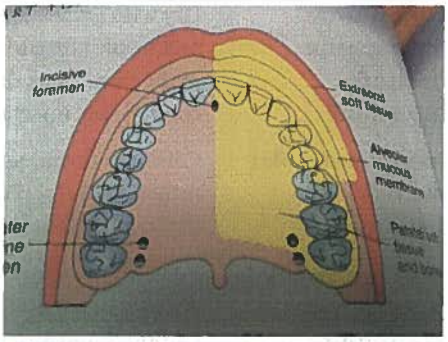
18. **Long Buccal Nerve Block technique** — Pull out cheek to stretch buccal mucosa, bevel of needle toward bone, Insert parallel with the occlusal plane but buccal to it, distal and buccal to the last molar

19. **Long Buccal Nerve Block: area anesthetized**

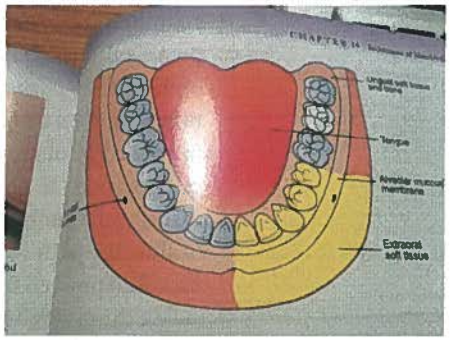


gingiva, buccal mucosa to the corner of the lip (NOT the teeth)

20. **Maxillary Nerve Block: area anesthetized**



21. **Mental/Incisive Canal: area anesthetized**



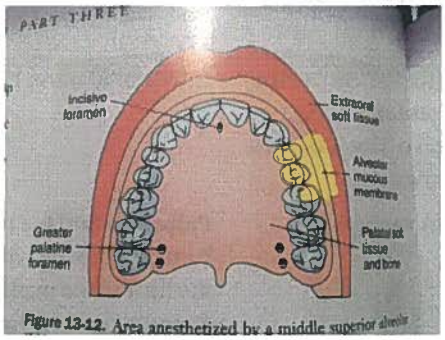
22. **Mental/Incisive Nerve Block** — This is the terminal branch of the inferior alveolar nerve and provides innervation to the teeth anterior to the mental foramen (PM-PM). This nerve is always anesthetized with an IANB is successful

23. **Mental/Incisive Nerve block injection site** — mental foramen is normally b/t the 1st and 2nd PM roots

24. **Mental/Incisive Nerve block technique** — Retract the lip and stretch the tissue, insert needle at PM and direct the needle towards to mental foramen. Penetrate 5-6mm, aspirate, then inject

25. **Middle Superior Alveolar (MSA) Nerve Block technique** — Aim for periapical region mesial to the maxillary second molar

26. **Middle Superior Alveolar Nerve Block: area anesthetized**



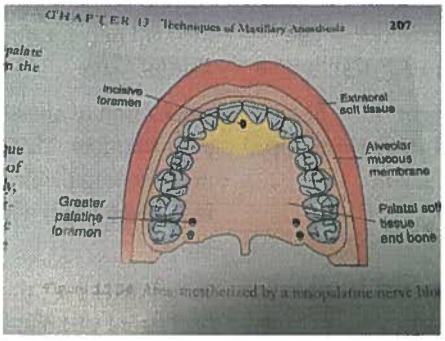
two PM and the mesial root of the 1st molar

27. **Most common use for ASA** — Use instead of doing multiple supraperiosteal injections

28. **Nasopalatine nerve Block is also known as...** — Incisive nerve block, sphenopalatine nerve block

29. **Nasopalatine Nerve block technique** — Insert needle on palatal mucosa just lateral to the incisive papilla. Apply pressure to the area with the swab while giving the injection to decrease pain

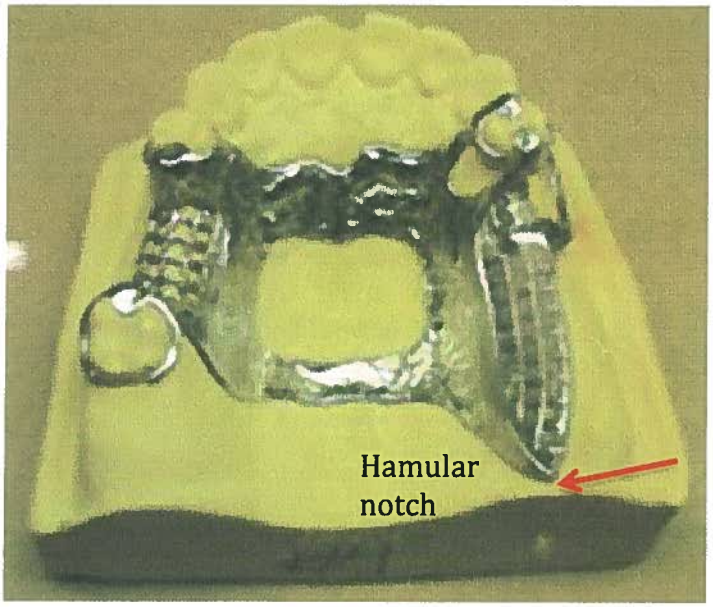
30. **Nasopalatine Nerve Block: area anesthetized**



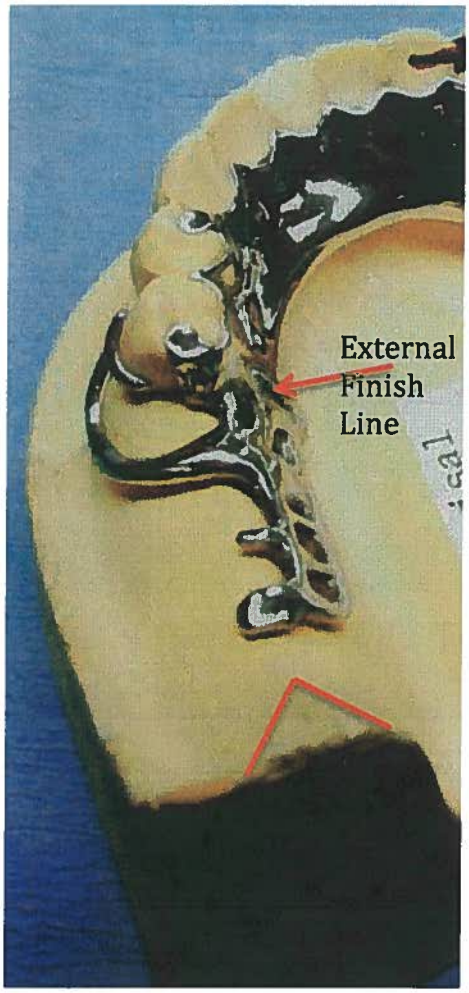
palatal anesthesia from distal of canine to distal of canine

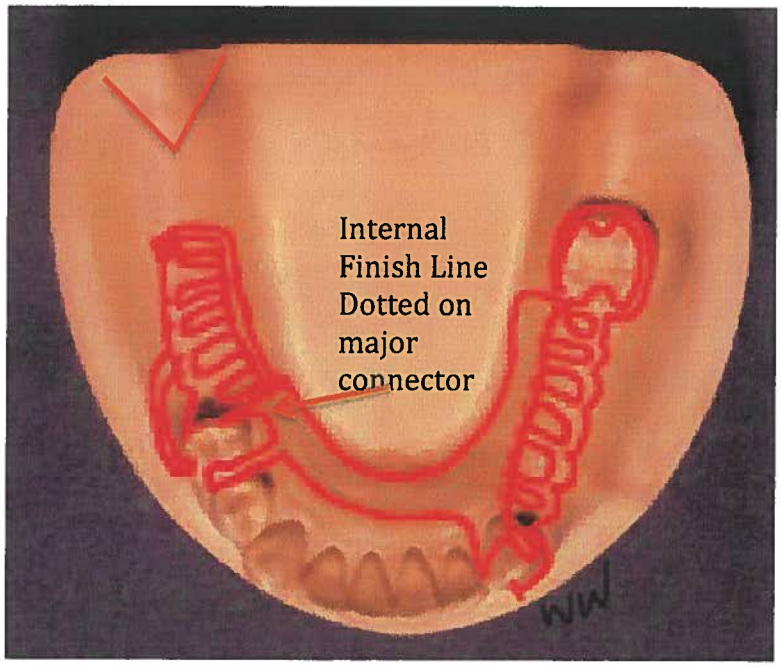
31. **Periodontal Ligament Injection** — Inject into the 4 corners of the PDL. Good for if the pt is numb everywhere but one tooth, good for kids, extractions. Prevents the lip, tongue, and other tissues from being anesthetized. Completely numbs the tooth, pulp, and surrounding tissue.

32. **Posterior Superior Alveolar (PSA) Injection technique** — target area for the injection is the posterior aspect of the tuberosity. Inject at the height of the mucobuccal fold above the max 2nd molar. Advance the needle at a 45 degree angle to the occlusal plane and move needle inward, upward, and backward



The Maxillary Major connector extends to the Hamular

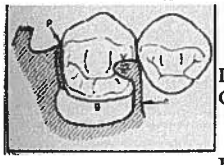




The Mandibular Base Attachment extends 2/3 of the distance to the beginning of retromolar pad. It does not extend past where the ridge makes a dramatic turn upward.

How to Clasp an Extension Base Side of a Class I or Class II RPD

On the distal abutment of an extension base or ("free end") RPD, you must use a concept for clasping that relieves stress to the abutment tooth. The ideal system is Krol's I-Bar concept. Do you understand this concept?



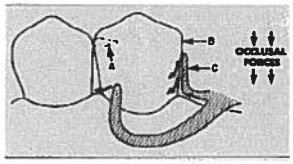
Lingual view GP = Guide plane

A. Buccal view

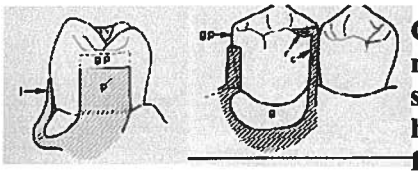
Distal view

Functional view

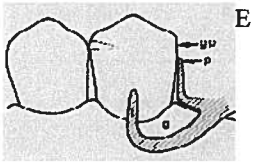
Occlusal view



D C B A



I-Bar Concept must specifically have the following components:



E

a. Mesial Rest - <u>Very specifically a mesial rest.</u> It is positioned here to direct the forces down the long axis of the tooth. Positioning it on the mesial creates a Class II Lever rather than a Class I Lever as happens when you place a distal rest. See A and B

b. Distal Guide Plate extends superiorly at least 1 mm above the bottom of the guiding plane. The guiding plane is prepared to extend a <u>minimum</u> of 2-3 mm below the marginal ridge of the abutment tooth. The guide plate extends to the lingual slightly to capture the tooth where it becomes narrower in width and functions to keep the tooth from moving lingual when the direct retainer snaps into the undercut. This is part of the reciprocal component. See A, B, and C

c. Drop away on the lingual to avoid torqueing forces on the tooth, which would be present if lingual plating or a reciprocal arm were used. This drop away is required. If your major connector cannot extend 8 mm into depth of floor of the mouth or palate, then you should consider a different design. The major connector at this point must be a minimum of 5 mm in width and you must avoid the marginal gingiva on the mandible by 3 mm.

d. The I-Bar clasp, which contacts the tooth from at or just above the survey line to the point of the 0.01" undercut in the recess under the survey line. It must be mid-facial or very slightly mesial to mid-facial. It is NOT in a mesial-facial undercut. See C & D above.

e. Observe picture E. When a force is exerted to the posterior denture teeth of an extension base RPD, the I-Bar moves forward and disengages the tooth. The guide plate rotates into the undercut and the mesial rest rotates directing the forces down the long axis of the tooth. This system provides stress relief for the abutment tooth.

JR/SR CLIN EXP

JUNIOR AND SENIOR CLINICAL EXPERIENCES AND COMPETENCY EXAMINIATIONS

Class of 2014

OPERATIVE JR. only	QTY.	DATE	ENCOUNTER #	PATIENT #
Prerequisites for Competencies				
Total Prerequisite Restorations	8			
Four Amalgam Restorations				
Class I	1			
Class II	2			
Class V	1			
Four Composite Resin Restorations				
Class I	1			
Class II	1			
Class III or IV	1			
Class V	1			
Competencies: Junior Year Only				
Class I	1			
Class II	1			
Class III/IV	1			
Total Competencies for Junior Year	3			

OPERATIVE SR. only				
One Class II Alloy	1			
One Class II Composite	1			
One Class III or IV	1			
Total Competencies for Senior Year	3			

OD/OM Junior/Senior	QTY.	DATE	ENCOUNTER #	PATIENT #
Ten Emergency exams as prerequisites				

Six Emergency exams graded - emergency form completed and turned in	1			
	2			
	3			
*Two emergency exams must be completed during senior year (BLACK)	4			
	5			
	6			
OD/OM CONT.				
2 Competencies Related to Medical Hx	1			
(This includes Faculty Consult and Patient Review)	2			
Pass Written Exam (Sr. Year, >70%)				

Fixed Partial Dentures	QTY.	DATE	ENCOUNTER #	PATIENT #
14 Units of Crown and Bridge	1			
Examples: crowns, FPDs (exclude pontics), inlays/onlays, implant crowns/FPDs, cast posts(limit 2)	2			
	3			
	4			
	5			
Junior Experience: 4 Units	6			
	7			
Senior Experience: 10 Units	8			
	9			
	10			
*One of these 14 experiences must be a crown which counts as a graded competency	11			
	12			
	13			
	14			

* A minimum of five (5) completed full coverage preparations are required prior to the student being eligible for the fixed prosthodontics competency examination.

These units *do not* include implant-supported restorations.

Prerequisites for mock board eligibility -five anterior preps (8 or 9) and five posterior preps (19 or 30) on dentaform; Six clinical fixed experiences.

* The details for the dentaform preparations will be released during the Advanced Concepts II class in the senior year.

* A minimum of six (6) completed full coverage restorations are required prior to the student being eligible for the ULSD mock exam for clinical fixed prosthodontics.

These units include teeth/ implant-supported restorations.

CD & RPD	POINTS	DATE	ENCOUNTER #	PATIENT #
1 CD/CD (2 points each)Junior Year	4			
1 CD/CD (2 points each) Senior Year	4			
1 CD (2 pts.) opposing RPD (3 pts.)	5			
1 interim CD (1 point)	1			
2 RPDs (3 points each)	6			
	total 20			
Miscellaneous RPD Procedures -	plus 4			
(relines,repairs, Essix retainers, occlusal splints - 1 point each)				
*Student must accumulate 24 points	24			
1 Tissue Conditioning				

PERIODONTICS JR/SR	QTY.	DATE	ENCOUNTER #	PATIENT #
Prerequisites for Competencies				
3 Preventive Counselings	1			
-(OHI, dietary, or tobacco counseling)	2			
	3			
4 Comprehensive Periodontal Exams	1			
	2			
	3			
	4			
5 Quad SRP (1-3 teeth = 0.5 quad)	1			
	2			
	3			
	4			
	5			
1 Periodontal Reevaluation	1			
Competencies (by end of Junior Year):				
2 Preventive Counseling	1			
-(OHI, dietary, or tobacco counseling)	2			
2 Comprehensive Perio Exams	1			
	2			
2 Quad SRP	1			
	2			
1 Periodontal Reevaluation	1			
Competencies to be Completed by Graduation (Including those needed for Junior Year and Mock Board Eligibility Total)	**Benchmarks Needed For Mock Board Eligibility (RED)**			

5 Preventive Counseling	1			
-(OHI, dietary, or tobacco counseling)	2			
	3			
	4			
	5			
4 Comprehensive Perio Exams	1			
	2			
	3			
	4			
5 Quad SRP	1			
	2			
	3			
	4			
	5			
2 Periodontal Reevaluations	1			
	2			
2 Phase II Completed Periodontitis Cases	1			
	2			
Essential Clincal Experiences (includes prerequisites and competencies)				
8 Preventive Counseling				
8 Comprehensive Periodontal Exams				
10 Quad SRP and Root Planing				
3 Periodontal Reevaluations				
1 Periodontal Surgical Assist/Observe with Graduate Periodontics - now completed as a rotation				

ENDODONTICS	QTY.	DATE	ENCOUNTER #	PATIENT #
Junior Year				
1 single canal endo experience (manikin)	1			
1 single canal endo experience (patient)	2			
1 single canal endodontic competency	3			
Senior Year				
1 multi/single canal endo experience (pt.)	1			
1 multi/single canal endo experience (pt.)	2			
1 multi-canal endodontic competency	3			

PEDIATRICS	QTY.	DATE	ENCOUNTER #	PATIENT #
Competencies:				
2 TX Plans	1			
	2			

2 Class II Amalgams on Primary molars	1			
	2			
2 SSC/Pulpotomy	1			
	2			
Nitrous Competency	1			

ORTHODONTICS	QTY.	DATE	ENCOUNTER #	PATIENT #
5 Patient Consults (recommended to complete 3 as Junior and 2 as Senior)				
2 points per consult x 5 pts. = 10 points	1			
	2			
*Enter code D9310 into Axium for credit	3			
	4			
Competency Exam: Spring of Senior Year	5			
*Schedule review session and exam in January of Senior Year				

ORAL SURGERY	QTY.	DATE	ENCOUNTER #	PATIENT #
*Clinic Rotations Only				
*Written compentency in Sr. Yr.				

TX Planning	QTY.	DATE	ENCOUNTER #	PATIENT #
Junior Year				

Students must challenge and pass a mock treatment plan competency with Dr. Haake or Dr. Metz in order to qualify for Jr. Clinical Tx Plan Competencies.

*An approved/signed/accepted clinical Tx plan is *not* required prior to the mock competency. Please see Tx Planning Manual pgs. 2.7-2.8 for Mock Competency Requirements. *After successful completion of the mock competency, clinical competencies may be challenged.

Junior Mock Competency				
	1			
Junior Clinical Competencies	1			
	2			
	3			
	4			

Junior grade is based upon the number of passed clinical competencies as outlined in the manual. A=4 passed competencies, B=3, C=2, D=1, F=0.

*Each individual competency is pass/fail, course grade is based upon accumulation of passed competencies. *Please see Tx Planning Manual pgs. 2.9-2.11 for Jr. Clinical Competency Requirements.

Senior Year				
Senior Tx Planning is graded on a Pass/Fail basis. In order to pass, the student must complete the requirements listed below. *Please see Tx Planning Manual pgs. 2.12-2.13 for Sr. Clinical Competency Requirements and Details				
	Tx Plan			
3 Completed Tx Plans	**1**			
	2			
	3			
1 Completed Case Competency	**1**			

MONTHLY CHECKLIST

Monthly Check list

1. Bring your assigned patient appointment list from your students personal planner
2. Unapproved list for each student from your students personal planner
3. Improcess list from the info manager
4. Are your patients being seen with-in 30 days
5. Medical Consults turn around time 3-10 days
6. QA s forwarded, pending or completed
7. Patients account balances being checked/payment plans
8. Are you scheduling PLANNED appointments
9. Students needs list are you updating this list
10. Jr. requirements list
11. Active recall make sure pt are being seen 6 mo
12. As patients are removed from the models should be removed from the model room

OSHA - CDDH employee

Each team coordinator meets w Debbie 1/months

MONTLY CHECK LIST

Each Student has one of these

Items	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Assigned patient appointment list												
Unapproved List for each students												
Improcess List for each student												
Patients being seen with-in 30 days?												
Medical Consults turn in 3-10 days?												
Qa status forwarded, pending or completed												
Patient account balances /Payment plans												
Scheduling planned appointments												
Update Student needs list												
Update Jr. requirement list												
Active recall												
Discontinued patients/models												
Student Attendance												

Monthly Check list

1. Bring your assigned patient appointment list from your students personal planner
2. Unapproved list for each student from your students personal planner
3. Improcess list from the info manager
4. Are your patients being seen with-in 30 days
5. Medical Consults turn around time 3-10 days
6. QA s forwarded, pending or completed
7. Patients account balances being checked/payment plans
8. Are you scheduling PLANNED appointments
9. Students needs list are you updating this list
10. Jr. requirements list
11. Active recall make sure pt are being seen 6 mo
12. As patients are removed from the models should be removed from the model room

EXAM TYPES

Comprehensive Exam

Prior to Start-check

1.) Obtain an Exam Kit from the dispensary (but wait to open in front of patient)
2.) Ask patient if they are experiencing any pain (this could change the appointment to an emergency appointment)
3.) Take medical, social, family and dental History of the patient
4.) List treatment modifications accordingly
5.) Obtain patient signature on medical history form
6.) Take vitals (BP, PP, RR & temp)
7.) Make sure general consent for is signed and current (within past year)
8.) Pull up Pan from screening appointment (if available) and have minimized at bottom of the screen
9.) Chart add diagnostic procedures
    a. D0150- comprehensive oral exam
    b. D0470- diagnostic casts
        i. diagnostic casts do not need to be done on patients who have no restorative needs
    c. D0210- intraoral complete series
    d. D0050- narrative note
    e. D0080- perio exam
    f. D0105- caries risk assessment
    g. D____- appropriate consult code (if needed)
10.)Open examination kit
11.)Place patient napkin and eyewear on patient

Presentation to Faculty

1.) place mirror and explorer on the bracket table
2.) introduce patient to faculty
3.) advise faculty of purpose of today's appointment
4.) have medical history displayed on screen (and MiPacs minimized at bottom of screen)
5.) Report vitals, treatment modifications & allergies
6.) Get faculty approval of both medical history form and proposed treatments for the day (start-check)

Data Gathering

1.) get FMX
    a. may only need 4 BW's if patient is in outstanding oral health
2.) Perio exam (after complete, request perio faculty approval)
    a. If the patient has severe periodontitis and it is evident on the PAN or FMX, you may not need to do the periodontal charting. If this happens you must complete an explanation for not periodontal charting in your progress note and have it signed by the periodontal faculty.
3.) Hard & soft tissue charting (after complete, obtain approval from *Group manager or attending faculty for Clinic A*)
4.) Diagnostic impressions (BE SURE TO COMPLETE THIS ON FIRST APPOINTMENT!)
    a. Obtain facebow transfer
5.) Complete CRA form (have faculty approve form)
6.) Appropriate consults (if needed)
7.) Complete Narrative note about procedures & data from that day's appointment (obtain approval from faculty for the note)
    a. If not all diagnostic data collection is completed on first day, finish on subsequent appointment(s) and document information in PARTS note

Treatment planning

1.) formulate treatment plan based off the findings of the diagnostic exams
2.) This treatment plan must be reviewed and approved by the faculty before patient presentation
3.) After presenting approved treatment plan to patient, patient must sign for proposed treatment and see the cashier to make financial arrangements
4.) Once the signature and financial arrangements are obtained, you may begin treatment from your treatment planned list

Recall Patient

Prior to Start-check

1.) Obtain Prophy kit from dispensary window (but wait to open it in front of patient)
2.) Ask patient if they are experiencing any pain (this could change the appointment to an emergency appointment)
3.) Update Medical history (first to lines up to date)
4.) Update treatment modification accordingly
5.) Obtain patient's signature on medical history form
6.) Make sure general consent form is up to date (within past year)
7.) Take Vitals (BP, PP, RR & temp)
8.) Pull up current radiographs in MiPacs and have minimized at bottom of screen
9.) Have diagnostic casts available
10.) Chart add diagnostic procedures
    a. D0120- periodic oral evaluation
    b. D0274- 4 bitewings (or appropriate needed radiographs- FMX may be needed if patient presents with extensive new decay)
    c. D0105- Caries Risk Assessment
    d. D0080- Perio exam
    e. D0470- Diagnostic casts (if needed)
        i. diagnostic casts do not need to be done on patients who have no restorative needs
    f. D____- appropriate consult code (if needed)
11.)Place patient napkin and eyewear on patient

Presentation to Faculty

1.) place mirror and explorer on the bracket table
2.) introduce patient to faculty
3.) advise faculty of purpose of today's appointment
4.) have medical history displayed on screen (and MiPacs minimized at bottom of screen)
5.) Report vitals, treatment modifications & allergies
6.) Get faculty approval of both medical history form and proposed treatments for the day (start-check)

Data Gathering

1.) obtain needed radiographs
   a. Bw's taken typically 1 time per year
   b. Bw's may need to be taken every 6 months if pt has high CRA(Caries Risk Assessment)
   c. PANS are taken every 5-10 years if patient is in good health
   d. PANS should be redone if patient has undergone extensive work (ex. Full mouth EXT)
2.) Review Perio chart (if it has been over a year, charting needs to be redone {every site reprobed} and approved by perio faculty)
3.) Hard and Soft tissue charting (approved by *Group Manager or Attending Faculty)*
4.) Complete CRA form (have faculty approve form)
5.) Appropriate consults (if needed)
6.) Formulate a treatment plan based off clinical finding of the appointment
7.) At end of appointment write PARTS

Treatment planning

1. Formulate treatment plan based on the findings of the diagnostic examinations and all necessary consultations (pros, perio, endo, ortho, medical etc…)
2. This treatment plan must be reviewed and approved by the faculty before patient presentation
3. After presenting approved treatment plan to patient, patient must sign for proposed treatment and see cashier to make financial arrangements
4. Once signature and financial arrangements are obtained, you may begin treatment from your treatment planned list

Transfer Patient

Prior to Start-check

1.) Obtain exam kit from dispensary window (but wait to open it in front of patient)
2.) Ask patient if they are experiencing any pain (this could change the appointment to an emergency appointment)
3.) Update Medical history (first to lines up to date)
4.) Update treatment modification accordingly
5.) Obtain patient's signature on medical history form
6.) Make sure general consent form is up to date (within past year)
7.) Take Vitals (BP, PP, RR & temp)
8.) Pull up current radiographs in MiPacs and have minimized at bottom of screen (if available)
9.) Have diagnostic casts available (if present)
10.) Chart add diagnostic procedures
    a. D0150a-comprehensive oral evaluation
    b. D0274- 4 bitewings (or appropriate needed radiographs - FMX may be needed if patient presents with extensive new decay)
        i. Bw's are taken once a year (typically)
        ii. Bw's are taken every 6 months if pt. has high CRA
    c.)D0470- Diagnostic casts (if needed)
        i. diagnostic casts do not need to be done on patients who have no restorative needs
    d. D0080- perio exam
    e. D0105- caries risk assessment
    f. D0050- narrative note
    g. D____- appropriate consult code (if needed)
11.)Place patient napkin and eyewear on patient

Presentation to Faculty

1.) place mirror and explorer on the bracket table
2.) introduce patient to faculty
3.) advise faculty of purpose of today's appointment
4.) have medical history displayed on screen (and MiPacs minimized at bottom of screen)
5.) Report vitals, treatment modifications & allergies
6.) Get faculty approval of both medical history form and proposed treatments for the day (start-check)

Data Gathering

1.) get needed radiographs
   a. Bw's are taken once a year typically
   b. Bw's may need to take every 6 months if pt has high CRA
   c. PANS can be taken every 5-10 years is patient is in good health
   d. PANS should be redone if patient has undergone extensive work (ex. Full mouth EXT)
2.) Perio exam (after complete, request perio faculty approval)
3.) Hard & soft tissue charting (after complete, obtain approval from *Group manager*)
4.) Diagnostic impressions (BE SURE TO COMPLETE THIS ON FIRST APPOINTMENT, if needed)
   a. Obtain facebow transfer if case is to be mounted
5.) Complete CRA form (have faculty approve form)
6.) Appropriate consults (if needed)
7.) Complete Narrative note about procedures & Data from that day's appointment (obtain approval from faculty for note)
   a. If not all diagnostic data collection is completed on first day, finish on subsequent appointment(s) and document information in PARTS note

Treatment planning

1. Formulate treatment plan based on the findings of the diagnostic examinations and all necessary consultations (pros, perio, endo, ortho, medical etc…)
2. This treatment plan must be reviewed and approved by the faculty before patient presentation
3. After presenting approved treatment plan to patient, patient must sign for proposed treatment and see cashier to make financial arrangements
4. Once signature and financial arrangements are obtained, you may begin treatment from your treatment planned list

Emergency Patient

Prior to Start-Check

1.) Obtain an Exam Kit from the dispensary (but wait to open in front of patient)
1.) Take medical History of the patient
2.) List treatment modifications accordingly
3.) Obtain patient signature on medical history form
4.) Take vitals (BP, PP, RR & temp)
5.) Make sure general consent for is signed and current (within past year)
6.) Pull up Pan from screening appointment (if available) and have minimized at bottom of the screen
7.) Chart add diagnostic procedures
    a. D0140- limited oral evaluation
    b. D0220 - first periapical radiographs
    c. D0230- each additional perioapical radiograph
8.) Place patient napkin and eyewear on patient

Presentation to Faculty

1.) place mirror and explorer on the bracket table
2.) introduce patient to faculty
3.) advise faculty of purpose of today's appointment
4.) have medical history displayed on screen (and MiPacs minimized at bottom of screen)
5.) Report vitals, treatment modifications & allergies
6.) Get faculty approval of both medical history form and proposed treatments for the day (start-check)

Data Gathering

1.) perform appropriate provocation tests
2.) get appropriate radiographs
3.) get approval from faculty
4.) general limited treatment plan based on clinical findings

Treatment Planning

1. General limited treatment plan based on clinical finding
   At end of TP add D0044 – return for further treatment planning
2. Have treatment plan approved by faculty member
3. Present treatment plan to patient and obtain their signature
4. Proceed with appropriate emergency treatment
5. At the end of the appointment write SOAP note

Screening Patient

Prior to Start-Check

1.) Obtain an Exam Kit from the dispensary (but wait to open in front of patient)
2.) Fill out screening form (which is a shortened medical history form) - And Fill Out Full Med. Form
3.) List treatment modifications accordingly
4.) Obtain patient signature on medical history form (screening form)
5.) Take vitals (BP, PP, RR & temp)
6.) Make sure general consent for is signed
7.) Chart add diagnostic procedures
    a. D0090- internal screening code
    b. D____ –Panoramic radiograph
8.) Place patient napkin and eyewear on patient

Presentation to Faculty

1.) place mirror and explorer on left side of bracket table
2.) introduce patient to faculty
3.) advise faculty of purpose of today's appointment
4.) have medical history displayed on screen (and MiPacs minimized at bottom of screen)
5.) Report vitals, treatment modifications & allergies
6.) Get faculty approval of both medical history form and proposed treatments for the day (start-check)

Data Gathering

1.) Get Pan of patient
2.) Look intraorally and get a overall feel and thought about the patient and if their needs are suitable for the school
3.) Obtain faculty approval for exam
4.) Write PARTS note and have it approved by the faculty – Have Pt. In Chair When Faculty Swipes
5.) DMDORA – Oral Cancer Screening

SUMMARY GUIDE TO PATIENT EXAMS June 2011

1. NEW COMPREHENSIVE PATIENT:
   a. Take vital signs, add Medical history (DMDMED) including treatment modifications
   b. Add codes D0150 and D0050, get start check
   c. Add Oral Examination Form (DMDORA), add any indicated radiographs.
   d. Start restorative/periodontal charting
   e. Progress note *Narrative* (includes CC, HCC, MH, FH, SH, DH, "Today section should include vital signs and Oral Cancer Screening Exam," and "NV")
   f. 12 month recall entered when code D0050 is completed by faculty.

2. TRANSFER COMPREHENSIVE PATIENT:
   a. Take vital signs; review the medical history (DMDMED). NO ENTRY CAN BE MORE THAN 1 YEAR OLD. Review all 5 pages, and make changes as needed. Use CTRL-R to update each entry.
   b. Add codes D0150A and D0050 and get start check.
   c. Add a new Oral Examination Form (DMDORA), any indicated radiographs.
   d. Start restorative/periodontal charting
   e. Progress note *Narrative* (includes CC, HCC, MH, FH, SH, DH, "Today with vital signs and OCSE," and "NV" as in #2 above)
   f. 12 month recall will be reset when D0050 code is completed by faculty.

NOTE: when comprehensive exam is not completed in 1 appointment, D0150 or D0150A should be put IN PROCESS. Subsequent appointments should use PARTS format for progress note.

3. SCREENING PATIENT: Take vital signs, add code 0090, get start check, start Screening Form and obtain indicated radiographs, use PARTS note format.

4. EMERGENCY PATIENT:
   a. Take vital signs, add and/or review the Medical History All Clinics (DMDMED); it may be prudent to forego the FH, SH, and DH at this visit
   b. Add code D0140 and get start check
   c. Investigate chief complaint; perform any indicated diagnostic tests and radiographs.
   d. Add emergency treatment plan.
   e. SOAP format for progress note (summarize significant medical problems, meds and allergies).

5. RECALL PATIENT:
   a. Take vital signs, review the medical history (DMDMED). NO ENTRY CAN BE MORE THAN 1 YEAR OLD ON MED HX. Use CTRL-R to update each entry.
   b. Add codes D0120 and D0050 and get start check
   c. Add a new Oral Examination Form (DMDORA), any indicated radiographs.
   d. Have appropriate treatment plan approved by faculty and signed by patient.
   e. Progress note using PARTS format (including a **summary** of the significant medical problems, meds, allergies, and OCSE)
   f. 12 month recall will be reset when D0050 is completed by faculty.

See next pages for examples of notes (***these examples do not show hard tissue charting, caries risk, perio charting, diagnostic impressions which are also done for many 'new patients***)

PROGRESS NOTE EX

Examples of Progress notes

1. NEW COMPREHENSIVE PATIENT:
   a. Take vital signs, add Medical history (DMDMED) including treatment modifications
   b. Add codes D0150 and D0050, get start check
   c. Add Oral Examination Form (DMDORA), add any indicated radiographs.
   d. Start restorative/periodontal charting
   e. Progress note *Narrative* (includes CC, HCC, MH, FH, SH, DH, "Today section should include vital signs and Oral Cancer Screening Exam," and "NV")
   f. 12 month recall entered when code D0050 is completed by faculty.

Example of initial narrative note:

CC: 51 y.o white female "I need my teeth cleaned."
HCC: Ms. Jones last went to the dentist 3 years ago, and has no pain now.
MH: Significant medical problems/medications
1. hypertension Rx: hydrochlorothiazide, aspirin
2. asthma Rx: symbicort
Other significant hospitalizations/surgeries: none
Allergies: penicillin
FHx: Born and has always lived in Louisville. Married for 31 years ~~with 3 adult children.~~ No known risks of infectious diseases. ~~Parents are alive and well.~~
SHx: Currently works as a medical office receptionist. No current use of alcohol or tobacco, but smoked cigarettes for about 10 years in the past. Has never traveled outside the US.
DHx: History of routine dental visits until 3 years ago when dentist retired.
Today: BP 135/85, P 72, R 15, Temp 98.4F. Completed oral cancer screening exam with no irregularities noted (Dr. X). Next visit: periodontal charting.

2. TRANSFER COMPREHENSIVE PATIENT:
   a. Take vital signs; review the medical history (DMDMED). NO ENTRY CAN BE MORE THAN 1 YEAR OLD. Review all 5 pages, and make changes as needed. Use CTRL-R to update each entry.
   b. Add codes D0150A and D0050 and get start check.
   c. Add a new Oral Examination Form (DMDORA), any indicated radiographs.
   d. Start restorative/periodontal charting
   e. Progress note *Narrative* (includes CC, HCC, MH, FH, SH, DH, "Today with vital signs and OCSE," and "NV" as in #2 above)
   f. 12 month recall will be reset when D0050 code is completed by faculty.

Example of transfer narrative note:

CC: 51 y.o. white female; has been a patient at the U of L Dental School and states, "I want to continue being treated here."
HCC: Ms. Jones has been a patient for the last 18 months, and has no pain now.
MH: Significant medical problems/medications
1. hypertension Rx: hydrochlorothiazide, aspirin
2. asthma Rx: symbicort
Other significant hospitalizations/surgeries: none
Allergies: penicillin
FHx: Born and has always lived in Louisville. Married for 31 years with 3 adult children. No known risks of infectious diseases. Parents are alive and well.
SHx: Currently works as a medical office receptionist. No current use of alcohol or tobacco, but smoked cigarettes for about 10 years in the past. Has never traveled outside the US.
DHx: History of routine dental visits until about 4 years ago when dentist retired.
Today: BP 135/85, P 72, R 15, Temp 98.4F. Completed oral cancer screening exam with no irregularities noted (Dr. X). Next visit: periodontal charting.

NOTE: when comprehensive exam (#1 or #2) is not completed in 1 appointment, D0150 or D0150A should be put IN PROCESS. Subsequent appointments should use PARTS format for progress note.

Example:
P: Continue comprehensive evaluation
A: No changes in medical history. Vital signs BP 135/80, P 80
R: No Rx given
T: Completed perio charting (Dr. Perio), hard tissue charting (Dr. Group Manager). Treatment plan developed, entitled "Comprehensive Treatment Plan #1" and presented to patient.
S: next visit: SRP of lower arch.

3. SCREENING PATIENT: Take vital signs, add code 0090, get start check, start Screening Form and obtain indicated radiographs, use PARTS note format.

Example of Screening note:

P: Patient here for screening. CC "I want a new denture."
A: Reviewed medical history. Significant medical history: hypertension, asthma; Meds: hydrochlorothiazide, aspirin, symbicort; Allergies: penicillin. BP 135/85, P 72, R 15, Temp 98.4F. Radiographs: no abnormalities noted.
R: No Rx given
T: Initial patient screening form completed (Dr. X), panorex (ordered by Dr. Y). Patient assigned to DMD student for comprehensive evaluation.
S: Next visit with a D4 student.

4. EMERGENCY PATIENT:
   a. Take vital signs, add and/or review the Medical History All Clinics (DMDMED); it may be prudent to forego the FH, SH, and DH at this visit
   b. Add code D0140 and get start check
   c. Investigate chief complaint; perform any indicated diagnostic tests and radiographs.
   d. Add emergency treatment plan.
   e. SOAP format for progress note (summarize significant medical problems, meds and allergies).

Example of emergency visit note:

S: Patient here for emergency. CC: "I have a tooth ache on the bottom right side, worse when I eat sweet or cold, but for the past 2 days it's been keeping me awake. I haven't been to the dentist since 1982."

O: Significant medical history: hypertension, diabetes; Meds: lisinopril, glipizide, aspirin; Allergies: none. BP 135/80, P 82, R 16, Temp 99.0F. Intraoral exam shows that #31 is broken at the level of the gingival, much debris, erythema around the distal where there is bleeding on probing. All other areas are WNL except lateral tongue that shows erythema where it rubs against the broken tooth. Extraoral exam: lymphadenopathy on right cervical area, tender to palpation, freely movable. Radiograph of #31 shows periapical radiolucency and extensive caries into the furcation.

A: Non-restorable tooth #31, chronic periapical periodontitis

P: Extraction of #31

Today: referred patient to Oral Surgery for extraction.

5. RECALL PATIENT:
   a. Take vital signs, review the medical history (DMDMED). NO ENTRY CAN BE MORE THAN 1 YEAR OLD ON MED HX. Use CTRL-R to update each entry.
   b. Add codes D0120 and D0050 and get start check
   c. Add a new Oral Examination Form (DMDORA), any indicated radiographs.
   d. Have appropriate treatment plan approved by faculty and signed by patient.
   e. Progress note using PARTS format (including a **summary** of the significant medical problems, meds, allergies, and OCSE)
   f. 12 month recall will be reset when D0050 is completed by faculty.

Example of Recall note:

P: Patient here for annual check-up

A: Reviewed medical history. Significant medical history: angina, hypertension, osteoarthritis; medications: diltiazem, lovastatin, nitroglycerin, hydrochlorothiazide, fenoprofen, multivitiamin, calcium supplements Allergies: penicillin BP 165/90, Pulse 80 regular, Respiratory rate 15, temperature 98.6F Oral Cancer Screening Exam completed within normal limits (Dr. X). Radiographs: no abnormalities noted. (Dr. Y)

R: No Rx given.
T: 4BWX (ordered by Dr. G.M), prophy completed (Dr. Perio). OHI given.
S: Next: 6 month recall.

NOTES about Vital Signs at ULSD:

1. BP, Pulse, Respiratory rate, temperature must be taken at every initial visit, annual recall, and emergency visit
2. BP and Pulse must be taken for every patient for every other visit
3. For patients with heart disease, take BP 5 minutes after initial injection of local anesthetic if additional injection is needed.

FORMAT for medications on the Medical History:

- List all prescription medications followed by over-the counter medications then vitamin and mineral (or other) supplements; try to group meds by disease.
- Generic names are required, with brand (proprietary) name if provided.
- List dose and interval
- Include therapeutic category

Example (only one per line):
diltiazem: 90mg bid; ACE inhibitor
lovastatin: 20 mg qd; antilipid agent/HMG-CoA reductase inhibitor
nitroglycerin: 2 mg prn; vasodilator
hydrochlorothiazide: 50 mg qd; thiazide diuretic
Nalfon (fenoprofen): 200 mg q6h prn arthritis pain; non-steroidal anti-inflammatory drug
One-a day Silver (multivitamin) 1qd; supplement
Citracal (calcium citrate) 500mg bid; mineral supplement

ORAL MED CONSULTS

Oral Medicine Consults -- Protocol and Expectations

When a student presents a medically compromised patient to the oral medicine faculty requesting a consultation for approval to proceed with dental treatment (*code 0054, "Medical Consult Reviewed"*), the oral medicine faculty expects the student to be able to:

- Effectively and professionally present and communicate all information described to the oral medicine faculty in a organized, systematic, and coherent manner.
- Satisfactorily answer all relevant questions posed by the oral medicine faculty regarding this patient's medical (including medications and allergies), physical, and psychological problems and how they relate to their dental treatment.

Specific expectations as to what should be completed prior to an oral medicine consultation for approval to proceed with dental treatment are as follows:

1) The Medical / Dental History:

- The patient's **medical /dental history narrative** has been correctly entered into the Axium treatment history (notes) by the student and includes the:
  chief complaint, history of the chief complaint, medical history summary (including **allergies, hospitalizations,** and **all current medications**), **review of systems, family history, social history**, and **dental history.**

2) Medical Consultations:

- All necessary **medical consultation(s)** for the patient have been returned by their physician(s).
  - All questions/lab test data requested in the consult have been answered or provided by the patient's physician(s) and scanned (by the chart room) into the Axium record.
- A note **summarizing the findings of all medical consults** (including the date and results of all relevant lab tests) has been included in the patient's Axium treatment history.

3) Identification of Dentally Significant Medical Problems and **Formulation of Dental Treatment Modifications:**

- The student has identified (and recorded in the patient's Axium treatment history) **all medical (including medications and allergies), physical, and psychological problems of the patient that <u>necessitate modification</u> of normal dental protocols and procedures in order ensure the safe dental treatment of the patient.**
- The student has described (and recorded in the Axium "CK-List Tx Mod." section (tab) of the "Medical History all Clinics" form)* **all necessary precautions, actions, or modifications that <u>need to be implemented in order to ensure the safe dental treatment of the patient</u>.**

  * *Alternatively, the student may write a draft copy of their list of treatment modifications for the patient on scrap paper and present them to the oral medicine faculty, after which, the finalized treatment modifications will then be added in the patient's Axium record.*

Medical Consultations: *Indications and Format Guidelines*

A medical consultation with the patient's physician(s) and subsequent review and approval by oral medicine faculty before initiating physiologically stressful or invasive dental treatment is usually required for any patient who meets any of the following criteria listed below.

Please note this is not meant to be a comprehensive list. There are many additional medical problems that would necessitate a medical consultation that are not specifically listed here.

1. The patient has a **potential allergy** to a **local anesthetic** (or any preparation component, e.g. sulfites), **dental material** (e.g., mercury, nickel), **other materials used in dental treatment** (e.g., **latex**), or likely to be environmentally encountered in the dental school / clinic.

2. The patient has any **medical problem(s) that could result in potential medical complications secondary to physiologically stressful or invasive dental treatment.**
   Examples include (but are not limited to):
   - Angina pectoris
   - History of myocardial infarction
   - History of cerebrovascular accident / transient ischemia attack
   - Cardiac insufficiency / congestive heart failure
   - Hypertension (defined as BP > 140 mm Hg systolic and/or 90 mm Hg diastolic)
   - Cardiac arrhythmia
   - Diabetes mellitus
   - Chronic obstructive pulmonary disease
   - Poorly controlled and/or exercise-induced and/or stress-induced asthma
   - Symptomatic hypo- or hyperthyroidism
   - Poorly controlled seizure disorder (defined as > 1 seizure per month)
   - Hepatitis, hepatic failure, or cirrhosis
   - Chronic kidney disease, renal failure and/or dialysis
   - Adrenal insufficiency

3. The patient has any **medical problem(s) that could result in an adverse reaction or potential medical complication due to drugs we may administer as part of dental treatment,** such as antibiotics, local anesthetics, vasoconstrictors, N_2O, or analgesics such as narcotics or NSAID's. (*See examples in #2 above*)

4. The patient has any **medical problem(s) or takes any medication(s)** that places them at **an increased risk for post-treatment infection due to immunosuppression and/or delayed wound healing.**
   Examples include (but are not limited to):
   - HIV/AIDS
   - Blood dyscrasias, aplastic anemia
   - Myeloproliferative disease (e.g., leukemia, myelofibrosis), lymphoma
   - Use of systemic corticosteroids and/or other immunosuppressive drug use (e.g., tumor necrosis factor blockers [e.g., etanercept, infliximab, adalimumab], azathioprine, methotrexate)
   - Undergoing antineoplastic cytotoxic chemotherapy
   - History of radiation therapy involving the maxillofacial region
   - Status-post organ, bone marrow or stem cell transplant

5. The patient has any **medical problem(s) or takes any medication(s)** that could result in **clinically significant impaired hemostasis.**
   Examples include (but are not limited to):
   - Hemophilia, von Willebrand's disease
   - Thrombocytopenia, thrombocytopathia
   - Warfarin (Coumadin)
   - Direct thrombin inhibitors (e.g., Pradaxa)
   - Factor Xa inhibitors (e.g., Xarelto)
   - Low-molecular-weight heparin (LMWH) such as enoxaparin (Lovenox)
   - Valproic acid (valproate sodium)

6. The patient has any **medical, psychiatric or cognitive problem(s)** that could:
   - effect (complicate) our ability to provide dental care to the patient, or;
   - impair the patient's ability to follow or understand instructions, or;
   - make the patient unable to provide legal informed consent to dental treatment or make informed consent decisions.

7. The patient has a **history of a possibly unresolved (still active) infectious disease that could pose a transmission risk to others during dental treatment, despite the use of "universal precautions"** (e.g., tuberculosis, pulmonary MRSA).

A General Outline for Medical Consults

Suggested opening:

- Mr./Ms. X, is a (*age, race, sex*) patient, that presents to the U of L School of Dentistry for treatment of (*specify diagnosis*). Treatment will include (*summerize anticipated treatment with emphasis on the most invasive treatment the patient is anticipated to receive such as extraction[s], osseointegrated implants, periodontal surgery, osseous reduction surgery, etc.*) using (*specify anesthesia: local anesthesia [2% lidocaine with 1:100,000 epinephrine], I.V. sedation, general anesthesia*). This treatment will be performed over approximately (*x*) appointments, each being of 2 to 3 hours in duration.

Body of consult:

- The patient's current medical problems and pertinent past medical history includes: (*list*)
- The patient's current medications are: (*list drug names and doses*)
- Give reason(s) for consult: (*be specific and number each question / item separately*)

Suggested closing phrases:

- Please indicate any additional significant medical history or changes in medication.
- Please specify any contraindications or precautions regarding the proposed dental treatment for this patient.
- Thank you for your assistance in my care of our mutual patient.

Medical Consult Example #1: History of Previous MI

Mr. John Doe, is a 68 year old white male patient that presents to the U of L School of Dentistry for treatment of dental caries and periodontal disease. Treatment will consist of extractions, osseointegrated implant placement, and possible periodontal surgery using local anesthetic (2% lidocaine with 1:100,000 epinephrine). This treatment will be performed over approximately 10 appointments, each being of 2 to 3 hours in duration.

Mr. Doe reports a history of a previous myocardial infarction in July, 2009 with subsequent coronary artery angioplasty and stent placement. He is currently being treated for hypertension, hyperlipidemia, and depression. He lists his current meds as: lisinopril 20 mg/day.; hydrochlorothiazide 12.5 mg/day; atorvastatin 20 mg/day; clopidogrel 75 mg/day; ASA 81 mg/day, and paroxetine 20 mg/day.

His BP today was: 122/88 mm Hg RAS; pulse: 72/min.

1) Please provide a summary of the patient's current post-MI cardiovascular status, and the presence of any current cardiovascular disease that requires medical treatment.

2) Please provide your assessment of this patient's overall cardiovascular risk in relation to their ability to safely tolerate the proposed dental procedures, as well as any specific medical management precautions or recommendations you may have as it relates to their dental treatment.

Thank you for your assistance in my care of our mutual patient.

Medical Consult Example #2: Psychiatric Consult

Mr. John Doe is a 41 year old white male patient that presents to the U of L School of Dentistry for treatment of periodontal disease and rampant dental caries. Treatment will include periodontal scaling, several extractions, and restorative dental treatment including endodontics (root canals) and crowns using local anesthetic (2% lidocaine with 1:100,000 epinephrine). This treatment will be performed over approximately 15 appointments, each being of 2 to 3 hours in duration.

Mr. Doe gives a current history of psychiatric treatment, "nervousness" and a "chemical imbalance" (treated with lithium 300 mg t.i.d; sertraline 50 mg b.i.d; and risperidone 1 mg b.i.d.), as well as a previous history of drug and alcohol abuse.

1) Please provide us with this patient's current DSM-IV, 5 axis diagnosis as well as a summary of their status and stability under current medications and treatment.

2) Please provide a summary of patient's past history of drug and alcohol abuse, dates of resolution, and the presence of any systemic disease (e.g., hepatitis, cirrhosis, etc.) secondary to substance abuse.

3) In your opinion, do you will feel this patient will be able to make informed consent decisions regarding their dental treatment?

4) Please comment on any implications or considerations this patient's psychiatric diagnosis would impose on our proposed dental treatment.

Thank you for your assistance in my care of our mutual patient.

MED/DENT NARRATIVE EXAMPLES

Example of a Medical - Dental History Narrative

CC:

Mr. X is a 66 y.o. African-American male who presents to the ULSD and states, "I would like to get my teeth fixed and see about some new dentures."

HCC:

Mr. X has received much previous dental care and he has not been satisfied with it. It has included RPD/RPD made in 9/1993 which pt. feels have been completely unsatisfactory. Pt. states that the dentures interfered with his speech that he could not function properly with them. Pt. also gives a history of 3 previous endo procedures. He recalls having problems associated with these procedures, including at least one re-treatment, as well as a surgical procedure (apicoectomy?) on one tooth. While pt. does not feel his dental problem is an acute one, he is very upset because approximately 3 weeks ago his previous dentist (Dr. A. Z.) recommended extraction of all his remaining teeth and construction of CD/CD.

MHS/ROS:

Past Medical Problems:

1. Acute appendicitis (1959)
2. Acute MI (3/2000), see: "Hospitalizations/Surgeries" for details.

Current Medical Problems:

1. Hypertension, Dx: 1995. Pt. reports baseline BP of 130/88 RAS. BP today was 132/90 RAS. Pt. reports no systemic complications secondary to HTN.
   - meds: hydrochlorothiazide: 50 mg qd.

2. ASHD/status post-MI, angina pectoris (stable), Dx: 3/2000. Pt. reports angina symptoms currently only occur with severe exertion or stress, and are readily relieved by sublingual nitroglycerin. Med consult of 9/1/10 with Dr. John Smith reports CV disease is currently under good medical control with no contraindications for dental treatment using L.A. with epi.
   - meds: diltiazem: 90mg bid, ASA: 81 mg/ day, nitroglycerin: 2 mg prn.

3. Hyperlipidemia, Dx: 3/2000
   - meds: lovastatin: 20 mg qd

4. Diabetes mellitus - type 2, Dx: 7/2008. Pt. reports SMBG once per day. No hx of hypo- or hyperglycemic episodes within the last year. Med consult with Dr. John Smith reports HbA1c = 7.4% and FBG = 128 mg/dL on 8/15/10 with no systemic complications of DM.
   - meds: metformin 500 mg t.i.d., and glipizide10 mg q.d.

Hospitalizations/ Surgeries:
1959: Dx: acute appendicitis Tx: appendectomy, no complications or sequelae.

3/2000: Dx: Acute MI. Patient was hospitalized for 4 days, at this time he was also diagnosed with ASHD and hyperlipidemia. PCTA with stents was performed at this time. Pt. reports no complications secondary to treatment, however, pt. presently reports some angina symptoms as noted above.

Allergies:
Pt. reports allergy to penicillin and that he "broke out in a rash and hives" when he took the drug as a child.
Pt. denies any other allergies including aspirin, codeine and local anesthetics.

Pt. denies a history of any other serious illness including diseases of the CV, CNS, GI, GU, MS, respiratory, endocrine, or immunologic systems as well as disease of psychiatric or nervous origin.

FHx:

Pt. was born in Jefferson County, Kentucky. He has been married for approximately 40 yrs. and has two grown children. Pt. denies any hx. of infectious diseases within his household or when growing up. Pt. reports that his father died of a "heart attack" at age 68. Pt. denies history of any other familial disorders.

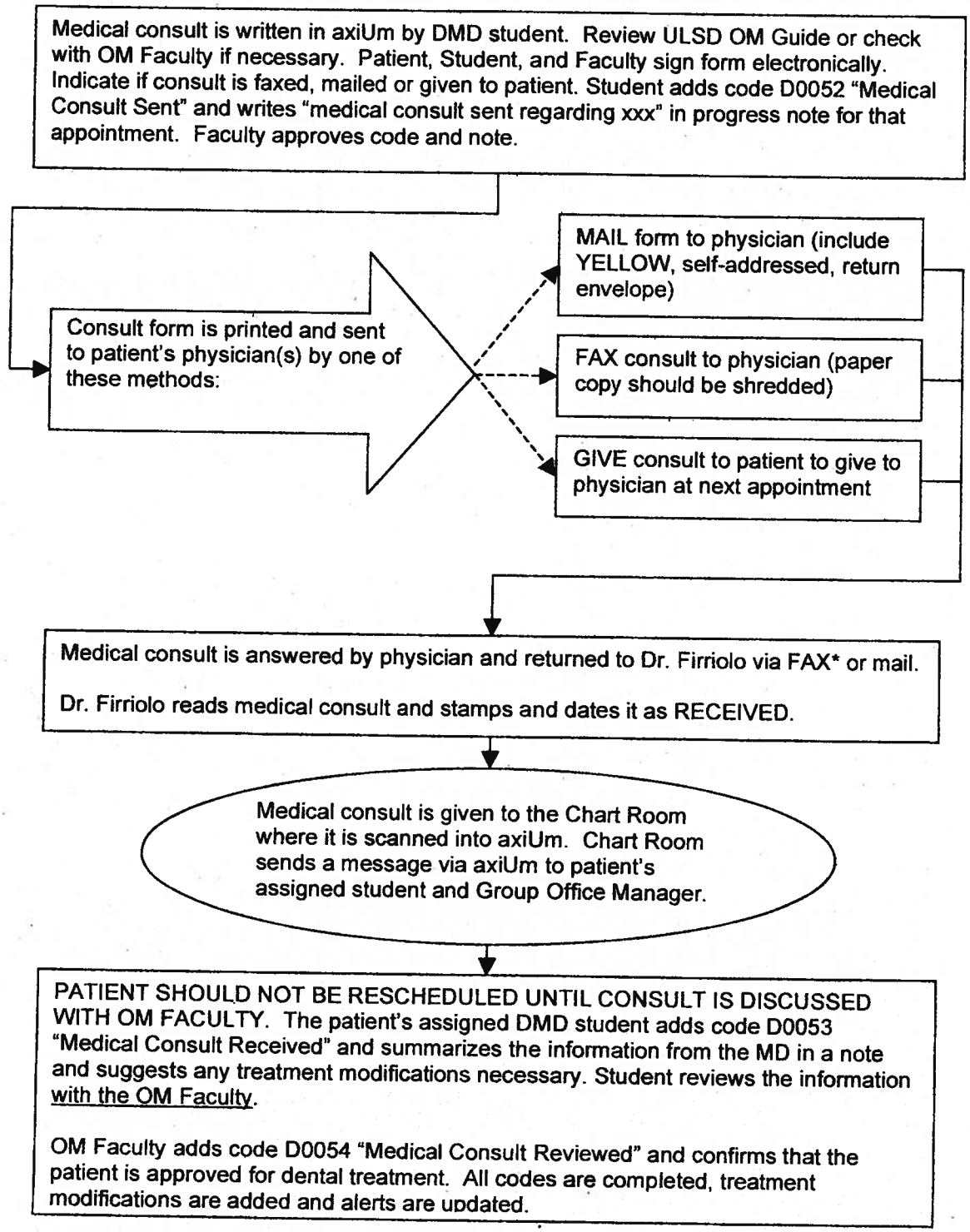
SHx:

He presently lives with his wife and appears to have no special social or financial problems. Pt. has worked as an accountant for the last 40 yrs. and reports his job or home life is not stressful. Pt. reports that his only time of residence outside of the U.S. was for one year (1952) when he was stationed in Korea while serving in the army. Pt. reports only light, occasional (social) ETOH use and has an approximately 28 pack/year cigarette history. Pt. reports he quit smoking in 3/1990 after his MI. Pt. denies any history of recreational drug use. Pt. denies any exposure to blood or body fluids and does not feel he is at risk for HIV.

DHx:

Pt. presently has fluoridated water, but did not as a child. Pt. makes regular dental visits as described in HCC. Pt. states most recent dental X-rays were at last dental visit about 3 weeks ago. Pt. reports gums bleed occasionally when brushing and that some teeth feel sightly loose. Pt. denies any symptoms of TMJ disorders, bruxism, or xerostomia. Pt. has never had any adverse experiences related to dental tx.

Procedure for Patient Medical Consultations



*All Medical Consults returned via FAX must be sent to (502) 852-3526 ONLY.

COMPREHENSIVE

1. Take Vitals
2. Add form: DNDIMED

Add Codes:

- D0150 Comp Exam
- D0502? Modified Med/Dental Hx narrative
- D0330 Perio Exam
- D0180 CRA
- D0145 Diagnostic Casts
- D0470

Add Forms:

- DNDORA Oral Exam Form
- CARISK Caries Risk

Add Today's Procedures:

- FMX D0210
- PAN D0330
- MED CONSULT D0171

Emergency Exam:

TB QUESTIONS

- Fever
- Chills
- Night sweats
- Weight loss
- Bloody Sputum/mucus

Perio

TB S/S:

- Cough
- Fever/night sweats
- Weight loss
- Malaise
- Lymphadenopathy

PROGRESS NOTE

* LIST DR. NAME who approved form

SOAP

S: problem
O: current health status, Vitals, Signs/symptoms
A:
P: Rx or recommendations
T: Treatment rendered
S: strategy for Next visit

Screening Patient

- Chief Complaint
- Vitals: BP, Pulse, Resp., Temp
- Health History (including med., soc., fam., dent. tabs)
- Panoramic radiograph
- **FACULTY APPROVED**
- Brief intraoral exam, Assess general oral health
- Determine patient needs
- Screening forms, Notes
- **FACULTY APPROVED**
- Dismiss patient

New Patient/Initial exam (has already been screened)

- Chief Complaint
- Vitals: BP, Pulse, resp., temp.
- Health History (including med., soc., fam., dent. tabs
- **FACULTY APPROVED**
- Soft Tissue Exam (intraoral/extraoral cancer screening)
- Hard Tissue Exam
- Radiographs: As indicated, usually FMX and Pan.
- Perio. Chart, Disclose, PHP, OHI
- **PERIO FACULTY APPROVAL FOR PERIO. CHART**
- Impressions for diagnostic cast
- Facebow transfer
- Treatment notes
- Code 0050, Attach Narrative Tx. note for Dr. Hupp
- **FACULTY APPROVAL**
- Dismiss patient

Transfer Patient/ New to the Student

- Chief Complaint
- Vitals: BP, Pulse, Resp., Temp
- Health History (including med., soc., fam., dent. tabs)
- **FACULTY APPROVED**
- Soft Tissue Exam (intraoral/extraoral cancer screening)
- Hard Tissue Exam (update odontogram)
- **FACULTY APPROVAL FOR RADIOGRAPHS**
-Radiographs: As indicated, usually FMX and Pan.
- New Perio. Chart, Disclose, PHP, OHI
- **PERIO FACULTY APPROVAL FOR PERIO CHART**
- TX plan/ TX as indicated
- Treatment notes
- **FACULTY APPROVAL**
- Dismiss Patient

Emergency Patient/ In Pain

- Chief Complaint
- Vitals: BP, pulse, resp, temp
- Health History(including med., soc., fam. tabs)
- **FACULTY APPROVAL**
- Brief intraoral exam, determine source of pain
- Determine patient needs
- **FACULTY APPROVAL FOR RADIOGRAPHS IF INDICATED**
- Treatment as indicated
- Treatment notes
- **FACULTY APPROVAL**
- Dismiss patient

Current Patient

-CC
- Vitals
- Hx
- **FACULTY APPROVAL**
- Treatment as indicated with faculty approval as needed
- Treatment notes
- **FACULTY APPROVAL**
- Dismiss patient

Important Codes

New Comprehensive Care Patient

D0150 - Comprehensive Oral Evaluation
D0470 - Diagnostic Casts
D0210 - Intraoral Complete Series
D0080 - Perio Exam / Initial
D0105 - Caries Risk Assessment (Initial)
D0050 - Medical / Dental History Narrative

Fill out the following forms:

Caries Risk Assessment
Medical History All Clinics
Oral Examination Form

General Treatment Planning Codes

Phase I:
D0047 - Treatment Plan Presentation
D1330 - Oral Hygiene Instructions
D1110 - Prophy - adult
D7140 - all extractions, unless surgical (impacted 3rd molars)
D6010E - Implant single tooth DMD clinic

First visit cores:
D1331 - Removal OHI
D0040 - Review, preventative
D0040B - Review, restorative
D0040C - Review, perio

Phase II:
D9950A - occlusion analysis non TMD
D6057 - custom abutment
D2752 - PFM noble metal crown - all crowns should be this
D6061 - PFM implant crown
D0041 - Completed care

LATIN PRESCRIPTION ABBREVIATIONS

Abbreviation (Latin Phrase)	Meaning
a.c. (ante cibum)	before meals
p.c. (post cibum)	after meals
h.s. (hora somni)	at bed time
q.AM.	every morning
q.PM.	every night
p.r.n. (pro re nata)	as needed
q.h. (quaque hora)	every hour
q.2.h. (quaque secunda hora)	every two hours
q.3.h. (quaque tertia hora)	every three hours
q.4.h. (quaque quarta hora)	every four hours
q.*x*.h. (quaque *x* hora)	every *x* hours
q.d. (quaque die)	every day
q.o.d. (quaque other die)	every other day
q.wk.	every week
q.mo.	every month
b.i.d. (bis in die)	twice a day
t.i.d. (ter in die)	3 times a day
q.i.d. (quater in die)	4 times a day
p.o. (per os)	by mouth
sig. (signa)	label(you write)
non rep. (ne repetatur)	do not repeat
ss. (semis)	one half
stat. (statium)	immediately
tab. (tabella)	tablet

General Treatment Planning Guidelines
Phase I
D0047 Treatment Plan Presentation
D1330 Oral hygiene instructions
D1110 Prophy- adult
Any emergency treatment to alleviate pain comes first. This could be extractions or it could be a root canal.
Extractions: all extractions should be coded as D7140, unless it's obviously going to be a surgical extraction (horizontally impacted 3rd molars, etc.)
Ridge Preservation/Bone Grafts
D6010E Implant single tooth DMD clinic
Fillings & Cores
D1331 Reinstruct OHI
D1110 Prophy-adult
D0040 Review, Preventive
D0040B Review, Restorative
D0040C Review, Perio
Phase II
D9950A Occlusion analysis non tmd
D6057 Custom Abutment
Crowns: all crowns should be noble metal crowns (PFM noble metal crown= D2752). There are different codes for regular crowns on a prepared tooth & implant crowns (PFM implant crown= D6061).
RPDs or CDs
D0040 Review, Preventive
D0040B Review, Restorative
D0040C Review, Perio
D0041 Completed Case

Your First Visit with a New Comprehensive Care Patient
You will enter the following codes (just chart add it):
D0150 Comprehensive Oral Evaluation
D0470 Diagnostic Casts
D0210 Intraoral-complete series
D0080 Perio Exam/Initial
D0105 Caries Risk Assmt (Initial)

Tx Plan Examples

Conventional CD/CD

D0047 Tx plan presentation
D5110 CD Max.
D5120 CD Mand.
D0010A Master Impression
D0010B Jaw Relation Record
D0010C Wax Try-in
D0040 Completed Case

CD/CD with Extractions & Interim CD

D7140 Extraction
D7310 UR Alveoplasty w/ext
D7140 Extraction
D7310A UL Alveoplasty w/ext-tuberosity reduc
D5810 Mx. Interim CD
D5850 Mx. CD Max. Tis. Cond
D5850 Mx. CD Max. Tis. Cond.
D5110 Mx. CD Max.
D5120 Md. CD Mand.

CD/OD with 2 Implants

D5110 Complete Denture – maxillary
D5120 Complete Denture – mandibular
D6053 Mand. Implant retained CD (implants in place at time of Tx.Pl)
D6190A Radiographic /Surgical Implant Index
D0360 Cone beam ct – craniofacial
D6010E 22 Implant single tooth dmd clinic
D6010E 27 Implant single tooth dmd clinic
D5851 Tissue Conditioning –Mand
D5851 Tissue Conditioning – Mand
D5751 Reline Complete Mand. Denture (Lab fabricated) (If indicated)
D6056 22 Prefabricated Abutment
D6056 27 Prefabricated Abutment
D5862A 22 Locator
D5862A 27 Locator
D6080 Implant maintenance Procedure

From: **Francis John Firriolo** john.firriolo@louisville.edu
Subject: IMPORTANT information for MEDICAL CONSULTS
Date: June 28, 2012 10:37 AM
To: Dental DMD Class of 2014 Dental-DMD-Class-of-2014@LISTSERV.LOUISVILLE.EDU

Students:

Attached are 2 documents for your use that contain important information regarding:
- deciding if a medical consult is needed for your patient;
- the required format for medical consultations (i.e., things you need to include in every medical consult);
- an example of an initial medical history narrative for a dental patient (you should use this as a guide for when you write a medical history narrative for your own patients);
- things you should know and do before you speak to Drs. Hupp, Firriolo or Ms. Hayden about reviewing a medical consult and/or getting a medically compromised patient approved to proceed with dental treatment.

Also remember a copy of the most recent (10-10-11) version of the "U.L.S.D. Oral Medicine Clinical Patient Management and Medical Consultation Guidelines" is available in the clinic by clinking the "Links" menu tab in Axium.

Also, as specified in the attached document, ALL medical consults must include:
- **A list of all the patient's current medical problems and pertinent past medical history** (e.g., MI, stroke, CABG surgery, etc.)*
- **A list of all the patient's current medications (list drug names and doses)***

***Note*: This means ALL the patient's current medical problems and medications and NOT just the ones relating to why the consult is being sent (e.g., status of diabetes).**

There are no exceptions to this requirement (except in the case of consults regarding antibiotic prophylaxis for prosthetic joints). Failure to adhere to this policy may result in a failing grade on an Oral Medicine Faculty Consult / Patient Review Competency Exam, or 5 points being deducted from your final average in the Clinical Diagnosis course.

F. John Firriolo, DDS, PhD
Professor of Oral Medicine
Director, Division of Oral Medicine
University of Louisville, School of Dentistry
501 South Preston St. -- Room 015
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Armamentarium

Prophy/ SRP:

Before seating pt:

-Barriers, extra bag, sheet

-Gown

-Prophy cup, prophy paste, toothbrush, tooth paste, floss, plaque index tabs

-BP Cuff, mirror, Safety glasses, Prophy kit, Chlorohexidine

-Check out cavitron

-Forms if it is a competency

Vitals, Med history

-Get them to sign and then pick up from window: Anesthesia form, Rx prevident?, maybe Tylenol for SRPs)

Start check

-Plaque index->have them check-> OHI-> have them sign form

-Anesthesia-> SRP-> note->swipe

ALWAYS ASK FOR COMPOSITE KIT IF UNSURE IF YOU ARE GOING TO DO AMALGAM OR COMP (COMP Kit comes with etch and bond, essex guide)

Amalgam restoration:

Before seating pt:

-Barriers, extra bag, sheet

-Gown

-Amalgamator

-Forms (purple if prereq) others if comp

-Floss, articulating paper, matrix band, sand paper, amalgam, rubberdam

-WINDOW: BP cuff, safety glasses, operative kit, friction grip, etch and bond, amalgam polishing? If you need base and liner (Glass ionomer)?

Vitals, med history

- Get them to sign and then pick up from window:

Anesthesia form

Start check:

-Anesthesia, rubber dam, Operative (have them check rubberdam, caries removal, occlusion, articulating paper.)-> note->swipe

Composite restoration:

Before seating pt:

-Barriers, extra bag, extra sheet

-Gown

-Curing light

-Forms (purple if prereq) others if comp

-Floss, articulating paper, matrix band, mylar strip, sand paper, anything to polish (pogos, sandpaper disc, etc.), rubber dam

-WINDOW: BP cuff, safety glasses, operative kit, friction grip, etch and bond, essex color, composite. If you need base and liner (glass ionomer).

Vitals, med history

Get them to sign and then pick up from window: Anesthesia form

Start check:

-Check shade first and go get composite first. Anesthesia, rubber dam, Operative (have them check rubberdam, caries removal, occlusion, articulating paper.)->note->swipe

What you can get from the dispensary :

Always get:

-Kit (Exam kit, Prophy kit, operative kit, RPD/CD kit, TMD kit)
-Blood pressure cuff, eye wear, mirror

Also offered:

-Torch, Bunsen burner, hot plate (For occlusal rim adjustments)
-Prescription forms
-Fridgadent (for cold test)
-Anesthesia
- RPD surveyor
-Regisile
-Composite W/ shade guide ( )
-Individual instruments
-Acrylic (for temporary)
-Integrity (for temporary)

What you can get in the clinic:

-Grade/step forms, Post-op instructions (extractions, teeth whitening, etc)
- Impression material and impression trays, rope wax
-Mirror, cotton, gauze, q-tips
-Tooth brush, tooth paste, floss
-Composite polishing disc (Blue, black, green white)
-Pogo
- Sandpaper strips
-matrix bands
-Mylar strips
-Amalgam
-Articulating paper

-PIP (Pressure indicator paste) for adjustments of CD or RPD
- container to hold denture/ occlusal guards

What you can get in the south lab:

-Facebow (hanua or whipmix)
-Articulator (hanua or whipmix)
-RPD surveyor
-Torch, Bunsen burner, hot plate
-Individual instruments

If doing restoration:

Dispensary:

-Blood pressure cuff, eye wear, mirror
-Operative kit
-Friction grip
-Get Dr. to sign anesthesia form and go to dispensary
-Esthetic shade guide (if using composite)
-Composite

Clinic:

-Rubber dam (punch holes)
-Amalgam
-Matrix bands, mylar strips
-Articulating paper
- Polishing stuff for composite:
    -Disc (Blue, black, green, white)
    -Pogo's
    -Sand paper strips
-or
-Polishing stuff for amalgam:
    -

Armamentarium for various pros procedures

Examination

Mouth Mirror or exam kit
Saliva ejector

Primary Impressions

Bowl,
spatula,
reg. set alginate,
try-in tray set,
impression trays of all sizes,
White or dead soft blue Rope wax,
Prosthetic Tray set- up
buffalo knife,
35 cc syringe,
Cheek retractors
Measuring device for alginate,
scoop for alginate,
very small amt. of Vaseline on tongue blade or sm corregated cup,
saliva ejector
patient napkin
2x2 gauze to clean face
Cup w mouthwash

Custom Tray Construction

Mask for patient & safety glasses
Bard Parker red handled knife and blade
Triad units in room 146, 111, and 137
Surveyor to determine undercuts
Triad material (2-3 pieces per student)
Vaseline in lab
Tin foil
Baseplate Wax for relief (2 sheets per student)
Wax Spatulas #11 and ##7
Slow speed Handpiece with straight cone attachment
Acrylic resin burs & lathe accessories (rag wheels, large felt points, etc.)
Medium grade pumice (only if roughened damaged surface)
Acryluster (only if absolutely necessary)
Roller board with roller
Wax coated paper cup for mixing
Tongue blade for mixing or spatula from in instrument kit
Arbor Band and attachments on lathe

Acrylic Resin liquid and Powder if using acrylic for lower.
Hanau Torch with Alcohol
Bunsen Burner

Master Impressions

Custom trays that you made
Slow speed handpiece with straight cone
Lathes in Lab with Very Large Acrylic Bur or stone wheels to Trim trays.
Pencil to mark trimming lines on tray
Bunsen Burner
Hanau Torch & Alcohol
Matches/fire starter
Green or Grey Stick Compound 3 sticks each (pos. more)
Water Baths with thermometer to control temp.
Bard parker blade for red handle.
Prosthodontic set up tray
Tray Adhesive to match Impression Material (polyether or pvs)
Impression Material
Saliva ejector
Large oriface saliva ejector
Patient napkin
Vaseline on 2 x 2 gauze to clean patient's face, corners of mouth
Salt packets available at dispensary for Gag reflex
Cetacaine spray avail at dispensary for Gag reflex if salt does not work
Cup with small amount of mouthwash to rinse mouth
2x2 or 4x4 gauze to dry mouth prior to impresssion
Paper towel for patient to wipe off hands and /or face
Prosthetic Tray set-up

Box and Pour Master Impression

Sticky Wax 1 stick
Rope Wax 2 ropes (pos. 3)
#7 or #11 spatula
Boxing Wax (Prefer the thin red) (2 per arch = 4)can use soft baseplate wax also
Yellow quick stone 2 pkgs per arch = 4 pkg.
Pumice 1 pkg to mix with labplaster 1 pkg
Millimeter ruler
Rubber band
Mixing bowl
Measurers for liquid
Spatula
Rubber band
Buffalo knife

Burs to make indexes in casts
Model trimmers

Construct Record Bases

Slowspeed handpiece with straight cone
#11 and #7 Spatula
Acrylic Burs (# 10 Round long shank also)
2 Triad Sheets for maxillary (depends on size of patient
Acrylic Resin if tray is to be made of acrylic resin (mandibular)
Sticky Wax
Baseplate Wax 4 Sheets
Bunsen Burner
Hanau Torch & Alcohol
Matches or flint
Hot Plate
Millimeter ruler

Making Jaw Records

Prosthodontic Tray Set Up
Waxing Instruments #11 & #7 Spatulas
Dr. Thompsons Color transfer sticks (3 ea)
Slow speed handpiece w straight cone
Acrylic resin burs
Buffalo knife
Cleoid Discoid
Tongue Blade
Pen to mark VDO on tongue blade and on nose
Alcohol torch
Bunsen Burner
Matches or flint
Alcohol on gauze at end of procedure to remove dots on nose
Green Stick or Grey Stick Compound 2 sticks
Hot Plate
Fox Plane
Papillometer (Ivoclar) (optional) measures distance from vestibule to edge of rim (11 to 21)
Facebow Apparatus & components including bite fork
Water Bath w thermometer (140)
Paper toweling in bottom of water bath.
Red Compound wafer
Vaseline or lubricant for Hanau Torch
Vaseline for records to prevent sticking
Articulator

Select Teeth

Shade guide- Dentsply Classic Shade Guide (interims), Dentsply IPN Shade guide (permanent or final CD's), Ivoclar Shade guide Blueline (temporary or permanent)
Mold Boards Dentsply **Classic Teeth** (interims) Dentsply IPN (final CD's), Ivoclar BlueLine Teeth for permanent or Temp. CD's.
Tongue Blade
Face Mirrors
1 piece rope wax
millemeter ruler
Tooth Indicator Board for Dentsply or Ivoclar
Sheets that show teeth actual size and measurements
Gingival Shades. (ask Roys if we can have some more samples of Coe Lor colors for blk patient
Tooth Order Form
Ivoclar Tooth measurement guage to measure ala to ala of nose

Mount Case

Plaster to mount case 2 pkgs per arch
Hanau Articulator
Mounting plates
Mounting Rings
Prescription Pad sheet
Bowl
Spatula
Buffalo knife
Sandpaper or dense micro sponges at sinks to finish plaster

Wax Try In & Dixie Cup Transfer

Tongue Blade
Pen to mark patient
Green Stick Compound (if records off)
Bunsen Burner
Hanau Torch
Matches or flint
Waxing Instruments
Prosthodontic Set Up Kit
Mounting Plaster 2 pkgs
Paper cup for Dixie cup transfer
Plaster for the Dixie Cup Transfer
Vaseline to coat teeth
Bowl
Spatula
Slow handpiece with straight cone p(ossibly)
Acrylic resin burs
Hand Mirror

Soft Reline of Denture (either for tissue conditioning or functional impression

Acrylic Resin Burs (one deep cut resin bur to remove old Liner material)
Acrylic burs to adjust any sore spots
Pressure indicator paste (if denture adjustment indicated)
Wax lined paper cup in which to mix material
Spatula (lg. cement or plastic spatula provided with material or tongue blade(least desirable)
Lynal or Coe Soft kit
  Measure for liquid
  Measure for powder
  Separating medium or Vaseline
Bard Parker blade handle (red lab type)
Bard Parker blade # 25 or #20 for lab handle
Slow speed & straight cone attachment
1 cotton tip applicator
2 x 2 gauzes
Lathe equipment
  Gauze wheel for pumice
  Gauze wheel for acryluster
  Pumice
  Acryluster
Cup with mouthwash diluted with water
Napkin or paper towel
Patient napkin
Saliva ejector
Articulating paper & holder
Instructions on care

Radiographic Stent

Duplicate cast
Spare teeth to do wax up
Block out resin or wax
Vacuform .040 gauge plastic square
Vacuform machine
Buffalo separating disk or substitute
Slow speed handpiece with straight cone
Wax coated paper cup
Spatula or tongue blade for mixing
Ortho resin liquid and powder
Gutta percha
#8 or #10 long shank but

Essix Appliance

Shade guide if prosthetic teeth needed
Impression material (PVS if mailing) Alginate if home made
Yellow stone
Vaseline for indexes
Mounting materials (if needed)
- Mounting rings
- Mounting plaster
- Bowl
- Spatula

Triad machine
Laboratory putty (Sil Tech putty)
Teeth replacement
Vacuform machine
Triad block out resin or other blockout
Hanau Torch,
#7 Wax Spatula
scissors,
Acrylic resin burs for tooth retention
separating disk to remove it from canst
Essix material sheet
Polishing burs,
Wire brush available from
Sticky wax,
Superglue might be helpful
Articulation ribbon
Articulating paper holder

Mandibular Injections

Injection	Inferior Alveolar and Lingual	Buccal	Mental	Incisive	Gow-Gates
Area Anesthetized	IA: Mandibular teeth to midline (molars, premolars, caninces, central, lateral); body of the mandible, all buccal soft tissue except buccal area of molars Lingual: No teeth: Lingual gingiva of mandibular quadrant, anterior 2/3 of tongue and floor of mouth.	NO TEETH Soft tissues and periosteum buccal to molars.	NO TEETH Buccal soft tissues from mental foramen to midline and soft tissues of lower lip and chin	Teeth anterior to the mental foramen (premolars, canine, lateral and central)	Entire quadrant on mandible: All teeth, facial and lingual gingiva, soft tissues of lower lip and chin, anterior 2/3 of tongue, floor of mouth, auriculotemporal area
Needle	25 or 27 long	25 or 27 long because it follows IA	25 or 27 short	25 or 27 short	25 or 27 long
Landmarks	IA: The triangle formed by the haular notch, pterygomandibular raphe, and coronoid notch AND commissure on contralateral side (near contralateral PMs)	External oblique ridge and the 2nd molar; retromolar fossa.	Mental foramen, located between the two premolars (can be anterior or posterior to this site)	Same as mental	Mesiolingual cusp of the maxillary 2nd molar.
Insertion/ Penetration Site	IA: Slightly inferior of center of the triangle, 6-10mm above occlusal plane and parallel with it.	Mucobuccal fold distal and buccal to the last molar; parallel with occlusal plane	Mental foramen, between the apices of the 1st and 2nd premolars (in the mucobuccal fold)	Mental foramen, between the apices of the 1st and 2nd premolars (in the mucobuccal fold)	Height of mesioligual cusp of maxillary second molar. Penetration is distal to the maxillary second molar.
Depth of Penetration	2/3-3/4 the length of the long needle	3-6mm	4-8mm	4-8mm	25mm (3/4 the length of the long needle)
Deposition/ Target Site	IA: Directly above mandibular foramen Lingual: ½ distance of IA.	Medial to the oblique ridge and distal and buccal to last molar.	Behind or in front of the mental foramen.	Behind or in front of the mental foramen.	Neck of condyle.
Volume of Anesthetic Used	IA: 1.5-1.8mL (3/4-1 cartridge) Lingual: .25-.5mL (1/8 cartridge)	.25-.5ml (1/3 cartridge)	0.5-1.0ml (1/3-1/2 cartridge)	0.5-1.0ml (1/3-1/2 cartridge	1.8ml (1 cartridge)
Potential Complications/ Additional Considerations	Too far medially: Medial pterygoid trismus Too deep- facial nerve paralysis if deposited into parotid. Lingual zing if you hit the lingual nerve.	Uncomfortable if needle contacts periosteum	Possibility of hematoma	Possibility of hematoma; incisive nerve blocks teeth only, however the mental nerve will be anesthetized incidentally when this injection is administered.	Warn patient not to bite lip or tongue; longer onset time; wide area of anesthesia.

Please note: the mylohyoid nerve block, used in 3rd molar extractions after a + lip sign has been established with other injections but pain still persists, is performed by injecting lingual to the 2nd molar.

Maxillary Injections

Injection	Infiltration	ASA	MSA	Infraorbital	PSA	Greater Palatine	Nasopalatine
Area Anesthetized	Tooth, periosteum and buccal soft tissue in entire area innervated by that nerve branch.	Teeth: centrals, laterals, canines. Periosteum and facial soft tissue.	Maxillary premolars, MB rooth of max 1st, periosteum and buccal soft tissue of the same area.	Max central to MB rooth of 1st molar, periosteum, bucca soft tissue of same area, lower eyelid, lateral aspect of nose and upper lip	1st, 2nd and 3rd max molars (except MB rooth of max 1st), periosteum and buccal soft tissue of same area	NO TEETH. Hard palate and lingual tissue posterior to 1st premolar and medial to midline.	NO TEETH. Anterior 13 of hard palate, lingual tissues from canine to canine.
Needle	27 or 30 short	27 short	27 short	25 or 27 long	27 short	27 or 30 short	27 or 30 short
Landmarks	Mucobuccal fold above tooth being anesthetized	Canine Fossae, between the lateral and canine	Maxillary premolars	Infraorbital notch; infraorbital foramen	Zygomatic process, corner of mouth	Dimple in hard palate medial to 2nd molar.	Maxillary centrals, incisive papilla.
Insertion/ Penetration Site	Height of mucobuccal fold apical to the tooth being anesthetized	Height of MB fold in area of lateral incisor and canine.	Height of MB fold over maxillary 2nd premolar.	Height of mucobuccal fold over max 1st premolar.	Height of mucobuccal fold distal to the second molar, 45* angle from the occlusal plane (to stay near bone)	Anterior to the dimple, usually, ½" to DL cusp of 2nd molar.	Incisive papilla
Depth of Penetration	3-5mm	10-15mm.	10-15mm	16mm (½ the length of the long needle)	15-20mm (3/4 the length of the needle)	3-5mm	3mm
Deposition/ Target Site	Apex of tooth	Mesial to apex of maxillary canine.	Over apex of 2nd premolar.	Directly over infraorbital foramen.	Posterior, superior and medial to maxillary tuberosity; 45* angle to occlusal plane, 45* angle to midsagittal	Slightly anterior to the greater palatine foramen (dimple)	Incisive papilla.
Volume of Anesthetic Used	1.0-1.8L (1/2-1 cartridge	1.0-1.2ml (1/2-2/3 cartridge)	1.0-1.2ml (1/2-2/3 cartridge)	1.2ml-1.5 ml (2/3-3/4 cartridge)	1.0 mL (1/2 cartridge)	0.45mL (1/4 cartridge)	0.2-0.45ml (1/8-1/4 cartridge)
Potential Complications/ Additional Considerations	Not effective on mandible due to dense cortical bone. Not suitable for large areas because of multiple needle insertions and volume of anesthetic needed.	Pain if periosteum is scraped. Ballooning of tissue possible. Additional infiltration over centrals may be required do to overlap.	Pain if periosteum is scraped. Ballooning of tissue possible.	Psychological fear of eye injury, palpitation may be uncomfortable.	Mandibular anesthesia arises if anesthesia is deposited too far laterally. ALWAYS ASPIRATE, as plexuses of veins anastomose here.	Be sure to get the entire bevel into the tissue. Apply cotton tip applicator with pressure during the injection and remove it after the needle is in (takes away perception of pain).	Painful.

PERIO

1) OHI
2) PROPHY
3) RECALL (4-6 MONTHS)

TX PLAN:
1) OHI
2) SRP (location)
3) Reval 4-6 weeks

MOBILITY:

CLASS 0
1 <1mm BL/MD Direction
2 >1mm " , NO Apical movement
3 " AND Apical Movement

FURCATION:

Class I Depression that doesn't catch probe
II Probe catches, but not contiguous
III Bone loss through-through, covered by gingiva
IV " " , GM below furcation

DIAGNOSIS: Ex: Generalized Slight/Mod Chronic Periodontitis

	SLIGHT	MOD	SEVERE
ATTACH LOSS / BONE LOSS	1-2mm Horizontal	3-4 Horizontal	5+ Horizontal/Vertical
PD	3-4	5-6	>7
FURCATION	NONE	Class I, II	Class II, III
MOBILITY	NONE	Class I	Class II, III

GINGIVITIS: No Attachment Loss

B/w maintainable with recession OR ON A REDUCED PERIODONTIUM

PROGNOSIS:

GOOD
FAIR CAL minimal B/w Class I Furcation
POOR Moderate CAL, Class II Furcation maintainable
QUES Severe CAL, Class II, III Furcation, Mob >2
HOPELESS

Ask:

Location, Intensity, Character, Frequency, Spontaneous, Provoking Factors, Duration

Look:

Asymmetry, Swelling, Lymphadenopathy

Heat - use gutta percha or compound

False neg - calcification, immature apex, trauma, analgesic

Pulp

Normal

Reversible pulpitis - irritated but quickly stops

Symptomatic Irreversible pulpitis - spontaneous pain, prolonged pain to cold etc. (sharp or dull), may have thick PDL

Asymp Irr pulpitis - may become symp or necrotic
- hyperplastic pulpitis
- internal resorption

Necrotic Pulp - only may feel heat (ice bag on face)
- thick PDL or periapical radiolucency

Perio

Periradicular Periodontitis

Acute - very painful to percussion, may be +/- to test, widened PDL but no periradicular radiolucency

Chronic - no symptoms, no response to test, periradicular radiolucency

Periradicular Abcess

Acute - painful to percussion + palpation, not respond to vitality test, may move, widened PDL or radiolucency, may have adjacent swelling, may have fever + tender lymph nodes

Chronic - no symp, periradicular radiolucency, DRAINAGE thru sinus tract

PERIODONTAL PROGNOSIS

- A prognosis may be quite different depending on whether or not treatment is delivered For example, a restored carious lesion has an excellent prognosis while an unrestored lesion has a poor prognosis

- An accurate prognosis assists the operator and the patient in deciding on an Acceptable treatment plan

- Prognosis is based on clinical experience rather than on hard research evidence. Experience is invaluable

The overall prognosis depends on the following:

1. Type of Periodontitis
2. Patient's age
3. Smoking
4. Malocclusion
5. Systemic Background
6. Cooperation of Patient
7. Genetics

Prognosis for Individual Teeth

1. Mobility
2. Periodontal Pockets
3. Mucogingival Problems
4. Furcation Involvement
5. Tooth Morphology
6. Teeth Adjacent to Edentulous Area
7. Relation to Adjacent Teeth
8. Caries, Nonvital Teeth, and Tooth Resorption

- The following guidelines are based on a considerable amount of clinical experience and are used in determining an accurate prognosis:

Prognosis:

Good = Adequate periodontal support and ease of maintenance

Fair = CAL minimal and/or Class I Furcation (maintainable)

Poor = Moderate CAL, Class 1 – 2 furcations that are maintainable but with difficulty

Questionable = Severe CAL, Class 2 – 3 furcations with poor maintainability, Mob > 2

Hopeless = Inadequate attachment to maintain tooth for health, comfort and/or function

OHR Guidelines

* From Fixed Prosth Manual pg 4

3. Porcelain or composite laminate veneers where occlusal and/or incisal plane is not to be altered, and where concurrent surgical intervention is not indicated
4. Foundation and definitive restoration of endodontically treated teeth
5. Routine and complex operative dentistry
6. Micro-abrasion and diastema closures with composite resins, and ceramic materials
7. Esthetic dentistry procedures
8. Non-complicated three unit prostheses

Indications for Fixed Prosthodontic Treatment in the Oral Health and Rehabilitation clinics would include:

1. Patients with TMD/occlusal disharmony. This is relevant when fixed prosthodontic treatment cannot be undertaken without first addressing of the TMD/occlusal disharmony. Examples for this category would include patients exhibiting attrition, erosion and abrasion, in addition to patients with parafunctional habits.
2. Completely or Partially Edentulous patients exhibiting any, or a combination of the following characteristics and requiring a fixed dental prosthesis (single or multiple unit)
    a. Restricted interocclusal space or less than ideal 'neutral zone'
    b. Skeletal Angle Class II maxillo-mandibular relationship
    c. Inability to repeatedly identify centric relation when required for treatment
    d. Occlusal plane disharmony and or complex identification of indicated incisal and/or occlusal plane
    e. Diagnosed VDO discrepancies requiring treatment as part of plan
    f. Combined fixed and removable procedures in any one arch
3. Three or more single crowns proposed in any one quadrant (inclusive of tooth and implant supported units)
4. Any FPD (implant or tooth borne) in excess of three units
5. Adjacent crowns in the esthetic zone or for an esthetically demanding patient
6. Adjacent missing teeth in the esthetic zone or for esthetically demanding patients
7. Fixed multiple unit restorations involving maxillary canines (or alternative teeth providing guidance)
8. Any patient(s) for whom treatment is considered beyond the student and or group as determined by group manager(s)

PREREQUISITE:

The School of Dentistry has adopted The Code of Professional Responsibility and The Professional Decorum Policy, which will be strictly enforced in this course. All students participating in this course should familiarize themselves with the content and intent of these documents in order to fully conform to stated requirements.

Student must successfully complete the Pre-clinical Fixed Prosthodontics course, Introduction to

ULSD Clinical Fixed Prosthodontics

Evaluation Criteria For

Competency Evaluation

Pre-op

THE FOLLOWING CLINICAL INDICATIONS IN THE FIXED PROSTHODONTIC MAY REQUIRE THE OHR AND/OR GRADUATE PROSTHOSDONTIC CONSULTATION:

1. Patients with TMD/occlusal disharmony. This is relevant when fixed prosthodontic treatment cannot be undertaken without first addressing of the TMD/occlusal disharmony. Examples for this category would include patients exhibiting attrition, erosion and abrasion, in addition to patients with parafunctional habits.

2. Completely or Partially Edentulous patients exhibiting any, or a combination of the following characteristics and requiring a fixed dental prosthesis (single or multiple unit)

    a. Restricted interocclusal space or less than ideal 'neutral zone'
    b. Skeletal Angle Class II maxillo-mandibular relationship
    c. Inability to repeatedly identify centric relation when required for treatment
    d. Occlusal plane disharmony and or complex identification of indicated incisal and/or occlusal plane
    e. Diagnosed VDO discrepancies requiring treatment as part of plan
    f. Combined fixed and removable procedures in any one arch

3. Three or more single crowns proposed in any one quadrant (inclusive of tooth and implant supported units)

4. Any FPD (implant or tooth borne) in excess of three units

5. Adjacent crowns in the esthetic zone or for an esthetically demanding patient

6. Adjacent missing teeth in the esthetic zone or for esthetically demanding patients

7. Fixed multiple unit restorations involving maxillary canines (or alternative teeth providing guidance)

8. Any patient(s) for whom treatment is considered beyond the capacity of DMD students as determined by group manager(s)

Pre-Op

	Test	Excellent	Clinically Acceptable	Standard Not Met
Mounted Diagnostic Casts	**1. Negatives/voids**	- none present on occlusal or axial surfaces	- none present on functional occlusal surfaces - small and infrequent voids on non-functional occlusal surfaces or axial surfaces	- any void on functional occlusal surfaces - large or numerous voids on all other surfaces
	2. Positives/blebs	- none present on occlusal or axial surfaces	- none present on occlusal surfaces - small and infrequent positives on axial surfaces	- any positive on functional occlusal surfaces - large and frequent positives on axial surfaces
	3. Extension	- all teeth, surrounding tissues, and vestibule present; - cast trimmed to follow arch form and occlusal table parallel to cast base	- all occlusal surfaces present, but portions of axial tooth surfaces, surrounding tissues, or vestibule absent	- any portion of occlusal surfaces trimmed from cast
	4. Distortion	- no distortion evident		- any evident distortion
	5. Neatness	- cast clean, free of slurry	- scratches or gouges on non-occlusal surfaces	- cast dirty, slurry present, scratches or gouges on occlusal surfaces
	6. Occlusal relationship	- same as patient (confirmed with shimstock in 3 locations)		- occlusal mal-relationship
	7. Neatness	- mounting plaster smooth, flush with cast and mounting plate - articulator is clean, free of plaster/stone and debris	- mounting plaster rough, flush with cast and mounting plate - articulator is clean, free of plaster/stone and debris	- mounting plaster rough, overlapping cast and mounting plate - plaster/stone/debris on articulator - articulator does not move freely
Diagnostic Wax-up	**1. Anatomy**	- 1° and 2° anatomy present (Posterior) - 1° anatomy present (Anterior)	- 1° anatomy present only (posterior)	- 1° anatomy lacking
	2. Surface Topography	- smooth	- catches, scratches, or irregularities	- pits, gouges, or cracks
	3. Esthetic Harmony	- Wax-up are contoured correctly, harmonious with adjacent teeth	- Wax-up are moderately over/under contoured	- Wax-up are extremely over/under contoured

Custom Trays

The following cases are required to use custom tray for impression taking:

a. Fixed partial denture (bridge)

b. Multiple units (2 or more single crowns in the same impression)

c. The abutment tooth is the most distal tooth in the arch, even it's a single restoration.

d. Anatomic limitations. (eg. Extremely large or small arches, tori, bony undercut.)

e. Survey crown(s).

f. Polyether impressions.

The custom trays need to be checked by the group manager (if the treatment is rendered in general clinic) or OHR covering faculty (if the treatment is rendered in OHR) at least 24 hours prior to your appointment with patient. The fixed step card needs to be submitted with your diagnostic cast, custom tray, and the faculty will sign off your step card after checking the lab work.

Custom Tray

	Test	Excellent	Clinical Acceptable	Standard Not Met
Tray Design	**1. Tray Rigidity**	- tray is rigid		- tray is non-rigid (flexible)
	2. Tray Thickness	- uniform 2 – 3 mm in thickness	- non-uniform thickness (too thin or thick in areas)	- too bulky to place in patient's mouth - tray is perforated
	3. Clearance	- uniform 2 – 3 mm clearance	- non-uniform clearance present	- greater than 3 mm clearance - contact between teeth and tray (other than stops)
	4. Gingival Extension	- 3 – 5 mm extension cervical to gingival margin in area of prepared teeth/implants	- 3 mm extension cervical to gingival margin in area of prepared teeth/implants	- extension is at or occlusal to the gingival margin in the area of prepared teeth/implants
	5. Posterior Extension	- tray extends 3 mm beyond most distal tooth		- tray is short of most distal tooth - tray extends/overlaps beyond distal tooth onto side of cast
Tissue Stops and Stability	**6. Stop Location**	- stops on non-centric cusps/inclines		- stops are on centric cusps/inclines
	7. Stop Location	- stops are not located in the area of the tooth preparation/implant		- stops are located in the area of the tooth preparation/implant
	8. Stability	- tray is stable - 3 – 4 stops present		- tray is not stable - less than 3 stops, no stops present
External Finish	**9. Smoothness**	- smooth with no sharp edges	- minor scratches, irregularities	- dirty - rough and/or sharp edges

Anterior All-Ceramic Crown/Retainer Preparation

	Test	Excellent	Clinically Acceptable	Standard Not Met
Incisal and Lingual Reduction	**1. Morphologic Reduction** visual comparison to contralateral tooth putty, cingulum height & contour	- follows original tooth contour	- approximates original tooth contour	- lacks relation to original tooth contour
	2. Lingual Clearance MI, ball burnisher, flexible clearance guide	- uniform 1.2 - 1.5 mm clearance - follows lingual tooth contour	- ≥ 0.8 or ≤ 2.0 mm clearance - approximates lingual tooth contour	- < 0.8 or > 2.0 mm clearance - lacks relation to lingual tooth contour
	3. Incisal Reduction Putty matrix & perio probe,	- uniform 2.5 mm reduction	- ≥ 2.0 or ≤ 3.0 mm reduction	- < 2.0 or > 3.0 mm reduction
Axial Wall Reduction	**4. Secondary Plane Reduction** putty matrix & perio probe	- facial 2-plane follows tooth contour - 1.7 mm at incisal facial	- facial 2-plane slightly irregular - ≥ 1.5 or ≤ 2.0 mm at incisal facial	- facial 2-plane not evident or over-reduced - < 1.5 or > 2.0 mm at incisal facial
	5. Taper perio probe, visual	- axial wall 3° - 10°	- axial wall > 10° or < 20°	- axial wall ≤ 3° or ≥ 20°
	6. Undercuts explorer, visual & tactile inspection	- no undercuts		- undercut > 0.2 mm or at margin
	7. Draw perio probe, explorer, mirror, adjacent teeth	- parallel with path as predetermined in diagnostic preparations	- placement of restoration possible but not parallel with diagnostic preparations	- placement of restoration not possible
Marginal Reduction	**8. Vertical Position** perio probe, 360° around preparation	- at clinically specified position (0.5 mm supragingival +/- 0.4); consistent with retention, health, and aesthetics	- more gingival or incisal - varying >/= 0.5 mm from desired height - equigingival, to < 1.4mm supragingival	- subgingival or - varying >/= 1.5 mm supragingival
	9. Horizontal Configuration 8847KR.016, 360° around preparation	- modified shoulder/heavy chamfer - 1.0 - 1.2 mm	- modified shoulder/heavy chamfer - ≥ 0.75 or ≤ 1.5 mm	- modified shoulder/heavy chamfer - < 0.75 or > 1.5 mm - sharp internal angle
	10. Interproximal Clearance perio probe tip passes without binding	- sufficient for saw blade, ≥ 0.5 mm		- < 0.5 mm
Axial & Margin Finish	**11. Surface Smoothness** explorer, feels like 8847KR.016, esp. margin	- fine diamond texture	- catches with explorer tip	- horizontal or vertical steps
	12. Surface Transitions visual & tactile, axio-incisal line/point angles	- rounded		- too rounded (compromise retention) - sharp
	13. Tissue Management explorer, visual & tactile inspection	- adjacent hard and soft tissues intact	- adjacent hard and soft tissues abraded	- adjacent tooth requires restoration or soft tissues lacerated

Anterior Metal-Ceramic Crown/Retainer Preparation

	Test		Excellent	Clinically Acceptable	Standard Not Met
Incisal and Lingual Reduction	**1. Morphologic Reduction** visual comparison to contralateral tooth putty, cingulum height & contour		- follows original tooth contour	- approximates original tooth contour	- lacks relation to original tooth contour
	2. Lingual Clearance MI, ball burnisher, flexible clearance guide		- uniform 1.0 mm clearance for metal *or* - uniform 1.5 mm clearance for porcelain	- ≥ 0.5 or ≤ 1.5 mm clearance for metal *or* - ≥ 1.0 or ≤ 2.0 mm clearance for porcelain	- < 0.5 or > 1.5 mm clearance for metal *or* - < 1.0 or > 2.0 mm clearance for porcelain
	3. Incisal Reduction putty & perio probe		- uniform 2.5 mm reduction	- ≥ 2.0 or ≤ 3.0 mm reduction	- < 2.0 or > 3.0 mm reduction
Axial Wall Reduction	**4. Secondary Plane Reduction** putty matrix & perio probe		- facial 2-plane follows tooth contour - 1.7 mm	- facial 2-plane slightly irregular - ≥ 1.5 or ≤ 2.0 mm	- facial 2-plane not evident or over-reduced - < 1.5 or > 2.0 mm
	5. Taper perio probe, visual		- axial wall 3° - 10°	- axial wall > 10° or < 20°	- axial wall ≤ 3° or ≥ 20°
	6. Undercuts explorer, visual & tactile inspection		- no undercuts		- undercut > 0.2 mm or at margin
	7. Draw perio probe, explorer, mirror, adjacent teeth		- parallel with path as predetermined in diagnostic preparations	- placement of restoration possible but not parallel with diagnostic preparations	- placement of restoration not possible
Marginal Reduction	**8. Vertical Position** perio probe, 360° around preparation		- at clinically specified position (0.5 mm supergingival +/- 0.4); (0.1 – 0.9 mm); consistent with retention, health, and aesthetics	- more gingival or incisal - varying >/= 0.5 mm from desired height - equigingival, to < 1.4mm supergingival	- subgingival or - varying >/= 1.5 mm supergingival
	9. Horizontal Configuration 8847KR.016, facial margin 6878K.016, lingual margin	facial	- modified shoulder/heavy chamfer - 1.0 - 1.2 mm	- modified shoulder/heavy chamfer - ≥ 0.75 or ≤ 1.5 mm	- modified shoulder/heavy chamfer - < 0.75 or > 1.5 mm - sharp internal angle
		lingual	- light chamfer - 0.5 mm	- light chamfer - ≥ 0.2 or ≤ 1.0 mm	- shoulder or knife edge - < 0.2 or > 1.0 mm
	10. Interproximal Clearance perio probe tip passes without binding		- sufficient for saw blade, ≥ 0.5 mm		- < 0.5 mm
Axial & Margin Finish	**11. Surface Smoothness** explorer, feels like 8847KR 016, esp. margin		- fine diamond texture	- catches with explorer tip	- horizontal or vertical steps
	12. Surface Transitions visual & tactile, axio-incisal line/point angles		- rounded		- too rounded (compromise retention) - sharp
	13. Tissue Management explorer, visual & tactile inspection		- adjacent hard and soft tissues intact	- adjacent hard and soft tissues abraded	- adjacent tooth requires restoration or soft tissues lacerated

Posterior Metal-Ceramic Crown/Retainer Preparation

	Test		Excellent	Clinically Acceptable	Standard Not Met
Occlusal Reduction	**1. Morphologic Reduction** visual comparison to contralateral tooth		- follows original tooth contour	- approximates original tooth contour	- lacks relation to original tooth contour
	2. Functional Cusp Clearance MI, ball burnisher, flexible clearance guide		- uniform 2.0 mm clearance (porcelain) - uniform 1.5 mm clearance (metal)	- ≥ 1.5 mm or ≤ 2.5 mm clearance (porcelain) - ≥ 1.0 mm or ≤ 2.0 mm clearance (metal)	- < 1.5 mm or > 2.5 mm clearance (porcelain) - < 1.0 mm or > 2.0 mm clearance (metal)
	3. Non-Functional Cusp Reduction MI, ball burnisher, flexible clearance guide putty matrix & perio probe		- uniform 2.0 mm clearance (porcelain) - uniform 1.0 mm clearance (metal)	- ≥ 1.5 mm or ≤ 2.5 mm clearance (porcelain) - ≥ 0.5 mm or ≤ 1.5 mm clearance (metal)	- < 1.5 mm or > 2.5 mm clearance (porcelain) - < 0.5 mm or > 1.5 mm clearance (metal)
	4. Functional Cusp Bevel Clearance MI, ball burnisher, flexible clearance guide putty matrix & perio probe		- uniform 2.0 mm clearance (porcelain) - uniform 1.5 mm clearance (metal) - FC bevel follows tooth contour	- ≥ 1.5 mm or ≤ 2.5 mm clearance (porcelain) - ≥ 1.0 mm or ≤ 2.0 mm clearance (metal) - FC bevel slightly irregular	- FC bevel not evident (< 1.0 mm; metal) (< 1.5 mm; porcelain) - FC bevel over-reduced (> 2.0 mm; metal) (> 2.5 mm; porcelain)
Axial Wall Reduction	**5. Secondary Plane Reduction** putty matrix & perio probe		- facial 2-plane follows tooth contour - 1.7 mm	- facial 2-plane slightly irregular - ≥ 1.5 or ≤ 2.0 mm	- facial 2-plane not evident or over-reduced - < 1.5 or > 2.0 mm
	6. Taper perio probe, visual		- axial wall 3° - 10°	- axial wall > 10° or < 20°	- axial wall ≤ 3° or ≥ 20°
	7. Undercuts explorer, visual & tactile inspection		- no undercuts		- undercut > 0.2 mm or at margin
Margin Reduction	**8. Vertical Position** perio probe, 360° around preparation		- at clinically specified position (0.5 mm supergingival +/- 0.4); (0.1 – 0.9 mm); consistent with retention, health, and aesthetics	- more gingival or incisal - varying >/= 0.5 mm from desired height - equigingival, to < 1.4mm supragingival	- subgingival or - varying >/= 1.5 mm supragingival
	9. Horizontal Configuration 8847KR.016, 6878K.021; facial margin 6876K.016; lingual margin	Facial &/or proximal	- modified shoulder/heavy chamfer - 1.0 - 1.2 mm	- modified shoulder/heavy chamfer - ≥ 0.75 or ≤ 1.5 mm	- modified shoulder/heavy chamfer - < 0.75 or > 1.5 mm - sharp internal angle
		Lingual &/or proximal	- light chamfer - 0.5 mm	- light chamfer - ≥ 0.2 or ≤ 1.0 mm	- shoulder or knife edge - < 0.2 or > 1.0 mm
Axial & Margin Finish	**10. Interproximal Clearance** perio probe tip passes without binding		- sufficient for saw blade, ≥ 0.5 mm		- < 0.5 mm
	11. Surface Smoothness explorer, feels like 8847KR.016, esp. margin		- fine diamond texture	- catches with explorer tip	- horizontal or vertical steps
	12. Surface Transitions visual & tactile, axio-incisal line/point angles		- rounded		- too rounded (compromise retention) - sharp
	13. Tissue Management explorer, visual & tactile inspection		- adjacent hard and soft tissues intact	- adjacent hard and soft tissues abraded	- adjacent tooth requires restoration or soft tissues lacerated

All-Metal Crown/Retainer Preparation

	Test	Excellent	Clinically Acceptable	Standard Not Met
Occlusal Reduction	**1. Morphologic Reduction** visual comparison to contralateral tooth, putty matrix and opposing tooth	- follows original tooth contour	- approximates original tooth contour	- lacks relation to original tooth contour
	2. Functional Cusp Clearance MI, ball burnisher; flexible clearance guide	- uniform 1.5 mm clearance	- ≥ 1.0 mm or ≤ 2.0 mm clearance	- < 1.0 mm or > 2.0 mm clearance
	3. Non-Functional Cusp Reduction putty matrix & perio probe	- uniform 1.0 mm reduction	- ≥ 0.5 mm or ≤ 1.5 mm reduction	- < 0.5 mm or > 1.5 mm reduction
	4. Functional Cusp Bevel Clearance MI, ball burnisher, flexible clearance guide putty matrix & perio probe	- uniform 1.5 mm clearance - FC bevel follows tooth contour	- ≥ 1.0 mm or ≤ 2.0 mm clearance - FC bevel slightly irregular	- FC bevel not evident (< 1.0 mm) - FC bevel over-reduced (> 2.0 mm)
Axia WallI Reduction	**5. Taper** perio probe, visual	- axial wall 3° - 10°	- axial wall > 10° or < 20°	- axial wall ≤ 3° or ≥ 20°
	6. Undercuts explorer, visual & tactile inspection	- no undercuts		- undercut > 0.2 mm or at margin
	7. Draw perio probe, explorer, mirror, adjacent teeth	- parallel with path as predetermined in diagnostic preparations	- placement of restoration possible but not parallel with diagnostic preparations	- placement of restoration not possible
Margin Reduction	**8. Vertical Position** perio probe, 360° around preparation	- at clinically specified position (0.5 mm supragingival +/- 0.4); (0.1 – 0.9 mm); consistent with retention and health	- more gingival or incisal - varying >/= 0.5 mm from desired height - equigingival, to < 1.4mm supragingival	- subgingival or - varying >/= 1.5 mm supragingival
	9. Horizontal Configuration 6878K.016, 360° around preparation	- light chamfer - 0.5 mm	- chamfer under reduced or over reduced - ≥ 0.2 or ≤ 1.0 mm	- shoulder or knife edge - < 0.2 or > 1.0 mm
	10. Interproximal Clearance perio probe tip passes without binding	- sufficient for saw blade, ≥ 0.5 mm		- < 0.5 mm
Axial & Margin Finish	**11. Surface Smoothness** explorer, feels like 8847KR.016, esp. margin	- fine diamond texture	- catches with explorer tip	- horizontal or vertical steps
	12. Surface Transitions visual & tactile, axio-incisal line/point angles	- rounded		- too rounded (compromise retention) - sharp
	13. Tissue Management explorer, visual & tactile inspection	- adjacent hard and soft tissues intact	- adjacent hard and soft tissues abraded	- adjacent tooth requires restoration or soft tissues lacerated

Interim Prosthesis / Definitive Prosthesis (Single Unit)

		Test	Excellent	Clinically Acceptable	Standard Not Met
Margins		**1. Two-way Catch** explorer	- vertically closed	- vertically open < 0.2 mm (tip of explorer tine)	- - vertically open > 0.2 mm (> tip of explorer tine)
		2. One-way Catch explorer	- scarcely detectable	- horizontally over/underextended < 0.2 mm	- horizontally over/underextended ≥ 0.2 mm
Axial Contours		**3. Axial Contour** visually, adjacent/contralateral teeth; Facial, Lingual	- F, L are contoured correctly, harmonious with adjacent teeth	- F, L are moderately over/under contoured	- F, L are extremely over/under contoured
		4. Embrasures visually, adjacent/contralateral teeth; Incisal/Occlusal, Gingival, Facial, Lingual	- I/O, G, F, L are contoured correctly	- I/O, G, F, L are moderately over/under contoured	- I/O, G, F, L are extremely over/under contoured
Proximal Contacts	Mesial	**5. Visually & Tactilely Closed** visual; floss and shimstock	- visually closed - identical in firmness to other contacts in mouth	- visually closed - lighter/firmer than other contacts - so firm that floss tears shimstock; - or contact open with shimstock	- visually open
		6. Contact Location visual, articulating film, compared to contralateral contact or diagnostic wax-up	- identical incisal/occlusal-gingival and facial-lingual position	- ≤ 1 mm incisal/occlusal-gingival and/or facial-lingual malpositioned	- > 1 mm incisal/occlusal-gingival and/or facial-lingual malpositioned
	Distal	**7. Visually & Tactilely Closed** visual; floss and shimstock	- visually closed - identical in firmness to other contacts in mouth	- visually closed - lighter/firmer than other contacts - so firm that floss tears shimstock; - or contact open with shimstock	- visually open
		8. Contact Location visual, articulating film, compared to contralateral contact or diagnostic wax-up	- identical incisal/occlusal-gingival and facial-lingual position	- ≤ 1 mm incisal/occlusal-gingival and/or facial-lingual malpositioned	- > 1 mm incisal/occlusal-gingival and/or facial-lingual malpositioned
Occlusal Contacts and Form		**9. Centric Occlusion or MI** shimstock, articulating film, compare to adjacent and contralateral	- anterior contacts: definitive contact on canine other teeth symmetrical with contralateral side (2 contacts incisor; 1 contact canine) - posterior 2 contacts premolar; 3 contacts molar	- light/few or heavy CO/MI contacts - anterior asymmetrical with contralateral side - posterior ≥ 1 contact - located on incline, or too large	- no contacts or traumatic contacts
		10. Working Contacts shimstock, articulating film, compare to adjacent and contralateral	- no working side contact (posterior) - functional lateral contact (canine) - protrusive contact (incisors)	- functional working contacts (posterior) - light/heavy lateral contact (canine) - light/heavy protrusive contact (incisors)	- interferences in working excursion (posterior) - interferences in lateral excursion (canine) - interferences in protrusion (incisors)
		11. Non-working Contacts shimstock, articulating film, compare to adjacent and contralateral	- no non-working contacts		- interferences in non-working excursions
		12. Anatomy 1° and 2° anatomy as compared to contralateral or diagnostic wax-up	- 1° and 2° anatomy present - 1° anatomy present (anterior)	- 1° anatomy present only (posterior)	- 1° anatomy lacking
External Finish and Internal Adaptation		**13. Surface Topography** explorer (external and internal)	- smooth - no laminations	- catches, scratches, or irregularities - minor laminations	- pits, gouges, or cracks - gross laminations
		14. Surface Polish visual	- polished to high shine finish	- polished to dull finish	- not polished
		15. Retention gross tactile	- snug passive fit, clean		- loose, binds, or dirty
		16. Stability gross tactile	- prosthesis is stable		- prosthesis rocks or rotates

Interim Prosthesis / Definitive Prosthesis (FPD)
(criteria 1 – 15 are same as the single unit)

	Test	Excellent	Clinically Acceptable	Standard Not Met
Fixed Partial Dentures Only	**16. Interabutment Relationship** finger or ball burnisher pressure on one retainer, visually watch for opening of margin on second retainer (saliva bubbles)	- prosthesis is stable - no rock of FPD retainers		- FPD rocks or rotates - cannot attain acceptable marginal fit on both retainers simultaneously
	17. Pontic Contours gingival contour and tissue relationship, visual and floss inspection	- light tissue contact (no blanching) - tissue surface convex with rounded line angles - tissue surface cleansable	- contact moderately excessive / insufficient	- contact absent or impinges on gingival tissue - tissue surface flat or concave (F/L or M/D) - tissue surface not cleansable
	18. Connector Location visual inspection with mirror	- occlusal third - facial third		- gingival third - lingual third
	19. Connector Dimension measure with floss wrapped around connector	- 4 mm occlusal/gingival height - 4 mm facial/lingual width (for posteriors) - 3 mm facial/lingual width (for anteriors)	- 3 mm occlusal/gingival height - 3 mm facial/lingual width (for posteriors) - 2 mm facial/lingual width (for anteriors)	- > 5 mm or < 3 mm in any dimension (posteriors) - > 5 mm or < 3 mm occlusal/gingival height or > 4 mm or < 2 mm facial/lingual width (anteriors)
	20. Connector Contour visual inspection	- rounded - heart shape facial/lingually		- sharp, pointed - concave in any dimension

Master Impression (polyvinylsiloxane)

	Test	Excellent	Clinically Acceptable	Standard Not Met
Prepared Tooth/Teeth	**1. Margin Capture**	- no negatives/voids on the margin of the preparation		- negatives/voids on the margin of the preparation
	2. Preparation Capture	- no negatives/voids on the occlusal (incisal) and/or axial surfaces of the preparation	- small negative/voids on the occlusal (incisal) and/or axial surfaces of the preparation	- large negatives/voids on the occlusal (incisal) and/or axial surfaces of the preparation
	3. Material Extension	- impression material extends cervical to the margin		- impression material does not extent cervical to the margin in one or more areas
Unprepared Teeth	**4. Teeth/Arch Capture**	- no negatives/voids on the occlusal (incisal) and/or axial surface of unprepared teeth	- small negatives/voids on the occlusal (incisal) and/or axial surface of unprepared teeth	- large negatives/voids on the occlusal (incisal) and/or axial surface of unprepared teeth
	5. Material Distortion	- no distortion evident		- distortion evident
Tissue and Pontic space	**6. Tissue Capture**	- surrounding tissue is captured in detail, none or small negatives/voids associated with these areas	- surrounding tissue is captured in detail, small or moderate negatives/voids associated with these areas	- surrounding tissue is not captured in detail, large negatives/voids associated with these areas
Material Support	**7. Material Support**	- impression material is adhered to the tray and is properly supported by the tray		- impression material is separated from the tray and/or is not supported by the tray

Laboratory Works

1. The outgoing fixed case: for natural abutment teeth.
   Items need to be submitted as the followings for QA:
   signed lab authorization,
   impression,
   articulated definitive cast (pinned, sectioned, margin marked),
   second solid pour (with the exception of digital impression systems),
   articulated opposing,
   occlusal record (if needed)

2. The outgoing fixed case: for implant
   Items need to be submitted as the followings for QA:
   signed lab authorization,
   impression,
   articulated definitive cast (soft tissue model),
   articulated opposing,
   required implant components (abutments, wax-up sleeves....),
   occlusal record (if needed)

3. Impressions to be poured up and trimmed by lab must be approved by course director. Only the following circumstances will be approved by course director:
   1. Small abutments AND closeto each other ------> like, mandibular incisors...
   2. Adjacent implant and natural tooth. (eg. #29 natural tooth, #30 implant)
   3. 4 or more abutments in one impression
   4. Porcelain laminate veneers.
   5. Pick up impression with partial, crowns, and bridge in your impression
   6. Difficult cases you have demonstrated multiple attempts without satisfactory results.

Send out the impression to be poured in the lab without course director's approval will result in losing credits toward your completed crowns.

Definitive Cast

	Test	Excellent	Clinically Acceptable	Standard Not Met
Antagonist Cast	**1. Negatives/voids**	- none present on occlusal or axial surfaces	- none present on functional occlusal surfaces - small and infrequent voids on non-functional occlusal surfaces or axial surfaces	- any void on functional occlusal surfaces - large or numerous voids on all other surfaces
	2. Positives/blebs	- none present on occlusal or axial surfaces	- none present on occlusal surfaces - small and infrequent positives on axial surfaces	- any positive on functional occlusal surfaces - large and frequent positives on axial surfaces
	3. Extension	- all teeth, surrounding tissues, and vestibule present; - cast trimmed to follow arch form and occlusal table parallel to cast base	- all occlusal surfaces present, but portions of axial tooth surfaces, surrounding tissues, or vestibule absent	- any portion of occlusal surfaces trimmed from cast
	4. Distortion	- no distortion evident		- any evident distortion
	5. Neatness	- cast clean, free of slurry	- scratches or gouges on non-occlusal surfaces	- cast dirty, slurry present, scratches or gouges on occlusal surfaces
Master Cast	**6. Negatives/voids**	- none present on die - none present on occlusal or axial surfaces of cast	- none present on die margin, small/infrequent voids on other surfaces of die - small and infrequent voids on non-functional occlusal surfaces or axial surfaces	- any void on margin of die - any void on functional occlusal surfaces - large or numerous voids on all other surfaces
	7. Positives/blebs	- none present on die - none present on occlusal or axial surfaces of cast	- none present on die - none present on occlusal surfaces of cast - small and infrequent positives on axial surfaces	- any positive on die - any positive on functional occlusal surfaces - large and frequent positives on axial surfaces
	8. Extension	- all teeth present - cast trimmed to follow arch form and occlusal table parallel to cast base	- all occlusal surfaces present, but portions of axial tooth surfaces away from dies absent	- any portion of dies or teeth trimmed from cast
	9. Distortion	- no distortion evident		- any evident distortion
	10. Neatness	- cast clean, free of slurry - no voids on interface between pours - sharp interface between pours	- scratches or gouges on non-occlusal surfaces - small voids on interface between pours - sharp interface between pours	- cast dirty, slurry present, scratches or gouges on occlusal surfaces - large voids on interface between pours - space between pours

Removable Dies and Die Trimming	**11. Dowel pin placement**	- all dowel pins centered in dies M/D and F/L - adequate distribution of pins to insure stability and anti-rotation of all segments	- dowel pins not centered - all segments stable	- any dowel pin loose or potentially unstable (segment of die broken from around pin; saw cut into pin)
	12. Stability	- all dies and segments stable		- any lateral or rotational instability of die or segments
	13. Die base length	- 10 to 12 mm from die base to preparation margin	- 8 mm to < 10 mm or >12 mm to 15 mm	- < 8 mm or > 15 mm from die base to preparation margin
	14. Seating	- all dies and segments seat fully		- incomplete seating of <u>any</u> die or segment
	15. Die removability	- all dies/segments independently removable	- removal of adjacent segment necessary to permit removal of any die	- die locked into place
	16. Neatness	- dies clean, free of slurry - neatly trimmed		- dies dirty; debris present on bottom of die, dowel pin, or dowel pin hole - scratches/gouges on dies from trimming
	17. Die base	- maximum area for die base	- area of die base slightly over-reduced	- area of die base grossly over-reduced
	18. Margin	- margins distinct and well defined - root emergence profile created (2-3 mm) - margins marked with red wax pencil - die spacer placed 1 mm from margins		- margins altered by trimming - lack of root emergence profile (<1 mm); distortion of root contour (i.e. die "ditched") - margins not marked with red wax pencil - no die spacer or placed <1mm from margins
JRR	**19. Occlusal relationship**	- same as patient (confirmed with shimstock in 3 locations)	- only one contact mesial or distal to working die	- no contacts on side of working die - occlusal mal-relationship
	20. Articulator settings	- set with appropriate values - custom incisal table reproduces lingual contours and length of maxillary incisors	- custom incisal table approximates lingual contours and length of maxillary incisors	- articulator programmed incorrectly - custom incisal table does not follow lingual contours and length
	21. Neatness	- mounting plaster smooth, flush with cast and mounting plate - articulator is clean, free of plaster/stone and debris	- mounting plaster rough, flush with cast and mounting plate - articulator is clean, free of plaster/stone and debris	- mounting plaster rough, overlapping cast and mounting plate - plaster/stone/debris on articulator - articulator does not move freely

FPD Framework Try-in

	Test	Excellent	Clinically Acceptable	Standard Not Met
Fixed Partial Dentures Only	**1. Interabutment Relationship** finger or ball burnisher pressure on one retainer, visually watch for opening of margin on second retainer (saliva bubbles)	- prosthesis is stable - no rock of FPD retainers		- FPD rocks or rotates - cannot attain acceptable marginal fit on both retainers simultaneously
	2. Pontic Contours gingival contour and tissue relationship, visual and floss inspection	- light tissue contact (no blanching) - tissue surface convex with rounded line angles - tissue surface cleansable	- contact moderately excessive / insufficient	- contact absent or impinges on gingival tissue - tissue surface flat or concave (F/L or M/D) - tissue surface not cleansable
	3. Connector Location visual inspection with mirror	- occlusal third - facial third		- gingival third - lingual third
	4. Connector Dimension measure with floss wrapped around connector	- 4 mm occlusal/gingival height - 4 mm facial/lingual width (for posteriors) - 3 mm facial/lingual width (for anteriors)	- 3 mm occlusal/gingival height - 3 mm facial/lingual width (for posteriors) - 2 mm facial/lingual width (for anteriors)	- > 5 mm or < 3 mm in any dimension (posteriors) - > 5 mm or < 3 mm occlusal/gingival height or > 4 mm or < 2 mm facial/lingual width (anteriors)
	5. Connector Contour visual inspection	- rounded - heart shape facial/lingually		- sharp, pointed - concave in any dimension

Post Cementation Check

	Test	Excellent	Clinically Acceptable	Standard Not Met
Occlusal Contacts	**1. Centric Occlusion or MI** shimstock, articulating film, compare to adjacent and contralateral	- anterior contacts: definitive contact on canine other teeth symmetrical with contralateral side (2 contacts incisor; 1 contact canine) - posterior 2 contacts premolar; 3 contacts molar	- light/few or heavy CO/MI contacts - anterior asymmetrical with contralateral side - posterior ≥ 1 contact - located on incline, or too large	- no contacts or traumatic contacts
	2. Working Contacts shimstock, articulating film, compare to adjacent and contralateral	- no working side contact (posterior) - functional lateral contact (canine) - protrusive contact (incisors)	- functional working contacts (posterior) - light/heavy lateral contact (canine) - light/heavy protrusive contact (incisors)	- interferences in working excursion (posterior) - interferences in lateral excursion (canine) - interferences in protrusion (incisors)
	3. Non-working Contacts shimstock, articulating film, compare to adjacent and contralateral	- no non-working contacts		- interferences in non-working excursions
Free of Residual Cement	**Residual Cement**	- Non clinical visible cement present - Non detectable with explore - Non detectable with radiograph (PA or Bitewing)		- Residual cement present (visible, detectable with explorer, present under radiograph)

ULSD Clinical Fixed Prosthodontics

Evaluation Criteria For

Daily Performance Grade

Evaluation Criteria - Daily Performance Grade

	Excellent (A+: 99 A:95 A-:90)	Good (B+:89 B:85 B-: 80)	Average (C+:79 C:75 C-: 70)	Poor (F: 60)
Preparation	The student has instruments open and ready when you come. All equipment and supplies are available and student does not have to run off to get items at the dispensary. The student has prepared himself for the procedure and is "ready". Notes and paperwork are done in a timely manner.	Instruments are open and ready when you come. Most equipment and supplies are available and student does not have to go get items from the dispensary. The student is pretty well prepared for the procedure at hand. You may have slight input toward the daily work. You do not have to "teach" the student what to do.	Instruments at the operatory but not ready when you come. All equipment and supplies are not available and student may have to run off to get an item from the dispensary. The student has done an average job preparing himself/herself for the procedure. Notes and paperwork done in average time.	The student does not have instruments set up when you come to work on the patient. The student does not have the proper supplies available and must go to the window repeatedly. Notes and paperwork are not done during the appointment.
Knowledge/Proc	In the pre-op and discussion of the daily activity, it is evident that the student understands very well what is to be done today and has complete knowledge of the procedure. You do not have to teach "how to" do anything. You do not have to answer any questions about the procedure.	In the pre-op and further discussion, it is evident that the student has a good knowledge of the procedure to be done today. The student may not express himself as well as the student who gets an excellent. You may need to make a small contribution to what the student has to say about the procedure.	In the pre-op and further discussion, it is evident that the student has an average understanding of what is to be done today and has questions. You must give input or some teaching to the student on the procedure.	The student displays a lack of understanding of the procedure. He expects the faculty to tell him what and how to do a procedure. The student is confused or lacks evidence of preparation for the procedure.
Performance/Proc.	The student performs the procedure without assistance from the faculty and performs it competently. Directions on the procedure are not necessary. It is done in a timely period and without patient discomfort. The proper equipment is used to complete the procedure. Student's evaluation of own work is accurate does not have to be told to correct any part of the product.	The student performs the procedure with slight assistance from faculty, but performs it well. Minimal direction or questions are answered by faculty. The procedure is done in a timely period and without patient discomfort. Proper equipment is used to complete the procedure. Student evaluation of own work is accurate. Does not have to be told to do something again.	Performs the procedure with a reasonable assistance from the faculty and completes it with average ability. Directions on the procedure are necessary. Procedure done in a timely period and without patient discomfort. Proper equipment is used but may need direction. Student's evaluation of own work is not accurate. Faculty tells the student to correct the product. Student does it.	A large amount of assistance from the faculty. Faculty does some of the work. Improper equipment (ie butane torch), endangering the patient. The student abuses the patient with poor technique. Does not recognize poor work. Student told to correct or redo the procedure. Repeated attempts to get the final procedure
Product	The product (custom tray, primary casts, impression, record base, crown, bridge, post etc.) is of exceptional quality. Stability, precise fit, no over/under-extensions, Occlusion excellent, finish perfect. Neat. Clean.	The product (master or primary impressions, casts, custom trays, baseplates and occlusion rims, try in, etc). The product is good quality. It is not perfect with ie, a slight overextension or under extension, but still very good, it fits well, slight sharp or rough area (very small defect), stable, clean and neat.	The product (master impressions, casts, custom trays, Record bases, crowns) is of average quality. Small problems ie.,over/under extensions, fit average but will work. May have problem areas (where indicated) but are correctable, stabile. Average cleanliness or neatness. Student identifies problems.	The product is of poor quality. There are problems: fit is poor, finish is poor. Errors exist that are not correctable; stability is questionable or poor, dirty or messy. You must have the student do the procedure again and student does not recognize problem
Patient Mgmt.	Rapport with patient is very good. Appointment time is appropriate for the procedure. The plan for what to accomplish in the time allowed for patient is appropriate. Good judgment. Interaction with faculty is excellent. Infection Control is properly done.	Patient Management. Rapport with the patient and faculty is good. Appointment time is appropriate for the procedure. Patient shows good judgment on how to handle patient. Proper infection control.	Rapport with patient is average. Patient is not very communicative with patient. Average accomplishment of work in time scheduled. Progress is proceeding at a reasonable pace.	Patient management is poor. Poor planning. Poor rapport with faculty and/or patient. Poor infection control. Wastes patient time by poor organization of time and procedures.

QUESTIONS YOUR PATIENT MAY ASK ABOUT ULSD INFECTION CONTROL PROCESSES
and
HOW TO ANSWER THEM

Q. What is ULSD'S sterilization process?
A. Sterilization procedures at ULSD follow CDC, OSHA and AAMI (Association for the Advancement of Medical Instrumentation) guidelines. Our sterilization procedures are monitored through a combination of mechanical, chemical, and biological techniques.

1. Mechanical techniques for monitoring sterilization equipment is monitored and documented on every load. This includes assessing the cycle time, temperature, and pressure of sterilization.
2. Chemical indicators, internal and external, are used on/in every package to ensure specific conditions have been met during the sterilization process. We also run the Bowie Dick Test with every load which is a type of chemical indicator.
3. Biological indicators (BIs) are the most accepted means of monitoring the sterilization process and run this test weekly.

Q: Do you sterilize your instruments?
A: We sterilize all instruments/handpieces using autoclaves, which is steam under pressure.

Q: Do you test your autoclaves and how often?
A: We test our autoclaves weekly through our monitoring service.

Q: How do I know these instruments are sterile?
A: There are outside indicators we examine before opening the package to ensure it is sterile. And there are inside indicators placed inside every package that we examine after opening to confirm the inside of the package is sterile.

Q: What if an item indicates "not sterile." What do you do then?
A: We return the package and obtain a new one. Then we start quality assurance trail to find out what happened and correct the situation immediately.

Q: Do you re-use items on each patient?
A. No, we use disposable items on every patient.

Q: Will there be a new needle, new syringe, and a new vial for this procedure or injection?"
A. We always use a new needle, new syringe, and a new vial for every procedure or injection.

Q: Are those "new" gloves you are wearing?
A: Yes. We always wear a new pair of gloves for every patient. (Make sure the patient sees you wash your hands and put on the gloves).

Q: Why are you using that "handrub" instead of washing your hands?
A. Evidence based studies have found the alcohol-based gel was more effective in reducing bacterial counts than the antimicrobial soap after one application.

Q: What about your waterlines? How do you clean them?
A:ULSD is on a closed water system. The water is heated to 190 degrees before it reaches the treatment area. Then we test it on a regular basis to ensure we are in compliance with CDC's Guidelines.

TRANSFER PATIENT PROTOCOL

(April, 2013)

This transfer patient protocol applies to patients that have signed and accepted comprehensive planned treatment entered in axiUm and have been seen for treatment related to that plan within the previous six months.

1. The student must review the transfer case with their group manager prior to the clinical transfer appointment with the patient.

2. ***The student must be completely familiar with the patient based on all available information.*** The student must have reviewed the medical history, medical consults and treatment modifications, general dentistry consults, dental specialty area consults, all available diagnostic data, have diagnostic casts if available, and understand the rationale for all planned treatment has not been completed in the active comprehensive planned treatment.

3. ***Prior to the transfer appointment,*** the group manager will review the case with the student and make whatever recommendations/modifications are deemed appropriate.

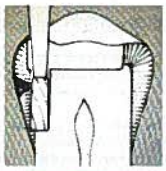
4. At the clinical transfer appointment, the student will introduce himself/herself to the patient, update the medical history, obtain and record vitals, examine the hard and soft tissue and evaluate the periodontal charting. The odontogram will be updated as indicated and approved by a faculty member. A new oral examination form will be entered if indicated and approved by a faculty member. A new comprehensive periodontal chart does not need to be entered unless it has been more than *one* year since the charting or there are significant changes in the periodontal findings.

5. The group manager will also clinically examine the patient. Modifications will be made in the comprehensive planned treatment as needed. If additional treatment is indicated in the comprehensive care clinic, this treatment will be entered through the "treatment planning" tab and presented to the patient. Patient acceptance and signature will be obtained for the additional treatment indications. If modifications have been made, the properly-sequenced comprehensive planned treatment will be presented to the patient, and acceptance and signature will be obtained using the "estimates" button. If the patient is on a payment plan or has insurance, the patient will visit the cashier if ***any*** changes have been made to the final comprehensive planned treatment that was previously presented to and accepted by the patient. If major modifications are required to the total comprehensive planned treatment, additional time will be required for the transfer appointment and any indicated consultations.

6. The comprehensive planned treatment must be placed into the current student's name. All planned treatment to be completed in the comprehensive care clinic by the current student must be assigned to that student using the "start check" feature in axiUm. Treatment to be performed in the specialty area clinics will remain assigned to the appropriate resident or clinic.

CLINICAL OPERATIVE DENTISTRY I
GDOM 834-56

CLINICAL OPERATIVE DENTISTRY II
GDOM 846-78



Department of General Dentistry and Oral Medicine

University of Louisville School of Dentistry

Fall 2013/Spring 2014

Course Director:
Michael Metz, DMD, MSD, MS, MBA
Certified, American Board of Operative Dentistry

Clinical Operative Dentistry I and II
Fall 2013/Spring 2014

Course Number and Title:	GDOM 834-56/ GDOM 846-78 Clinical Operative Dentistry I/ II
Course Credit:	4.5 credit hours, graded (GDOM 834-56) D3 6.0 credit hours, graded (GDOM 846-78) D4
Term:	Fall 2013 and Spring 2014
Lecture:	None
Clinical:	100% Clinical Course
Course Director:	Michael J. Metz, DMD, MSD, MS, MBA Department of General Dentistry and Oral Medicine University of Louisville School of Dentistry 852-6168 Mimetz01@louisville.edu
Course Participants:	Dr. Jennifer McCants Dr. David O. Willis Dr. Randall Vaught Dr. Greice Oliveira Dr. Gus Oliveira Dr. Gary Crim Dr. Tim Daugherty Dr. Dan Fadel Dr. Alia Eldairi Dr. Sherrie Zaino Dr. Melinda Paris Dr. Theresa Mayfield Dr. Jim Kelly Dr. Bill Sanders Dr. Megan Degaris Dr. Marija Sasek

Office Hours (Room #107):

Monday and Friday 9-12am or by appointment
Office Phone: 502-852-6168
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General Course Description:

Clinical Operative Dentistry I and II (GDOM 834-56/ GDOM 834-78) are composed of various direct operative restorative procedures on patients of record. Essential skills presented and practiced in pre-clinical operative dentistry technique course are utilized and expanded in clinical applications. As students' progress in the clinical environment, more advanced direct restorative techniques are introduced and mastered.

Clinical Operative Dentistry I and II employ a competency education curriculum placing value on the students' knowledge of operative dentistry, dental materials, evidence-based literature, critical thinking, treatment rational and skill proficiency. Competency education is effective in teaching and accessing student progression as it is based demonstration of a pre-defined level of competence.

In order to evaluate the clinical progression of each student in preparation for regional licensure examinations, several competency examinations will be given. The competency examination provides the following:

- Assist the calibrated operative faculty in identifying potential weaknesses that students may have in tooth preparation, direct restorative techniques and overall patient management.
- Provide valuable instructional information for student weaknesses identified.
- Provide substantiated and defensible assessment for remediation or recommendations to SPPC.

Successful completion of a competency examination requires some degree of speed and accuracy in treating clinical patients. Additionally, each student must have awareness of what constitutes acceptable performance and the desire for self-improvement. NO STUDENT will be allowed to graduate without proving his/her competence in operative dentistry. If the student fails to perform at an acceptable, competent level, he/she will receive the necessary remediation before being permitted to challenge regional licensure examinations and graduate.

Competency is defined as the knowledge and clinical skill which students must possess to provide oral health care at a professionally accepted level as a newly graduated dentist. Competency criteria are guidelines which embrace concepts that prepare students to function as entry level professional dentists.

The School of Dentistry has adopted ***The Code of Professional Responsibility and The Professional Decorum Policy*** which will be strictly enforced in this course. All students enrolled in Clinical Operative Dentistry I and II should be familiar with the content and the intent of these documents in order to conform to appropriate behavioral requirements.

CODA Standards Assessment

- ✓ **2-1** In advance of each course or other unit of instruction, students must be provided written information about the goals and requirements of each course, the nature of the course content, the method(s) of evaluation to be used, and how grades and competency are determined.
- ✓ **2-2** If students do not meet the didactic, behavioral and/or clinical criteria as published and distributed, individual evaluations must be performed that lead to an appropriate decision in accordance with institutional due process policies.
- ✓ **2-10** Graduates must demonstrate the ability to self-assess, including the development of professional competencies and the demonstration of professional values and capacities associated with self-directed, lifelong learning.
- ✓ **2-25** Dental education programs must make available opportunities and encourage students to engage in service learning experiences and/or community-based learning experiences.
- ✓ **5-2** Patient care must be evidenced-based, integrating the best research evidence and patient values.

Course Goals and ULSD Competency Assessment Statements

- ✓ **1.1** Provide compassionate and ethical care to a diverse population of patients
- ✓ **1.2** Communicate effectively with peers, other professionals, staff, patients and guardians and the public at large.
- ✓ **3.1** Comply with federal, state and local regulations as related to infection control, radiation and environmental safety measures on all clinical procedures
- ✓ **4.1** Identify a patient's chief complaint, general needs, past dental history, and treatment expectations
- ✓ **4.6** Recognize the normal range of clinical and radiographic findings and conditions that require monitoring or management.
- ✓ **4.7** Recognize predisposing and etiologic factors that require intervention to prevent disease.
- ✓ **4.8** Interpret findings from the history, clinical and radiographic examinations, and other diagnostic procedures.
- ✓ **4.10** Integrate subjective and objective clinical findings in the formulation of the diagnosis.
- ✓ **4.11** Evaluate the prognoses of various treatment options.
- ✓ **6.3** Restore missing or defective tooth structure to proper form, function, and esthetics.
- ✓ **6.13** Select and administer/prescribe appropriate pharmacological agents in the treatment of patients with dental disease.
- ✓ **6.19** Anticipate, prevent and manage complications of dental treatment.

Method of Evaluation: Clinical Competency Examinations/ Oral Examination

Course Objectives

1. Provide students with the opportunity to perform clinically the techniques presented and mastered in their pre-clinical operative course
2. Provide students with clinical applications of adhesive dentistry as related to direct polymeric resin composite and glass ionomer restorations
3. Provide students with clinical applications of dental amalgam alloy from simple to advanced direct restorations
4. Provide students with clinical treatment planning strategies on patients with ideal operative needs to patients suffering from rampant caries, medical compromise, root caries and financial limitations
5. Provide the student with the treatment planning knowledge to accurately present and obtain consent for appropriate care of their patients while restoring form and function
6. Provide the student with the concepts of inter-disciplinary consultations and appropriate referrals to trained specialists
7. Provide the student with encouragement in obtaining and continuing competency examinations via daily constructive feed-back on Essential Clinical Experiences, D3clinical competencies, D4 clinical competencies and mock regional board examinations
8. Provide the student with basic direct restorative dental materials knowledge and clinical applications of those specific materials
9. Provide the clinical knowledge and recall of dental anatomy to restore form and function via direct restorations in harmonious occlusion to promote continued TMJ health
10. Provide the clinical knowledge to construct a stable foundation core restoration for severally compromised teeth with the use of auxiliary retention (slots, pins, grooves, etc.)
11. Provide the student with the diagnostic ability to determine pre-operative pulpal status in emergency pain patients for appropriate triage or treatment (indirect pulp cap, direct pulp cap, sedative fill, root canal therapy, etc.)
12. Provide the student with the knowledge to honor the patients' rights of personal autonomy, nonmaleficence, beneficence, justice and veracity.

Pre-requisites for Competency Examination

The recommended minimal Essential Clinical Experiences performed on patients of record prior to achieving **competency eligibility** are as follows:

- The following Amalgam Essential Clinical Experiences must be completed at an acceptable level on a graded daily operative evaluation sheet prior to becoming eligible for any competency examination;
  - 1 (one) class I amalgam restoration
  - 2 (two) class II amalgam restorations
  - 1 (one) class V amalgam restoration
- The following Composite/Glass Ionomer Essential Clinical Experiences must be completed at an acceptable level on a graded daily operative evaluation sheet prior to becoming eligible for any competency examination;
  - 1 (one) class I composite restoration
  - 1 (one) class II composite restorations
  - 1 (one) class III or IV composite restoration
  - 1 (one) class V composite or glass ionomer restoration

Achieving the 8 (eight) minimal Essential Clinical Experiences on patients DOES NOT automatically allow an attempt at an operative competency examination. The Course Director reserves the right to consult with Group Managers prior to competency eligibility. Additional work in deficient areas of operative dentistry may be required before eligibility status is awarded.

The student must petition the Course Director via e-mail when he/she has completed the 8 (eight) minimal Essential Clinical Experiences for **WRITTEN APPROVAL** to initiate a competency examination. ***If a student attempts a competency examination without written approval, the student will receive a zero (0) grade for that competency no matter the outcome. NO EXCEPTION!***

It is the sole responsibility of the student to be familiar with all the clinical operative dentistry criteria and clinical paperwork in this manual. The student will be better prepared for Essential Clinical Experiences, clinical competency examinations and regional board examinations.

****Under no circumstance will Essential Clinical Experiences or Competency Examinations be performed on a DENTOFORM. Some remediation exercises may be performed on the dentoform at the discretion of the Course Director/Clinical Operative Dentistry Discipline Coordinator.***

*****If a faculty member or the Course Director observes a loss of competent performance during any clinical operative procedure as demonstrated by poor daily clinical evaluations, including students who have completed some competency examinations, the student MUST participate in remediation as deemed appropriate by the Course Director.***

Daily Operative Evaluation Sheet:

D3 Operative Step Sheet (one purple Copy): **APPENDIX I**

- One purple step sheet for each Essential Clinical Experience performed on patients of record
- Must include appropriate CDT code for each direct restoration completed and graded step card for each progressive step throughout appointment by covering faculty
- This step sheet must be completed and submitted by covering faculty to receive credit as an Essential Clinical Experience. ***It is NOT the Course Directors responsibility to track down mishandled or lost Daily Operative Evaluation Sheets.***

D4 Operative Grade Sheet (one yellow copy): **APPENDIX II**

- One yellow sheet for each clinical operative procedure that is not a competency examination
- Must include appropriate CDT code for each direct restoration placed
- Graded as Pass/Fail with recommendations for improvement. . ***It is NOT the Course Directors responsibility to track down mishandled or lost Daily Operative Evaluation Sheets.***

Competency Examination Forms:

Instructor Grade Cards (2 Pink Copies): **APPENDIX III**

- One pink grade card per examining instructor for each examination
- Examination form with required information must be completed prior to pre-op

Student Self-evaluation Grade Card (1 white Copy): **APPENDIX IV**

- One white grade card per student for each examination
- Examination form with required information must be completed prior to pre-op
- Student must complete self-evaluation prior to final restoration grading by both examiners
- A grade will NOT BE RELEASED without a self-evaluation grade card for each competency attempted so that it may be reviewed by the Course Director

Clinical Competency Procedure Sheet (1 white Copy): **APPENDIX V**

- One white procedure sheet per student for each examination
- Form with required information must be completed prior to pre-op
- Used as the sole communication between the examinee and the two examiners throughout the competency examination
- Student must request grading of preparation and restoration by both examiners prior to moving forward on the examination
- Student must request any deviation from normal on this sheet and await approval or disapproval from the examiners
- ***A grade will NOT BE RELEASED without a self-evaluation grade card for each competency attempted so that it may be reviewed by the Course Director***

Clinical Operative Dentistry I (D3 Year)

Pre-requisites for Competency Examination

The recommended minimal Essential Clinical Experiences are listed on page 3 with accompanying guidelines for competency eligibility.

Competency Examination

Each student must complete ***2 (two)*** competency examinations on permanent vital teeth on patients of record before the end of the spring semester.

1. **1 (one) direct posterior Class II preparation/restoration**
   a. Must have at least one virgin proximal lesion or evidence of significant clinical caries
   b. Restored with amalgam or composite
2. **1 (one) direct anterior Class III or IV preparation/restoration**
   a. Must have at least one virgin proximal lesion or evidence of significant clinical caries
   b. Restored with composite

Each student may attempt a class I competency examination for the clinical experience and in addition to the two aforementioned requirements. This is strongly encouraged and the grades will only count if it helps to raise your overall clinical operative dentistry I grade. If the attempt is unsuccessful, you will be required to achieve a passing grade and it will count in your overall grade regardless of the outcome.

- **1 (one) direct posterior Class I (occlusal) preparation/restoration**
  - Virgin lesion with significant caries to the DEJ
  - Restored with amalgam or composite

Failure Consequences of Competency Examinations

- Students falling below minimal standards for competency examinations will be notified by email with a "cc" to their respective group manager.
- Upon notification, competency examinations will cease until the student meets formally with the Course Director to discuss deficiencies and required remediation procedures.
- Once the formal meeting with the Course Director has occurred and all remediation has been successful to reestablish eligibility, a written email from the Course Director to the student and group manager will indicate that competency examinations may be attempted.
- If a student attempts another competency without written email approval from the Course Director, the successful competency will not count and the unauthorized competency will be averaged into the overall course grade.
- ***Failure to check email is NOT a valid excuse for Clinical Operative Dentistry I and/or II.***

Course Grades

The final course grade for Clinical Operative Dentistry I will be determined by clinical performances on the two required competency examinations only (class II and III). The final grade will be the average of the attempted competency examination grades. Each student will be allowed ***ONE*** competency failure that will NOT be used in the calculation of the final course grade. However, another passing score on the same competency indication must replace it prior to the end of the spring semester. If you choose to do the class I and fail it, that will be your one replacement. There must be a total of at least two (class II and III) D3 competency examination grades to be averaged for course grade. However, there may be an average of three grades if the class I competency examination is attempted. Each failure will be recorded as a 0 (zero) in the final course grade and if the student does not attempt their replacement of the one failed competency then a 0 (zero) will be recorded as one of the three grades.

After the completion of both clinical competency examinations, if a student wishes to raise the final overall course grade, he/she may choose to do the following:

- Within 48 hours of the successful completion of both D3competencies the student may declare (in writing via email to the Course Director) the desire to attempt a similar competency for another grade.
- A clear and concise email to the Course director with the scheduled date for this additional competency and the competency wishing to be replaced.
- This APPROVED attempt must occur within one month of the original declaration for replacement.
- This replacement competency will replace the original competency independent of the outcome (if the student receives a lower grade on the replacement competency that is the grade recorded for the final course grade.

A D3 student may attempt a D4 competency in a specific area (e.g. class II amalgam) with written permission via email from the Course Director. If the attempt at the D4 competency is unsuccessful, that failure will be recorded as a 0 (zero) and calculated as an additional grade for Clinical Operative Dentistry I.

Students are required to perform all operative procedures, Essential Clinical Experiences and competency examination, with the clinical integrity and professionalism as a competent health care provider. A record of unsatisfactory performances and unprofessional behavior WILL result in simulation remediation, possible loss of clinical privileges, or other appropriate actions.

Failure to complete both (two) competency examinations by the end of the spring semester of the D3year will result in an "X" grade. Any uncompleted competency examinations by the beginning of the fall semester of the D4 year will be carried over. Failure to successfully complete both (two) competency examinations by the end of the fall semester of the D4 year will result in an "I" (incomplete) grade for Clinical Operative Dentistry I.

Clinical Operative Dentistry II (D4 Year)

Pre-requisites for Competency Examination

Each student must have successfully completed all Competency Examinations for Clinical Operative Dentistry I.

Reminder: ***A D4 student may attempt a D4 competency in a specific area (e.g. class II amalgam) if he/she has successfully completed all D3 competency examinations for that indication even though a grade for Clinical Operative Dentistry I has not been achieved.***

Competency Examination

Each student is required to complete ***3 (three)*** competency examinations on permanent vital teeth on patients of record before the end of the spring semester.

- 2 (two) direct posterior Class II preparation/restoration
  - Must have at least one virgin proximal lesion or evidence of significant clinical caries to the DEJ
  - One (1) restored with amalgam
  - One (1) restored with composite
- 1 (one) direct anterior Class III or IV preparation/restoration
  - Must have at least one virgin proximal lesion or evidence of significant clinical caries to the DEJ
  - Restored with composite

One (1) of these competency examinations must be successfully completed prior to participating in D4 Clinical Proficiency Examinations.

Two (2) of these competency examinations must be successfully completed as part of the D4 Clinical Proficiency Examinations.

D4 Clinical Proficiency Examinations

The D4 Clinical Proficiency Examinations are designed to simulate actual testing format on regional licensure examinations (WREB/SRTA).

The operative section of the D4 Clinical Proficiency Examinations must be successfully completed during the scheduled examination time frame, or, in the event of a failure, successfully retaken on a later specified date. Upon successful completion of both D4 Clinical Proficiency Examination indications, credit will be awarded towards Clinical Operative Dentistry II. Upon unsuccessful completion of both D4 Clinical Proficiency Examination indications, a formal remediation will be assigned as deemed appropriate by the Course Director to improve deficient areas in operative dentistry.

Successful completion of the D4 Clinical Proficiency Examinations operative section is mandatory to receive a final grade in Clinical Operative Dentistry II and to graduate. You will not be given permission to register to participate in any regional licensure examination until the operative section of the D4 Clinical Proficiency Examinations is successfully completed. Additional detailed information will be forthcoming about D4 Clinical Proficiency Examinations in the fall semester as part of the D4 Clinical Proficiency Examinations Manual.

Failure Consequences of Competency Examinations

- Students failing competency examinations will be notified by email with a "cc" to their respective group manager.
- Upon failure, competency examinations will cease until the student meets formally with the Course Director to discuss weaknesses and indicated remediation.
- Once the formal meeting with the Course Director has occurred and all remediation has been successful to reestablish competence, a written email from the Course Director to the student and group manager will indicate that competency examinations may be attempted.
- If a student attempts another competency without written email approval from the Course Director, the successful competency will not count and the failed competency will be averaged into the overall course grade.
- ***Failure to check email is NOT a valid excuse for Clinical Operative Dentistry I and/or II.***

Course Grades

The final course grade for Clinical Operative Dentistry II will be determined by clinical performances on the competency examinations only. The final grade will be the average of the attempted competency examination grades. Each student will be allowed ***ONE*** competency failure that will NOT be used in the calculation of the final course grade. However, another passing score on the same competency indication must replace it prior to the end of the spring semester. There must be a total of three D4 competency examination grades to be averaged for course grade. Each failure will be recorded as a 0 (zero) in the final course grade and if the student does not attempt their replacement of the one failed competency then a 0 (zero) will be recorded as one of the three grades.

After the completion of all three clinical competency examinations, if a student wished to raise the final overall course grade, he/she may choose to do the following:

- Within 48 hours of the successful completion of the three D4 competencies the student may declare (in writing via email to the Course Director) the desire to attempt a similar competency for another grade.
- A clear and concise email to the Course director with the scheduled date for this additional competency and the competency wishing to be replaced.
- This APPROVED attempt must occur within one month of the original declaration for replacement.

- This replacement competency will replace the original competency independent of the outcome (if the student receives a lower grade on the replacement competency that is the grade recorded for the final course grade).

Students are required to perform all operative procedures, Essential Clinical Experiences and competency examination, with the clinical integrity and professionalism as a competent health care provider. A record of unsatisfactory performances and unprofessional behavior WILL result in simulation remediation, possible loss of clinical privileges, or other appropriate actions.

Failure to successfully complete all 3 (three) competency examinations by the end of the fall semester of the D4 year will result in an I (incomplete) grade for Clinical Operative Dentistry II.

ALL operative competency Examinations and D4 Clinical Proficiency Examinations must be successfully completed before the student receives approval from the Course Director and Department to Graduate! NO EXCEPTIONS!

Student Self-Recording Clinical Progress

The following chart allows the student the opportunity to record their progress through Clinical Operative Dentistry I (Essential Clinical Experienced and Competencies) and Clinical Operative Dentistry II (Competencies and D4 Clinical Proficiency Examinations). ***This chart is used for student visual progression and not verification for graduation as the course director has the autonomy to disagree with the recordings without proper documentation.***

	Procedural CDT Code	Patient Number	Date Completed
Essential Clinical Experiences			
○ Class I Amalgam			
○ Class II Amalgam			
○ Class II Amalgam			
○ Class V Amalgam			
○ Class I Composite			
○ Class II Composite			
○ Class III or IV Composite			
○ Class V Composite			
D3Competency Examinations			
○ Class I Amalgam or Composite (optional)			
○ Class II Amalgam or Composite			
○ Class III or IV Composite			
D4 Competency Examinations/D4 Clinical Proficiency Examinations			
○ Class II Amalgam			
○ Class II Composite			
○ Class III or IV Composite			
Remediation Competencies			

Competency Examination Rules/ Requirements

- All students are expected to identify potential competency operative procedures from their pool of assigned patients with a current and approved treatment plan with appropriate informed consent. Students are responsible for fully understanding their patients' medical history and need for any pre-medications associated with proposed operative treatment.
- It is the student's responsibility to schedule their competency operative examination on a day in the clinic when two examiners are assigned and will be available to cover the proposed procedure.
- All operative examiners have been calibrated and two independent graders will cover each proposed competency examination.
- Any student formally requesting to perform an operative competency examination must receive a pre-operative verification and approval from both clinical examiners on the floor. Non-operative faculty cannot authorize competency examinations NOR give pre-operative approval to begin.
- The operative examiners reserve the right to approve the proposed operative lesion, disqualify the proposed operative lesion and/or change the proposed operative lesion.
- It is the students primary responsibility to recognize and propose competency indications for patients of record, however, covering faculty reserve the right to require a student to perform an operative competency examination if indications exist and the student is eligible.
- All electronic devices must be stowed away (except digital clock) for the entire operative competency examination.
- All examination forms must be completed PRIOR to receiving pre-operative approval for the proposed procedure with the students corresponding ID number and date (two examiners evaluation forms, one self-evaluation form and one competency procedure sheet).
- Students may utilize auxiliary assistance by staff or classmates; however, any inappropriate use of that assistance will constitute an automatic failure (0) and loss of clinic privileges.
- Once approved by both examiners to begin the competency examination, withdrawal from that procedure will constitute an automatic failure (0) for that examination.
- Students are expected to provide compassionate, professional and ethical care for their patients during all clinical procedures. Additionally, students are required to maintain a professional and collegial interaction with examiners, staff and auxiliary assistance.
- Students are expected to understand and comply with all standards of infection control, radiation exposure and environmental safety as dictated by the dental school.
- Anxious patients requiring the use of conscious sedation (nitrous oxide, oral sedatives) are excluded form competency examinations unless receiving prior written approval from the Course Director.
- Two (2) hours are allotted for each operative competency examination. The student must obtain pre-operative approval by 9:30 in the am session or 2:30 in the pm session to begin their

examination. Additionally, the student must be completed with their examination at 11:30 in the am session and 4:30 in the pm session. NO EXCEPTIONS!

  - Poor time management is a critical error and will result in an automatic failure and a zero (0) grade for that procedural examination.
- Evaluation from the two examiners will be made from the published competency evaluation criteria/ grading section in this manual. It is the responsibility of the student to understand and comply with the criteria set forth for cavity preparations, final direct restorations and their overall performance on each competency examination.
- Any inappropriate use or intervention by competency examiners and/or clinical faculty during the examination will result in an automatic failure for that procedure. Sole communication during the examination will be any deviation and/or modifications needed by the student (or examiners) to increase the retention, resistance and long term success of that clinical procedure.
- The grading scale and skills assessments are located in the previous section of the manual. The student must receive no less than a 1.5 in each of the six grading areas (three from each examiner) to be successful on an operative competency examination. The six grades (three from each examiner) will be averaged and must be > 1.5 to be successful for that examination.
- Tooth preparation design must be clearly identified PRIOR to pre-operative approval of the competency based examination by the examiners (slot preparations, tunnel preparations, etc.).
- All teeth proposed for competency examination must meet the following criteria:
  - Permanent (adult), vital and asymptomatic with no history of trauma, fistulous activity, and/or radiographic periapical/periradicular pathology
  - Interproximal contact
    - Must have pre-existing contact between the qualifying carious lesion and adjacent virgin tooth
    - Must have pre-existing contact between qualifying carious lesion and adjacent incipient carious tooth where ideal embrasures can be restored
    - Must have pre-existing contact between qualifying carious lesion and properly restored adjacent tooth
    - A temporary restoration (IRM) or a removable partial denture are NOT acceptable adjacent tooth surfaces
  - Occlusal contact
    - Must have pre-existing occlusal contacts between qualifying carious lesion and opposing natural tooth or properly restored opposing tooth (direct and indirect restoration).
    - Exceptions will be class V and class III mandibular qualifying indications
  - Any teeth with existing temporary restorations will NOT be qualified for competency examinations

  - Any teeth with large existing restorations proposing a marginal repair (class III caries approximating a bonded ceramic veneer) will NOT be qualified for competency examinations
  - Carious lesion
    - There must be clinical and/or radiographic evidence of active caries to qualify
    - Digital image; carious lesion must have reached just to or just penetrated the DEJ on a current bitewing and periapical digital image
    - To qualify the lesion, the current bitewing and periapical image must show the periapical/periradicular status of the tooth with both proximal contacts clearly visible
    - There must be carious activity for the lesion to qualify for competency examination
      - Replacing defective, existing restorations without recurrent caries will NOT qualify for examination
    - A virgin carious lesion on the proximal surface is strongly recommended
    - Misdiagnosis of carious lesions will negatively affect the students overall grade and remediation will be required at the discretion of the Course Director
- Local Anesthesia
  - Pain control and adequate local anesthesia must be obtained PRIOR to treating patients. No more than 2 carpules shall be administered to one patient to achieve adequate anesthesia during an examination. Additional anesthesia MUST be approved by the examiners before the examination can continue.
  - Inadequate local anesthesia by the student will result in a failure (0) for that examination and remediation will be required at the discretion of the Course Director
- Rubber Dam Isolation
  - Standard of care for all competency examinations
  - Ligature must be secured to the retainer to prevent possible aspiration/ ingestion
  - Quadrant isolation with retainer placed one tooth distal to operative field is STRONGLY recommended
  - Must be removed for final restoration evaluation to verify centric occlusion and excursive interferences.
- Preparations
  - All caries and existing restorative materials (including bases and liners) must be removed
  - The cavity preparation should be ideal as instructed in the pre-clinical operative dentistry course to accommodate the clinical situation. Any deviation and/or modification must be requested by the student and approved by the grading competency examiners (see deviations/modifications section of this manual).
  - The completed cavity preparation must be graded by the competency examiners prior to placing any type of base/liner or placing the matrix band/matrix retainer

- All occlusal caries must be removed and restored
  - For example, if the student is challenging a MOL alloy on #14 and there are incipient caries in the distal pit;
    - The oblique ridge should be preserved and small class I preparation completed in the distal pit to remove incipient caries
    - Leaving the distal caries would result in a failure for that competency examination with a grade of zero (0)- "caries remaining"
- All pulpal exposures, mechanical and/or carious, will result in a failure for that competency examinations with a grade of zero (0)- "pulpal exposure"
- Decalcified enamel should be removed when it is penetrable and in a non-cleansable area for the patient

Examination Day Armamentarium

Prior to Pre-operative Approval (by both examiners):

- Evaluate and record patient's current vital signs (blood pressure) in Axium and on both pink examiners grade sheets (ink).
- Review and update patient's current medical history and medications (prescription and over the counter)
- Proposed competency tooth must be on a current and approved treatment plan
- All patient information in Axium must be current and approved
- All required competency forms must be completed and ready

Pre-operative Approval (by both examiners)

- Instruments needed (unscratched mirror, 23 explorer, periodontal probe, tri-flow syringe tip, unwaxed dental floss)
- Two (2) pink competency examiner grading forms neatly completed in ink with the patient's vital signs recorded on the top right corner and any pertinent information for the examiners to know
- One (1) white competency student self-evaluation grade form with student number and date in ink
- One (1) white deviation/modification form with student number and date in ink
- Current (within 6 months) digital images of the proposed lesion clearly displayed on the computer monitor
  - Digital images; carious lesion must have reached just to or just penetrated the DEJ on a current bitewing and periapical image
  - To qualify the lesion, the current bitewing and periapical image must show the periapical/periradicular status of the tooth with both proximal contacts clearly visible

Modifications

- Modifications are intended for the <u>unexpected clinical situation</u> during a competency operative examination where ideal preparation outline and/or extension form are modified from ideal (caries, demineralization, affected dentin).
- Some minor variations will always exist from patient to patient and are not proper use of the modification form. Major variations and management of those indications is the correct use of the modification process on the clinical competency procedure form discussed earlier.
- Competency examinations are designed to evaluate clinical judgment and clinical applications of variations in treatment. Inappropriate use of the modification process will negatively affect time management, professionalism and clinical judgment grading criteria as described in the following section labeled ***Competency Evaluation Criteria/ Grading***.
- The student's modification request must be precisely written in clear dental terminology in those situations where ideal outline and/or extension forms are compromised. ***<u>DO NOT ASK FOR MODIFICATION WHILE STILL WITHIN IDEAL PREPARATION PARAMETERS</u>***.
- For each modification request, please use the following guidelines:
  - Type of modification: (internal or external)
  - Location of modification: (gingival floor, axial wall, pulpal floor, etc.)
  - Extent of modification: (.5mm increments ideal unless gross caries)
  - Reason for modification: (caries, demineralization, affected dentin, etc.)
- Modification Examples:

Outline/Internal	Location	Extent	Reason	Approval (Yes or No)
1. Internal	Pulpal Floor	.5mm	Remove Caries	
2. External	Transverse Ridge	1mm	Undermined Enamel	
3.				
4.				
5.				

- All infection control barriers must be donned and patient wearing personal protective apparatus (safety glasses, napkin with chain)

Preparation Grading/ Deviation Approval (by both examiners)

- Instruments needed (unscratched mirror, 23 explorer, periodontal probe, tri-flow syringe tip, spoon excavator, 2X2 gauze, cotton roll)
- Current (within 6 months) digital images of the lesion clearly displayed on the computer monitor
- All infection control barriers must be donned and patient must wear personal protective apparatus (safety glasses, clean/unsoiled napkin with chain)
- Appropriate use of the deviation form must be understood as the sole communication and instructional guide between the examiners and the student

Prior to Final Restoration Grading (by both examiners)

- The rubber dam must be removed so that the student can verify centric occlusion and excursive interferences
- Replace or clean any visibly soiled patient personal protective barriers (napkin, protective glasses)
- Enter progress notes into Axium of procedure performed including material and complete the self-evaluation grade sheet critiquing clinical performance for procedure

Final Restoration Grading (by both examiners)

- Instruments needed (unscratched mirror, 23 explorer, periodontal probe, tri-flow syringe tip, 2X2 gauze, cotton roll, unwaxed dental floss, millers forceps with articulator ribbon)
- Current (within 6 months) digital images of the lesion clearly displayed on the computer monitor
- All infection control barriers must be donned and patient must wear personal protective apparatus (safety glasses, clean/unsoiled napkin with chain)

Competency Evaluation Criteria/ Grading

Examination grades will reflect performance related to skill assessment and overall execution of procedure via competency statements presented in this manual and the following grading criteria for Clinical Operative Dentistry I and II:

Preparation Skill Criteria:	Restoration Skill Criteria:	Overall Performance Criteria:
Adequate Anesthesia	Anatomical Form	Professionalism/ Conduct
Caries Removal	Contours	Clinical Judgment
Extension	Esthetics	Clinical Attire
Depth	Proximal Contacts	Tooth Selection
Retention	Occlusion	Instrumentation
Pulp Protection	Condensation	Paperwork/ Computer Use
Finish	Finish	Manage Medical Conditions
Isolation	Cavosurface Margins	Time Management
Hard Tissue Damage	Hard Tissue Damage	Infection Control
Soft Tissue Damage	Soft Tissue Damage	

<u>Below Minimal Competency Standards</u>

The following <u>critical errors</u> are considered below minimal competency standards for and will result in an unsatisfactory performance on the competency examination; recorded as a 0 (zero):

- Inadequate anesthesia
- Poor or no rubber dam isolation
- Mechanical or carious pulpal exposure
- Extremely over-extended preparation outline
- Extremely under-extended preparation outline
  - Preparation still in or partially in enamel
  - Proximal contacts not broken
- Incomplete caries removal
- Incomplete removal of ALL previous restorative materials (including bases and liners)
- Major damage to hard or soft tissue during preparation and/or finishing restoration
- Inadequate proximal contact design (too open or too tight)
- Significant overhang and/or flash over cavosurface margin
- Open cavosurface margin or voids in the final restoration
- Hyperocclusion
- Significant over-carving with compromised anatomical form and function
- Examination proposed or completed on non-vital tooth
- Preparing the wrong tooth (one not pre-approved) or tooth surface(s) of approved tooth
- Cracked or broken restorations
- Poor time management/ Past time limit
- Unprofessional/ unethical conduct towards examiners and/or patient
- Receiving a zero (0) in any of the criteria categories

Grading Scale

The evaluation of the competency examination preparation skill, restoration skill and overall performance will be based on the following grading scale:

3= Superior; satisfies all criteria
2= Acceptable; could be improved with minor deficient area improvement
1= Marginal; needs major improvement in deficient areas
0= Unacceptable; unsatisfactory and serious remediation is required

The examiners of the competency examination reserve the right to score in (.1) increments. The following conversion of averaged points to a course letter grade will be employed by the Course Director as graded by the two examiners:

2.50 – 3.00 = A
2.00 – 2.49 = B
1.50 – 1.99 = C
< 1.50 = F

Student Skills Assessment and Overall Performance Scale for Faculty

Grade	Criteria
3	Exceptionally prepared for operative procedure
	Skillful performance on clinical operative procedure
	Critical and appropriate evaluation of clinical performance
	Mastered clinical protocol and insured patient safety throughout procedure
	All paperwork was completed correctly and Axium entered correctly
	Exceptional knowledge of dental materials with clinical applications

Grade	Criteria
2	Adequately prepared for operative procedure
	Average performance on clinical operative procedure
	Adequate evaluation of clinical performance
	Followed clinical protocol and insured patient safety with minor adjustments
	All paperwork was completed correctly and Axium with minor adjustments
	Adequate knowledge of dental materials with clinical applications

Grade	Criteria
1	Unprepared for operative procedure but some knowledge
	Poor performance on clinical operative procedure
	Incorrect evaluation of clinical performance
	Followed clinical protocol and insured patient safety with major adjustments
	All paperwork was completed correctly and Axium with major adjustments
	Incorrect knowledge of dental materials with clinical applications

Grade	Criteria
0	Unprepared for operative procedure
	Unacceptable performance on clinical operative procedure
	Unacceptable evaluation of clinical performance
	Did not follow clinical protocol and patient safety was compromised
	Paperwork was completed incorrectly and Axium entry incorrect
	Unacceptable knowledge of dental materials with clinical applications

Pulpal Protection- Bases and Liners/Sealers

Bases, liners and sealers are used under direct restorations to minimize microleakage, reduce post-operative sensitivity and promote dentinal repair. In the clinical situation during a competency examination where a base, liner and/or sealer are needed, it is the student's responsibility to know the materials and how to use them appropriately.

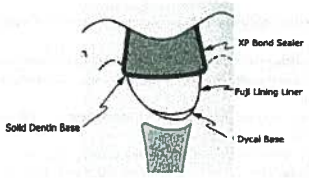
Bases:

- Dycal (CaOH): Calcium Hydroxide is used for direct and indirect pulp capping in those deep caries cases or over-prepared teeth where secondary dentin formation is needed to maintain vitality of the pulpal tissue
  - It is both highly soluble and brittle (poor compressive strength)
  - It must be covered with a resin-modified glass ionomer (Fuji Lining) liner as comprehensive therapy

Liners and Sealers:

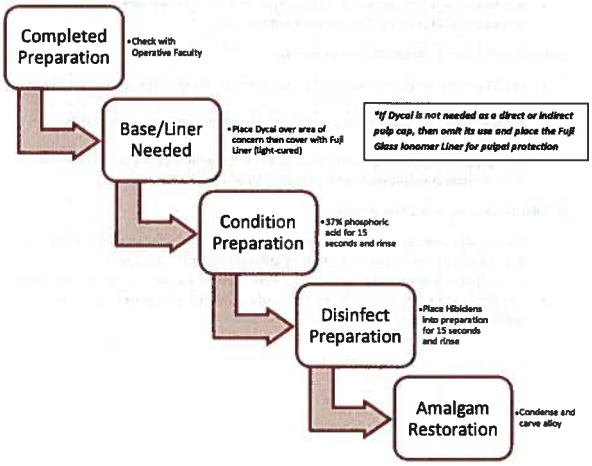
- Fuji Lining (Resin-Modified Glass Ionomer): Used for covering bases (Dycal) and occluding dentinal tubules to prevent post-operative sensitivity in those moderate caries cases or where over-prepared teeth have occurred.
  - Low solubility and less brittle than bases (Dycal)
  - Light Cure Material
  - Only place over base or on the pulpal/gingival floors (NOT ON WALLS)

- XP Bond (Light-Cured Bonding Agent): Used in those routine cases to occlude dentinal tubules and seal enamel cavosurface margins in ideal preparations.
  - Used under amalgam (liner) and composite (adhesive) direct restorative materials
  - Light Cure Material
  - Can be used over resin-modified glass ionomer liner following proper cure



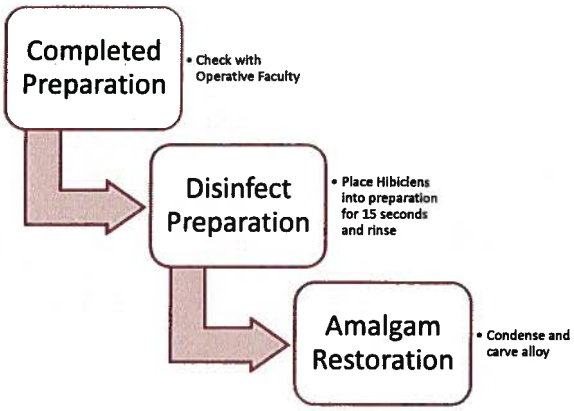
Today I am going to do an amalgam restoration!

What are the steps for my direct restoration requiring a base/liner my if preparation is deeper than ideal?



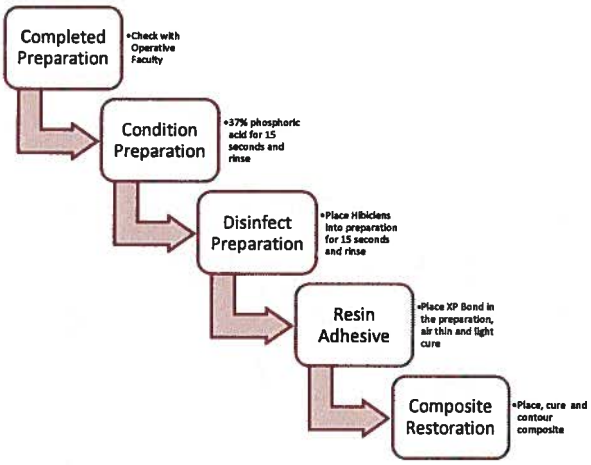
Today I am going to do an amalgam restoration!

What are the steps for my direct restoration not requiring a base/liner in my ideal preparation?



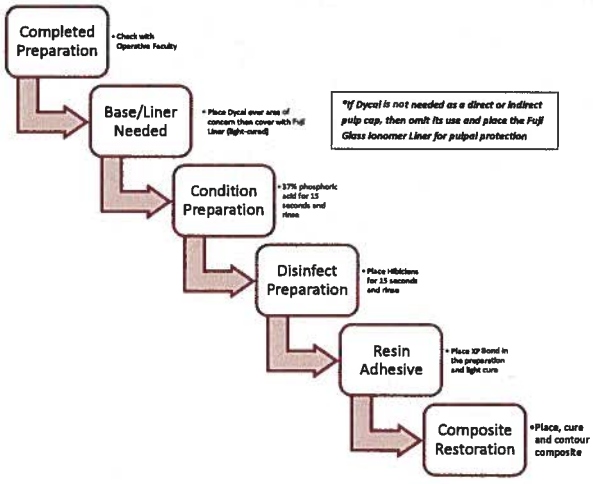
Today I am going to do a composite restoration!

What are the steps for my direct restoration not requiring a base/liner in my ideal preparation?



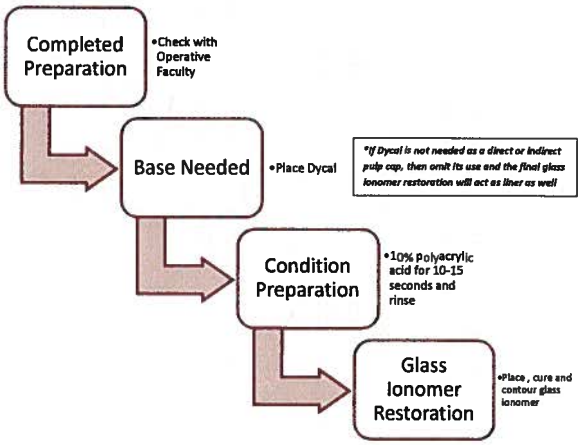
Today I am going to do a composite restoration!

What are the steps for my direct restoration requiring a base/liner if my preparation is deeper than ideal?



Today I am going to do a glass ionomer restoration!

What are the steps for my direct restoration?



Sasek,Marija

From: Metz,Michael J
Sent: Monday, April 08, 2013 3:15 PM
To: Dental_DMD_Class_of_2014; Baughman,Pauletta Gay; Boyd,James Paul; Gardner Jr,Hugh Kenneth; Haake,Joseph A; Hassell,Kurt J.; Kelly,James C.; Ljaljevic Tucakovic,Alma; Paris,Mary Melinda; Sanders,William Loudon; Sasek,Marija; Stratton,Barbara Morgan; Utley,Michael J.; Weber,Valerie Harris
Cc: Crim,Gary A.; Metz,Michael J; Mayfield,Theresa Gale; Daugherty,Timothy Carroll; Hill,Margaret
Subject: Operative Competencies
Attachments: Clinical Operative Dentistry 2013-14.pdf

Class of 2014- According to your class president, there were no objections to the reduction in operative competencies required for your D3 year. I have awarded you the opportunity to perform the class I competency as an optional experience to enhance your overall clinical operative performance. Typically, D3 students find the class I examination to help boost confidence before tackling the other more complex class II and III experiences. Please feel free (I encourage it) to continue using this experience to your advantage. For those individuals who have challenged the class I competency:

1. I will only average it in the overall grade if it does nothing or helps you. (if it hurts you and you passed it, I will not use it in the average)

For example: Class I (1.5), Class II (2.0), Class III (2.5)

I would not include the class I in the overall average. With the class I, average (2.0), without the class I, average (2.25)

Normally, D3 students do much better on the class I examination than the class II and III (food for thought).

**If you are currently in a failing status for an unsuccessful class I examination, you must remediate and redo the examination. It will count in the overall average regardless of the grade.
***If you choose to do the class I and fail it, you will be required to remediate and repeat it with a passing grade. It will not go away.

I have attached your new course manual reflecting the changes discussed. I will be replacing the old manual with the current one on blackboard when you all enroll in clinical operative dentistry II in the fall. Please feel free to come see me with any questions. I have personally graded and recorded several outstanding competencies from this group. Kudos, Dr. Metz

Respectfully,

Michael J. Metz, DMD, MSD, MS, MBA
Certified, American Board of Operative Dentistry
Director, Division of Clinical Operative Dentistry
Director, Laboratory Quality Assurance
Acting Vice-Chair, Department of General Dentistry and Oral Medicine
University of Louisville School of Dentistry
501 S. Preston Street
Louisville, Ky. 40202
mjmetz01@louisville.edu
(502) 852-6168

DMD CLINIC GUIDELINES – FIXED PROS

1. The designated all-ceramic restoration in the DMD clinic is the anterior lithium disilicate crown. (e.max)
   The correct term on the lab authorization should be all-ceramic crown, not porcelain crown, porcelain FPD....
   E.max can be pressed or CAD/CAM. Please specify that on the lab authorization if you have any preference.
   The restoration will need to be bonded with resin cement. Fuji plus is not an ideal choice for the e.max restoration.
   The e.max will need to be HF etched, silaned and bonded.
   You can obtain the resin cement in 1st or 2nd floor dispensary, and the HF and silane in the OHR clinic.
   The stump shade (dentin shade)is necessary for the e.max restoration. Before sending out the case, please check if you have stump shade and final shade on the lab authorization.

2. All the fixed cases involve with canine, the custom incisal guide table is required.
   The reference cast demonstrated desired shape and guidance on the canines (from diagnostic wax up or provisional restorations) needs to be cross articulate with opposing and master cast.
   The custom incisal guide table should not be fabricate on the remaining teeth (eg, premolars) from master cast.
   In the QA, at least 3 articulated casts will need to be present, the master cast, opposing, the cast with desired canine guidance.

3. One of the important reason of having second pour is to have a solid cast (without sectioning).
   Please make sure the second pour is a solid cast, so the lab can verify the proximal contacts on it.

4. I have seen the increased requests or completed cases for the partial arch impression. (triple tray, digital impressions..)
   The standard protocol in the DMD clinical fixed cases is the full arch impression.
   In most of the cases, full arch custom tray or digital impression should be the choice when the patient has anatomic structures prevent the use of stock tray.

5. The baseplate should be used if there are no widely spread teeth to provide stable articulation.
   (commonly seen in the survey crowns cases with limited remaining teeth present)
   The mushy bite on the soft tissue with Regisil and no baseplate is not acceptable.
   All the Regisil occlusal records should be trimmed above the height of contour of the teeth.
   If the Regisil extended on the soft tissue or the undercut portion of the teeth, the accuracy can not be verified.

6. The minimum clinical experience for the D3 and D4 students to use the digital fixed impression is 5 seated clinical crowns.
   Please ask the students to fill out the reservation form with Mary in OHR.
   We have no grant to support the scan body and repositional analog in the DMD clinic, and we do not do the digital impression for the implants currently.

7. Integrity: I had been working with Dr.Collins to order the Integrity for the DMD clinic.
   The identified indications in DMD clinics for the integrity are:
   single unit provisional crown (anterior and posterior), partial coverage restorations (veneer, inlay, onlay..), students or patients have allergic reactions or health-related concerns (pregnancy) to the PMMA monomer.
   We are not currently using the integrity for the FPD or splinted multiple single units provisional restorations because of the cost.
   However, I am evaluating theses guidelines, please let me know if we need to expand the indications.
   When the clinical faculty see the indications, please write a quick note and sign the note for the students to obtain the Integrity from the dispensary.
   The integrity is soon available in both first and second floor dispensary.

Sasek,Marija

From: Lin,Weishao
Sent: Wednesday, April 03, 2013 2:29 PM
To: Baughman,Pauletta Gay; Bohn,Robert C; Boyd,James Paul; Ceridan,Barry Wayne; Clark,Mary C; Collins,Paula Lee; David Maddy (Dave@dmaddy.com); drbobbohn@gmail.com; Eldairi,Alia; Fadel,Daniel A.; Firriolo,Francis John; Haake,Joseph A; Hassell,Kurt J.; Hupp,Wendy S; Keeling,Richard Wiley; Kelly,James C.; Lay,Wayne Deaton; Ljaljevic Tucakovic,Alma; Maddy,David Morgan; Mansfield,William Michael; Mattingly,Stephen L.; Mayer,Lee Sidney; McCants,Jennifer Barnes; Noble,Ryan M.; Oliveira,Greice Costa; Paris,Mary Melinda; Sanders,William Loudon; Sasek,Marija; Stratton,Barbara Morgan; Utley,Michael J.; Vaught,Randall Lee; Weber,Valerie Harris; Willis,David O.; Zaino,Sherrie W.; Cotton,Douglas; Davis,Rachel Hilary; Dr. Clark (clarkst@bellsouth.net); Flesch, Mark; Forster,Delia Adriana; Gardner Jr,Hugh Kenneth; Hayden,Dedra Marie; Hicks,Madeline M.; Hislop,Abigayle Leigh; Jolene Zirnheld (jrzdmd@aol.com); Jones,David C.; Karem,Donald Nick; Marcum,james s; McCall,Douglas Henry; Moore,John D.; Rakutt,John P.; Richard (drrkeeling@gmail.com); Tabb,William Gary; Topor,Stephen T.; Williams,Chris; Woodward DMD,James D; Shumate,Amy Jo; Windchy,Ann M.; Linehan,Allan D; Tamer Abdel-Azim; Zandi Nejad,Amir Ali; Harris,Bryan Todd; Elathamna,Eiad Nehad; Bolin,Mary Waller; Wei-Shao Lin
Cc: Crim,Gary A.; Mayfield,Theresa Gale; Daugherty,Timothy Carroll; Morton,Dean; Metz,Michael J; Oliveira,Gustavo Mussi
Subject: IMPORTANT ******** Integrity and Flowable composite**********

Dear Clinical Faculty, D3 and D4 students,

The integrity should be available in the both 1st and 2nd floor dispensary now.
Please understand that it's a very expensive material and the usage of it is being evaluated.
The identified indications in DMD clinics for the integrity are:
single unit provisional crown (anterior and posterior), partial coverage restorations (veneer, inlay, onlay..), students or patients have allergic reactions or health-related concerns (pregnancy) to the PMMA monomer.
We are not currently using the integrity for the **FPD** or **splinted multiple single units provisional restorations** because of the cost.
Please use integrity only in the indicated clinical conditions, and it may subject to be removed from the clinics if not used responsibly.
When the clinical faculty see the indications, please write a quick note and sign the note for the students to obtain the Integrity from the dispensary.

The flowable composite is also being considered currently to be ordered for the DMD clinics for the marginal repair on the Integrity provisional restorations.
In the mean time, please do not come to OHR to ask for the flowable composite, since those flowables are from graduate pros program, and they can't afford handing out their materials on a daily basis.

Thanks for your attention on this matter.

Wei-Shao Lin, DDS
Assistant Professor
Discipline Coordinator and Course Director of Clinical Fixed Prosthodontics
Department of Oral Health and Rehabilitation
University of Louisville, School of Dentistry
501 S. Preston Street, Rm 0108
Louisville, KY. 40292

STUDENT COPY PATIENT APPOINTMENT TIME

LAB TURN AROUND INCLUDING QA

Time starts the <u>following day</u> it arrives at the South lab

Labs to handle implants*

LABS		PT APPOINT
ROYS*	Set up	9 WORKING DAYS
	PROCESS	9 WORKING DAYS
	INTERIM	11 WORKING DAYS
	FGC	9 WORKING
	PFM	11 WORKING DAYS
	ZIRCONIA	14 WORKING DAYS
	CR &BR METAL TRY IN	9 WORKING DAYS
	APPLY PORCELAIN	9 WORKING DAYS
LC&B	FGC	8 WORKING DAYS
	PFM	8 WORKING DAYS
	ZIRCONIA	8 WORKING DAY
ADL*	Set up	8 WORKING DAYS
	PROCESS	8 WORKING DAYS
	INTERIM	9 WORKING DAYS
(DENTSPLY)	RPD FRAMEWORK	15 WORKING DAYS
	FGC	9 WORKING
	PFM	9 WORKING DAYS
	ZIRCONIA	11 WORKING DAYS
	(full ceramic stump shade)	
	CR &BR METAL TRY IN	9 WORKING DAYS
	APPLY PORCELAIN	7 WORKING DAYS
DERBY	Set up	9 WORKING DAYS
	PROCESS	8 WORKING DAYS
	INTERIM	9 WORKING DAYS
(DENTSPLY)	RPD FRAMEWORK	15 WORKING DAYS
	FGC	9 WORKING DAYS
	PFM	9 WORKING DAYS
	ZIRCONIA	9 WORKING DAYS
	CR &BR METAL TRY IN	8 WORKING DAYS
	APPLY PORCELAIN	7 WORKING DAYS
HIGHLAND*	FGC	11 WORKING DAYS
	PFM	11 WORKING DAYS
	ZIRCONIA	11 WORKING DAYS
	CR &BR METAL TRY IN	9 WORKING DAYS
	APPLY PORCELAIN	11 WORKING DAYS
	ALL CERAMIC	11 WORKING DAYS
	PRESSED WORK	11 WORKING DAYS

LABS		PT APPOINT
DENTAL CERAMICS	FGC	9 WORKING DAYS
	PFM	14 WORKING DAYS
	ALL CERAMIC	14 WORKING DAYS
	CR &BR METAL TRY IN	9 WORKING DAYS
	APPLY PORCELAIN	9 WORKING DAYS
DAL'S KY	SET UP	15 WORKING DAYS
	PROCESS	15 WORKING DAYS
	RPD FRAMEWORK	15 WORKING DAYS
DENTAL ART LAB	SET UP	15 WORKING DAYS
	PROCESS	15 WORKING DAYS
	RPD FRAMEWORK	15 WORKING DAYS

ALL RELINES, REPAIR AND REBASE 2 – 3 DAY

Complete Edentulous Screening Form - Explanation

The PDI diagnostic criteria may help the dentist with insurance companies in reimbursement of the denture. It definitely points out the fact that all denture patients are not the same level of difficulty. We have modified the criteria to fit our ULSD needs. This check list can provide the dental screener with criteria that may assist the screener to determine who should treat the patient and where treatment should be rendered. An assignment should be made at the end of the first screening appointment. This information should be filled out in conjunction with the Patient Evaluation and Examination Form.

- A **Class I** patient is uncomplicated and should be easily treated in a General Clinic and covered by a faculty with limited complete denture experience. The overall prognosis for this patient should be good to excellent.

- A **Class II** patient has minor complicating factors consisting of systemic disease, residual ridge anatomy, ridge relationship or other. This patient should successfully be treated in the general Clinic with supervision by Pros. faculty, residents or Gen. Dentistry faculty with experience in treating complete dentures. With the defined supervision, with close faculty supervision, this patient should have a good prognosis. This patient may be best treated in the OHR Pros. specialty clinic, and that decision must be made prior to treatment.

- A **Class III** patient has additional complicating circumstances like, limited or excessive inter-arch distance, need for pre-prosthetic surgery, TMD symptoms or other factors. This patient should be treated by a Prosthodontic resident or by a student with close one-on-one Pros. faculty supervision and be treated in the OHR Clinic. This patient has a guarded prognosis. A Prosthodontic faculty member may decide to work with a student one-on-one, through the <u>entire case</u>. The student cannot flip around from faculty to faculty or clinic to clinic on these complex cases.

- A **Class IV** patient is the most complicated and debilitated patient. He may have: an edentulous arch in very poor condition, very deficient anatomy for complete dentures, complicated medical conditions, and/or may be requiring extensive pre-prosthetic surgery. This patient is best treated by the surgical specialist, a resident or a prosthodontist. The prognosis for the patient is poor, if treated by the general dentist, and is only guarded, if treated by the prosthodontist. The patient may convert to another classification after the pre-prosthetic mouth prepaation and surgery is managed by the prosthodontist or resident.

A patient may, in some cases, be transferred to another clinic for treatment. This is evaluated on a one-on-one basis.

Complete Edentulous Screening Form

	Class I	Class II	Class III	Class IV
Bone Height Mandibular				
21 mm or greater				
16-20 mm				
11-15 mm				
10 mm or less				
Residual Ridge Morphology - Maxilla				
Type A - Resists vertical & horizontal hamular notch, no tori				
Type B- no buccal vest,.,poor hamular, notch, no tori				
Type C - no ant. Vest., min. support, mobile ant. Ridge				
Type D - no ant. /post. vest.., tori, redundant tissue				
Muscle Attachments - Mandibular				
Type A - adequate attached mucosa				
Type B - No Buccal attached mucosa(22-27) +mentalis m				
Type C - no ant. B & L vest.(22-27), +genio & mentalis m				
Type D - Att. Mucosa in posterior only				
Type E - No attached mucosa, cheek/lip moves tongue				
Maxillomandibular Relationships				
Class I				
Class II				
Class III				
Conditions Requiring Pre-prosthetic Surgery				
Minor soft tissue procedures				
Implants - simple				
Implants with bone graft - complex				
Correction of dentofacial deformities				
Hard Tissue augmentation				
Major soft tissue revisions				
Limited interarch Space				
18-20 mm				
Surgical correction needed				
Tongue Anatomy				
Large (occludes interdental space)				
Hyperactive - with retracted position				
Modifiers				
Oral manifestations of systemic disease				
Mild				
Moderate				
Severe				
Phsychosocial				
Moderate				
Major				
TMD Symptoms				
Hx of paresthesia or dysesthesia				
Maxillofacial defects				
Ataxia				
Refractory Patient				
Gag Reflex severe				
Final Classification of Patient & Assignment	☐	☐	☐	☐

DMD Gen. Clinics

Pros. In DMD/OHR

Pros Resident or Student/Fac. - OHR

Prosthodontist Resident in Grad

Defining the Interim and Immediate Complete Denture

An **Interim Complete Denture (ADA code 5810)** is a denture that is to be worn as a **temporary** prosthesis, for a short period of time, while the alveolar ridge shrinks after extractions, while implants integrate, and/or during the time when alveoloplasty may be performed. We do interim complete dentures on the maxillary arch but try to avoid constructing an interim on the mandibular arch. It is very difficult to have success with an interim complete denture opposing an interim complete denture. Most mandibular interim complete dentures are worn in the pocket. A minimum of 8 to10 weeks of healing should take place before construction of the final denture.

It is necessary to construct the interim prosthesis using Trubyte Classic teeth or Ivoclar Teeth. The posterior teeth should be extracted and posterior interferences (exostoses) removed before an impression is made for the temporary prosthesis. A maximum of 8 teeth (no molars) can remain when the final impression is made for the interim prosthesis. The only reason a molar may be retained is for the maintenance of VDO or it has a clasp for an RPD. If you record a final interim impression on a patient with severe generalized exostoses or undercuts in the posterior area, it will adversely affect the successful treatment with an interim complete denture. It is possible that the interim will not be able to be delivered, and the patient will be very unhappy. Sometimes, additional pre-prosthetic surgery may need to be performed at the time of final extractions, and if so, a surgical stent should be provided to oral surgery. The healing time may vary prior to taking the final impression for the interim denture. You need to consult with your group leader about treatment planning details. One tissue conditioning is included in the cost of the Interim prosthesis. Any additional tissue conditionings should be indicated with ADA Code 5850/5851 in the treatment plan. To be safe, add two into your treatment plan. This avoids Tx. Planning & financial problems with your patient - later. The Final Complete Denture ADA Codes for Maxillary and Mandibular Complete dentures are: 5110 (maxillary) and 5120 (mandibular). If implants have been placed, the code for the final mandibular implant supported Complete Denture is ADA Code 6053. See the fee book and implant manual for implant prosthesis suggestions and a sample implant treatment plan. We place only the anterior teeth and possibly 1 premolar on the interim denture.

An **Immediate Complete Denture** is a denture that is delivered at the time of extractions. It can be an **Interim Immediate Denture** (ADA code 5810) or the **Final Immediate Denture** prosthesis (ADA code 5130) delivered at the time of the final extractions. The final immediate denture will often need to be relined after a few months period of time. For the Final Immediate Denture, the posterior teeth are extracted first. A maximum of 6-8 teeth can remain, but preferably 6. After 6 weeks, an appointment is made to evaluate healing and the need for additional alveoloplasty or pre-prosthetic surgery in the posterior. Any alveoloplasty, if needed, is done, and an additional 6 weeks is allowed for healing. A master impression for a final immediate complete denture is made, using a "custom tray", **3-4 months after initial extractions**, no exceptions. The final 6-8 teeth are extracted and the denture is immediately delivered. We do not do this treatment at ULSD. We prefer to give the patient an interim complete denture and then construct a final complete denture when all healing is complete.

Interim Complete Denture Procedures

ALL DMD STUDENTS WILL BE REQUIRED TO DO THE FOLLOWING WHEN *INTERIM COMPLETE DENTURES* ARE BEING FABRICATED. The patient must be a) treatment planned, b) have a payment plan contract or have paid in cash in order to proceed with the following steps:

1. Maxillary extractions (required prior to denture fabrication) **must** be grouped sequentially on a treatment plan if an interim CD is being considered.

2. Alveoloplasty and tori reduction **must** be included and inserted in the treatment

plan, immediately after the planned extractions for the day (number and correct coding D7310-D7321 to be determined by faculty approving the treatment plan), so that the patient is advised in the event these procedures are necessary. At least two tissue conditionings **must** also be treatment planned. The first tissue conditioning is included in the cost of the interim. Consider how many oral surgery appointments will be used and arrange codes logically for what will occur on each surgery day.

Sample Treatment Plan

Surgery 1	**Surgery 1 or 2**	**Surgery 2 or 3**
7140 extract #03	7140 extract #12	7140 extract #6
7140 extract #05	7140 extract #14	7140 extract #8
7140 extract #30	7140 extract #18	7140 extract #10
7140 extract #31	7140 extract #20	7149 extract #11
7310 Mx Alveoloplasty / Quad	7310 Mx. Alveoloplasty	5810 Deliver interim

3. The student **should ideally be present** when the oral surgery is performed and the **denture is to be delivered** so that extractions, alveoloplasty, tori reduction, etc. can be evaluated and are shown to meet the needs of the particular patient. Only the student knows what was said at the consult and diagnosis. Place good notes on Axium regarding details of the consult.

4. The denture is to be seated once the surgical procedures are completed in Oral Surgery.

5. The student **must also** schedule time, **that day,** in their respective Groups to verify that the denture is seated, and the extensions and occlusion are appropriate. Ideally, get OHR supervision. Spend very little time adjusting the denture out of the mouth on that day. The patient begins to swell after the extractions, and this can be detrimental to seating the denture.

6. The student **must** have a stent or diagnostic cast (with areas that need treatment circled) for the oral surgeon at the time that the procedure(s) is/are being done.

7. **No more** than eight teeth are to remain needing extraction for an interim denture. (first premolar-first premolar) or 6-11 and a couple of teeth used as an old RPD clasp retention or premolars or a molar that hold vertical dimension. Preferably only 6-11 remain to be extracted.

8. **Delivery of the interim CD** with preferably a 24 hr. adj. and 72-hour adjustment appointments scheduled. The faculty can change this at the 24-hour adjustment appointment depending on findings, but the two appointments must be scheduled in advance.

9. Three months of adjustments are allowed at no charge. After that, a fee for service (Denture Adjustment) is charged. If a patient is not comfortable after 3 months, additional consultation should be sought to analyze the problems and/or final denture construction should begin.

10. Since the master cast is destroyed during processing. Make a duplicate of your cast or take two impressions. Do not lose your only record of pre-treatment. It can be used for tooth selection.

Interim Complete Denture with <u>No Remaining Teeth on the Opposing Arch</u>

If no teeth are to remain on the opposing arch at time of delivery of the interim, the case does not necessarily need to be mounted in order to construct the interim complete denture. Consideration should be given as to whether an occlusion rim should be made on your cast and adjusted in the mouth, so that the lab has an idea of how to develop the lip support, length of the anterior teeth and plane of occlusion

for the interim denture. The occlusion rim is necessary when anteriors are missing or severely broken down, or for the patient who is edentulous and needs an interim while implants are integrating.

Interim Complete Denture Opposing Remaining Natural Teeth

This case must be mounted before it is sent to the laboratory for fabrication. All the posterior teeth should be extracted and a maximum of 8 teeth remain in the maxillary arch. When posterior extractions are complete and alveoloplasty has been completed, proceed to the following:

Appointment 1	Get a final impression for the interim denture arch and the opposing arch. A regular Stok tray and alginate material is used. Tray fit & a good impression are critical to the success of an interim denture. Use wax to adjust the tray length, if necessary. The syringe technique (see manual) is excellent for this.
Between Appts.	Pour Casts within 15 minutes. Construct occlusion rim(s), as needed, for accurately mounting the case. An occlusion rim may not be required on both arches if a tripod or rectangular area of support on the opposing teeth.
Appointment 2	Adjust rim(s) for contour and VDO. Obtain a Facebow (if anatomical teeth are to be used), and a CJR record. Mark the midline if teeth are missing. Select **Trubyte Classic Teeth or Ivoclar** and color. Acrylic blocks can be developed in the posterior, but only premolars are set on an interim.
Between appts.	Mount the case. Write a prescription. Get signature on prescription and a stamp from the Cashier's Office in Patient Services. Deliver the case to the Junior/Senior Lab dispensary. Prepare a Surgical Stent, if additional surgery.
Appointment 3	Extraction of teeth and deliver Interim Complete Denture on a Monday or Tuesday with 24- and a 72- hr. adjustment appointments scheduled.

Delivery of Complete Denture Prosthesis Information

All final prostheses **must** be inserted within 3 months (appx, 90 days) of the date at which the final impression for the prosthesis was made. Provision may be made for patient (not student) cancellations, no-shows, rotations ie. AHEC, etc. Failure to deliver the denture in reasonable time may result in a lower letter grade for poor patient management and possible referral to the Student Review Committee.

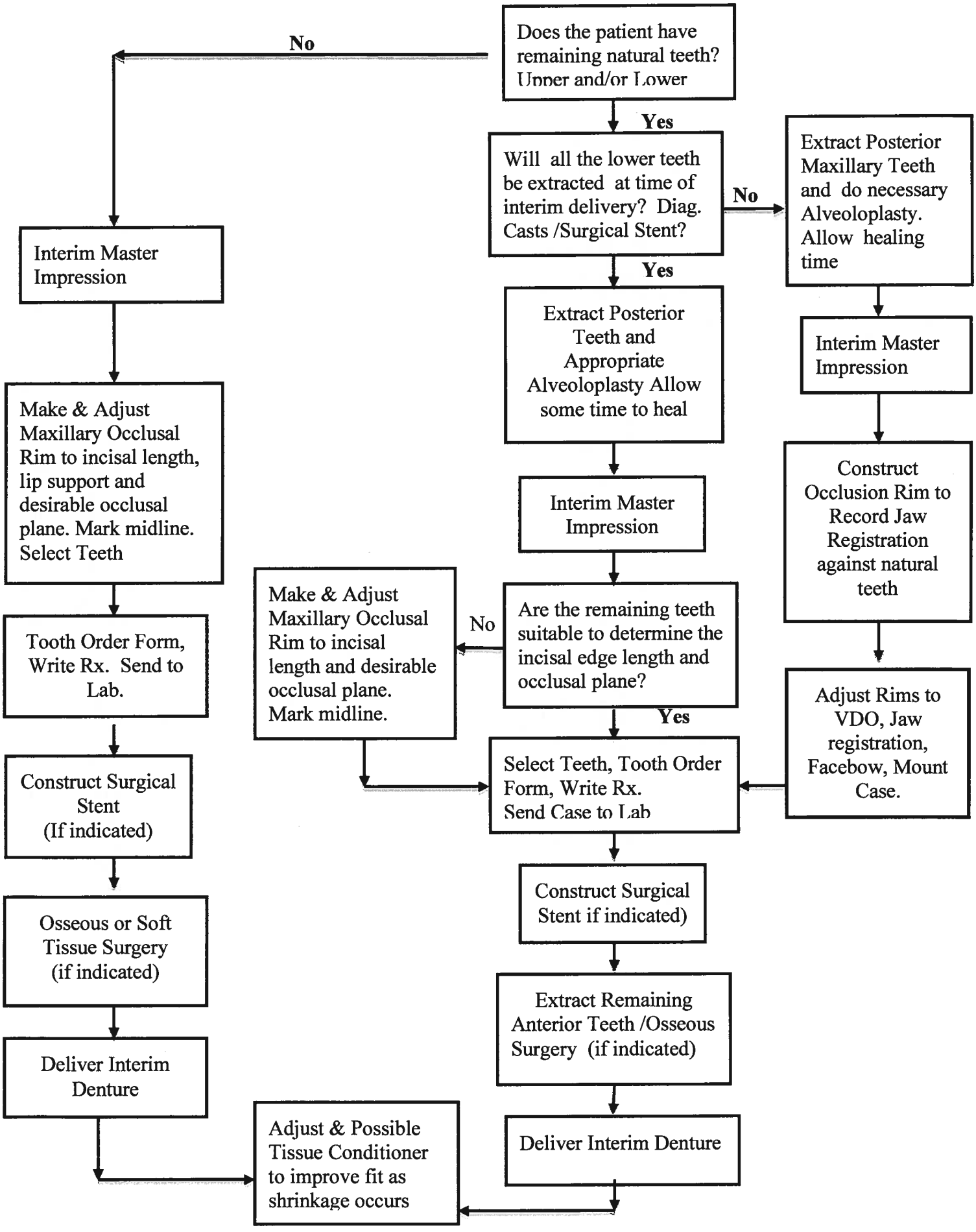
Restrictions for placing an immediate interim prosthesis.

1. Follow-up appts. must be scheduled for a 24-hour, and a 72-hour adjustment in that week. If the patient can not make it for a 24–hour adjustment, then a 48-hour adjustment must be scheduled in the same week, and another appointment scheduled for 48- hours later. Additional adjustments will be scheduled weekly or on an "as needed"-- not an "I already have another patient scheduled" basis until there are no lesions or reasonable patient complaints. You do not shuffle this patient off to another student for care. Your goal is to learn how to treat this complete denture patient. Consult your faculty for appointment recommendations. Plan ahead!

Restrictions for placing any prosthesis before an extended absence

1. No prosthesis can be placed before a break unless there is provision for a 24- or 48-hour adjustment in the same week of delivery and a 1 week adjustment prior to the break.
2. No prosthesis can be placed when there is less than (1) full week plus the day of placement and the 24-hour adjustment to follow the patient. (In other words, placement on Thursday, 24-hour adjustment on Friday, and one [1] week to adjust and follow-up). This applies to Thanksgiving, Christmas, Spring Break, Intersession week(s), and the end of summer school. Students who will have an extended absence (AHEC) must make provision for the patient to be covered during the absence.

Interim Complete Dentures Flow Chart



3M ESPE

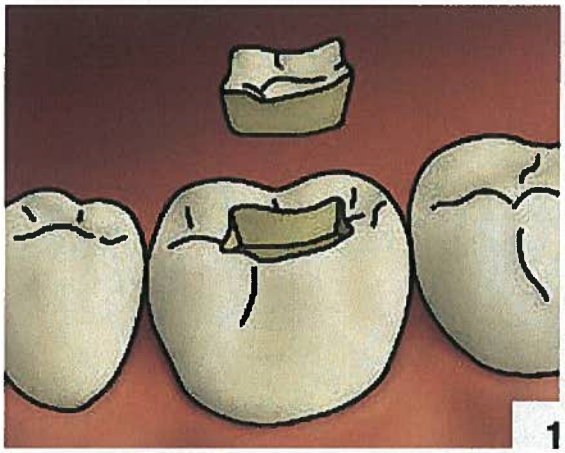
RelyX™ Unicem 2 Automix

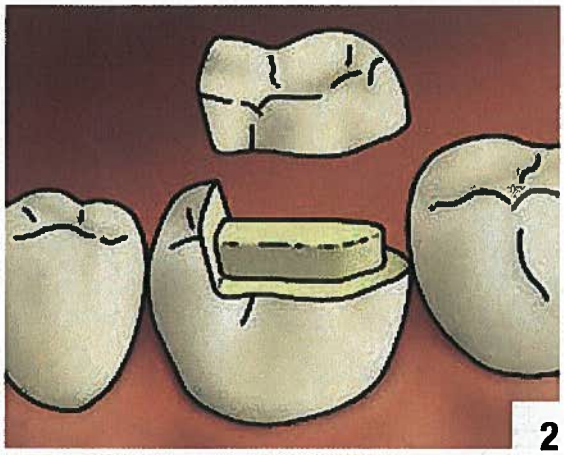
(en) Self-adhesive Resin Cement

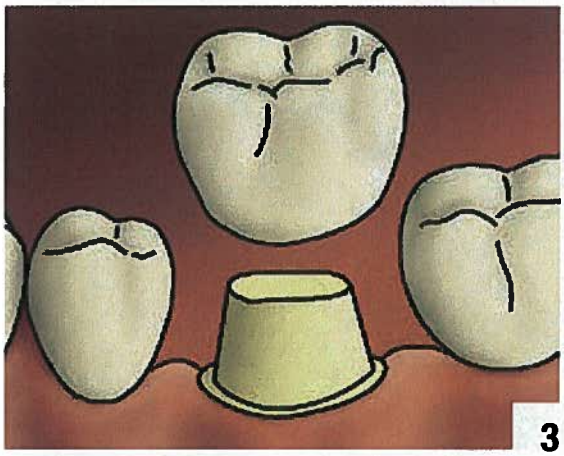
(de) Selbstadhäsiver Composite-Befestigungszement

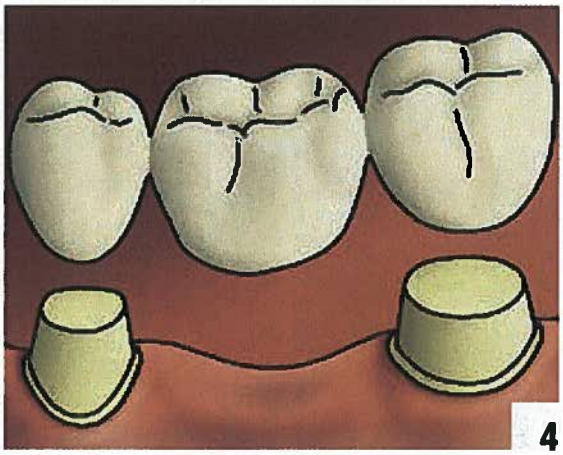
Please refer to the Instructions for Use – especially for Adhesive Bridges.
Bitte Gebrauchsinformation beachten – speziell bei Adhäsivbrücken.

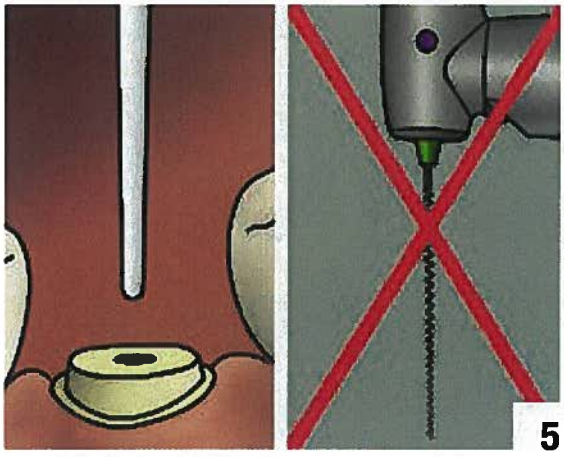
Metal – Composite – Ceramic











Cementation of a Restoration